

# Hitachi Group Sustainability Report 2014

FY 2013 Results





#### Hitachi Group Sustainability Report 2014

#### CONTENTS

#### 004 Sustainability Report Editorial Policy

006 Hitachi Group Profile

008 TOP COMMITMENT Message from Management

Hiroaki Nakanishi, Chairman & CEO, Toshiaki Higashihara, President & COO

010 Executive Officer's Message

Toshiaki Kuzuoka, Senior Vice President and Executive Officer Shinichiro Omori, Vice President and Executive Officer Hidenobu Nakahata, Vice President and Executive Officer

#### 013 VISION: Management Strategies and CSR

2015 Mid-term Management Plan: Financial and Non-Financial Highlights / CSR Management / CSR Activities: Results and Plans

021 INNOVATION Hitachi R&D and Intellectual Property Rights
Research and Development Strategy / Intellectual Property

#### 029 | FEATURE: Contributing to Society through Business

Hitachi's Solutions for Social Issues

Key Hitachi Business Segments

Creating a Healthy, Safe Society through Our Healthcare Business

Renewable Energies for the Future

Dialogue: Hitachi's Social Innovation Business
Working with Governments and Public Policymakers

#### 049 Activities by Country and Region

Europe / The Americas / Asia & India / China

#### **Governance Report**

#### 060 Corporate Governance

Hitachi's Governance Initiatives / Group Management / Internal Control over Financial Reporting/ Compensation for Directors and Executive Officers

#### 063 | Brand Management

Brand Management Initiatives / Global Campaign / Managing the Hitachi Brand Impression

#### 065 Risk Management

Reinforcing the Risk Management System / Creating BCPs in Key Operations Worldwide / Improving Safety for Employees Sent to Dangerous Regions

#### 067 **Compliance**

Enhancing Our Compliance Framework / Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct /Preventing Corrupt Practices / Implementing Corporate Ethics and Compliance Month / Preventing Violations of the Antimonopoly Law / Compliance Reporting System / Prevention of Anti-social Transactions / Export Control / Information Security



#### Hitachi Group Sustainability Report 2014

**Environmental Report** 

#### **Environmental Management Strategies and Initiatives**

Vision / Environmental Action Plan / Environmental Management Framework / Climate Change: Risks and Opportunities

#### **Environmentally Conscious Products and Services** 085

Increasing the Ratio of Eco-Products / Recycling Product Resources / Managing Chemical Substances Contained in Products

#### **Environmentally Conscious Production** 099

Creating Eco-Factories and Office Select / Promoting Global Warming Countermeasures / Calculation of GHG Emissions throughout the ValueChain / Reducing Waste / Water Conservation / Chemical Substance Management / Environmental Compliance / Data on Environmental Load Resulting from Business Operations (FY 2013)/ **Environmental Accounting** 

#### **Preserving Ecosystems and Environmental Communication**

Preserving Ecosystems / Environmental Education / Environmental Communication

#### **Social Report** 129

#### 130 **Respect for Human Rights**

Human Rights Initiatives / Framework / Achievements and Issues

#### 133 **Supply Chain Management**

CSR Supply Chain Management Framework / Sharing Procurement Policies / CSR Deployment Guidebook / CSR Procurement Initiatives / CSR Monitoring (Self-Checks) / CSR Audits / Creation of Procurement BCPs

#### 138 **Diversity Management**

Developing Diversity Management / Diversity Development Structure / Developing Women's Careers / Work-Life Management / Diversity Activities / Employing People with Disabilities / Main Assessments and Awards

#### **Employee Health and Safety**

Addressing Occupational Health and Safety / Health and Safety Promotion Framework / Information Sharing and the Hitachi Group Health and Safety Portal System

#### **Global Human Capital Development**

Managing Global Human Capital / Global Recruiting and Globalizing Human Capital / Global Employee Survey / Career Development in the Workplace

#### 158 **Quality Assurance Activities**

Quality Assurance Activities / Quality and Reliability Education /Strengthening Quality Assurance (QA) Systems in China and throughout Asia / Handling Product Accidents / Ensuring Hitachi Home Appliance Safety

#### **Customer Satisfaction**

CS Improvement Activities / Universal Design

#### 167 **Communication with Shareholders and Investors**

IR Information Disclosure Policy / Proactive IR Approach / General Meeting of Shareholders / Hitachi as an SRI Investment / Fundamental Policy against Takeovers

#### 171 **Social Contribution Activities**

Philosophy and Policy / Social Contribution Activities in Japan and Asia / Social Contribution Activities in India and ASEAN / Social Contribution Activities in the U.S. and Europe / Social Contribution Activities in Africa

#### **List of Key Indicators** 184

- Overview of Financial Results, Board Members and Employee Data 186
- 189 **Independent Assurance**
- 192 | Inquiries

Symbol Marks Used in This Report \* Technical terms, proper nouns, tables, or diagrams, etc. requiring

WEB Indicates the title and URL of the webpage related to the article

Hitachi References in This Report Hitachi, Ltd.: Information on or initiatives of Hitachi, Ltd. Hitachi: Information on or initiatives of all Group companies in and outside Japan

# **Sustainability Report Editorial Policy**

#### **Basic Concept**

The Hitachi Group Sustainability Report 2014 presents basic policies, promotion systems, measures, and key performance indicators on each initiative in keeping with related reporting guidelines. This approach maintains an honest and transparent disclosure of information regarding fiscal 2013 activities and Hitachi's stance in addressing social and environmental issues that are vital to the sustainability of corporate management and society.

#### Scope of Reporting

[Period] The main period covered is fiscal 2013 (April 1, 2013 to March 31, 2014)

[Companies] Hitachi, Ltd. and 947 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 948 companies

#### [Scope of Data]

Financial data: Hitachi, Ltd. and 947 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 948 companies and 231 affiliated companies that use the equity method

Social data: Scope of data indicated under each item

Environmental data: Hitachi, Ltd. and 947 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 948 companies. However, for environmental load data generated through business operations, companies that cover 90 percent of the load (based on Hitachi calculations) are included.

- · The data for each fiscal year indicates the results according to the scope of data in that fiscal year.
- · The base fiscal year data has been revised to match the scope of data for fiscal 2013.

#### Key Guidelines Referred to in Preparing this Report

Environmental Reporting Guidelines (FY 2012 version), Ministry of the Environment, Japan Environmental Reporting Guidelines 2001—With Focus on Stakeholders, Ministry of Economy, Trade and Industry, Japan

GRI Sustainability Reporting Guidelines (G3.1), Global Reporting Initiative ISO 26000: 2010, International Organization for Standardization

The Hitachi Group Sustainability Report is published annually.

# Disclosure of Financial and Non-Financial Information

Hitachi Ltd., following closely the deliberations of the EU and the International Integrated Reporting Council (IIRC) about non-financial disclosure, presents information to match the needs of stakeholders reading this report. While financial information is in the Annual Report, the Hitachi Group Sustainability Report presents non-financial information and clarifies how sustainability issues relate to financial activities. The latest information is available on the Hitachi Group's website.



#### **Third-Party Assessments**

To enhance the credibility of this report, we commissioned third-party environmental, governance, and social performance assessments in fiscal 2013. Ernst & Young Sustainability Co., Ltd., verified the 2015 Mid-term Management Plan and Related Non-Financial Activities as well as governance and social performance based on International Standard on Assurance Engagement (ISAE) 3000. Bureau Veritas Japan Co., Ltd. assessed environmental performance.

#### **External Evaluations**

We were selected in September 2013 for the Dow Jones Sustainability World Indexes (DJSI World), one of the world's leading sustainability investment fund indexes.



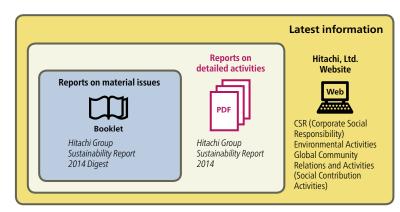
#### Initiatives That We Participate in

We have been a member of the World Business Council for Sustainable Development (WBCSD) since 1995 We have been a member of the United Nations Global Compact since February 2009.



#### **Report Media**

This report is a combination of the Hitachi Group Corporate Sustainability Report and the Hitachi Group Environmental Sustainability Report, which we published until fiscal 2010. We published the Hitachi Group Sustainability Report 2014, which emphasizes comprehensiveness and searchability of information with special emphasis on management transparency, as a PDF file (A4, 000 pages) and the Hitachi Group Sustainability Report 2014 Digest, a summary of policies, areas of special social interest, and reports on key management issues, as a booklet (A4, 16 pages). We also report on detailed activities, as well as news releases and other latest information on our website.





## Reports on Detailed Activities Hitachi Group Sustainability Report 2014

Sustainability Report Editorial Policy Hitachi Group Profile Top Commitment Messages from Management

#### **Management Strategies and CSR**

2015 Mid-term Management Plan Highlights / CSR Management / CSR Activities: Result and Plans / Hitachi R&D and Intellectual Property Rights

#### FEATURE

Contributing to Society through Business / Activities by Country and Region

#### **Governance Report**

Corporate Governance / Brand Management / Risk Management / Compliance

#### **Environmental Report**

Environmental Management Strategies and Initiatives / Environmentally Conscious Products and Services / Environmentally Conscious Production / Preserving Ecosystems and Environmental Communication

#### **Social Report**

Respect for Human Rights / Supply Chain Management / Diversity Management / Employee Health and Safety / Global Human Capital Development / Quality Assurance Activities / Customer Satisfaction / Communication with Shareholders and Investors / Social Contribution Activities

List of Key Indicators / Overview of Financial Results, Board Members and Employee Data / Independent Assurance



#### Reports on Material Issues Hitachi Group Sustainability Report 2014 Digest

Hitachi Group Profile Top Commitment

#### VISION

Management Strategies and CSR

#### **FEATURE**

Contributing to Society through Business

#### ACTIVITIES

FY 2013 Environmental Report / FY 2013 Governance and Social Report Hitachi Group Profile



## Latest Information Website

#### CSR Initiatives

The CSR website has a full PDF version of the *Hitachi Group Sustainability Report 2014*, as well as the following additional content:

Information Disclosure Policy / Comparative Table with GRI Guidelines / Comparative Table with ISO 26000 Core Subjects / Comparative Table with the UN Global Compact / Policy, Vision, and Guidelines / List of Key Indicators / Highlights Archive (2005-2013) http://www.hitachi.com/csr/

#### **Environmental Activities**

This website adds to the environmental activities section of the *Hitachi Group Sustainability Report 2014* (including Supplementary Data and List of Indicators) and includes special features on environmentally conscious products and services, Eco-Factories & Offices, and other initiatives related to the environment.

http://www.hitachi.com/environment/

#### **Social Contribution Activities**

Features Hitachi social contribution activities. http://www.hitachi.com/csr/sc/

# Hitachi Group Profile

#### Company Profile (as of March 31, 2014)

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 & COO

458.79 billion yen Number of employees (unconsolidated basis) 33,500 Number of employees (consolidated basis) 320,725 Number of consolidated subsidiaries 947

(Japan: 283, outside of Japan: 664)

Number of equity-method affiliates 231

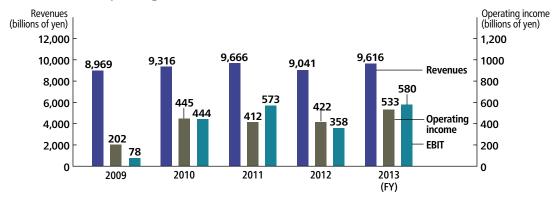
(Japan: 66, outside of Japan: 165)

24%

#### Consolidated Business Overview and Results for Fiscal 2013

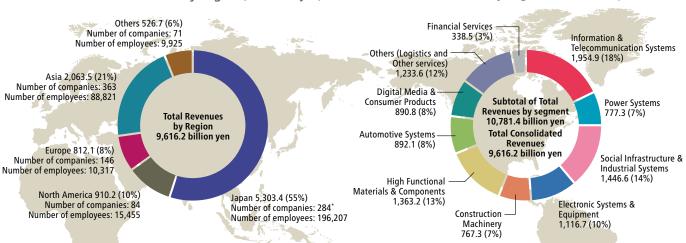
9,616.2 billion yen Capital Expenditure 849.8 billion yen (up 14%) Revenues (up 6%, year on year) R&D Expenditure 351.4 billion yen (up 3%) Operating income 532.8 billion yen (up 26%) Percentage of Revenues amount to Oversea Production 580.1 billion yen (up 62%)

#### **Revenues, Operating Income and EBIT**



#### Revenues and Sales Ratio by Region (billions of yen)

#### Revenues and Ratio by Segment (billions of yen)



<sup>\*</sup>EBIT: Defined income before income tax less interest income changes

<sup>\*</sup> Hitachi, Ltd. and 283 consolidated subsidiaries in Japan, total 284 companies

#### **Information & Telecommunication Systems**

- Systems Integration, Outsourcing Services, Software, Disk Array Subsystems, Servers, Mainframes, Telecommunications Equipment, ATMs
- Hitachi Information & Telecommunication Engineering, Ltd., Hitachi-Omron Terminal Solutions, Corp., Hitachi Computer Products (America), Inc., Hitachi Computer Products (Europe) S.A.S., Hitachi Information & Control Solutions, Ltd., Hitachi Solutions, Ltd., Hitachi Systems, Ltd., Hitachi Consulting Corporation, Hitachi Data Systems Corporation, Hitachi Information & Telecommunication Systems Global Holding Corporation



Hitachi Unified Compute Platform<sup>\*</sup>

#### **Power Systems**

- Thermal, Nuclear and Renewable Energy Power Generation Systems, Transmission & Distribution Systems
- Hitachi-GE Nuclear Energy, Ltd., Hitachi Power Solutions Co., Ltd., Horizon Nuclear Power Limited



Photovoltaic Power Generation System\* Oita Solar Power Corporation, Oita solar power (Mega solar power plant)

#### Social Infrastructure & **Industrial Systems**

- Industrial Machinery and Plants, Elevators, Escalators, Railway Systems
- Hitachi Industrial Equipment Systems Co., Ltd., Hitachi Elevator (China) Co., Ltd., Hitachi Building Systems Co., Ltd., Hitachi Plant Construction, Ltd.



Class395 high-speed train (UK)\*

#### **Electronic Systems & Equipment**

- Semiconductor and LCDs, Manufacturing Equipment, Test and Measurement Equipment, Advanced Industrial Products, Medical Electronics Equipment, Power Tools
- Hitachi High-Technologies Corporation, Hitachi Koki Co., Ltd., Hitachi Kokusai Electric Inc., Hitachi Medical Corporation



Hitachi Medical's MRI System

#### **Construction Machinery**

- Hydraulic Excavators, Wheel Loaders, Mining Machinery
- Hitachi Construction Machinery Co., Ltd.



Hitachi Construction Machinery's Double-arm Working Machine

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

- Semiconductor and Display Related Materials, Circuit Boards and Materials, Automotive Parts (Molded Plastics, etc.), Energy Storage Devices, Specialty Steels, Magnetic Materials and Components, High Grade Casting Components and Materials, Wires and Cables
- Hitachi Chemical Company, Ltd., Hitachi Metals,



#### **Automotive Systems**

- Engine Management Systems, Electric Powertrain Systems, Drive Control Systems, Car Information Systems
- Clarion Co., Ltd., Hitachi Automotive Systems, Ltd., Hitachi Automotive Systems Americas, Inc.



Hitachi Automotive Systems' Semi-Active Suspensior

#### **Digital Media & Consumer Products**

- Air-Conditioning Equipment, Room Air Conditioners, Refrigerators, Washing Machines, Optical Disk Drives, Flat-Panel TVs
- Hitachi Appliances, Inc., Hitachi-LG Data Storage, Inc., Hitachi Consumer Products (Thailand), Ltd., Hitachi Consumer Marketing,



Hitachi Appliances' Large Capacity Refrigerator "Vacuum Compartment FS" X series

#### Others (Logistics and Other services)

- Logistics, Property Management
- Hitachi Life, Ltd., Hitachi Transport System, Ltd., Hitachi Urban Investment, Ltd., Hitachi America, Ltd., Hitachi Asia Ltd., Hitachi (China), Ltd., Hitachi Europe Ltd., Hitachi India Pvt. Ltd.



Hitachi Transport System's truck and Metropolitan East Distribution Center

#### **Financial Services**

- Leasing, loan guarantees
- Hitachi Capital Corporation



Hitachi Capital's Hitachi Corporate Card

- •: Main products and services : Positioning of principal affiliated companies (as of March 31, 2014) \*: Products and services of Hitachi, Ltd.
- (Notes.) 1. Hitachi America, Ltd., Hitachi Asia Ltd., Hitachi (China), Ltd., Hitachi Europe Ltd. and Hitachi India Pvt. Ltd. are the Hitachi Group's regional supervising company for Americas, Asia, China, Europe and India, and they sell the Hitachi Group's products.
  - 2. Hitachi Information & Control Solutions, Ltd. changed its name to Hitachi Industry & Control Solutions, Ltd. in association with the reorganization of the information and control solution business for industrial fields, the security system business and the printed-circuit board manufacturing business of the Group as of April 1, 2014.

# Leveraging Hitachi's Strengths to Resolve Social Issues



"Hitachi delivers innovations that answer society's challenges. With our talented team and proven experience in global markets, We Can Inspire the World."

Inspire the world—to meet this challenge, set down in the Hitachi Group Vision in fiscal 2013, our emphasis is on winning, maintaining, and growing the trust of global society. This means not only developing technologically superior products and services to meet customer needs, but also observing fair, sound business processes grounded in the law and corporate ethics, so that we can remain a trustworthy partner in our customers' eyes. In line with the Hitachi Founding Spirit of sincerity, we will pursue integrity and complete transparency in our business operations to increase the trust that society places in us. We will also ensure compliance, product quality, and safety as part of our ongoing commitment to the principle of *Basics* and *Ethics*.

#### **Resolving Social Issues through Business**

Global society faces many difficult challenges that cannot be resolved overnight. Whether it is the worldwide depletion of water resources or climate change, national energy policies linked to the global political and economic situation, the power shortages coming from surging energy demand in emerging countries, the medical and healthcare systems needed to handle the rapid graying of society or plunging birthrates in the developed world, be assured that Hitachi's technologies, experience, and knowhow are already hard at work. We believe that there are two key elements required for Hitachi to provide

solutions to these social issues for meeting the expectations of global society. The first is two-way communication with customers and other stakeholders. To find solutions for our customers and for global society, we need a solid grasp of the circumstances in every country and region as well as the background to their particular ones. The second is the foresight to develop solutions not only for current issues but for potential ones as well. In addition to rapidly responding to changes in social conditions, our aim is to help build a sustainable society—finding the optimal energy mix, for example, among coal-fired thermal power, shale gas, nuclear power, solar power, and wind power. This will require developing deep insights into global society 50 to 100 years from now, including insights into demographics and energy and environmental issues. Working together to identify the complex issues facing our customers and global society and then leveraging the Hitachi Group's combined strengths to find solutions—that's how we will *Inspire the World*.

#### **Globalizing Management**

The 2015 Mid-term Management Plan, our business plan for the three years beginning in fiscal 2013, highlights three key policies: *Innovation, Global,* and *Transformation.* We have been transforming our business portfolio and expanding our service businesses based on these key policies. In fiscal 2014, we took on the further challenge of globalizing our management. Over the years we have globalized operations, choosing the best regions from around the world for procurement and production. We have taken management closer to our customers to expedite business, including establishing, for the first time in April, a global Chief Executive Officer for our rail systems business in the United Kingdom. Realizing that global management will also require employing our human capital worldwide, we have been building a framework for the global deployment of Group employees based on a common personnel system and evaluation platform. We will continue to expand the scope of this framework to employ people in the right place at the right time to be better partners with our global customers.

As of April 2014, Hitachi established a Chief Operating Officer position to work alongside our Chief Executive Officer, effectively integrating the implementation of our Mid-term Management Plan with the speedy delivery of solutions to customers and global society, while bolstering our management framework. Drawing on this enhanced leadership structure, we will continue to address diverse social issues through our Social Innovation Business, while fulfilling our responsibility to global society as a corporate citizen by respecting human rights, as defined by the United Nations Guiding Principles on Business and Human Rights, while also ensuring sustained protection of the global environment.

Hiroaki Nakanishi Chairman & CEO 7. Nigaslihara

Toshiaki Higashihara

President & COO

**WEB** 

Hitachi to Strengthen Leadership Team to Drive Global Business Expansion in the Rail Systems Business

http://www.hitachi.com/New/cnews/month/2014/03/140320.html

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

#### Meeting Global Challenges with Social Innovation

We are using our Social Innovation Business, which fuses social infrastructure with IT, to tackle the many challenges facing global society. Drawing on the technologies and knowhow honed on business frontlines, Hitachi products and services have helped to create the foundation for the social infrastructure, including waterworks, transportation systems, information communications, and power stations around the world—developed and emerging countries included. At the same time, we realize that business affects the environment, the social systems, and governance in local communities. Corporate social responsibility (CSR) means finding a balance between minimizing the negative social impact of business activities through legal compliance, respect for human rights, and product safety, as well as developing new value in local communities by creating jobs, protecting the environment, and contributing to society through business. To achieve that balance, we have set new organizational targets for CSR and the environment.

Communication is key to identifying exactly what global society expects from Hitachi and from our non-financial ESG\*1 activities and for responding to these expectations through our management strategies and everyday operations. By talking



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
Hitachi. Ltd.

with a wide range of stakeholders—customers, local communities, suppliers and NGOs—we can quickly spot and reduce environmental, supply chain, and governance business risks

This communication give us the chance to make sure that our stakeholders understand the aims of our Social Innovation Business and our CSR and environmental activities, as well as to check that these are consistent with the expectations of global society and are helping to resolve social challenges, while improving the quality of our management.

It is our responsibility as a company engaged in a broad spectrum of social infrastructure-related businesses to address the varied challenges facing global society. Drawing on two-way communication with our stakeholders, we look forward to meeting the social responsibility of Hitachi as a major global enterprise.

\*1 ESG: Environment, Social, Governance

WEB

# **Executive Officer's Message: Procurement**

#### Working with Suppliers to Address Issues across the Entire Supply Chain

The scope of corporate responsibility for the supply chain management underpinning our business has widened in recent years. All companies are now expected to carefully oversee CSR activities related to the environmental and human rights risks and other issues across the entire supply chain—not only tier 1 but also tier 2 and 3 suppliers—and to deal effectively with any problems.

Hitachi is responding to the broader social expectations of companies by working as a Group to identify and mitigate all risks. We have also begun CSR monitoring, along with external audits, of selected suppliers from China and the rest of Asia.

In September 2013, we created the Hitachi Group Conflict Minerals Procurement Policy, once again clearly stating to suppliers that Hitachi as a company will not be party to human rights violations or social instability. We will continue to develop highly transparent supply chain management and set up sustainable supply chains.



Shinichiro Omori
Vice President and Executive Officer,
CPO, General Manager of Corporate
Procurement Division, and Project
Leader of Direct Materials Cost
Transformation Project and Indirect
Materials Cost Transformation Project,
Smart Transformation Project
Initiatives Division
Hitachi, Ltd.

# **Executive Officer's Message: Human Capital**

# Enhancing Human Capital Management through Employee Surveys and Career Development Support

We created the Global Human Capital Management Strategy in fiscal 2011 to optimize individual and organizational performance toward our goal of becoming a major global player. In fiscal 2013, we conducted Hitachi Insights, a survey of around 180,000 employees worldwide. In fiscal 2014, we will draw on these invaluable survey responses to take further measures toward developing employee-friendly workplaces and organizations.

Diversity management is another key Hitachi strategy; we are striving to create workplaces that embrace diverse human capital. A key focus is to accelerate support for women in the workplace as a touchstone for diversity promotion, including announcing indicators for the appointment of female executives and managers in Japan and holding exchanges of view between the executive in charge of human capital and female employees. This work was recognized in March 2014 when Hitachi, Ltd. received Nadeshiko Brand designation from the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange.



Hidenobu Nakahata
Vice President and Executive Officer,
CHRO, General Manager of Human Capital Group,
and Project Leader of Headquarters
Transformation Project and Global Human
Resources Transformation Project,
Smart Transformation Project Initiatives Division
Hitachi, Ltd.

In fiscal 2014, we will proactively support career development and will continue to hone our diversity management, opening the way for all employees to reach their potential.

# **Management Strategies and CSR**

As a global company, we share society's values and pursue sustainable growth by integrating management strategies and CSR. We align our CSR activities with our Mid-term Management Plan to realize the Hitachi Group Vision, creating both social and economic value.

For Hitachi, CSR is about realizing the world we envision in our Group Vision. That is, to contribute through innovation to both helping to build a safe, secure, comfortable, and fair society and helping to tackle global challenges: poverty, inequality in education, diseases, natural resource and energy issues, population concentration in cities, and other environmental issues. CSR is one of the drivers to achieve the goals in our Midterm Management Plan, our action plan for our vision. By implementing this plan, we fulfill our responsibilities as a good corporate citizen by promoting Social Innovation Business, and with robust, diverse governance and a pioneering spirit as well as the strong ethics of our

employees. We also comply with national laws and work in line with the Hitachi Group Codes of Conduct. We created our Group Vision in May 2013, at the start of 2015 Mid-term Management Plan, which draws on the ethics and values that the Group has developed over the past 100 years encapsulated in our Corporate Credo and Founding Spirit—to lay out a new mid- to long-term vision. Recognizing the changing macro trends in society, the vision shows our commitment to help solve some of the issues facing the global community and to realize a sustainable society. We also merged the Corporate Credo, Founding Spirit, and Hitachi Group

Vision into the Hitachi Group Identity.

#### Trends in Society and Hitachi Group Identity

#### Hitachi Group Identity Macro Trends in Society · Toward a society centered on distribution, sharing, and recycling • Expansion of free trade zones **Corporate Credo:** • Global economic growth led by Contribute to society through the emerging nations development of superior, original · Global market structural changes technology and products based on energy resources **MISSION** Hitachi Founding Spirit: Harmony, Sincerity, Pioneering Spirit Achieving a Sustainable **VALUES** Society Securing water resources, energy, **Hitachi Group Vision:** and food Hitachi delivers innovations that answer • Replacing aging infrastructure systems • Reducing CO<sub>2</sub> emissions society's challenges. With our talented Improving transportation systems team and proven experience in global VISION • Dealing with the low birth rate and an markets, we can inspire the world. aging population Promoting material recycling Direction of our management strategies Rules for fair corporate behavior **Codes of Conduct** Mid-term Management Plan **Business plans** Companies' regulations and standards

#### **2015 Mid-term Management Plan Highlights**

Hitachi Group Sustainability Report 2014

The 2015 Mid-term Management Plan focuses on innovation, global, and transformation. To achieve our targets, we will grow and transform through our Social Innovation Business.

#### 2015 Mid-term Management Plan and FY 2013 Results (Consolidated)

Management Targets				
	FY 2015 Target*1	FY 2013 Results*2		
Revenues	10 trillion yen	9,616.2 billion yen		
EBIT*3 (operating income) ratio	Over 7% (over 7%)	6.0%		
Net income attributable to Hitachi, Ltd. stockholders	Over 350 billion yen	264.9 billion yen		
Net income attributable to Hitachi, Ltd. stockholders per share	Over 70 yen	54.86 yen		
Total Hitachi, Ltd. stockholders' equity ratio (manufacturing, services & others)	Over 30%	27.4%		
Service Revenue Ratio, Overseas Revenue Ratio, Number of Employees				
Service revenue ratio (including systems solutions)	Over 40%	32%		
Overseas revenue ratio	Over 50%	45%		
Employees in Japan	200,000	196,000		
Employees outside Japan	150,000	124,000		
Effects of Hitachi Smart Transformation Project				
	Total up to FY 2015	Total up to FY 2013		
Cost reduction effect	400 billion yen	220 billion yen		

<sup>\*1</sup> Assumed exchange rate: 90 yen/US dollar, 115 yen/euro \*2 Exchange rate: 100 yen/US dollar \*3 EBIT: Earnings before interest and taxes

#### 2015 Mid-term Management Plan and Related Non-Financial Activities

In addition to financial activities, non-financial activities play a crucial role in achieving the 2015 Mid-term Management Plan goals. We set targets for non-financial activities related to key management policies and started these activities in fiscal 2013.

Management Focus		Material Issues for Hitachi		
	Related Non-Financial Activities			
Innovation:		Sustainable Business		
Strengthen service businesses that maximize the utilization of IT and bring about innovation	Expand Promote R&D in 7 areas globally (as of June 2014)  R&D centers			
	outside Japan	Increase R&D staff FY 2013 Result: approx. 290 people → FY 2015 Target 400 people		
•		Strengthen Open Innovation FY 2013 Result: $80$ cases outside Japan, $250$ in Japan		
	Service busines	ss sales ratio FY 2013 Result: 32% → FY 2015 Target Over 40%		
		Caring for the Environment		
	Eco-Product sal	les ratio FY 2013 Result: 89% → FY 2015 Target 90%		
Global:		Diversity Management		
Deliver innovation to customers and society globally	Diversity in directors (as of April 2014, out of 14 directors)  • Outside directors: 8 • Non-Japanese: 4 • Females: 2			
	Female managers (Hitachi, Ltd.) FY 2013 418 women → FY 2020 Target 1,000 women			
	Female senior executives Target to be assigned by FY 2015			
	Respect for Human Rights			
	Business and human rights FY 2013 Results: 2 human rights due diligence pilot programs			
		Public Policy Initiatives		
	Stakeholder dia	alogues FY 2013 Results: Regions, themes expanded; held in 3 regions (Europe, US, and China)		
Transformation:		Diversity Management		
Transform Hitachi: To deliver innovation by standardized and speedy operation	Promotion of global human capital management strategy  FY 2013 Results: Introduction of Global Performance Management / Talent development for global executives / Introduction of Global Leadership Development program			
	Sustainable Business			
	Promotion of Hitachi Smart Transformation Project  Total up to FY 2013 220 billion yen → Target outcome (aggregated FY 2011–FY 2015) 400 billion yen			

#### **CSR Management**

With our Corporate Credo of contributing to society through the development of superior, original technology and products, we strive to realize a sustainable society by integrating global social and environmental expectations with our management through communication with stakeholders.

Hitachi Group Sustainability Report 2014

#### Hitachi's CSR Activities

Looking toward the next Mid-term Management Plan which will start from fiscal 2016, to further integrate management strategies and CSR, we are revising our CSR Policy to a new framework using ISO26000. From fiscal 2014, we will further improve communications with our stakeholders to recognize and fulfill our social responsibilities. We will also reinforce the PDCA cycle to ensure execution of our activities and to improve the quality of our management.

# Recognize Properly recognize our social responsibility 1. Recognition of Social Responsibility 2. Organizational Governance 3. Human Rights 4. Labor Practices 5. The Environment 6. Fair Operating Practices 7. Customers (Consumer Issues)

Community Involvement and

9. Review and Improvement of

Development

CSR Activities

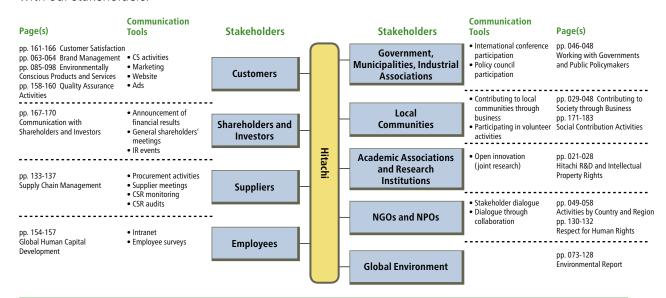
**New CSR Management Framework** 

#### Identify, Prioritize and Act

Identify relevant issues, establish priorities for addressing issues, and act

#### Stakeholder Engagement

Hitachi puts great importance on communication with our stakeholders at various areas of our business activities. We will further work on developing more effective communication tools as well as on information disclosure to build trust relationships with our stakeholders.



**Review and** 

CSR activities

through proactive

communication and stakeholder engagement

Review and improve

**Improve** 

#### **Material Issues for Hitachi**

We use a materiality process based on dialogues with stakeholders to identify material issues. To integrate our management strategies and CSR, we reflect, in our activities, material issues related to the key management policies in our Mid-term Management Plan and we seek to materialize CSR in line with our management strategy.



#### Selection Process for Material Issues

To select our material issues, we evaluate and verify sustainability issues that are identified through dialogues with stakeholders, such as international organizations, investors, and NGOs as well as by monitoring public policy trends, from two dimensions: importance for stakeholders and influence on business. Importance for stakeholders includes human rights, international development, the environment, reporting, ethics, and regional and international requirements. Influences on business are assessed from the perspectives of *global*, *fusion*, and the *environment*, the main points of our 2012 Mid-term Management Plan, as well as the perspectives of innovation, risk, reputation, and cost effectiveness.

#### **CSR 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. The goals of the new organization are laid out in Hitachi Group CSR Statement and Mission. In fiscal 2014, we will continue to share Hitachi Group CSR Statement and Mission with in-house companies and Group companies.

#### **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 stakeholders and integrating those expectations into our management:

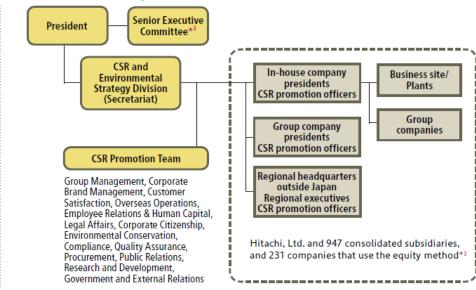
- CSR and environmental initiatives that contribute to solving social issues
- \* Governance that realizes sustainable management
- \* Communication that fosters mutual understanding with stakeholders

To promote CSR in the whole Group, the CSR and Environmental Strategy Division, together with CSR-related departments at Hitachi, Ltd. (the CSR Promotion Team\*1) and CSR departments of in-house companies, Group companies, and regional headquarters outside Japan, regularly to shares a common direction and develops Group-wide CSR programs and initiatives.

To fulfill our social responsibilities, as well as to seek sustainable growth as a global company, we communicate with stakeholders in and outside of Japan and take a proactive approach to incorporate global social issues into our management strategy, while continuously strive to improve the quality of our management.

\*1 CSR Promotion Team: Develops CSR initiatives for every CSR-related department and executes these throughout the Group.

#### Structure of Hitachi Group CSR Promotion



- \*2 Senior Executive Committee: Develops CSR management policies at the executive level
- \*3 As of March 2014

#### **CSR Activities: Results and Plans**

:Achieved :Partially achieved :Just Launched

1. Recognition of Our Social Responsibility

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Disclosure of Information and Stakeholder Engagement	<ul> <li>Continue engaging in stakeholder dialogues</li> </ul>	Held a dialogue in Belgium on social issues related to big data in healthcare Held a dialogue in the US on CSR procurement Postponed a planned dialogue in Japan		Continue stakeholder dialogues to explore ways to solve social issues through business Pursue partnerships with NGOs

#### 2. Organizational Governance

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Commitment to Corporate Social Responsibility	Create next CSR     strategy	<ul> <li>Worked with CSR representatives from 11 operations outside Japan and around 25 Group companies in Japan to create new CSR Management Framework (to be applied from fiscal 2014)</li> </ul>		Roll out new CSR     Management Framework     Group-wide     Ensure that CSR commitment     is shared throughout Hitachi
	Bolster global CSR framework	<ul> <li>Held meetings with CSR representatives in Europe and India, representatives from around 10 local Group companies attended in each country</li> </ul>		

#### 3. Human Rights

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Corporate Ethics and Human Rights	Conduct education on Business and Human Rights	Created the Hitachi Group Human Rights Policy, publicly disclosed as a company regulation in May 2013     Worldwide rollout of Business and Human Rights e-learning course in Japanese, English and Chinese     Business and Human Rights training for all executive officers		Introduce Hitachi Group Human Rights Policy as a company regulation Group- wide Create guidance on Human Rights due diligence Continue Human Rights e- learning in local subsidiaries outside Japan
	Conduct Human     Rights due diligence     pilot programs	<ul> <li>Conducted two Human Rights due diligence pilot programs, one for specific businesses and the other from the regional perspective</li> </ul>		

#### 4. Labour Practices

Hitachi Group Sustainability Report 2014

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Working Environment	Promote females to executive and management positions (strengthen top-level commitment, encourage motivation of female employees, and present role models)	Held 5 dialogues between General Manager of Human Capital Group and female employees, 115 females participated Held Hitachi Group survey on the role of females employees; KPIs were set for Group companies on workplace support for female employees Held 13 leadership-related seminars for female employees; 355 females participated		Continue steps to promote the appointment of female executives and managers to retain and develop woman leaders
	<ul> <li>Establish balanced working styles by continuing WLB (Work -Life Balance)-Up! Month</li> </ul>	<ul> <li>Implemented WLB-Up!         Month to help people reach a work-life balance     </li> </ul>	Ongoing	
	Strictly follow legal employment rate for people with disabilities at all Hitachi Group companies in Japan	<ul> <li>Reached an employment rate of 2.03% as of June 2013 (53 companies still below the legal rate)</li> </ul>		<ul> <li>Strictly follow legal employment rate for people with disabilities at all Hitachi Group companies in Japan</li> </ul>

#### **5. The Environment**

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Environmental Conservation	Raise the Eco-Product     sales ratio	Raised from 84% in FY 2012 to 89%		<ul> <li>Raise the Eco-Product sales ratio</li> </ul>

#### **6. Fair Operating Practices**

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Corporate Ethics and Human Rights	Continue to more     widely implement the     Hitachi Group Codes     of Conduct	<ul> <li>Provided case studies to employees via the intranet in Japanese, English, and Chinese for workplace discussion; 139,038 people participated in workplace discussions held worldwide during Corporate Ethics Month</li> </ul>		<ul> <li>Inform and familiarize all employees with the Hitachi Group Codes of Conduct to instill corporate ethics and ensure legal compliance</li> </ul>
	Continue compliance     education and     auditing of regional     offices outside Japan	* Conducted audits of regional office in Singapore		
Responsible Partnerships with Business Partners	Continue CSR audit suppliers globally	Conducted CSR audits of 16 suppliers in China and the rest of Asia		Continue CSR audits of suppliers (in China and the rest of Asia) to strengthen global supply chains
	Continue distributing information on environmental management to suppliers	<ul> <li>Revised Green Procurement Guidelines and informed around 23,000 suppliers</li> </ul>		Continue distributing information on environmental management to suppliers

#### 7. Customers (Consumer Issues)

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Contribution to Society through Our Business	* Continue implementing the Hitachi Group QF (Quality First) Innovation Movement* and assess the results	<ul> <li>Continued implementing the Hitachi Group QF Innovation Movement</li> </ul>	Ongoing	<ul> <li>Continue implementing the Hitachi Group QF Innovation Movement and assess the results</li> </ul>
	Increase the number of R&D staff at corporate research centers outside Japan to 400 by fiscal 2015	<ul> <li>Reached approx. 290 R&amp;D staff at six research centers outside Japan</li> </ul>		Increase the number of R&D staff at corporate research centers outside Japan to 400 by fiscal 2015 to localize R&D activities

<sup>\*</sup> Hitachi Group QF (Quality First) Innovation Movement: Activities to ensure product safety, compliance with laws and regulations, human resource development, and quality enhancement.

Hitachi Group Sustainability Report 2014 8. Community Involvement and Development

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Corporate Citizenship Activities	Continue social contribution activities on the themes of education, the environment, and social welfare	Held 43 social contribution programs (e.g., the Universal Design (UD) Classroom Program, the Horqin Desert Greening Project in China, the Hitachi Science Seminar and the Hitachi Volunteer Seminar); 2,743 people participated, including employee volunteers		<ul> <li>Revised the social contribution activity themes to include education, the environment, and community support in line with new CSR Management Framework and continue social contribution programs on these themes</li> </ul>

Hitachi Group Sustainability Report 2014

#### 9. Review and Improvement of CSR Activities

Previous CSR policy	FY 2013 goals/plans	Results in FY 2013	Achievement level	FY 2014 goals/plans
Disclosure of Information and Stakeholder Engagement	Continue engaging in stakeholder dialogues	Held a dialogue in Beijing on information disclosure in China		Continue engaging in stakeholder dialogues Continue to be selected for the DJSI World Index Rebuild external website for more effective communication with stakeholders

**External Evaluations** 

Since 2009 Hitachi has been selected for five consecutive years for the Dow Jones Sustainability Indices (DJSI) World, one of the world's leading sustainability investment fund indexes.

Dow Jones
Sustainability Indices
In Collaboration with RobecoSAM •

# Hitachi R&D and Intellectual Property Rights

Hitachi has actively pursued research and development (R&D) since our founding to fulfill our corporate credo of "contributing to society through the development of superior, original technology and products." In the area of intellectual property (IP), we not only in activities to protect our IP, by preventing imitations, but we also help set international standards and promote the development of healthy global markets.

#### **Research and Development Strategy**

At Hitachi, R&D is being accelerated as part of a strategy to achieve growth in the global market spear-headed by Social Innovation Business. In fiscal 2013, the domestic organization (consisting of the Technology Strategy Office, Central Research Laboratory, Hitachi Research Laboratory, Yokohama Research Laboratory and the Design Division, and the six overseas research bases) was enhanced as part of a seven hub global network\*1 to cooperate in achieving the goals set out in the 2015 Mid-term Management Plan: 1) develop world-winning technology supporting Hitachi's core business, 2) reinforce regional research that contributes to global business expansion, and to promote the Hitachi Smart Transformation Project.\*2

Open innovation is being promoted to take advantage of global resources and to resolve business issues with customers. Joint research with customers and collaborative R&D with partners are also being pursued to ensure that R&D achievements translate into business. Participation in industry-academia-government partnerships worldwide is also being used to lay the foundations for future business.

- \*1 Seven regional hubs: Japan, China, India, Southeast Asia, USA, Brazil, and Europe
- \*2 Hitachi Smart Transformation Project: A project launched in fiscal 2011 to reform Hitachi's cost structure by thoroughly reviewing cost structure, strengthening our financial position, and generating a cash base for growth investments.

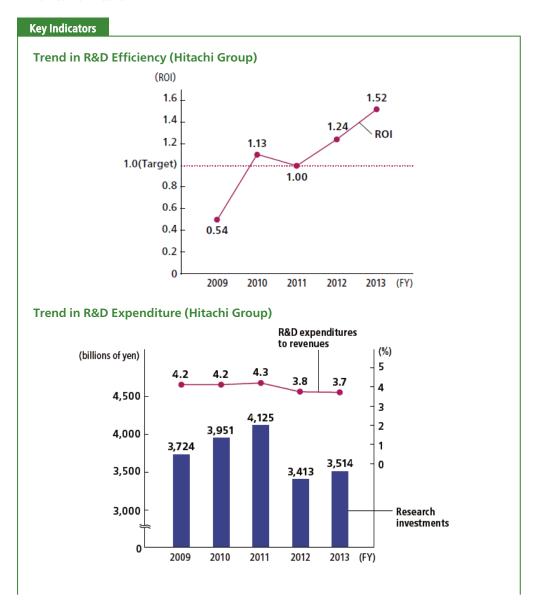
#### **Research and Development Plan**

R&D investment represents about 4 percent of Hitachi Group revenues. The ratio of operating profit margin to R&D expenditure is used as a measure of R&D efficiency, and the Group target is to deliver an ROI\*1 of greater than one.

At Hitachi, Ltd., R&D investment is allocated strategically by target. Approximately 70 percent represents Sponsored or Advanced Sponsored Research from internal companies and Hitachi Group companies based on business roadmaps for current and next-generation businesses. The remaining 30 percent represents Frontier and Platform Research, based on the mid-to-long-term Technology Plan developed by the Technology Strategy Office. The goal of Sponsored and Advanced Sponsored Research is to expand and advance core businesses, targeting practical application within three to five years. Frontier and Platform Research aims to create innovative technologies for future core businesses. The goal in fiscal 2014 is to start using a customer-driven research approach that works in tandem with the corporate policy to strengthen Hitachi's service business. Research in services, which represented only 5 percent of Frontier and Platform Research in fiscal 2013, will be increased to 15 percent by 2015. Hitachi will contribute to the expansion of business and accelerating global development by pursuing R&D in alignment with management strategy.

In 2012, Hitachi together with the IEEE Computer Society co-sponsored the establishment of the IEEE Technical Field Award for Innovation in Societal Infrastructure within the IEEE, the world's largest professional association for the advancement of technology. Applications for the 2014 inaugural award closed in January 2013, and the inaugural recipient was announced in July 2013. The purpose of this award is to bring recognition to innovative developments in societal infrastructure technology taking place worldwide, and to promote the proliferation of Social Innovation Business.

\*1 ROI: Return on investment



#### Strengthening Global R&D

Hitachi Group Sustainability Report 2014

In fiscal 2013, to reinforce our global research capability, the global R&D network was further improved to strengthen R&D closely linked to regional markets, and that contributes to business expansion. The Hitachi China Materials Technology Innovation Center was set up in Shanghai and the Big Data Research Laboratory opened in Santa Clara in April, followed by the Hitachi Brazil Laboratory in Sao Paulo in June and the European Big Data Laboratory in Manchester in October.

By reinforcing the global R&D organization, not only is R&D dedicated to each region, but R&D is conducted with a diverse group of global talent. As well, experience and ideas are stimulating creativity and innovation. The number of R&D staff outside Japan working on IT, infrastructure, and materials research will be increased, raising the total number of researchers from around 290 in fiscal 2013 to 400 by fiscal 2015. Further, a policy of appointing locally hired staff as research leaders is being undertaken to accelerate regionally led R&D.

#### Main Hitachi Group R&D Centers



Hitachi Group Sustainability Report 2014

Europe (Hitachi Europe Ltd.)	Advanced physics / Rail systems / Automotive systems / Power systems / Design / Big data applications
India (Hitachi India Pvt. Ltd.)	Software / Societal infrastructure systems / Knowledge processing
Asia (Hitachi Asia Ltd.)	Big data analytics / Cloud storage / Water treatment
China (Hitachi (China) Research & Development Corporation)	Societal infrastructure systems / Information & telecommunication systems / Medical & Healthcare systems / Chinese materials & Manufacturing processes / Engine control & hydraulic systems / Design
USA (Hitachi America, Ltd.)	Automotive equipment / Storage systems / Wireless communication systems / Big data analytics / Design
Brazil (Hitachi South America, Ltda.)	IT systems for agriculture and mining / Societal infrastructure systems

#### **Open Innovation**

Hitachi maintains an open R&D environment for innovative technology development that cannot be realized by Hitachi alone, working with research institutes, universities and customers both within and outside of Japan. For example, the Hitachi Cambridge Laboratory was set up within Cambridge University in the United Kingdom in fiscal 1985 to conduct research in advanced physics at the frontier of computing, device, and material innovation. A joint research laboratory was established within Tsinghua University in 2001 for research on information and telecommunications. In fiscal 2013, Hitachi R&D cooperated with around 250 research institutes within Japan and 80 research institutes outside of Japan. Further, Hitachi is promoting ties with researchers overseas through programs such as the Hitachi Research Visit Program, setup in fiscal 1985 to invite researchers to Japan on fixed-term contracts. Hitachi will continue to promote regionally led R&D and open innovation contributing to resolving the issues faced by customers and society.

#### **Examples of R&D Achievement**

#### Remote Work Support System Using AR and 3D Data Processing

Augmented reality (AR) is a technology using special glasses to superimpose computer-generated words and images over the wearer's field of view. Hitachi has developed a work support system using AR and three-dimensional (3D) data processing that enables veteran engineers in Japan to provide instructions to operators at plants outside of Japan, or check that a task has been completed correctly. The operator can view real world visual information as 3D data, superimposing words and images over particular places in real time. The supervising engineer can also see the operator's view to guide work in areas that cannot be seen via



Experiment on remote work support

monitoring cameras, such as behind a device or in a shadow. The next step will be repeated pilot tests before applying the technology to remote work support in plants outside of Japan.

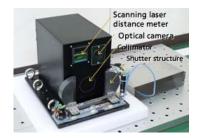
#### 025

Hitachi Group

Sustainability Report 2014

#### **Gamma Ray Camera for High Radiation Environments**

From February 2012, Hitachi together with Hitachi GE Nuclear Energy, Ltd., participated in a New Energy Development Organization (NEDO) project to develop a gamma ray camera to measure gamma ray intensity distribution for checking the radiation levels in the Fukushima Daiichi Power Plant reactor building. To survey the entire area, the camera had to be capable of operating in extremely high radiation conditions. A signal processing circuit and a structure to shield the core gamma ray detection module from external gamma rays was used to create a camera capable of measuring gamma ray intensity distribution in a highly



Gamma ray camera prototype

radioactive environment of 300 mSv/h. The prototype has been in use on-site since fiscal 2013. Hitachi will now work with other organizations to put this camera into full operation.

#### **Intellectual Property**

IP is a key element of Hitachi's business strategy. We are protecting the innovations emerging from our R&D, as well as the Hitachi brand, by using intellectual property rights, while working on international standards to grow our markets.

#### **Building a Global Patent Portfolio**

One of the IP activities supporting our global operations is developing a global patent portfolio to provide worldwide protection for innovations emerging from our R&D and to prevent other companies from using our technologies without authorization. The portfolio also enables us to demonstrate the advantages of those technologies to customers and to cooperate with other companies through cross licensing. We boosted our patent application ratio outside Japan from 47 percent in fiscal 2009 to 59 percent by fiscal 2013. To efficiently build and maintain our global patent portfolio, we will continue filing PCT (Patent Cooperation Treaty) applications as an efficient way to protect our inventions across multiple countries and regions.

Together with R&D center globalization, we are also globalizing our IP hubs. We currently have IP offices in Washington, DC, and San Francisco in the United States, Beijing and Shanghai in China, and Munich in Germany to protect the innovations generated through overseas R&D activities.

Another key issue is developing globally minded IP human resources. Since fiscal 1964, Hitachi's Intellectual Property Division has operated an overseas job training system, sending trainees to IP law firms in Europe and the United States. In fiscal 2013, four trainees went to the US, two to Germany, and one to the UK.



サステナビリティ

レポート 2014

#### **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 before 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 their IPRs. If any company is found to have infringed Hitachi's IPRs, we encourage them to acquire the necessary license, and will take legal action, if necessary.

#### **Anti-Counterfeiting Activities**

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

As counterfeit goods and their sales routes have become more sophisticated, providing information about these goods to local police, customs officers and other public officials and garnering their cooperation



Anti-counterfeiting seminar in Iraq

has become critical for effectively combating counterfeit products. In fiscal 2013, we strengthened our partnership with government agencies. Our Intellectual Property Division staff visited customs agencies in Dalian, Shanghai, and Ningbo in China and government offices and authorities in Saudi Arabia and the United Arab Emirates to exchange information. We also held an anti-counterfeiting seminar in Erbil, Iraq, which was attended by 125 people, primarily from the Iraqi government.

#### **International Standardization Activities**

To help create and expand markets as well as accelerate our global business expansion, we are active in developing international standards, committing our employees to serve in key positions within international organizations, such as the IEC (International Electrotechnical Commission) Vice-President, and a IEC Market Strategy Board member.

We have established a Hitachi Group Standardization Committee to coordinate international standardization for Group companies. The steering committee\*1 for this body selects Hitachi Group priority themes and promotes standardization in the working groups of the committee. One priority theme is smart cities. Japan has been appointed secretariat for the International Standardization Organization (ISO) Subcommittee on Smart Community Infrastructures. Yoshiaki Ichikawa from Hitachi Ltd. chairs the subcommittee, releasing a technical report (ISO TR37150) in February 2014 and continuing to work on technical specifications.

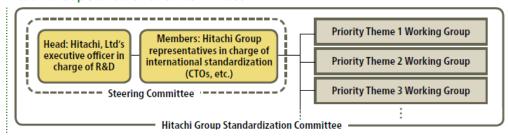
Hitachi's international standardization work is also recognized outside the company. In fiscal 2013, Shigetoyo Nomura, Kyoko Tajima, and Hirotaka Yoshida won Industrial Science and Technology Policy and Environment Bureau Director-General's Awards from the Ministry of Economy, Trade and Industry for their contribution to standardization in the fields of accessibility, the environment, and encryption technology. Yukiyasu Shirasaka received an IEC 1906 Award from the IEC for his contribution to power transformer standardization, and Osamu Namikawa received an Encouragement Award in the ICT Field from the ITU Association of Japan for his service to environment-related standardization for ITU-T,\*2 ISO, and IEC.

Hitachi Group Sustainability Report 2014

Hitachi is committed to contributing to international standardization to realize innovation that resolves social issues, 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; includes CTOs (chief technology officers) of Hitachi in-house companies and Group companies. The committee is responsible for decision making on cross-departmental and company-wide projects.
- \*2 ITU-T: The International Telecommunication Union's Telecommunication Standardization Sector

#### **Hitachi Group Standardization Committee**



#### **Reward System for Employee Inventions**

We motivate employees on the R&D frontlines with a reward system for new inventions. To ensure that the reward system operates fairly and transparently, 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.

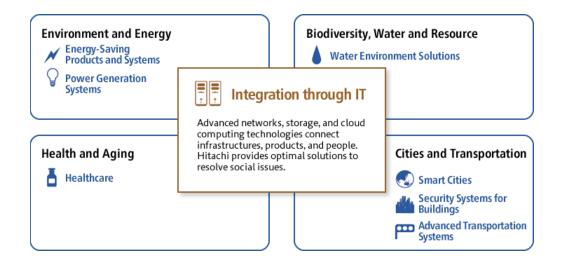
We have set up a special division within the Intellectual Property Division to plan and operate this system. An internal Invention Management Committee made up of R&D, legal affairs, personnel management, and IP experts ensures that the system operates effectively across the whole Group. As part of the system, we have developed an invention information channel to promote communication between inventors and the business divisions using their inventions. Inventors can ask the business divisions for information about their 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 with the same composition as the Invention Management Committee. Inventors can appeal directly to this arbitration 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. As of fiscal 2006, we have also awarded the top 50 young inventors (under 35 years old) based on patent application rewards received within five years of their joining Hitachi.



## Hitachi's Solutions for Social Issues

Combining our wide-ranging business activities with IT solutions helps us resolve social issues, including global environment problems.



#### The Environment and Energy

The aim of Hitachi's environmental management is to "achieve a sustainable society." For one key element of this aim, preventing global warming, we are reducing CO<sub>2</sub> emissions through our business operations.

#### **✗** Energy-Saving Products and Systems

We contribute to the reduction of  $CO_2$  emissions across society as a whole by providing products and services with low energy consumption.



We develop wind and solar power and other renewable energy power systems. Also, we reduce CO₂ emissions by improving the efficiency of these systems.



#### **Biodiversity, Water, and other Resources**

Ensuring biodiversity for the next generation means preserving ecosystems today. We help to preserve ecosystems through business operations that clean the air, water, and soil.



#### **Water Environment Solutions**

Our water environment solutions purifying polluted water and desalinating seawater, for example—enable more efficient use of this limited resource.



Sustainability Report 2014

### **Health and Aging**

Responding to aging in societies worldwide, our medical solutions maintain and improve health. As well as diagnostic and testing equipment for early treatment, we supply pharmaceutical manufacturing equipment for safe, effective drugs.



#### Healthcare

We contribute to medical innovation by providing solutions across the healthcare cycle, including particle beam therapy systems and big data systems for preventive care and diagnostics.



## **Cities and Transportation**

Our infrastructure solutions increase safety and comfort in cities and remote islands with limited infrastructures. Solutions include safe, high-speed transportation networks; highly stable, efficient power equipment and transmission networks for diverse power sources, including renewable energy; and water systems for a safe, constant supply of water.



#### Smart Cities

Worldwide, we propose new forms of cities that are safer, more secure, and more convenient, and we contribute to the standardization of smart city infrastructures.



#### Security Systems for Buildings

Our security systems cover exit / entry as well as elevator operations and maintenance.

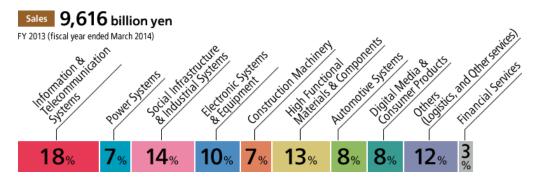


Our safe, convenient railway and traffic information systems help reduce the environmental burden and congestion.



# **Key Hitachi Business Segments**

Hitachi contributes to society through a wide array of business operations, including the social infrastructure business segment.



#### **Information & Telecommunication Systems**

Our expertise, is gained through a broad range of areas, provides IT services tailored to diverse needs from consulting to systems development, operations, maintenance, and support.

#### Business operations in approx 100 countries and regions

We provide total IT solutions—from consulting to systems development and operations—to assist corporations that are upgrading social infrastructures and are globalizing their operations.

Sales	Operating income ratio	EBIT
1,954.9 billion yen	5.6%	98.5 billion yen



Data Center (Okayama No. 3 Center)

#### **Power Systems**

Our highly efficient and reliable thermal, hydro and nuclear power generation equipment, as well as wind, solar, and other renewable energy products, help to create a low-carbon society.

#### Share of wind power generation system orders in Japan 48%

In fiscal 2013, we had the largest share in Japan for wind power systems. By making these more efficient and by developing offshore wind farms, we are helping to build a lowcarbon society.

Sales	Operating income ratio	EBIT
777.3 billion yen	2.1%	152.9 billion yen



Wind Power Generation System Wind Power Kamisu 1st Offshore Wind Farm, Wind Power Ibaraki, Co., Ltd.

#### Hitachi Group Sustainability Report 2014

#### **Social Infrastructure & Industrial Systems**

Our railway and traffic systems, elevators and escalators, and water systems support daily life, and our industrial machinery and energy-saving solutions reduce the environmental burden.

#### Freshwater supplied 336,000 m<sup>3</sup>/day

This much water will be supplied to nearby industrial parks flom Asia's largest desalination plant, to be built by Hitachi for a seawater desalination project in Dahej, Gujarat, India.

Sales	Operating income ratio	EBIT
1,446.6 billion ven	3.9%	59.1 billion yen



Monorail (Daegu, South Korea)

#### **Electronic Systems & Equipment**

Our semiconductor fabrication equipment, broadcasting and communications systems, medical care and testing systems, and electric tools support the Information Age.

#### MRI scanners supplied 6,600

As of April 2014, Hitachi Medical's MRI scanners had approx. 30 percent of the market share in Japan. Developing this and other medical equipment promotes better health for everyone.

Sales	Operating income ratio	EBIT
1,116.7 billion yen	5.3%	52.6 billion yen



Hitachi Kokusai Electric's Advanced Batch Thermal Process System

#### **Construction Machinery**

Our technological expertise helps us to develop solutions in civil engineering and construction, building demolition, mining, and construction machinery sales, service and maintenance.

#### Overseas sales ratio 73 %

This is the fiscal 2013 overseas sales ratio for construction machinery. Our excavators, wheel loaders, and dump trucks are used on construction sites and mines around the world.

Sales	Operating income ratio	EBIT
767.3 billion yen	9.6%	63.3 billion yen



Hitachi Construction Machinery's Double-Arm Working Machine

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

This business segment produces high functional materials and components for IT, home appliances, and cars, including semiconductor and display materials, circuit boards and related materials, synthetic resin car parts, storage devices, advanced special metals, magnetic materials and parts, advanced molded components, and cable materials.

#### World share of ANISOLM 60%

Hitachi Chemical's ANISOLM, the world's most widely used high functional anisotropic conductive film for LCDs, helps, through low power consumption, to popularize flat panel displays.

Sales	Operating income ratio	EBIT
1,363.2 billion yen	7.5%	96.5 billion yen



Hitachi Metals' NEOMAX® Neodymium-based Sintered Magnets

#### **Automotive Systems**

We supply cutting-edge automotive equipment and systems globally, including systems for engine management, electric powertrains, drive control, and car information.

#### Ratio of automotive electronics products 46%

Hitachi Automotive Systems develops new electronic car parts for high levels of safety, convenience, and fuel efficiency. The fiscal 2012 ratio of these products to the whole product line was equivalent to third place in sales worldwide.

Sales	Operating income ratio	EBIT
892.1 billion yen	5.3%	4.9 billion yen



Hitachi Automotive Systems' Semi-Active Suspension System

#### **Digital Media & Consumer Products**

Our reduced-energy commercial and domestic airconditioning systems, home appliances and all-electric products, as well as digital home appliances, help reduce the environmental burden.

#### Number of LED lighting models 2,500

Responding to the surge of interest in power-saving and long-lasting LED lighting, Hitachi Appliances will expand the product line from 1,900 models in fiscal 2013 to 2,500 in fiscal 2014.

Sales	Operating income ratio	EBIT
890.8 billion yen	0.5%	-2.9 billion yen



Hitachi Appliances' Multi-split air condition "FLEXMULTI" (high-efficiency model)

Sustainability Report 2014

#### Others (Logistics, and Other services)

Hitachi is also active in logistics, including systems logistics, freight, inventory management, and packaging for shipping, as well as in other fields such as real estate.

#### Eco-car ownership rate **72.6**%

This is Hitachi Transport System's eco-car ownership rate, including hybrid, natural gas, electric and LPG vehicles, as well as nationally certified, low-emission gas and biofuel vehicles.



Hitachi Transport System's Metropolitan East Distribution Center and a large truck

vernicles.		
Sales	Operating income ratio	EBIT
1,233.6 billion yen	3.7%	48.1 billion yen

#### **Financial Services**

Worldwide, our optimal business solutions cover lease, loan and rental services, card services and securitization, payment and collections, non-life insurance, trust, and outsourcing services.

#### Power generated from renewable energy $2.2 \times$

Hitachi Capital finances and operates wind and solar power plants, providing Hitachi's combined strengths to find solutions that promote renewable energy use. Our goal is to boost power generated from renewable energy from 160 MW in fiscal 2012 to 350 MW in fiscal 2015.

Sales	Operating income ratio	EBIT
338.5 billion yen	8.6%	34.6 billion yen



Hitachi Capital's Hitachi Corporate Card

# Creating a Healthy, Safe Society through Our Healthcare Business

Building on Hitachi's history of contributing to medical care with superior technologies, products, and services, we are using IT to create advanced healthcare solutions that support people's healthy lives and future society.

#### **Providing Optimal Healthcare Solutions**

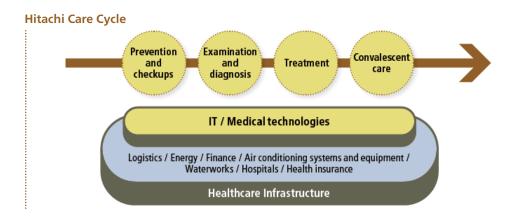
Healthcare stands alongside the environment and energy as an increasingly serious global social issue. The developed world urgently needs to deal with the graying of society, an increase in chronic diseases, and rising medical spending, while emerging countries need to boost medical care and healthcare standards to meet their individual requirements. In addition to medical examinations and treatment, preventive and convalescent healthcare is becoming more and more important—nursing care included.

We see healthcare as an integral part of the social infrastructure supporting 21st century society. Hitachi has long provided products and services in the entire healthcare value chain from disease prevention and medical checkups to examinations, diagnosis, treatment, convalescent care, and drug development. We will continue to develop healthcare solutions optimized for the individual, while helping to resolve social issues using our technologies and solutions for a global roll-out of an IT-enhanced social infrastructure.

#### **Realizing our Healthcare Group Vision**

Hitachi established the Health Care Group in April 2014 as a way to respond swiftly to increasingly varied global healthcare needs. Hitachi's seventh group, the Health Care Group, will include the new Health Care Company that integrates the healthcare-related businesses that were previously distributed among Hitachi's in-house companies and Group companies, including Hitachi Medical Corporation, which develops and manufactures medical equipment and systems.

The new Health Care Group will unify Hitachi's many medical technologies and systems with the goal of helping to build a society where everyone can be healthy, safe, and secure. These technologies include analytic and forecasting technologies that use big data from Hitachi Health Insurance Society subscribers to optimize medical spending, and a proton beam therapy system that is garnering global attention as a new cancer treatment. What's more, the new group will provide solutions combining medical equipment and medical services with IT for a care cycle that covers disease prevention and medical checkups, examinations and diagnosis, treatment, and convalescent care. By doing this, we will improve our ability to propose solutions for varied healthcare needs and boost the quality of life (QOL) for everyone, contributing to the realization of healthy, safe, and secure societies around the world.



### Medical Equipment with Hitachi Quality and Reliability

Hitachi Medical Corporation, part of the Health Care Group, drives the Group's healthcare business with diagnostic imaging equipment such as diagnostic ultrasound systems, MRI,\*1 X-ray CT,\*2 and X-ray diagnostic systems.

Hitachi Medical's products are developing based on our patient-friendly product concept. For example, instead of conventional bore-shaped MRIs, a new shape better suited to the work flow of medical staff has been developed. The new MRI system also accommodates varied patient, including the elderly, infants, people with large physiques, and those who are claustrophobic. The open architecture MRI has magnets that use limited power for low power consumption. The new MRI system is used in more than 150 countries and regions, including emerging countries and places without a stable power supply. Hitachi Medical's diagnostic imaging systems are also used in training, helping medical staff in and outside Japan acquire new skills.

Hitachi is renowned for reliability, from high-quality medical equipment through to maintenance and repair. Combining products and services with IT, we aim to build an even more extensive range of healthcare solutions.

- \*1 MRI: magnetic resonance imaging
- \*2 CT: Computed tomography



Hitachi Medical's magnet-based open architecture AIRIS Soleil MRI system

## **Integrated Healthcare Platforms**

In October 2013, Hitachi and NHS\*1 Greater Manchester\*2 launched a joint proof-of-concept project for using IT to improve healthcare services. Together with GPs\*3 and the NHS, Hitachi will develop a system and network infrastructure for centralizing the management of local medical institutions' medical records, while safeguarding security and privacy. Hitachi will also develop IT-based lifestyle disease programs targeting people at risk for diabetes, using the lifestyle and health coaching skills learned from Hitachi Health Insurance Society's success with the Harasuma Diet\*4 program.

Geared to specific communities, Hitachi's IT-based integrated platforms will help to provide ideal healthcare solutions for everyone, as well as improve the quality of medical care and optimize medical spending.

- \*1 NHS: Britain's National Health Service
- \*2 NHS Greater Manchester: The representative body for 10 clinical commissioning groups serving the Manchester
- \*3 GPs: General Practitioners (doctors)
- \*4 Harasuma Diet: A diet program designed by Dr. Nakagawa at the Hitachi Health Care Center



Trialing a prototype system for a lifestyle improvement program

#### **TOPICS**

## **Global Rollout of Proton Beam Cancer Therapy System**

Hitachi's advanced proton beam cancer therapy system has already been introduced in 11 countries. The system was launched in 2006 at the Proton Therapy Center in the 70-year-old University of Texas MD Anderson Cancer Center in Houston, Texas, and has treated more than 5,000 patients, as of April 2014. The unique spotscanning technology, which can direct a proton beam at a tumor to minimize the impact on normal cells, has been adopted by top medical institutions in the US. Through the development of technologies like these, Hitachi is contributing to the leading-edge radiation and cancer therapy that protects patients' quality of life.



Proton beam cancer therapy system at the MD Anderson Cancer Center

## Renewable Energy for the Future

Through the global deployment of our latest technology, we will boost the ratio of renewable energy sources, such as wind and solar power, to help achieve a sustainable society.

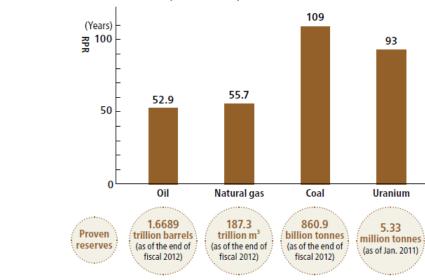
## Using Hitachi Technologies and Solutions to Realize a Sustainable Society

Surging global economic and social activity is raising demand for energy, water, and other resources, as well as increasing the  $CO_2$  emissions that cause global warming. To build a sustainable society and reduce  $CO_2$  emissions, we need to limit using increasingly scarce natural resources, such as fossil fuels, and boost the ratio of renewable energies, such as wind and solar power.

Renewable energies are both inexhaustible and easy on the environment, but issues remain for cutting generating costs and ensuring a stable supply. Feed-in tariffs and similar programs encouraging renewable energy development began appearing in the 1990s, and are now being used in close to 100 countries and regions. Japan introduced an energy feed-in tariff in 2012, and demand for large wind and solar power systems is growing as investors and companies join in.

Hitachi's record on renewable energy development includes highly efficient generation and transformation technologies and batteries, as well as the control systems that ensure a reliable supply of power. We will use the power system technologies and knowhow that we have developed over the years to help resolve global social issues and achieve a sustainable society.

#### **Reserves to Production Ratios (Worldwide)**



\* Ratios for Reserves to Production: Proven reserves divided by annual production Sources: Oil, natural gas, and coal: BP Statistical Review of World Energy June 2013 Uranium: OECD-NEA Uranium 2011: Resources, Production and Demand

## Full Suite of Mega-Solar Power System Solutions from Funding to Maintenance and Repair

Solar power generation fluctuates with the weather and the hours of sunshine. One of Hitachi's strengths is stable generation, due to highly reliable products and control systems, including our Power Conditioning System (PCS) with its increased efficiency for conversion. We also have a strong track record in large-scale power plant EPC (engineering, procurement, and construction). For example, Hitachi handled the entire process from engineering through procurement, production, installation, and final adjustments for Japan's largest-class solar power plant, the Oita Solar Power Plant, which began operating in March 2014. The plant uses a photovoltaic module fault monitoring algorithm developed by Hitachi's Central Research Laboratory to boost operating efficiency. This fault monitoring system detects faults and aging at a level beyond the capacity of conventional monitoring technology.

Building a mega solar plant presents more issues than just equipment selection and design—licensing and interconnections with power companies, for example. In fiscal 2013, we launched a solutions business that uses our extensive knowhow and we combined strengths to supply mega solar system packages from capital funding to EPC (20 years of operation, maintenance, and repair) for local authorities, companies, and individuals wanting to build megawatt-capacity plants.

Outside Japan too, Hitachi has now launched local PCS production for solar power plants to meet the expected demand in Asia and other markets. We will continue to supply mega solar system solutions not only in Japan but across the globe.



This mega solar power plant on a 105-hectare site in Oita City, Oita Prefecture, has around 340,000 solar panels and a capacity of 82,020 kW. It is forecast to generate 87 million kWh per year (the equivalent annual power consumption of around 30,000 households).\*1

<sup>\*1</sup> Based on monthly household power consumption of 276.1 kWh in fiscal 2012 (Source: The Federation of Electric Power Companies of Japan)

#### Hitachi Group Sustainability Report 2014

## Hitachi Wind Turbine Systems: Stable under the Harshest Conditions

Large-scale wind farms and other forms of wind power generation have traditionally been set in Europe and the United States where winds blow steadily throughout the year over relatively flat terrain. Japan's many mountains and hills, frequent natural disasters, and erratic wind direction and strength require wind turbine systems geared to a much harsher environment.

Hitachi wind turbines use a unique system that positions the rotor downwind so that the turbine can efficiently catch the wind blowing upward along mountains or hills. This boosts generating efficiency, as well as reduces the stress on equipment during high winds. Hitachi's power generator produces stable power, even when the wind changes. As well, our charging technologies and control systems operate under the harshest conditions. These features will create growing demand for both our land and offshore wind turbine systems.

The Kamisu Wind Farm, a full-scale offshore operation in Ibaraki Prefecture, had no damaged despite shocks reaching a JMA seismic intensity of six+ and tsunami waves of around five meters during the Great East Japan Earthquake. Hurdles need to be overcome when building wind farms, including responding to environmental impact assessments, cutting costs, and getting local people's approval. However, these massive structures, made from around 20,000 components, promise to stimulate industry and create an economic ripple effect. Our aim is to increase the ratio of renewable energy, which currently accounts for 1.6 percent\*1 of Japan's total energy generation (excluding hydro).

Outside Japan, we will begin rolling out safe, reliable wind turbine systems in Taiwan, Philippines, and other areas of tropical cyclone-prone East Asia from fiscal 2015 onward.

\*1 Power Output Ratio by Power Source (FY 2012), The Federation of Electric Power Companies of Japan



Wind Power Ibaraki Co., Ltd., Kamisu Wind Farm The Kamisu Wind Farm, where turbines are fixed to the seafloor, is offshore of Kamisu City in Ibaraki Prefecture, The 15 downwind turbines making up Hitachi's 2000 kW wind turbine generation system have a total output of 30,000 kW.

### Further Evolution Ahead for Hitachi's wind Turbine Systems

For resource-poor Japan, wind power is an extremely important power source. Wind power generation is evolving on all fronts—turbines, construction technologies, control systems, and maintenance technologies—and I feel confident that it will grow into an even bigger industry.

In Ibaraki Prefecture, the Wind Power Group uses 16 Hitachi turbines to produce a generating capacity of 32,000 kW—the equivalent of power for 16,000 households—at the Hitachi Chemical Wind Power Station operated by the Wind Power Group, Wind Power Kamisu DAIICHI Offshore Wind Farm, and Wind Power Kamisu DAINI Offshore Wind Farm. I was pleased with the Wind Power Group and Hitachi's success with the Wind Power Kamisu DAIICHI Offshore Wind Farm in 2010, a frontrunning project that was the first major offshore wind farm to be built in Japan. Wind farms will shift from sheltered bays and inlets to offshore areas as wind power systems become more and more massive. I look forward to the evolution of Hitachi wind power systems contributing to countries and regions, and indeed to the global environment.



Mamoru Komatsuzaki President, Wind Power Group

# Dialogue: Hitachi's Social Innovation Business



In October 2013, former World Bank Vice President Mieko Nishimizu and Yukiko Araki, Executive General Manager of our CSR and Environmental Strategy Division, held a dialogue at Hitachi, Ltd. headquarters on how the Hitachi Group should shape its Social Innovation Business to meet the Group's aim of helping to solve social issues in global markets.



photo:Keiko Suzuki

#### Mieko Nishimizu

Graduated in economics from Goucher College in the US in 1970. Completed a doctorate in economics from The Johns Hopkins University in 1975 and was appointed Assistant Professor, Economics Department, at the Woodrow Wilson School of Public and International Affairs, Princeton University. Joined the World Bank in 1980; appointed Regional Vice President for South Asia in 1997. Since leaving the World Bank in 2003, she has continued her international writing, speaking, and advisory activities. She has been a senior partner at Think Tank SophiaBank since 2007

## What is the "innovation" that society want?

Araki

The Hitachi Group Corporate Credo is "to contribute to society through the development of superior, original technologies and products." Since Hitachi's founding more than a century ago, we have remained faithful to that spirit, regarding contributing to society through business as Hitachi's essential identity. The Hitachi Group Vision outlines what the Hitachi Group aims to become in the future. Created in April this year, it states explicitly that "Hitachi delivers innovations that answer society's challenges. With our talented team and proven experience in global markets, we can inspire the world." Our Social Innovation Business translates this mission and vision into action.

Dr. Nishimizu, at the World Bank you were engaged in investment projects supporting sustainable development and social transformation in the developing countries. We define Hitachi's Social Innovation Business as a field that "provides the world with advanced, safe, and secure social infrastructure enhanced by IT," the aim being not just to create social infrastructure but rather to contribute to society through that infrastructure to change people's lives and the way that society operates. In that sense, I wonder if there aren't commonalities with your work over the years?

Nishimizu Could you give me some concrete examples of your Social Innovation Business?

Hitachi Group Sustainability Report 2014

Well, for example, power generation technologies and smart grids that maintain a stable power supply even as energy demand continues to grow; water systems for efficient water use; desalination and water treatment; and public transportation and rail systems that eliminate the traffic jams that go with urbanization in emerging countries. For healthcare, we provide equipment and systems for medical care and checkups, as well as support for disease prevention. Other areas include elevators, construction machinery, and information and communications. We see potential for contributing to society across the whole spectrum of the Hitachi Group's involvement in business.

Nishimizu Ah, so your Social Innovation Business is essentially using Hitachi's technologies to make a direct contribution to society and to resolve various social issues. Rather than those so-called social contributions and corporate social responsibility (CSR) programs that are abandoned as soon as the money runs out, I gather you're talking about long-term corporate activities with a sound business foundation that will continue to benefit both society and Hitachi.

Araki

Exactly. Innovation to us means more than just Hitachi coming up with technological improvements that provide superior solutions. We want our products and services to spur on social innovation and transform lifestyles and social systems, creating an unprecedented level of social value for safety, reliability, comfort, and convenience.

Nishimizu If you're using Hitachi's advanced technologies, does that mean that the focus will be primarily on developed countries? If you're aiming to become a global company in the true sense of the word, I think Hitachi needs to view itself as serving all of humanity. More than half of the seven billion people that make up humanity live in the developing countries. And with populations in developing countries continuing to grow quickly in the coming years, their proportion of the world economy will only increase.

> One of the structural issues facing the developing countries is the limited number of people with the ability to fully exploit current technologies for social transformation. Most of these countries lag behind the developed countries, starting from very basic areas. So, rather than cutting-edge technologies, you need to start by providing existing technologies and sharing established knowhow. For example, using mobile phones as public phones and sharing information from these devices has meant that rice farmers who once had to accept unfair low prices offered by brokers can now sell at better prices. This has substantially bumped up farm incomes. Areas like this, though, won't make money for Hitachi, nor will they have much to do with Hitachi's Social Innovation Business with its stated aim of using cutting-edge technology to resolve social issues.

Araki

Certainly, as a private enterprise, our baseline has to be business viability. However, it's also important to consider the lifespan of a business. While business in the developing countries might not be particularly profitable at the outset, it still becomes a target for Hitachi's Social Innovation Business from the long-term perspective, after laying the foundation.

Hitachi is good at long-term development. For example, for more than 40 years, we've been extending scholarships to Asian students and bringing them to Japan for training or have been providing them with local training. Nurturing human capital like this has laid a number of business foundations for us. Even in countries where we are still only planning to cultivate operations, we believe that investing first in human capital can open up business prospects in the future.

Nishimizu Developing people is always the cornerstone, isn't it? From my experience overseas. I know that Japan's education level is among the highest in the world. and things which we Japanese regard as obvious accomplishments are seen elsewhere as guite amazing. I think more companies, and particularly those aiming to become global enterprises, need to realize this, because it might encourage them to invest in boosting education levels in the countries where they have serious business interests. In particular, for companies like Hitachi, which are expected to provide goods and services with an advanced technological component, it becomes vital to focus on human capital investment from a technological perspective.

Hitachi Group Sustainability Report 2014

## **Business Strategy Starts with Visioning**

Do you have any other expectations for our Social Innovation Business?

Nishimizu | Well, of course I'd like to see Hitachi invest in ways that change society for the better, but from what I've just heard, I wonder if the scope of your Social Innovation Business is too wide. As Hitachi technologies have an almost infinite number of potential applications, if you don't refine your strategic focus, you may lessen the sustainability and business value of your projects. A tighter focus may well be on the areas that you outlined earlier, but surely there's major potential even within those limits.

> The business of the World Bank is economic and social development, and that too is obviously extremely broad—everything from infrastructure to education and medical care. When the scope is just too wide, no matter how good a job you do, there is the risk of "shooting yourself in the foot." Hitachi too would be better served by not doing everything possible, but instead taking a more strategic approach.

Araki

Hitachi does have a wide range of technologies and an incredibly rich pool of human capital, so in that sense our approach could seem a bit too broad. Conversely, though, wouldn't the focus naturally be restricted by the nature of the social issues that present themselves?

Nishimizu I think you'll find the scope almost infinite even then. Basically, it comes down to whether Hitachi itself has a clear vision for 50 or even 100 years from now. That vision will help define both your Social Innovation Business strategy and where you channel your resources.

> By your vision, I don't mean something imposed by top management. You need all of the Hitachi Group's hundreds of thousands of employees to put their heads together and paint a picture—a rough one is fine—of how they see the Hitachi Group in 50 or 100 years from now. Then, you have to imagine being in that future and looking back to work out what the Hitachi of today should do to get there. Without that kind of visioning—working backward from the future—you won't be able to see how to change society, and your Social Innovation Business too might end up taking the "long way around."

For Hitachi, 50 or 100 years is not a long time. Companies that are run on the basis of a clear future vision think in units of 100 years anyway, and given that you're dealing with social infrastructure, a long-term perspective becomes absolutely essential.

Araki

That's great food for thought. Thank you very much.

046 Hitachi Group Sustainability Report 2014

# Working with Governments and Public Policymakers

Partnerships with governments and policymakers around the world are vital for growing our Social Innovation Business to create a sustainable society. To deepen government institutions' understanding of Hitachi, we are strengthening our external relations globally—policy recommendations included—and feeding back to management information on social and policy trends.

#### **External Relations Initiatives**

The global expansion of our Social Innovation Business, particularly for social infrastructure with its strong interest from the public, makes those government institutions who are the main agents for social infrastructure important Hitachi partners as both customers and backers. The Japanese government has implemented a support structure for infrastructure systems that are being exported with the goal of strengthening Japan's industrial competitiveness. Our access to these systems and to government advice will be enormously helpful.

In our relations with government institutions outside Japan, we gather policy information from a range of sources and engage with government officials. This dialogue ensures that we have a solid grasp of local social issues and business needs and can help build better societies. For these reasons, our relationships with government institutions in and outside Japan are becoming increasingly important.

## **Promoting External Relations**

The Government & External Relations Division was established within our headquarters in fiscal 2009 to guide and accelerate the external relations of the entire Hitachi Group. This was in response to our 2015 Mid-term Management Plan, which focuses on the global expansion of our Social Innovation Business, as well as the growing support offered by the Japanese government for infrastructure system exports. Through this division, we are working to strengthen the dialogue between government officials and Hitachi senior management as well as external relations staff in our business divisions and Group companies. We intend to provide government institutions with a better understanding of our business and to offer policy recommendations on key comprehensive policy issues with the prospect of stimulating the industry as a whole.

Outside Japan, we have offices in Washington, DC, and Brussels to monitor policy trends and to manage external relations initiatives in the US and Europe.

To promote external relations Group-wide, we hold an annual Group meeting to share cases and issues, with an eye to boosting the efficiency of our activities.

## **Initiatives in Japan**

Hitachi Group Sustainability Report 2014

#### **Policy Recommendations**

In fiscal 2013, our then-President Hiroaki Nakanishi was appointed to Japan's Council for Science and Technology Policy, where he continues to make recommendations. Established within the Cabinet Office under the leadership of the Prime Minister, this council serves as the "control tower" for promoting science, technology, and innovation policy. The council oversees all of the nation's science and technology, creating basic science and technology plans, while formulating guidelines for allocating funds and other resources for science and technology. Also in fiscal 2013, then-Chairman Takashi Kawamura attended a "Government-Labor-Management Meeting for Realizing a Positive Cycle of the Economy" that makes recommendations on developing human capital and the importance of diversity.

Senior managers proposed specific programs after discussing and exchanging views with staff from government institutions on yen loans and other policies related to infrastructure system exports as well as the tax system.

#### **Government Support**

METI provides a Global Internship Program, supporting global human resource development, to promote important network and cooperative relationships in business development in the host countries, as a part of its support for infrastructure system exports. During fiscal 2012 and 2013, 18 young Hitachi Group employees took part in this program, which sends junior-level employees from private companies to government institutions and local companies in emerging countries for several months. By participating in this type of program, we will be able to more accurately identify the needs of emerging countries and propose the best solutions for their particular social concerns, helping to resolve them.

#### **Participating in Business and Industry Associations**

Operating through business and industry associations is another critical aspect of our external relations. Hitachi is a member of Keidanren (Japan Business Federation), serving as vice chair as well as participating in several committees. In addition to making proposals on human capital development, education issues, and economic diplomacy, as the planning and coordination chair for the subcommittee on Europe, we urged the Japanese and European governments to enter into negotiations on a Japan-EU Economic Partnership Agreement. With these efforts, negotiations were launched in April 2013.

As a member of the Japan Electronics and Information Technology Industries Association (JEITA), we are participating in the development of a Japanese industry response to the General Data Protection Regulation on personal data protection currently under consideration in the European Union, as well as the amendments to the Act on the Protection of Personal Information being considered in Japan.

Within the Japan Electrical Manufacturers' Association (JEMA), Hitachi is surveying the status of the development of the social infrastructure in emerging countries, including power generation and transmission facilities, to support promoting 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 support to solve social issues in those emerging countries.

#### **Global Activities**

Hitachi Group Sustainability Report 2014

#### **Developing Relationships with Government Institutions outside Japan**

We participate in international conferences to deepen other nations' understanding of our business. We took part in events associated with the "ASEAN-Japan Commemorative Summit Meeting" held in Tokyo in December 2013, including discussions and conferences with ASEAN leaders by our directors and an exhibit showcasing Hitachi's products and business services. As part of Keidanren's international dialogue project, our executive officer went to Indonesia to mark the 55th anniversary of the beginning of diplomatic relations, attending meetings with key ministers. Hitachi also attended the "8th Japan-Colombia Joint Economic Committee Meeting" in Bogotá to strengthen bilateral economic relations. Additionally, we are participating in the TOMODACHI Initiative, a joint Japan-US cultural and educational exchange program organized by the United States Embassy in Japan and the US-Japan Council.

#### United States: Hitachi Group Corporate Office in Washington, DC

The Hitachi Group Corporate Office in Washington, DC, examines the impact of US government 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 launched the Hitachi Government Relations Network (HGRN) in fiscal 2011. Made up of Hitachi Group companies in the US, HGRN serves as a platform for exchanging information on key laws and regulations that impact management and business, and for sharing the business impact of public policy. The HGRN also communicates with key policymakers in federal and state governments and with other government officials.

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 directly and indirectly how Hitachi technologies can contribute to US society. For example, with influential institutions such as the Brookings Institution, the American Association for the Advancement of Science (AAAS), the Center for Strategic and International Studies (CSIS), and the Council on Foreign Relations (CFR), we provide knowledge on the benefits of Hitachi's business and technological capacity, and with this understanding, support policymaking at their institutions.

#### **Europe: Hitachi Corporate Office, Europe (HIBRU)**

The Hitachi Corporate Office, Europe, (located in Brussels, Belgium) is active in European social issues, contributing to European policy development through business and programs that boost Hitachi's profile in Europe. As of November 2013, we have joined several of the European Commission's Environmental Footprint pilot projects, participating in discussions on policy formulation from an early stage. We also submitted recommendations on proposed amendments to European corporate law covering nonfinancial information disclosure as well as conflict minerals legislation to make certain that both of these initiatives help to resolve social issues as well as improve corporate value. In fiscal 2014, we pursue exchanges with policymakers, including workshops with European Commission staff, ahead of the 2014 healthcare-focused Hitachi Science & Technology Forum.

## **Activities by Country and Region**

Hitachi's business operations span the globe. Here we introduce key CSR activities in key countries and regions, along with a review of fiscal 2013 from our representative officers.



## **Activities in Europe**

"Hitachi Group companies in Europe contribute to society through environmental and social activities. In 2014 and beyond, Hitachi in Europe will continue to address societal issues through our Social Innovation Business, using IT to strengthen our operations."
(Europe: Message from Representative)

## **Activities in the Americas**

"We have several sustainability projects that are helping to resolve social issues. In fiscal 2014, we are harnessing our collective energy and technology to help tackle several issues facing society." We will continue to contribute to the region through our Social Innovation Business. (The Americas: Message from Representative)

### **Activities in Asia & India**

"We are strongly aware of the significance and necessity of contributing to society not only through business activities but also by nurturing the next generation of leaders. We will continue to contribute to the region through our Social Innovation Business."

(Asia & India: Massage from

(Asia & India: Message from Representative)

#### **Activities in China**

"Hitachi's roots in China trace back to the 1970s. Our business has supported China's development and growth, as we have grown at the same time. We will press ahead with our CSR activities in China from a wide perspective, tackling daily business operations through to volunteer activities." (China: Message from Representative)

## **Europe**

### **Message from Representative**

Europe is changing rapidly. There are increasingly challenging and complex societal issues including urbanization, population growth, shifting demographics, and climate change. These challenges demand more intelligent, cost-effective solutions that include, among others, an improved transportation infrastructure, leading-edge healthcare, improved access to clean water, and more reliable energy supplies.

More and more, society is expecting corporations to contribute to solving these social challenges, and Hitachi responds primarily through Social Innovation Business.

For example, in June 2013, Hitachi opened the European Big
Data Laboratory (EBDL) in Manchester, UK. EBDL collaborates on
projects with the National Health Service (NHS) England, making
full use of IT and big data to improve the quality of life, while
holding down healthcare costs. Going forward, EBDL will expand into the energy and

Chairman of the Board of Hitachi Europe Ltd. Chief Executive Officer of Hitachi Power Europe GmbH

Klaus Dieter Rennert Chief Executive for Europe Chairman of the Board of

Hitachi Group companies in Europe contribute to society through environmental and social activities. In 2013, the Hitachi Computer Products Europe plant in Orleans, France, became Hitachi's first European Eco-Factory. By implementing ISO and other standards, this plant reduced energy and water consumption, as well as waste production and improved other operations that impact the environment. By 2015, Hitachi Europe plans to improve other production plants with the aim of eventually having over 50 percent of the plants classed as Eco-Factories.

transportation sectors. In addition, in Turkey, Hitachi Infrastructure Systems has been

helping large hotels to recycle water using membrane bioreactor systems.

To support globalization, Hitachi in Europe is working to become more diverse and inclusive. In 2013, the Women's Interactive Network (WIN) was launched to better enable female representatives from different Group companies to discuss tackling the challenges of diversity and inclusion. A new interactive e-learning course was also developed to further raise the awareness and understanding needed to overcome unconscious biases. In 2014 and beyond, Hitachi in Europe will continue to address societal issues through our Social Innovation Business, using IT to strengthen our solution offering. We will provide solutions in the energy, healthcare, and transportation sectors that combine products, services, and highly sophisticated IT as well as finance to deliver entire packages that best suit our customers and society.

Hitachi Group Sustainability Report 2014

## **Key CSR Activities**

#### Poland: Self-Service Banking Using Finger Vein Authentication



**Biometric authentication** 

The Information Systems Group of Hitachi Europe Ltd. has come up with a biometric authentication solution for a Polish bank. In 2013, self-service VTM\*1 branches called Getin Point, which use finger vein authentication, were delivered to Getin Bank, the retail arm of Getin Noble Bank. Due to the high level of security provided by finger vein authentication, the VTM branches now support signing of loan agreements, bill payments, deposits, and transfers, as well as setting up new accounts and instantly issuing a new bank card. At any time, the customer can also get support from a bank employee by video conference. Getin Bank's VTM is a combination of several of the top innovations on the market, including finger vein biometric authentication and issuing instant bank

cards. Finger vein biometrics is becoming an increasingly popular form of authentication in Poland. It is already used at ATMs and in bank branches, with over 120,000 bank customers now using this technology.

\*1 VTM: virtual teller machine: Self-service banking system using finger vein authentication

## Belgium: European Stakeholder Dialogue



European Stakeholder Dialogue

In March 2014, Hitachi Europe's CSR team, headquartered in Brussels, held the Fourth European Stakeholder Dialogue in Brussels. This year's theme, using IT in healthcare to generate social innovation, was discussed by 22 people, including Hitachi Group healthcare personnel, and representatives from medical companies, industry associations, and the EU. Participants noted that it is essential to prevent personal information leaks, and that the emphasis for healthcare should be on local communities rather than on technologies. Hitachi put the highest priority on examining what is best for the patient, and will

explore possible partnerships with other organizations that have the same point of view.

## The Netherlands: New, State-of-the-Art, Environmentally Conscious Distribution Center



**HDS European Distribution Centre** 

Hitachi Data Systems Corporation (HDS) has completed the new European Distribution Centre in Zaltbommel, the Netherlands. Environmentally conscious technology has been used to reduce CO<sub>2</sub> emissions by about 200 tonnes per year. Both the building and the construction method were BREEAM (Building Research Establishment Environmental Assessment Method) certified. The 6,200 solar panels (17,000 m²) generate 1.4 MW of electricity, while the building has geothermal air conditioning and in-floor heating, as well as LED lighting and battery chargers

for employees' electric vehicles and bicycles. In addition rainwater is collected and used in the toilets. This new center will open the way for efficient Europe-wide distribution of hundreds of Hitachi solutions, including data storage products such as Hitachi Unified Storage VM, and Hitachi Content platform and Hitachi Virtual Storage platforms.

#### 052

#### Hitachi Group Sustainability Report 2014

## **United Kingdom: Supporting Technology Education for University Students**



**Heavy Plant Training Centre** 

Hitachi Construction Machinery UK Ltd, a wholly owned subsidiary of Hitachi Construction Machinery Europe, has formed a partnership with Coleg Menai in Wales. Together, they are using three of Hitachi's latest environmentally conscious and highly fuelefficient excavators in the new Heavy Plant Training Centre (HPTC) at the college's Llangefni Campus. The training center will provide students with training on excavators, cranes, and other heavy machinery. The new excavators will be used to train people in the skills needed for large construction projects in many

regions. Hitachi Construction Machiney UK is also working with local organizations to make sure that an effective supply chain is in place for the major infrastructure projects proposed for Anglesey over the coming years.

## The Americas

## Message from Representative

As I look back on our accomplishments over the first year of our current Mid-term Management Plan, I am pleased to see that revenues from the Americas have increased year over year. Within that improvement, there are several sustainability projects that are helping to resolve social issues, and I would like to highlight a few of these.

One critical sustainability project is overseeing the supply chain. We held a workshop to discuss the impact of conflict minerals on our supply chain as well as supplier diversity.\*1 Experts provided guidance on how to correctly respond to customer requests for conflict mineral information using the EICC\*2 template, which is the globally accepted reporting format. In addition, the team shared best practices in supplier diversity programs and looked at methods for increasing the ratio of procurement from minority suppliers. Initiatives such as these



Takashi Hatchoji Director, Group Chairman for the Americas, Hitachi Ltd. Chairman of Hitachi America, Ltd.

are crucial for answering requests from our customers and for ensuring a sustainable supply chain. In addition to overall environmental sustainability compliance, we are bolstering management in the Americas as part of Hitachi's drive for global governance improvements. Recently, the first Environmental Network Meetings were held in Brazil and Mexico, in addition to existing North American meetings, and these focused on sharing environmental best practices, including collaboration among Group companies and sharing the latest regulatory trends and risks.

Already in fiscal 2014, we are harnessing our collective energy and technology to help tackle several issues facing society. We are focusing on combining all of our companies' expertise and strengths to provide total solutions using innovations that have successful and sustainable outcomes.

- \*1 Supplier diversity: An initiative encouraging procurement from companies run by minorities, women, and veterans.
- \*2 EICC: Electronic Industry Citizenship Coalition

### **Key CSR Activities**

## Hitachi Develops and Installs One of the World's Highest Output Water Pumps



Four-stage turbine pump

To help move water along the California Aqueduct over the Tehachapi Mountains to Southern California, Hitachi America, Ltd. collaborated with the Hitachi Tsuchiura Works to develop and install four four-stage turbine pumps in the A.D. Edmonston Pumping Plant. Southern California's dense population and limited rainfall make water a precious resource. Hitachi engineers worked closely with the State of California Department of Water Resources to create a highefficiency pump with the world's highest class of output. It was the first time that Hitachi had developed and produced such a large pump. The development and installation process and the final results won the development team the customer's total confidence, boosting Hitachi's reputation as a world-class manufacturer and providing value to society.

#### **Delivering Optimal Energy Solutions**

Hitachi Consulting's energy solutions enable customers to rein in their energy spending by introducing energy-saving products with no upfront capital investment. Drawing on extensive knowhow and experience developed over many years, Hitachi Consulting provides customers with optimal energy solutions. The company offers a full suite of energy management services including energy performance analyses, improvement roadmaps, and cost benefit financial planning. Hitachi Consulting chooses the right Hitachi environmentally conscious products and services for customers then pairs these with management services, such as plant lighting and air conditioning, data center optimization, equipment conversion, and smart buildings.

### **STEM Education Support Program**



To help address the shortage of skilled engineers and scientists in the STEM\*¹ fields in the United States, Hitachi High Technologies America, Inc. (HTA) has developed the STEM Education Support Program. In addition to loaning out TM3000 TableTop scanning electron microscopes to schools around the country, HTA has also created a website for educators where they can download class plans, learning programs, and hundreds of images of what can be observed through the TM3000. By providing young people with the experience of seeing the nano world—visible only through an electron microscope—and supporting educators through the website, HTA is helping to interest the next generation in the STEM disciplines.

Students learning about nanoscience

<sup>\*1</sup> STEM: science, technology, engineering, and mathematics

Sustainability Report 2014

## Asia & India

## Message from Representative

The Asian countries, including India, have enhanced their global economic positions and are expected to lead future global growth. However, there are challenges ahead: building the social infrastructure to keep pace with economic growth, for example, and achieving a good balance between economic growth and environmental conservation.

Helping to solve these challenges through our Social Innovation Business is, we believe, the responsibility of Hitachi as a company with a global reach.

We have made some achievements in these areas. Hitachi received an order of the railway subsystems for Vietnam's first urban railway in Ho Chi Minh City. In India, a consortium led by Hitachi and Hyflux signed a Water Purchase Agreement with

Asia, Hitachi, Ltd. Chairman of Hitachi Asia Ltd. and Hitachi India Pvt. Ltd.

Kiyoaki Iigaya Chief Executive for

Dahej SEZ Ltd. to construct a seawater desalination plant providing a stable supply of industrial water for about 30 years within the Dahej Special Economic Zone in Gujarat.



Business aside, Hitachi has been operating educational programs such as the Hitachi Young Leaders Initiative and *The Hindu-*Hitachi Scholarship Program. We are strongly aware of the significance and necessity of contributing to society not only through business activities but also by nurturing the next generation of leaders.

We anticipate that in 2014 and beyond, the region's economic, political, and business environment will change dramatically. We need to consider how to develop business strategies, capitalize on upcoming opportunities, and operate our business successfully under these challenging conditions. Hitachi needs to establish a full value chain, including R&D, design, manufacturing, sales, and after-sales service, and to create robust supply chain management systems. We should also ensure respect for human rights throughout our business activities.

Working closely with governments and business partners, we will continue to contribute to the region through our Social Innovation Business—including social infrastructure and urban development—as well as other necessary services.



### **Key CSR Activities**

## Vietnam: Hitachi to Receive Order Equipment for Urban Railway Line 1 in Ho Chi Minh City

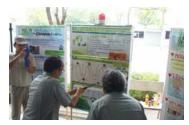


**Equipment contract signing ceremony** 

In 2013, Hitachi received an order to supply electrical and mechanical equipment for Urban Railway Line 1 in Ho Chi Minh City. The rapid increase in traffic volume created by Vietnam's economic growth has become a serious issue, and the government is looking to public transportation to help reduce traffic congestion and conserve the environment. Plans have been made for the construction of several urban railways in Ho Chi Minh City, and this project represents the first phase.

Hitachi will deliver subsystem including 17 train sets (total 51 cars) as well as signalling systems, telecommunications system including wireless train radio system, power supply systems, and platform screen doors, automatic fare collection system, and depot facilities. We will also handle maintenance for five years from the start of commercial operations. A project office was set up in Ho Chi Minh City in August 2013.

#### **Thailand: Wide Range of Energy-Saving Activities**



**Energy saving in action** 

Hitachi Consumer Products (Thailand), Ltd. has pursued energy efficiency on many of fronts, and in fiscal 2013 succeeded in cutting annual CO₂ emissions by 378.6 tonnes. High-efficiency boilers and other equipment replaced old models, and inverter-controlled fans were introduced for the coating process. To boost energy-saving awareness among employees, the company held an energy-saving exhibition, and introduced noontime automatic power-off announcements and energy patrols. To ensure that energy saving continues, an internal Energy-

Saving Committee conducts a monthly energy survey, and auditors selected by the president conduct energy audits.

#### 12<sup>th</sup> Hitachi Young Leaders Initiative



**HYLI students and speakers** 

Hitachi, Ltd. and Hitachi Asia Ltd. held the 12<sup>th</sup> Hitachi Young Leaders Initiative (HYLI) in Bangkok in July 2013. Launched in 1996, the HYLI, a five-day event, has been offering university students from Indonesia, Malaysia, the Philippines, Singapore, Thailand, Vietnam, and Japan an opportunity to discuss and raise their awareness of common issues in Asia. The theme of the twelfth event was The Road Ahead: ASEAN's Role in Asia and the Global Economy. The first and second days featured speeches and discussions by prominent guest speakers including Thailand's deputy

prime minister, minister of finance, and ASEAN's secretary-general. The event drew about 400 participants, including people from local media and universities.

## China

### **Message from Representative**

In recent years, the world's second largest economic power, China, has seen consistently high economic growth and has become an engine for global economic development. At the same time, this country is facing challenges, including dealing with environmental issues, developing their infrastructure, and reshaping the nation's industrial base to meet the demands of strong economic growth. Under the 12th Five-Year Plan, announced in March 2011, China's leadership is aspiring to grow their economy centered on industrial structural reform, urbanization, and the expansion of domestic demand, as well as realizing a low-carbon, environmentally conscious society with a green economy. With a direct impact on Chinese people's lives, these issues require urgent action.



Kenichi Kokubo Vice President and Executive Officer Chief Executive for China Hitachi, Ltd.

The Hitachi Group, having both world-leading IT and infrastructure technology, is in a unique position as a global enterprise. Our proud mission is to use this uniqueness, along with our many other strengths, global experience, and knowhow in countries around the world to support their growth and development. China is no exception.

Hitachi's roots in China go back to the 1970s. Our business has supported China's development and growth, as we have grown at the same time. Today, we have 177 companies in China, employing some 46,400 people. We are keenly aware of the high expectations of the Chinese government and other stakeholders for Hitachi to help resolve their many challenges. Our corporate management has had a strong spirit of corporate social responsibility (CSR) since our founding. The Hitachi Group in China has carried on that spirit, contributing to the development of Chinese society through our key strength: Social Innovation Business. In other words, bringing the Group's collective power to bear in growing our business in tandem with market needs is in itself an expression of our CSR. We will forge ahead with our business in China with the goal of creating an affluent society and comfortable lifestyles for the Chinese people.

With growing business and local purchasing on the rise in China, CSR risk management in supply chains has become crucial. Since 2012, we have been conducting CSR audits at more than 10 suppliers from China every year, checking their human rights, labor, and environmental performance while ensuring their compliance with the Hitachi Group Code of Conduct. One China-only CSR initiative is the Hitachi Eco Education Classroom program, run mainly by Hitachi volunteers for elementary school students. In the last two years, around 20 Group companies have taken part in this program by explaining the importance of the environment to around 2,000 children in a friendly, easy-to-understand way. These activities have received high praise from elementary school students and the schools that have adopted the program. We will continue to assist the Hitachi Hope Elementary School in Jiangxi Province. In addition to donating books and other supplies, we aided in the construction of the dormitory and cafeteria, creating a pleasing environment where children, with their futures ahead of them, can play to their heart's content.

We will press ahead with our CSR activities in China from a wide perspective, tackling daily business operations through to volunteer activities, striving to achieve our goal of becoming "the Most Trusted Partner in China."

#### **CSR Activities in China**

#### **Stakeholder Dialogues**



First stakeholder dialogue in China

Every year in China, Hitachi (China) Ltd., in cooperation with other Group companies, releases a Chinese version of the *Hitachi Group Sustainability Report*. In addition to global articles, the report delves deep into Hitachi's activities in China, disclosing valuable information. In March 2014, we held our first stakeholder dialogue in China in Beijing. There we again outlined the governance, environmental, and social activities that we carry out in China to contribute to the development of their society. We also invited

frank views from Chinese CSR experts working for think tanks, government agencies, and the business press on Chinese society's expectations for CSR and information disclosure. We will continue to focus on social challenges though direct dialogues, nationally and locally, and reflect the insights gained through our business operations as well as our CSR and environmental initiatives.

## Leading-Edge Technologies and Equipment: Creating an Environmentally Conscious Factory



Hitachi Elevator Motor (Guangzhou) Co., Ltd.

Hitachi Elevator Motor (Guangzhou) Co., Ltd. manufactures the traction machines and equipment that move elevators. In 2013, leading-edge technologies and equipment were used to create a new environmentally conscious factory. The production line employs the latest machines to improve productivity and to use energy efficiently. To minimize VOC\*1 emissions from the coating line, water-soluble paints with low VOC content and a VOC adsorption system were used. Ceilings were designed to take in natural light and about 2,600 LED lights are being used throughout the building. As well, a central control for high-efficiency air conditioning systems

reduces power use across the plant. Moreover, the factory uses resources effectively: wastewater is collected and reused, while waste is recycled. Even the residue from the waste is passed on to a contractor to be made into bricks.

\*1 VOC: volatile organic compounds

#### **Hitachi Eco Education Classroom**



Elementary school children learn about the environment

Since fiscal 2012, we have been running the Hitachi Eco Education Classroom program in China to teach elementary school children about the environment, raise their awareness about conservation, and communicate the importance of changing their attitudes to what they can do for the environment. In fiscal 2013, 19 classes were held. In addition to company volunteers acting out a story, we used a new activity craft kit to stimulate children's interest. 187 volunteers from 16 Group companies assisted 844 elementary school children, with classes held again in Beijing, Shanghai, and Guangzhou, and for the first

time in Shenzhen, Suzhou, Hefei, Fuzhou, Wuxi, and Jiangxi.

# **Governance Report**

145th General Meeting of Shareholders (Hitachi, Ltd.)



Report 2014

## **Corporate Governance**

Hitachi has adopted the committee system to ensure highly transparent corporate governance. Our J-SOX Committee maintains and evaluates the effectiveness of our internal control over financial reporting. We will continue to improve corporate governance across the Group to meet the expectations of stakeholders as a business that merits the public's trust.

## **Hitachi's Governance Initiatives**

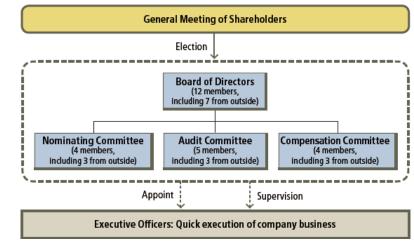
Hitachi has adopted the committee system.\*1 We aim to establish a framework for quick business operations and to realize highly transparent management by separating the responsibilities for management oversight from the execution of business operations. We have formulated and published Corporate Governance Guidelines outlining the framework of corporate governance, such as the function and composition of the Board of Directors, qualifications for outside directors, and the criteria for assessing the independence of outside directors.

Committee system: 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. Hitachi, Ltd. and its seven major listed subsidiaries have adopted the committee system.

#### Governance Structure of Hitachi, Ltd.

The Majority of our Board of Directors are outside directors, including non-Japanese. Our goals are to reflect global and diverse viewpoints as well as to reinforce management supervisory functions.

#### Governance Structure of Hitachi, Ltd.



## **Group Management**

Hitachi instituted an in-house company system in fiscal 2009 to optimize business operations. By maintaining the independence of in-house and Group companies, we have clarified responsibilities and authority, while respecting management independence and original innovation. This has speeded up management and enhanced competitiveness. Since fiscal 2010, we have rated each company and transferred authority to ensure swift, independent management.

#### **Seven-Group Management Structure**

In April 2012, we reorganized the entire Hitachi Group into five groups to achieve an increased focus on growing fields. This move was designed for a rapid response to the worldwide dynamic changes in business models and services centered on our Social Infrastructure Business. In April 2013, the automotive equipment business, which was an element of the Infrastructure Systems Group, was split off to form the new Automotive Systems Group, for quicker management decision making. In April 2014, we created the Healthcare Group to integrate our customer response, to boost our ability to propose solutions geared to diversifying market needs, and to enhance our global competitiveness.

We will continue to promptly and carefully adapt our management structure in response to the particular features of the markets, customers, and regions where we operate, as well as to make changes when necessary.

#### Seven-Group Management Structure



- \*1 Big data: A collection of the massive volumes of the unstructured data that conventional systems could not process, or the technology handling that data
- SI (systems integration): Integrated information system services that include planning through implementation to operation responding to customer needs

## **Internal Control over Financial Reporting**

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

Our in-house companies and major Group companies have been developing mechanisms to objectively perform assessments. Assessment results are reported to the J-SOX Committee's Office to evaluate the effectiveness of internal controls.

\*1 J-SOX: A system for the development of the internal controls required under Japan's Financial Instruments and Exchange Act (FIEA) that ensure the reliability of corporate disclosure.

#### **Hitachi Internal Control Assessment System** Hitachi, Ltd. President Financial and CFO Services Internal Agency Control Report Report Report Report Audit Committee Committee's Office Collaboration Secretariat Report Internal Auditing Office In-house and External major Group companies Audit Report Subsidiaries

## **Compensation for Directors and Executive Officers**

Compensation for every director and executive officer is determined by the Compensation Committee based on the provisions of the Companies Act of Japan.

Compensation for directors and executive officers consists of monthly salaries together with year-end allowances for directors and a performance-linked component for executive officers. While compensation for directors is fixed, the performance-linked component for executive officers is set within a range equivalent to about thirty percent of the executive officer's annual income, adjusted based on Company and individual performance. Beginning with compensation for fiscal 2008, the system for directors and executive officers was revised to abolish retirement allowances. 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 those directors or executive officers. In fiscal 2013, the amount of compensation for directors and executive officers is shown below.

#### **FY 2013 Compensation for Directors and Executive Officers**

Category	Recipients (number)	Total amount (millions of yen)
Directors (outside directors)	14 (9)	376 (215)
Executive officers	31	1,989
Total	45	2,366

- The number of directors indicated excludes one director who concurrently serves as an executive officer.
- Compensation to directors includes the monthly salaries of one outside director who retired due to expiration of his term of office at the close of the 144th Ordinary General Meeting of Shareholders held on June 21, 2013.
- In addition to the above, there are retirement allowances of 21 million yen for three directors (of which, 5 million yen is for two outside directors) who retired on June 20, 2014, and of 16 million yen for one executive officer who retired on March 31, 2014.

#### chapter 1 | Governance Report

060 Corporate Governance

063 Brand Management

065 Risk Management 067 Compliance

Report 2014

## **Brand Management**

The global expansion of our Social Innovation Business requires us to clearly express the Hitachi identity and vision to our stakeholders. Hitachi's brand management activities are designed to enhance the brand value for stakeholders both inside and outside the company.

### **Brand Management Initiatives**

Hitachi's brand management brings the Hitachi Group Vision to life. Our Global Brand Campaign introduces to stakeholders our vision of realizing a sustainable society and showcases the ways that our Social Innovation Business is helping to solve social issues. Internally, we are working to raise awareness of the Hitachi Group Vision among the Group's over 320,000 employees.

## **Global Campaign**

#### Social Innovation—It's Our Future

It is critical that we gain our stakeholders' understanding of our corporate vision of realizing a sustainable society and of our globally-based Social Innovation Business. In fiscal 2013, we launched the Global Brand Campaign in 17 countries. Based on the 2015 Mid-term Management Plan, the campaign uses the slogan Social Innovation—It's Our Future, presenting examples of how Hitachi's Social Innovation Business is helping to address universal social issues such as shortages of energy, water, transportation, and healthcare. To enrich the Hitachi brand in emerging markets, in fiscal 2013 we took the Global Brand Campaign as well as the Hitachi Group Exhibition to India, Brazil, and the Middle East. We showcased solutions to the social issues facing those countries and region, including harm to the environment and lack of water resources and transportation. We provided



Global Brand Campaign advertising

information on our Social Innovation Business to a wide range of stakeholders—government officials included—through speeches and panel discussions, as well as solutions and panel exhibits related to Social Innovation Business.

#### **Achieving Group-wide Penetration**

To realize the Hitachi Group Vision, our brand management must engage everyone in the Group in retaining our spirit of challenge in the face of social issues and meeting stakeholders' expectations. We use channels such as our intranet to ensure that Group employees are clearly aware of what needs to be done to realize the Group vision. To promote understanding of the Hitachi brand, we launched the Inspiration of the Year Awards in fiscal 2003 to share within Hitachi those activities that have made an outstanding contribution to boosting our brand value. In fiscal 2012, we started evaluating applications globally, renaming them the Inspiration of the Year Global Awards. In fiscal 2013, the awards attracted 244 applications throughout the world, including from China, Europe, Africa, India, North America, Southeast Asia, and Japan. Outstanding activities from each region were highlighted on the intranet and awards were given out by the president at a ceremony held in our Tokyo headquarters. We have also placed on the intranet Japanese, English, and Chinese versions of the Hitachi Vision Movie, a visual depiction of the Hitachi Group Vision, and the Hitachi Vision Book, a straight-forward explanation using illustrations and photographs, to instill the Hitachi Group Vision in our employees.

Through these initiatives, we intend to raise employee awareness of the Hitachi Group Vision and become a company that responds with innovation to the challenges facing society.

064 Hitachi Group Sustainability Report 2014



## **Managing the Hitachi Brand Impression**

To safeguard the credibility of the Hitachi brand and to accurately communicate our brand value to stakeholders, we have created a global manual showing the correct presentation and use of our logo and trademark to ensure a consistent visual impression.



We provide legal protection for the Hitachi brand by working hard to eliminate counterfeit products and parts in high-risk regions. In regions where counterfeit products are particularly widespread, we collaborate with local companies to step up anticounterfeiting programs.

Report 2014

## **Risk Management**

Our broad-ranging business activities take place all over the world. We are strengthening risk management, including developing a framework for managing Group-wide compliance, to prevent risks that hold back business continuity.

## Reinforcing the Risk Management System

The entire Hitachi Group is reinforcing management systems to address increasingly global and complex risks. In fiscal 2009, we formulated the Hitachi Global Compliance Program (HGCP), our basis for audits and for educating employees. In fiscal 2013, we appointed a Hitachi Group Chief Compliance Officer (CCO) to manage compliance for the whole Group. As well, we appointed CCOs in all our business units.

In October 2013, we set up a Risk Management Group, bringing functions such as internal audits, compliance, and risk management (BCP),\*1 which were previously handled separately by risk management officers. We will develop a comprehensive enterprise risk management framework to provide standards and systems for determining all risks to Hitachi—business and other risks—that will be examined at the management level.

\*1 BCPs: Business continuity plans for early restoration and continuation of key business processes during an emergency.

## **Creating BCPs in Key Operations Worldwide**

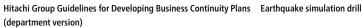
Being deeply committed to the social infrastructure, we are enhancing our BCPs to guard against risks that could cause disruptions to business operations that severely impacts society. For example, we issued the *Hitachi Group Guidelines for Developing Business Continuity Plans* in December 2006, and in fiscal 2010 translated this 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 included identification of secondary and other suppliers, cloud storage and multiplexing of production information, as well as securing alternate transportation and fuel sources. Based on the lessons learned from this disaster, in October 2011 we released and distributed new BCP guidelines for departmental implementation to further improve our BCPs. Hitachi Group operations in Japan completed their preparation and review of BCPs, based on applicability to their operations, by the end of fiscal 2011. BCPs for large earthquakes and novel strains of influenza have been prepared for 49 Hitachi, Ltd. business sites and 96 Group companies. Outside Japan, 303 companies are preparing BCPs with the goal of completing them for key operations by the end of fiscal 2013. These BCPs will strengthen 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.

Since fiscal 1998, Hitachi, Ltd. has held annual earthquake simulation drills at key operations in Japan. In February 2014, our Chubu Area Operation held a drill simulating three large earthquakes hitting at the same time: the Tokai, Tonankai, and Nankai earthquakes. Directed by the General Manager of Area Operations, managers in charge of their divisions confirmed the action plans in emergency situations based on the Chubu Area Operation BCP.

067 Compliance







## Improving Safety for Employees Sent to Dangerous Regions

Responding to the hostage incident in Algeria in January 2013, President Nakanishi reinforced his policy in February 2013 of ensuring the safety of employees sent outside Japan. Survey missions by in-house and outside experts are now sent beforehand to areas at high risk of war, terrorism, and other threats. Additional surveys are to be conducted every six months after that to check on their safety and other measures. In fiscal 2013, survey missions were sent to several countries in Africa and the Middle East, underscoring our commitment to making certain that our employees working around the globe are safe.

Hitachi is also contributing to safety measures at other Japanese corporations operating outside Japan. Hitachi, Ltd. participated in a government-organized round-table conference, launched in February 2013, to consider the protection of Japanese citizens and Japanese companies operating in other countries, making safety recommendations to the Chief Cabinet Secretary. Hitachi, Ltd. also sent a lecturer to all four sessions of the Intensive Public-Private Joint Seminar on Overseas Safety Measures held by the Ministry of Foreign Affairs in fiscal 2013 in response to the round-table recommendations.

## **Compliance**

Our business activities are subject to government regulations in the countries where we operate. As we expand internationally, we are deepening compliance knowledge and awareness among Hitachi Group companies worldwide to ensure fair competition.

## **Enhancing Our Compliance Framework**

To enhance our compliance framework, we have appointed a senior vice president and executive officer to oversee risk management for Hitachi as a whole. Every in-house company and key Group company also has an executive handling risk management, assisted by a Compliance Manager (CM).

The Compliance Management Conference, made up of risk management executives from in-house companies and key Group companies, and the Hitachi Group Compliance Conference, all CMs, meet regularly to provide information on compliance and to make certain that actions, such as monitoring and education, are being implemented.

## Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct

Hitachi, Ltd. formulated the Hitachi Group Codes of Conduct as a specific common conduct code for the Hitachi Group. This was in line with the shift to a new Group management structure to mark Hitachi's centennial. To educate employees on the codes, we issued the *Hitachi Group Codes of Conduct Handbook* in fiscal 2011, with more than 240,000 copies distributed to employees in Japan, as of March 2014. We ask managers to submit a written statement confirming that they have taken the course and that they pledge to comply with the Hitachi Group Codes of Conduct. To broaden awareness of the codes throughout our global operations, we have produced English and Chinese versions of a Japanese-language e-learning tool that shows appropriate behavior and presents specific examples for use in Hitachi Group companies, within and outside Japan. We also conduct compliance training that includes Group companies outside Japan.

#### **Preventing Corrupt Practices**

To deal with global corruption risks, in fiscal 2013 we used the *US Foreign Corrupt Practices Act\** Resource Guide as a reference when developing various corruption risk scenarios, using these as the basis for a survey conducted with Hitachi Group companies outside Japan. By analyzing the survey results, we identified some companies at potential risk. We will now monitor and work with those companies with the goal of reducing corruption worldwide.

\*1 US Foreign Corrupt Practices Act covers the anti-bribery 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.

067 Compliance

#### Hitachi Group Sustainability Report 2014

## **Implementing Corporate Ethics and Compliance Month**

Corporate ethics and compliance are the bedrock of all our activities. Since fiscal 2009, we have held Ethics and Compliance Month throughout the Hitachi Group each October. In fiscal 2013, we revised the set of case studies created in fiscal 2012 for workplace discussions on issues relevant to particular workplaces, and put this up on our intranet. The 63 case studies match chapters in the Hitachi Group Codes of Conduct Handbook. We also translated case studies into English and Chinese for use in our global operations, drawing 139,038 employees around the world into workplace discussions during fiscal 2013's Corporate Ethics and Compliance Month.

Group companies also held their own activities, including lectures, requests for senryu (satirical poetry), putting up posters, conducting compliance awareness surveys, and identifying risks.

## **Preventing Violations of the Antimonopoly Law**

The Hitachi Group engages in business based on the principles of "conformance with the law and business ethics" and "fair and disciplined competition." However, regrettably Hitachi, Ltd. was penalized for impairing the fairness of a public bid in fiscal 2002, and we received administrative orders in September 2006, October 2008, and March 2009 for violating Japan's Antimonopoly Law.

In November 2012, a subsidiary dealing in automotive components received administrative orders from the Japan Fair Trade Commission for violating the Antimonopoly Law. In September 2013, the same company was prosecuted by the US Department of Justice for violating US antitrust laws, resulting in a plea bargain.

We are working in several ways to prevent further such violations and to broaden awareness of compliance issues, including publicizing messages from top executives, developing company regulations, conducting regular audits, and providing education and training to employees based on a compliance manual. In fiscal 2013, we held group education sessions on the Antimonopoly Law for all Hitachi, Ltd. sales managers in June and July, with 851 taking part.

During Corporate Ethics and Compliance Month, education sessions were also held in every Hitachi, Ltd. area operation, with 1,669 employees attending. We will continue working to improve and enhance our compliance framework.

### **Compliance Reporting System**

We instituted a Group-wide whistle-blowing system to prevent illegal and unethical behavior, to promptly address infractions, and to enhance our ability to self-regulate. People can report directly to the Compliance Department at Hitachi or to an outside attorney. This system can be used not only by Hitachi employees but also by former employees, temporary staff, and business partners. Another system—Channel to the Board of Directors—was been introduced to allow employees to report problems anonymously directly to Hitachi's board of directors.

We investigate and check the facts of all reports. People who have signed their names to their reports are informed of the investigation results, and we deal with the situation appropriately, including taking remedial action where necessary.

#### 069

Hitachi Group Sustainability Report 2014

#### **Prevention of Anti-social 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:

- 1. We will have no relations whatsoever with anti-social 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, the police, external specialist institutions (the National Center for the Elimination of Boryokudan and the Special Violence Prevention Measures Association (Tokubouren) under the control of the Metropolitan Police Department), and lawyers. We include an organized crime elimination clause in contracts so that if we determine that a business partner belongs to an antisocial group, we can void the contract and break off the relationship.

### **Export Control**

For basic export control policies, we adopt the Hitachi Standards of Corporate Conduct,\*1 which states "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, and we conduct screenings for such factors as destination countries and regions, as well as the end-use and end-users of all goods and technologies intended for export as strict export control practices according to laws and regulations. The guidance is provided to Hitachi Group companies, and we also provide educational support to make certain that all Group companies follow the same export control policies. In fiscal 2013, we held a workshop for Group companies in the United States, providing practical training on export control. We also set up e-learning programs on export control basics and U.S. reexport controls at 111 Group companies worldwide for around 20,000 employees.

\*1 Hitachi Standards of Corporate Conduct: Created by Hitachi, Ltd. to ensure full awareness of Hitachi's mission and role and to enable Hitachi to continue to grow as a truly global enterprise.

## **Information Security**

Hitachi maintains information in a secure way that respects all regulations. We use our information security management system to safeguard the business and personal information of our customers, Hitachi Group technical information, and other confidential information. We maintain and improve security in several ways: extensive information handling procedures, security education for employees, and information security audits, among others.

#### **Framework for Information Security**

The Information Security Committee, chaired by the Chief Information Security Officer, determines our information security policies and procedures. The Information Security Promotion Council and other bodies convey decisions internally and to Hitachi Group companies. 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:

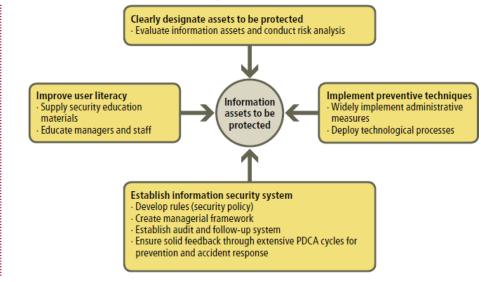
#### (1) Precautionary measures and prompt security responses

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.

#### **Basic Approach to Information Security Governance**



#### **Preventing Information Leaks**

We formulated the Three Principles for Preventing Leakage of Confidential Information to ensure the highest level of care for confidential information and to prevent leaks and accidents. Our policies make certain that, when an accident occurs, we minimize damage by promptly contacting customers, reporting to government agencies, investigating causes, and acting to prevent recurrences.

071

Hitachi Group Sustainability Report 2014

Hitachi Group companies take the following IT steps to prevent information leaks: using encryption software and secure PCs; employing electronic document access control and expiration processing software; maintaining ID management and access control by building an authentication infrastructure; and using e-mail and website filtering. 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 with both entry and exit countermeasures.

To ensure a secure exchange of information with our suppliers, we review their information security measures based on Hitachi's information security standards before allowing them access to confidential information. We have provided tools to approximately 11,500 suppliers (procurement partners) for security education and for checking business information on computers. In addition, we require them to check and remove business information from personal computers to prevent leaks.

#### 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 are reinforcing information security in line with our Global Information Security Administration Rules, which conform to the international ISO/IEC 27001 standard. We distribute these rules from our 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.

#### **Education on Information Security**

To consistently maintain information security, it is crucial for everyone 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. At Hitachi, Ltd., nearly 100 percent of the approximately 40,000 employees take these programs. We provide specific additional training with clear goals, especially for new employees and managers, and information system administrators. In 2012, we also began simulation training to educate employees about increasingly targeted e-mail attacks and other cyberattacks. Employees are sent simulated targeted e-mail to heighten their awareness of security through direct experience.

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

#### 072

## **Information Security Audits and Inspections**

Hitachi Group Sustainability Report 2014

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

The president appoints officers to conduct independent audits. These officers are not allowed to audit their own units, underlining our commitment to fairness and objectivity in auditing. We implemented audits at 247 domestic Hitachi Group companies, and we are in the process of confirming the results. For 649 Hitachi Group companies outside Japan, we use the Global Security Self Check 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 approximately 450 operations that handle important personal information. This regular control mechanism ensures complete safety management and implementation.

#### **Protecting Personal Information**

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

**WEB** 

Personal Information Protection Policy http://www.hitachi.com/privacy-e/index.html

#### **Privacy Mark Certification**

Hitachi, Ltd. received Privacy Mark\*¹ certification in March 2007, and maintained a high level of privacy protection for the fourth time in March 2015. The entire Hitachi Group is committed to personal information protection, with 59 Hitachi Group companies in Japan receiving the Privacy Mark as of March 2014. In July 2009, the Ibaraki Hospital Center, a corporate hospital in Japan, became Privacy Mark certified, and is working hard to protect and carefully handle the personal information of 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 adhering to all applicable laws and regulations, including social requirements.

\*1 Privacy Mark: A third party certification granted to businesses approved by an assessment institution as taking appropriate security management and protection measures on personal information (granting institution: Japan Information Processing Development Corporation). Effective since April 1998.



073

# **Environmental Report**

Malé Water and Sewerage Company Pvt. Ltd. Desalination Plant



# **Environmental Management Strategies** and Initiatives

With the environment as an important management focus, we are working to reduce the environmental burden of our business operations.

Guided by the Environmental Vision, aimed at achieving a sustainable society, Hitachi Group environmental management is determined to achieve the goals of the long-term plan Environmental Vision 2025 and our Environmental Action Plan.

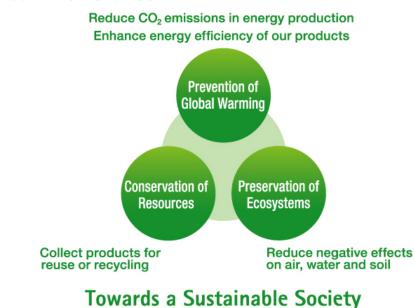
#### Vision

#### The Hitachi Environmental Vision

The world's population, having passed the 7 billion mark in 2011, is expected to reach 9.5 billion by 2050.\*¹ At the same time, worldwide GDP continues to grow. This economic and social growth has led to global warming, caused by a rise in CO₂ emissions from growing fossil fuel use. The depletion of energy, water, mineral reserves and other resources due to increased demand, as well as ecosystem destruction and other environmental problems, are also worsening.

To solve these environmental problems and to realize a sustainable society where humankind can thrive, we must do everything possible to reduce the burden of human activities on the environment. As a company engaged in the Social Innovation Business, we aim to achieve the environmental management described in our Environmental Vision or achieving a sustainable society by employing our company's resources to reduce the burden of human activities on the environment.

#### The Hitachi Environmental Vision



075

Hitachi Group Sustainability Report 2014

We are committed to global warming prevention, resource conservation, and ecosystems preservation as the three pillars of our vision. Our goal is to achieve a more sustainable society by promoting global production that reduces the environmental burden of a product throughout its life cycle. As a milestone on the way to realizing this Environmental Vision, we created our long-term plan Environmental Vision 2025 that looks ahead to fiscal 2025.

\*1 According to the United Nations report, World Population Prospects: The 2012 Revision

#### **Long-Term Plan Environmental Vision 2025**

The Intergovernmental Panel on Climate Change (IPCC) concluded in its Fifth Assessment Report, issued September 2013 (WG I report), that climate warming is unequivocal and extremely likely to be caused by human activities. This announcement, which reinforced arguments that have been made for some time, confirms once again that reducing  $CO_2$  and other greenhouse gases is essential for the prevention of global warming. Accordingly, the long-term plan Hitachi Group Environmental Vision 2025 targets the prevention of global warming, one of the issues the world is facing today, and states our goal of helping to reduce annual  $CO_2$  emissions by 100 million tonnes by 2025 through improved Hitachi products and services. Our aim is to do our part toward achieving a major reduction in  $CO_2$  emissions by providing our customers with low-carbon energy supplying products and energy-efficient products. To reach these goals, we are working to increase the ratio of our products that are Hitachi Eco-Products, with a reduced burden on the environment. We are expanding business opportunities further by working with partners in global markets.

#### 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 the Hitachi Environmental Vision.

#### **Hitachi Action Guidelines for Environmental Conservation**

- 1. Global environmental conservation is a critical challenge shared by all humans. Hitachi is committed, therefore, to fulfilling its responsibilities by assisting in the realization of an environmentally harmonious and sustainable society as one of its management priorities.
- 2. Hitachi will make efforts to contribute to society by developing highly reliable technologies and production processes, while identifying needs considering concerns related to the prevention of global warming, conservation of resources, and preservation of ecosystems.
- 3. Members of the board in charge of environmental conservation are responsible for facilitating appropriate environmental conservation activities. Departments responsible for environmental conservation should endeavor to promote and ensure environmental conservation activities, including improving environment-related rules and regulations and setting goals for environmental burden reduction. These departments should also confirm that their environmental conservation activities are conducted in a proper manner and ensure that these activities are maintained and improved.
- 4. Hitachi will promote globally applicable 'MONOZUKURI' with the aim of understanding and reducing environmental burdens at every stage, including product research and development, design, production, distribution, sales, usage, and final disposal.
- 5. Hitachi will investigate and review the environmental impact caused in the course of its 'MONOZUKURI' processes. Hitachi will also introduce excellent technologies and materials useful to safeguard the environment, in other words, to reduce environmental burdens through energy and resource saving, recycling, chemical substance management, consideration for the ecosystem, and other measures
- 6. Hitachi's environmental conservation efforts are not only to be focused on observing international environmental regulations and those of national and local governments, but also on conserving the environment by implementing voluntary environmental standards when necessary.
- 7. Regarding globally-applicable 'MONOZUKURI' activities, impact on the local environment and community are to be considered. In addition, measures that meet local communities' requests should be implemented.
- 8. Hitachi will educate its employees to take action in order to obey environment-related laws, raise their global environmental awareness, and encourage their interest in environmental conservation having a broad overview of society's activities.

Governance Report 059 chapter 2 | Environmental Report

074 Environmental Management Strategies and Initiatives
085 Environmentally Conscious Products and Services

099 Environmentally Conscious Products and Serv

122 Preserving Ecosystems and Environmental Communication

chapter 3

Social Report

129

076

Hitachi Group Sustainability Report 2014

- 9. Hitachi will evaluate potential environmental problems and prevent them from occurring. In the event that any environmental problem occurs, Hitachi will take appropriate measures to minimize the environmental burden.
- 10. Hitachi will make efforts to disclose information on its environmental conservation activities to its relevant stakeholders. Hitachi will also actively communicate with these stakeholders so as to strengthen mutual understanding and forge cooperative relationships with them.

# **Environmental Action Plan**

Our Environmental Action Plan was created and designed to carry out the measures in our Action Guidelines for Environmental Conservation. This plan sets improvement targets for specific areas, and environmental initiatives are promoted by executing and improving activities in the every area. Prior to fiscal 2013, the Environmental Action Plan was a five-year plan. Beginning in fiscal 2013, to give our environmental strategy a more prominent role in our management strategy, it was changed to a three-year plan, which aligns with the Mid-term Management Plan for the Hitachi Group covering fiscal 2013 to 2015.

# Third Environmental Action Plan for 2013 to 2015: Achievements and Targets

In fiscal 2013, the first year of the Third Environmental Action Plan, we were able to match or exceed that year's targets. We are now accelerating this work to ensure that all our targets are achieved by fiscal 2015, the final year of the plan.

The following tables show the main indicators for each of the action items, and the initiatives in each area are introduced on the corresponding pages.

#### Become an environmental value-creation company

Action goals	Indicators	Fiscal 2013 targets	Fiscal 2013 results	Achievement level	Final fiscal year (2015) targets
Contribute to the reduction of 100 million tonnes of CO <sub>2</sub> emissions through products and services	CO <sub>2</sub> emission reductions through products and services	24 million tonnes	27.47 million tonnes		35 million tonnes (100 million tonnes per year by 2025)

#### **Establish environmental management systems**

Action goals	Indicators	Fiscal 2013 targets	Fiscal 2013 results	Achievement level	Final fiscal year (2015) targets
Raise the level of environmental activities (GPs: green points)	GPs in GREEN 21 Environmental Activity Evaluation System	512 GPs	540 GPs		640 GPs
Ecosystem (biodiversity) preservation	Conduct assessment of ecosystem preservation	Conducted ecosystem preservation assessment	Carry out assessment		Completion of ecosystem preservation assessment

#### **Promote Eco-Products**

Action goals	Indicators	Fiscal 2013 targets	Fiscal 2013 results	Achievement level	Final fiscal year (2015) targets
Expand Hitachi Eco- Products lineup	Percentage of Hitachi Eco- Product sales	84%	89%		90%
	Number of models in Eco- Products Select program	140 models	210 models		240 models

#### Build industry's most advanced factories and offices

Action goals	Indicators	Fiscal 2013 targets	Fiscal 2013 results	Achievement level	Final fiscal year (2015) targets
Promote Eco-Factory & Offices Select certification	Eco-Factories & Offices Select certification	Expansion of certification	New certifications: 19 Renewed certifications: 36 Total: 55		Average of one or more certifications per in-house and Group company

Governance Report 059 chapter 2 | Environmental Report

074 Environmental Management Strategies and Initiatives 085 Environmentally Conscious Products and Services

099 Environmentally Conscious Production

122 Preserving Ecosystems and Environmental Communication

chapter 3 Social Report 129

# **Prevent global warming**

Action goals	Indicators	Fiscal 2013 targets	Fiscal 2013 results	Achievement level	Final fiscal year (2015) targets
Reduce energy use per unit	Rate of reduction in energy use per unit (base: FY 2005, global)	11%	14%		15%

# Hitachi Group Sustainability Report 2014

# Use resources efficiently

Action goals	Indicators	Fiscal 2013 targets	Fiscal 2013 results	Achievement level	Final fiscal year (2015) targets
Reduce waste and valuables generation per unit	Rate of reduction for waste and valuables generation per unit (base: FY 2005, global)	19%	24%		23%
Reduce water use per unit	Rate of reduction in water use per unit (base: FY 2005, outside Japan)	26%	39%		30%

# **Manage chemical substances**

Action goals	Indicators	Fiscal 2013 targets	Fiscal 2013 results	Achievement level	Final fiscal year (2015) targets
Reduce VOC atmospheric emissions per unit	Rate of reduction in VOC atmospheric emissions per unit (base: FY 2006, global)	38%	43%		40%

# Global citizenship program

Action goals	Indicators	Fiscal 2013 targets	Fiscal 2013 results	Achievement level	Final fiscal year (2015) targets
Social contributions through environmental activities	Carry out environmental communication as the flagship activity of each in- house and Group company	Expansion of activities	Expanded activities		Achieve one or more flagship activity per in -house and Group company

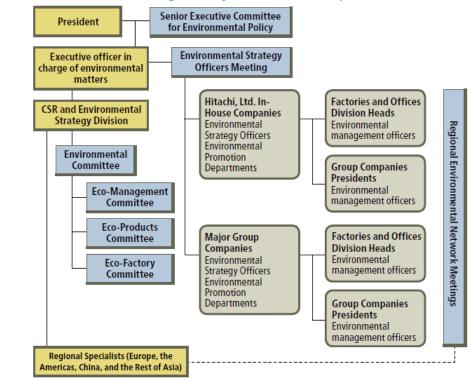
: Achieved : Partially achieved

# **Environmental Management Framework**

Our global environmental management system supports environmental decision making and implementation at Hitachi, Ltd., 947 consolidated subsidiaries, and 231 equitymethod affiliates.

The CSR and Environmental Strategy Division is responsible for developing Group-wide environmental policies. Important items related to environmental initiatives are considered by the Senior Executive Committee, chaired by the president. The Environmental Strategy Officers Meeting, made up of representatives from in-house companies and major Group companies, ensures that Hitachi Group Environmental Action Plan that has been approved by the executive officer in charge of environmental concerns is implemented throughout the Group. The Environmental Committee and committees of working-level experts for each policy area develop targets and ways to achieve them, as well as promote 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 to share information on the latest environmental regulations, while exchanging views on local environmental issues within each region.

#### Hitachi's Environmental Management System (EMS) (as of April 2014)



Hitachi, Ltd., and 947 consolidated subsidiaries:total 948 companies, and 231 equity-method affiliates

#### **Building Environmental Management Systems**

080 Hitachi Group Sustainability Report 2014

For efficient management of each business site's environmental load, we have set criteria for environmental management. There are approximately 250 business sites that meet these criteria. The R&D Group, five in-house companies, and 11 Group companies, 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 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.

#### Criteria for Environmental Management Level (major items)

Number of employees	≥ 500
Electric power consumption	≥ 6,000 MWh/year
Waste generation	≥ 500 tonnes/year
Water use	≥ 600 m <sup>3</sup> /day
Paper purchase	≥ 50 tonnes/year

# Status of ISO 14001 Certifications (as of April 2014)

	Japan	Outside Japan	Total
Number of Certified Sites*1	171	148	319



122 Preserving Ecosystems and Environmental Communication

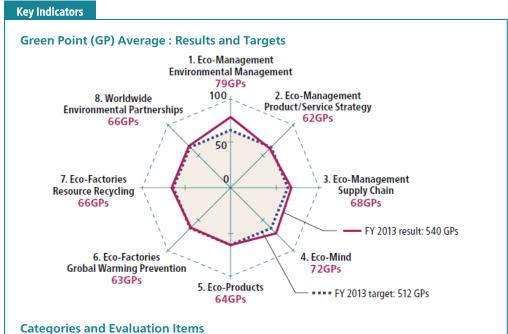
# **Monitoring Environmental Performance Data**

For effective environmental management, we collect data on the environmental performance of business operations using the Environmental Load Evaluation System. This system collects environmental load data from some 250 Hitachi business sites worldwide on items such as energy use, CO<sub>2</sub> emissions, and waste generation, together with information on awards received and other items. By analyzing this information, we identify environmental management issues, share instructive examples within the Group, and improve environmental practices. Specifically, environmental performance data in the key areas of energy, waste materials, water, and VOCs is collected and analyzed monthly or quarterly so that performance levels can be further increased.

Hitachi Group Sustainability Report 2014

# **Environmental Activity Evaluation System**

We use our own evaluation system, GREEN 21, to improve the level and quality of our environmental activities. It divides environmental activities into eight categories and evaluates achievements and progress toward Action Plan targets by rating 52 items on a scale from 1 to 5. For any category, a perfect score is 100 green points (GPs). We surpassed our fiscal 2013 target of 512 GPs with a score of 540 GPs. As we further raise the level of environmental activities, we are aiming at a target of 640 GPs for fiscal 2015.



- 1. Environmental management, environmental accounting, compliance with laws and regulations
- 2. Progress toward goal of reducing CO<sub>2</sub> emissions by 100 million tonnes; environment business strategies
- 3. Gathering and communicating environmental information across the supply chain
- 4. Environmental education, training environmental experts

- 5. Assessment of products and services
- 6. Reducing CO<sub>2</sub> emissions, improving energy efficiency, energy savings in transportation
- 7. Resource recycling, chemical substances management
- 8. Information disclosure. communication activities, global citizenship activities, preserving ecosystems

chapter 3

# **Hitachi Group Environmental Award Program**

To encourage environmental activities and disseminate best practices throughout the Group, we established the GREEN 21 Award program, honoring environmentally conscious products and technologies, examples of advanced energy savings and other initiatives at business sites, and communication with society through environmental activities. In fiscal 2013, 16 awards were given out.

#### Fiscal 2013 GREEN 21 Awards

Category	Recipient (business site/individual)	Achievement
Environmental Mar	nagement & Communication	
Grand Prize	Hitachi Construction Machinery Co., Ltd.	Emission credit activities for construction machinery
Excellence Prize	Hitachi Electronic Products (Malaysia) Sdn. Bhd.	Prime Minister's Hibiscus Award for achievements in the environmental area
Honorable Mention	Hitachi Construction Machinery (Shanghai) Co., Ltd.	Greening of the Horqin Desert in the Inner Mongolia Autonomous Region of China
	Yokohama Area Operation, Hitachi, Ltd.	Environmental Summit for children in Kanagawa, 2013
Eco-Business and E	co-Products	
Grand Prize	Information & Telecommunication Systems Company, Hitachi, Ltd., Government & Public Corporation Information Systems Division	ADWORLD, Long-term care insurance office support system
Excellence Prize	Clarion Co., Ltd.	Full-digital Speaker Z17F
Honorable	Hitachi Consulting Corporation	Hitachi Consulting Energy Solutions
Mention	Hitachi Appliances, Inc.	Developing the large-capacity refrigerator Vacuum-chilled FS series
	Hitachi Metals, Ltd.	Amorphous Metal Materials Metglas® 2605HB1M
Eco-Factories and E	co-Offices	
Grand Prize	Hitachi Data Systems Netherlands BV	Reducing environmental burden, including installing a 1.6 MW photovoltaic power generation system in distribution center
Select Excellence Prize	Hitachi Elevator Motor (Guangzhou) Co., Ltd.	Making plant environmentally conscious by measures including recycling manufacturing wastewater and reducing VOC emissions
	Infrastructure Systems Company, Hitachi, Ltd., Omika Works	Omika Smart Factory project and visualizing the waste discharge volume
Honorable Mention	Information & Telecommunication Systems Company, Hitachi, Ltd., IT Platform Division Group, Yokohama Office	Reducing energy use by building an Eco-Office
	Hitachi Industrial Equipment Systems, Ltd., Narashino Works	Reducing environmental burden by developing an IH varnish curing system
	Hitachi Kokusai Electric Inc., Tokyo Works	Building a new environmentally conscious production wing, and reducing energy use and amount sent to landfills
Challenge Prize		
	Hitachi Life Group	Providing energy-conscious environment, and environmental programs for products and buildings

# **Climate Change: Risks and Opportunities**

The Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) states that "warming of the climate system is unequivocal," noting evidence of "warming of the atmosphere and oceans" and "increasing concentrations of greenhouse gases." Looking ahead, the report warns that our ability to adapt may be hindered and urges major innovations in political, social, economic, and technological systems so that effective adaptation measures can be implemented. Along with mitigation measures, these steps will help us move toward achieving a resilient society and sustainable development.

We recognize the risks of climate change as a vital management issue, while seeing opportunities for challenging these risks through *mitigation* or reducing greenhouse gases, and through *adaptation* or changing the ways that society interacts with nature. Aware of the importance of considering and implementing specific proposals in the Group as a whole, we intend to bring together and use the diverse technologies that have been developed up to now.

We recognize these risk factors related to climate change:

- 1. Measures such as emissions trading, carbon taxes, and energy efficiency standards, adopted as regulations or policies in each country, will affect business activities at manufacturing sites.
- 2. Product and service conditions, such as energy efficiency standards for products, carbon footprint labeling, and the introduction of a feed-in tariff system for renewable energy, will affect market trends.
- 3. Damage to facilities from frequent large typhoons and flooding as well as water shortages due to reduced rainfall will increase the cost of countermeasures, and these natural events will temporarily interrupt operations, including those in our supply chains.

All these risks restrict or place burdens on business activities and product development, but they can also be seen as opportunities for raising market competitiveness. We need an effective strategy that includes meeting all regulations, and we are devoting new management resources to deal with these issues.

A prime example of Hitachi creating opportunities is the use of IT (information technology) for exploiting big data (massive amounts of digital information). Big data includes the information kept on our daily lives as well as information continually recorded by the social infrastructure systems that support our lives, and other information such as weather and climate, as well as supplementary data that is updated every day. Big data challenges us to link together the latest information technologies, creating new opportunities for contributing to the development of a sustainable society that can cope with climate change.

Electric power systems must be made resilient to adapt to climate change. The risks include water runoff and flooding caused by rising temperatures and extreme weather from global warming. Hitachi takes part in the Electric Utilities group of the World Business Council for Sustainable Development (WBCSD), and has contributed to issuing the *Building a Resilient Power Sector* report (March 2014) that analyzed the impact of climate change on power systems, pointing out the need to manage and counter risks. This report describes the risks faced by power systems and introduces initiatives by Hitachi and other companies. It also offers proposals on building up specialized knowledge for recording climate data for the earth as a whole and distilling it down to the regional level, as well as risk management and a cost benefit analysis on effective countermeasures, cooperation with government bodies, research and development, and mutual cooperation.

122 Preserving Ecosystems and Environmental Communication

chapter 3



**Building a Resilient Power Sector** 

**WEB** 

**WBCSD Building a Resilient Power Sector** 

http://www.wbcsd.org/resilience.aspx

# **Environmentally Conscious Products** and Services

To reduce the environmental burden of products and services throughout their life cycle, we are developing and expanding the ratio of products called Eco-Products that meet standards for environmental consciousness, recycling product resources, and managing chemical substances.

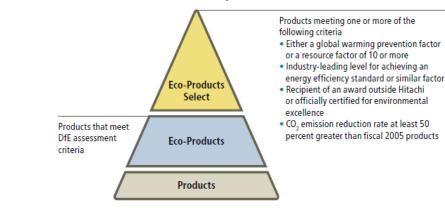
# **Increasing the Ratio of Eco-Products**

We develop environmentally conscious products called Eco-Products as part of our initiative to reduce, as much as possible, the burden on the environment of our products and services.

Eco-Products must meet criteria used for the design and development of products and services. These criteria are set out in our Assessment for DfE (Design for Environment), where we evaluate the extent to which the environmental burden of products and services is reduced throughout their life cycle. To promote their development, we have set targets for raising the Eco-Product sales ratio, which is the ratio of Eco-Product sales to total product sales.

Eco-Products that meet even more demanding requirements are designated as Eco-Products Select. We are also working to produce more of these products.

#### Hitachi's Framework for Environmentally Conscious Products



**WEB** 

**Designation of Eco-Products** 

http://www.hitachi.com/environment/activities/ecoproducts/promote.html#promote02

WEB

**Designation of Eco-Products Select** 

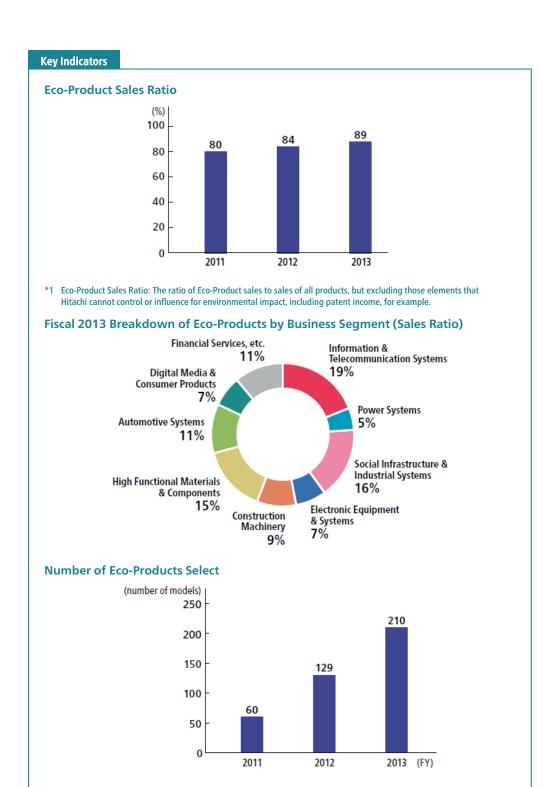
http://www.hitachi.com/environment/activities/ecoproducts/promote.html#promote03

#### **Activities and Results**

In fiscal 2013, our Eco-Product sales ratio reached 89 percent, and we increased the number of Eco-Products Select models by 81, totaling 210 products. At business sites outside Japan—now with new design and development functions—we went ahead with a planned approach to expanding the lineup of Eco-Products. This included improving the eco-design skills of our designers.

122 Preserving Ecosystems and Environmental Communication

chapter 3



# **Designation of Eco-Products**

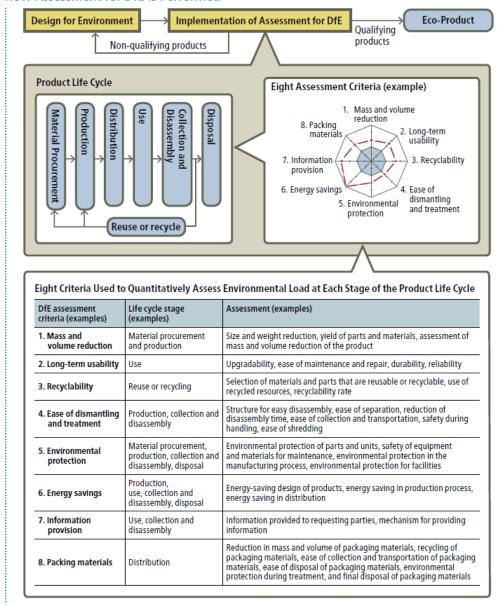
The Hitachi Group evaluates the environmental consciousness of products and services at the design and development stage, using Assessment for DfE (Design for Environment), and designates ones as Eco-Products that meet the criteria.

chapter 1
Governance Report
050

ш	Environmental Report
074	<b>Environmental Management Strategies and Initiatives</b>
085	Environmentally Conscious Products and Services
099	Environmentally Conscious Production
122	December 5

In Assessment for DfE, the environmental load throughout the product life cycle-from material procurement to production, distribution, use, collection and disassembly, and appropriate disposal-is assessed using eight DfE criteria, including environmental protection measures and energy savings. The results are recorded as 1 through 5. For a product to be designated an Eco-Product, it must score at least level 2, the reference level before the latest major model change, in all eight assessment criteria and its average over all the criteria must be level 3 or higher.

#### **How Assessment for DfE Is Performed**

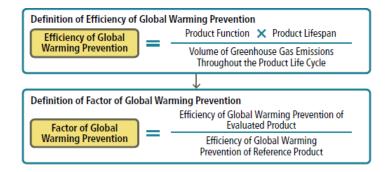


Eco-Products that meet even more demanding requirements are designated as Eco-Products Select. These must (1) have either a global warming prevention factor or resource factor of 10 or more, or (2) be leaders in their industry for their energy efficiency standard achievement rate\*1 or similar factors, or (3) have received an award outside the company or official certification for their environmental excellence, or (4) have a  $CO_2$  emission reduction rate at least 50 percent greater than fiscal 2005 products. "Factor 10 or more" indicates that the product has a global warming prevention efficiency or resource efficiency at least ten times greater than the reference products that were sold in fiscal 2005, in principle.

\*1 Energy efficiency standard achievement rate: Based on the Energy Conservation Law (Act on the Rational Use of Energy) in Japan, this value indicates the rate of achievement for energy efficiency targets of certain home appliances. The target values are defined using the most energy-efficient products available at the time.

#### **Global Warming Prevention Factor Calculation**

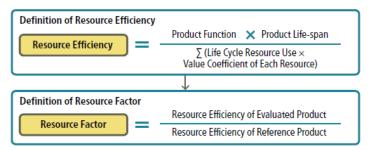
The global warming prevention factor indicates the amount of improvement in efficiency of global warming prevention compared with a reference product. The efficiency of global warming prevention is based on the concept of environmental efficiency that balances the value of products contributing to the quality of life and the reduction of their environmental load. We measure the improvement in quality of life by product function and life span, and use the amount of greenhouse gases emitted over the product life cycle to calculate the reduced environmental load.



#### **Resource Factor Calculation**

The resource factor indicates the amount of improvement in resource efficiency compared with a reference product. Drawing on the same concept as global warming prevention efficiency, we measure the improvement in quality of life by product function and life span, and use the amount of resources used over the product life cycle\*1 to calculate the reduced environmental load.

\*1 Amount of resources used over the product's life cycle: amount of new resources + wasted resources



chapter 3

#### **Information & Telecommunication Systems**

Product	Hitachi Unified Storage VM (Information & Telecommunication Systems Company, Hitachi, Ltd.)	######################################
Environmentally Conscious Features and Characteristics	<ul> <li>Controlled fan speed for reduced power consumption</li> <li>High-capacity 3.5-inch/2.5-inch hard disc drives improve energy efficiency by around 40%*1</li> </ul>	Hitachi Unified Storage VM

\*1 Compared with earlier Hitachi Virtual Storage Platform (September 2010 model with 640 3.5-inch drives)

Product	ADWORLD, Long-term care insurance office support system (Information & Telecommunication Systems Company, Hitachi, Ltd.)	ADWORLD
Environmentally Conscious Features and Characteristics	<ul> <li>Raising the efficiency of long-term care insurance procedures by local government workers; reduces CO<sub>2</sub> emissions by 80% from levels prior to system introduction</li> <li>Enabling up to 20 organizations to share the server system needed for operations; reduces CO<sub>2</sub> emissions by around 90% compared with municipalities using individual servers</li> </ul>	Service infrastructure  • Management of eligibility of insured persons  • Management of payment of insurance premiums  • Management of insurance service recipients  • Management of service
Third-Party Awards	"Green IT Award 2013 "Savings in Society's Energy Consumption by IT" category Green IT Award, Review Board Special Award	Typical services of Long-term care insurance office support system of ADWORLD

#### **Social Infrastructure and Industrial Systems**

Product	Ref Assist, energy-saving spot cooling system for data centers (Infrastructure Systems Company, Hitachi, Ltd.)
Environmentally Conscious Features and Characteristics	<ul> <li>Refrigerants circulated naturally using specific gravity differences, along with using spot cooling units installed above servers, reduce the power needed for fans.</li> <li>This design, combined with high-efficiency heat sources and free cooling, reduces power consumption by up to 60% compared with conventional underfloor air conditioning systems.</li> <li>In recognition of these advantages, the criteria for selecting data center cooling systems demonstrated by Hitachi were adopted by the ITU in its international standards for Energy Efficiency and Green Data Centers.</li> </ul>
Third-Party Awards	<ul> <li>Main prize at the 53rd (2010) Best 10 New Product Awards sponsored by Nikkan Kogyo Shimbun</li> <li>FY 2012 Regional Invention Awards, Chiba Invention Association Chairman's Prize</li> </ul>



Cooling unit of ceiling-suspension type for Ref Assist energy-saving spot cooling system

- \*1 ITU (International Telecommunication Union): It is a professional organization of the United Nations and one of the three major international standards organizations. Among its purposes are promoting standardization in the electrical and radio communication fields, developing telecommunication technologies and allocating communication frequencies.
- \*2 Products are selected for their contribution to the development of the manufacturing industry and for making Japan more globally competitive. The main prize is awarded to ten new products.

# **Electronic Equipment and Systems**

Product	Noblus Digital Diagnostic Ultrasound System (Hitachi Medical Corporation, Hitachi Aloka Medical, Ltd.)	1
Environmentally Conscious Features and Characteristics	<ul> <li>By reducing the number of parts, including circuit boards, power consumption is cut by around 67% from the earlier cart-mounted model introduced in fiscal 2009.</li> <li>By revising the chassis shape and materials to reduce the amount of iron and ferrous alloys, which accounted for 70% of the earlier equipment weight, a 90% decrease in weight was achieved.</li> </ul>	Noblus Digital Diagnostic Ultrasound Scanner

# **High Functional Materials**

091 Hitachi Group Sustainability Report 2014

Product	Metglas <sup>®</sup> 2605HB1M Amorphous Alloy (Hitachi Metals, Ltd.)	
Environmentally Conscious Features and Characteristics	Standby power (no-load-loss) of transformers using Metglas 2605HB1M alloy is approximately one-third compared to that of cold rolled grain oriented electrical steel. The higher saturation flux density (80.1) is a bigory	
	amorphous alloy (Metglas® 2605SA1) is achieved along with this low loss.  Amorphous transformers using this alloy can be smaller and less noisy than those using conventional alloy.	
Third-Party Awards	Main prize at the 56th (2013) Best 10 New Product Awards sponsored by Nikkan Kogyo Shimbun	Met



etglas® 2605HB1M Amorphous Alloy

#### **Automotive Systems**

Product	Z17F Full-digital Car Speaker System (Clarion Co., Ltd.)	
Environmentally Conscious Features and Characteristics	<ul> <li>Full digital processing from the audio source to speakers without using an amplifier, cuts drive voltage to half that of conventional analog speakers and lowers power consumption to one-fifth or one-sixth.</li> </ul>	
Third-Party Awards	<ul> <li>ATTT (Automotive Telecommunication Technology Tokyo) Award for Excellence, Products and Hardware Division</li> <li>Car Audio/Visual division award in 2013 (26th) Car Accessory Awards sponsored by Nikkan Jidosha Shimbun</li> </ul>	



Z17F Full-digital Car Speaker System

#### **Digital Media and Consumer Products**

Product	EcoCute, heat pump water heater for home use (Hitachi Appliances, Inc.)	- 1
Environmentally Conscious Features and Characteristics	<ul> <li>Already meets the fiscal 2017 energy efficiency standard*1 (target year fiscal 2017)</li> <li>Six models of the "NIAGARA SYUTTO" Series with standard highefficiency tank (BHP-FV46ND, etc.), adopting a dedicated highly efficient heat pump unit consisting of a newly developed evaporator, scroll compressor, and water-refrigerant heat exchanger, have achieved among the best energy efficiency in the industry.*2</li> </ul>	
Third-Party Awards	Director-General's Prize, The Agency for Natural Resources and Energy for products and business models (Energy Conservation Grand Prize 2013)	EcoCute BHP-FV46ND

Hitachi Group Sustainability Report 2014

- \*1 Targets set for energy efficiency performance of residential heat pump water heaters, based on the Energy Conservation Law (Act on the Rational Use of Energy) in Japan
- As of June 24, 2014. Applies to residential heat pump water heaters for general specification areas, with tank capacities of 460 to less than 550 liters or 320 to less than 460 liters.

#### **Disclosure of Environmental Information**

To let stakeholders know that a product is environmentally conscious, Hitachi's environmental mark indicates that Assessment for DfE has shown the product to be an Eco-Product or an Eco-Product Select. Our website also discloses environmental information, introducing case studies on environmentally conscious products and services as well as datasheets that include the power consumption of each product.



Hitachi's environmental mark

# Hitachi Products Helping to Reduce CO<sub>2</sub> Emissions

In fiscal 2013, we expect to achieve a reduction in CO<sub>2</sub> emissions through products of 27.47 million tonnes, better than the target of 24 million tonnes. Major contributions to this achievement were made by the products and services of our Power Systems Company, Infrastructure Systems Company, Hitachi Appliances, and Information & Telecommunication Systems Company. We plan to work even harder to develop and popularize other products that contribute to CO<sub>2</sub> emission reductions.

Hitachi Group

Sustainability

Report 2014

# **Addressing Our Carbon Footprint**

The Carbon Footprint of Products (CFP) is the CO₂ 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 boosts consumer interest in buying products with low carbon emissions and encourages businesses to reduce the amount of carbon emitted by their products over the whole life cycle. A number of countries around the world use the CFP approach.

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 2013, our servers, ATMs (automated teller machines), tape array equipment,\*2 and a WiMAX-WiFi relay equipment are verified and approved by the JEMAI CFP Program.\*3 For servers, ATMs, and tape array equipment-aside from the visual display of CO<sub>2</sub> emission amounts-we quantified the rate of CO<sub>2</sub> emissions reduction per function\*4 from previous models to quantitatively indicate saving -energy effect of these products.

Products with the CFP label were shown at the Hitachi Innovation Forum held in October 2013 and at Eco-Products 2013 in December. These exhibits were intended to explain our CFP initiative to visitors and further their interest in Hitachi's work to develop environmentally conscious products.

- \*1 Approved CFP Products: A product subjected to testing according to the CFP quantification rules of the Carbon Footprint Communication Program, which also passes the CFP quantification verification, and for which applications to register and publicize are made.
- \*2 Tape array equipment: Equipment for backing up data in storage
- \*3 WiMAX-WiFi relay equipment: Equipment providing an Internet connection to wireless LAN terminals
- \*4 "Life cycle GHG emissions in a unit of function amount" calculated by dividing "life cycle GHG emissions in a sales unit" by "function amount of applicable product" specified by performance (or performance characteristic) and/or use period.

#### Products authorized to display the CFP label in fiscal 2013

Products	Hitachi ATM	Hitachi Storage Solutions Tape Array Equipment	Hitachi WiMAX-WiFi relay equipment	Hitachi Advanced Server HA8000
(new model)	AKe-S	TF1100	WIFI-AP-A	RS110xM
Product Appearance	The state of the s	TANKA TO CO.		0
(Previous model)	AK-1	TF850E	_	RS110xL2
Rate of Reduction in CO <sub>2</sub> Emissions*1	-31%	-40%	-	-61%

<sup>\*1</sup> Quantified only for approved CFP products which have previous models

#### 094

# **Working with European Environmental Footprint Initiatives**

The Product Environmental Footprint (PEF) and Organisation Environmental Footprint (OEF) initiatives were launched by the Environment Directorate-General of the European Commission to develop methodologies for measuring the life cycle environmental impact of products and organizations in up to 14 areas. Three-year pilot studies were started in November 2013 to establish assessment methods in multiple product and organization fields.

Hitachi, drawing on experience with Japan's carbon footprint program and the knowledge gained from calculating and visualizing  $CO_2$  emissions in the IT product life cycle, is participating in a European Environmental Footprint pilot study in the IT equipment field, and serves as the technical secretariat.

#### **Next Steps**

We have set the targets for raising the Eco-Product sales ratio to 90 percent and the number of Eco-Products Select models to 240 by fiscal 2015. To meet these goals, we are working on product and service development plans aimed at expanding the number of Eco-Products, and are also working on additional product and service value creation by lowering their environmental burden in ways that will help our business to grow.

Hitachi Group Sustainability Report 2014

# **Recycling Product Resources**

Through recycling that includes collecting end-of-life products and refurbishing parts for reuse, Hitachi is reducing the environmental burden of products at the disposal stage, preserving the environment through recycling, and making more effective use of resources.

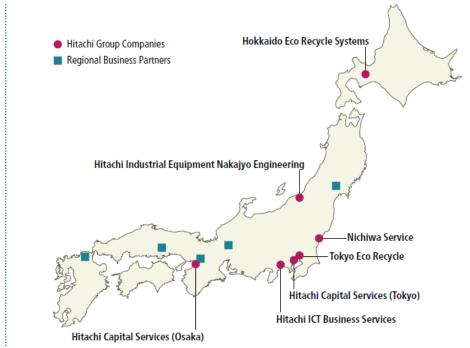
#### **Product Collection and Recycling**

We are building on the knowhow gained from recycling end-of-life home appliances, begun in 2001, based on the Home Appliance Recycling Law. We are now expanding collection and recycling programs to include IT products and industrial equipment, such as pumps, motors, distribution boards, transformers, refrigeration equipment, and machine tools. In fiscal 2013, we established a network in Japan for recovering rare earth magnets used in hard disc drives, as well as industrial equipment used in building construction. These are several of our ongoing recycling programs.



Collecting and shipping end-of-life products

#### **Product Recycling Network**



chapter 3

Hitachi Group

Sustainability Report 2014

# **Refurbishing Construction Machinery Parts**

Hitachi Construction Machinery (Shanghai) co., Ltd has been refurbishing and selling parts from hydraulic excavators and other equipment since 2003, based on the concept of resource recycling. After refurbishing by highly skilled workers to the same standards and with the same expertise as in Japan, the parts-with the same functionality and performance as authorized Hitachi parts-are listed in catalogs and given a manufacturer's guarantee. The refurbished parts are provided to customers at reasonable prices, helping to reduce resource consumption and promoting more effective use.







Parts refurbishing

**WEB** 

Management of Containers and Packaging http://www.hitachi.com/environment/activities/data/wrapping.html

**WEB** 

Number and rate of recycled consumer electronics products http://www.hitachi-ap.co.jp/company/environment/kankyo/recycle\_kaden/

**WEB** 

Number of PCs taken back and the resource recycling rate http://www.hitachi.co.jp/Prod/comp/OSD/pc/flora/environment/recycle.htm

# **Managing Chemical Substances Contained in Products**

To manage the chemical substances contained in products, we created Regulations for Environmental CSR-Compliant Monozukuri in fiscal 2005.

We continue to revise the list of applicable substances to ensure compliance with the European REACH\*1 and other regulations. In April 2013, we modified the list of Voluntarily Controlled Chemical (VCC) Substances; 17 prohibited substances (Level 1) and 20 controlled substances (Level 2) are now listed.

\*1 REACH regulation: The European Union regulation on Registration, Evaluation, Authorization and Restriction of Chemicals.

# Hitachi Group's Voluntarily Controlled Chemical (VCC) Substances

Classification	Application	Substance (Group) Names
Level1: Prohibited Substances	Chemical substances that the Hitachi Group prohibits from being included in procured products (chemical substances banned or restricted for use in products, including packing materials, by domestic or foreign regulations and potentially used for procured products for the Hitachi Group)	Cadmium and its compounds, hexavalent chromium compounds, lead and its compounds, mercury and its compounds, polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs), tri-substituted organostannic compounds, polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCTs), polychlorinated naphthalenes (with 3 or more chlorines), short-chain chlorinated paraffins (C10-C13), asbestos, ozone layer depleting substances (Class I), perfluorooctanesulfonic acid and its analogous compounds, 2-(2H-1,2,3-benzotriazole-2-yl)-4,6-di-tert-butylphenol, hexachlorobenzene, dimethylfumarate (DMF)
Level2: Controlled Substances	Substances for which monitoring and control are required by domestic or foreign regulations, or for which special consideration for recycling or appropriate disposal is required. This level includes substance groups whose use in supplied products may be restricted for certain uses.	Antimony and its compounds, arsenic and its compounds, beryllium and its compounds, nickel and its compounds, selenium and its compounds, un-specific brominated flame retardants, polyvinyl chloride (PVC) and its mixture and its copolymer, phthalate esters, ozone layer depleting substances (Class II: HCFC), radioactive substances, di-substituted organostannic compounds, cobalt and its compounds, azodyes and azocolourants which form specified amines, formaldehyde, benzene, fluorine-based greenhouse gasses, REACH restriction substances, REACH authorization substances, REACH SVHC, JAMP declarable substances

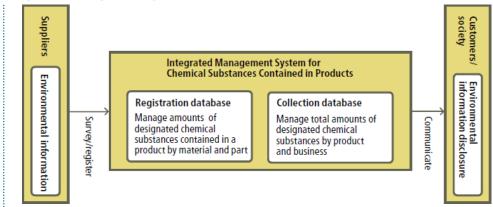
# **Compliance with REACH Regulation**

REACH notifications on particular substances in articles were completed by the June and December 2013 deadlines. Investigations and preparations are also continuing in the lead-up to the next round of notifications.

# Working with the Supply Chain (Integrated Management System for Chemical Substances Contained in Products)

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, 2014, chemical substance information for more than 1.13 million parts and products was registered in this integrated management system.

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



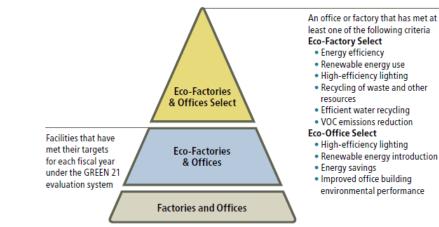
# **Environmentally Conscious Production**

We have set targets for efficient energy use, waste amounts, chemical substance emissions, and water use to reduce the environmental burden of our business activities. Factories and offices that show a high level of environmental consciousness as well as outstanding results in these areas receive Eco-Factory & Office Select certification as a way of promoting environmentally conscious production and encouraging effective environmental action.

# Creating Eco-Factories & Offices Select

We have been implementing an Eco-Factories & Offices Select certification program since fiscal 2011. Certification criteria were developed for our manufacturing (factory) and non -manufacturing (office) divisions globally. To maintain and raise the level of environmental awareness in Eco-Factories & Offices Select, certified factories and offices will be re-evaluated every fiscal year to confirm that their performance continues to meet the certification criteria. In fiscal 2013, 19 facilities obtained new certifications and 36 facilities had their certifications renewed.

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



## **Examples of Eco-Factories & Offices Select**

#### Hitachi High-Technologies Corporation, Ibaraki, Japan

The Naka Division of Hitachi High-Technologies Corporation designs, develops, and manufactures semiconductor measuring and inspection equipment, as well as electron microscopes and clinical analyzers for use in medicine.

At this facility, recycling show employees the need for conservation and ensures that waste materials are properly recovered and reused. For more efficient energy use, the division is also conserving energy, including upgrading to high-efficiency air conditioning systems, installing LED lighting, and installing motion



Production wing at Hitachi **High-Technologies Corporation** 

detectors in common areas. A new building completed in 2011 was also designed to be environmentally conscious, featuring energy-efficient equipment, rooftop greenery, and solar power systems.

Governance Report 059

chapter 2 | Environmental Report

074 Environmental Management Strategies and Initiatives

085 Environmentally Conscious Products and Services 099 Environmentally Conscious Production

122 Preserving Ecosystems and Environmental Communication

chapter 3

Social Report

129

## Hitachi Building Equipment Manufacturing (Tianjin) Co., Ltd., Tianjin, China

Hitachi Building Equipment Manufacturing (Tianjin) Co., Ltd. manufactures elevators and related components.

Reducing the environmental burden was a goal for this factory from the beginning. Skylights let in natural light, and a management system automatically controls the air conditioning for maximum efficiency. Every employee conserves energy in other ways,



100

Hitachi Group

Sustainability Report 2014

Hitachi Building Equipment
Manufacturing (Tianjin) Co., Ltd.

Every employee conserves energy in other ways, including turning off lights and PC displays in the administrative wing during lunchtime. Water used during manufacturing is recovered by a wastewater treatment system,

**WEB** 

**Eco-Factories & Offices** 

treated, and then reused in the factory.

http://www.hitachi.com/environment/showcase/select/index.html

#### **Next Steps**

The Eco-Factories & Offices Select program is being expanded by developing more efficient energy use, recycling waste, and other measures in Group factories and offices, reducing the environmental burden of our business activities.

Our goal is for every in-house and Group company to have at least one factory or office certified by fiscal 2015.

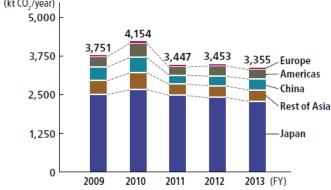
# **Promoting Global Warming Countermeasures**

We are promoting ways to use energy more efficiently during production and transportation to help prevent global warming.

#### **Actions and Achievements**

We are working to reduce the energy use per unit as one way to use energy more efficiently. In fiscal 2013, we achieved a reduction of 14 percent, surpassing the target of 11 percent (from fiscal 2005, the base year). For further reductions, we are continuing to install high-efficiency equipment and devices, from LED lighting to inverter air conditioners, and are reducing energy consumption by improving manufacturing processes. We are also visually displaying energy use data at in-house and Group companies as an incentive to make further improvements.

# 



Breakdown by Region (kt CO <sub>2</sub> /year)					
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Europe	5	8	7	4	4
Americas	318	421	295	316	321
China	444	502	287	315	332
Rest of Asia	437	543	357	381	375
Japan	2,547	2,680	2,501	2,437	2,323
Total	3,751	4,154	3,447	3,453	3,355

<sup>\*</sup> Emissions were calculated based on the 2005 CO<sub>2</sub> emission coefficients for electric power by country published by the International Energy Agency (IEA: CO<sub>2</sub> Emissions from Fuel Combustion, 2010 Edition).

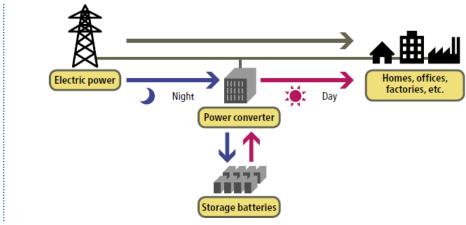
# **Using an Electric Storage System to Smooth Out Demand Peaks**

At Shin-Kobe Electric Machinery Co., Ltd., an electric storage system developed in-house was introduced at the Hikone Works (converter output: 400 kW) and the Saitama Works (converter output: 100 kW) to reduce peak power demand. The system uses lithium-ion batteries which are light and have a space-saving design. In addition to everyday efforts to conserve energy, recently there has been a need for energy management geared to a demand and supply balance for power. To equalize demand, electricity generated at night (during times of low use) is stored in batteries, and then made available during heavy use periods during the day, helping to reduce peak energy demand.



Lithium-ion storage system

## **System Outline**



#### **Introducing Renewable Energy**

We are promoting the use of solar, wind power, and other forms of renewable energy. The Tokyo Works of Hitachi Kokusai Electric Inc. in fiscal 2013 built a new production wing equipped with a 100 kW solar power system. The electricity generated by this system is used to drive production equipment. In the Netherlands, Hitachi Data Systems Netherlands BV installed a 1.6 MW solar power system in its distribution center, a move to reduce conventional energy use. We also contracted for Green Power Certifications for 1,000 MWh through Japan Natural Energy Company Limited, using these to cover power generated for offices and at exhibitions.



#### **Green Curtain Project**

To conserve electricity, since fiscal 2011 we have been planting climbing vines along building windows and walls, creating green curtains that lower the room temperature inside the buildings. In fiscal 2013, the third year of this project, green curtains have been planted at 175 Hitachi Group sites and at the homes of some employees. A contest was also held to promote this project, with awards being presented to groups and individuals for outstanding achievements.



Gunma Works, Hitachi Automotive Systems, Ltd.



 ${\bf Hitachi\ Chemicals\ Group\ (Hikone\ Works,\ Shin-Kobe\ Electric\ Machinery\ Co.,\ Ltd.)}$ 

#### **Reducing Transportation Energy**

Reductions in transportation energy consumption per unit are reflected in the individual targets of each in-house and Group company, so that additional actions can be taken to further reduce energy consumption. CO<sub>2</sub> emissions from transportation inside Japan for the Hitachi Group in fiscal 2013 were 125 kt CO<sub>2</sub>/year.

## **Examples: Promoting Green Logistics**

At Hitachi Transport System, Ltd., Green Logistics is helping to reduce global warming through environmentally conscious logistics. Building and operating distribution centers are using renewable energy, natural light, and high-efficiency lighting to the maximum extent possible to reduce energy use. The introduction of fuel-efficient and low-pollution eco-cars, vehicles used for transportation, is being carried out with the goal of 100 percent adoption by fiscal 2015. For transporting products, a modal shift\*1 is being promoted in cooperation with business sites, using medium-range trains between Kanto and Hyogo, and ships between Kanto and Kyushu.

\*1 Modal shift: Switching to a more efficient way to ship goods. In general, this means switching from trucks to trains and domestic ships, which are large-volume transportation with a smaller environmental burden than trucks.



Tosu Distribution Center 3 introducing natural light and solar power generation



Natural gas truck

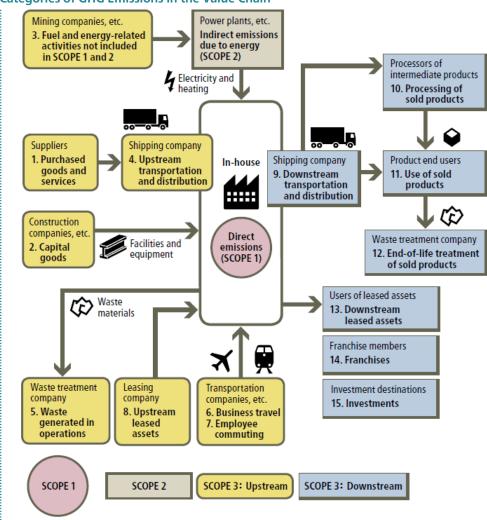
#### **Next Steps**

Our initiatives to reduce energy-related  $CO_2$  emissions include the scheduled introduction of LED lighting, inverter air conditioners and other high-efficiency equipment and devices. We also use energy efficiency diagnoses to determine the potential for improvement, as we aim for a high level of energy conservation including improvements in production processes. Target achievement is tracked visually, and individual reduction measures are supported based on the extent of progress, as we work to raise the overall level of reduction by the Group.

# Calculation of GHG Emissions throughout the Value Chain

We calculate GHG (greenhouse gas) emissions throughout the entire value chain to more effectively reduce these emissions. For emissions from the products that we have sold, accounting for more than 90 percent of emissions, we are developing Eco-Products that meet environmentally conscious criteria throughout the entire product lifecycle for continuing reductions.

#### **Categories of GHG Emissions in the Value Chain**



SCOPE 1: Direct GHG emissions by the company

SCOPE 2: Indirect emissions from electricity, heat, and steam supplied to and used by the company

SCOPE 3: Indirect emissions other than SCOPE 1 and 2 (emissions by others related to the company's activities)

In-house: Within the scope of the company's organizational boundaries, in principle the scope of all business

activities of the company itself and activities within or controlled by its consolidated subsidiaries

Upstream: In principle, activities related to purchased products and services Downstream: In principle, activities related to sold products and services

# **GHG** Emissions throughout the Hitachi Value Chain

Hitachi Group Sustainability Report 2014

Category	Category Description	Calculation Results (kt-CO <sub>2</sub> e)	Notes
SCOPE 1			
Direct emissions	Direct emissions from in-house fuel use and industrial processes	830 (0.3%)	
SCOPE 2			1
Energy-related indirect emissions	Indirect emissions from using electricity and heat purchased by the company	2,610 (1.1%)	
SCOPE 3: Upstream (other inc	direct emissions)	•	•
1 Purchased goods and services	Emissions from activities on raw materials, parts, supplied products and sales from the resource extraction stage to the manufacturing stage	10,200 (4.1%)	
2 Capital goods	Emissions generated in the construction, manufacture and shipping of the company's own capital goods (equipment, devices, buildings, facilities, vehicles, etc.)	1,360 (0.6%)	
3 Fuel and energy-related activities not included in SCOPE 1 and 2	Emissions from procuring the fuel (resource extraction, production and shipping) necessary for producing electricity and heat, etc., procured from other suppliers	220 (0.1%)	
4 Upstream transportation and distribution	Emissions due to distribution activities until materials involved in raw materials, parts, supplied products and sales have been delivered to the company, and other distribution activities of products for which the company bears the expense	250 (0.1%)	
5 Waste generated in operations	Emissions from transportation, disposal and treatment of waste generated in the company's operations	100 (0.0%)	
6 Business travel	Emissions generated from using fuel and electric power in transportation of employees for business travel	90 (0.0%)	
7 Employee commuting	Emissions generated from using fuel and electric power for transportation of employees between their homes and their worksites	60 (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	er indirect emissions)		
9 Downstream transportation and distribution	Emissions from transportation, storage, loading and unloading, and retail sales of products	20 (0.0%)	
Processing of sold products	Emissions by downstream companies during processing of intermediate products	7 (0.0%)	
Use of sold products Emissions from use of products by end users (consumers and businesses)		229,933 (93.5%)	Excluding power generation equipment
End-of-life treatment of sold by end users (consumers and businesses)  Emissions from transportation, waste disposal and treatment of products by end users (consumers and businesses)		180 (0.1%)	Excluding power generation equipment
Downstream leased assets	Downstream leased assets Emissions from operating assets owned by the reporting company as lessor and leased to other entities		
Franchises	(SCOPE 1 and 2) emissions by franchises	-	N/A
Investments	Emissions related to management of investments	180 (0.1%)	
	Total	246,070 (100%)	

chapter 1	<sup>chapter</sup> 2   Environmental Report
Governance Report 059	074 Environmental Management Strategies and Initiatives 085 Environmentally Conscious Products and Services 099 Environmentally Conscious Production 122 Preserving Ecosystems and Environmental Communication

# **Reducing Waste**

Waste issues, from pollution to illegal dumping and disposal of waste materials, are common across the globe. We have set targets for waste generation in factories and offices around the world, working hard to meet these targets while developing more effective use of resources as well as solutions to landfill issues.

#### **Activities and Results**

In fiscal 2013, we set a target of a 19 percent reduction (from the base year) for waste and valuables generation per unit, and bettered this by achieving a 24 percent reduction. Every factory and office is recycling waste materials onsite and, in cooperation with customers, is reducing waste related to transportation. Under the Zero Emission\*1 initiative, which minimizes landfill disposal as close to zero as possible, 121 facilities achieved their zero emission goal, as of fiscal 2013.

\*1 Zero emission: Defined as a final disposal rate (landfill disposal/waste) of less than 0.5 percent in any given year

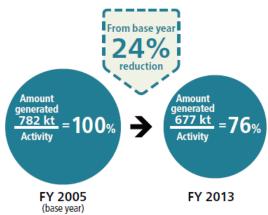
**WEB** 

**Zero emission Sites** 

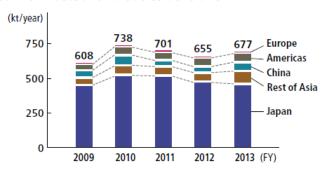
http://www.hitachi.com/environment/activities/data/zeroemission.html

#### **Key Indicators**

#### **Reduction in Waste and Valuables Generation per Unit**



#### Trend in Amount of Waste and Valuables Generation



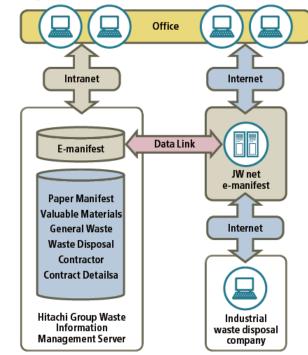
Breakdown by Region (kt/year)							
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013		
Europe	1	1	3	1	1		
Americas	38	54	55	58	56		
China	51	80	40	38	62		
Rest of Asia	54	78	80	80	93		
Japan	464	525	523	478	465		
Total	608	738	701	655	677		

# **Using IT for Managing Waste**

Making use of our Group-wide network, we have developed and now operate a waste management system aimed at both more efficient processes and at reducing compliance risk. This system makes it possible for small offices with small waste volumes and business sites without a dedicated waste manager to visualize operations at the site, lending support for better management. It is also being used as a tool for keeping track of the waste generated in the entire Group and to share ways to more effectively use resources. We intend to boost the Hitachi Group e-manifest\*1 registration ratio to at least 90 percent by fiscal 2015. As of fiscal 2013, 128 sites had introduced e-manifest systems, raising the registration rate to 78 percent.

\*1 E-manifest: An evidence document that the waste generator must issue when waste disposal is commissioned to a disposal company

#### **Waste Management System**



#### **Examples: Waste Reduction**

#### **Zero Emission Initiative**

Hitachi Elevator (China) Co., Ltd., a manufacturer of elevators and escalators, and its Group companies in Guangzhou, Guangdong Province, have achieved zero emissions by recycling waste and outsourcing the resulting scrap to a vendor with advanced technology for making bricks.



Scrap after processing



Recycled as bricks

#### **Shipping Pallets Made from Bamboo**

Hitachi-Omron Terminal Solutions Corp. is promoting the more effective use of resources by adopting bamboo for the pallets used for shipping products. A manufacturer of ATMs\*1 and other financial industry products, the company, when developing a new ATM product for use in Japan, with environmental awareness as one of its key ideas, decided to switch from wooden to bamboo pallets. Bamboo is a plentiful natural material that grows rapidly and has the advantages of being both light and strong. While wood from forest thinning is used for most packing materials, using bamboo not only helps to protect forests but it also has a longer life than wooden pallets, which reduces costs and the environmental burden.

#### \*1 ATM: automated teller machine



Bamboo pallet



Used for shipping an ATM

# **Office Waste Reduction Program**

Hitachi Consulting Corporation (USA) is reducing waste generated in offices, so that less waste will be sent to landfills. The main measures are composting leftover food, reusing packaging paper, donating old electronic equipment to schools, switching from disposable to reusable products, and purchasing items that either have long usable lifetimes or are recyclable. The company is also reducing the number of wastebaskets in offices. As a result, the volume of recycled materials grew by 45 percent in fiscal 2013 over the previous year. The company also received an Eco Leadership Award from the NPO Alliance for Workplace Excellence.

# **Next Steps**

In Japan, the volume of waste sent to landfills was significantly reduced by either eliminating or reducing the volume of waste generated and by promoting recycling. Worldwide economic growth and population increases are expected to sharply increase the amount of waste materials. We, taking a global perspective, are committed to further reducing waste and effectively disposing hazardous materials and landfill waste.

122 Preserving Ecosystems and Environmental Communication

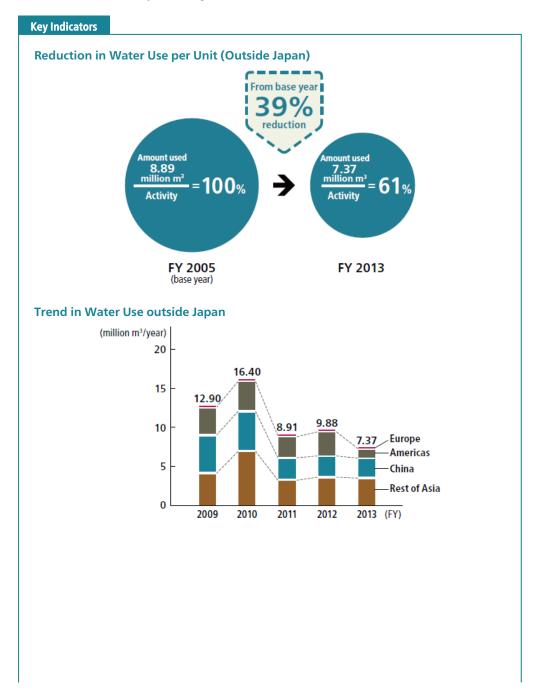
chapter 3

# **Water Conservation**

Issues over water, whether droughts or floods, have an impact on people's lives and affect the business operations of companies. The consequences can be far-reaching, extending to regional conflict, biodiversity, and agricultural production. We have set targets for water conservation to reduce the water use in production, and we are working across the world to achieve these targets.

#### **Activities and Results**

In fiscal 2013, we set a target for our business sites outside Japan of a 26 percent reduction (over the base year) for water use per unit, and achieved a 39 percent reduction. With the growing amount of production outside Japan, we are promoting efficient use of water by reducing the water use.



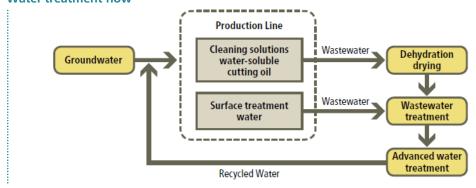
Breakdown by Region (million m³/year)						
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Europe	0.01	0.02	0.03	0.03	0.02	
Americas	3.71	4.05	2.35	3.15	1.20	
China	4.94	5.16	2.92	2.85	2.50	
Rest of Asia	4.24	7.17	3.61	3.85	3.65	
Total	12.90	16.40	8.91	9.88	7.37	

#### **Examples: Water Conservation**

#### **Recycling Factory Wastewater**

Hitachi Automotive Systems Kyushu, Ltd., which makes automotive parts, has been reducing the amount of wastewater discharged from manufacturing plants since 2008. Actions include increasing the capacity of wastewater treatment from production lines for better recycling and installing evaporation-type decompression-dehydration dryers along with advanced water treatment equipment. By reusing the recycled water as industrial water, the volume of pumped well water used as industrial water has been reduced by more than 60 percent.

#### Water treatment flow



#### **Next Steps**

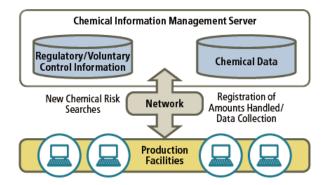
Climate change, one of the major items on the list of global environmental problems, has an impact not only on global warming but also on water resources. As traditional rainfall patterns change, the number of droughts and floods is expected to grow. By effectively managing the water resources used in our business operations, and carrying out conservation and recycling, we are tackling global environmental issues.

# **Chemical Substance Management**

To deal with chemical risk and to comply with laws and regulations, we assess chemical substances used in production processes, managing risk in three ways: prohibition, reduction, and control. In addition, we educate chemical substance managers on laws and regulations and on how to assess risks to prevent problems from arising.

#### **CEGNET Chemical Substance Management System**

Since 1998, we have operated a database for chemical substance management called CEGNET to keep track of the latest laws and regulations and our own voluntary regulations, ensuring the management of newly introduced chemical substances. Chemical substances used in our operations are also registered with CEGNET. Collecting and aggregating data on the amount of chemical substances used, emitted, or transferred helps to reduce our use of chemicals.



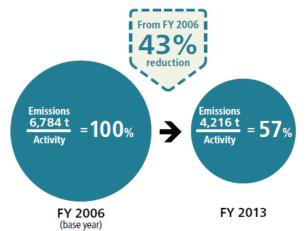
#### **Activities and Results**

To prevent air pollution, we have cut emissions from 41 volatile organic compounds (VOCs) based on a program of the Ministry of the Environment in Japan. Initiatives in fiscal 2013 to reduce VOC emissions included switching to high-solid coatings with their lower VOC content, and installing equipment for recovery and recycling. We also strengthened the PDCA (plan, do, check, act) cycle to achieve our targets.

We comply with Japan's PRTR Law\*¹ 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 all PRTR substances of 10 kilograms or more per year, recognizing the need to control these substances as well

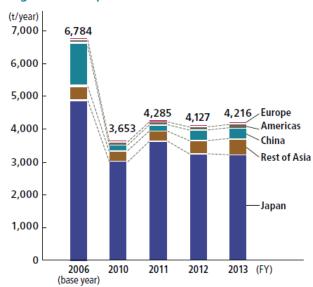
\*1 PRTR Law: Japan's Pollutant Release and Transfer Register Law

# **Reduction in VOC Atmospheric Emissions per Unit**



	Japan	Outside Japan	Overall
FY 2013 (from base year)	26%	17%	43%

# **Trend in Reducing VOC Atmospheric Emissions**



Breakdown by Region (t/year)

	FY 2006 (base year)	FY 2010	FY 2011	FY 2012	FY 2013
Europe	8	9	28	6	8
Americas	54	41	62	53	76
China	1,339	131	427	273	372
Rest of Asia	438	258	232	346	447
Japan	4,945	3,214	3,536	3,449	3,313
Total	6,784	3,653	4,285	4,127	4,216

The coverage of data for outside Japan differs before fiscal year 2010.

Hitachi Group

Sustainability

Report 2014

# **IH Varnish Curing System Reduces VOCs**

Hitachi Industrial Equipment Systems co., Ltd.developed and is using an IH\*1 varnish\*2 curing machine for motor varnishing. The new system automatically and continuously applies varnish and cures it.

Since this machine uses a non-solvent varnish containing no VOCs, it reduces by 100 percent the volume of VOCs handled and released into the atmosphere. Moreover, by applying the varnish by dripping instead of immersing, the amount of varnish is reduced and VOC emissions from the immersion tank used in the conventional approach are totally eliminated.



Varnish curing system (protective covers have been removed for this photo)

In addition, with the introduction of this machine varnish curing was changed from indirect steam heating to direct IH heating, which saves energy by reducing thermal loss. An advantage of automatic operation is that processing can be done at night, reducing peak energy demand.

- \*1 IH: Induction heating
- \*2 Varnish: A resin coating for insulating coils in electrical and electronic equipment

# **Managing PCB**\*1 Storage

Information on storing and handling equipment that uses PCBs is gathered and continually managed as an environmental management item of the Hitachi Group. Waste materials with high PCB concentrations are subjected to a treatment program based on requirements set by the national government of Japan. Waste materials with low PCB concentrations are processed by treatment companies that have been certified and have the capacity to handle them. In the case of discarded electrical equipment contaminated with low PCB concentrations that might leak if moved, and that cannot be kept in a container, the PCB oil is drained from the equipment and processed following government quidelines, giving the highest priority to safety.



Removing oil from electrical equipment contaminated with low PCB concentrations

\*1 PCB: Polychlorinated biphenyl

#### **Next Steps**

For painting and coating processes that account for a large percentage of VOC atmospheric emissions, we are switching to alternative substances and finding ways to improve the processes. We are aiming for a 40 percent reduction in VOC atmospheric emissions per unit by fiscal 2015.

# **Environmental Compliance**

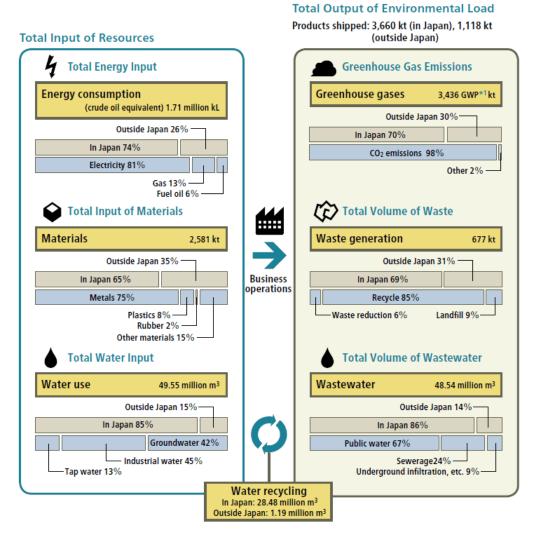
Considering the environmental burden of all our business activities, we set voluntary management criteria that are more stringent than regulatory requirements. At every business site, we regularly monitor water quality and noise, for example, and work to minimize environmental risks. In addition, we share information on environmental laws and regulations throughout the Group, along with examples of infringements, while taking every possible step to prevent recurrences and to strengthen controls.

#### **Activities and Results**

Worldwide in fiscal 2013, globally, we received eight notices or complaints concerning water quality, noise, or odors, all of which were promptly resolved. To prevent recurrences or new occurrences of these problems, we will continue implementing programs that strengthen environmental management.

# Data on Environmental Load Resulting from Business Operations (FY 2013)

The data below shows the resource inputs and the environmental load (impact in statistical terms) for Hitachi Group business operations in fiscal 2013.



\*1 GWP (Global Warming Potential): A coefficient derived by converting the global warming potential into CO<sub>2</sub> equivalent tonnes

#### 117

# **Detailed Data on Input of Resources and Output of Environmental Load**

Hitachi Group Sustainability Report 2014

## **Total Input of Resources**

The total amount of resources input from Hitachi Group business operations.



# Total Energy Input

Energy consumption (crude oil equivalent): 1.71 million kL

Total Energy Input

		In Japan	Outside Japan
Electricity		4.1 billion kWh (39,000 TJ)	1.4 billion kWh (14,000 TJ)
Gas	Natural gas	80 million m <sup>3</sup> (3,500 TJ)	50 million m <sup>3</sup> (2,100 TJ)
	LPG, etc.	45,000 t (2,300 TJ)	14,000 t (800 TJ)
Fuel oil (heavy oil, kerosene, etc.)		90,000 kL (3,500 TJ)	5,000 kL (200 TJ)



Total Input of Materials

Materials: 2,581 kt

		In Japan	Outside Japan
Metals		1,214 kt	725 kt
Plastics		148 kt	66 kt
Rubber		8 kt	26 kt
Other materials		297 kt	97 kt
Chemicals	PRTR substances*1 handled	156 kt	23 kt
	Ozone-depleting substances handled	6 t	7,222 t
	Greenhouse gas substances handled	4,187 t	1,335 t

<sup>\*1</sup> The 462 chemicals designated in Japan's Act on Confirmation, etc. of Release Amount of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof



Total Water Input

Water use: 49.55 million m<sup>3</sup>

	In Japan	Outside Japan
Tap water	5.23 million m <sup>3</sup>	1.5 million m <sup>3</sup>
Industrial water	18.08 million m <sup>3</sup>	4.12 million m <sup>3</sup>
Groundwater	18.88 million m <sup>3</sup>	1.74 million m <sup>3</sup>

#### **Total Output of Environmental Load**

The amount of environmental load output from Hitachi Group business operations.



Greenhouse Gas Emissions

Greenhouse gases: 3,436 GWP / kt

Greenhouse das Emissions			
		In Japan	Outside Japan
CO <sub>2</sub> emissions		2,323 kt	1,032 kt
Other GHGs	SF <sub>6</sub> (sulfur hexafluoride)	46 GWP / kt	0
	PFCs (perfluorocarbons)	15 GWP / kt	0
	HFCs (hydrofluorocarbons)	19 GWP / kt	1 GWP / kt
	N <sub>2</sub> O, NF <sub>3</sub>	0 GWP / kt	0 GWP / kt

chapter 1	chapter 2   Environmental Report	chapter 3
Governance Report 059	074 Environmental Management Strategies and Initiatives 085 Environmentally Conscious Products and Services 099 Environmentally Conscious Production 122 Preserving Ecosystems and Environmental Communication	Social Report 129

Sustainability Report 2014

Waste generation: 677 kt

Total Volume of Waste

		In Japan	Outside Japan
Waste reduction		31 kt	9 kt
Recycling		415 kt	160 kt
	Reuse	55 kt	7 kt
	Materials recycled	334 kt	151 kt
	Thermal recovery	26 kt	2 kt
Landfill		18 kt	45 kt
Chemicals	PRTR substances discharged or transferred	5 kt	3 kt
	SOx (sulfur oxides)	41 kNm <sup>3</sup>	6 kNm <sup>3</sup>
	NOx (nitrogen oxides)	362 kNm <sup>3</sup>	34 kNm <sup>3</sup>
	Ozone-depleting substances emitted	2.9 t (0 ODP*1t)	0 t (0 ODPt)

<sup>\*1</sup> ODP: Ozone Depletion Potential. A coefficient derived by converting the global depletion potential into equivalent tonnes CFC-11 (trichlorofluoromethane)



Total Volume of Wastewater

Wastewater: 48.54 million m<sup>3</sup>

Total Volume of Wastewater

		In Japan	Outside Japan
Public water		30.63 million m <sup>3</sup>	1.78 million m <sup>3</sup>
Sewerage		6.76 million m <sup>3</sup>	4.75 million m <sup>3</sup>
Underground infiltration, etc.		4.20 million m <sup>3</sup>	0.42 million m <sup>3</sup>
Water quality	BOD (biochemical oxygen demand)	285 t	281 t
	COD (chemical oxygen demand)	160 t	735 t

# **Environmental Accounting**

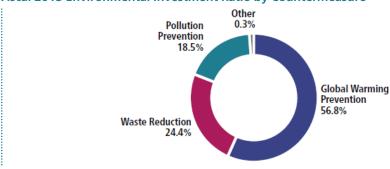
We have adopted, and are making public, environmental accounting procedures that conform to the Environmental Accounting Guidelines issued by the Japanese Ministry of the Environment in 2005. The results help us to raise the efficiency of environmental investments and activities by more effectively allocating management resources to our ongoing efforts that benefit the environment.

#### **Achievements**

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



Fiscal 2013 Environmental Investment Ratio by Countermeasure



#### **Environmental Investments**

	Description	Costs (billions of yen)				
		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total investment	Investment in energy-saving equipment and equipment that directly reduces environmental load	7.95	7.60	9.61	5.28	5.81

#### **Environmental Protection Costs**

Hitachi Group Sustainability Report 2014

	Item	Description	Costs (billions of yen)				
			FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Expenses	Business area	Costs of maintaining equipment with low environmental load, depreciation, etc.	28.20	27.98	27.78	31.84	38.63
Upstream/downstream  Administration  Research and development		Green procurement expenses, recovery and recycling of products and packaging, recycling expenses	1.70	1.60	1.43	1.38	1.27
		Labor costs for environmental management, implementation and maintenance of environmental management system	8.92	8.61	8.25	7.67	6.77
		R&D for the reduction of environmental burden caused by products and production processes; product design expenses	52.81	57.56	79.81	84.71	75.62
	Social activities	Planting, beautification, and other environmental improvement expenses	0.25	0.31	0.45	0.41	0.51
	Environmental remediation	Environmental mitigation costs, contributions, and charges	0.68	0.37	1.94	1.90	0.53
	Total		92.56	96.44	119.66	127.91	123.34

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

#### **Environmental Protection Effects**

Economic Effects*1							
Item	Costs (billions of yen)				Major FY 2013 Activities		
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013		
Net income effects	8.30	9.62	13.72	17.85	15.98	Recovering value from waste by sorting and recycling	
Reduced expenses effects	15.00	18.45	15.27	12.07	9.82	Reducing waste disposal costs through waste reduction	
Total	23.30	28.07	28.98	29.92	25.80		

<sup>\*1</sup> Economic effects include the following items:

- 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 expenses, and others by environmental load reduction activities

Physical Effects							
Item	Amount Reduced					Major FY 2013 Activities	
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013		
Reduction in energy used during production	191 million kWh	129 million kWh	93 million kWh	107 million kWh	70 million kWh	Upgrading air conditioning equipment, installing motion sensors, etc.	
Reduction in amount of waste for landfill during production	5,955 t	3,623 t	4,754 t	3,788 t	2,420 t	Encouraging disposal by sale, reducing volume or recycling of liquid waste, etc.	

<sup>\*</sup> Benefits from equipment investments are calculated using the straight-line method over five years, as with costs.

# **Efficiency of Environmental Load Reduction**\*2

ltem	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Efficiency of reduction in energy consumption (million kWh/100 million yen)	4.2	2.6	2.0	1.7	1.3
Efficiency of reduction in amount of waste for landfill (t/100 million yen)	229	121	183	146	95

<sup>\*2</sup> The amount of environmental load reduction divided by the cost of the reduction.

# Preserving Ecosystems and Environmental Communication

Having made the preservation of ecosystems a pillar of our environmental vision, the entire Hitachi Group is now taking action. We are also working to deepen stakeholders' understanding of our environmental activities by disclosing information, and we are encouraging two-way communication to improve those activities.

# **Preserving Ecosystems**

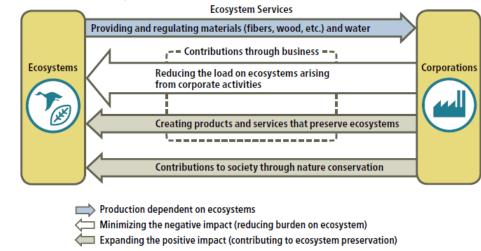
We have made the preservation of ecosystems a pillar of our environmental vision and incorporated it into our Action Guidelines for Environmental Conservation. In fiscal 2013, we conducted the Business Assessment on the Preservation of Ecosystems. We were also active outside the company, taking part in the Ecosystems Focus Area of the World Business Council for Sustainable Development (WBCSD).

We will continue working to raise awareness and knowledge in the company and to promote ecosystem preservation throughout the entire Group, while laying the groundwork for ecosystem preservation programs through activities outside the company.

#### **Corporate Relationship with Ecosystems**

Corporations depend on "ecosystem services," or the benefits received from ecosystems, including materials such as fibers and wood, and the ability of the ecosystem to maintain the quality and quantity of air, water, and soil. To continue receiving these benefits and to restore ecosystems, we believe that we can contribute to ecosystem preservation through both business and social activities. Specifically, for contributions through business, we are promoting designs and production that reduce the impact on ecosystems throughout the product life cycle (material procurement, production, transportation, use, collection and disassembly, and appropriate disposal), as well as increasing the number of products and services for direct preservation of ecosystems through water and air purification. Viewing chemical substance management as part of ecosystem preservation, we continue to ensure that it is carried out correctly. For contributions to society, we encourage tree planting and ecological surveys of rare plants and animals by employees through volunteer programs, along with other programs that preserve ecosystems.

#### **Corporations and Ecosystems**



#### 123

# **Encouraging Action**

Hitachi Group Sustainability Report 2014

Following the first edition of the Hitachi Group Guide to Preservation of Ecosystems issued in fiscal 2011, we issued a second edition in fiscal 2012, presenting employees with our thinking on the relationship between corporate activities and ecosystems, while introducing trends and examples of initiatives being taken around the world. To further improve our employees' understanding, in fiscal 2013 we carried out the Business Assessment on the Preservation of Ecosystems at 229 factories and offices in and outside Japan. This is the start of a program of self-assessment on the relationship between business operations and ecosystems. Through these assessments, we hope to encourage actions that will help preserve ecosystems from many aspects, including design, procurement, manufacturing, transportation, and product use. We intend to stimulate thinking about the development of new products and services related to ecosystem preservation as well. For contributions to society through nature conservation and by studying the impact on and benefits to local ecosystems, we are developing a deeper appreciation of ecosystem preservation. We will continue to review this assessment program and improve each Group company's initiatives.

In fiscal 2013, we again held internal training sessions within the Group on preserving ecosystems, and we invited experts from NGOs and government agencies to describe policy trends and thinking. We also held discussions on using Business Ecosystems Training (BET), new course materials developed by the WBCSD for teaching company employees about the relationship between corporate activities and preserving ecosystems.

#### Contribution to the Development and Spread of Learning Materials for Employees

For the BET learning materials developed and released by the WBCSD in February 2012, Hitachi prepared Japanese-language versions of all modules and of the instructor manuals and made them available on the Web.

The biodiversity working group of four Japanese electrical and electronic industry associations,\*1 of which Hitachi is a member, developed an educational tool, Let's Study Biodiversity, that demonstrates the relationship between the environmental protection programs from companies in these industries and the global Aichi Biodiversity Targets.

\*1 JEMA (Japan Electrical Manufacturers' Association), JEITA (Japan Electronics & Information Technology Industries Association), CIAJ (Communications and Information Network Association of Japan), and JBMIA (Japan Business Machine and Information System Industries Association)

#### Laying the Groundwork for Ecosystem Preservation by Society

## Employee Participation in IT for Ecosystem Preservation at the IT Eco Experimental Village

The IT Eco Experimental Village, established in Hadano, Kanagawa Prefecture, in April 2011, is being used for trials and studies to determine how IT can be used to promote ecosystem preservation. The site is a satoyama (natural woodland) area of approximately 7,000 m<sup>2</sup> on the outskirts of the city, consisting of fallow farmland, bamboo groves, and forests, etc. In cooperation with the local community, local government, and schools, rice fields are being restored, helping to preserve the ecosystem in this area. IT systems are being used to gather information on flora and fauna. In fiscal 2013, the third year of the program, some new initiatives were launched. For example, information on the natural environment (photos, voice data, location information, etc.) is being compiled in a

database, using various Hitachi technologies such as the Hitachi voice SNS "talkfield"\*1 application for smart devices, and a system using AR technology\*2 for on-site visualization.\*3 We are now studying the best ways to take advantage of this information. We are also active in the Research Group for Future City Design, an industry-academia-government collaboration led by Yokohama National University, which is conducting research on urban innovations for solving global environmental issues. The IT Eco Experimental Village is being used for field studies and analysis on how to build and use the next-generation integrated ITC\*4 platforms that will be essential to future city design.

- \*1 Hitachi voice SNS "talkfield ": A digital social service using a dedicated application to post and share voice
- \*2 AR technology (Augmented reality technology): Technology augmented reality. technology that superimposes layers of digital information over a real-world environment that's displayed in real time.
- \*3 AR-based On-site Visualization System: A product from Hitachi Solutions that uses AR technology. It presents location-based information along with live images and operational data on an Android device.
- \*4 ICT: information and communication technology



Planting rice with people from the local community



Field survey using "talkfield"

# Participation in the IPBES International Workshop (Representing the WBCSD)

In September 2013, the Asia-Pacific Regional Workshop on Regional Interpretation of the IPBES (Intergovernmental Platform on Biodiversity and Ecosystem Services) Conceptual Framework and Knowledge Sharing was held in South Korea. As the sole participant from industry, Hitachi reported on corporate initiatives for ecosystem preservation in the WBCSD. The results of the symposium discussions were summarized and made public in an official United Nations document (IPBES/2/INF/12), in which it was proposed that the WBCSD approach to ecosystem preservation by industry be incorporated info the IPBES. This document was presented at the IPBES second plenary session held in Antalya, Turkey, in December 2013.

WEB

Report on Asia-Pacific Workshop

http://isp.unu.edu/events/2013/ipbes\_workshop\_korea.html

WEB

IPBES Second Plenary Session Report (IPBES/2/INF/12)

http://www.ipbes.net/images/K1353757.pdf

# **Environmental Education**

Hitachi Group Sustainability Report 2014

Hitachi Group Training is offered to all Group employees with a view to raising awareness and aiding understanding of environmental issues.

#### **Activities and Results**

In fiscal 2013 we trained employees who work in air and water quality or waste management to provide them with basic knowledge and to inform them of recent amendments to laws and operational procedures. 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 three languages: Japanese, English, and Chinese. To date 157,379 employees worldwide (97 percent of target employees) have taken this course.

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

Target		Introductory	Beginning	Intermediate	Advanced
General education	All employees	Introductory training employees  Online e-learning: (General Topics: Gloissues, environment	Eco-Mind education bal environmental tal law, etc.)	Eco-Mind education cs: Environmental al Action Plan, etc.)	
Specialized education	Working-level employees	Basic environment course for working (management of wa quality, hazardous i (development & op- management syster	-level employees aste, air/water materials, etc.) eration of	opment training	for ISO 14001
	Internal environmental auditors			auditors  ISO 14001 auditor certification training	ISO 14001 senior auditor certification training

# **Next Steps**

From fiscal 2014, we will continue with environmental education training to enhance the knowledge and skills of staff in charge of factory management.

#### **Environmental Communication**

We have published reports every year on our environmental protection initiatives, their results, and our plans. The *Hitachi Group Environmental Report*, issued each year in Japanese starting in fiscal 1998, was first published in English in fiscal 2000 and in Chinese starting in fiscal 2005. In fiscal 2011, this report was combined with the *Hitachi Group Corporate Social Responsibility Report* as the *Hitachi Group Sustainability Report*, in response to the global need for a sustainability report. The *Sustainability Report 2013*, issued for fiscal 2013, was awarded a Prize for Excellence in the 17th Environmental Communication Awards sponsored by the Japanese Ministry of the Environment and others. This is the second consecutive award, following the Sustainability Reporting Award for the fiscal 2012 report. We also cooperate with SRI\*1 ratings and other environmental surveys.

\*1 SRI: Socially Responsible Investment. An approach to investing where shares are selected partly on the basis of criteria related to CSR

**WEB** 

CSR/Environmental reports published by Hitachi Group companies http://www.hitachi.com/csr/link/index.html

#### **Website Communication**

In addition to the *Sustainability Report*, the Environmental Activities section of the Hitachi website provides more detailed information about the main environmental services and activities of the Hitachi Group. In fiscal 2013, two new sections were added-"Working to secure societies future through innovation and environmental technology" and "To Create a Sustainable Future"-to visually introduce our environmentally conscious products and services, as well as pages introducing the 34 business sites certified in the Eco-Factories & Offices Select program.

**WEB** 

Environmental Activities
http://www.hitachi.com/environment/index.html

#### **External Environmental Awards**

We received outside recognition for our environmental activities again in fiscal 2013, including many awards, among them were the Energy Conservation Grand Prize 2013 for a next-generation smart factory project at Omika Works, and awards for our Heat Pump Water Heater "EcoCute", and other products and services. Click on the following link for the list of awards received in fiscal 2013.

WEB

**External environmental awards** 

http://www.hitachi.com/environment/activities/data/commendation.html

Governance Report 059 chapter 2 | Environmental Report

074 Environmental Management Strategies and Initiatives

085 Environmentally Conscious Products and Services

099 Environmentally Conscious Production

122 Preserving Ecosystems and Environmental Communication

chapter 3 Social Report 129

Hitachi Group

Sustainability Report 2014

#### **Dissemination of Information through Exhibitions and Forums**

Valuing the opportunity for direct dialogue with stakeholders, we participate in environment-related exhibitions. In Japan, we presented a special exhibit on the theme of Hitachi's Solutions for Social Issues at the Hitachi Innovation Forum (October 2013). Outside Japan, we took part in the International Greentech & Eco Products Exhibition & Conference (IGEM) in Malaysia in October 2013, the China International Green Innovative Products & Technologies Show 2013 in Guangzhou in November 2013. In addition, we presented booths on environment-related themes at the Hitachi Social Innovation Forum held in Rio de Janeiro, Brazil (November 2013), in New Delhi, India (December 2013), and in Riyadh, Saudi Arabia (February 2014).

We also provided opportunities for discussions with stakeholders on environmental issues. The theme of our 5th Eco-Engineering Forum,\*1 which was held in Washington, D.C., USA in October 2013, was shale gas. At the WBCSD, we discussed ecosystem preservation and electric power projects.

Eco-Engineering Forum: An event jointly sponsored by the American Association for the Advancement of Science and the Brookings Institution



Special exhibits zone at the Hitachi Innovation Forum



**Eco-Engineering Forum** 

#### **Worldwide Environmental Partnerships**

We are promoting environmental communications, holding social contribution activities on environmental themes, and deepening exchanges with local stakeholders. In fiscal 2013, we carried out environmental education and tree planting as well as cleanup activities in regions around the world.

**Environmental Communication** http://www.hitachi.com/environment/showcase/employee/index.html

#### **Forest Preservation (Philippines)**



For an area around Subic Bay, we have been commissioned by a local government agency to help preserve a 1,700 m<sup>2</sup> area of forest. In fiscal 2013, our employees planted 200 mahogany saplings. In recognition, the company received a Good Corporate Governance Award from the local government. (Hitachi Terminals Mechatronics Philippines Corporation)

Hitachi Group Sustainability Report 2014

#### **Environmental Education (USA)**

The company designed and built an outdoor classroom for local elementary school children to learn about the environment. A rock garden, human sundial, vegetable garden, and other items were created and used as learning tools for environmental classes, furthering students' knowledge and understanding of the environment. (Hitachi Computer Products (America), Inc.)





#### Tree Planting (China)



Approximately 100 employees and their family members planted 50 fern pines, able to withstand strong winds, with the goal of increasing greenery and creating "life surrounded by green." (Hitachi Airconditioning & Refrigerating Products (Guangzhou) Co., Ltd.; Hitachi Compressor Products (Guangzhou) Co., Ltd.)

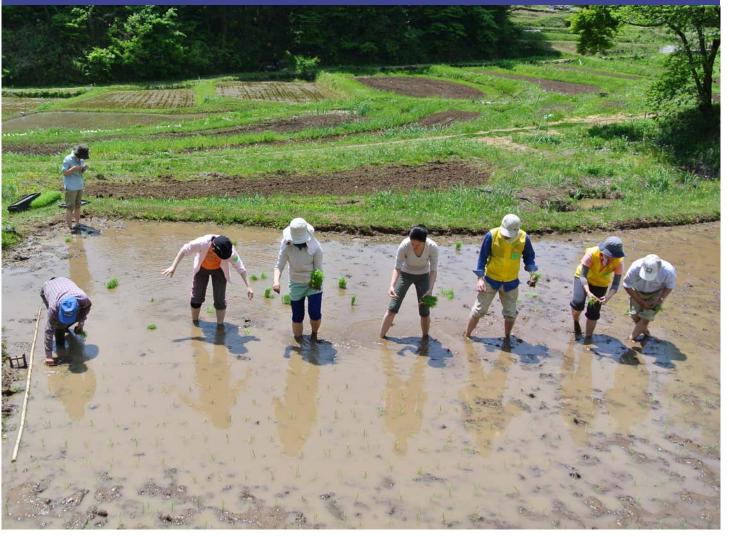
#### Clean Nogawa Strategy (Japan)



The source of the Nogawa River, a class A river with a major influence on local ecosystems, is on the grounds of the Central Research Laboratory of Hitachi, Ltd. Every year since 2011, we have taken part in the Clean Nogawa Strategy for preserving this river. This program is sponsored by the local region. In 2013 our employees helped clean up the riverside, working under the early summer sun. (Central Research Laboratory, Hitachi, Ltd.)

# **Social Report**

Working with an NPO to preserve terraced paddy fields and satoyama (natural woodlands)



Report 2014

# **Respect for Human Rights**

Hitachi views meeting the responsibility to respect the human rights of all stakeholders including employees, communities and those throughout supply chains as key to operating as a responsible business. Respect for human rights is accepted to be a baseline expectation for all companies. In fiscal 2013, we released the Hitachi **Group Human Rights Policy and undertook a range of initiatives** including educating employees and preparing to institute human rights due diligence processes.

**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 to be, 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 national laws and regulations in all the regions and countries where we operate, and respecting international human rights when faced with conflicts between internationally recognized human rights standards and national laws. In fiscal 2013, we began developing procedures for human rights due diligence.

Using the Hitachi Group Human Rights Policy, Hitachi strives to respect the human rights not only of Hitachi Group employees but of everyone involved in Hitachi business activities, products, and services.

- \*1 Human rights due diligence: An on-going 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 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: Report on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises by the then-UN Secretary-General's Special Representative on Business and Human Rights Professor John Ruggie.

#### Framework

Hitachi Group Sustainability Report 2014

Hitachi, Ltd. established the Corporate Human Rights Promotion Committee in fiscal 1981 to gauge the impact of business activities on stakeholders' human rights and deliberate on mechanisms and policies to prevent human rights violations. The executive officer in charge of human capital chairs this body, whose members include representatives from sales, procurement, human capital, the CSR Division, and other corporate units. Information from deliberations is shared with all employees through company and business site committees, led by company and division executives.

We improve Hitachi-wide human rights awareness based on the guidelines discussed and written by the Corporate Human Rights Promotion Committee. We develop human rights leaders in each business unit, while they use their own regular group training, seminars, and videos to educate employees. To bring a global perspective to the human rights initiatives of the Hitachi Group as a whole, we reflect the views of CSR team members from our six operating bases,\*1 as well as regional issues, in developing educational materials to raise human rights awareness and consider due diligence.

\*1 Our six operating bases cover the Americas, Europe, Japan, China, India, and Southeast Asia.

Hitachi, Ltd. Framework for Promoting Respect for Human Rights



#### Achievements and Issues

Hitachi Group Sustainability Report 2014

# **Business and Human Rights e-Learning**

In June 2013, we began rolling out a business and human rights e-learning in Japanese, Chinese and English, with around 160,000 employees participating, as of March 2014. Educational materials grounded in the Hitachi Group Human Rights Policy, created in May 2013, are used to help employees understand Hitachi's policy on respect for human rights and to act accordingly. This is our first common global human rights e-learning program.

The course covers the spectrum of human rights issues, including the definition of human rights, the UN Guiding Principles on Business and Human Rights and other international standards, corporate human rights issues and human rights risks in corporate activities, examples of responses to these risks, and Hitachi's next steps. Through e-learning, we aim to educate employees on why companies must respect human rights and how human rights should be reflected in employees' daily activities.

#### **Human Rights Training for Executive Officers**

We regard understanding and leadership from senior management as vital for building human rights awareness among our employees and implementing human rights due diligence. In July 2013, 29 executive officers, including the president, Nakanishi participated in a workshop on human rights in global business. Representatives from the NPO Shift, the US NPO made up of members of the team that wrote the UN Guiding Principles on Business and Human Rights, lead the session, in which participants used specific cases to examine human rights risks across the global business value chain and ways to prevent, mitigate, or remedy these risks.



Human rights workshop for executive officers

## Pilot Program for Human Rights Due Diligence

We conducted a pilot program for human rights due diligence within the Hitachi Group from September 2013 to March 2014 to develop and implement ongoing human rights due diligence within the Group based on the Hitachi Group Human Rights Policy.

We worked with the NPO Shift to identify human rights impacts of specific business in line with the four elements of human rights due diligence recommended in the UN Guiding Principles on Business and Human Rights: assessing impacts, integrating and acting, tracking, and communicating.

Through workshops as well as interviews with stakeholders within and outside Hitachi, we also identified human rights risks in the business' value chain. In addition, we worked with BSR, a nonprofit business network dedicated to sustainability, to map Hitachi's human rights risks in the particular region.

In fiscal 2014, we will draw on the results of those pilot programs to create written guidance on how to embed human rights due diligence within the Hitachi Group.

#### chapter 3 | Social Report

# **Supply Chain Management**

Our supply chains around the globe are being extended in response to the growing number of regions where we operate. We respect basic human and work rights in global procurement activities, sharing guidelines and communicating openly to encourage Hitachi suppliers—the co-drivers of our operations—to share our CSR philosophy.

#### Hitachi Group Sustainability Report 2014

# **CSR Supply Chain Management Framework**

Given the global reach of Hitachi's business, supply chain risks can create management problems, so we are working hard to identify and mitigate these risks beforehand as much as possible. We established a CSR/Ecological Procurement Promotion Center within the Hitachi headquarters in fiscal 2011. We have also established the Hitachi Group CSR Green Procurement Committee, which includes committee members from in-house companies and key Group companies. This completes a framework that will enable our CSR supply chain management and green procurement philosophy and initiatives to be shared throughout the Group.

# **Sharing Procurement Policies**

Our procurement activities are based 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 as well as all forms of child and forced labor.

#### **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.

- 1. Overall procurement activities of Hitachi shall adhere to the "HITACHI Company Conduct Standards."
- 2. HITACHI shall maintain proper partnerships, mutual understanding, and reliable relationships with suppliers with a view to the long term results.
- (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. (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, 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, regulation compliance, respect for human rights, elimination of discrimination in respect of employment and occupation, elimination of all forms of forced and compulsory labor, environmental preservation activities, social contributions, good working environment, and recognition of social responsibilities with business partners.

#### chapter 3 | Social Report

<sup>167</sup> Communication with Shareholders and Investors

(1) HITACHI shall not request quotations from suppliers with whom there are no intention to enter into a future business relationship.

(2) In accordance with specified internal procedures, the role and responsibility for specifications, terms and conditions, product acceptance and inspection belongs to each Requester, Procurement Department and Inspection Department.

- (3) Procurement Departments shall be a representative of HITACHI when contracting with suppliers.
- 5. HITACHI members are prohibited from receiving any personal gifts or offers from suppliers.

Revised in 2009

# **CSR Deployment Guidebook**

To help suppliers, as the co-drivers of our operations, to understand Hitachi's supply chain management philosophy, we have distributed the Hitachi Group Supply Chain CSR Deployment Guidebook, revised in 2009, which is based on the Supply Chain CSR Deployment Guidebook from JEITA.\*1 The guidebook is given out to around 23,000 suppliers of our in-house companies and Group companies.

\*1 JEITA (Japan Electronics and Information Technology Industries Association): An industrial association for electronics technologies, electronic machinery, and information technologies.

WEB

CSR · Green Procurement http://www.hitachi.com/procurement/csr/index.html

#### **CSR Procurement Initiatives**

#### **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. By fiscal 2012, our 15 overseas procurement bases had grown to 25. To expand the pool of suppliers in emerging markets, we set up the China Asia Pacific Procurement Headquarters, Hitachi East Asia Ltd. in fiscal 2012 and built a global supply database in fiscal 2013. We are also reinforcing our responsiveness to CSR risks, a growing concern as the supply chain expands globally.

#### **Green Procurement**

We use green procurement,\*1 sharing our commitment to environmentally conscious monozukuri craftsmanship with everyone in our supply chain.

\*1 Green procurement: Procuring parts and materials manufactured with reduced environmental impact, so that suppliers help to protect the environment.

158 Quality Assurance Activities

Customer Satisfaction

## **Revised Green Procurement Guidelines (Responding to Chemical Substance** Regulations)

Hitachi Group Sustainability Report 2014

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 quidelines 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.

In fiscal 2013, we reviewed our categories for controlled chemical substances with a particular focus on restricted substances, authorized substances, and SVHCs (substances of very high concern) as stipulated in Europe's Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulations for managing chemical substances within the EU. 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 quidelines were revised now version 7.0 and distributed through in-house and Group companies to suppliers to make sure that suppliers are fully informed. There is a global trend for strengthening regulations on chemical substances. We have built the 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 JAMP (Joint Article Management Promotion Consortium).\*3 We also encourage them to use information transmission systems and to minimize the amount of labor.

- \*1 MSDSPlus: A format for reporting chemical substances contained in products created by upstream companies (chemical manufacturers) for mid-stream companies (molded product manufacturers, etc.).
- AIS: A format for reporting chemical substances contained in products created by mid-stream companies (molded product manufacturers, etc.) for downstream companies (assembly manufacturers, etc.).
- \*3 JAMP (Joint Article Management Promotion Consortium): 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.

WEB

**Joint Article Management Promotion Consortium** http://www.jamp-info.com/english

#### **Promoting Green Procurement**

We are improving our green procurement rate—the ratio of environmentally conscious products purchased to total office supplies—by using a Group-wide online purchasing system: the e-sourcing Mall. This system has a range of environmentally conscious products, and promotes purchasing by clearly labelling these products. In fiscal 2013, our green purchasing rate reached 90 percent.

Hitachi Group Green Procurement Guidelines (PDF, 549 Kb) http://www.hitachi.co.jp/environment/library/pdf/green\_en.pdf

#### Response to the Conflict Minerals Issue

The Request to Our Suppliers, based on the Conflict Minerals Procurement Policy that we released in September 2013, has been put up on our website as a clear statement of our position.

#### chapter 3 | Social Report

158 Quality Assurance Activities

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

The Hitachi Group is committed to responsible procurement practices to mitigate the risk of sourcing conflict minerals (tantalum, tin, tungsten and gold) that can directly or indirectly finance armed groups abetting human rights violations in the Democratic Republic of the Congo (DRC) and adjoining countries. The Hitachi Group Procurement Division strives to establish a sustainable supply chain that eliminates procurement of materials and/or parts using conflict minerals. Our efforts are to continue procurement of minerals from responsible sources in the region and are not intended to implement a ban on procurement of minerals from the DRC and adjoining countries.

#### **Request to Our Suppliers**

To do so, it is important to enhance supply chain transparency and to strengthen responsible procurement of materials and parts. Therefore, we expect our suppliers to agree to our Conflict Minerals Procurement Policy and to cooperate with us in our efforts to ensure procurement of conflict-free minerals. In accordance with the Dodd-Frank Act\*1 and the OECD Guidelines for Multinational Enterprises,\*2 companies are required to conduct a reasonable country of origin inquiry and to exercise due diligence covering the entire supply chain to determine whether final products include conflict minerals which benefit armed groups.

The Hitachi Group will examine our supply chain through a collaborative industry-wide approach by utilizing the tool developed by EICC-GeSI.\*3 We expect our suppliers to adhere to our Conflict Minerals Procurement Policy and to cooperate with our supply chain investigation.

As improved processes are introduced to eliminate conflict minerals from the supply chain, we will ask our suppliers to comply with such programs once they are developed, proven, and established (i.e., expansion of the Conflict-Free Smelter\*4 list which is under implementation by EICC-GeSI). The Hitachi Group will continue to engage in industry efforts to develop methods to build a stable, conflict minerals-free supply chain.

- \*1 Dodd-Frank Act: The Dodd-Frank Wall Street Reform and Consumer Protection Act, signed into federal law by President Barack Obama on July 21, 2010.
- OECD Guidelines for Multinational Enterprises: Government recommendations for multinational corporations operating in or from the Organisation for Economic Co-operation and Development (OECD) countries to adhere
- \*3 EICC-GeSI: Non-profit organization of members in the information and communications technology (ICT) industry
- Conflict-free smelter: a smelter or refinery that does not handle conflict minerals

#### **Request to Our Suppliers**

http://www.hitachi.co.jp/procurement/csr/\_\_icsFiles/afieldfile/2013/09/03/CM\_PP\_RE\_E.pdf

158 Quality Assurance Activities

# **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 make CSR Monitoring(self-checks) using the JEITA Supply Chain CSR Deployment Guidebook and detailed checklists. We collect and analyze the results and take any necessary remedial action. Since fiscal 2011, we have expanded the scope to include suppliers in China and the rest of Asia. In fiscal 2013, we asked 100 suppliers — 55 in Japan and 45 outside Japan—to make CSR Monitoring(self-checks).

#### **Self-Check Results**

FY	Suppliers in Japan	Suppliers outside Japan	Total
2007	100	0	100
2009	132	0	132
2011	0	102	102
2012	57	41	98
2013	55	45	100
Total	344	188	532

#### **CSR Audits**

Since July 2012, we have been auditing suppliers from China and the rest of Asia from among the suppliers providing CSR Monitoring (self-check) results. In fiscal 2013, we conducted CSR audits of 16 suppliers: 11 in China, two in Malaysia, and one each in Philippines, Vietnam and Korea. For these audits, we engage JACO and DNV,\*1 experienced CSR auditing companies. Our audits follow the international SA8000 certification standard developed by the Social Accountability International (SAI), an American CSR evaluation institution. Theses audits investigate our workplace practices, and an EICC-recognized auditor checks suppliers' performances on labor and human rights, health and safety, the environment, and ethics. In fiscal 2013, audit results revealed no major infringements at 16 companies, but some small areas need improvement, and we are working with suppliers to address these. We will systematically continue audits of suppliers, mainly in China and the rest of Asia.

\*1 JACO and DNV: JACO (Japan Audit and Certification Organization) is a certification institution that provides a range of auditing services. For overseas audits, JACO develops and carries out joint audits with DNV (Det Norske Veritas), a third-party certification institution that provides certification and other services. DNV, with 140 years of experience, is known as a risk management leader.

# Creating of Procurement BCPs

We have a deep involvement in social infrastructures, where the suppliers who are our business partners are 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 awhole. To minimize this impact, the procurement divisions in key Group and in-house companies in Japan have created BCPs that (1) standardize and use generic products 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 2014, all Group companies worldwide will take the same steps to improve procurement BCPs and contribute to the continuation of Hitachi's global operations.

Customer Satisfaction

# **Diversity Management**

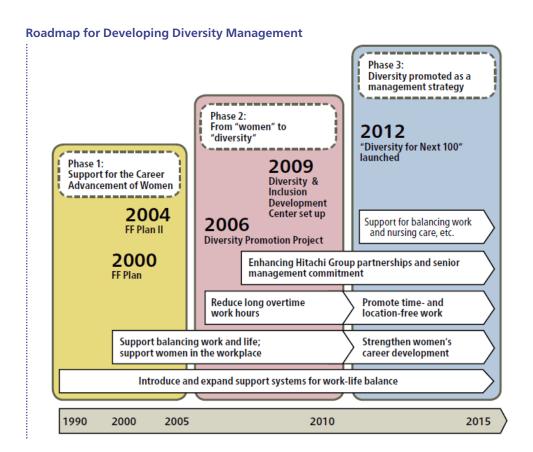
Diversity is both the wellspring of our innovation and our growth engine. Hitachi's diversity management embraces and respects people's external and internal differences. We see, among others, gender, nationality, work history, age, character, and values as making up someone's individuality. Combining our employees' many -sided strengths will enable us to meet the wide range of customer needs in global markets.

# **Developing Diversity Management**

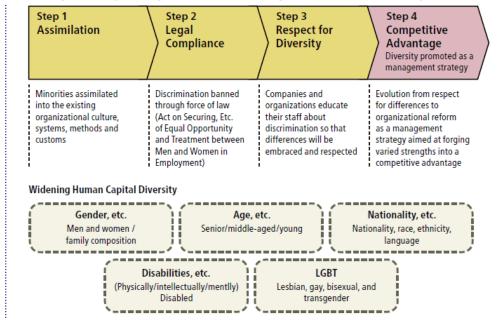
Since fiscal 1990, we have been at the social forefront, supporting women and other members of our multi-faceted workforce. This includes setting up systems to help balance work with child and nursing care. Entering the third stage of our diversity management roadmap—"Diversity promoted as a management strategy"—we are embracing differences across Hitachi as a management strategy. This means creating an environment where women and other members of our varied workforce can use their skills in leadership and business management.

# **Diversity Management Initiative**

Our Diversity for Next 100 initiative develops diversity management as a key management strategy to best use our wide range of personnel. Through diversity management, we aim to boost our competitiveness in global markets and nurture employees who can respond to the growing diversity of our stakeholders and customers. The wide spectrum of our business arenas, technologies, geographic coverage, and types of customers make us a treasure house of diversity. We are proud of our diversity, and will use it to the full, getting the most from our talented employees to strengthen our organizational capacity, create synergies, boost company productivity, and expand our operations.



#### **Deepening Diversity Management and Widening Human Capital Diversity**



#### chapter 3 | Social Report

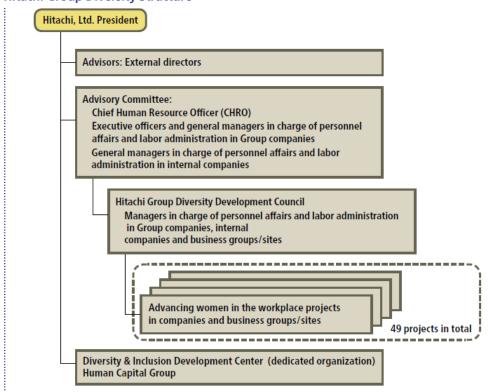
# **Diversity Development Structure**

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.

Hitachi and 22 Group companies jointly operate the Advisory Committee and the Diversity Development Council to accelerate awareness across Hitachi as a whole. 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. Companies and plants have also set up their own projects to become organizations that develop the role of women in the workplace and that improve those initiatives that are 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**



Global Human Capital Developm

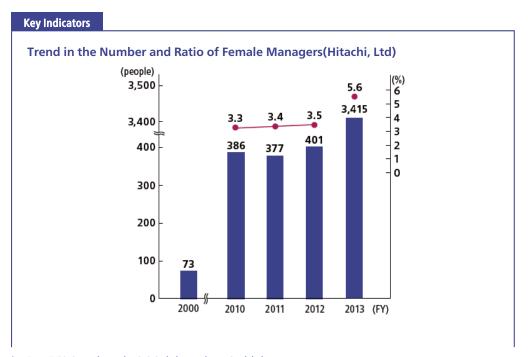
# **Developing Women's Careers**

Hitachi has created two key performance indicators (KPIs), announced externally 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 new initiatives and outstanding issues in each business area and to set numerical targets for each area, 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. We intend to create an environment where as many women as possible are able to optimize their potential in management positions.

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

Appoint female executives by fiscal 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)



From FY2013, number and ratio is includes employees in global

# **Work-Life Management**

Our diversity management initiatives are designed to enable all employees to reach their full potential, as well as to enhance our organizational capabilities and to create synergies that will boost productivity and grow our business. This requires building a work environment that embraces human resource diversity and work style flexibility.

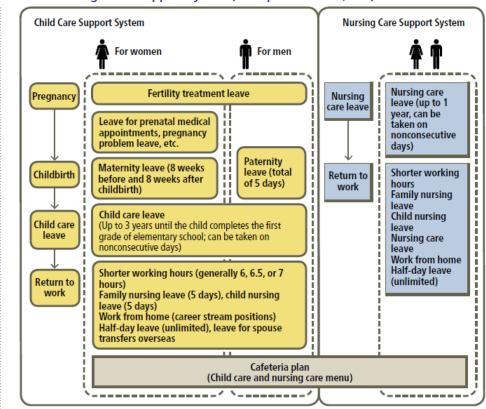
## Hitachi's Work-Life Management

Hitachi looks beyond work-life balance to work-life management: our employees 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, which in turn boosts work performance.

## **Developing Work-Life Management Support Systems**

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

# Work-Life Management Support System (Example of Hitachi, Ltd.)



\* Flextime and discretionary labor systems are also available. Cafeteria plan is a system which employees can select the support that they need-when they need-according to their "Cafeteria Points."

#### 143

Hitachi Group

Sustainability

Report 2014

#### **Improving In-House Child Care Centers**

In April 2013, the Genki Club daycare center celebrated its 10th anniversary. This inhouse facility was set up to help Hitachi Group employees living and working around the Totsuka area in Yokohama City to balance work and child care. The center opened with 14 children; today this has grown to over 70, with the center becoming one of the few large in-house daycare facilities in Japan. The Hitachi Workers Union Soft Branch operates the center, along with Hitachi Ltd., Hitachi Group companies, labor unions and other groups who work together to provide support.

Hitachi Chemical Co., Ltd. has a range of programs that ensure an employee-friendly work environment, including a program launched in fiscal 2006 (change the name to Diversity Development Project from fiscal 2008) to encourage women in the workplace and setting up a special section to develop diversity in fiscal 2007. Hitachi Chemical has also created a nearby in-house nursery to help employees balance work and child rearing. Featuring a large play area with playground equipment, the nursery's flexible childcare options are designed to meet the full range of employee needs, including monthly care and drop-ins.

#### Work-Life Balance-up! Month

In fiscal 2010, we began holding a Group-wide Work-Life Balance-up! (WLB-up!) Month every November to inform employee of our approach to managing the balance between work and life. Our aims are to boost employees awareness of work-life management, to develop a better review work styles, and promote understanding the programs and tools needed for work-life management, in the end improving the quality of both work and home life.

Group-wide activities include messages from top management, work style review declarations in our workplaces from department general managers and above, WLB-up! Month posters, and a weekly mail magazine sent to all employees. Individual workplaces also operate their own programs, including holding WLB-up! meetings, surveys of work styles, and holding a visualization campaign for annual leaves.



WI B-up! Month character

Customer Satisfaction

<sup>167</sup> Communication with Shareholders and Investors

# **Diversity Activities**

Hitachi Group Sustainability Report 2014

# **Human Capital Executive Visits Career-Stream Female Employees around Japan**

Since fiscal 2013, our executive in charge of human capital has been visiting career-stream female employees around Japan to directly communicate Hitachi's position on diversity and women's career success. Issues such as developing better work-life management and reviewing work styles have been vigorously discussed. Having visited Hokkaido, Ibaraki, Kanagawa, Tokyo, and Aichi Prefectures, our executive will continue to work his way around the country for more direct exchanges of view with career-stream female employees.



Workplace visit by our human capital executive

## Hitachi Group Women's Career Success Survey

In the first half of fiscal 2013, a survey of women's career success was conducted in 30 inhouse companies and Group companies. We used an external institution's survey framework to quantify the status in these companies, especially: four indexes (1) female management appointments: (2) work-life balance; (3) gender equality; and (4) advancement of women in the workplace. Because of the wide range of businesses surveyed, their Group rankings were accompanied by comparisons with other companies in the same industry. Survey results revealed both the progress to date and some outstanding issues. The companies participating in the survey are now using the results to take action, including creating key performance indexes (KPIs) to accelerate female employees' advancement in the workplace.

#### **Hitachi Group Women Leaders' Meeting**

This meeting was held for female employees to drawing on their own experience and concerns make recommendations to senior management on how to employ female staff more effectively. Held on August 5 and September 27, 2013, this event was attended by 113 women at the general manager level and above from Hitachi Group companies in Japan.

On the first day, then-Hitachi President Hiroaki Nakanishi opened the meeting by making a speech about diversity promotion awareness and the



Hitachi Group Women Leaders' Meeting

expectations of women leaders, based on his own experience working in the United States and the United Kingdom. On the second day, presentations were given by then-Chairman Takashi Kawamura and Ms. Yukari Tominaga, the Hitachi Group's first female executive officer, followed by a lively Q&A session.

Participants engaged in group discussions on themes such as boosting female employees' own awareness and changing the mindsets of people in the workplace, as well as rethinking work styles and developing better work-life management. Every group presented recommendations to then-Vice President and Executive Officer, CHRO, Naoki Mitarai. Vice-President Mitarai asked questions and made comments on each group's presentation and promised to consider their recommendations with the goal of implementing them, where possible.

#### chapter 3 | Social Report

- Global Human Capital Developm
- 158 Quality Assurance Activities
- Customer Satisfaction
- 167 Communication with Shareholders and Investors
- 171 Social Contribution Activities

Hitachi Group

Sustainability

Report 2014

#### Prior to Maternity Leave / Return-to-Work Support Seminars

With more employees balancing work and child care, since fiscal 2012 we have been running Prior to Maternity Leave / Return-to-Work Support Seminars to address issues such as putting careers on hold for childbirth and child care, and concerns about balancing work with child care. Employees attend seminars with their managers so that both can share attitudes and approaches when returning to work. This will ensure a woman's smooth return to work as well as understanding and support from her managers and from colleagues. These seminars are held regularly four to six times each year.



Prior to Maternity Leave / Return-to-Work Support Seminar

#### **Diversity Workshops**

Hitachi's unique diversity workshops use the World Café approach, bringing together employees, including senior executives and young employees, to freely exchange opinions on diversity and work-life management. It is important that the workplace as a whole develops a better understanding of diversity and puts work-life management into practice. Changing the mindsets of managers is a particularly critical task. Our diversity workshop approach is an effective way for managers to reflect on their management styles and consider how to optimize the potential of their employees to achieve top results for the organization as a whole. Around 570 managers took part in workshops from the second half of fiscal 2010 up to fiscal 2012. More than 1,000 other Hitachi Group employees have also participated in these workshops, prompting many positive comments. One person, for example, felt that the workshop had been invaluable for sharing issues and opinions with senior staff and other employees. A workshop handbook has now been created, which in-house companies and Group companies have been using to hold their own workshops (as of fiscal 2013).

#### **Time- and Location-Free Work**

We have systems and processes in place that allow employees to choose flexible and diverse work styles unrestricted by time or location. This allows our diverse staff to produce results more efficiently. Initiatives—in addition to discretionary work, flextime, and work from home—include establishing satellite offices, simplifying work-from-home procedures and applications, distributing mobile tools such as smartphones, and creating a time-and location-free work page on our intranet to provide information on diverse work styles.

#### **Career Events for Science-Oriented Female Students**

Hitachi participates in career events for junior and senior high school students designed to inform female students from an early stage of the enjoyment and appeal that work has for women. In fiscal 2013, then-Chairman Takashi Kawamura spoke to junior and senior high school students and their parents at a symposium at the University of Tokyo entitled Bring the Family: On the Frontline of Science at Observing that women will be a vital force for stimulating the Japanese economy, he explained the appeal to women of working in science. A female scientist from Hitachi also talked to the audience about the interesting nature of her job. We also hold field days at the Hitachi Research Laboratory and the Central Research Laboratory to convince as many high school girls as possible of the advantages of working in science by giving them the opportunity to observe research work firsthand and to take part in roundtable meetings with Hitachi employees who majored in science.

<sup>161</sup> Customer Satisfaction

<sup>167</sup> Communication with Shareholders and Investors

#### **Building a More Diverse and Inclusive Workplace in Europe**

146 Hitachi Group Sustainability Report 2014

Diversity and inclusion remains high on the agenda for Hitachi in Europe as the Hitachi Group works to become a truly global company. Gender diversity continues to be a priority issue.

To address this challenge, two key initiatives were launched in 2013. Group companies in Europe collaborated to launch the European Women's Interactive Network (WIN) which was extended from a WIN run by Hitachi Consulting in the US. The network's objectives.

- 1. Make Hitachi a more attractive place for women to work;
- 2. Provide advocacy for women within the company at every level; and
- 3. Become recognized as an employer of choice for women.

WIN engages its members through interactive quarterly "webinars" and annual summits. The inaugural summit was held in November 2013. Entitled Hitachi in Europe: Advancing Gender Diversity, this event was attended by over 50 participants from across the Group. An engaging lineup speakers ran sessions on why diversity is important for Hitachi, having confidence and thinking positively, and working in a multicultural organization. Breakout workshops focused on topics such as achieving a satisfactory work life balance, career development and building a personal brand. In 2014, WIN plans to establish a mentoring program to further support its members.

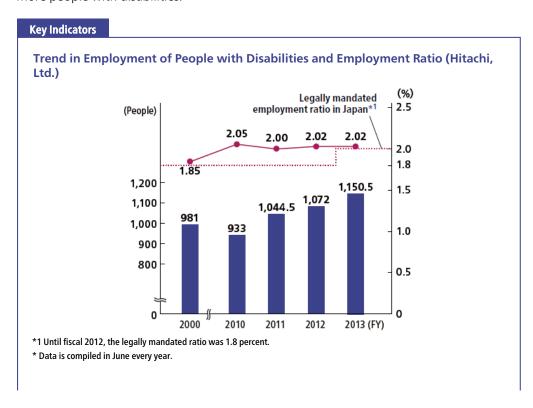
A new e-learning program on building an inclusive workplace was developed and rolled out to employees across Europe. In addition to covering compliance around diversity, this learning resource focuses on making Hitachi's culture more inclusive of all people. The version for managers includes a section on their specific responsibilities and inclusive leadership. Going forward with these initiatives and others will further engage all levels of the organization in making Hitachi in Europe a more diverse and inclusive place to work.

150 Quality Assurance Activities 153 Customer Satisfaction

159 Communication with Shareholders and Investors

#### **Employing People with Disabilities**

Hitachi, Ltd. and Group companies in Japan have worked hard to bring on board people with disabilities, including holding special hiring fairs and study meetings for the Group companies to share information. As a result, as of June 2013, the employment ratio of people with disabilities was 2.02 percent at Hitachi, Ltd. and 2.03 percent for the entire Group (compared with 1.95 percent last year). Both of these figures topped Japan's legally mandated ratio of 2.0 percent. We will maintain our Group-wide drive to hire more people with disabilities.



Hitachi Group

Sustainability Report 2014

#### **Hitachi Group Special Subsidiaries**

Five special subsidiaries\*1 within the Hitachi Group employ 229 people with disabilities, as of June 2013. They work at the parent company and affiliated companies performing tasks such as collecting and delivering mail, cleaning, and clerical assistance, or staffing cafeterias and tearooms.



Hitachi You and I Co., Ltd. employees working in a Hitachi, Ltd.

\*1 Special subsidiary: If an enterprise forms a subsidiary that gives special consideration to employing people with disabilities in order to promote and stabilize the employment of these people, and where certain requirements are met, people employed at the subsidiary are recognized as being employed at the parent company and can be included in calculations of the parent company's employment rate.

#### Hitachi Group Special Subsidiaries (as of June 2013)

Hitachi Group Sustainability Report 2014

Special subsidiary	Parent company	No. of people with disabilities	Main tasks
Hitachi You and I Co., Ltd.	Hitachi, Ltd.	97	Cleaning, mail, shredding, cafeteria work, clerical work assistance
Hallow	Hitachi Metals, Ltd.	43	Machining, checking, aluminum wheel grinding, mail
Hitachi High-Tech Support Corporation	Hitachi High-Technologies Corporation	29	Mail collection and delivery, business card creation, travel expense calculations, bookbinding
.Builcare Staff Co.,Ltd	Hitachi Building Systems Co., Ltd.	55	Digitizing of documents, office work assistance, cleaning, shredding
UJKC Social Enterprise Co.,Ltd	Hitachi Automotive Systems Steering, Ltd.	5	Auto parts assembly

To create jobs in Ibaraki Prefecture, Hitachi's original home, local plants and offices and Group companies contribute to the community by together outsourcing work to the Ibaraki Sheltered Workshop for around 80 people.\*2



Employees hard at work at the Ibaraki Sheltered Workshop

\*2 Ibaraki Sheltered Workshop: Established in 1978 under an agreement among Ibaraki Prefecture, Social Welfare Corporation, Jiritsuhoushikai, and Hitachi, Ltd. to provide work, guidance, and health supervision for the physically disabled who are able to work but are prevented from working at other companies because of limited facilities or structures, or long commutes.

#### **Understanding People with Mental Disabilities and Employment**

We have created a special intranet page to share among Group companies in Japan the employment and retention expertise developed through Hitachi's participation in Promoting the Employment of People with Mental Disabilities, a model project of the Ministry of Health, Labour and Welfare (MHLW). The wide range of information on the page includes an explanation of mental illness, examples of mentally challenged people at work, and a counseling section dealing with the concerns of people with mental disabilities, their families, and workplaces.

In fiscal 2012, we created a handbook for personnel managers and workplaces on employing and retaining people with mental disabilities, distributing it to all Group companies in Japan. We also held the Hitachi Group Study Meeting on People with Disabilities, encouraging Group-wide sharing of information that included examples of Group companies promoting work for the mentally challenged. Our initiatives have seen the number of mentally challenged employees in the Hitachi Group shoot up from 25 in fiscal 2008 to 225, as of June 2013. MHLW-hosted seminars and annual meetings of the Japan Psychiatric Medical Conference have brought widespread attention to Hitachi, Ltd. and Group company work in this area. We will continue to develop model examples of employing the mentally challenged and will work closely with medical, welfare, and government institutions to communicate this information to society.

**WEB** 

WEB Promoting the Employment of People with Mental Disabilities (Ministry of Health, Labour and Welfare) (Japanese only) http://www.mhlw.go.jp/houdou/2009/05/h0501-5.html

#### chapter 3 | Social Report

Customer Satisfaction 167

#### **Main Assessments and Awards**

#### **Nadeshiko Brand Designation**



Hitachi, Ltd. was one of the enterprises selected for the fiscal 2014 Nadeshiko Brand designations announced on March 3, 2014. Hitachi was recognized this year because we were considered to have developed environments where women in management positions are able to maximize their potential.

Since fiscal 2013, the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange (TSE) have jointly selected, on an industry basis, enterprises from among those listed on the first section of the TSE which are considered to encourage women to play active roles in the workplace, including the development of environments where women are able to further their careers. Companies are scored assessed on two factors: (1) providing career support for women; and (2) supporting women in balancing work and life. Of the top scorers, those which also meet the requirement for return on equity receive the Nadeshiko Brand designation. Hitachi, Ltd. was one of 26 enterprises chosen in fiscal 2014, the second round of selections.

#### **METI 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 areas such 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 instead promoting diversity management Group-wide as a corporate strategy backed by a strong management commitment. We will continue to pursue diversity management as a Group, providing opportunities for a wide range of employees, as well as reflecting their diverse perspectives in our management during our ongoing drive for global competitiveness.

#### Kurumin Certification



Kurumin certification is granted under the Act on Advancement of Measures to Support Raising Next-Generation Children, which came into force in April 2005, to companies that create action plans for child care support in line with this legislation and that meet performance requirements. In February 2011, we acquired this certification in recognition of our achievements in developing and implementing action plans supporting child care so that our employees can work with the peace of mind that comes from a good work-life balance.

**WEB** 

Act on Advancement of Measures to Support Raising Next-Generation Children Japan's Ministry of Health, Labour and Welfare http://www.mhlw.go.jp/seisakunitsuite/bunya/kodomo/shokuba\_kosodate/jigyou\_ryouritsu/ryouritu.html

Employee Health and Safety

Global Human Capital Developme

<sup>158</sup> Quality Assurance Activities

Customer Satisfaction

<sup>167</sup> Communication with Shareholders and Investors

# **Employee Health and Safety**

Hitachi Group Sustainability Report 2014

We take a Group-wide approach to preventing accidents, including sharing the Hitachi Group Health and Safety Policy globally and using a system that tracks information on health and safety management from all Group companies in Japan. When an accident occurs, the Group responds by investigating the cause and reviews the risk to reduce the number of potential accidents. As well, we ask a third party to assess safety.

#### Addressing Occupational Health and Safety

The basic principle underlying the Hitachi Group Health and Safety Policy is to ensure the health and safety of all employees. This policy is shared by Hitachi Group companies all over the world. Employees work together to create safe, secure work environments aiming to be accident free.

#### **Hitachi Group Health and Safety Policy**

#### Principle

"Health and Safety Comes First."

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

To accomplish this, we will:

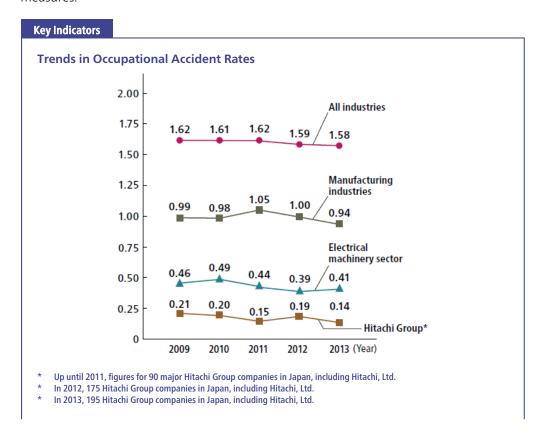
- 1. Continually be involved in health and safety activities in order to prevent work-related injuries and sickness through designating the health and safety of employees as management's top priority.
- 2. Comply with the local laws, and regulations in each company regarding health and safety
- 3. Develop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

Revised November 2013

#### **Health and Safety Promotion Framework**

Hitachi, Ltd. and Group companies in Japan undertake a range of health and safety activities. However, in some cases we are unable to prevent occupational accidents, including worker injuries. After assessing these cases, we make improvements designed to boost the level of health and safety management.

For example, in fiscal 2011 we introduced the Hitachi Group Key Safety Management Designation System which tracks key safety management improvements at Hitachi Group companies and business sites in Japan that have experienced serious occupational accidents. These companies and business sites take on both management-driven and bottom-up initiatives to formulate and promote specific improvement plans under the leadership of top executives. As well, we extensively investigate the cause of serious accidents and review risk to reduce the potential for accidents, then ask third parties with a high level of health and safety expertise to diagnose safety. In these ways, we are reshaping the Group's safety management framework and introducing targeted safety measures.



## Information Sharing and the Hitachi Group Health and Safety Portal System

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

Information on all occupational accidents is registered in the system so that all Group companies can track the causes of and measures against accidents at Group companies. Statistics are kept on the type of accident to prevent reoccurrences.

Once a year, we also hold the Hitachi Group Health and Safety Research Presentation Meeting for Hitachi health and safety officers. The 57th gathering, in November 2013, attracted around 200 participants. They shared their newfound knowledge from case studies and heard special lectures from outside experts on ideas that could benefit health and safety activities at every business site. Around 100 industrial healthcare workers, such as industrial physicians and nurses, participated in the 13th Hitachi Group Industrial Health Conference in January 2014. The participants gave presentations on specialized research and shared information on qualitative improvements in industrial health programs at business sites and training for industrial healthcare workers.

chapter 1
Governance Report
059

- 138 Diversity Management Employee Health and Safety Global Human Capital Developm
- 158 Quality Assurance Activities
- Customer Satisfaction
- 167 Communication with Shareholders and Investors

#### Hitachi Group Health and Safety Award Program

The Hitachi Group Health and Safety Award Program awards Hitachi Group companies in Japan that either extend accident-free records or win external prizes for health and safety. Based in Totsuka Ward, Yokohama City, the Telecommunications and Network Systems Division of Hitachi, Ltd.'s Information & Telecommunication System Company extended their industry record of work time accident-free hours to 150,506,325 as of March 31, 2014. Recording not a single work-time accident for approximately 36 years, this division remains the Group's top health and safety performer.

## Hitachi Group Sustainability Report 2014

#### **Fatigue and Stress Checkup System**

To support workers returning to work after a mental illness, Hitachi Systems, Ltd., has begun using the Fatigue and Stress Checkup System, a tool for controlling physical conditions through visualizations of fatigue levels. This system was originally developed through an industry-university partnership in fiscal 2012 to care for the mental health of local residents affected by the Great East Japan Earthquake and for local government employees. Using an instrument that measures autonomic nervous system responses for the early detection of fatigue and stress, this



cloud-based system capitalizes on the results of research into fatigue technologies.

#### **Employee Welfare**

Hitachi, Ltd. has designed programs to support employees' self-reliance and independence. These 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, and consolation payments. In fiscal 2000, a new "cafeteria plan" system was introduced so employees can select the benefits they will receive. Choosing from a list of options, such as skills development, childcare, nursing care, health promotion and donations, allows employees to tailor a plan to their individual lifestyles and needs. Employees can select the support that they need—when they need it—according to their "cafeteria points."

In response to the diversification of postretirement lifestyles, changes in the employment system, and revisions to legal systems, the Hitachi Group has fundamentally revamped the retirement and pension plans. Defined contribution pension and defined benefit pension plans have been introduced within the systemic infrastructure—across the Group—to provide support for employees' diversified life planning. For the defined contribution pension plan, we encourage the participation of employees in their postretirement planning through, for example, education on asset management and investments. For the defined benefit pension plan, we have increased the number of benefit options in response to employees' varied needs.

Report 2014

# **Global Human Capital Development**

Hitachi is creating a global human capital management strategy. Based on this strategy, we are building a global human capital database and developing employees who can succeed in the global business arena. In addition to providing opportunities for young employees to gain experience, we provide workplace-based career development to boost individual performance.

#### Managing Global Human Capital

Our Group-wide global human capital management strategy optimizes both human resources and organizational performance toward achieving Hitachi's goal of becoming a major global player.

For example, in fiscal 2013, we constructed the Global Human Capital Database to cover all Hitachi Group employees, excluding factory workers outside Japan. This database enables us to fully understand our Group worldwide human capital, and to assess macro management data, such as the allocation of human resources. We 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 entire Group, assessing the value of management duties against a common standard.

Also in fiscal 2013, we introduced a performance management system at Hitachi, Ltd. as well as Group companies worldwide to link the goals of both business operations and individual skills, toward the goal of sustained improvement and growth of both. In fiscal 2014, this system will be expanded to include more companies. To support the advancement of employees as our global operations expand, we are introducing common global hiring systems to secure talented people, boost efficiency, and reduce the costs of hiring.

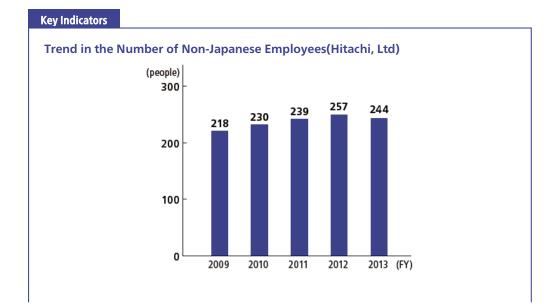
#### **Global Recruiting and Globalizing Human Capital**

To open up global markets, we have been accelerating the globalization of human capital in Japan through three initiatives: (1) recruiting people in Japan who can promote global operations, (2) providing more young Japanese employees with experience outside Japan, and (3) comprehensively revising management development for Japanese employees.

To secure the right people for business globalization, we are opening up employment opportunities and strengthening management diversity. We categorize all employees graduating from universities and technical colleges in principle as global business personnel who are able to drive our global operations. Our priority for employing global business personnel is to attract people who are eager to build their foreign language skills and who want the challenge of working in different cultures, social settings, and work environments.

We also recruit new employees to ensure diversity in and outside Japan. In fiscal 2014, we recruited around 70 non-Japanese from universities in Japan and worldwide, and around 10 Japanese graduates from universities outside Japan.

Communication with Shareholders and Investors



#### **Providing Young 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 who can understand and adapt to local cultures and lifestyles, we have offered a program for younger employees to live outside Japan. We have sent around 3,000 young Group employees over the three years since fiscal 2011, allowing them to take part in more than 80 programs, including understanding other cultures, language studies, local field studies, and internships, as well as opportunities to work with local people to resolve social issues. We plan to continue these programs in fiscal 2014.

#### Globalizing Management Training

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

We launched the Global Advanced Program for Leadership Development (GAP-L) in 2012 to develop leaders for our Asian operations. In fiscal 2013, 23 participants from around the world took part in the program in Singapore. Another 25 people participated in the Global Leadership Acceleration Program for Key Positions (GAP-K), which targets management candidates, in Delhi, India, and other locations. These programs focus on global business expansion by creating customer value and the requisite leadership skills, moving us closer to our goal of becoming a major global player. In the GAP-K program in particular, participants learn and discuss strategies for global business expansion with a special emphasis on emerging markets.

We will run the GAP-L program twice in 2014, and the GAP-K program will be held in Brazil as well as India. We also plan to hold standard training courses for general managers and new managers across our global Group operations in 2014. As global human capital management evolves to realize Hitachi's management strategies, we will work to globalize participation in our management development programs and make sure these are followed up in our business strategies.

#### **Global Employee Survey**

In September 2013, we conducted our first global employee survey. Created in 12 languages, Hitachi Insights was designed to measure employee engagement. The survey was sent to around 180,000 employees worldwide, and we received around 150,000

Overall, among the 13 categories, Hitachi scored well in "pride in your company" and "your supervisor's management," suggesting that employees are proud of Hitachi and its drive to become a major global player underpinned by sustainable growth. A poor score for "resources and support" indicates that we can do better on the level of staffing as well as information and resource tools.

In fiscal 2014, Hitachi's organizations will review their own results and compare them with those of other business units and with major global players to identify and implement steps that will lead to more incentives for jobs, workplaces, and organizational structures.

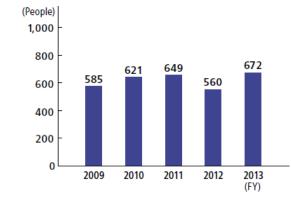
#### Career Development in the Workplace

Because we regard the workplace as the center of career development, our career development support emphasizes growth in daily work. Hitachi's Global Performance Management (GPM) uses performance planning: employees and their supervisors discuss and agree on short-term work goals. We also use career consultations for gaining mutual understanding of medium to long-term career plans, training and skills development to boost individual employees' engagement and motivation and to advance their careers in the workplace. Repeating the GPM cycle improves individual performance and further increases motivation and creativity. This in turn spurs individual growth and improves organizational results.

#### **Career Development Workshops**

Together with workplace career development, we provide direct support for individual career development through education and workshops that encourage self-awareness of employees' "internal careers"—in other words, their reasons for working and living. These programs are geared to every employee's career development and life stage, from young employees to those more senior. The Hitachi Career Development Workshop (H-CDW), which was launched in fiscal 2002 as a Group-wide initiative, is a key program that targets middle-aged employees who have some work experience and who play a central role in the workplace. 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 their own career development and skills development.

#### Trend in the Number of Participants in Career Development Workshops (Hitachi Group in Japan)



Customer Satisfaction

157 **Next Steps** 

To become a major global player, we are prioritizing individual and organizational performance. We will create value built on employees' individuality and their aspirations by implementing GPM grounded in diversity and the individual. To support career development, we will work to deepen mutual understanding by fostering communication between employees and their organizations through career development programs that encourage every employee to take greater control of his or her career development. In these ways, we are creating the resources and tools that enable a wide range of people to work together enthusiastically.

Hitachi Group Sustainability Report 2014

Report 2014

# **Quality Assurance Activities**

The entire Hitachi Group contributes to quality assurance, part of our tradition of *monozukuri* craftsmanship from the customer's perspective. These contributions cover all processes from research and development through to after-sales service. In addition to providing training for engineers in Japan, we are developing human capital outside Japan.

#### **Quality Assurance Activities**

To preserve our tradition of monozukuri craftsmanship from the customer's perspective and to advance product reliability, our quality assurance activities cover all processes from product planning and development through to design, manufacturing, delivery, and after-sales service. Our 2015 Mid-term Management Plan calls for Hitachi to begin a new phase to secure a leading market position as a major global player. For quality assurance, there is a growing and increasingly clear call for taking the customer's perspective and strengthening both products and processes. In response, we have extended, until fiscal 2015, the three-year Hitachi Group QF (Quality First) Innovation Movement that was launched in fiscal 2010. This will ensure product safety, compliance with laws and regulations, human resource development, and quality improvements. We have also been concentrating on quality improvements in China and the rest of Asia, as well as other countries and regions, since fiscal 2007.

#### **OCHIBO HIROI**

Meaning "gleaning" in English, OCHIBO HIROI identifies the fundamental causes of product accidents and recurrence prevention measures. The quality assurance executive officer works with related divisions to identify fundamental causes and develop recurrence prevention measures. They delve deeply into the technical causes as well as the procedures and the organizational and psychological factors that led to the accident.

#### **Intensive Product Safety Programs**

To deliver safe products and services, we combine expertise and technologies from such varied areas as planning, research, design, manufacturing, quality assurance, and maintenance. Safety of life, health, and property are the top priorities in product development. Therefore, we verify design safety and conduct risk assessments from a wide perspective in collaboration with related manufacturing plants and research laboratories.

#### **Complying with Technical Laws**

To supply our customers with products 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 within Hitachi Group companies on product regulations worldwide with amendment trends and enforcement dates. We have also created compliance guidelines to share within the whole Group that include clarifying product-specific laws (product-specific laws map), continuous improvement processes based on our compliance management system, designed to satisfy the 2008 ISO 9001 standards—and providing education on compliance, as well as raising compliance awareness

#### Quality and Reliability Education

Our training programs for all technical and skill levels at divisions working in design and quality assurance cover reliability (basic and advanced) and product safety. In fiscal 2011, we reinforced our monozukuri practices by beginning an e-learning program for the more than 120,000 Hitachi engineers around the world, reaffirming the monozukuri spirit based on our engineering ethics. During fiscal 2012 and 2013, we operated another e-learning program that drew on the results of analyses of past product accidents to identify weaknesses that our engineers must see and understand, as well as overcome in their daily works, including respecting, understanding, and practicing monozukuri craftsmanship.

Quality assurance training centers at our manufacturing sites help to increase production, quality assurance, and maintenance skills through their own specialized technical

#### Strengthening Quality Assurance (QA) Systems in China and throughout Asia

As production volume has been increasing in China and other Asian nations, we are reinforcing systems and training to improve product quality from these locations. For example, we host annual conferences for QA managers in China and Thailand to improve quality awareness and to share information and best practices.

We provide reliability training programs in Beijing, Shanghai, and Guangzhou in China and Bangkok, Thailand, to develop employees' QA skills and to improve their quality awareness and inspection techniques. In addition to the Basic Reliability Course\*1 and Intermediate Reliability Course,\*2 we launched an Advanced Reliability Course in China in fiscal 2011 and in Thailand in fiscal 2012. In this Advanced Reliability course, managers hold group discussions on past accidents to identify the fundamental causes, including the process-related, organizational, and psychological factors. The goals are to boost problem identification and problem-solving skills as well as to develop accident prevention procedures. We also plan to provide these courses in India and Malaysia.

- \*1 Basic Reliability Course: Deepens understanding of such basic issues as Hitachi's monozukuri craftsmanship, quality management, and labor safety.
- Intermediate Reliability Course: Improves understanding of more practical issues in, for example, Hitachi monozukuri craftsmanship, ISO 9001 certification, defect elimination, design for reliability, and purchasing and vendor management

#### **Handling Product Accidents**

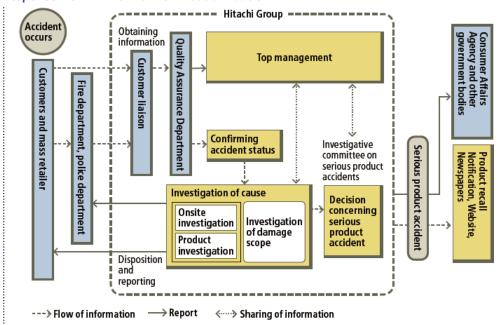
If there is a product accident, the division responsible acts swiftly to resolve the problem from the customers' perspective, coordinating with other Hitachi business units as needed. For an especially serious accident, we report to government agencies, as we are legally required to do, and publish the incident information through our website and other channels. At the same time, we quickly submit a status report to top management, ensuring fast and appropriate remedial action not just at one company but all companies Group-wide.

When we decide that a product recall is necessary, we notify the public through our website and/or in newspaper notices, then repair or replace these products.

Customer Satisfaction

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

Hitachi Group Sustainability Report 2014



#### **Ensuring Home Appliance Safety**

We are reducing consumer appliance accidents to near zero levels in line with Hitachi's Customer Satisfaction (CS) Management Guidelines, which have avoiding all accidents as the baseline. For example, since fiscal 1987 we have been testing worst-case scenarios, such as deliberately setting a fire inside a product to confirm that the fire will not spread outside it. Since fiscal 2006, we have also been conducting product safety risk assessments at the development stage, creating "accidents" that might be caused by misuse.

Of the serious product accidents occurring in Japan, there were 3,411 fires in electrical products between May 14, 2007 and March 31, 2013.\*1 By product, room air conditioner accidents (including outside units) were the most common. No Hitachi air conditioners were involved in the serious product accidents listed on the Consumer Affairs Agency website for the January to December 2013 period, reflecting the strength of the Hitachi Group QF Innovation Movement. 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.

\*1 Report on Status of Product Safety Policy Initiatives

**WEB** 

**Customer Satisfaction Management Guidelines** http://www.hitachi.com/csr/society/satisfaction/index.html#cs02

Global Human Capital Developm

Customer Satisfaction

## **Customer Satisfaction**

Hitachi Group Sustainability Report 2014

We are committed to improving customer satisfaction (CS) based on the Customer Satisfaction Management Guidelines that we created in 1994. To bring customers' voices into our product and business strategies, we prioritize direct dialogue and share these opinions across the whole Group. We also incorporate the views of product users and experts into our Universal Design (UD).

#### **CS Improvement Activities**

Using the Customer Satisfaction Management Guidelines, one of the pillars of our business management, we continue to improve CS with the goal of creating innovation through collaboration with customers.

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

- 1. Listen to our customers 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 customers' voices for 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 Hitachi's "portals," and the whole Group works with them to build closer relations with customers and to boost customer satisfaction.

Our Hokkaido, Tohoku, Shikoku, and Kyushu area operations hold executive seminars for local customers. Through direct dialogues with customers participating in our seminars and lectures, we incorporate their expectations for Hitachi and their opinions into product strategies.

We also hold the Hitachi Innovation Forum that has lectures, business sessions, seminars, and exhibits showcasing new businesses and initiatives targeting social innovation. Project leaders explain details to customers to deepen their understanding of Hitachi's business. We use feedback from this forum to improve our operations.

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

#### **Website Customer Support**

Our website provides comprehensive customer support. It 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 products and services. We also conduct training courses to provide better handling of these inquiries.

As one of our initiatives, we have been holding the Web Inquiry Responsiveness Improvement Course since fiscal 2009. In fiscal 2013, 122 Hitachi Group company employees took this course (bringing the total to 564 participants since the course began), which features case studies based on response 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.

#### **Electric Home Appliances**

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

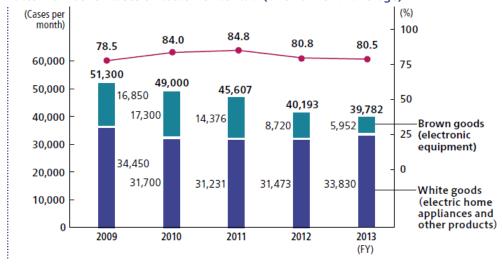
Our call center and website handle about 2.4 million customer inquiries, repair requests, and complaints about washing machines, LCD TVs and other appliances.\*1 We have undertaken a number of initiatives to better respond to inquiries and to reflect customer feedback in our monozukuri craftsmanship, including improving the rate of customer contact by using outsourcing; creating a database of customer feedback, including consultations, inquiries and complaints; and enhancing our website FAQs.

We also conduct semiannual customer service evaluation surveys at 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 seven countries in Asia and the Middle and Near East. We are also working on unifying management of the operations outside Japan.

\*1 For fiscal 2013, technical inquiries from suppliers and parts orders have been excluded from these statistics.

#### Rates/Number of Cases of Customer Contact (twelve-month average)



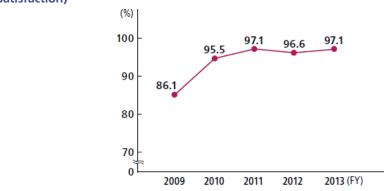
Customer Satisfaction 167

Communication with Shareholders and Investors Social Contribution Activities

#### 163

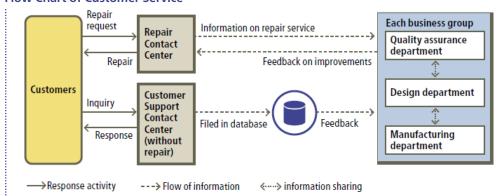
#### Results of Evaluation Survey for Customer Repair Services (Degree of Customer Satisfaction)

Hitachi Group Sustainability Report 2014



Figures for fiscal 2013 are totals for April 2013 to January 2014.

#### **Flow Chart of Customer Service**



Communication with Shareholders and Investors 167

<sup>171</sup> Social Contribution Activities

#### **Universal Design**

We promote Universal Design (UD) by improving the quality and ease of use, accessibility, and life cycles of our products. Quality of use means focusing on the traits that make people feel that the product is easy and enjoyable to use. Accessibility refers to the range of people who can use a product or service. Life cycle covers all the stages of the value chain from product purchase through to disposal.

#### **Our Universal Design Activities**

In keeping with these three elements of our UD philosophy, we conduct basic research on behavior and cognitive characteristics of various users to formulate UD guidelines and reflect these in product development, incorporating the voices of users and experts at every stage. The information obtained during product development is entered into a database shared by our businesses in Japan. We also distribute some of this information externally to promote open source standardization and education.

#### **Digital and Home Appliances**

We define people as customers as soon as a product interests them, so we make a point of considering Universal Design in everything from pre-sales to disposal. Key attributes are usability, features, harmony with the environment, safety, and maintenance. Our intention is to provide products that suit the physical ability or lifestyle of every customer and are appreciated for a long time.

Our UD focus extends beyond products to include product manuals. For example, we are working with the NPO Kanagawa Information, Employment and Welfare Network for the Visually Impaired (View-Net Kanagawa) to make our manuals available as audio text files. The entire manual, including photographs, diagrams and tables, is converted into a text file that can be played aloud using text-to-speech software (a screen reader for the visually impaired). These reconstructed text files are available online and allow the visually impaired to use our products safely and easily. The text files are created based on feedback from visually impaired people who have operated and verified product use while listening to the instructions on the text files.

We have also launched a range of measures to improve the accessibility of increasingly complex electronic consumer appliances for the elderly and disabled. DVDs providing clear explanations on product use are included with products, while some products have Braille labeling on their buttons.



Instruction DVD



Verifying audio text files for product operation

Customer Satisfaction 167

Communication with Shareholders and Investors

#### **Public Equipment and Systems**

Public equipment and systems are used by a large number of people, including children, either individually or collectively, in public spaces such as public buildings, stations, railways, and hospitals. Because of the public nature of the spaces where they are used, product design must address not only ease of use but also security, privacy, and safety.

For example, our automated teller machines (ATMs) include considerations and ideas based on a human-centric approach aimed at producing a machine that a range of people can operate in the same way with ease and without any particular concern. The arched guide frame leads hands naturally toward the card, bankbook, and cash slots. The open space below the user panel has been substantially deepened to improve wheelchair access. The screen interface, designed to be easier to use regardless of differences in color vision, has received color Universal Design certification\*1 from the NPO Color Universal Design Organization (CUDO).



AKe-S next-generation ATM

\*1 CUDO color Universal Design certification: Granted where the color schemes used in products and facilities, etc., are tested and found to be consistent with CUDO (Color Universal Design Organization) standards for color Universal Design, the concept of designing products and facilities for universal ease of use, regardless of peoples' differences in color perception. The aim of the CUDO certification system is to contribute to the public good by creating a society that accommodates personal differences.



An arched guide frame leads hands naturally toward the slots



A deeper space below provides better wheelchair access



A display screen preventing color vision differences

Hitachi Group

Sustainability Report 2014

#### Web and Information Systems

Web and information systems are essential for gathering information and communicating. For people with disabilities who have difficulty accessing information, it is particularly important that systems are accessible, usable, and secure. We are promoting UD that ensures accessibility in our Web and information systems by using the international Web Content Accessibility Guidelines (WCAG) 2.0.\*1 Examples of this include screens and layouts that are easy to read, compatibility with screen readers that read content out loud, and a feature that allows people to alter font size and color.



Screenshot of the Assistance for Color

Generation tool

The Assistance for Color Generation by CSS3 (CSS3 Generator) tool uses CSS3,\*2 enabling the rendering of gradation, shadows, glow effects, font bordering, rounded corners and other effects that allow more people to create web pages efficiently without factoring in colors and using images. This tool makes it easy to choose colors that can be differentiated regardless of color vision. We have made this tool available for free from July 19, 2012, so that it can be used by screen designers and systems developers.

- \*1 Web Content Accessibility Guidelines (WCAG) 2.0: Guidelines created by the World Wide Web Consortium (W3C) that form the basis of the JIS standard on information communications and Web content. The International Organization for Standardization (ISO) adopted these guidelines as an ISO/IEC 40500:2012 standard on October 12, 2012.
- \*2 CSS3 (CSS Level 3): An additional specification for the W3C's Cascading Style Sheets (CSS), a language for describing the rendering of HTML and XML documents.

Customer Satisfaction

<sup>167</sup> Communication with Shareholders and Investors 171 Social Contribution Activities

# **Communication with Shareholders and Investors**

To ensure that shareholders and investors can make sound investment decisions, we provide information that is fair, transparent, and appropriate, including information on our management strategies. We are improving communication through investor relations (IR) events and general shareholders' meetings.

#### Information Disclosure

We communicate with shareholders and investors based on our disclosure policy. We disclose not only information required by laws or regulations, but also information that promotes deeper stakeholder understanding of our management policies and business activities.

#### **Disclosure Policy**

#### 1. Basic Policy

Hitachi's Mission is to contribute to society through the development of superior, original technology and products. With this in mind, Hitachi seeks to maintain and develop trust relationships with its stakeholders, including shareholders and other investors, customers, business partners, employees and regional communities. It will fulfill its responsibility to stakeholders by disclosing information in a fair and highly transparent manner, and by conducting various communication activities.

#### 2. Information Disclosure Standards

Hitachi discloses information as appropriate in a fair and highly transparent manner, in compliance with the law and/or regulations of the stock exchanges on which the Company is listed. Hitachi discloses not only information required by law and/or regulation, but also management and financial information it regards as useful in deepening stakeholder understanding of Hitachi management policy and business activities. Hitachi also discloses non-financial information regarding the social and environmental impact of its activities. Hitachi's stance on disclosure recognizes that society regards the above information as important.

#### 3. Disclosure Methods

Hitachi uses appropriate means to disclose the information required by law and/or regulations of the stock exchanges on which the Company is listed. The Company also posts this information on its website immediately after it is disclosed. Hitachi also discloses information not required by law and/or regulations by distributing news releases, holding press conferences and presentations, posting information on its website, and conducting other disclosure activities in an appropriate, precise and timely manner.

#### 4. Quiet Period

Hitachi stipulates a quiet period of a certain length prior to earnings announcements to prevent information leaks and to maintain disclosure fairness. During this period, Hitachi refrains from answering inquiries about business performance and related matters.

#### 5. Forward-Looking Statements

In its disclosures, Hitachi may make statements that constitute forward-looking statements that reflect management's views with respect to certain future events and financial performance at the time of disclosure and include any statement that does not directly relate to any historical or current fact. Such statements are based on information available at the time of disclosure and are subject to various risks and uncertainties. Certain forward-looking statements are based upon assumptions of future events which may not prove to be accurate. Hitachi discloses the factors that could cause actual results to differ materially from those projected or implied in forward-looking statements.

#### **Proactive IR Approach**

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

In fiscal 2013, we held quarterly financial results briefings and corporate strategy meetings on the 2015 Mid-term Management Plan created in May 2013. Following on from fiscal 2012, we hosted a Hitachi IR Day 2013, where senior management explained their business strategies and management policies under the Mid-term Management Plan. Feedback from institutional investors and analysts was positive. Their comments included, "Hearing explanations of each business strategy enabled us to better understand these, which I found useful for analysis" and "It was a significant event for dialogue between the capital market and management."

We held a corporate strategy meeting on our information and telecommunications systems and power systems businesses to deepen understanding of these operations. Furthermore, we conducted around 800 one-on-one meetings with institutional investors and analysts worldwide. Senior managers visit institutional investors in North America, Europe, and Asia twice a year to explain management policies and business directions. We are doing our best to share IR feedback in-house and reflect this in management and operations.

We are committed to timely disclosure, and we post briefing materials and business performance as well as stock price trend charts on our IR website. Concise explanations of Hitachi's history and business are also provided on pages for individual investors. We intend to expand that content and make it more user friendly.

#### **Disclosure Tools**

Financial results

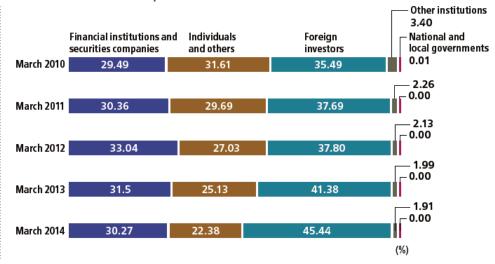
Annual and quarterly reports in accord with the Financial Instruments and Exchange Law of Japan Annual reports

Hitachi Group Corporate Sustainability Report

#### **General Meeting of Shareholders**

At the Ordinary General Meeting of Shareholders, we provide audio-visual reports designed to give shareholders a thorough understanding of our situation. After the general meeting of shareholders, Hitachi discloses management policy explanations from our president for shareholders and investors via our website. We post notices of general meetings of shareholders earlier than legally required to give stakeholders additional time to consider our proposals.

#### **Trends in Shareholder Composition**



Data of Source: Report on the 145th Business Term

**WEB** 

Report on the 145th Business Term

http://www.hitachi.co.jp/smeet-e/145/report/140526a.pdf

## Hitachi as an SRI\*1 Investment

The Hitachi Group welcomes external assessments as a socially responsible and sustainability investment. For five years in a row (since fiscal 2009), DJSI World,\*2 a leading global sustainability investment index, has listed Hitachi, Ltd. as a component stock. Four Group companies, including Hitachi Chemical Co., Ltd. and Hitachi Capital Corp., were selected for the FTSE4Good Index Series.\*3 Four Group companies including Hitachi Construction Machinery Co., Ltd. and Hitachi High-Technologies Corp. were chosen for the Morningstar SRI Index,\*4 with the Group performing well overall in these external assessments.

- SRI: Socially responsible investment, where investment funds evaluate companies and select stocks from a CSR perspective
- DJSI: A family of SRI indexes developed by Dow Jones & Company (USA) and RobecoSAM (Switzerland) that includes global and regional indexes within a certain composition. DJSI World, for example, selects on a global basis, while the DJSI Asia Pacific Index covers Japan, Asia, and Australia.
- \*3 FTSE4 Good 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, bribery and corruption prevention, and corporate governance.
- Morningstar SRI Index: SRI Indexes for Japanese stocks. Morningstar Japan K.K. developed these indexes with Center for Public Resources Development.

Institution	Index	Companies selected
RobecoSAM	Dow Jones Sustainability World Index	Hitachi, Ltd.
	Dow Jones Sustainability Asia Pacific Index	Hitachi Chemical Co., Ltd.
FTSE Group	FTSE4Good Index Series	Hitachi Chemical Co., Ltd. / Hitachi Capital Corp. / Hitachi Construction Machinery Co., Ltd. / Hitachi High-Technologies Corp.
Morningstar	SRI Index	Hitachi, Ltd. / Hitachi Chemical Co., Ltd. / Hitachi Construction Machinery Co., Ltd. / Hitachi High-Technologies Corp.

#### **Fundamental Policy against Takeovers**

The Group invests a great deal of business resources in fundamental research and in the development of market-leading products and businesses that will bear fruit in the future, and realizing the benefits from these management policies requires that they be continued for a period of time. For this purpose, the Company keeps its shareholders and investors well informed of not just the business results for each period but also of the Company's business policies for creating value in the future.

The Company does not deny the significance of the vitalization of business activities and performance that can be brought about through a change in management control, but recognizes the necessity of determining the impact on company value and the interests of all shareholders of the buying activities and buyout proposals of parties attempting to acquire a large share of stock of the Company or a Group company by duly examining the business description, future business plans, past investment activities, and other necessary aspects of such a party.

There is no party that is currently attempting to acquire a large share of the Company's stocks nor is there a specific threat, neither does the Company intend to implement specified so-called anti-takeover measures in advance of the appearance of such a party, but the Company does understand that it is one of the natural duties expected by shareholders and investors to continuously monitor the state of trading of the Company's stock and then to immediately take what the Company deems to be the best action in the event of the appearance of a party attempting to purchase a large share of the Company's stock. In particular, together with outside experts, the Company will evaluate the buyout proposal of the party and hold negotiations with the buyer, and if the Company deems that said buyout will not maintain the Company's value and is not in the best interest of the shareholders, then the Company will quickly determine the necessity, content, etc., of specific countermeasures and prepare to implement them. The same response will also be taken in the event a party attempts to acquire a large percentage of the shares of a Group company.

## **Social Contribution Activities**

Hitachi believes that contributing to society is the company's most important role, not only through our businesses but also by engaging with and contributing to local communities as a part of the community. Through our employees, while we pass on technologies and knowhow to local communities. We also work with local authorities and NPOs to nurture the next generation and to resolve local issues.

#### Philosophy and Policy

We approach social contribution based on our Group-wide Social Contribution Activities Philosophy and Policy under the Hitachi Group Identity. Group companies, their employees, and our six foundations work together to resolve issues in the communities where we have business operations.

We also believe that our social contribution activities help us build trust with communities as a good corporate citizen, while volunteer work inspires greater social awareness and more flexible thinking in those employees who volunteer. These initiatives will become a source of strength for driving our Social Innovation Business, enabling us to contribute to the development of both a sustainable society and business. Given that December 5 is the International Volunteer Day, we set every November and December as Hitachi Volunteer Days during which Hitachi further encourages employees to take part in a broad range of volunteer activities to contribute to their communities.

In fiscal 2013, funding for the social contribution activities implemented by Group companies and the five foundations in Japan totaled approximately 3,1 billion yen.

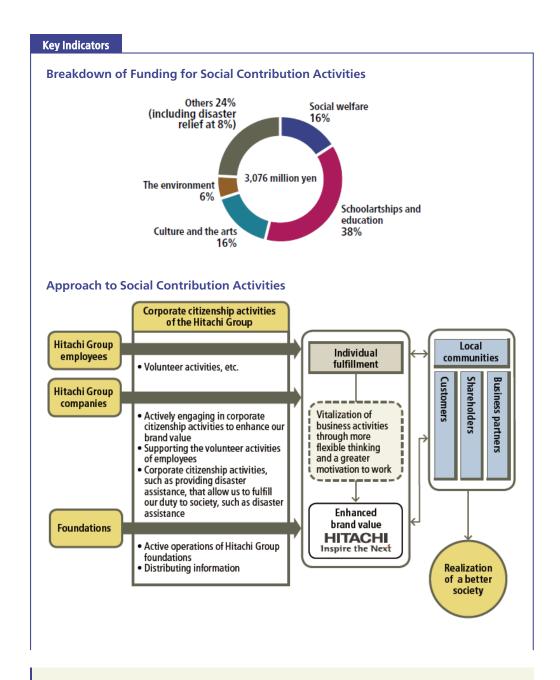
#### **Social Contribution Activities Philosophy and Policy**

#### Philosophy

The Hitachi Group strives to demonstrate good corporate citizenship in response to social needs and expectations, while endeavoring to enrich the quality of life and realize a better society.

The Hitachi Group promotes various social contribution activities to build a vibrant society based on fostering leadership to implement reformation for the next era. This is achieved by making optimal use of our knowledge and information technology in three specific areas: education, the environment, and social welfare.

Communication with Shareholders and Investors



#### **Hitachi's Foundations**

The Odaira Memorial Hitachi Education Foundation

The Hitachi Environment Foundation

The Kurata Memorial Hitachi Science and Technology Foundation

The Hitachi Scholarship Foundation

The Hitachi Mirai Foundation

The Hitachi Foundation (US)

Hitachi's six foundations worldwide operate in a wide range of areas, including supporting family education, promoting science and technology research, inviting Southeast Asian university faculty members and researchers to Japan, helping with environmental conservation, supporting the development of young people, and promoting good corporate citizenship in the United States.

#### Social Contribution Activities in Japan and Asia

#### **Fostering Future Scientists**

#### **Hitachi Science Seminar**

Since fiscal 2011, the Hitachi Science Seminar program has been encouraging children's interest in science. In hands-on programs, Hitachi Group companies involve children in science experiments and projects in an enjoyable way, sharing the skills and knowhow developed through our long monozukuri tradition with the next generation.

In fiscal 2013, Hitachi Group companies held eight Hitachi Science Seminars at the Science Museum in Tokyo. The seminars drew 229 elementary and junior high school students, creating paperclip motors using magnets and dry cell batteries (Hitachi Metals, Ltd.,



Children conducting a science experiment directed by a teacher

Hitachi Maxell, Ltd., and Hitachi, Ltd.); observing the micro world through electron microscopes (Hitachi High-Technologies Corporation); purifying water with coagulation and magnetic separation as well as voice synthesis by computers (Hitachi, Ltd.); and, in a new chemical experiment program launched in fiscal 2013, experiencing the weight of carbon dioxide (Hitachi Chemical Co., Ltd.). A special biology seminar was held in cooperation with then Prof. Tatsuo Motokawa, affiliated with the Tokyo Institute of Technology Graduate School of Bioscience and Biotechnology. The seminar provided an enjoyable introduction to biological behavior and mechanisms. Hitachi will continue to use the technologies and strengths of Group companies for these educational support programs by addressing diverse themes that foster children's curiosity.

#### Hands-on Science Education Support Programs by Group Companies

As part of our support for nurturing of young scientists, we take advantage of our companies' wideranging resources to offer hands-on science educational support programs to students from preschool to junior high school.



Water purification corner at a we love the earth class

Customer Satisfaction

#### **Main Science Education Support Programs**

Hitachi Group Sustainability Report 2014

Company name	Activity	Target	Activity description
Hitachi Chemical Co., Ltd.	Fureai Kagaku Kyoshitsu Science Experiment Classes for Children	Preschool children	Since fiscal 2012, these classes have been taught by Hitachi Chemical employees at kindergartens and day-care centers in the neighborhood of their business sites in Japan, introducing 2,870 children to the wonders and ple
	Fushigi Hakken! How miraculous is the abundance of sea life!	Elementary school students	Special workshops held jointly with the Sumida Aquarium in Sumida Ward, Tokyo, since fiscal 2013. In 2013, 66 elementary school children learned about the ocean as the wellspring for all living things, the abundance of sea life, and the value of all life.
	Summer Vacation Family Science Experiments	Elementary and junior high school students	Since fiscal 2009, Hitachi Chemical has worked with the Chemical Society of Japan's I Love Chemistry (Kagaku Daisuki) Club to provide fun science experiments to 1,421 children and their parents at four business sites in Japan.
Hitachi High-Technologies Corporation	Science outreach using electron microscopes	Elementary school students	In this program, children use tabletop scanning electron microscopes to experience the surprise and wonder of the unknown worlds of everyday objects. Since fiscal 2012, 384 children have participated in the Let's Look at Bugs! program at the Sayo-cho Konchukan (insect museum) in Hyogo Prefecture, Japan. In fiscal 2013, biomimetics was introduced at a 20-day exhibition that attracted 1,200 elementary school students at the Science Museum in Tokyo, entitled 400 Million Years—Letters with Insects.
Hitachi Maxell, Ltd.	Kyo Edison Program (Battery Class)	Elementary school students	A program for elementary and junior high students is run by the Kyoto Otokuni Regional Education Office, bringing together company employees, Board of Education members, and school personnel to promote science, technology and monozukuri (skilled manufacturing). Hitachi Maxell joined in fiscal 2006, carried out a class on batteries where, so far, 1,236 elementary school students have participated. In fiscal 2013, these classes were held in five schools, with 321 children creating their own unique dry batteries.
Central Research Laboratory Hitachi, Ltd.	Waku Waku Kids' Science Seminar	Elementary school students	Since fiscal 2012, around 200 elementary school children in the fifth and sixth grades participated in this program, including seminars, projects, and research laboratory visits. The seminars and projects are managed by researchers. In fiscal 2013, about 100 students came to the CRL for a seminar on the theme of light.
Hitachi Research Laboratory Hitachi, Ltd.	Science Seminar	Junior high school students	Launched in fiscal 2005, this hands-on program taught by young researchers to junior high school students (295 to date) in experiments that stimulate their interest in science and engineering in an enjoyable way. In fiscal 2013, 40 students used electron microscopes, built a prototype cyclone vacuum cleaner, and conducted supercooling experiments, supported by 30 employees.
Infrastructure Systems Company Hitachi, Ltd.	Partnership in Elementary School Club Activities	Elementary school students	A science education partnership with Toshima Ward, Tokyo, began in fiscal 2007. To date, around 950 students have participated in these science classes. In fiscal 2013, science classes were launched as club activities at another six elementary schools in Toshima Ward, and around 150 students have deepened their understanding of science through handicrafts and experiments on the nature of compressed air and water purification.
	We Love the Earth Class	Elementary school students	Since fiscal 1998, students from elementary schools around the Matsudo Works have been invited to taken part in water-related science classes. The program has been held 32 times, with more than 3,000 students participating so far.

 <sup>158</sup> Quality Assurance Activities
 161 Customer Satisfaction
 167 Communication with Shareholders and Investors
 171 Social Contribution Activities

Hitachi Group

Sustainability

Report 2014

#### Supporting Science and Mathematics Education in Hitachi City

Hitachi City's educational objectives are to foster an interest in science and to cultivate creativity and originality in children on an international stage. Hitachi, Ltd. supports these objectives, and in fiscal 2009 concluded a basic agreement to work with Hitachi City on programs that enrich science and mathematics education. Assisted by the Hitachi Science Club,\*1 established by an NPO in May 2009, we work with the Hitachi City Board of Education and local schools—in line with school curricula—to develop science experiments that deepen students'



Class support

understanding and to provide a wide range of programs that stimulate their curiosity.

The six programs include assistance for elementary school science classes, an experience class on making water rockets, and the Super Science and Math Academy for junior high school students with a strong interest in science and mathematics. In fiscal 2013, 17,755 students took part in 423 classes. In another program called Rika-Shitsu no Ojisan (Mr. Science), volunteers of the Hitachi Science Club went to 25 local elementary schools twice a week to help set up science experiments and answer students' questions. These activities deepen children's interest in science. As of March 2013, the Hitachi Science Club's activities have become regular club events at all 25 schools.

Hitachi, Ltd. will continue to support these programs, providing opportunities for our engineers to convey their experience and skills to children so that children can experience the joy of science and the satisfaction that comes from creating something.

Hitachi Science Club: An NPO of around 100 volunteer retirees from Group companies' plants and research institutes, including engineers with PhDs, professional monozukuri engineers, and senior engineers with special

#### Cosponsoring Kagaku-no-Koshien

Hitachi, Ltd. has been co-sponsoring the Kagaku-no-Koshien (the Japan High School Science Championships) event since fiscal 2011. Organized by the Japan Science and Technology Agency with the aim of getting more high school students interested in science and extending their abilities. The tournament is held every year in Nishinomiya City in Hyogo Prefecture with the cooperation of the government, industry, and academia. Teams of six to eight students from high schools that won preliminary rounds in Japan's 47 prefectures compete for the highest total



Japan High School Science Championships

score in written exams and practical competitions. The Hitachi Award is given to the team that demonstrates the most creative answers with the most innovative potential, regardless of the score, to help nurture outstanding future scientists. In fiscal 2013, Hitachi, Ltd. also participated as a cosponsor in a new competition for junior high school students held in Tokyo. We look forward to continuing to support this program and fostering creative and inventive scientists for the future.

<sup>158</sup> Quality Assurance Activities Customer Satisfaction

<sup>167</sup> Communication with Shareholders and Investors

<sup>171</sup> Social Contribution Activities

#### Sponsorship of Kanagawa Science Fair for Junior High School High School Students"

Hitachi Group Sustainability Report 2014

The Hitachi, Ltd.'s Yokohama Research Laboratory supports this science fair sponsored by Kanagawa Prefecture to deepen the understanding of science and technology and highlight their appeal. The fair counters the drift of high school students away from science. Universities and companies specializing in science and technology in Kanagawa Prefecture collaborate in the event. In fiscal 2013, the Yokohama Research Laboratory ran a booth on the theme of highly reliable IT platform technologies for the social infrastructure. Nine employees took part in demonstrations and introduced Hitachi's cutting-edge



Demonstration by Hitachi staff

technologies to 402 students. The Yokohama Research Laboratory will continue to show Hitachi's leading-edge technologies to students through this outstanding example of government-industry-academia collaboration.

#### **Great East Japan Earthquake Recovery Support**

#### **IT-based Pro Bono Work**

Hitachi Solutions, Ltd. is running a pro bono\*1 project in Kamaishi City, Iwate Prefecture. Employees provide IT-based recovery assistance for local revitalization. In fiscal 2013, seven employees helped to improve the website of Kamaishi's Toni Town Fishery Cooperative to Strengthen the information on their website. They also helped to develop a business system to boost productivity for a seafood processor. The processing company was delighted to find that improvements to in their business system have doubled business productivity. The Fishery Cooperative too has welcomed the new look of its website, which provides not only fisheries information but also a new, multi-faceted introduction to Toni Town's history, natural environment, culture, and way of life. The number of people accessing the website is expected to increase. Hitachi Solutions will work with fishery cooperatives, local residents, local authorities, NPOs, and other stakeholders on sixth sector industrialization to revitalize the region. Disaster recovery is one of Japan's major social challenges, requiring a long-term approach. Hitachi Solutions looks forward to continuing to bring IT expertise to support the recovery in this region.

\*1 Pro bono: Voluntary work where people use their professional skills for the public good

#### Cleaning the Seabed to Restore the Fishing Industry

To restore the Ogatsu Bay coastal area and the fishing industry in Ishinomaki City, Miyagi Prefecture, Hitachi Systems, Ltd. has been working with the Miyagi Prefecture Fisheries Cooperative, Kanagawa Prefecture's civil volunteer group, "The Sea Beautification Society", and a local volunteer group, "Ogatsu Bay Fisheries Cooperative Association Support Society". Since fiscal 2012, these groups have been cleaning up the seabed in Ogatsu Bay. Local authorities tackled this problem after the earthquake, but a huge amount of waste and debris remained and



Bringing up debris from the seafloor

continues to harm the marine environment. In fiscal 2013, 13 Hitachi employees helped to remove waste and debris to restore the fishing grounds. Over two days, they recovered 10 tonnes of waste, including wood, steel pipes, and home appliances.

<sup>154</sup> Global Human Capital Developme

Customer Satisfaction

<sup>167</sup> Communication with Shareholders and Investors 171

Before the Great East Japan Earthquake, the fishing industry in Ogatsu Town, Ishinomaki City, supplied a rich variety of marine products, including the best scallops in Miyagi Prefecture, caught in the calm waters of the Ogatsu Bay, as well as oysters, sea squirts, and seaweed from the coastal waters. Hitachi Systems will continue to provide long-term support for the recovery of the aquaculture industry and the revitalization of fishing villages.

Hitachi Group Sustainability Report 2014

#### **Hitachi Hospitals Support Their Communities**

In 1938, Hitachi, Ltd. founded the Hitachi Hospital (now the Hitachi General Hospital), Japan's first corporate-affiliated hospital, with the fundamental philosophy of contributing to personal health in our plants as well as public medicine. Since then, we have established other company hospitals, centered on regions where our production plants and other businesses are located.

All of our hospitals are open to local residents, in addition to providing social welfare and health management services for Hitachi Group employees and their families. These hospitals provide high-quality, safe healthcare services using the latest medical technologies and experience. They also work with local medical institutions to boost the level of local medical care, and cooperate with the healthcare industry by sharing knowhow from the Hitachi Hospitals' medical practices, helping to improve the quality of services. We currently operate three company hospitals.

Hospital	Location	Year established
Hitachi General Hospital	Hitachi City, Ibaraki Prefecture	1938
Taga General Hospital	Hitachi City, Ibaraki Prefecture	1942
Hitachinaka General Hospital	Hitachinaka City, Ibaraki Prefecture	1945

#### **Participating in Charity Events**

Hitachi Australia Pty Ltd. participates in charity events that support local communities. In September 2013, over 50 Hitachi Group employees and their family members ran, jogged, and walked in the annual City2Surf run in Sydney, Australia. This is the world's largest charity run, with 85,000 registered participants, and Hitachi Group companies participate every year. Runners can choose an organization to raise funds for. Hitachi's employees in 2013 chose the charity Barnardos Australia, a well-known child welfare organization that works to stop child abuse by providing mentoring, accommodation, and foster care.



City2Surf charity runners

Team Hitachi raised over AU\$3,400 (around 320,000 yen) for this charity.

On November 3, 2013, employees from several Hitachi Group companies based in Australia rode together in the MS Gong Ride, a one-day community bicycle ride to raise money for MS (Multiple Sclerosis) Australia. A special part of Sydney's cycling heritage, the ride from Sydney Park to Wollongong is 90 kilometers long. For Hitachi's first time at this event, Team Hitachi was ranked the 24th fundraiser in the Information and Communications Technology category. Together, the team raised AU\$2,105 (around 200,000 yen) for MS Australia. The participants enjoyed riding with other colleagues for their communities under the globally know Hitachi name, and are looking forward to having a bigger team next year.

#### chapter 3 | Social Report

<sup>154</sup> Global Human Capital Development

#### 178

#### Hitachi Group Sustainability Report 2014

#### **Preserving Mangrove Wetlands**

Since 2010, Hitachi Elevator (China) Co., Ltd. has been participating in the World Wildlife Fund-organized Earth Hour, the world's biggest combined environmental event. In 2010, the company joined the event by turning off lights for an hour together with participants in more than 150 countries worldwide, and has since been promoting green mobility by encouraging bicycle commuting and planting trees.



Mangrove conservation

In March 2013, the company held a mangrove conservation event near a village in the Nansha District of Guangzhou together with the Shenzhen Mangrove Wetlands Conservation Foundation (MCF). After MCF's explanation about mangroves and their role in the ecosystem, 30 employees joined the MCF staff to remove trash from the mangrove wetlands. In 2014, the company will continue to work with the foundation on mangrove conservation and wild bird studies.

154 Global Human Capital Development

#### Social Contribution Activities in India and ASEAN

#### **Singapore-Industry Scholarship**

Hitachi Asia Ltd. was invited by the Singapore Economic Development Board (EDB) in 2012 to work in partnership with the Singapore government to cosponsor the inaugural Singapore-Industry Scholarship (SgIS). The aim is to jointly develop a strong core of local talent to anchor the strategic sectors that are critical for Singapore's development. The selection process included some research on Hitachi, ability and skills assessments, a panel interview, and a networking session with the scholarship's management. The interview panel had a strong makeup of senior management representatives from Hitachi Group



Networking session with management

companies in Singapore and Hitachi, Ltd. The Singapore government agencies were very happy with our approach and have complimented us for our engagement with the scholars. The partnership also resulted in good media exposure for our scholars: two out of five scholars from 2012 were featured in local newspapers. As of fiscal 2013, we have had 10 outstanding scholars who are now part of Hitachi's talent pipeline and that may become future leaders that will contribute to the Hitachi family after their graduation.

#### **Hitachi Library Project**

Since the launch of the Hitachi Library Project in 1993, employees of Hitachi Asia (Thailand) Co., Ltd. have been volunteering to donate school books and other materials to rural schools in need of educational tools. With funds from Hitachi Asia Ltd. and group companies, books and materials have been donated every year to elementary and junior high schools in central, northeast, and northern Thailand. In 2013, more than 2,000 books were donated. To date, 219 schools have benefited from this project. Hitachi Asia Ltd. also donated 100,000 baht (about 310,000 yen) to the areas where libraries and renovations were needed. This community-based project aims not only to cultivate students' interest in reading but also to



Kazuo Karasawa, then-Managing Director of Hitachi Asia (Thailand) Ltd, donating books

improve their knowledge and reading skills as a way to increase their learning skills.

#### **Health Care Training Center Opens in Laos**

In October 2013, held was an opening ceremony was held for the Health Care Training Center, established in Xepon District, Savannakhet Province, in the Lao People's Democratic Republic (PDR). The center was built as a government-private sector project under the Grant Assistance for Grassroots Human Security Projects, a Japanese government ODA program. The project proposal was submitted in fiscal 2012 by the Savannakhet Province Health Department with support from Nagasaki University, the Research Institute for Humanity and Nature (RIHN), and Hitachi,



Hitachi staff scanning finger veins

Basic public health education and health surveys using finger vein authentication are conducted at the center. Established in the Xepon District Hospital, the center trains volunteers selected from the province's villages. Hitachi has also been working with Nagasaki University and the RIHN on a finger vein authentication system to support

chapter 1 Governance 059

chapter 7 Environmental Report 073

#### chapter 3 | Social Report

130 Respect for Human Rights

Supply Chain Management

138 Diversity Management

Employee Health and Safety Global Human Capital Developme

158 Quality Assurance Activities

Customer Satisfaction

167 Communication with Shareholders and Investors 171 Social Contribution Activities

The opening ceremony was attended by the Lao PDR's Vice Minister of Health, the Director of the Savannakhet Province Health Department, the Second Secretary of the Embassy of Japan in the Lao PDR, and representatives from Nagasaki University, the RIHN, and Hitachi. Hitachi marked the opening by donating eight finger vein authentication systems.

#### The Hindu-Hitachi Scholarship Program

Together with the influential Indian English-language newspaper The Hindu, Hitachi, Ltd. has been running The Hindu-Hitachi Scholarship Program since 1960 to nurture young Indian engineers. Every year, engineers from the Indian public and private sectors are invited to Japan for technical training at the plants and offices of Hitachi Group companies. As of 2013, 134 engineers have completed the training. Three 2013 engineers received training:



Presentations by scholars

- 1. Host site: Power Systems Company, Hitachi, Ltd. Training areas: Turbine generator design, gas-insulated switching device design, assembly processes, and quality control
- Host site: Infrastructure Systems Company Power Systems headquarters and Power Systems Company, Hitachi, Ltd. Training areas: Power transformation and distribution (protection and control, and protection relays)
- 3. Host site: IT Platform Business Division, Information and Telecommunications Systems Company, Hitachi, Ltd. Training areas: Server and storage management as well as maintenance and related network technologies

At the final presentations at Hitachi, Ltd. headquarters in January 2014, the engineers described how their training helped them improve their skills in their specialized areas. They commented that they looked forward to taking back what they had learned through their training about Japanese culture and the Japanese approach to work and putting that to use in their professional careers at home.

#### **Partnering with IITH in Technology**

Hitachi India Pvt. Ltd. has been strengthening their technological partnership with the Indian Institute of Technology Hyderabad (IITH) since 2009. A series of lectures and knowledge-sharing forums by Hitachi employees have further reinforced the relationship with IITH. Hitachi India has also been supporting some of IITH's annual events. In January 2014, Hitachi India sponsored Robo Epic. The two-day Robo Epic, where 30 participants pitted their robots against each other in robo fights, along with some interesting robot chasing games, drew more than 100 visitors from IITH and other Hyderabad engineering institutes. Hitachi



Students participating in Robo Epic

India will continue to support this event to further encourage students' competitiveness and creativity, leading to an improvement in their monozukuri skills.

#### chapter 3 | Social Report

<sup>138</sup> Diversity Management Employee Health and Safety

Global Human Capital Development

Customer Satisfaction

<sup>167</sup> Communication with Shareholders and Investors

# Hitachi Group Sustainability Report 2014

### Social Contribution Activities in the U.S. and Europe

### **Introduction of Volunteering Policy**

To encourage employees to get involved with volunteering, Hitachi Europe launched the first Employee Volunteering Policy covering its operations in the UK in June 2013. This new policy allows employees up to two days leave, in addition to annual leave, to volunteer for local charities, schools, and NPOs. For fiscal 2013, 17 employees volunteered, or over 7 percent of Hitachi Europe employees in the UK. For example, seven employees helped a with charity event to support an organization that assists cancer patients, raising over 760 pounds (around 130,000



Employees enjoying the new policy

yen). Another 10 volunteers introduced Universal Design (UD) to about 150 students. When running the program, the volunteers made presentations, ran experiments, and helped the students design a TV remote control as part of a group competition. All the volunteers enjoyed their experience and would recommend volunteering to their colleagues.

Hitachi's European CSR team also established an online toolkit in 2013 to enable group companies in Europe to more easily contribute to their local communities. The toolkit, developed by the team, contains their CSR vision, goals, and suggested activities for other Group companies to implement for education, the environment and community support. The webpage also includes a starter kit for those who plan to start a UD program in their local community and schools. Hitachi Europe believes that this toolkit is a valuable resource for fulfilling their commitment to work with local European communities through outreach. A similar toolkit has been introduced in North America, and it will be used to help local communities there.

### **Supporting a Poster Contest**

The Hitachi, Ltd. Los Angeles Office has been sponsoring the Times in Education program with the Los Angeles Times for more than 16 years. This program provides thousands of students and teachers in the Southern California area with copies of the LA Times to use as learning materials in the classroom. As part of this program, Hitachi also created a poster contest in 2001 where students are asked to design posters specific to causes relevant to society today and to show solutions or prevention.

In 2013, more than 150 posters were submitted from both middle and high school students, and one grand prize—winning student was chosen from both age groups. The theme for this year was climate change. The grand prize winners drew posters showing the importance of recycling and keeping the environment healthy and safe. The winners received a \$100 gift card and a Hitachi 46-inch LED TV to be used by their schools.



Grand prize—winning poster in the 2013 senior high school category

Governance 059

chapter 7 Environmental Report 073

chapter 3 | Social Report

130 Respect for Human Rights

Supply Chain Management Diversity Management

Employee Health and Safety Global Human Capital Developm 158 Quality Assurance Activities

Customer Satisfaction

167 Communication with Shareholders and Investors

171 Social Contribution Activities

Hitachi Group

Sustainability Report 2014

#### **Helping Earn General Education Degrees**

In April 2013, the Hitachi Foundation joined with the Harrodsburg Community Action Committee (CAC) in Kentucky that consists of employees from Hitachi Automotive Systems Americas, Inc, donating US\$1,900 (around JPY 190,000) to the Mercer County Adult Education (MCAE) program operated by the Mercer County Adult Learning Center. The MCAE program assists adults who weren't able to graduate from high school to prepare for an exam from their General Education Degree (GED), the equivalent of a high school diploma. Earning a GED gives prospective job hunters a better chance to get a higher paying job and



Presenting a donation

to better their lives. The center used the funds to purchase an interactive smart board, which has improved classroom instruction for those who have limited time to attend classes due to work or family obligations. Between July and December 2013, 65 students passed their GED. Many graduates are reporting big changes in their lives, including finding jobs at companies offering better pay or finding a full-time job and then buying a home. The Harrodsburg CAC will continue their support of the local community.

### **Delivering Meals to Seniors**

In 2013, 17 employees from Hitachi Metals Automotive Components USA, LLC (HMAC) joined a local program called Meals on Wheels, which delivers meals to seniors. This nationwide program helps seniors maintain their mental and physical health as well as remain independent and in their homes instead of being institutionalized. Through this nutrition program, seniors above the age over 60 can receive a meal once a day that provides one-third of their daily recommended nutrition. After 2010, when HMAC employees started volunteering for meal delivery once a month in their local community of



HMAC employees with Meals on Wheels staff

Effingham, Illinois, they increased this to twice a month in 2012. In 2013, volunteers in the Effingham area, including HMAC volunteers, delivered 23,825 meals to house bound seniors, as well as 15,889 meals to seniors in group settings. With growing life expectancy, the need for support has been increasing. The result of an employee survey, conducted earlier by HMAC's Community Action Committee, showed meal assistance, youth development education, and the aging of society as their employee's top four concerns for their local community HMAC will continue with volunteer activities focusing on these issues.

Customer Satisfaction

Communication with Shareholders and Investors Social Contribution Activities

### **Social Contribution Activities in Africa**

Hitachi Group Sustainability Report 2014

### Hitachi-DST Scholarship Programme for South African Engineers

Since 2009, Hitachi and the DST (Department of Science and Technology, South Africa) have collaborated on a program that trains engineers from South Africa, where the lack of electricity as well as engineers are two of the country's social issues. Every year, three engineers visit Japan for three months of training. They learn about Hitachi's latest technologies in power generation and distribution, as well as initiatives for the environment at Hitachi's sites. At the engineers' final presentations before their return, they



reported that they found it valuable to learn about Japan's power technologies and Japanese culture, including kaizen (continuous improvement). The engineers will help to improve power systems in South Africa after they return home.

### **List of Key Indicators**

The Key Indicators reported in the *Hitachi Group Sustainability Report 2014* are listed below. Comparative tables with GRI Guidelines and ISO26000 Core Subjects, as well as our Policy, Vision, and Guidelines, are only available on our website.

WEB

Comparative Table with GRI Guidelines http://www.hitachi.com/csr/list/gri.html

WEB

Comparative Table with ISO26000 Core Subjects http://www.hitachi.com/csr/list/iso.html

WEB

Comparative Table with the UN Global Compact http://www.hitachi.com/csr/list/gc.html

WEB

Policy, Vision, and Guidelines http://www.hitachi.com/csr/list/policy.html

#### Governance

		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Inn	ovation Management					
	Ratio of R&D Efficiency (ROI)	0.54	1.13	1.00	1.24	1.52
	Ratio of R&D Expenditures to Revenues	4.2	4.2	4.3	3.8	3.7
	Number of R&D Staff outside Japan	-	150	150	-	290
Inte	ellectual Property					
	Patent Application Ratios outside Japan	47	51	55	57	59

#### [Scope of Data]

Hitachi, Ltd. and consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies.)

Number of companies: FY 2009: 901; FY 2010: 914; FY 2011: 940; FY 2012: 964; FY 2013: 948

#### The Environment

		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Enviro	onmentally Conscious Products and Services					
	Eco-Product Sales Ratio	-	-	80	84	89
	Eco-Product Sales Ratio Contributions to CO <sub>2</sub> Emission Reduction (millions of tonnes)	-	1,551	1,904	2,274	2,747
Enviro	onmentally Conscious Production					
	CO <sub>2</sub> Emissions (kt CO <sub>2</sub> )	3,751	4,154	3,447	3,453	3,355
	Waste and Valuables Generation (kt)	608	738	701	655	677
	Water Use (outside Japan) (millions of m <sup>3</sup> )	1,290	1,640	891	988	737
	VOC Atmospheric Emissions (t)	3,737	3,653	4,285	4,127	4,216

### [Scope of Data]

For environmental load data generated from products; Hitachi, Ltd. and consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies.)

Number of companies: FY 2009: 901; FY 2010: 914; FY 2011: 940; FY 2012: 964; FY 2013: 948

For environmental load data generated through business operations; companies that cover 90 percent of the load

(based on Hitachi calculations.) Data for each fiscal year indicates performance within the given scope for the fiscal year.

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Corporate Citizenship Activities				'	
Funding for Corporate Citizenship Activities *1 (billions of yen)	1,347	1,607	-	-	1,806
Funding for Corporate Citizenship Activities *2 (billions of yen)	-	-	3,471	3,284	3,076
Supply Chain Management					
Number of CSR Monitoring (Self-Checks)	132	-	102	98	100
Number of Audits by External Auditing Organizations	-	-	-	12	16
Diversity Management	•	•	•		
Ratio of Male and Female Employees*3	85:14	84:16	84:16	84:16	83:17
Number and Global Ratio of Female Managers	-	-	-	-	3,415 (5.6)
Disabled Employment Ratio*3	2.01	2.05	2.00	2.02	2.02
Global Human Capital Development <sup>*3</sup>					
Number of Non-Japanese Employees	218	230	239	257	244
Number of Young Employees Participating in Training outside Japan*4	-	-	1,064	1,202	747
Employee Health and Safety*5					
Occupational Accident Rate*6	0.06	0.07	0.10	0.14	0.10
Occupational Accident Rate*7	0.21	0.20	0.15	0.19	0.14

## [Scope of Data]

- \*1 Hitachi, Ltd. and five foundations in Japan
- \*2 The Hitachi, Ltd.

  \*3 Hitachi, Ltd.

- \*4 Hitachi Group \*5 January to December 2012
- \*6 Hitachi, Ltd.
- \*7 90 major Hitachi Group companies in Japan including Hitachi, Ltd. through to 2011; 175 major Hitachi Group companies in Japan including Hitachi, Ltd. for 2012; 195 major Hitachi Group companies in Japan including Hitachi, Ltd. for 2013

# Overview of Financial Results, Board Member and Employee Data

Hitachi Group Sustainability Report 2014

An overview of the Financial results (consolidated), board member and employee data are listed below. Most data are Hitachi, Ltd. figures.

### **Financial Results (Consolidated)**

(Billion ven)

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Revenues	8,968.5	9,315.8	9,665.8	9,041.0	9,616.2
Operating Income	202.1	444.5	412.2	422.0	532.8
EBIT*1	77.8	443.8	573.2	358.0	580.1
Income before Income Taxes	63.5	432.2	557.7	344.5	568.1
Capital Investment (completion basis)	546.3	556.8	649.2	742.5	849.8
R&D Spending	372.4	395.1	412.5	341.3	351.4
Net Income Attributable to Hitachi, Ltd. Stockholders	-106.9	238.8	347.1	175.3	264.9

<sup>\*1</sup> EBIT: Defined income before income tax less interest income changes.

### **Board Members**

	Total	Gender		Nationality	
		Male	Female	Japan	Outside Japan
Directors*1	12	11	1* <sup>3</sup>	9	3
Executive Officers*2	31	31	0	31	0

<sup>\*1</sup> As of June 2014

<sup>\*2</sup> As of April 2014 \*3 External directors (one from outside Japan)

Sustainability Report 2014

### **Composition of Employees**

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Number of Employees*1	31,065	31,243	32,908	33,665	33,550
Male	26,360	26,399	27,805	28,437	28,323
Female	4,705	4,844	5,103	5,228	5,227
Ratio of Female Employees	-	16.00	15.90	16.00	16.60
Average Age (years)	39.7	39.9	40.0	40.2	40.7
Male	40.4	40.6	40.6	40.8	41.3
Female	35.9	36.3	36.8	37.1	37.6
Average Service (years)	17.7	17.9	17.9	18.0	18.3
Male	18.5	18.6	18.6	18.7	19.0
Female	13.7	14.0	14.2	14.5	15.0
Number and Ratio of Female Managers*2	-	386 (3.3)	377 (3.4)	401 (3.5)	418 (3.8)
General Manager or Above	-	-	54 (1.9)	68 (2.3)	77 (2.7)
Section Chief	-	-	323 (4.0)	333 (4.0)	341 (4.3)
Employment of Ratio of People with Disabilities	2.01	2.05	2.00	2.02	2.02

### **Hiring Ratios**

		April 2010	April 2011	April 2012	April 2013	April 2014
Ratio o	f New Female Graduate Hired*1	19.9	18.3	20.3	18.0	19.4
	Technical	16.7	13.5	14.7	11.6	14.7
	Administrative	37.7	39.3	43.9	43.4	43.4

<sup>\*1</sup> Graduates from universities or colleges (including postgraduate schools and technical colleges)

# **Number of Employees Using Work-Life Balance Support Systems**

		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Number of Employees Taking Childcare Leave /	Female	480	525	518	525	539
Spouse Childcare Leave	Male	139	173	224	245	238
Number of Employees Using Shorter Working Hours for Child Care	Female	472	528	608	617	683
nours for Critic Care	Male	1	3	6	8	5
Number of Employees Taking Nursing Care	Female	4	7	6	10	8
Leave	Male	4	3	6	7	12
Number of Employees Using Reduced Working	Female	7	7	6	7	4
Hours for Nursing Care	Male	0	1	2	3	2

<sup>\*1</sup> Number of full-time employees \*2 See *List of Key Indicators* for Group global figures

# **Working Conditions**

		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Paid Leave	Average Number of Days	14.3	16.1	15.9	15.3	15.5
	Ratio	66.4	66.4	66.8	64.0	64.7
Average Overtime Hours / N	√onth	12.9	12.3	12.8	14.1	13.5
Employee Health and Safety	Number of Fatal Accidents	5	1	1	3	1

### **Social Contribution Activities**

		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Social Contribution Activities	Number of Voluntary Social Contribution Programs	24	32	32	34	43
	Participants in Voluntary Social Contribution Programs	1,591	2,567	2,087	2,479	2,744

### **Independent Assurance**

To enhance the reliability of the data disclosed in the Hitachi Group Sustainability Report 2014, we have received third-party audits and reviews.

### **Governance Report / Social Report**

Regarding "2015 Mid-term Management Plan Highlights" which has been published in "Management Strategies and CSR (pp. 013-016)", Hitachi R&D and Intellectual Property Rights (pp. 021-028), the Governance Report (pp. 059-072) and the Social Report (pp. 129–183), focusing mainly on activities in fiscal 2013, we have received a review by Ernst & Young Sustainability Co., Ltd.

#### Third-Party Certification Report on Governance Report and Social Report



#### Translation

The following is an English translation of an independent assurance statement prepared in Japanese and is for information and reference purposes only. In the event of a discrepancy between the Japanese and English versions, the Japanese version will prevail or the state of th

#### **Independent Assurance Report**

Date: September 10, 2014

Mr. Toshiaki Higashihara President Hitachi, Ltd.

> Kenji Sawami Representative Director Ernst & Young Sustainability Co., Ltd.

We, Ernst & Young Sustainability Co., Ltd. have been commissioned by Hitachi, Ltd. (hereafter the "Company") to provide limited assurance on the Key Sustainability Performance Indicators (hereafter the "Indicators") of the Company and its major subsidiaries for the year ended March 31, 2014 included in the following contents of the Hitachi Group Sustainability Report 2014 posted on the Company's Web site (hereafter the "Report").

- ·Sustainability Report Editorial Policy
- ·Hitachi Group Profile
- ·VISION: Management Strategies and CSR ·Governance Report
- ·INNOVATION Hitachi R&D and Intellectual Property Rights
- ·Social Report

#### 1. The Company's Responsibilities

The Company is responsible for the preparation of the Report in accordance with the Company's policies and standards\*1 as criteria.

\*1 The Reporting Standards refer to the Sustainability Reporting Guidelines Version 3.1 (Revised in March 2011 by Global Reporting Initiative), and the important information subject to disclosure are identified in accordance with the Sustainability Reporting Assurance and Registration Criteria (Revised in January 2014 by the Japanese Association of Assurance Organizations for Sustainability Information).

#### 2. Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

We apply International Standard on Quality Control 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### 3. Our responsibilities

Our responsibility is to express a limited assurance conclusion on the Key Sustainability Performance Indicators of the Company and its major subsidiaries for the year ended March 31,2014 included in the Report based on the procedures we have performed and the evidence we have obtained.

We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements - Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000), issued by the International Auditing and Assurance Standards Board, Practical Guidelines for the Assurance of Sustainability Information, revised in December 2012 by the Japanese Association of Assurance Organizations for Sustainability Information.

- The summary of the procedures we performed for our assurance engagement is as follows:

  Reading relevant documents with regard to the Company's Reporting Standards and the Company's policies and standards and inquiring of personal responsible thereof;
  • Reading relevant documents with regard to the design of the Company's internal control of the Indicators and
- inquiring of personal responsible thereof at the headquarters and the site visited;

   Performing analytical procedures of the Indicators at the headquarters and the site visited (1 site); and
- · Agreeing to supporting documents and recalculating with part of the Indicators at the headquarters and the site visited on a test basis.

The procedures performed in a limited assurance engagement are more limited in nature, timing, or extent than a reasonable assurance engagement. As a result, the level of assurance obtained in a limited assurance engagement is not as that obtained had we performed a reasonable assurance engagement.

Based on the assurance procedures performed, nothing has come to our attention that caused us to believe that the Indicators of the Company and its major subsidiaries for the year ended March 31, 2014 included in the Report were not measured and reported in accordance with the Company's policies and standards in all material respects.

Hitachi Group

Sustainability Report 2014

#### **Environmental Report**

Regarding the fiscal 2013 results in the Environmental Report (pp. 073-128), we have received a review by Bureau Veritas Japan Co., Ltd.\*1

For energy use in Japan, a more detailed verification was conducted to confirm the data. Environmental load data, Eco-Product registration data, and the contribution to CO<sub>2</sub> emission reduction through the use of Hitachi products and services were also subject to review.

The standards, guidelines, and calculation methods used in collecting data are posted on our website.

\*1 A certification agency providing inspection, auditing, and certification services in areas such as marine and building compliance; health, safety, and the environment; systems; and consumer products.

WEB

Calculation methods for environmental load data:

http://www.hitachi.com/environment/activities/third/method.html

#### Third-Party Verification Report on Environmental Report

#### Hitachi Group Sustainability Report 2014 Independent Verification Report

To: Hitachi, Ltd.



Bureau Veritas Japan Co., Ltd. System Certification Services Headquarter

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) has been engaged by Hitachi, Ltd. (Hitachi) to conduct an independent verification and review of its environmental data selected by Hitachi for inclusion in the Hitachi Group Sustainability Report 2014 (the Report), issued under the responsibility of Hitachi. The aim of the verification work is to evaluate the reliability and accuracy of environmental data within the Report based on objective evidence and to provide a limited assurance opinion in the form of a independent statement. The aim of the review work is to evaluate the reliability and accuracy of environmental data within the Report based on objective evidence and to provide a review opinion in the form of an independent statement.

#### 1. Verification and Review Outline

1) Environmental load data generated through business operations in FY2013

Bureau Veritas conducted verification of energy consumption data and CO<sub>2</sub> emissions data from energy use associated with activities within Japan only, and conducted review of the other environmental data.

Data verified or Reviewed	Site Visited	Verification or Review Methodology
90%("1) of environmental load data generated through business operations of Hitachi, Ltd. and 947 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): a total of 948 companies ("1) based on Hitachi, calculations.	Hitachi Head Office     Hitachi Construction Machinery Co., Ltd. Tsuchiura Works     Hitachi Kokusai Electric Inc. Toyama Works     Hitachi Metals, Ltd. Toyoura Works	Review of documentary evidence produced by Hitachi Head Office and the sites visited - Interviews with relevant personnel of Hitachi He Office and the sites visited - Site inspection about data monitoring procedur - Comparison between the reported data and the supporting documentary evidence

The verification was conducted using Bureau Veritas' standard procedures and guidelines for external verification of non-financial reporting, based on current best practice. Bureau Veritas refers to the International Standard on Assurance Engagements (ISAE) 3000 in providing a limited assurance for the scope of work stated herein.

#### 2) Eco-Products registration data

Bureau Veritas conducted a review of the following data

Data Reviewed	Site Visited	Review Methodology
- Data used for registration of two products - The number of models registered as Eco-Products in FY 2009, 2010, 2011, 2012 and 2013 - The sales ratio of Eco-Products in FY2012 and 2013 - The share of Eco-Products sales by segment in FY2013 - The number of models registered as Eco-Products Select in FY2013	Hitachi Head Office	Review of documentary evidence produced by Hitachi Head Office Interviews with relevant personnel of Hitachi Head Office Comparison between the data used for the registration and the supporting documentary evidence.

3) Contribution to CO2 emission reduction through the use of Hitachi products and services delivered to market by the end of FY2013

Data Reviewed	Site Visited	Review Methodology
Contribution to CO <sub>2</sub> emission reduction through the use of three different products and services	Hitachi Head Office	Review of documentary evidence produced by Hitachi Head Office and the companies in charge of the relevant products and services - Interviews with relevant personnel of Hitachi Head Office and the companies in charge of the products and services - Companison between the data used in the calculation of emissions reductions and the supporting documentary evidence     The GHG Protocol for Project Accounting (WBCSD/WRI) was used as a reference for the review.

#### 2. Findings

- 1) Environmental load data generated through business operations in FY2013

   Based on the verification work, the environmental load data stated in the Report is consistent with the data collected and consolidated by Hitachi Head Office.

   No significant error was detected in the environmental load data reported to Hitachi Head Office by the sites visited.
- No significant error was detected in the environmental natural reported to Finactin read united by Hitachi Head Office for the purpose.
   Froe conducts registration of Eco-Products are consistent with the criteria prepared by Hitachi Head Office for the purpose.
   No significant error was detected in source data and evaluation results for Eco-Products registration.
   No significant error was detected in the number of models registered as Eco-Products, the sales ratio of Eco-Products and the share of Eco-Products sales by business segment.
   No significant error was detected in the number of models registered as 'Eco-Products Select'.
- 3) Contribution to CO<sub>2</sub> emission reduction through the use of Hitachi products and services delivered to market by the end of FY2013 The criteria used in the calculation of CO<sub>2</sub> emissions reductions are consistent with the calculation criteria prepared by Hitachi Head

  - No significant error was detected in the source data or the calculation results for CO<sub>2</sub> emissions reductions

Bureau Veritas has implemented a code of ethics across its business which is intended to ensure that all our staff maintain high standards in the day to day business activities. We are particularly vigilant in the prevention of conflicts of interest. Bureau Veritas activities for Hitachi are for social reporting verification only and we believe our verification assignment did not raise any conflicts of interest.

#### **Greenhouse Gas Emissions Verification Statement**

#### **GREENHOUSE GAS EMISSIONS VERIFICATION STATEMENT**

To: Hitachi, Ltd.



July 18, 2014



Bureau Veritas Japan Co., Ltd. System Certification Services Headquarters

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) was engaged by Hitachi, Ltd. (Hitachi) to conduct verification to a limited level of assurance of the greenhouse gas (GHG) emissions reported in the Hitachi Group Sustainability Report 2014 for the period of April 1, 2013 through March 31, 2014.

#### 1. Scope of Verification

Hitachi requested Bureau Veritas to verify the accuracy of the following GHG information, to a limited level of assurance:

- 1) Scope 1 and Scope 2 emissions:
  - ·CO<sub>2</sub> emissions from energy use within Japan through the Hitachi Group's business operations (\*1)
  - (\*1) Companies that cover 90% of the Hitachi Group's total environmental load (based on Hitachi calculati are included. Hitachi Group consists of Hitachi, Ltd. and 947 consolidated subsidiaries: a total of 948 companies
- 2) Scope 3 emissions
  - ·CO2 emissions from transportation of goods within Japan only, that are associated with Hitachi's business operations

#### 2. Methodology

Bureau Veritas conducted the verification in accordance with the requirements of the international standard 'ISO 14064-3(2006): Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions'.

As part of Bureau Veritas' assurance, the following activities were undertaken:

- Interviews with relevant personnel of Hitachi responsible for the identification and calculation of GHG emissions;
- ·Review of Hitachi's information systems and methodology for collection, aggregation, analysis and review of information used to determine GHG emissions; and
- · Audit of a sample of source data to check accuracy of quantified GHG emissions.

#### 3. Conclusion

Based on the verification work and processes followed, there is no evidence to suggest that the GHG emissions assertions shown below:

- ·are not materially correct and are not a fair representation of the GHG emissions.
- · are not prepared in accordance with the methodology for calculating GHG emissions established and

1	/erified greenhouse gas emi	issions
Scope 1	Scope 2	Scope 3
570,000 t-CO <sub>2</sub> e	1,753,000 t-CO <sub>2</sub> e	125,000 t-CO <sub>2</sub> e

#### [Statement of independence, impartiality and competence]

IStatement of independence, impartiality and competence]
Bureau Veritas is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 180 years history in providing independent assurance services. No member of the verification team has a business relationship with Hitachi, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest. Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities. The verification team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has an excellent understanding of Bureau Veritas standard methodology for the verification of greenhouse gas emissions data.

### Inquiries:



CSR and Environmental Strategy Division
1-6-1 Marunouchi, Chiyoda-ku, Tokyo, 100-8220 Japan
Tel: +81-3-4235-5800 Fax: +81-3-4235-5835
http://www.hitachi.com/csr/