

# Hitachi Group Sustainability Report 2013





Hitachi Group Sustainability Report 2013

#### CONTENTS

- 004 Sustainability Report Editorial Policy
- 006 Hitachi Group Profile
- 008 TOP COMMITMENT Message from Management Hiroaki Nakanishi, President, Hitachi, Ltd.

### 010 VISION: Management Strategies and CSR

Trends in Society and Hitachi Group Identity / 2015 Mid-Term Management Plan to Realize the Hitachi Group Vision / Performance Overview of 2012 Mid-Term Management Plan

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

Hitachi's Solutions for Social Problems

Key Hitachi Business Segments

 ${\it Ensuring Safe, Reliable, and Optimal Water Environments Worldwide}$ 

Innovative Cities and Communities

### 022 Activities by Country and Region

Europe / The Americas / Asia & India / China

### 026 | Governance Report

- 027 message Toshiaki Kuzuoka, Senior Vice President and Executive Officer
- 028 Corporate Governance

Strengthening Governance / Compensation / Internal Controls over Financial Reporting / Group Management

032 | CSR Management

CSR Policy of the Hitachi Group / CSR Management Structure / CSR Self-Assessment Tool / CSR Activities Results and Plans

037 Risk Management

Reinforcing the Risk Management System / Business Continuity Plans / Providing Information through Our Internal Website / Managing Risk Overseas / Responding to the Great East Japan Earthquake / Reputation Management

041 **Compliance** 

Enhancing Comliance Flamework / Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct / Implementing Corporate Ethics and Compliance Month / Preventing Corrupt Practices Involving Public Officials / Compliance Reporting System / Preventing Violations of the Antimonopoly Law / Export Control / Information Security

047 Innovation Management

Research and Development Strategy / Research and Development Goals / R&D Plan and Investment / Enhancing R&D outside Japan / Noteworthy R&D Achievements

052 Intellectual Property

IP Activities Supporting Global Operations / Activities and Results

056 | Brand Management

Global Brand Strategy / Evaluating Our Global Brand Strategy / Activities and Results (Improving the Global Brand / Web Management / Internal Brand Management / Brand Management)



### Hitachi Group Sustainability Report 2013

### **Environmental Report**

061 message Shigeru Azuhata, Chief Environmental Strategy Officer

#### 062 Environmental Activities Worldwide

#### 064 Environmental Management Strategies and Initiatives

The Hitachi Environmental Vision and Long-Term Plan Environmental Vision 2025 / Environmental Action Plan

### 071 Environmentally Conscious Products and Services

Increasing the Ratio of Eco-Products / Hitachi Products Helping to Reduce  $CO_2$  Emissions / Recycling Product Resources / Managing Chemical Substances Contained in Products / Participating in the Development of International Standards

### 086 Environmentally Conscious Production

Creating Eco-Factories and Office Select / Promoting Global Warming Countermeasures / Calculation of GHG Emissions throughout the Value Chain / Reducing Waste / Water Conservation / Chemical Substance Management / Managing Environmental Risk / Environmental Load Data Generated through Business Operations (FY 2012)

#### **Environmental Management Framework and Communication**

Environmental Management Framework / Preserving Ecosystems / Environmental Education / Environmental Accounting / Environmental Communication

### 120 | Social Report

105

121 message Shinichiro Omori, Vice President and Executive Officer
Naoki Mitarai, Vice President and Executive Officer

#### 122 Respect for Human Rights

Adoption of Human Rights Policies / Framework for Promoting Respect for Human Rights and Activities / European Stakeholder Dialogue 2013: Human Rights Policy and Due Diligence / Sharing the UN Guiding Principles on Business and Human Rights / Human Rights Education in China / European Senior Manager Training on Business and Human Rights / Contributing to International Discussions

### 127 Supply Chain Management

Promoting Global Procurement / Sharing Procurement Policies / Building Global Partnerships / Hitachi Group CSR Procurement / Green Procurement / Response to the Conflict Minerals Issue

#### 133 **Diversity Management**

Hitachi Group Diversity Management / Diversity Promotion Project Structure / Diversity Activities / Work-Life Management / Main Assessments and Awards / Employing People with Disabilities

### 147 Public Policy Initiatives

External Relations Promotion Structure / Specific Initiatives

### 150 **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

#### 153 Customer Satisfaction

CS Improvement Activities / Universal Design

#### 159 Communication with Shareholders and Investors

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

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

Health and Safety Programs / Measures for Improving Health and Safety

### 167 Global Human Capital Development

Global Human Capital Management Strategy / Accelerating the Globalization of Japanese Employees / Developing Local Personnel / Optimizing Employee and Organization Performance / Career Development Support / Employee Welfare

#### 173 **Social Contribution Activities**

Philosophy and Policy / Education / The Environment / Social Welfare / Hitachi's Foundations / Support for Volunteers / Disaster Relief / Contributing to Local Communities

### 189 List of Key Indicators

191 Independent Assurance

194 Inquiries

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

**WEB** Indicates the title and URL of the web page related to the article.

# **Sustainability Report Editorial Policy**

### **Basic Concept**

The Hitachi Group Sustainability Report 2013 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 2012 initiatives 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 2012 (April 1, 2012 to March 31, 2013)

[Companies] Hitachi, Ltd. and 963 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 964 companies

#### [Scope of data]

Financial data: Hitachi, Ltd. and 963 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 964 companies and 215 affiliated companies that use the equity method

Social data: Scope of data indicated under each item

Environmental data: Hitachi, Ltd. and 963 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 964 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 2012.

#### 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. Up-to-date information is available on the Hitachi Group's website.

### **Non-Financial Information Reports**



Hitachi Group Sustainability Report 2013



http://www.hitachi.com/csr/





**WEB** Environmental Activities http://www.hitachi.com/ environment/

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

### **Financial Information Reports**





WEB Investor Relations http://www.hitachi.com/IR-e/

Note: We also disclose financial information about Hitachi, Ltd. in the Corporate Governance Report, the Annual Securities Report, and the Report on the 144th Business Term

### **Third-Party Assessments**

To enhance the credibility of this report, we commissioned third-party environmental, governance, and social performance assessments in fiscal 2012. Bureau Veritas Japan Co., Ltd. assessed environmental performance. Ernst & Young Sustainability Co., Ltd., verified governance and social performance based on International Standard on Assurance Engagement (ISAE) 3000.

#### **External Evaluations**

We were selected in September 2012 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.

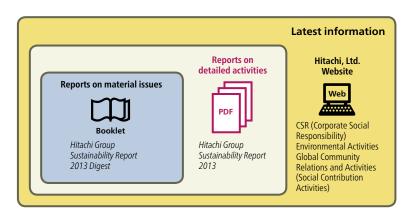


We have been a member of the United Nations Global Compact since February 2009.



### **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 2013, which emphasizes comprehensiveness and searchability of information with special emphasis on management transparency, as a PDF file (A4, 194 pages) and the Hitachi Group Sustainability Report 2013 Digest, a summary of policies, areas of special social interest, and reports on key management issues, as a booklet (A4, 12 pages). Our website also reports on detailed activity, as well as news releases and other up-to-date information.





# Reports on Detailed Activities Hitachi Group Sustainability Report 2013

Sustainability Report Editorial Policy Hitachi Group Profile Top Commitment

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

Trends in Society and Hitachi Group Identity / 2015 Mid-Term Management Plan to Realize the Hitachi Group Vision / Material Issues for Hitachi / Performance Overview of 2012 Mid-Term Management Plan

#### FEATURE

Contributing to Society through Business

#### **Governance Report**

Message from the Executive Officer for Management Audits / Corporate Governance / CSR Management / Risk Management / Compliance / Information Security / Innovation Management / Intellectual Property / Brand Management

### **Environmental Report**

Message from the Chief Environmental Strategy Officer/ Environmental Activities Worldwide / Environmental Management Strategies and Initiatives / Environmentally Conscious Products and Services / Environmentally Conscious Production / Environmental Management Framework and Communication

#### Social Report

Message from the Executive Officer for Procurement / Message from the Executive Officer for Human Capital Group / Respect for Human Rights / Supply Chain Management / Diversity Management / Public Policy Initiatives / Quality Assurance Activities / Customer Satisfaction / Communication with Shareholders and Investors / Employee Health and Safety / Global Human Capital Development / Social Contribution Activities

List of Key Indicators / Independent Assurance



### Reports on Material Issues Hitachi Group Sustainability Report 2013 Digest

Hitachi Group Profile Top Commitment

#### VISION

Management Strategies and CSR

### FEATURE

Contributing to Society through Business

#### **ACTIVITIES**

FY 2012 Environmental Report / FY 2012 Governance and Social Report

Hitachi Group Profile



# Latest Information CSR (Corporate Social Responsibility) Website

The CSR website has a full PDF version with details on our activities and the following content. The Environmental Activities website reports on environmental protection initiatives. The Global Community Relations and Activities website discloses corporate citizenship activities.

### **Contents Disclosed Solely on the Website**

Hitachi's CSR Principles: Vision and Policies
Highlights: Spotlighting FY 2005 through FY 2012
Supplementary Data for Environmental Report\*
Comparative Table with GRI Guidelines / Comparative Table with ISO
26000 Core Subjects / Comparative Table with the UN Global Compact /
Policy, Vision, and Guidelines

<sup>\*</sup> Expanded version of Hitachi Group Sustainability Report (PDF file)

# Hitachi Group Profile

### Company Profile (as of March 31, 2013)

Corporate Name Hitachi, Ltd.

Incorporated February 1, 1920 (founded in 1910)

Head Office 1-6-6 Marunouchi, Chiyoda-ku,

Tokyo 100-8280, Japan

Representative Hiroaki Nakanishi, Representative

**Executive Officer and President** 

Capital 458.79 billion yen

Number of employees (unconsolidated basis)33,665Number of employees (consolidated basis)326,240Number of consolidated subsidiaries963

(Japan: 314, outside of Japan: 649)

Number of equity-method affiliates 215

(Japan: 85, outside of Japan: 130)

### **Consolidated Business Overview and Results for Fiscal 2012**

21%

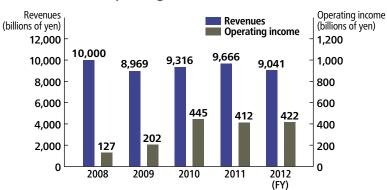
Revenues 9,041 billion yen (down 6% year-over-year)

Operating income 422 billion yen (up 2%)
Capital investment 742.5 billion yen (up 14%)
R&D expenditures 341.3 billion yen (down 17%)

Output outside Japan as a

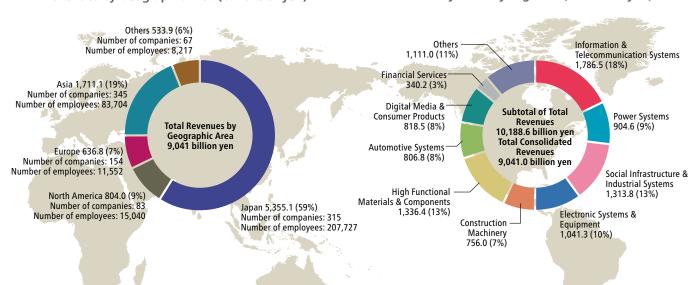
percentage of consolidated net sales

#### **Revenues and Operating Income**



### Revenues by Geographic Area (billions of yen)

#### Revenues by Industry Segment (billions of yen)



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

- System integration, outsourcing services, software, disk array subsystems, servers, mainframes, telecommunications equipment, ATMs
- Hitachi Information & Communication 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 Consulting Corporation, Hitachi Data Systems Corporation, Hitachi Information & Telecommunication Systems Global Holding Corporation



Data center (Okayama No. 3 Center)\*

#### **Power Systems**

- Thermal, nuclear, hydroelectric, and renewable energy power generation systems, power distribution systems
- Babcock-Hitachi K.K., Hitachi-GE Nuclear Energy, Ltd., Hitachi Engineering & Services Co., Ltd., Hitachi Power Europe GmbH, Hitachi Power Systems America, Ltd., Horizon Nuclear Power Ltd



Ultra supercritical pressure coal-fired power plant\*

# Social Infrastructure & Industrial Systems

- Industrial machinery and plants, elevators, escalators, railway vehicles and systems
- Hitachi Industrial Equipment Systems Co., Ltd., Hitachi Elevator (China) Co., Ltd., Hitachi Building Systems Co., Ltd., Hitachi Plant Technologies, Ltd.



Wastewater recycling plant (Dubai, UAE)\*

### **Electronic Systems & Equipment**

- Semiconductor and LCD manufacturing equipment, test and measurement equipment, electronic medical equipment, power tools, electronic parts processing equipment
- Hitachi High-Technologies Corporation, Hitachi Koki Co., Ltd., Hitachi Kokusai Electric Inc., Hitachi Medical Corporation, Hitachi Via Mechanics, Ltd.



Hitachi Automatic Analyzer

#### **Construction Machinery**

- Hydraulic excavators, wheel loaders, mining machines
- Hitachi Construction Machinery Co., Ltd.



Hitachi Construction Machinery's double-arm working machine

# High Functional Materials & Components

- Wires and cables, copper products, semiconductor and display-related materials, circuit boards and materials, specialty steels, magnetic materials and components, highgrade casting components and materials
- Hitachi Cable, Ltd., Hitachi Chemical Co., Ltd., Hitachi Metals, Ltd.



Hitachi Chemical's transparent conductive transfer film

### **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' electrically controlled brake

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

- Air-conditioning equipment, room air conditioners, refrigerators, washing machines, optical disk drives, LCD projectors, flat-panel TVs
- Hitachi Appliances, Inc., Hitachi Consumer Electronics Co., Ltd., Hitachi Media Electronics Co., Ltd., Hitachi Consumer Products (Thailand), Ltd., Hitachi Consumer Marketing, Inc., Hitachi-LG Data Storage, Inc.

Hitachi Appliances' CV-SU series cyclonic vacuum cleaner for markets outside Japan

### **Financial Services**

- Leasing, loan guarantees
- Hitachi Capital Corporation



Hitachi Capital's Hitachi Corporate Card

### Others

- Logistics, information recording media, batteries, property management, regional headquarters
- Hitachi Maxell, Ltd., 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 Pyt. Ltd.



Hitachi Transport System's Keihin Distribution Center

- •: Major Products & Services : Major Consolidated Subsidiaries (as of March 31, 2013) \*: Products & services of Hitachi, Ltd.
- (Notes.) 1. Hitachi Information & Communication Engineering, Ltd. merged with another Hitachi, Ltd. Consolidated subsidiary in information and telecommunication systems and was renamed Hitachi Information & Telecommunication Engineering, Ltd. as of April 1, 2013.
  - 2. Hitachi, Ltd. completed acquisition of all outstanding shares of Horizon Nuclear Power on November 23, 2012, then became a Hitachi, Ltd. consolidated subsidiary.
  - 3. Chuo Shoji, Ltd. was renamed Hitachi Urban Investment, Ltd. as of April 1, 2012.
  - 4. Hitachi Engineering & Services Co., Ltd. merged with three other Hitachi, Ltd. consolidated subsidiaries in power systems and was renamed Hitachi Power Solutions Co., Ltd. as of April 1, 2013.
  - 5. Hitachi Plant Technologies, Ltd. merged into Hitachi, Ltd. as of April 1, 2013.

# Our Key Business Challenges Are Social Contribution and Reducing the Environmental Burden



The Hitachi Group has positioned the Social Innovation Business as our core business emphasis, and we work as a group to expand that business globally. There are several reasons why we call what we do *Social Innovation Business*.

### **Resolving Social Issues**

First, continuing to simply supply the equipment and systems needed for the social infrastructure would not be enough to overcome the trials faced by society. Carefully honing and perfecting the functionality and performance of individual products and systems is of course an extremely important responsibility for a manufacturer. However, the issues facing many countries and regions around the world are becoming too complex to be resolved with equipment and systems alone. Take energy issues, for example. In many regions, economic development has brought power shortages. One solution is to build large, high-efficiency thermal power stations, but at the same time, because thermal power stations emit gases that cause environmental problems, we also need to look closely at these problems and strive to

minimize the environmental burden so that we can be in harmony with the environment. If the environmental burden goes beyond tolerable limits, it will be necessary to use renewable energy such as solar and wind power. However, renewable energy relies on the weather, and the power that is produced fluctuates enormously. Robust management must be used to deal with the impact on power transmission and distribution systems for a stable, reliable supply of power. Many of these complex issues will not be easily resolved by the Hitachi Group alone, but the basic approach of our Social Innovation Business is to deepen our understanding of the particular issues to the greatest extent possible and to seek solutions together with our customers and partners. Engaging in close dialogue with people around the world, we will use Hitachi technologies to the full to help resolve social issues.

### **Using Innovation to Build a Sustainable Society**

The second challenge is innovation. To deal with the complex issues facing society, we need to clarify these issues to the maximum extent possible—not an easy task. Many social issues by their nature have political, economic, and historical dimensions. We are developing certain technologies, including big data and data analytics, to gather a wide range of social phenomena from many perspectives into databases and to analyze that data. To bring about social and business innovations, we need to overcome many hurdles as we mobilize these technologies and apply methods for the experiential and objective analysis of social behavior. We believe that by taking on these challenges as a group, we can earn the trust of many people worldwide through our commerce, and that this will in turn grow our business. The Hitachi Group is committed to contributing to society through Social Innovation Business. In other words, we view our Social Innovation Business as the business of creating a sustainable society.

This sustainability report presents the many activities that the Hitachi Group carried out with a view to creating a sustainable society. As you will see, we operate around the world in a huge range of capacities. This report also lays out Hitachi's management strategies and CSR, a diverse array of solutions showing how Hitachi contributes to society through business, respects human rights, promotes diversity, and helps to reduce the environmental burden from production, as we become a corporate citizen through our activities around the world.

As we have done in the past, in the years ahead we will position our business operations with a firm emphasis on the creation of a sustainable society.

Hiroaki Nakanishi President, Hitachi, Ltd.

# **Management Strategies and CSR**

As a global enterprise, we share society's values and pursue sustainable growth by integrating management strategies and CSR. Our challenge is to match our CSR activities with our Mid-Term Management Plan goals to achieve the Hitachi Group Vision, creating both social and economic value.

For us, CSR is about making our Group Vision a reality. Our purpose is to contribute through innovation to both realizing a safe, secure, comfortable society and helping to tackle global challenges: poverty, inequality in education, the spread of diseases, resource and energy issues, population concentration in cities, and other global environmental issues.

The Mid-Term Management Plan is our action plan for realizing the Group Vision. Our CSR activities help to achieve the goals set out in

this plan. By implementing the plan, we are creating robust, diverse governance, as well as strong ethical behavior from and a sense of challenge for our employees. Additional benefits include promoting business that helps to resolve environmental problems and other issues facing society as a good corporate citizen in global society. While implementing the Mid-Term Management Plan, Group employees comply with national laws and, wherever they are in the world, they work with a strong sense of ethics in line with the Hitachi Group Codes of Conduct.

### **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 structure changes based technology and products on energy resources **MISSION** Hitachi Founding Spirit: Harmony, Sincerity, Pioneering Spirit Achieving a Sustainable **VALUES** Society • Securing water resources, energy, and food Hitachi Group Vision: Hitachi delivers innovations that answer · Replacing aging infrastructure systems • Reducing CO<sub>2</sub> 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 Rules for fair corporate behavior Direction of our management strategies Mid-Term Management Plan **Codes of Conduct Business plans** Companies' regulations

In April 2013, as we began on a new Mid-Term Management Plan, we created the Hitachi Group Vision to show what the Hitachi Group intends to become. The Vision 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 medium- to long-term vision for

the Hitachi Group. Recognizing the changing macro trends in society, the Vision embodies our firm commitment to help resolve the challenges facing the global community and to realize a sustainable society. Together with creating our Vision, we have also merged the Corporate Credo, Founding Spirit, and Hitachi Group Vision into the Hitachi Group Identity.

### 2015 Mid-Term Management Plan to Realize the Hitachi Group Vision

Our action plan for realizing the Hitachi Group Vision is the 2015 Mid-Term Management Plan.

### **Management Targets**

To achieve our management targets, we will grow and transform through our Social Innovation Business.

#### **Management Focus**

In the 2015 Mid-Term Management Plan, our key management policies focus on innovation, a global emphasis, and transformation.

#### **Summary of Key Management Policies**

### I. Global Expansion of the Social **Innovation Business**

In our Social Innovation Business, we work as One Hitachi with society and our customers to identify their issues, creating innovation through Group teamwork. We provide global solutions combining products, services, and IT (cloud) platforms.

### **II. Promoting Transformation**

Bold structural reforms will fulfill the 2015 Mid-Term Management Plan. Our supply chain management will be rebuilt to quickly respond to markets and boost management efficiency, leverage business intelligence to speed up our response to environmental changes, improve our balance sheets, and upgrade our operations globally.

We will better utilize our human capital our most critical resource—using a global strategy. Our global grading system and human capital database help to optimize personnel deployment worldwide. Our human capital development promotes diversity at all levels, including management, to maximize organizational and individual performance. Human capital is the foundation of our growth strategy.

Other steps include creating a marketdriven organization, speedily transforming our business portfolio, and reviewing our cost structure.

#### FY 2015 Targets

Management Targets				
	FY 2015 Target*1			
Revenues	10 trillion yen			
EBIT*2 (operating income) ratio Over 7% (over 7%)				
Net income attributable to Hitachi, Ltd. shareholders	Ltd. Over 350 billion yen			
Net income attributable to Hitachi, Ltd. shareholders per share	Over 70 yen			
Total Hitachi, Ltd. Shareholders' equity ratio (manufacturing, services & others)	Over 30%			
Service Revenue Ratio, Overseas Revenue	Ratio, Employees			
FY 2015 Target				
Service revenue ratio (including systems solutions)  Over 40%				
Employees in Japan	200,000			
Employees outside Japan	150,000			
Expected Cost Reduction Effects of Hitachi Smart Transformation Project				
FY 2013 forecast Total up to FY 2015				
100 billion yen 400 billion yen				

<sup>\*1</sup> Assumed exchange rate: 90 yen/US dollar, 115 yen/euro

### 2015 Mid-Term Management Plan **Management Focus**

#### 1. Innovation

Strengthen service businesses that maximize the utilization of IT and bring about innovation

#### 2. Global

Deliver innovation to customers and society globally

#### 3. Transformation

Transform Hitachi: To deliver innovation by standardized and speedy operation

### Realizing the Hitachi Group Vision



### Social Innovation Business

Identify issues faced by society and customers while working together on solutions as One Hitachi

Innovate by providing solutions that combine products, services, and IT (cloud computing)



### **Solutions**

### Services

Support customers from maintenance through to operation, outsourcing and management support

### Cloud-based service platform

Create knowledge by analyzing and assessing data collected and accumulated using cutting-edge IT

### **Products**

Use wide-ranging systems expertise and technologies to provide products responding to regional needs

<sup>\*2</sup> 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	Expand R&D centers	Promote R&D in 7	areas globally (as of June 2013)		
	outside Japan	Increase R&D staff	FY 2013 Result approx. 280 people -> FY 2015 Target 400 people		
IT and bring about innovation		Strengthen Open I	Strengthen Open Innovation		
	Service busines	s sales ratio	FY 2012 Result <b>30%</b> → FY 2015 Target Over <b>40</b> %		
		Caring for the Environment			
	Eco-Product sale	es ratio	FY 2012 Result <b>84%</b> → FY 2015 Target <b>88%</b>		
Global:			Diversity Management		
Deliver innovation to customers and society globally	Diversity in directors (as of June 2013, out of 14 directors)  • Outside directors: 8 people • Non-Japanese: 4 people • Females: 2 people				
	Female managers (Hitachi, Ltd.) FY 2020 Target 1,000 women (2.5 times more; compared with th number at the end of FY 2012)				
	Female senior executives Target to be assigned by FY 2015				
	Respect for Human Rights				
	Business and human rights May 2013: Global roll out of the Hitachi Group Human Rights Po		May 2013: Global roll out of the Hitachi Group Human Rights Policy		
	Public Policy Initiatives				
	Stakeholder dia	logue	FY 2012 Result: Held in two regions Expand regions and themes		
Transformation:			Diversity Management		
Transform Hitachi: To deliver innovation by standardized and speedy operation	Promotion of global human capital management strategy  • Introduction of performance management  • Talent development for global executives  • Introduction of Global Leadership Development program				
			Sustainable Business		
	Promotion of Hitachi Smart Transformation Project  Target outcome (aggregated FY 2011 – FY 2015) 400 billion yen				

### **Material Issues for Hitachi**

Hitachi uses a materiality process based on dialogue with stakeholders to identify material issues. To integrate our management strategies and CSR, we reflect in our CSR activities material issues closely related to the key management policies in our Mid-Term Management Plan. The content of this report also reflects Hitachi's material issues supporting the improvement of the quality of our management.

Importance for stakeholders

- 1. Products that Create a Sustainable Society (Sustainable Business)
- 2. Caring for the Environment
- 3. Public Policy Initiatives
- 4. Respect for Human Rights
- 5. Supply Chain Management
- 6. Diversity Management

Influence on business

### **Selection Process for Material Issues**

We evaluate and verify issues identified through stakeholder dialogues with international organizations, and we identify sustainability issues in public policy trends from the standpoints of importance for stakeholders and the influence on business. The importance for stakeholders includes human rights, international development, the environment, reporting, ethics, and regional and international requirements. The influences on business are assessed from the perspectives of the global, fusion, and environmental focuses of our 2012 Mid-Term Management Plan, as well as the perspectives of innovation, risk, reputation, and cost effectiveness. The digest of this report presents these important issues in the two assessment areas.

### Hitachi Group Sustainability Report 2013

### Performance Overview of 2012 Mid-Term Management Plan

We have revised our business portfolio to reflect the shift in focus to Social Innovation Business. While we did not reach our overall revenue target, we did achieve most of our profit targets. We also realized our D/E ratio and equity ratio targets, enabling us to strengthen our foundation for further growth.

### **FY 2012 Performance**

	FY 2011 Results	FY 2012 Results	FY 2012 Target*1	
Revenues	9,665.8 billion yen	9,041.0 billion yen	10 trillion yen	
Operating income ratio	4.3%	4.7%	Over 5%	
Net income attributable to Hitachi, Ltd. shareholders	347.1 billion yen	175.3 billion yen	Consistently generate at least 200 billion yen	
D/E ratio*2 (manufacturing, services & others)	0.86 times (0.56 times)	0.75 times (0.47 times)	0.8 times or below	
Total Hitachi, Ltd. shareholders equity ratio (manufacturing, services & others)	18.8% (20.5%)	21.2% (23.2%)	20%	
Exchange rate	79 yen/US dollar 109 yen/euro	83 yen/US dollar 107 yen/euro	80 yen/US dollar 110 yen/euro	

<sup>\*1</sup> As of June 9, 2011 (revised to reflect HDD business transfer), assumed exchange rate

### 2012 Mid-Term Management Plan: Key Management Policies and Related CSR Activities

CSR activities related to our key management policies and Hitachi's material issues played a crucial role in achieving 2012 Mid-Term Management Plan goals.

2012 Mid-Term Management Plan Key	Material Issues for Hitachi				
Management Policies		Relevant Section			
I. Strengthen Management Base	Supply Chain Management				
(1) Cost structure reforms	Rate of	FY 2010	FY 2011	FY 2012	Supply Chain
(2) Strengthen financial position	procurement outside Japan	36%	38%	38%	Management
	Cost-cutting effect of Hitachi		FY 2011	FY 2012	
	Smart Transformation	Project	35 billion yen	75 billion yen	
Focus management resources	Supplier audits in eme	rging countries	FY 2012 <b>12</b>		
II. Global Growth Strategies		Divers	ity Management		
(1) Expand investment in key regions	Non-Japanese	FY 2010	FY 2011	FY 2012	Global Human
Globalize corporate functions and promote China	employees in Japan	230 people	239 people	257 people	Capital Development
Business Strategy 2015	Ratio of female	FY 2010	FY 2011	FY 2012	Diversity
• Expand business in ASEAN countries as a new key	managers (Hitachi, Ltd.)	3.3%	3.4%	3.5%	Management
region and establish business in Myanmar (2) Optimize use of human resources and	Employment ratio of	FY 2010	FY 2011	FY 2012	
increase efficiency	people with disabilities (Hitachi, Ltd. in Japan)	2.05%	2.00%	2.02%	
Pursue global human resource strategies		Caring fo	or the Environme	nt	<u>'</u>
Launch Global Management Human Resources     Development and Allocation Program in Fiscal     2012  (3) Strengthen global governance	Contributions	FY 2010	FY 2011	FY 2012 (estimate)	Environmentally Conscious Products
	to CO <sub>2</sub> emission reduction	15.51 million tonnes	19.04 million tonnes	22.74 million tonnes	and Services
	Rate of reduction in	FY 2010	FY 2011	FY 2012	Environmentally Conscious
Strengthen global governance     Strengthen response to globalized management	CO <sub>2</sub> emissions per unit production*1 (global)	_	21%	22%	Production
and supervisory functions	Respect for Human Rights				
<ul><li>(4) Value creation and CSR</li><li>Pursue contributions to the environment and</li></ul>	Creation of the Hitachi Group Human Rights Policy  Announcement of the Hitachi Group Human Rights Policy (May 2013)				Respect for Human Rights
regional social contribution activities	Occupational accident rates*2	2010	2011	2012	Measures for Improving Health
Respect human rights and implement stakeholder		0.20	0.15	0.19	and Safety
dialogues		Products That Cr	eate a Sustainab	le Society	
	Eco-Product sales ratio	FY 2010	FY 2011	FY 2012	Increasing the Ratio of
	sales latio	78%	80%	84%	Eco-Products
	Public Policy Initiatives				
	Stakeholder dialogues	FY 2010	FY 2011	FY 2012	Public Policy Initiatives
	uidiogues	3	3	2	
	Funding for Social Contribution Activities	FY 2010	FY 2011	FY 2012	Social Contribution
	Contribution Activities	1.6 billion yen	3.5 billion yen	3.3 billion yen	Activities

<sup>\*2</sup> Including noncontrolling interests and liabilities associated with the consolidation of securitized entities.

<sup>\*2</sup> Up to 2011, 90 major Hitachi Group companies in Japan including Hitachi, Ltd.; in 2012, 175 Hitachi Group companies in Japan, including Hitachi, Ltd.



### **FEATURE**

# **Contributing to Society through Business**

Our R&D program focuses on products and services that help to resolve social issues.

Creating value to fulfill our Corporate Credo—contributing to society through the development of superior, original technology and products—has underpinned our business development for more than a century.

Environmental issues are becoming global: climate change and ecosystem degradation as well as energy, water, resource and food shortages, urban population growth, graying of societies, and others. To solve these problems, as a global corporate citizen, we create both economic and social value for a sustainable society.

Our new Hitachi Group Vision action plan, the 2015 Mid-Term Management Plan, clarifies our contribution to overcoming the challenges facing society and drives our Social Innovation Business.





# Hitachi's Solutions for Social Problems

Combining our wide-ranging business activities with IT solutions helps us resolve global environmental problems and social issues.

### **Environment and Energy Issues**

The aim of our 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 are helping to reduce CO<sub>2</sub> emissions across society as a whole by providing products and services with low energy consumption.



### **Power Generation Systems**

We use wind and solar power and other renewable energies. Also, we reduce CO2 emissions by improving the efficiency of power generation systems.

### Biodiversity, Water and Resource Issues

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



### **Water Environment Solutions**

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

### **Health and Aging Issues**

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

Our R&D promotes medical innovation in such areas as ultrasound diagnostic equipment, MRI scanners for highly advanced medical care, and particle therapy equipment.



# **Integration** through IT

Advanced networks, storage, and cloud computing technologies connect infrastructures, products, and people. Our IT solutions meet society's and our customers' challenges.

### **Cities and Transportation Issues**

Our infrastructure solutions boost 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 ensergy; and water systems for safe, constant water.



### Smart Cities

Worldwide, we propose new forms of cities that are safer, more secure, and more convenient and 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.

### Advanced **Transportation Systems**

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

# **Key Hitachi Business Segments**

The Hitachi Group contributes to society through a wide range of business operations including the social infrastructure business segment.

Sales Ratio by Business Segment FY 2012 (fiscal year ended March 2013)

9,041 billion yen

Information & Telecommunication Systems

**Power Systems** 

Social Infrastructure & Industrial Systems

**Electronic Systems** & Equipment

1)%

Construction Machinery

%

**High Functional** Materials & Components

5%

Automotive Systems

Digital Media & Consumer Products

**Financial Services** 

Others



### Information & **Telecommunication Systems**

Our expertise is gained through a wide range of areas and developed to provide IT services tailored to diverse needs from consulting to systems building, operations, maintenance, and support.

> We have business operations in approx.

countries and regions

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

Sales 1,786.5 billion yen

Operating income ratio

5.9%

Wind Power Ibaraki Co., Ltd.'s Wind Power Kamisu 1 Offshore Wind Farm



### **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 build a low-carbon society.

generation system orders in Japan

Share of wind power

In fiscal 2012, we had the largest share in Japan for wind power systems. By making these more efficient and by developing offshore wind farms, we are building a low-carbon society.

904.6 billion yen

Operating income ratio

3.3%



### 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 environmental burden.

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

Sales 1,313.8 billion yen

Operating income ratio 4.6%



### **Electronic Systems &** Equipment

Our semiconductor electronic component processing equipment, broadcasting and communications systems, medical care and testing systems, and electric tools support the information age.

> Medical MRI scanners supplied

As of April 2013, Hitachi Medical's MRI scanners maintained approx. 30 percent of the market share in Japan. Developing these and other medical equipment promotes better health for evervone

Sales 1,041.3 billion yen

Operating income ratio



### **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.

This is Hitachi Construction Machinery's fiscal 2012 overseas sales ratio for excavators, wheel loaders, mining machinery, and dump trucks used on construction sites and mines around the world.

756 billion yen

Operating income ratio

7.2%



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

This business segment produces special metals; magnetic materials; wires and cables; copper products; semiconductor, display and high functional materials; and synthetic resin products for IT, home appliances, and cars.

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.

1,336.4 billion yen

Operating income ratio 4.4%



### **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

Hitachi Automotive Systems develops new electronic car parts. The fiscal 2011 ratio of those products to the whole product line was equivalent to fourth place among the top ten auto parts companies in sales worldwide.

Sales

806.8 billion yen

Operating income ratio



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

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



Number of LED

Responding to the surge of interest in powersaving and long-lasting LED lighting, Hitachi Appliances will expand the product line from 600 models in fiscal 2012 to 1,200 in fiscal 2013.

818.5 billion yen

Operating income ratio -0.7%



### **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.



Through financial services provided to environmental projects, Hitachi Capital boosted power generated from renewable energy from 160 MW in fiscal 2012 to 320 MW in fiscal 2015, promoting wider renewable energy use.

Operating income ratio



### Others

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.

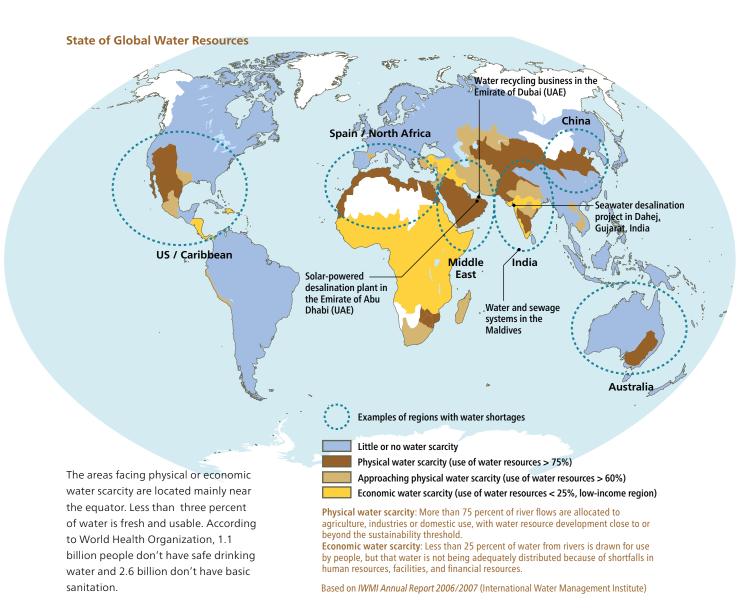
Hitachi Transport System's eco-car ownership rate includes hybrid, natural gas, electric and LPG vehicles, as well as nationally certified and lowemission gas and biofuel vehicles.

Operating income ratio

3.6%

# Ensuring Safe, Reliable, and Optimal Water Environments Worldwide

# Hitachi's Intelligent Water System



In the 21st century, water shortages and pollution are expected to become more acute as populations grow and concentrate in cities. There is a worldwide need for social infrastructures that conserve and use limited water resources and create sustainable living environments.

### Hitachi's Intelligent Water System

In Japan, we have supplied equipment and systems for 550 domestic water treatment plants and 2,800 sewage treatment plants, in addition to 900 monitoring and control systems. As well, we participate in water-related projects in 40 countries. Our intelligent water

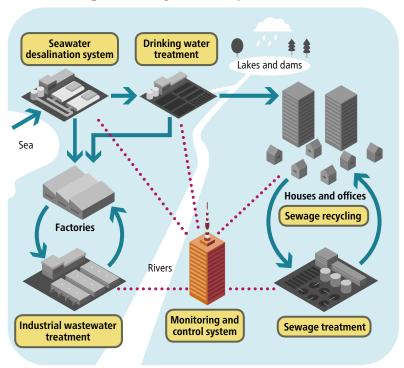
system contributes to society by creating an optimized water cycle for as many people as possible. We achieve this by coordinating our infrastructure technologies—water and sewage treatment, industrial wastewater treatment, desalination, and water recycling technologies—with information management and control systems to optimize water use.

### Hitachi Water Environment Solutions

In fiscal 2010, we set up the Water **Environment Solution Division** to increase deployment of our intelligent water system. We are working on a water recycling project in Dubai to improve water quality that has deteriorated due to population growth and a desalination project in India to provide a stable water supply for industrial use from desalinated seawater. Other projects include water and sewage management systems and deep sea water systems for air conditioning to reduce CO<sub>2</sub> emissions in the Maldives, as well as solar-powered desalination equipment in Abu Dhabi to protect rare desert animals.

We will work to expand our business in China, Southeast Asia, and emerging nations. In developed countries, we will further advance systems that optimize intelligent water cycles.

### **Hitachi's Intelligent Water System Concept**





Island of Malé in the Republic of the Maldives

### **Hitachi's Worldwide Water Environment Solutions**

Project	Main Developments	Hitachi Group Involvement
Water recycling in Dubai (UAE)	August 2008 Hi Star Water Solutions LLS established as a joint-venture company February 2009 Water recycling business launched	An urban development boom in Dubai has caused social problems such as deteriorating water quality. Hitachi built a plant using membrane technology to treat wastewater. At the plant, a business has been launched that supplies inexpensive treated water to nearby factories for industrial use.
Solar-powered desalination units in Abu Dhabi (UAE)	Sept. 2009 Hitachi contracted Oct. 2010 First unit supplied Nov. 2012 Partial operation March 2013 All 15 units supplied	We participated in a project to protect the endangered Arabian oryx and other desert-dwelling animals. Hitachi's solar-powered desalination units convert highly saline well water into fresh water for desert animals.
Seawater desalination project in Dahej, Gujarat, India	Dec. 2009 Japan-India Summit agreement March 2012 Joint development contract Jan. 2013 Water supply agreement	We are helping to build one of the largest seawater desalination plants in Asia, part of an agreement between the governments of Japan and India on smart community development. The plant is expected to provide a stable supply of industrial water over 30 years (including construction) at a rate of 336,000 m³ per day.
Water and sewage business in the Maldives	Jan. 2010 Hitachi acquired 20% of shares in Malé Water and Sewerage Company Pvt. Ltd.	We installed approximately 200 seawater desalination units, an information management system for pipe network in the island of Malé and a water-cooled air conditioning system using deep sea water in airports and buildings, enabling a reduction of 12,450 tonnes of CO <sub>2</sub> emissions per year (estimate).

## **Innovative Cities and Communities**

### Smart Cities and Smart Communities Worldwide

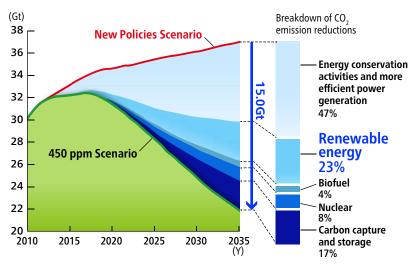
Global warming from greenhouse gases is a serious global problem. Lowering atmospheric concentrations of greenhouse gases to 450 ppm requires a major reduction in CO<sub>2</sub>. Renewable energies—hydro, wind and solar—are vital for energy and environmental challenges, but they can be unreliable and expensive. We are helping to build smart cities and communities using integrated information and control solutions, power distribution, and storage.

### Wind and Photovoltaic Generation and EV Demonstration Project on Maui, Hawaii

We are working on the Japan-US Island Grid Project (JUMPSmartMaui). The island of Maui in Hawaii relies heavily on fossil fuels, and aims to boost the renewable energy ratio to 40 percent by 2030. We installed

### Breakdown of Energy-Related CO<sub>2</sub> Emission Reductions

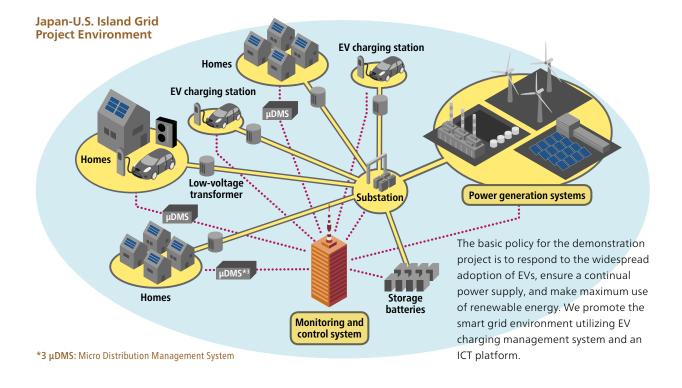
Comparing Reductions under the New Policies Scenario\*1 and the 450 ppm Scenario\*2



- \*1 New Policies Scenario: A scenario that takes into account broad policy commitments and plans that have been announced by countries.
- \*2 450 ppm Scenario: A scenario that restricts the global increase in temperature to 2°C by limiting concentrations of greenhouse gases in the atmosphere to around 450 parts per million of CO<sub>2</sub>.

Based on "energy-related CO<sub>2</sub> emissions" in *IEA World Energy Outlook 2012* 

charging management systems for electric vehicles (EVs)—more widely used in the future—as well as home gateways and other equipment. This will create a smart grid for a stable supply of power even with increasing reliance on renewable energy, which is affected by weather conditions, through this demonstration project.



### Smart Cities and Mutual Agreement

Mutual agreement and dialogue with local communities is vital for realizing smart cities. For the Maui demonstration project, we built strong community relationships through meetings with local NPOs and leaders, being sensitive to the regional situation and culture, keeping residents informed, and creating user-friendly manuals.

Hitachi's smart city concept uses technology to reduce the environmental burden while ensuring quality of life such as safety and convenience, comfort, and enjoyment. We will continue to contribute to the creation of smart cities optimized for people and the environment, mindful of cultural and social considerations for each country and region.













Jeanne Unemori Skog Maui Economic Development Board, Inc.

President & CEO

### Change a challenge to an opportunity

Maui is fortunate to have been selected as the site for the groundbreaking JUMPSmartMaui demonstration project. Our island-and state-are challenged by the highest rates for energy in the United States and an unsustainable dependence on fossil fuel. The cost of energy impacts our businesses, public institutions and the economic and social wellbeing of our residents. Our challenge is also an opportunity. JUMPSmartMaui represents a win-win: Maui offers a willing, ideal test-bed for Hitachi's cutting edge strategies and technologies; NEDO (New Energy and

Industrial Technology Development Organization) and Hitachi invest in solutions that accelerate Maui's search for broad-scale, clean energy solutions. As importantly, Hitachi has embraced our island community. Project leaders have placed a high priority on respecting the environmental and cultural values deeply held by our residents. They have tapped local businesses to assist with planning and implementation. They have readily adopted island traditions. All of these experiences have laid the groundwork for a productive relationship. We look forward to the results.

thousands of highly skilled jobs.

For Hitachi in Europe, 2012 was a positive year. Despite difficult conditions across the Eurozone, we continue to observe a strong demand for environmental technology and public infrastructure.

Energy self-sufficiency and emission reduction are major challenges for Europe; and this is reflected in the contracts we have won. First, Hitachi Power Europe (HPE) will construct a high-efficiency coal fired power plant in Poland, which will ensure a dependable supply of electricity in an expanding economy. Second, Hitachi acquired Horizon Nuclear Power in the UK. This will help the UK achieve its vision of a secure, low-carbon and affordable energy supply through the construction of new nuclear power plants on two sites, as well as creating

Third, Hitachi Europe has become a significant partner in smart cities projects identifying energy-saving technology applications for the future. In the rail sector, we have concluded a contract to supply and maintain highspeed Intercity Express trains in the UK and launched our European Rail Research Centre. Hitachi Rail Europe will build a factory in North East England creating 200 jobs during construction, completing in 2015. The facility will employ up to 730 people to produce rolling stock for two major routes.

Hitachi's biometric Finger Vein technology is establishing a new standard of customer identity authentication. The innovative Polish banking sector is becoming a forerunner in using biometric technology in European retail banking.

Hitachi's philosophy is to work closely with local stakeholders to innovate and provide sustainable technology solutions to meet social needs. We aim to deliver economic benefits to local areas through employment and procurement, believing that local leadership teams, who understand Hitachi's heritage and values as well as local markets, deliver the best service.



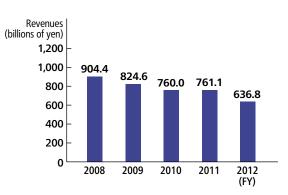
Sir Stephen Gomersall Deputy Chairman of Hitachi Europe, Ltd.

Revenue by Geographic Area (billion of yen)

Europe 636.8 billion yen (7%) Number of employees: 11,552



#### **Trend in Revenue**



Sustainability is a part of every business. It has always been a core part of Hitachi and is incorporated throughout everything we do. Let me address three specific sustainability areas.

Environmental — Our North America environmental managers attend annual meetings to share updates and discuss regulation requirements. Similar meetings are held in Mexico and Brazil. There are 80 sites in the Americas from the viewpoint of the environment and each site is categorized based on its degree of environmental load to determine the amount of impact that it generates. The Environmental Office has three priorities for corporate environmental activity: business and communication, compliance, and management. The latest environmental policies and regulations are shared, as are best practices, across the Hitachi companies. An internal website is used to promote guidelines and contains four types of handbooks that cover major US environmental laws and are now available in country appropriate languages.

Community — Our Community Action committees operate in 36 locations throughout North America. These employee-led groups designate funding and volunteerism activities. The Hitachi Foundation supports this program but also drives two additional programs that support and expand business practices that create tangible and enduring economic opportunities for underprivileged Americans.

Employees — Being aware of our business environment includes being aware of our employees. Diverse teams create better products for the marketplace, and by having all employees entered into our global human capital database; we can better manage where to locate the best talent and when that talent needs training or education. In addition, many employee resource groups are growing and providing additional support to our employees.

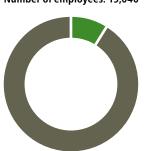
In closing, let me state that business sustainability is also important and incorporating all sustainability issues into management decisions is vital for success. We will continue to cultivate strong community relationships and develop our employees as they create innovative products and solutions.



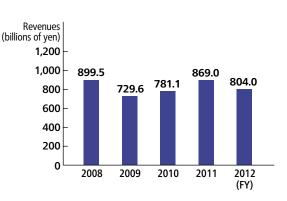
**Takashi Hatchoji** Group Chairman for the Americas Chairman of the Board of Hitachi America, Ltd.

Revenue by Geographic Area (billion of yen)

North Americas 804 billion yen (9%) Number of employees: 15,040



#### **Trend in Revenue**



### Message from Representative **Activities by Country and Region**

# Asia & India

Hitachi Group Sustainability Report 2013

Significant economic, political, social and environmental events have unfolded in recent years pushing companies to look carefully at how they operate and do business.

For example, ASEAN was seen before as just a manufacturing hub for many multinational companies and the Indian sub-continent as just a big offshore market. Today, we clearly see that situations have dramatically changed. These areas now represent tremendous growth opportunities and are emerging as big markets not only for Hitachi but for other global companies as well.

With the advent of progress, social infrastructure improvements have been high on the agenda of most of the region's leaders. As more social infrastructures are built, rapid urbanization normally follows. And with growth, each country in the region today is faced with the issue of sustainability.

For over a hundred years, Hitachi has maintained its role as a responsible corporate citizen. Being a leading global company in the Social Innovation Business has given us an excellent platform to address the challenges of building environmentally-sound social infrastructures.

To back up these commitments, we announced in 2011 the appointment of an environment representative for ASEAN and India whose role, among other things, is to promote environmentally conscious systems that prevent pollution, to lead sustainable business management, and to supervise the full execution of environmental compliance in every factory and office.

Addressing the issues of education is also part of our CSR agenda. We have been implementing three education-related programs, in the region that help towards building the future generation: The Hindu-Hitachi Scholarship Program, The Hitachi Young Leaders Initiative and The Hitachi Scholarship.

Moving forward, we are expanding our CSR activities to include dialogues with various stakeholders and introducing a human rights management system. Stakeholder dialogues will help identify social issues, understand what is expected of us and to reflect this in our management and strategy. At the same time, the human rights management system will seek to evaluate current human rights and find ways to improve it.

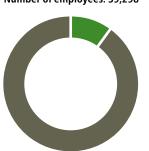
The initiatives that Hitachi Asia, Ltd. is advancing show our recommitment to actively engage ourselves as part of the ASEAN and Indian communities to build a more sustainable society.



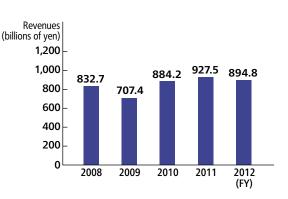
Kiyoaki Iigaya Chief Executive for Asia, Hitachi, Ltd. Chairman, Hitachi Asia, Ltd. & Hitachi India, Pvt. Ltd.

### Revenue by Geographic Area (billion of yen)

Asia & India 894.8 billion yen (10%) Number of employees: 39,298



#### **Trend in Revenue**



### Message from Representative

**Activities by Country and Region** 

# China

025 Hitachi Group Sustainability Report 2013

Under the 12th Five-Year Plan announced in March 2011, China has set two goals: to achieve economic growth driven mainly by urbanization and increased domestic consumption, as well as to create an environmentally conscious society with a low-carbon green economy. China's new leadership has also positioned the "new four modernizations"—industrialization, "informatization," urbanization, and agricultural modernization—as the engines for economic development. China is expected to focus on information technologies and developing social infrastructure.

In line with the Hitachi Group China Business Strategy 2015, which we formulated in February 2012, we will pursue environment-focused businesses driven by further localization of operations and realization of Group synergies. Specific steps will include strengthening partnerships with local governments and companies in the energy-saving and environment fields, and accelerating localization by appointing outstanding local employees to key positions. The Group will also foster greater internal synergies by drawing on our combined strength to bolster the management platform and business bases in China by rolling out the Hitachi Smart Transformation Project, a global project for overhauling cost structures. Another step in increasing both synergies and Hitachi's presence in China will be to hold combined Group exhibitions.

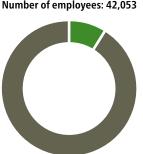
Through these initiatives, we will continue to drive forward in our business areas to realize the goal for the entire Hitachi Group to become "the Most Trusted Partner in China."



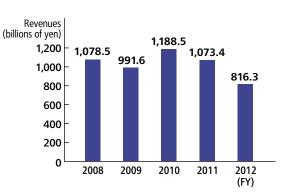
Ryuichi Kitayama Vice President and Executive Officer Chief Executive for China Hitachi, Ltd.

Revenue by Geographic Area (billion of yen)

China 816.3 billion yen (9%) Number of employees: 42,053



**Trend in Revenue** 



# **Governance Report**



144th General Meeting of Shareholders (Hitachi, Ltd.)

## **Meeting Globalization with Enhanced Risk Management and Governance**

The Hitachi Group provides social infrastructure systems to countries worldwide, helping to realize sustainable societies as a new growth axis. Strengthening our compliance framework is vital for expanding our operations as a good corporate citizen in emerging countries and other global markets. We must also be aware that any accidents that occur can have serious repercussions for our business continuity.

Looking at global compliance risks, preventing bribery in particular, has become an urgent issue amid tightening regulations worldwide. In fiscal 2009, we formulated the Hitachi Global Compliance Program (HGCP), our basis for audits and educating staff. We decided to appoint a chief compliance officer (CCO) to further improve our framework for Group-wide compliance. In April 2013, I became Hitachi Group CCO, assuming responsibility for managing the compliance for the whole Group. Under my supervision, we will establish CCOs in all in-house and Group companies, as well as regional CCOs in our regional headquarters. Guided by the HGCP, the CCOs will strengthen our compliance framework and strictly enforce the Hitachi Group Codes of Conduct.

The Hitachi Group Codes of Conduct include compliance with ISO 26000 and other international standards. The Group as a whole globally shares high ethical values even above national laws. In May 2013, we created the Hitachi Group Human Rights Policy to supplement the human rights section of the Hitachi Group Codes of Conduct. We are also reinforcing corporate governance in response to globalization. As of fiscal 2012, we have appointed a majority of our Board of Directors from outside the Company, including non-Japanese directors. As part of the strategic strengthening of the functions of the Board of Directors, we held a board meeting in December 2012 in India, a region where our operations are expected to grow. This was Hitachi's first board meeting outside Japan, and directors discussed strategies for India. In fiscal 2013, we increased the number of non-Japanese and female directors to reflect a more global perspective and a diversity of ideas in our management.



Toshiaki Kuzuoka Senior Vice President and Executive Officer, in charge of Human Capital, Government & External Relations and Corporate Auditing, General Manager of Legal and Communications Group and

Compliance Division, and Hitachi Group Chief Compliance Officer

# **Corporate Governance**

By enhancing corporate governance, the Hitachi Group is promoting speedier, more efficient management and is meeting the expectations of stakeholders as a business that merits the public's trust.

### Strengthening Governance

Hitachi operates under a committee system.\*1 We have strictly separated business supervision and execution to establish a business structure for speedy, highly transparent management. 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.

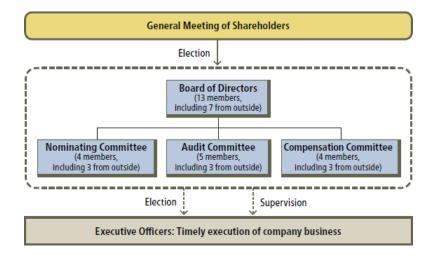
\*1 Committee system: A corporate governance system where a board of directors makes basic policy decisions and oversees the execution of business by executive officers, while the executive officers, appointed by the board of directors, execute the company's business affairs. Hitachi, Ltd. and its nine major listed subsidiaries have adopted the committee system.

WEB

Corporate Governance Guidelines of Hitachi, Ltd. http://www.hitachi.com/IR-e/corporate/governance/guidelines.html

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

In fiscal 2012, we appointed a majority of independent outside directors, non-Japanese included, to our Board of Directors, reflecting a balanced mix of ideas and global perspectives and reinforcing the Board's supervisory function.



#### Compensation

Compensation for every director and executive officer is set by the Compensation Committee based on the Japanese companies act governing companies with committees.

Compensation for directors and executive officers consists of monthly salaries together with year-end allowances for directors and performance-based bonuses for executive

028 Corporate Governance 032 CSR Management 037 Risk Management 041 Compliance

047 Innovation Managemen

052 Intellectual Property 056 Brand Management

chapter 2 Environmental Report 060

chapter 3 Social Report 120

Hitachi Group Sustainability Report 2013

officers. While compensation for directors is generally fixed, performance-based bonuses for executive officers are set at around 30 percent of annual compensation. Bonuses are determined individually according to business performance and the outcome of work carried out under the officers' management. Beginning with compensation for fiscal 2008, the system for directors and executive officers was revised to eliminate retirement allowances. Now that retirement allowances have ended, the Compensation Committee will determine and implement the payment of severance benefits for executives on their retirement. In fiscal 2012, executives were compensated as follows:

#### **FY 2012 Compensation**

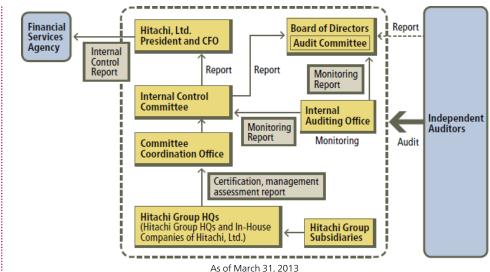
Category	Recipients (number)	Total amount (millions of yen)
Directors (outside directors)	15 (7)	336 (154)
Executive officers	27	1,689
Total	42	2,025

- The number of directors indicated does not include one serving concurrently as an executive officer.
- Compensation to directors includes the monthly salaries, from April 2012 to the time of retirement, of three directors who retired as of the close of the 143rd Ordinary General Meeting of Shareholders on June 22, 2012.
- We additionally provided 1 million yen in retirement allowances to one outside director who retired on June 21, 2013 and 165 million yen in retirement allowances to three executive officers who retired on March 31, 2013.

### **Internal Control over Financial Reporting**

Hitachi, Ltd. and listed Group companies establish, maintain and evaluate internal control over financial reporting, and then report the results on a consolidated basis. The Group is committed to complying with all laws and regulations. Further, Hitachi recognizes that it is an important social responsibility to establish and maintain the systems that ensure appropriate financial reporting, and we will enhance the transparency and credibility of our business operations.

### Hitachi Internal Control Assessment Framework



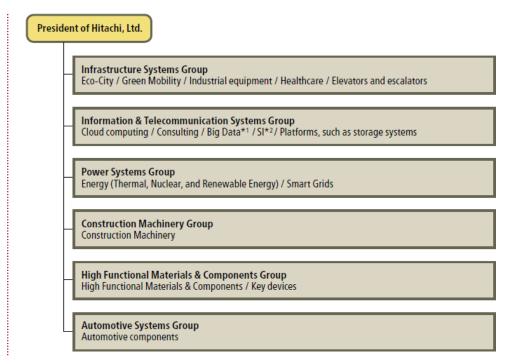
chapter 7

### **Group Management**

The Hitachi Group instituted an in-house company system in fiscal 2009 to optimize business operations. By maintaining the independence of in-house and Group companies, we 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.

### **Six-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 to enable 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, reorganizing the Group management structure into six groups. This change will bring about quicker management decision making for automotive components because in the future there will be accelerating changes in the needs of regions and of customers.



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

### **Hitachi Smart Transformation Project**

In April 2011, we launched the Hitachi Smart Transformation Project, part of a drive to reinforce overall Group corporate functions. Through this initiative, we are reforming the Group-wide business structure, optimizing the allocation of resources, and sharing common resources among business units. The Group Strategy Committee will handle Group-wide strategies with an eye to optimize Hitachi Group management.

Through the Smart Transformation Project, we have been overhauling our cost structure in line with our Mid-Term Management Plan goals. In August 2012, we established the Smart Transformation Project Initiatives Division to accelerate project promotion. The new division is responsible for driving forward seven projects, with executive officers serving as project leaders.

#### **Smart Transformation Project Initiatives Division Structure**



060

Hitachi Group Sustainability Report 2013

# **CSR Management**

We strive to live up to our Corporate Credo of contributing to society through the development of superior, original technology and products. We are working to realize the Hitachi Group Vision by integrating CSR into management and operation strategies while sharing our values with society.

### **CSR Policy of the Hitachi Group**

We created the Hitachi Group Vision based on the Corporate Credo and Hitachi Founding Spirit, the starting points for Hitachi's CSR. The CSR Policy of the Hitachi Group, designed to realize that vision, is shared Group-wide. Based on this policy, the CSR Promotion Team, staffed by people from corporate divisions within Hitachi, Ltd. together with regional headquarters outside Japan, has drafted a policy plan. This plan is steadily being implemented by the entire Group.

### **CSR Policy of the Hitachi Group**

- 1. Commitment to Corporate Social Responsibility (CSR)
  - The Hitachi Group, including all its executives and employees, recognizes CSR as a vital part of corporate activity and is therefore committed to a course of social responsibility in accordance with this CSR policy for the sustainable development of society and business.
- 2. Contribution to Society through Our Business
  - The Hitachi Group will contribute to the building of a prosperous and vibrant society by providing safe, high-quality products and services through business activities based on its excellent research, technology, and product development.
- 3. Disclosure of Information and Stakeholder Engagement
  - The Hitachi Group will disclose information openly and transparently in order to maintain and develop a relationship of trust with its various stakeholders, and act responsibly towards them through various means of communication.
- 4. Corporate Ethics and Human Rights
  - The Hitachi Group will undertake its business based on the principles of fairness and sincerity, act with the utmost respect for human rights and pursue a high sense of corporate ethics in the global business market which encompasses diverse cultures, morals, ethics, and legal systems.
- 5. Environmental Conservation
  - The Hitachi Group will strive to minimize environmental effects and utilize resources towards the development of a sustainable society that is in harmony with the environment.
- 6. Corporate Citizenship Activities
  - The Hitachi Group will promote social contribution activities as a good corporate citizen in order to realize a better society.
- 7. Working Environment
  - The Hitachi Group will make every effort to create a pleasant and motivating working environment for all its employees and to fully support those employees who desire selffulfillment and self-development through their work.
- 8. Responsible Partnership with Business Partners
  - The Hitachi Group will make every effort to promote fair and sound business practices among our business partners by fostering a common awareness of social responsibility.

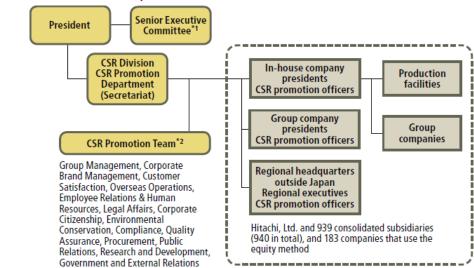
Adopted March 2005

### **CSR Management Structure**

To promote CSR, the CSR Promotion Team, staffed by people from the CSR Division and CSR-related departments at Hitachi, Ltd., discusses and develops Group-wide CSR measures. The team focuses on specific global initiatives with CSR promotion officers at Group companies and regional headquarters outside Japan. Particularly important issues, such as determining medium- and long-term policies, are decided by the Senior Executive Committee. In-house company and Group company CSR promotion officers also meet regularly to discuss issues that need attention and to follow a common direction.

To meet our responsibilities as a global enterprise, we take on sustainable activities for the entire Group by using two tools: the materiality process and the jointly developed CSR Self-Assessment Tool, which we use for improving CSR activities Group-wide and to clarify the issues that we face as a global entity. By talking with and listening to global stakeholders, we proactively integrate global social issues within our organization to create sustainable social and management programs.

#### Structure of Hitachi Group CSR Promotion



- \*1 Senior Executive Committee: Decides CSR management policies at the executive level
- \*2 CSR Promotion Team: CSR-related departments prepare, implement, and follow up detailed plans for CSR activities

### **CSR Self-Assessment Tool**

In fiscal 2008, Hitachi, Ltd. and Group companies jointly developed the Hitachi Group CSR Self-Assessment Tool, which benchmarks our companies against other leading global companies. The goal is to tackle issues and clarify initiatives based on our policies for pursuing CSR and continually improving performance.

In fiscal 2011, we revised this tool to focus more on management collaboration and global perspectives, as well as to address risk and to measure impact based on such social demand changes as the launch of ISO 26000 and the requirements of major SRI indexes.

027 Message

028 Corporate Governance 032 CSR Management

037 Risk Management 041 Compliance 047 Innovation Management

052 Intellectual Property 056 Brand Management chapter 2 Environmental Report 060 Social Report 120

### Results of Fiscal 2012 Self-Assessment

After reviewing the results of the fiscal 2012 self-assessment, we were able to clarify items where building or improving a common global platform were required. In fiscal 2013, we will implement action plans based on the assessment results, and use this tool to improve overall Group standards.

Hitachi Group Sustainability Report 2013

#### Main Topics Covered in Each Policy of the CSR Self-Assessment Tool

Policy 1: Commitment to Corporate Social Responsibility (CSR)

CSR vision; CSR education; risk management

Policy 2: Contribution to Society through Our Business

Coordination with business strategies; sustainable designs; innovation; customer satisfaction

Policy 3: Disclosure of Information and Stakeholder Engagement

Information disclosure; dialogue with stakeholders

Policy 4: Corporate Ethics and Human Rights

Corporate governance structure; education on ethics and awareness of legal violations; respecting human rights; infringement risks

Policy 5: Environmental Conservation

Carbon management strategies; resource recycling; ecosystem conservation

Policy 6: Corporate Citizenship Activities

Strategic social contribution; participation in local communities; support for employees' volunteer activities

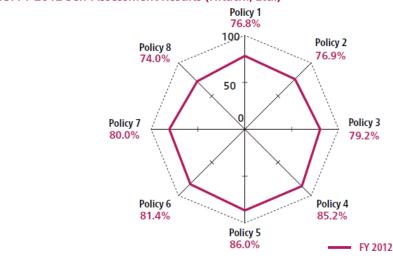
Policy 7: Working Environment

Respecting diversity; fulfilling work environments; creating opportunities for skills development; work-life balance

Policy 8: Responsible Partnerships with Business Partners

Minimize procurement risks; communicate with suppliers

### 13. FY 2012 Self-Assessment Results (Hitachi, Ltd.)



chapter 7

CSR Policy of the Hitachi Group	Hitachi Group Activities in FY 2012	Results in FY 2012	Achieve- ment Level	FY 2013 Goals/Plans
1. Commitment to Corporate Social Responsibility	· Apply revised version of the CSR Self-Assessment Tool based on ISO 26000 to Group companies	· Began applying to Group companies	***	· Create next CSR strategy
2. Contribution to	Continue implementing the Hitachi Group QF (Quality First) Innovation Movement launched in FY 2010 and assess the results	Continued implementing the Hitachi Group QF Innovation Movement, improving processes for priority business divisions, and OCHIBO HIROI*1	Ongoing	· Continue implementing Hitachi Group QF Innovation Movement and assess the results
Society through Our Business	Double the number of R&D personnel at corporate research centers outside Japan (approx. 150 in FY 2010)	· Established three research centers including Hitachi Brazil Ltd., R&D Division and boosted R&D personnel to approx. 280 as of June 2013	***	- Boost R&D personnel to 400 by FY 2015
3. Disclosure of In- formation and Stake- holder Engagement	· Continue engaging in stakeholder dialogues	· Held a dialogue on business and human rights in Belgium	**	
	Participate in international dialogues and express our views on sustainability	Hitachi representatives participated as panelists or speakers at international conferences (UN Global Compact, CSR Europe and BSR,*2 etc.)	***	Continue to hold stakeholder dialogues
	Create Hitachi Group human rights policy in collaboration with nongovernmental and other organizations and develop a due diligence framework	Created the Hitachi Group Human Rights Policy (published in May 2013)     Held a human rights workshop in China	***	· Conduct education on business and human rights
4. Corporate Ethics and Human Rights	Enhance education materials to implement the Hitachi Group Codes of Conduct more widely	Implemented annual Corporate Ethics Month in October     Created case studies in Japanese, English, and Chinese for workplace discussion and conducted discussions using these	***	Continue working to implement the Hitachi Group Codes of Conduct more widely
	· Continue compliance education and auditing of regional headquarters outside Japan	Held a lecture in Vietnam on corruption prevention and competition law     Continued auditing regional headquarters	***	· Continue compliance education and auditing of regional headquarters outside Japan

<sup>\*1</sup> OCHIBO HIROI (gleaning) is Hitachi's program for adopting the customer's perspective when reflecting on past accidents and working to prevent recurrences.

\*2 BSR is a non-profit business association headquartered in the United States that serves a network of more than 300 companies around the world and advises companies on their CSR management.

◆◆◆ : Achieved ♦♦: Partially achieved

5. Environmental Conservation	Reduce CO <sub>2</sub> emissions from Hitachi products (target for the year: 23 million tonnes)	· Helped reduce CO <sub>2</sub> emissions by 22.74 million tonnes (target almost reached)	***	· Increase sales ratio of Eco- Products	
6. Corporate Citizen- ship Activities	Conduct social contribution activities based on medium-term themes and overall plan	Implemented social contribution activities based on medium-term themes for education, the environment and social welfare	***	· Continue to implement social	
	Continue to implement social contribution activities covering the environment, energy, and other areas	Implemented educational support programs on the environment for children in China     Worked with an NGO on butterfly research near Mt. Fuji to increase ecosystem preservation awareness		contribution activities covering education, the environment, and welfare	
7. Working Environ- ment	Follow up biannually on progress with the plans produced by each in-house company for promoting female executives	Conducted follow-up on progress of the promotion plans of each in-house company	***	- Establish balanced working styles by continuing to implement WLB-Up! Month - Strictly comply with legal employment rate for people with disabilities at all Hitachi Group companies in Japan	
	· Establish balanced working styles by continuing to implement WLB (Work-Life Balance)-Up! Month	· Implemented WLB-Up! Month to help people balance their work with their private lives	***		
	Strictly comply with legal employment rate for people with disabilities at all Hitachi Group companies in Japan	· Legal employment rate increased to 1.95% (1.86% in the previous year)	***		
8. Responsible Partner- ships with Business Partners	· Strengthen monitoring of suppliers globally (site surveys)	Monitored 98 suppliers in China and Asia     Conducted site surveys in 12 locations	***	· Continue monitoring suppliers globally	
	· Continue to distribute useful information for suppliers' environmental management	∙ Exchanged information at the New MMM Club*³ plenary session	***	· Continue to convey useful information for suppliers' environmental management	

<sup>\*3</sup> The New MMM Club is an organization run primarily by suppliers who have acquired environmental certification through Hitachi's activities to support their environmental programs. *Mottainai*, which means regrettable waste in Japanese, is now an international environmental term. The three Ms come from the first letter of the word mottainai.

◆◆◆ : Achieved ♦♦: Partially achieved

047 Innovation Management 052 Intellectual Property 056 Brand Management

 $\mathsf{chapter}\, \mathbf{2}$ Environmental Report 060

# **Risk Management**

Reducing the frequency and impact of risks globally by strengthening policies and programs to meet the goals of the Mid-Term Management Plan.

# Reinforcing the Risk Management System

We manage the business and operational risks of every division with internal audits. The entire Hitachi Group is reinforcing management systems to address increasingly global and complex risks. Since fiscal 2009, we have consolidated information on all risks for all in-house companies, Hitachi Group companies, research centers, and regional headquarters outside Japan. In addition to traditional risks, including natural disasters or business risks such as the market environment and raw material prices, these risks also include environmental and reputational risks, human rights risks that cover employee diversity and poor working conditions within the supply chain, as well as other risks that could impact Hitachi's credibility and business sustainability.

We will reinforce our comprehensive risk management framework within which our assessment standards are fully examined, where accumulated risk information is analyzed and evaluated in greater detail, and where responses to the results of these analyses and evaluations are examined at the management level. In addition, we will improve risk awareness among all employees through information sharing, education, and training.

# **Business Continuity Plans**

Being deeply committed to the social infrastructure, we are enhancing our business continuity plans (BCPs) to guard against risks that could cause an interruption to business operations that impact society. Specifically, we created the Hitachi Group Guidelines for Developing Business Continuity Plans in December 2006, and in fiscal 2010 translated them into English and Chinese for distribution to all Hitachi Group companies worldwide to reinforce



Hitachi Group Guidelines for Developing Business Continuity Plans (department version)

risk mitigation for large disasters. In fiscal 2011, we produced a department version of the Hitachi Group Guidelines for Developing Business Continuity Plans, based on lessons learned from the Great East Japan Earthquake, and translated these into English and Chinese in fiscal 2012. Using these guidelines, Hitachi Group companies and business sites review and prepare BCPs relevant to the nature of their operations, accelerating BCP creation in key operations in and outside Japan.

#### **Novel Strain of Influenza Action Plan and BCPs**

In fiscal 2008, as a precaution against a novel strain of influenza that gave rise to fears of a pandemic, \*1 we set up a special organization called the Risk Management Headquarters, headed by our president. In the event of a worldwide outbreak, the Risk Management Headquarters would take the lead in securing the safety of all Hitachi Group employees and their families. Every effort would be made to ensure



Pandemic simulation drill

that operations essential for maintaining social functions, such as helplines, logistics, information systems, medical services, and public security, would continue without interruption. As part of these preparations, we formulated the *Guidelines for Pandemic Influenza Preparedness* in 2009. We distributed these to all Hitachi Group companies in fiscal 2010, after translating them into English and Chinese. In fiscal 2011, we further enhanced preparedness by collaborating with three Hitachi Group service businesses to conduct a joint drill based on the scenario of a novel influenza pandemic.

\*1 Pandemic: An infectious disease epidemic that spreads to a geographically wide area

### **Tabletop Exercise to Prepare for Large-Scale Disasters**

Since fiscal 1998, Hitachi, Ltd. has held annual disaster simulation drills covering 20 sites throughout Japan. During these drills, teams of people make decisions under disaster scenario conditions that have been developed over three to six months and include a range of crises. The objective is to verify and improve the effectiveness of prevention plans for large disasters. In fiscal 2012, we held a drill in the Kansai region, which has already experienced the Great



Drill at Kansai Area Operation

Hanshin-Awaji Earthquake and where there is now concern about the potential for the simultaneous occurrence of three large earthquakes known as the Tokai, Tonankai, and Nankai earthquakes. Business site risk managers participating in the drills reported on their drills and the results at a general assembly for around 200 officers responsible for handling risk. We are constantly improving BCPs to address large disasters by sharing the results of these tabletop drills. We also hold monthly drills that use a satellite communications system.

## **Providing Information through Our Internal Website**

The Hitachi Group internal website has provided a risk response page for all Hitachi employees since 1997. This internal website features information from wire services and Japan's Ministry of Foreign Affairs as well as problems that Hitachi Group employees have already experienced. If emergencies arise, the site alerts employees and posts information based on top



Influenza page on the e-learning site

management policies and the extent of damage. The risk response website adds or updates around 80 news items every day. The average number of page views per month has reached 500,000, illustrating that the site is playing an essential role in Hitachi's risk

027 Message

028 Corporate Governance

032 CSR Management 037 Risk Management 047 Innovation Managemen 052 Intellectual Property 056 Brand Management chapter 2

Environmental Report 060

# **Managing Risk Overseas**

The growing geographic scope of our operations is also increasing business travel to dangerous areas. The Hitachi Group puts peoples' lives first, so since fiscal 1993 we have operated a 24-hour international travel call center system focused on overseas emergency medical care. We also run overseas risk management courses for employees about to work outside Japan and young employees entering overseas experience programs. In fiscal 2012, around 1,600 employees took part in these courses. To ensure employee safety in countries and regions with a particularly high travel risk, we send in local survey missions that include external experts to identify and institute specific risk management measures. Recognizing that the hostage incident in Algeria in January 2013 increased the risk of similar incidents occurring around the world, a President's Message was issued to remind all employees to take extra care to ensure safety, and we have bolstered risk management partnerships worldwide.

# Responding to the Great East Japan Earthquake

When the massive earthquake, followed by a devastating tsunami, hit Japan's Tohoku region and Pacific coast on March 11, 2011, we responded by immediately setting up the Emergency Headquarters for Response to Large-Scale Earthquakes to confirm the safety of all employees and their families, while assessing the damage. Many Hitachi Group facilities in Fukushima and Ibaraki prefectures were heavily damaged. We expected that restoration would take a long time, but key business sites completed their recovery within a month and restarted most of their production. This swift turnaround is a testament to the support received from related entities outside Hitachi and the emergency preparedness of business sites within Hitachi. On March 23, we broadened the role of the emergency headquarters to create the Hitachi Group Headquarters for Post-Earthquake Reconstruction and Redevelopment, headed by Hiroaki Nakanishi, President of Hitachi, Ltd. This group functions as a "control tower" for the Hitachi Group, gathering information on damage and providing increased efficiency for support and restoration work by consolidating of assistance requests, empowering Hitachi to undertake concerted efforts to restore areas hit by disasters.

# **Reputation Management**

All Hitachi Group companies share the Hitachi brand globally. While this generates group synergies for innovation and trust in the brand, we recognize that accidents and rumors can damage the brand around the world. We have set up communication divisions at regional headquarters outside Japan to handle reputational risk. These divisions ensure the broad recognition of our activities by regularly communicating with local media and government agencies, as well as members of nongovernmental organizations and opinion leaders in each market who are particularly interested in human rights and environmental issues. These divisions work hard to prevent public misconceptions about our business management.

040

Hitachi Group Sustainability Report 2013

We have also introduced a Web inquiry management system used across the Group for managing the opinions and questions we receive every day from customers. These inquiries are being recorded and kept as valuable sources of information for reputation management.

Hitachi, Ltd., in-house companies, Group companies, and regional headquarters outside Japan collaborate to mitigate risk to the brand and resolve problems arising from accidents or rumors. Moreover, we work to proactively prevent the spread of any adverse impact, as well as future occurrences, by investigating similar or related incidents in other regions or businesses.

Sustainability Report 2013

# **Compliance**

As we expand internationally, we are deepening compliance knowledge and awareness among Hitachi Group companies worldwide, instilling and reinforcing even more stringent compliance practices to ensure fair competition.

# **Enhancing Framework for Promoting Compliance**

The Hitachi Group Codes of Conduct were formulated in 2010 and are implemented among Hitachi Group companies. We have also developed in-house regulations and instituted bribery prevention measures to maintain fair business practices. We use audits, including internal control assessment procedures and a compliance reporting system, to check the results of our compliance system and to promptly identify and address breaches, promoting robust and more sustainable management and business practices. As of April 2013, our Senior Vice President and Executive Officer has been appointed Chief Compliance Officer to further enhance our global compliance framework.

**WEB** 

**Hitachi Internal Control Assessment Framework** http://www.hitachi.com/csr/governance/gove/index.html#gove03

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

Hitachi, Ltd. formulated the Hitachi Group Codes of Conduct as specific common conduct codes for the Hitachi Group. This was in line with the shift to a new Group management structure to mark Hitachi's centennial. Based on translations of this document into 19 languages (so far), consolidated subsidiaries worldwide then formulated their own codes of conduct in line with the same content. To ensure broader awareness of the codes, we produced the *Hitachi* Group Codes of Conduct Handbook in fiscal 2011 as a resource for the entire Hitachi Group. We also produced English and Chinese versions of an existing Japanese-language e-learning tool that teaches



Hitachi Group Codes of Conduct Handbook

appropriate behavior and presents specific examples to publicize initiatives for Hitachi Group companies within and outside of Japan. We are extending training to business sites of Hitachi Group companies worldwide and we are asking 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.

WEB

**Hitachi Group Codes of Conduct** http://www.hitachi.com/about/corporate/conduct/index.html

# **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.

chapter 1 | Governance Report

028 Corporate Governance 032 CSR Management

037 Risk Management

047 Innovation Managemen 052 Intellectual Property 056 Brand Management

Environmental Report 060

In fiscal 2012, we created a set of case studies for workplace discussion to boost employee awareness of the content of the Hitachi Group Codes of Conduct Handbook. The 44 case studies were mapped to the chapters in the handbook so that employees could discuss the issues relevant to their own workplaces. We also translated the case studies into English and Chinese for use in Hitachi global operations. 219,688 employees in 23,038 groups and departments have taken part in discussions, and 11,490 employees attended lectures given by internal and external speakers on the topic.

# **Preventing Corrupt Practices Involving Public Officials**

Hitachi Group is focusing on the infrastructure business in emerging countries. Recognizing that global compliance will become ever more important, we formulated Group-wide rules and guidelines in October 2008. We are ensuring adherence through audits and education.

In October 2012, we held a lecture on bribery prevention and competition law in Vietnam and Singapore that was attended by 10 compliance officers in Vietnam and 26 in Singapore. In March 2013, we invited a speaker to give a lecture to 207 officers on building and operating a global 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 Division 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—has been introduced to allow employees to report problems anonymously directly to Hitachi's board of directors.

# **Preventing Violations of the Antimonopoly Law**

The Hitachi Group operates on the principles of "conformance with the law and business ethics" and "fair and disciplined competition." However, it is with regret that 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 established during an incorporation-type company split received administrative orders for violating the Antimonopoly Law. We deeply regret these violations, and have worked hard to boost awareness of compliance issues in several ways, including publicizing messages from top executives, who also conduct individual interviews with sales staff.

In fiscal 2012, we held four education sessions for 76 sales managers using a group discussion format to address familiar relevant cases. During the Corporate Ethics and Compliance Month, discussion sessions on the Antimonopoly Law were also held in each division and department, with 7,570 employees attending. We intend to improve the compliance awareness of all employees by stepping up auditing and education.

# **Export Control**

For basic export control, we use the Hitachi Standards of Corporate Conduct, which states that we "shall help maintain international peace and security through compliance with trade laws and regulations." We adopted rules for controlling security exports based on this policy in 1987, and we strive for the strictest possible export controls. This means promoting legal compliance and screening for destination countries and regions, as well as end use and end-user of all goods and technologies intended for export. In addition, we promote Group-wide export controls by providing guidance to all Hitachi Group companies on the rules and organizations for export control. Also, we support education and compliance training to make certain that every Hitachi employee follows the same export control policies. In fiscal 2012, we provided practical training on export control through working-level meetings and workshops for Group companies in Europe, China, and India. In fiscal 2012, we held a basic e-learning course on US re-export controls within the Hitachi Group for around 66,000 employees in Japan and we supplied English and Chinese versions of the course to Group companies worldwide. In fiscal 2012, the Hitachi Group committed no material export control violations.

060

Report 2013

# **Information Security**

The Hitachi Group maintains information in a secure way with respect for all regulations. We use our information security management system to safeguard business and personal information of our customers, and Hitachi Group technical information as well as other confidential information. We sustain 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 then inform

The Hitachi Group emphasizes two points that protect personal information and information security in our policies:

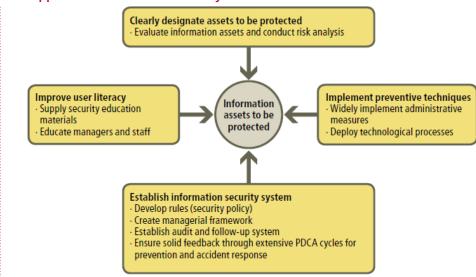
#### (1) Precautionary measures and prompt security responses

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. Our policies make certain that we minimize leaks by promptly contacting customers,

028 Corporate Governance 032 CSR Management

037 Risk Management 041 Compliance

047 Innovation Managemen

052 Intellectual Property

056 Brand Management

chapter 7 Environmental

Report 060

reporting to government agencies, investigating causes, and acting to prevent recurrences. Hitachi Group companies worldwide take the following steps to prevent information leaks: using Hitachi Hibun encryption software and security PCs that do not store data; employing Hitachi Katsubun 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 8,800 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. Consequently, we experienced no information leaks in fiscal 2012.

#### Three Principles for Preventing Leakage of Confidential Information

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.

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 Global Information Security Administration Standards. We have set up PC security and other priority measures in coordination with colleagues in the United States, Europe, Southeast Asia, and China to protect security by using secure shared services.

#### **Protecting Personal Information**

We established a personal information protection management system based on our Personal Information Protection Policy. The roll-out of this system through e-learning courses for all employees and through periodic audits ensures the Company-wide protection and safe handling of personal information.

**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 (renewed for the third time in March 2013). As of March 2013, 69 Hitachi Group companies had received the Privacy Mark. In July 2007, the Odaira Memorial Tokyo Hitachi Hospital became the first corporate medical institution in Japan to become Privacy Mark certified. The Ibaraki

028 Corporate Governance 032 CSR Management

037 Risk Management

047 Innovation Management 052 Intellectual Property 056 Brand Management

Environmental Report 060

chapter 7

046

Hitachi Group Sustainability Report 2013

Hospital Center (located in Japan) was also certified. These hospitals work 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 in keeping 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.



#### **Information Security Audits and Inspections**

The Hitachi Group promotes 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 divisions.

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 298 domestic Hitachi Group companies, and we are in the process of confirming the results. For 517 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 as a voluntary inspection of business unit workplaces. We conduct monthly Confirmation of Personal Information Protection and Information Security Management assessments at approximately 500 operations that handle important personal information. This regular control mechanism ensures effective safety management and implementation.

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

To consistently protect information, 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 courses 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 courses. We provide specific additional training, especially for new employees and managers, and information system administrators. We have prepared a wide range of information security programs based on target and role. We also aim to prevent human error, the prime cause of information security incidents. These programs combat cybercrime by addressing issues such as risk prediction and social engineering.

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

060

Sustainability Report 2013

# **Innovation Management**

Since our founding, the Hitachi Group has actively pursued R&D to fulfill the Corporate Credo of contributing to society through the development of superior, original technology and products. This continuous innovation, with R&D as its core, is the driving force of sustainable growth for the Hitachi Group.

# Research and Development Strategy

The Hitachi Group invested 670 billion yen, approximately 60 percent of the total R&D expenditure of 1,100 billion for FY 2010-2012, in Social Innovation Business areas to accelerate R&D that promotes growth in the global market for this business area. In April 2011, the R&D organization was reformed for the first time in 25 years. Locally led research was expanded by increasing the number of researchers employed in the four research hubs outside Japan, while consolidating the eight research laboratories in Japan into three. In addition, the Technology Strategy Office was established within the Research and Development Group to oversee Group-wide technology strategies and to formulate medium-to-long-term technological and development plans linked with business strategies. Under this new structure, technology developments supporting global Social Innovation Business will be accelerated, and measures put in place to increase the efficiency of R&D.

#### **Global Research and Development Structure**

The organization of the R&D function within Hitachi, Ltd. includes the Technology Strategy Office, the Central Research Laboratory, the Hitachi Research Laboratory, the Yokohama Research Laboratory, the Design Division, and six research bases outside Japan.

The Technology Strategy Office (TSO) prepares medium-to-long-term technology and development plans linking corporate research centers and business divisions in order to accelerate expansion in areas of business priority. By proposing Hitachi-wide strategic projects, the TSO formulates technology strategies to achieve Hitachi's management policies.

Also, our overseas R&D bases will be further enhanced to build a stronger global R&D network. In June 2013, the Hitachi Brazil Laboratory was established in Sao Paulo, Brazil, creating a worldwide seven-hub formation: Japan, Europe, North America, China, India, the rest of Asia, and South America.

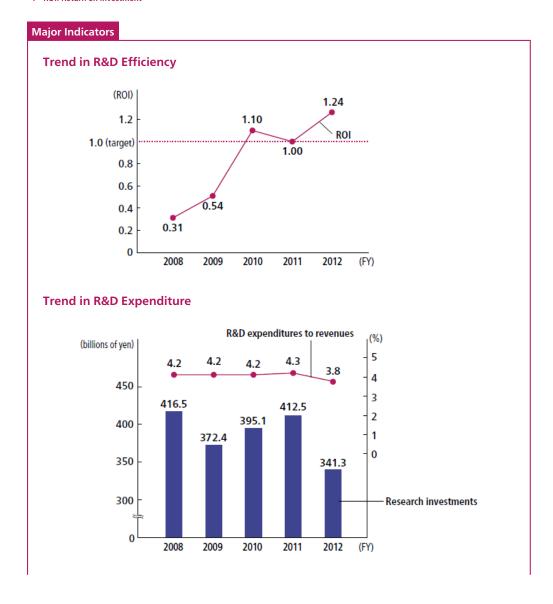
#### **Research and Development Goals**

The R&D expenditure of the Hitachi Group is being maintained at around 4 percent of total revenue. For R&D investment efficiency, the target is to deliver an ROI<sup>\*1</sup> (operating income divided by R&D expenditure) of more than 1.

The number of papers accepted by the Institute of Electrical and Electronics Engineers (IEEE), the world's largest professional technology association, is used as a benchmark for measuring Group technology standards and activities worldwide. In fiscal 2012, the IEEE

accepted 40 research papers from the Hitachi Group, ranking it third in the electronics industry worldwide and first in the electronics industry in Japan.

\*1 ROI: Return on investment



# **R&D Plan and Investment**

At Hitachi, Ltd., 70 percent of R&D expenditure is for sponsored and advance sponsored research from Hitachi in-house companies and Hitachi Group companies, and the remaining 30 percent is for basic and platform research from corporate funds. The goal of sponsored and advance sponsored research is to expand and advance priority businesses, targeting practical application within three to five years. Basic and platform research is centered on the medium-to-long-term Technology Plan, and aims to create innovative technologies forming the basis for future core businesses. In fiscal 2013, 89 percent of basic and platform research will be invested in Social Innovation Business research, and the remaining 11 percent in platform research.

028 Corporate Governance 032 CSR Management

037 Risk Management

047 Innovation Management 052 Intellectual Property 056 Brand Management

chapter 7 Environmental Report 060

# **Enhancing R&D outside Japan**

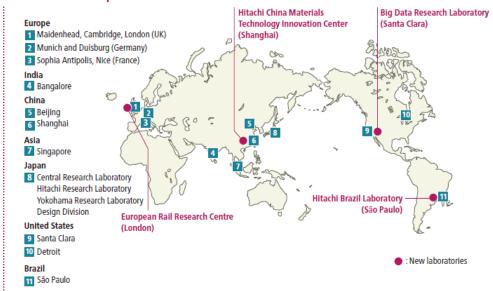
By enhancing the global R&D organization, Hitachi will promote R&D activities based on regional needs as well as incorporating a diverse array of experience, backgrounds and ideas. This global approach will serve as a source of creativity and as a catalyst for innovation with the aim of further expanding overseas business operations.

First, as a human resource initiative, the number of researchers outside Japan will be increased from the current 280 to 400 by fiscal 2015. Further, Hitachi will actively seek to appoint qualified locally employed staff as leaders to accelerate regionally based

Also, the Hitachi Brazil Laboratory was established in June 2013 to expand operations in Brazil which is a focus region for the Hitachi Group. The Hitachi Brazil Laboratory will be Hitachi's seventh regional base to integrate and promote regional R&D, along with Japan, the US, Europe, China, Singapore, and India.

Also, to promote R&D that leverages regional requirements, research centers and laboratories within each regional research base are being enhanced. In October 2012, the European Rail Research Centre was established in the United Kingdom, followed by the Hitachi China Materials Technology Innovation Center in China and the Big Data Research Laboratory in the United States in April 2013.

#### Main Hitachi Group R&D Centers



#### **Main Research Themes in Overseas Research Centers**

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

028 Corporate Governance 032 CSR Management

037 Risk Management

047 Innovation Managemen 052 Intellectual Property 056 Brand Management

chapter 7 Environmental Report 060

# **Noteworthy R&D Achievements**

# **ROPITS: Single-Passenger Mobility-Support Robot for Autonomous Locomotion on Footpaths**

Hitachi is conducting R&D on human symbiotic robots that co-exist with and provide services to people, supporting the needs of a future society with a high proportion of elderly people.

Announced in March 2013, ROPITS (Robot for Personal Intelligent Transportation System) was developed to support short-distance transportation for the elderly or those with walking difficulties. It is a single-passenger robot that autonomously navigates along walkways. Since March 2011, Hitachi has been participating in the Mobility Robot Experiment Special District in Tsukuba City, Ibaraki Prefecture, to make autonomous travel technology more practical. Through pilot tests on real-world walkways, we



Urban vehicle ROPITS

have improved the convenience of robots as a transport support service, as well as their reliability in autonomous travel and the safety of robot-pedestrian interaction. A ROPITS only requires the passenger to specify a pick-up and drop-off point on a smartphone or tablet, then the ROPITS delivers them to their destination.

**WEB** 

Development of single-passenger mobility-support robot ROPITS for autonomous locomotion on footpaths http://www.hitachi.com/New/cnews/130312.html

# Highly Efficient (11 kW) Permanent Magnet Synchronous Motor without Rare Earth Metals

In fiscal 2012, Hitachi, Ltd. and Hitachi Industrial Equipment Systems Co., Ltd. developed a highly efficient 11 kW permanent magnet synchronous motor that does not use magnetic materials containing rare earth metals such as neodymium and dysprosium. Instead, this motor uses an ironbased amorphous metal\*1 in the core of the motor.



Conventional motor (left) and 11kW highly efficient permanent magnet synchronous motor (right)

In 2008, the two companies established the basic technology for a rare earth metal-free motor. To further increase capacity and efficiency, technologies such as structural optimization and core loss minimization were developed and applied to create a medium -capacity (11 kW) motor. Compared with conventional motors of the same class, the new motor is smaller and has an energy efficiency of approximately 93 percent, conforming to the IE4\*2 standard, the highest level in the International Electrotechnical Commission (IEC) efficiency guidelines. The technology will be further developed toward a fiscal 2014 product launch.

027 Message

028 Corporate Governance 032 CSR Management

037 Risk Management

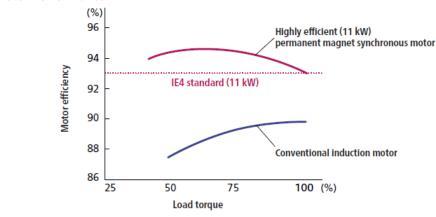
047 Innovation Management052 Intellectual Property056 Brand Management

Environmental Report 060 Social Report 120

A part of this technology was developed under the Rare Metal Substitute Materials Development Project of the New Energy and Industrial Technology Development Organization (NEDO), Japan.

- Amorphous metal: Solidified by rapid cooling, this metal has unique characteristics compared with normal crystalline material.
- \*2 IE4: Currently the highest standard set out in IEC60034-31, the IEC guideline for motor energy efficiency.

#### **Motor Performance**



Report 2013

# **Intellectual Property**

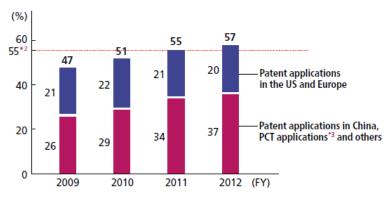
Intellectual Property (IP) is a key element of Hitachi's business strategy. We are developing a global patent portfolio and promoting IP activities focusing on Social Innovation Business. We are also conducting anti-counterfeiting activities to protect the Hitachi brand, and we are working on international standardization to expand our business to other markets.

# **IP Activities Supporting Global Operations**

Our IP activities support global operations, including building a global patent portfolio to prevent other companies from using our technologies without authorization and to demonstrate the advantages of the technologies to customers. In some cases, we use our patent portfolio to forge cross-licensing agreements with other companies, creating smooth business operations without constraint on IPs for those companies.



The goal in building our global patent and IP portfolio was to increase our patent application ratio outside Japan from 47 percent in fiscal 2009 to 55 percent by fiscal 2012. In fiscal 2012 this ratio was 57 percent, achieving ahead of time the 2012 Mid-Term Management Plan goal of an overseas revenue ratio of more than 50 percent.



- \*1 Hitachi, Ltd. and consolidated subsidiaries
- \*2 FY 2012 target

**Key Indicators** 

\*3 The number of PCT (Patent Cooperation Treaty) applications is converted and counted based on the number of countries in which Hitachi is expected to obtain patents.

# **Next Steps**

To efficiently build and maintain a global patent portfolio, we will continue to file PCT applications. We will also conduct IP activities that support our business operations, including anti-counterfeiting programs to protect the Hitachi brand, and we will participate in international standardization to grow markets.

028 Corporate Governance 032 CSR Management

037 Risk Management

# **Intellectual Property: Activities and Results**

#### **Respect for intellectual Property**

We respect the intellectual property rights (IPRs) of others, as we expect them to respect ours. We follow in-house rules\*1 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 IP. If any company is found to have infringed our IPRs, we encourage them to acquire the necessary license, and will take legal action, if necessary.

\*1 In-house rules: The Hitachi Group Codes of Conduct state "We will respect the intellectual property of other parties. We will prevent violations of other parties' intellectual property rights in advance and, for the smooth progress of business, we will investigate other parties' intellectual property rights beforehand when engaged in research, development, design, production and sales of new products or new technologies, and implement appropriate measures when any doubts arise.'

WEB

**Hitachi Group Codes of Conduct** 5.3 Management and Preservation of Company Assets http://www.hitachi.com/about/corporate/conduct/index.html#ank2138315053

## **Anti-Counterfeiting Activities**

Protecting the Hitachi brand is crucial to support our global operations, and the Hitachi brand is now registered as a trademark in more than 200 countries and regions. 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.

The standard anti-counterfeiting measures are to send warnings to manufacturers, distributors, wholesalers and vendors who infringe our IPRs and/or to report these occurences to administrative agencies. Recognizing, however, that the supply of counterfeit products exists only where there is demand, we are also educating consumers about these products. For example, in fiscal 2011 we took part, together with other Japanese companies, in the Third Educational and Advising Event for Primary School Pupils in Beijing on Protection of IPRs hosted by the JETRO Beijing Office and the Education Committee of the Copyright Society of China. At the event, the importance of protecting IP was explained to students at 10 elementary schools in Beijing. We invest significant resources in IP programs for customs officials as the most effective way of preventing infringements, focusing particularly on China and the Middle East. We also hold seminars and workshops, in cooperation with local law enforcement agencies, governments and authorities to seek their assistance with our anti-counterfeiting initiatives.

060

# 054

### Third Educational and Advising Event for Primary School Pupils in Beijing on **Protection of IPRs**

Hitachi Group Sustainability Report 2013



Date: April-June 2011

Location: 10 elementary schools in Beijing, China Hosts: JETRO Beijing, Education Committee of the

Copyright Society of China

Participating companies: Sanrio Co., Ltd, Sony Corporation, Panasonic Corporation, Bandai Co., Ltd., Sanyo Electric Co., Ltd., Canon Inc., Mazda Motor

Corporation, and Hitachi, Ltd.

#### **Anti-Counterfeiting Seminar with Bahrain Customs Officials**



Date: April 8-9, 2012

Venue: Khalifa bin Salman Port, Bahrain

Participants: 18 customs officials

#### **International Standardization Activities**

We support international standardization and commit our employees to serve in key positions within international organizations. For example, Hiromichi Fujisawa is IEC (International Electrotechnical Commission) Vice-President. In fiscal 2012, Yukiyasu Shirasaka, IEC convener\* for power transformers, and Shoichiro Koseki, IEC convener for power electronic systems and equipment, both received a METI Minister's Award at METI's Industrial Standardization Awards for their contribution to technologies developed in Japan being adopted as international standards.

We have established a Hitachi Group Standardization Committee to coordinate international standardization for Group companies. The steering committee\*2 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 working on infrastructure metrics. Yoshiaki Ichikawa, Hitachi Ltd., chairs the subcommittee. In addition, Hitachi and Toshiba Corporation used the top standard system\*3 to help establish an IEC technical committee on Electrical Energy Storage Systems.

- \*1 Convener: Working group chair
- \*2 Steering committee: Headed by the executive officer overseeing R&D and includes CTOs (chief technology officers) of Hitachi in-house companies and the Hitachi Group. The committee is responsible for decision making on cross-departmental and company-wide projects.
- \*3 Top standard system: Japanese Industrial Standards Committee system for making swift international standardization proposals to the ISO/IEC.

Report 2013

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



\*1 CTO: Chief Technology Officer

#### **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 Group 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 status 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 rewarded.

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 receiving patent application rewards within five years of them joining Hitachi.

#### **Cultivating Human Capital**

We drive IPR initiatives forward by cultivating employees who are highly skilled and globally aware. As of April 1 2013, our Intellectual Property Group had 106 registered patent attorneys and six lawyers registered in the US. Every year, we send six employees from our Intellectual Property Group to patent and law offices in the US and Europe for internships.

060

Hitachi builds corporate value by promoting the 2012 Mid-term Management Plan and by improving business performance. To bolster and expand our Social Innovation Business worldwide, we must improve our brand recognition and reputation in every market and establish the Hitachi brand in the Social Innovation Business arena. In fiscal 2013, we will expand our Social Innovation Business globally as One Hitachi in line with the 2015 Mid-Term Management Plan, and pursue global brand management that contributes to achieving that plan. We will increase Hitachi's brand value globally so that we become a company preferred by customers, investors, and outstanding job applicants, which in turn will improve our brand value even more. We will realize this positive cycle across the Hitachi Group and communicate globally with stakeholders toward a fuller understanding of Hitachi to increase the value of our brand.

# **Global Brand Strategy**

For developing Social Innovation Business globally, we need to communicate our Vision to stakeholders. To do this, we will enhance the Hitachi brand value by implementing a Group-wide brand strategy that



globally integrates public relations, investor relations, advertising, the Internet, and CSR activities. In fiscal 2013, we created a new Vision. This Vision, together with the Mission and Values passed on since Hitachi's founding, were articulated as the Hitachi Group Identity. Our focus now, as One Hitachi, will be on promoting international communications, expanding our Social Innovation Business globally, and enhancing Hitachi's brand value. We will also present the Hitachi Group identity to all our stakeholders, building understanding of our direction for the future.

**WEB** 

Hitachi Group Identity http://www.hitachi.com/about/corporate/identity/index.html

# **Evaluating Our Global Brand Strategy**

Every year we conduct surveys to get an objective overview of the strengths of Hitachi's brand in global markets, examining the degree of recognition and the reputation of the Hitachi brand in key markets. We use these findings to review brand initiatives in line with the 2012 Mid-Term Management Plan and assist with the development of regional and business strategies, working to boost brand value.

In fiscal 2012, we conducted surveys in 11 countries.\*1 The Mid-Term Management Plan calls for global expansion of our Social Innovation Business as a key business area, but markets still have a strong perception of Hitachi as a Japanese appliance or consumer products manufacturer. Moreover, while we are better known in some regions, recognition of the Hitachi brand is certainly not high compared with our competitors. We need to further improve that brand recognition and build our image as a Social

028 Corporate Governance 032 CSR Management

037 Risk Management

047 Innovation Managemen 052 Intellectual Property

Report 056 Brand Management 060

Environmental

Innovation company. Also, for our brand communication planned and executed in fiscal 2013, we will measure the effectiveness of the steps taken so far.

057 Hitachi Group Sustainability Report 2013

\*1 The 11 countries surveyed were China, India, Thailand, the Philippines, Myanmar, Malaysia, Germany, France, Poland, Brazil, and South Africa.

060

# **Brand Management: Activities and Results**

### **Improving the Global Brand**

For developing our Social Innovation Business globally, we execute brand advertising campaigns and exhibitions in countries and regions around the world. In fiscal 2012, in China and Brazil, we held the 2012 Dalian Hitachi Exhibition and the Hitachi+Brazil Exhibition. We also conducted brand advertising campaigns in Turkey, Kazakhstan, and Australia

In fiscal 2013, we will execute a new brand advertising campaign based on a unified message in 17 countries and regions to accelerate global expansion along with the announcement of the 2015 Mid-Term Management Plan. In growth markets such as India, Brazil, and the Middle East, where we are focusing on business expansion, we will hold Hitachi Group exhibitions and carry out other communication activities linked to regional business strategies, helping to enhance the Hitachi brand value and expand our Social Innovation Business globally.

#### **Web Management**

We have responded to increased Internet use worldwide by revamping our Hitachi Global site as well as country and regional Web portal sites, \*1 making them the key tools for publishing important information. To convey a consistent Group brand message, we also post content about key business areas and products in these countries and regions as well as on Hitachi Group Social Innovation Business initiatives. In recent years, we have focused especially on building websites in the emerging countries that we have positioned as key markets. In fiscal 2012, we created a South American portal site covering Argentina and Chile, among other countries, and a Sub-Saharan portal site for countries such as South Africa and Kenya. Currently our portal sites are in 28 languages and cover 46 countries and regions.

Responding to the recent surge in people using social media, we have set up the Hitachi Brand Channel on YouTube. <sup>\*2</sup> We have also created a policy for social media use in the Hitachi Group that is the base for a campaign to use social media to strengthen relations with stakeholders.

- \*1 Portal site: Website unifying diverse webpages
- \*2 YouTube: YouTube and the YouTube logo are Google Inc. registered trademarks.



Hitachi Group website (Japanese) http://www.hitachi.co.jp/



Hitachi Group Global website (English) http://www.hitachi.com/

# **Internal Brand Management**

As our employees deal directly with stakeholders, they are important contact points for building the brand. To safeguard the Hitachi brand, it is vital that we engage employees to thoroughly understand and live our values, as well as the Hitachi Group Identity underpinning these values. Therefore we are increasing internal Hitachi brand recognition through global internal initiatives that encourage desirable employee behavior. This includes giving out Inspiration of the Year Global Awards\*1 to programs and people that help improve our brand value. Grand prizes are awarded for outstanding initiatives embodying our Vision in each of our six regions, including activities with strong business growth potential, as well as activities that contribute to local communities through business and that enhance the Hitachi brand value.

027 Message

028 Corporate Governance 032 CSR Management

037 Risk Management

047 Innovation Managemen052 Intellectual Property056 Brand Management

chapter 2 Environmental Report

060

Social Report 120

059 Hitachi Group Sustainability

Report 2013

In fiscal 2012, we launched Hitachi Brand News, \*2 a Hitachi Group newsletter for departments involved in brand communication, so that brand value enhancement by these departments can be shared among Group employees worldwide. In fiscal 2013, we created the Hitachi Vision Book and other documents to convey the new Hitachi Group Identity to employees globally. In addition, we will arrange internal brand education programs around the world.

\*1 Inspiration of the Year Global Awards Applications: 288 from the six regions Area: China, Europe and Africa, India, the Americas, Southeast Asia and Oceania, Japan, etc. Overseas application ratio: 60.8 percent in fiscal 2012 (compared with 18.9 percent in fiscal 2010)

Hitachi Vision Book

http://social-innovation.hitachi.com/ebook/en/

\*2 Hitachi Brand News: Released quarterly. Volume 4 came out in April 2013.

#### **Brand Management**

The Hitachi brand is an important and clear "promise" to all stakeholders of our fundamental contribution, and that includes our management philosophy, social mission, and specific corporate activities. To fulfill this promise, it is essential to continually communicate the Hitachi brand, consistently based on the integral principles of our brand.

#### Managing of the Hitachi Brand Impression

We globally unified the presentation and use of our logo and trademark to maintain a consistent high quality in our messaging and to accurately communicate the values of the Hitachi brand. To roll out our message as a single global entity, or One Hitachi, we have created the Hitachi Group Identification Standards Manual, which outlines how to use the Hitachi logo. We have also integrated visual impressions of the Hitachi brand, by developing a design system for each communications medium.

## Safeguarding the Hitachi Brand

We provide legal protection for the Hitachi brand by working hard to eliminate counterfeit products and parts in such high-risk regions as China, the rest of Asia, the Middle East, and Africa. In countries or regions where brand infringements are particularly widespread, we collaborate with local companies to step up anticounterfeiting programs.

# **Environmental Report**



Wind Power Ibaraki, Co., Ltd.'s Wind Power Kamisu 1 Offshore Wind Farn

# Tackling environmental concerns as a group to resolve energy and environmental issues

The Environmental Report 2013 provides an overview of Hitachi Group environmental initiatives, where we are making steady progress guided by the major policies laid down in our Environmental Vision.

One particular focus in fiscal 2012 was reducing energy use. In response to the call for energy conservation following the Great East Japan Earthquake, in the summer we introduced electricity visualization systems into our main Japanese facilities and offices. Showing employees how much power was being used across Hitachi as a whole in real time raised their awareness of efficient power use and enabled us to cut our peak power consumption by 164 MW in fiscal 2010. We intend to further improve our energy efficiency Group-wide.

We are also communicating globally on environmental issues and company initiatives. We are deeply involved in the World Business Council for Sustainable Development (WBCSD), where our president, Hiroaki Nakanishi, served as co-chair for the ecosystems focus area. We also participate in the Electric Utilities group and the greenhouse gas working group. In South Korea, we took part in the 2012 World Conservation Congress hosted by the International Union for Conservation of Nature, where I gave a presentation on company initiatives, including ecosystem conservation. The Hitachi Environmental Forum was held in India, with government, business and NGO representatives from both countries participating in a discussion of India's environmental issues.

In fiscal 2013, with the Hitachi Group 2012 Mid-Term Management Plan coming to an end and the 2015 Mid-Term Management Plan beginning, we have revised our Environmental Action Plan from the traditional five-year format to three years to better integrate our management and environmental initiatives. Long-term goals are achieved through the success of many short- and mediumterm programs, so we have set in place mechanisms to steadily manage these milestones.

At the Hitachi Group, we are committed to working as one to address global responses to environmental issues, helping to reduce the environmental burden through our business activities.



Shigeru Azuhata Executive Vice President and Executive Officer Hitachi, Ltd. Hitachi Group Chief Environmental Strategy Officer

# **Environmental Activities Worldwide**

Hitachi Group Sustainability Report 2013

In the Hitachi Group, we contribute to environmental protection by acting globally.

# Europe



#### Advanced distribution center

In the Netherlands, a new distribution center went into operation that is equipped with a solar power generation system with an output of 1.6 megawatts, the largest project of its type in the Hitachi Group.

(Hitachi Data Systems)

#### Contributions to CO<sub>2</sub> Emission Reduction



#### **Protecting honey bees**

Responding to the decline in honey bee numbers in France, believed due in part to the use of pesticides, employees have started a volunteer bee raising group, helping to increase awareness of ecosystem preservation. (Clarion Europe S.A.S.)

#### **Environmental Communication**



#### Reducing annual water use

At a storage system manufacturing center in France, the latest Hitachi chillers were introduced, cutting annual water use in half, compared with the previous fiscal year. (Hitachi Computer Products (Europe) S.A.S.)

Water Conservation



### Americas



#### Startup of CCS demonstration experiment project

Hitachi has jointly built with SaskPower in Canada's Saskatchewan Province a CO<sub>2</sub> recovery demonstration plant and started working on a Carbon Dioxide Capture and Storage (CCS) experiment project.

Contributions to CO<sub>2</sub> Emission Reduction



#### **Eco-Engineering Forum**

This annual environmental forum is held in Washington, DC. With water as this year's theme, stakeholders from government agencies, private enterprises, research institutes, and NGOs discussed water issues facing the United (Hitachi, Ltd.)

**Environmental Communication** 



#### Improving energy efficiency

By promoting factory-wide efficient energy use, a 45% reduction was achieved in the energy consumption rate per unit production compared with the base year of fiscal 2005. (Hitachi Computer Products (America), Inc.)

**Creating Eco-Factories & Offices Select** 

#### chapter 1 Governance Report

#### chapter 2 | Environmental Report

Global CO<sub>2</sub> emissions

(by country and region/2010) More than 5 billion tonnes

1 to 5 billion tonnes

Source: CO<sub>2</sub> Emissions from Fuel Combustion Highlights (2012 Edition),

500 million to 1 billion tonnes

Less than 100 million tonnes

100 to 500 million tonnes

- 062 Environmental Activities Worldwide
- Corporate Environmental Management Strategies and Initiatives
- 071 Environmentally Conscious Products and Services
- Environmentally Conscious Production 105 Environmental Management Framework and Communication

# China



#### **Promoting water recycling**

An additional wastewater treatment system was introduced to cope with production line increases. The treated wastewater is used for watering the factory grounds and other needs, helping to promote water recycling.

(Guangzhou Hitachi Unisia Automotive Parts, Co., Ltd.)

**Water Conservation** 



#### Starting up a denitrification catalyst plant

Hitachi developed unique denitrification catalysts used to reduce air pollution, and the high-performance, long-life catalysts are winning high praise in the world. Production of the catalysts has began in China, where they are much needed. (Babcock-Hitachi (China))

**Development and Expansion of Eco-Products** 



#### Tree planting

We have been planting trees in Shenzhen since fiscal 2009, working with government officials and other groups. In fiscal 2012, we planted 

Japan

**Environmental Communication** 

#### Global CO<sub>2</sub> emissions (by country and region/2010)

More than 5 billion tonnes

1 to 5 billion tonnes

500 million to 1 billion tonnes

100 to 500 million tonnes

Less than 100 million tonnes

Source: CO2 Emissions from Fuel Combustion Highlights (2012 Edition), IEA

# **Rest of Asia**



#### **Holding Hitachi Environment Forum**

An environment forum was held in New Delhi, India. Invitees included government officials, customers, and business partners. In addition to discussions on pressing environmental issues, Hitachi Group products and services that contribute to sustainable urban development were introduced. (Hitachi Pvt.Ltd.India)

#### **Environmental Communication**



#### **Natural Barriers in Malaysia**

Under the supervision of local government officials, employees spent two days planting 60 coconut trees and 500 mangrove seedlings, which act as a natural barrier against the sea. (Hitachi Air Conditioning Products (Malaysia)



### **Promoting waste recycling**

Industrial and general waste materials are being recycled. After careful separation and sorting, a recycling route is established for each category, resulting in a final disposal rate of less

(Hitachi Automotive Systems, Ltd., Sawa Works)

#### **Creating Eco-Factories & Offices Select**



#### Launching an environmentally conscious data center

Hitachi Okayama Center No. 3 was inaugurated as a leading-edge environmentally conscious data center. To lower the environmental burden, this new center uses an optimal combination of a highly efficient air-conditioning system and the building's structure, with a double outer layer and insulating roof paint.

**Development and Expansion of Eco-Products** 

#### **Environmental Communication**

chapter 1

Report

026

Governance

#### chapter 2 | Environmental Report

- 062 Environmental Activities Worldwide
- Corporate Environmental Management Strategies and Initiatives
- 071 Environmentally Conscious Products and Services

Operating thermal power plants

Singapore's Senoko Energy started up the Stage 2 Repowering Project. This is the first such

project to be carried out by the EPC consortium, of which Hitachi is a member, and involved

Contributions to CO<sub>2</sub> Emission Reduction

removing, reconstructing, and using existing

Environmentally Conscious Production

(Hitachi, Ltd.)

105 Environmental Management Framework and Communication

# **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.

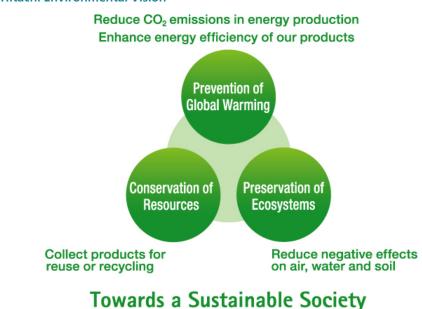
Guided by the Environmental Vision, aimed at achieving a sustainable society, Hitachi Group environmental management is determined to achieve the goals of the long-term plan Environmental Vision 2025 and our Environmental Action Plan.

# The Hitachi Environmental Vision and Long-Term Plan Environmental Vision 2025

#### The Hitachi Environmental Vision

Our environmental vision describes the aim of our environmental management as "achieving a sustainable society." The world's population is expected to reach 9.6 billion by 2050,\*1 and worldwide GDP continues to grow. Along with the increase in economic and social activities has come growing demand for energy, water, minerals, and other resources, worsening pollution and environmental problems such as climate change. 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.

#### The Hitachi Environmental Vision



Sustainability Report 2013

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 drew up the long-term plan Environmental Vision 2025, looking 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\*1 (IPCC) concluded in its Fourth Assessment Report that global warming is real and that human activities are involved in this warming. The area of sea ice in the Arctic Ocean in 2012 was the smallest ever recorded due to this warming, shrinking by an amount double the size of the Japanese archipelago since 2007, the year the ice was at its smallest size in the past.\*2 The report further stated that CO<sub>2</sub> emissions will have to peak by 2015 and be reduced by 50 to 85 percent of their 2000 levels by the year 2050 to meet the minimum stabilized density scenario (450 ppm) for greenhouse gases.

The International Energy Agency (IEA) has drawn up a CO<sub>2</sub> emission reduction scenario allocating the amount of reductions for the supply and demand of power to meet the 450 ppm stabilization scenario. Hitachi conducts business widely in both of these sectors.

(billions of Current policies scenario tonnes/year) ---- 450 ppm scenario 45 41.2 billion tonnes (sector and reduction amount) 40 Necessary reduction 11.6 billion Power generation 35 tonnes 16.4 billion tonnes 30.4 30 Total final consumption, etc. 4.8 billion (including industry, tonnes transport, buildings) 25 24.8 billion tonnes 2010 Based on energy-related CO<sub>2</sub> emissions in IEA World Energy Outlook 2012

World Outlook for Energy-Related CO<sub>2</sub> Emissions and Reduction Scenarios

For this reason, the long-term plan Hitachi Group Environmental Vision 2025 targets the prevention of global warming, one of the issues that the world is facing today, and states our goal of helping reduce annual CO<sub>2</sub> emissions by 100 million tonnes by 2025 through Hitachi products and services.

This means that as we reduce CO<sub>2</sub> emissions through greater efficiency and other means, our contribution to curbing CO<sub>2</sub> emissions through the use of our products and services will be 100 million tonnes per year by 2025 compared with the products of the base year, fiscal 2005. The target of 100 million tonnes was calculated based on growth strategies in each business sector. Some 70 percent of the reductions are being targeted in the power sector, 20 percent in the industrial sector, and 10 percent in the transportation, commercial, and residential sectors. 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.

066 Hitachi Group Sustainability Report 2013

- \*1 IPCC: Intergovernmental Panel on Climate Change
- \*2 According to observations by the Japan Aerospace Exploration Agency (JAXA)

#### WEB

Contribution to CO2 emissions reduction through product use and development and expansion of Hitachi Eco-Products

http://www.hitachi.com/environment/activities/ecoproducts/index.html

#### **WEB**

**Record shrinking of Arctic Sea ice** 

http://www.satnavi.jaxa.jp/project/gcom\_w1/news/2012/120920.html

#### **Environmental Action Plan**

#### **Overview of Environmental Action Plan**

Hitachi has adopted environmental action plans every five years to define specific action items and targets for achieving the Environmental Vision and to promote the long-term plan Environmental Vision 2025. The Third Environmental Action Plan was launched in fiscal 2011 as a five-year plan. However, this was revised to a three-year plan in fiscal 2013 to respond quickly to changes in the external environment and to carry out the plan in line with the Mid-Term Management Plan of the Hitachi Group for the fiscal years 2013 to 2015. This new Third Environmental Action Plan covers the years from 2013 to 2015.

Third Environmental Action Plan in Fiscal 2012: Achievements http://www.hitachi.com/environment/activities/actionplan/fy2012.html

WEB

Third Environmental Action Plan for 2013 to 2015: Targets http://www.hitachi.com/environment/activities/actionplan/fv2013.html

#### 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
- 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 wide-view about society activities.
- 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.

chapter 3

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.

068 Hitachi Group Sustainability Report 2013 In fiscal 2012, the second year of the plan, we fell short of our targets for the first item but were able to achieve our targets for the remaining items. See pages corresponding to each item for details of our initiatives.

Item	Action goals	Indica	ators	Fiscal 2012 targets	Fiscal 2012 results	Achieve- ment level
Becoming an envi	ronmental value crea	ation company				
Contribute to 100 million tonnes CO <sub>2</sub> emissions reduction through products and services		Annual CO <sub>2</sub> emissions reductions through products and services		23 million tonnes [100 million t/ FY 2025]	22.74 million tonnes	**
Eco-Mind & Globa	l Environmental Mar	nagement				
Establish environmental management systems	Raise the level of environmental activities (GPs: green points)	GPs in GREEN 21 Environmental Activity Evaluation System		448 GPs	489 GPs	***
	Ecosystem (biodiversity) preservation	Conduct assessment on ecosystem preservation; propose strategies for ecosystem preservation (in some operations)		Trial assessment of ecosystem preservation	Trial assessment	***
Next-Generation F	Products and Services	5				
Promote Eco-Products	Expand Hitachi	Percentage of Hitachi Eco-Product sales		81%	84%	***
	Eco-Products lineup	Number of models in Eco-Products Select program		70 models	129 models	***
Environmentally C	Conscious Factories a	nd Offices				
Build industry's most advanced factories and offices	Promote Eco-Factory & Offices Select certification	Penetrate significance and role of Eco-Factories & Offices Select Eco-Factory Select certification		Expansion of certification	New certifications: 11 Continuation certifications: 15 Total: 26	***
Prevent global warming	Reduce CO <sub>2</sub> emissions	Rate of reduction in CO <sub>2</sub> emissions (base: FY 1990, Japan)		17%	30%	***
	Reduce CO <sub>2</sub> emissions per unit production	Rate of reduction in CO <sub>2</sub> emissions per unit production (standard goals for in-house and group companies, base: FY 2005, global)		7%	22%	***
Reduce energy used in transportation	Reduce energy for shipping per unit production	Rate of reduction in energy for shipping per unit production (base: FY 2006, Japan)		13%	19%	***
Use resources efficiently	Reduce waste generation per unit production	Rate of reduction in waste generation per unit production (base: FY 2005)	High Functional Materials Group	9%	9%	***
			Assembly Industry Group (other than High Functional Materials)	16%	16%	***
	Use water effectively	Rate of reduction in water use per unit production (base: FY 2005, outside Japan)		18%	52%	***
Reduce VOC*1 atmospheric emissions	Decrease ratio of VOC atmospheric emissions (emissions/used amounts)	Ratio of VOC atmospheric emissions (emissions/ used amounts)		6.3%	6.3%	***
Worldwide Enviro	nmental Partnership	S		•		,
Global citizenship program	Social contributions through environmental activities	Carrying out environmental communication as the flagship activity of each in-house or group company		Expansion of activities	Expanded activities	***

\*1 VOC: Volatile Organic Compounds

◆◆◆ : Achieved ◆◆ : Partially achieved

# Third Environmental Action Plan for 2013 to 2015: Targets

To give a more prominent role to environmental strategy within our overall management strategy, the Third Environmental Action Plan was changed to a threeyear plan in line with the Mid-term Management Plan of the Hitachi Group for the fiscal years 2013 to 2015, and the plan was revised. Responding to recent situation, indicators for some items are revised and targets are set higher.

Item	Action goals	Indicators	Fiscal 2013 targets	Final fiscal year (2015) targets		
Becoming an envi	ronmental value crea	ation company				
Contribute to 100 million tonnes CO <sub>2</sub> emissions reduction through products and services		Annual CO <sub>2</sub> emissions reductions through products and services	24 million tonnes	35 million tonnes (100 million t/FY2025)		
Eco-Mind & Globa	l Environmental Mar	nagement				
Establish environmental management systems	Raise the level of environmental activities (GPs: green points)	GPs in GREEN 21 Environmental Activity Evaluation System	512 GPs	640 GPs		
	Ecosystem (biodiversity) preservation	Assessment of ecosystem preservation	Assessment of ecosystem preservation	Completion of ecosystem preservation assessment		
Next-Generation Products and Services						
Drawata Faa Dradusta	Expand Hitachi Eco-Products lineup	Percentage of Hitachi Eco-Product sales	84%	88%		
Promote Eco-Products		Number of models in Eco-Products Select program	140 models	180 models		
Environmentally 0	Conscious Factories a	nd Offices				
Build industry's most advanced factories and offices	Promote Eco-Factory & Offices Select certification	Eco-Factories & Offices Select certification	Expansion of certification	Average of one or more certifications per in-house and group company		
Prevent global warming	Reduce energy used per unit  Reduction in energy used per unit (Reduction in CO <sub>2</sub> emissions per unit) (base: FY 2005, global)		11% (12%)	15% (16%)		
Use resources efficiently	Reduce waste and reusable waste generation per unit	Reduction in waste and reusable waste generation per unit (base: FY 2005, global)	19%	23%		
	Reduce water used per unit	Rate of reduction in water used per unit (base: FY 2005, outside Japan)	26%	30%		
Manage chemical substances	Reduce VOC*1 atmospheric emissions per unit	Rate of reduction in VOC atmospheric emissions per unit (base: FY 2006, global)	38%	40%		
Worldwide Enviro	nmental Partnership	os				
Global citizenship program	Social contributions through environmental activities	Carry out environmental communication as the flagship activity of each in-house or group company	Expansion of activities	Achieve one or more flagship activity per in-house and group company		

<sup>\*1</sup> VOC: Volatile Organic Compounds

# **Environmentally Conscious Products** and Services

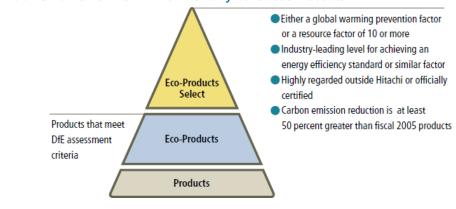
To reduce the environmental burden of products and services, we take steps to help reduce CO<sub>2</sub> emissions through products, conserve resources, and manage chemical substances. We assess each of these factors at the design and development phase, and designate those products that meet the standards as Eco-Products, and promote the development of environmentally conscious products and services.

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

We develop environmentally conscious products called Eco-Products as part of our efforts to make the burden on the environment of our products and services as small as possible. Eco-Products that meet even more demanding requirements are designated as Eco-Products Select.

Eco-Products must meet specific environmentally conscious criteria for the design and development of products and services. These criteria are set in our Assessment for DfE (Design for Environment), which is used for the evaluation process. To make all our products and services Eco-Products by fiscal 2025, we have set targets for raising the Eco-Product sales ratio, which is the ratio of Eco-Product sales to total product sales.

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



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**Development of Eco-Products** 

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

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**Development of Eco-Products Select** 

http://www.hitachi.com/environment/activities/ecoproducts/promote/index.html#promote04

#### **Activities and Results**

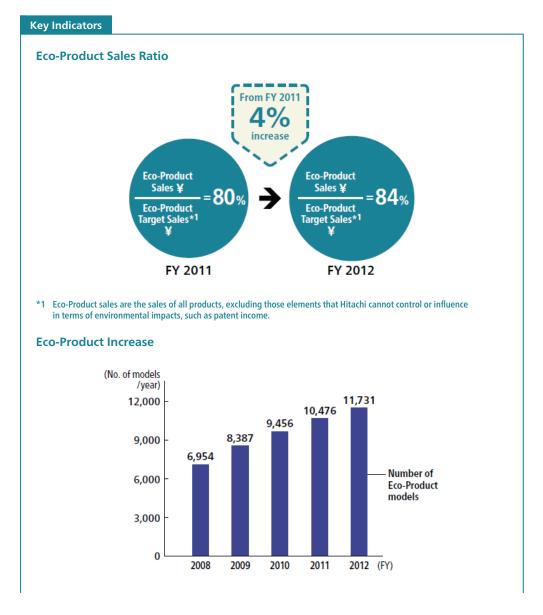
In fiscal 2012 we created a Chinese language version of the Eco-Product registration (database) system in addition to the English and Japanese versions, to enable registering the results directly from product designers outside Japan. These initiatives helped increase the number of models designated as Eco-Products to 11,731, up 1,255 from the previous fiscal year, and our Eco-Product sales ratio to 84 percent, topping our goal of 81 percent.

Governance Report chapter 2 | Environmental Report

061 Message

062 Environmental Activities Worldwide 064 Corporate Environmental Management Strategies and Initiatives 071 Environmentally Conscious Products and Services

086 Environmentally Conscious Production 105 Environmental Management Framework and Communication



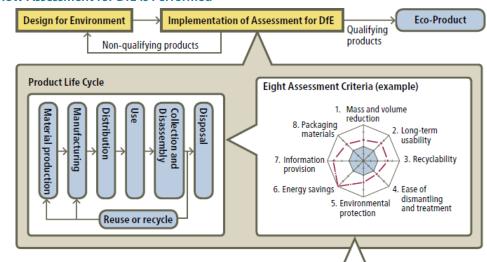
#### **Development of Eco-Products**

In 1999, we introduced Assessment for DfE (Design for Environment), which sets specific environmentally conscious criteria for designing and developing products and services to minimize their environmental burden. Products that meet DfE standards are designated as Eco-Products.

In Assessment for DfE, the environmental load for each product life cycle stage—from material procurement to production, distribution, use, and disposal—is assessed using eight DfE criteria, including environmental protection measures and energy saving. 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 more.

105 Environmental Management Framework and Communication

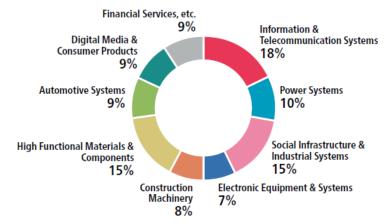
Hitachi Group Sustainability Report 2013



#### Eight Criteria Used to Quantitatively Assess Environmental Load at Each Stage of the Product Life Cycle DfE assessment criteria (examples) Life cycle stage (examples) Focal points of assessment (examples) Material production, manufacturing Size and weight reduction, yield of parts and materials, assessment of mass and volume reduction of the product 1. Mass and volume reduction 2. Long-term usability Upgradability, ease of maintenance and repair, durability, reliability Selection of materials and parts that are reusable or recyclable, use of recycled resources, recyclability rate 3. Recyclability Reuse or recycling Structure for easy disassembly, ease of separation, reduction of disassembly time, ease of collection and transportation, safety during handling, ease of shredding 4. Ease of dismantling Manufacturing, collection and disassembly & treatment Material production, Environmental protection of parts and units, safety of equipment 5. Environmental manufacturing, collection and disassembly, disposal and materials for maintenance, environmental protection in the manufacturing process, environmental protection for facilities protection Manufacturing, Energy-saving design of products, energy saving in production process, energy saving in distribution 6. Energy savings use, collection and disassembly, disposal 7. Information Use, collection and Information provision to requesting parties, mechanism for information provision disassembly provision Reduction in mass and volume of packaging materials, recycling of packaging materials, ease of collection and transportation of packaging materials, ease of disposal of packaging materials, environmental protection during treatment, and final disposal of packaging materials Distribution 8. Packaging materials

#### Fiscal 2012 Breakdown of Eco-Products by Sector and Examples

U / 4 Hitachi Group Sustainability Report 2013



Sector	Key products	Sector	Key products
Information & Telecommunication Systems		High Functional Materials & Components	00
	Storage		Anisotropic conductive films
Power Systems	Thermal power systems	Automotive Systems	Electronic brakes for automobile
Social Infrastructure & Industrial Systems	Elevators	Digital Media and Consumer Products	
Electronic Equipment & Systems	Semiconductor measurement electron microscopes	Financial Services, etc.	Washer-dryers  Logistics systems
Construction Machinery	Hydraulic excavators		

#### **Development of Eco-Products Select**

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) be highly rated outside the company or officially certified, or (4) have a carbon emission reduction 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 reference products that were sold in fiscal 2005, in principle.

Chapter 1
Governance
Report
026

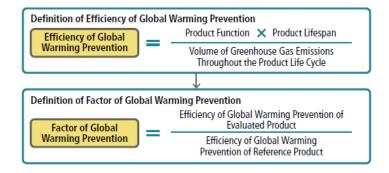
We are committed to increasing the number of Eco-Product Select models. In fiscal 2012, 129 models were designated Eco-Products Select, well above the target of 70 models.

\*1 Energy efficiency standard achievement rate: Based on the Energy Conservation Law (Act on the Rational Use of Energy), 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.

Hitachi Group Sustainability Report 2013

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

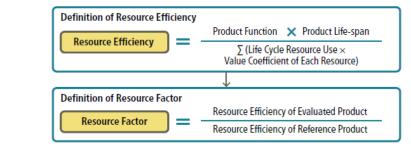
The global warming prevention factor indicates the amount of improvement in efficiency of global warming prevention compared with a reference product. The efficiency of global warming prevention is based on the concept of environmental efficiency that balances the value of products contributing to the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



Hitachi Group Sustainability Report 2013

#### **Examples of Eco-Products Select**

Refrigerator-freezers with Vastly Improved Energy Savings

		, , , , , , , , , , , , , , , , , , ,
	Product:	R-C6700 and 13 other models in the Vacuum-Compartment series (Hitachi Appliances, Inc.)
	Environmentally Conscious Features and Characteristics	Energy-saving measures include Frost Recycle Cooling, which cools the interior using air cooled by frost forming on the evaporator during operation; refrigerant valve control that switches the flow path of high-temperature refrigerant to reduce the inflow of heat into the compartment; and a flexible vacuum insulation panel design that keeps heat out. The series as a whole boasts an energy efficiency standard achievement rate of 256 percent or more (2010 standard).
Evaluations  Conservation Grand Prize 2012 for products and business r products category) (11 models out of 14 models in the Vacuum-Compartment		(11 models out of 14 models in the Vacuum-Compartment series: R-C6700, R-CK6700, R-C6200, R-C5700, R-C5200, R-C4800, R-SF620CM, R-SF570CM, R-



Refrigerator R-C6700

#### Wind Turbine Generating System with Reduced Environmental Burden

Product:	HTW2.0-80 2 MW Downwind Wind Turbine Generating System (Power Systems Company, Hitachi, Ltd.)	
Environmentally Conscious Features and Characteristics	- Adopting downwind turbine technology with the rotor located on the downwind side of the tower, it can generate 2 to 8 percent more power than upwind models with the rotor located on the upwind side of the tower when used in mountainous or hilly regions where updrafts are common, making it well suited to the Japanese terrain. 2 MW is the largest capacity of any previous model of this type.  - The improved capacity achieved by using the downwind design and space savings gained from putting the converter inside the tower, along with other measures, help to reduce the environmental burden throughout the life cycle, from manufacturing to operation and disposal.	
Third-Party Evaluations	Chairperson's Award, Eco-Products Awards Steering Committee, 9th Eco- Products Awards (2012)	



Wind Turbine Generating System

#### **Addressing Our Carbon Footprint**

The Carbon Footprint of Products (CFP) is the CO<sub>2</sub> equivalent of the total amount of greenhouse gases (GHGs) emitted over the entire life cycle of a product or service—from procurement of raw materials through to disposal and recycling. Making the GHG emission amount visible in this way boosts people's 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), launched in 2012, continuation of the CFP Pilot Project run by the Japanese Ministry of Economy, Trade and Industry (METI) and other ministries. In December 2012, we were authorized to display the CFP label on our OCR\*1

CFP label on Hitachi Unified Storage150 Compared to conventional model



Compared to conventional model (October, 2008)

 Reduction of CO<sub>2</sub> emissions — Carbon Footprint of Products per TB×year [TB year] http://www.cfp-japan.jp CR-C I 03-12003

were authorized to display the CFP label on our OCR\*1 scanners, following earlier approval for use on servers and storage equipment. For each of these products we are able to show the CO<sub>2</sub> reduction rate per function (per page in the case of OCR scanners) compared with conventional products. These products and their CFP labels were on display at Eco-Products 2012 held from December 13 to 15, 2012.

\*1 OCR: Optical Character Reader







PC Server HA8000/RS110 x L2

Hitachi Unified Storage 150

OCR Scanner HT-4161

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

In 1999, Hitachi introduced an environmental information labeling system that uses symbols and datasheets to provide environmental information on environmentally conscious products. Hitachi's environmental mark indicates that Assessment for DfE has shown the product to be an Eco-Product, informing stakeholders that the product's environmental burden has been reduced. Our website also discloses environmental information, such as datasheets that include power consumption for each environmentally conscious product and case studies of products that helped to improve environmental efficiency.



Hitachi's environmental mark

WEB

Lists and datasheets of Eco-Products http://www.hitachi.com/environment/ecoproducts/

**WEB** 

Environmental Efficiency of Hitachi Products Based on Factor X (PDF, 5.06 MB) http://www.hitachi.com/environment/library/pdf/factorx\_en.pdf

#### **Next Steps**

To achieve our goal of boosting the Eco-Product sales ratio to 88 percent by fiscal 2015, we will work on developing more Eco-Products that will help solve energy and environmental problems throughout the world, and we will strive to expand sales through product advertising, achieving two aims: business expansion and environmental protection.

Also, for Eco-Products Select, we have set a target of 180 models by fiscal 2015, as we do our best to reduce greenhouse gas emissions throughout the product life cycle.

#### **Hitachi Products Helping to Reduce CO2 Emissions**

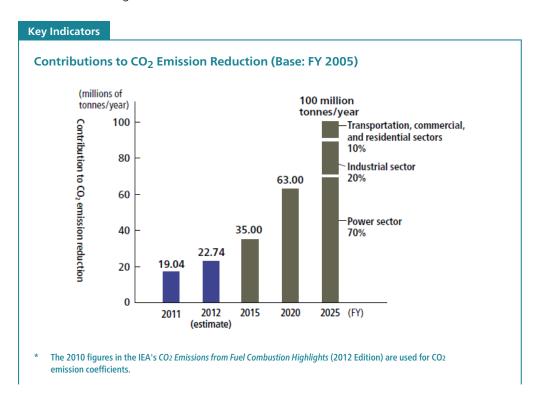
The long-term Hitachi Group Environmental Vision 2025 states our goal of helping to reduce annual CO<sub>2</sub> emissions by 100 million tonnes by 2025 through Hitachi products and services.

This means that as we reduce  $CO_2$  emissions—by improving the environmental efficiency of products and by other means—our contribution to lowering  $CO_2$  emissions through the use of our products and services by 2025 from the base year of fiscal 2005 will be 100 million tonnes annually.

To achieve our targets for contributing to reduced CO<sub>2</sub> emissions, we have set as our leading indicator to make all of our products Hitachi Eco-Products with a reduced burden. We are working with partners in global markets to expand business opportunities, while we develop environmentally conscious products and create new businesses.

#### **Activities and Results**

Our contribution to  $CO_2$  reduction in fiscal 2012 was 22.74 million tonnes. A wide range of products and services contributed to the reduction in emissions, including highefficiency thermal power plants and inverters, energy-saving information systems, and parts and materials for use in energy-saving products. After the Great East Japan Earthquake in 2011 our plans for installing electric power facilities were altered, and we fall short of the targeted amount of 23 million tonnes.



**WEB** 

Details of methods for calculating the contribution of Hitachi products and services to the reduction in CO2 emissions http://www.hitachi.com/environment/activities/third/method.html

#### Main Products Contributing to CO<sub>2</sub> Emission Reductions in Fiscal 2012

Hitachi Group Sustainability Report 2013

# High-efficiency Gas Turbine Generators at Kansai Electric Himeji No. 1 Power Station (Power Systems Company, Hitachi, Ltd.)





Two gas turbine generators went into commercial operation in August 2012 at the Himeji No. 1 thermal power station of the Kansai Electric Power Co., Inc. Delivered to Kansai Electric for the first time, this simple cycle generation system uses high-efficiency H-25 gas turbines.

The decision to install this equipment was made in January 2012 as a measure for boosting supply capacity in the summer of 2012 as the utility struggled to meet demand. The plant was therefore built in a very short time, being completed in approximately four months from the start of construction through to commercial operation. The new plant will contribute to an annual reduction in CO<sub>2</sub> emissions of 37,000 tonnes.\*1

\*1 Compared with CO2 emissions per unit power of a conventional gas turbine (as of 2005)

#### Multi-Split Air-Conditioning System for Buildings (Hitachi Appliances, Inc.)



Multi-Split Air-Conditioning System for Buildings FLEXMULTI High Efficiency

The FLEXMULTI High Efficiency building air-conditioning system integrates several indoor units with one outdoor unit. The modular outdoor units can be combined as needed. A compressor performance at low speed is improved by optimizing the slow-rotation efficiency of the concentrated winding DC brushless motor. This advanced technology

and an enhanced refrigeration cycle control sharply reduce annual power consumption. For the 28.0 kW high-efficiency model (RAS-AP280DG1, with seasonal power consumption of 4,579 kWh/year\*1), the contribution to the annual reduction in CO<sub>2</sub> emissions is 0.9 tonnes per system.\*2

- \*1 The RAS-AP280DG1 is a fiscal 2012 model, which was replaced in fiscal 2013 by the RAS-AP280DG2.
  Calculation Conditions
  JRA4048: Data for 2006 (Tokyo, office building, cooling from April 16 to November 8, heating from December 14 to March 23, 8:00 a.m. to 8:00 p.m.) Seasonal power consumption was calculated under the standard conditions set by the Japan Refrigeration and Air Conditioning Industry Association. Actual results may vary with the locale
- \*2 Compared with 2005 model RAS-NP280F5 (Seasonal power consumption: 6,783 kwh/year) Hitachi calculation based on JRA4048: 2006 (Tokyo, office building)

## PC Server HA8000/RS220 (Information & Telecommunication Systems Company, Hitachi, Ltd.)



PC Server HA8000/RS220

Hitachi, Ltd. servers use the latest processors and have large memory capacities. An array of power-saving techniques minimize the power consumption of IT equipment following the recent explosive growth in data volume. The BS500 Blade Server and HA8000/RS220 PC Server, for example,

reduce overall power by employing high-efficiency 80 PLUS® Platinum power supplies (certified conversion efficiency of 94% or higher\*1) along with power capping function to control processor performance so that it does not exceed set power consumption levels. The BS500 and HA8000 rack servers guarantee operation up to 40°C by efficiently

Governance Report 026 chapter 2 | Environmental Report

061 Message

062 Environmental Activities Worldwide 064 Corporate Environmental Management Strategies and Initiatives 071 Environmentally Conscious
Products and Services

Products and Services
086 Environmentally Conscious Production
105 Environmental Management
Framework and Communication

chapter 3 Social Report 120

080 Hitachi Group Sustainability Report 2013

cooling internal components while conventional servers guarantee it only up to 35°C, and reduce the need for air conditioning in a server room. Due to the increased information processing capacity and power-saving design, HA8000/RS220 contributes to an annual reduction in CO<sub>2</sub> emissions of 14.2 tonnes per server.\*<sup>2</sup>

- \*1 At a power supply load factor of 50%
- \*2 Comparison of fiscal 2012 model HA8000/RS220 with fiscal 2005 model HA8000/130W

#### **Next Steps**

We will continue to develop and popularize products that help to reduce CO<sub>2</sub> emissions, contributing to the prevention of global warming through technology.

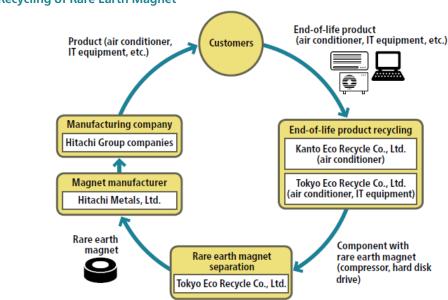
#### **Recycling Product Resources**

To promote resource recycling, the Hitachi Group is developing recycling technologies and creating and operating systems for the reuse and recycling of end-of-life products. We are working steadily on solving the difficult problems one at a time for completing the cycle from product manufacturing to taking back end-of-life products, recycling resources, and using recycled materials.

#### **Rare Earth Magnet Separation and Recycling**

In the past, it has been difficult to safely and cheaply extract rare earth magnets due to their strong magnetic fields. So, reusing these valuable resources has not been successful. We have developed a technology–applicable to hard disk drives and air conditioner compressors–that partially automates disassembly, highly efficiently separating rare earth magnets from these products after degaussing the magnets. The recovered rare earth magnets are provided to magnet manufacturers, who use them to make new products.

#### **Recycling of Rare Earth Magnet**



#### **Recycling and Reusing Information/Telecommunications Products**

End-of-life IT products need to be handled carefully due both to the need for information security and the safe disposal of waste materials. Through our sales division, we propose plans to our customers for taking back end-of-life IT products for recycling and reuse. The hard disk drives that are taken back are physically destroyed and their rare earth magnets are retrieved so that we can recycle these resources. In fiscal 2012, we extracted 2,620 kg of rare earth magnets from approximately 200,000 hard disk drives.



Taking back of IT products

#### **Recycling Construction Machinery**

Hitachi Construction Machinery Co., Ltd. led the industry in recycling fabricated counterweights, traditionally considered difficult to recycle, to realize a material cycle. The company recovered and recycled around 1,300 tonnes from fiscal 2006 to fiscal 2012. Construction machinery counterweights are used to balance machines and are made by casting or are fabricated from metal. Cast metal counterweights have traditionally been recycled because of their resource value. Fabricated counterweights, however, contain filler material such as low-purity iron ore and scrap metal\*1 within the steel outer shell, so they were disposed of as industrial waste. Hitachi Construction Machinery passes the end-of-life fabricated counterweights to a recycling specialist for separation. A counterweight manufacturer then uses the recycled materials to make counterweights which Hitachi Construction



082 Hitachi Group Sustainability Report 2013

\*1 Scrap from steel plate cutting or stamping

Machinery buys and uses.

WFR	Managa

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 have also been using our Integrated Management System for Chemical Substances Contained in Products, created in 2005, as a way to gather and send out information about chemical substances contained in products.

We will continue to revise and improve our regulations and product information gathering procedures to ensure compliance with REACH\*1 and other regulations. Briefings are held in Japan and other countries to ensure that regulations are understood and actions are taken throughout the Hitachi Group and to educate the employees who are responsible. Starting from April 2013, we modified the list of Voluntarily Controlled Chemical (VCC) Substances; 17 prohibited substances (Level 1) and 20 controlled substances (Level 2) are listed.

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

Classification	Application	Substance (Group) Names	
Level 1 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 paraffirs (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)	
Level 2 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, fluorinebased 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 2012 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 about chemical substances across the supply chain via the Integrated Management System for Chemical Substances Contained in Products. As of March 31, 2013, chemical substance information for more than a million parts and products was registered in this integrated management system.

<sup>\*1</sup> REACH regulation: The European Union regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals

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

084 Hitachi Group Sustainability Report 2013

Customers/ society Suppliers Integrated Management System for Chemical Substances Contained in Products **Environmental information** Disclosing environmental information Collection database Registration database Managing the amount of designated chemical Managing the total amount of designated chemical substances by product and business Survey/register Communicate substances contained in a product by material and part

#### 085

Hitachi Group Sustainability Report 2013

#### Participating in the Development of International Standards

We work with the following international standards organizations on environmental issues and environmentally conscious product technology: the International Organization for Standardization (ISO), the International Electrochemical Commission (IEC), Ecma International, the Standardization Sector of International Telecommunications Union (ITU -T), and the World Business Council for Sustainable Development (WBCSD). This helps us to discover global business opportunities and ensure our products' competitiveness.

#### **Activities and Results**

In fiscal 2012, Hitachi, Ltd. chaired the plenary meeting in Brazil of the IEC Technical Committee for Environmental Standardization for Electrical and Electronic Products and Systems (TC111), as well as the plenary meeting of the ISO technical committee TC268/SC1 on smart community infrastructures. Japan took the lead in drafting IEC TR 62725, setting out the



IEC/TC111 meeting chaired by Hitachi, Ltd.

guidelines for life cycle assessment of greenhouse gas emissions (carbon footprint) of products. This standard was issued with wide support from IEC member countries, and was adopted by European governments as a reference document for future policymaking.

The ISO is currently developing indicators for comprehensive assessment of energy, water, transportation, info-communications, and waste recycling, aimed at disseminating smart city technologies and expanding business opportunities.

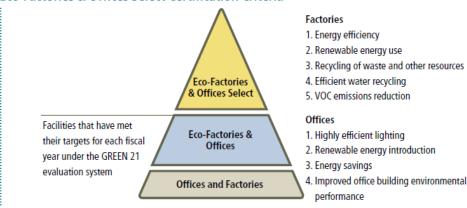
## **Environmentally Conscious Production**

We have set targets for reducing greenhouse gas emissions, waste, 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 environmental action.

### **Creating Eco-Factories & Offices Select**

Hitachi began an Eco-Factories & Offices Select certification program in fiscal 2011. Certification criteria were developed for our manufacturing (factory) and non-manufacturing (office) divisions. To maintain and raise the level of environmental awareness in Eco-Factories & Offices Select, certified plants and offices will be reevaluated every fiscal year to confirm that their performance continues to meet the certification criteria. In 2012, 11 facilities obtained new certification and 15 facilities obtained continuation certification.

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



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

#### Hitachi Automotive Systems, Ltd. Sawa Works

Hitachi Automotive Systems, Ltd.'s Sawa Works is the site of research, development, design, and manufacturing of electrical and electronic components/systems and engine equipment for automobiles.

Industrial waste from this location includes sludge, oil, waste acid and alkali, plastics, and wood shavings, while ordinary waste materials includes paper and raw



Panoramic View of the Sawa Works

garbage. Recycling reduces the amount of these wastes. Every item—separated and sorted into approximately 80 categories—has a recycling route, resulting in a final disposal rate of less than 0.1 percent.

100 percent registration in electronic manifests by fiscal 2011 was also achieved, a target set at its introduction in May 2010.

#### Hitachi Computer Products (America), Inc.

Hitachi Computer Products (America) introduced processes to use energy more efficiently, achieving a 45-percent reduction in energy consumption per unit production compared with fiscal 2005. A newly built delivery warehouse uses thermal barrier paint, natural light, motion sensor lighting, and other measures to reduce the impact on people and the environment.



Hitachi Computer Products (America)

Among several ways to make further improvements, the company is improving the product test time during the manufacturing process and is studying the introduction of renewable energy.

#### **Next Steps**

Certification under the Eco-Factories & Offices Select program is being expanded to further reduce environmental burden by promoting global warming prevention and waste reduction in Hitachi Group manufacturing plants and offices. Our goal is for every in-house and Group company to have at least one plant or office certified by fiscal 2015.

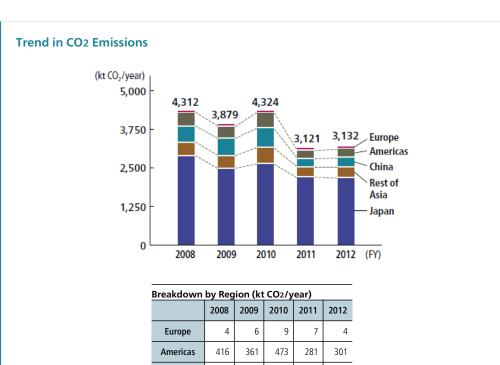
#### **Promoting Global Warming Countermeasures**

The Hitachi Group is promoting the reduction of energy-related CO<sub>2</sub> emissions from production, as well as CO<sub>2</sub> emissions from transportation, to reduce greenhouse gases and prevent global warming.

#### **Actions and Achievements**

CO<sub>2</sub> emissions per unit production is an indicator of reduced CO<sub>2</sub> emissions. We achieved a reduction of 22 percent in fiscal 2012, surpassing the target of 7 percent. 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 raising environmental awareness by monitoring electric power consumption and CO<sub>2</sub> emissions at every in-house and Group company, and visually displaying target achievements on the company intranet.





China 510 554 276 303 489 476 357 382 Rest of Asia 586 Japan 2,893 2,482 2,630 2,200 2,142 4,312 3,879 Total 4,324 3,121 3,132

#### **Creating Hitachi Group Electric Data Counting and Monitoring System**

To efficiently control and manage electricity use in the Group as a whole, we built the Hitachi Group Electric Data Counting and Monitoring System. This system began operating in July 2012, and it shows hourly statistics on power use at 238 large-lot user sites in Japan (contracted capacity of 500 kW or above). With this system, we are able to share information on power use and compare it with the previous year. By managing electricity use per unit, we are able to achieve higher efficiency levels while building employee awareness of the need to save electricity. This system contributed to savings of 164,000 kW in the summer of 2012 compared with fiscal 2010 peak use at each site.



Web screen: Hitachi Group Electric Data Counting and Monitoring System

Emissions outside Japan were calculated based on the IEA's CO2 emission coefficient for electric power by country for the year 2008. For Japan, we used 0.36 kg CO2.

090 Hitachi Group Sustainability Report 2013

We have created Hitachi Group Energy Data Management System for monitoring CO<sub>2</sub> emissions and energy consumption at all Hitachi Group sites in Japan. We show the results visually, including CO<sub>2</sub> emission trends and target achievements. In July 2012, we began displaying these statistics on the company intranet, to both keep track of targets at every site and to raise environmental awareness.



Web screen: Hitachi Group Energy Data Management System

#### **Introducing Renewable Energy**

We are promoting the use of solar, wind power and other forms of renewable energy. In fiscal 2012, 797 MWh of electricity were generated from renewable energy, mainly from solar power generation at our Omika Works in Ibaraki Prefecture (940 kW) and the Yokohama Office in Kanagawa Prefecture (500 kW). We also contracted for Green Electricity Certifications of 1,000 MWh through Japan Natural Energy Company Limited, using these to cover 965 MWh of power generated for offices and at exhibitions.



Green Power logo from Green Power Certification

#### **Participation in the Low-Carbon Society Action Plan**

The Hitachi Group (Hitachi Industrial Equipment Systems Co., Ltd., Hitachi Appliances, Inc., Hitachi Medical Corporation, Hitachi Kokusai Electric Inc., and Hitachi, Ltd.) takes part in the electric and electronic industry's Action Plan toward a Low-Carbon Society, aiming to achieve the common target for the industry of improving the energy consumption rate per unit by an annual average of 1 percent between now and 2020.

#### **Green Curtain Project**

To conserve electricity, climbing vines were planted along building windows and walls forming green curtains that lower the room temperature inside buildings. This continuing project, begun in fiscal 2011, is being used at more than 200 Hitachi Group sites and at the homes of some employees. In December 2012, we held the Hitachi Group Green Curtain Contest, presenting awards in the group and individual categories for activities during the year.



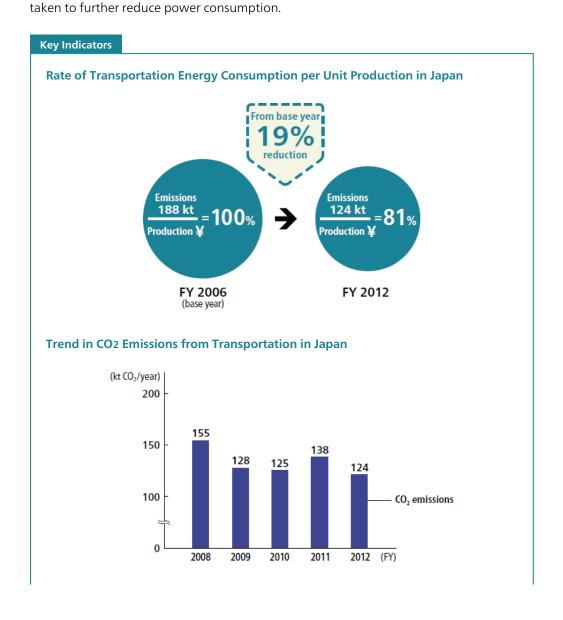
Toyokawa Works, Hitachi Terminal Mechatronics, Corp.



Hikone Works, Shin-Kobe Electric Machinery Co., Ltd.

#### **Reducing Transportation Energy**

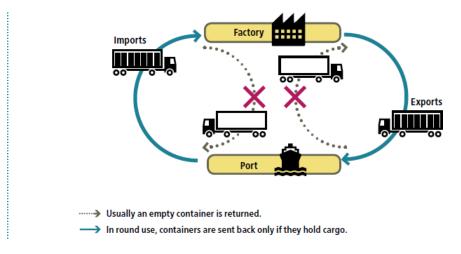
Transportation energy consumption per unit was reduced by 19 percent in fiscal 2012 (base year 2006), surpassing the target of 13 percent, through such measures as container round use and improved load efficiencies. This result will be reflected in the individual targets of every in-house and Group company so that additional action can be Hitachi Group Sustainability Report 2013



#### **Examples: Container Reuse**

Reusing the same container for imports and exports (container round use) eliminates the shipping of empty containers. This is being promoted as a way to reduce energy consumption during transportation as well as overall transportation energy. Hitachi Appliances, Inc., in cooperation with Hitachi Transport System, Ltd., is implementing container round use from the Tochigi Works, aggressively promoting this project, while matching nearby business partners.

Hitachi Group Sustainability Report 2013



#### **Next Steps**

Our measures 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 conservation diagnoses to determine the potential for improvement, as we aim for a high level of energy conservation, including improvements in production processes. Target acheivement 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.

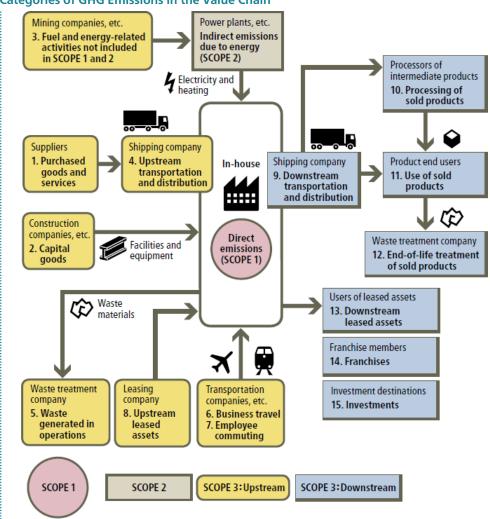
## Calculation of GHG Emissions throughout the Value Chain

We have been working to calculate GHG (greenhouse gas) emissions throughout the entire value chain.

#### **Activities and Results**

In fiscal 2012, we carried out trial calculations using a methodology based on Ministry of the Environment guidelines. We found that the category with the most GHG emissions was the use of sold products, accounting for 92 percent of the total. This was followed by purchased products and services and then indirect energy-related emissions. We believe it is important to focus first on those categories with the most GHG emissions so that we can efficiently reduce the amount of emissions.

#### **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 Value Chain in Hitachi

Hitachi Group Sustainability Report 2013

Category	Category Category Description		Notes
SCOPE 1			
Direct emissions	Direct emissions from in-house fuel use and industrial processes	862 (0.5%)	
SCOPE 2		•	
Energy-related indirect emissions	Indirect emissions from using electricity and heat purchased by the company	2,367 (1.3%)	Unit CO2 emission per kwh:0.36
SCOPE 3 Upstream (other inc	direct emissions)		
1 Purchased goods and services	Emissions from activities on raw materials, parts, supplied products and sales from resource extraction to the manufacturing stage	10,570 (5.6%)	
2 Capital goods	Emissions generated in the construction, manufacture and shipping of the company's own capital goods (equipment, devices, buildings, facilities, vehicles, etc.)	-	Under consideration
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	-	Under consideration
4 Upstream transportation and distribution	256 (0.1%)		
5 Waste generated in operations	Emissions from transportation, disposal and treatment of waste generated in the company's operations	99 (0.1%)	
6 Business travel	Emissions generated from using fuel and electric power by transportation of employees for business travel	91 (0.0%)	
7 Employee commuting	Emissions generated from using fuel and electric power for transportation of employees between their homes and their worksites	-	Under consideration
8 Upstream leased assets	ostream leased assets Emissions from 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 of products	-	Under consideration
10 Processing of sold products	Emissions by downstream companies during processing of intermediate products	-	Under consideration
11 Use of sold products	Emissions from use of products by end users (consumers and businesses)		Excluding power generation equipment
12 End-of-life treatment of sold products	Emissions from transportation, waste disposal and treatment of products by end users (consumers and businesses)	142 (0.1%)	Excluding power generation equipment
13 Downstream leased assets	Emissions from operating assets owned by the reporting company as lessor and leased to other entities	-	Under consideration
14 Franchises	(SCOPE 1 and 2) emissions by franchises	-	N/A
15 Investments	Emissions related to management of investments	-	Under consideration
	Total	188,821 (100%)	

chapter 1	
Governance Report	
026	

#### **Reducing Wastes**

The Hitachi Group is reducing and recycling waste materials generated during manufacturing, including valuable resources (reusable resources with residual value), setting Group-wide goals for waste reduction per unit production.

#### **Activities and Results**

In fiscal 2012, the High Functional Materials Group\*1 reduced the amount of waste generated per unit production by 9 percent compared with fiscal 2005, the base year, while the Assembly Industry Group\*2 reduced this by 16 percent by implementing various measures such as reducing the amount of waste plastic and recycling resources. Both groups achieved their targets.

Under the Zero Emission<sup>\*3</sup> initiative, which minimizes landfill disposal as close to zero as possible, 161 facilities have achieved their zero emission goal as of fiscal 2012.

- \*1 High Functional Materials Group: Business group dealing primarily with special metals, electrical wire and cables, wrought copper and copper alloy products, functional materials, and synthetic resin processed goods
- \*2 Assembly Industry Group: Business group other than the High Functional Materials Group
- \*3 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**

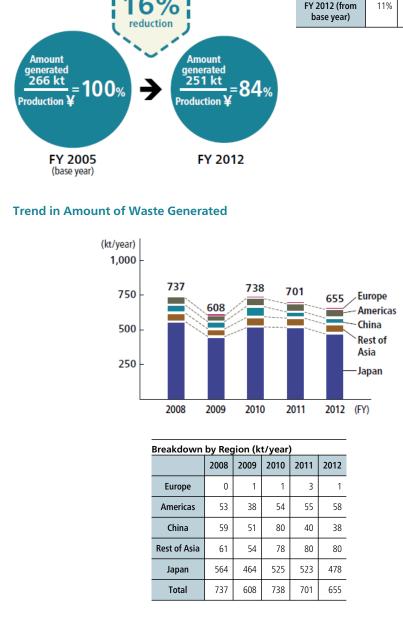
#### **Amount of Waste Generated per Unit Production Rate**

#### **High Functional Materials Group**



	Japan	Outside Japan	Overall	
FY 2012 (from base year)	12%	19%	9%	





#### **Using IT for Managing Waste**

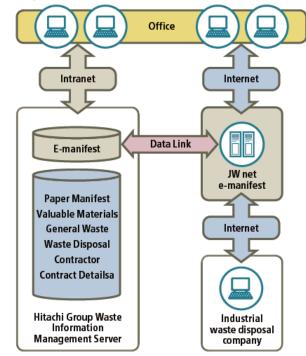
In 2012, we improved a system that manages the status of general waste and valuable waste generated at each facility. This has made it easier to analyze waste by type, and helped us to effectively implement measures to raise the recycling rate, to recycle valuable resources, and to improve the landfill rate.

We intend to boost the Hitachi Group e-manifest\*1 registration ratio to at least 90 percent by fiscal 2015. As of fiscal 2012, 109 facilities had introduced e-manifest systems, raising the registration rate to 56 percent.

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

chapter 1
Governance Report
026

#### **Waste Management System**



# **Examples: Waste Reduction by Introducing Returnable Transportation Packaging**

At Hitachi High-Technologies Corporation, the packaging used for shipping products between Japan and manufacturing sites around the world was changed from cardboard to returnable boxes made of plastic with aluminum frames. The company has reduced the amount of cardboard that used to be thrown away as waste in Japan, lowering the environmental burden. The returnable box is designed strong and safe to be used for double stack shipping in a freight container, This is helping to reduce the number of containers as well as to improve transport efficiency.







Returnable Box

#### **Next Steps**

To achieve the targets in the Environmental Action Plan, we will promote waste reduction from a global perspective by working on minimizing waste generation, reducing waste in landfills, and raising resource recycling rates. Mindful of each country's circumstances, we will continue to steadily reduce waste by implementing appropriate measures as well as by sharing information in the Hitachi Group.

chapter 1
Governance
Report
026

chapter 2 | Environmental Report

061 Message

062 Environmental Activities Worldwide 064 Corporate Environmental Management Strategies and Initiatives 071 Environmentally Conscious
Products and Services

Products and Services
086 Environmentally Conscious Production
105 Environmental Management
Framework and Communication

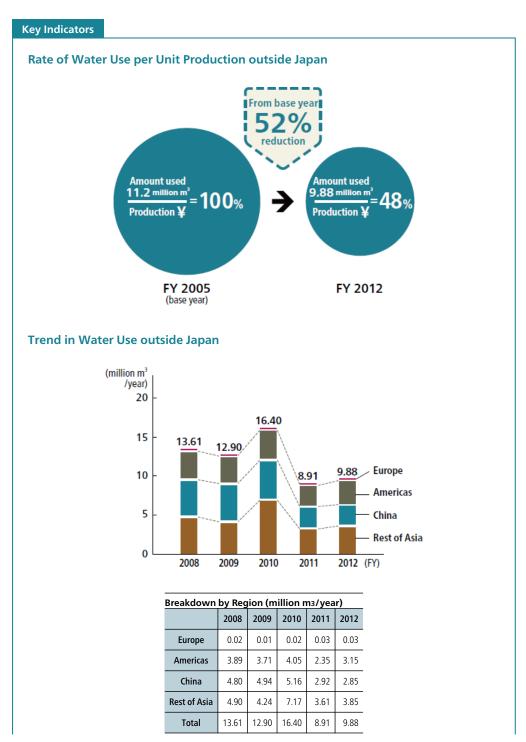
chapter 3 Social Report 120

#### **Water Conservation**

We are committed to effective water use by reducing water consumption in our operations, especially outside Japan where securing water resources is a pressing issue, making water use per unit production the indicator.

#### **Activities and Results**

In fiscal 2012, we increased the rate of water reuse by implementing measures such as introducing and improving advanced water treatment facilities, lowering water use per unit production outside Japan by 52 percent compared with fiscal 2005, the base year.



Governance Report

#### chapter 2 | Environmental Report

061 Message

062 Environmental Activities Worldwide 064 Corporate Environmental Management Strategies and Initiatives 071 Environmentally Conscious
Products and Services

086 Environmentally Conscious Production 105 Environmental Management Framework and Communication chapter 3 Social Report 120

#### **Examples: Achieving "Zero Emissions" for Wastewater**

099 Hitachi Group Sustainability Report 2013

Hitachi Elevator (Shanghai) Co., Ltd., a manufacturer of elevators and escalators, collects and treats wastewater from production processes for use in toilets and for other domestic water needs and for watering trees and plants within the facility's premises. Moreover, by using reverse osmosis membranes and other advanced treatment technologies, water is reused in production. Due to this recycling system, the company has reduced to zero the amount of



Recycled Water used for Greening of the Facility's Premises

wastewater coming out of the plant, achieving "zero emissions" for wastewater. Following on recognition by city officials in fiscal 2010 as a Shanghai Water-Saving Company (Business Site), in fiscal 2012 the water treatment facilities were expanded to meet the increase in production and Hitachi Elevator (Shanghai) was honored by the city as a model water-saving business site.

#### **Examples: Water Recycling**

At Guangzhou Hitachi Unisia Automotive Parts, Co., Ltd., a manufacturer of automotive parts, recycled water is used for watering trees and plants within the facility's premises, after chemical treatment, active charcoal filtering, and other advanced treatments. Through these recycling technologies, the company saves up to 18,250 m³ of water per year. We will promote the use of recycled water for manufacturing and toilets, among others.



Landfill-type Wastewater Treatment Center

#### **Next Steps**

We will continue optimizing water use efficiency as well as steadily reducing our own water consumption by preventing leaks and boosting the recycling rate.

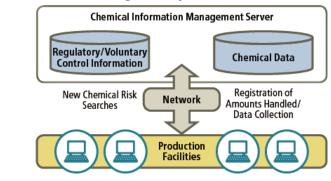
#### **Chemical Substance Management**

To deal with chemical risk and to comply with laws and regulations, we assess chemical substances to be used in production processes, managing risk in three ways: prohibition, reduction and control. In addition, we train chemical substance managers and regularly communicate the risks to deepen local residents' understanding of how we manage chemical substance risk.

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

Since 1998, we have operated a database for chemical substances management called CEGNET to index 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.

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



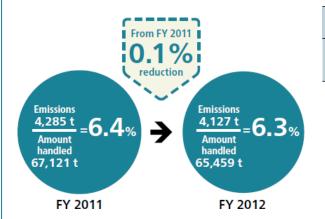
#### **Activities and Results**

To prevent air pollution, we cut emissions of 41 volatile organic compounds (VOCs) based on a program from the Ministry of the Environment in Japan. In 2012, we raised painting efficiency by changing paint and improving processes, and achieved our target by strengthening the PDCA (Plan, Do, Check, Act) cycle based on the data collected in Japan every three months and outside Japan every six months.

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 this to local Japanese governments. Although some substances are exempt from reporting due to their small quantities, our policy is to keep data on all PRTR substances (10 kilograms or more per year), recognizing the need to control these substances as well.

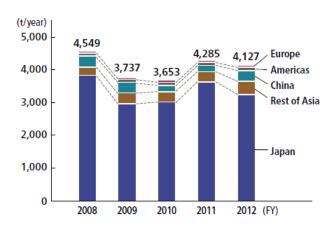
\*1 PRTR Law: Japan's Pollutant Release and Transfer Register Law

#### **Ratio of VOC Atmospheric Emissions**



	Japan	Outside Japan	Overall
FY 2012 (from base year)	7.5%	3.5%	6.3%

#### **Trend in Reducing VOC Atmospheric Emissions**



Breakdown by Region (t/year)							
	2008	2009	2010	2011	2012		
Europe	9	7	9	28	6		
	(13)	(10)	(12)	(29)	(8)		
Americas	37	29	41	62	53		
	(44)	(41)	(48)	(70)	(64)		
China	288	268	131	427	273		
	(607)	(502)	(310)	(9,522)	(10,769)		
Rest of Asia	189	273	258	232	346		
	(356)	(452)	(539)	(8,101)	(8,479)		
Japan	4,026	3,160	3,214	3,536	3,449		
	(65,935)	(48,444)	(51,862)	(49,399)	(46,139)		
Total	4,549	3,737	3,653	4,285	4,127		
	(66,955)	(49,449)	(52,771)	(67,121)	(65,459)		

Top figure is the VOC atmospheric emission volume. Lower figure (in parentheses) is the volume of VOCs handled. The scope of the data aggregation outside Japan prior to fiscal 2010 is different.

#### 102

Hitachi Group Sustainability Report 2013

#### Managing PCB\*1 Storage

Information on storing and handling equipment that uses PCBs is gathered and continually managed as an environmental management item for the Hitachi Group. Waste materials with high PCB concentrations are registered with treatment companies at an early point, and subjected to a planned waste treatment program. Waste materials with low PCB concentrations are processed by treatment companies as they are received.



Loading PCB Waste for Disposal

\*1 PCB: Polychlorinated biphenyl

#### **Next Steps**

In addition to search for alternative substances for painting with high VOC atmospheric emissions, we will improve production processes. To achieve a reduction rate of 40% in fiscal 2015, we will further promote activities.

Hitachi Group Sustainability Report 2013

### **Managing Environmental Risk**

The Hitachi Group sets voluntary management criteria that are more stringent than regulatory requirements, considering the environmental burden of all our business activities. At every business site, we regularly monitor water quality and noise, for example, and work to minimize environmental risks.

#### **Activities and Results**

In fiscal 2012, we received eight complaints about noise or odors, all of which were promptly resolved. We will continue close monitoring to prevent recurrences or new occurrences of these problems.

## **Data on Environmental Load Resulting from Business Operations (FY 2012)**

The data below show resource inputs and the environmental load for Hitachi Group business activities in fiscal 2012.

#### **Total Input of Resources Total Energy Input** Outside Japan 25% In Japan 75% **Energy consumption** (crude oil equivalent) 1.77 million kl Electricity 81% Gas 13% Fuel oil 6% In Japan Outside Japan 4.3 billion kWh 1.4 billion kWh Electricity Natural gas 90 million m<sup>3</sup> 40 million m<sup>3</sup> 44,000 t 15,000 t LPG, etc. Fuel oil (heavy oil, kerosene, etc.) 90,000 kl 6,000 kl **Total Input of Materials** In Japan 54% Outside Japan 46% Materials Other materials 3,763 kt Metals 56% Plastics 5% Rubber 0% In Japan Outside Japan Metals 1,355 kt 732 kt Plastics 146 kt 58 kt 7 kt Rubber 2 kt Other materials 539 kt 924 kt Chemicals PRTR substances\*1 handled 162 kt 23 kt Ozone-depleting substances 30 t 512 t handled Greenhouse gas substances 1,680 t 1,111 t handled **Total Water Input** Outside Japan 17% In Japan 83% Water used 56.52 million m Industrial water 43% Groundwater 40% Tap water 17% Outside Japan In Japan 5.79 million m<sup>3</sup> Tap water 3.72 million m3 Industrial water 20.19 million m<sup>3</sup> 4.33 million m<sup>3</sup> Groundwater 20.66 million m<sup>3</sup> 1.84 million m<sup>3</sup>

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

Products shipped: 3,527 kt (in Japan), 937 kt (outside Japan)

Greenho	use Gas Em	Outsions Outside	le Japan 31% ¬			
Greenhouse gases	ln J	lapan 69%				
3,230 GWP*2 kt		CO <sub>2</sub> emissions 97	%			
			Other 3%			
		In Japan	Outside Japan			
CO <sub>2</sub> emissions		2,142 kt	989 k			
Other GHGs						
SF <sub>6</sub> (sulfur hexafluoride)		67 GWP*2kt				
PFCs (perfluorocar		17 GWPkt				
HFCs (hydrofluorocarbons)		14 GWPkt	1 GWPkt			
Total Volu	me of Wast	e Outside Ja	apan 27% ¬			
w	In Japan 73%					
Waste generated 655 kt		Recycle 83%				
	Waste reduction 4% Landfill 13%					
		In Japan	Outside Japan			
Waste reduction		19 kt	10 k			
Recycle		429 kt	114 k			
Reuse		65 kt	8 k			
Material recycle		336 kt	106 k			
Thermal recovery		28 kt				
Landfill		30 kt	1 kt 53 kt			
		30 KL	33 1.			
Chemicals PRTR substances of	ا Iischarged or t	ransferred 5 kt	4 k			
SOx (sulfur oxides)		45 kNm³	<b>+</b> ·······			
		473 kNm³	12 kNm³			
NOx (nitrogen oxides)		4/3 KIVIII	25 kNm <sup>3</sup>			
	hetaneor omitte	y 3 + (0 000*3+)	0 + (0 0 0 0			
	bstances emitte		0 t (0 ODP			
Ozone-depleting su		vater Outside	0 t (0 ODP			
Total Volume Wastewater	e of Wastev	vater Outside	0 t (0 ODPt			
Total Volume	e of Wastev	vater Outside In Japan 83% c water 66%	e Japan 17% –			
Total Volume Wastewater	e of Wastev Publi	vater Outside	e Japan 17% ¬			
Total Volume Wastewater	e of Wastev Publi	vater Outside In Japan 83% c water 66% Sewerage 2	e Japan 17% ¬			
Total Volume Wastewater	e of Wastev Publi	vater Outside In Japan 83% c water 66% Sewerage 2 ground infiltration, e In Japan 32.12 million m³	e Japan 17% – 22% – ttc. 12% –			
Wastewater 54.84 million m <sup>3</sup>	e of Wastev Publi	vater Outside In Japan 83% c water 66% Sewerage a ground infiltration, e In Japan	e Japan 17% – 22% – tc. 12% – Outside Japan 4.18 million m			
Total Volume Wastewater 54.84 million m³	e of Wastev Publi Under	vater Outside In Japan 83% c water 66% Sewerage 2 ground infiltration, e In Japan 32.12 million m³	e Japan 17% – 22% – tc. 12% – Outside Japan 4.18 million m			
Wastewater 54.84 million m³  Public water Sewerage Underground infiltra	Publi Under	vater Outside In Japan 83% c water 66% Sewerage 2 ground infiltration, e In Japan 32.12 million m³ 7.45 million m³ 5.88 million m³	e Japan 17% – 22% – tc. 12% – Outside Japan 4.18 million m 4.69 million m			
Wastewater 54.84 million m³  Public water Sewerage Underground infiltra	Publi Under	vater Outside In Japan 83% c water 66% Sewerage 2 ground infiltration, e In Japan 32.12 million m³ 7.45 million m³	e Japan 17% 7			

<sup>\*1</sup> The 354 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

\*2 GWP (Global Warming Potential): Coefficient derived by converting the global warming potential into CO₂ equivalent tonnes

Water recycling In Japan: 41.9 million m<sup>3</sup> Outside Japan: 0.63 million m<sup>3</sup>

chapter 1 Governance Report 026

#### chapter 2 | Environmental Report

062 Environmental Activities Worldwide

Corporate Environmental Management Strategies and Initiatives

071 Environmentally Conscious Products and Services

Environmentally Conscious Production 105 Environmental Management Framework and Communication

chapter 3 Social Report 120

<sup>\*3</sup> ODP (Ozone Depletion Potential): Coefficient derived by converting the global depletion potential into trichlorofluoromethane (CFC-11) equivalent tonnes

# **Environmental Management Framework and Communication**

In the Hitachi Group, we have built a global network and are using environmental management systems to foster sound environmental practices and instill "Eco-Mind" in all our employees. We also work to deepen stakeholders' understanding of our environmental activities by disclosing information, and we encourage two-way communication to improve those activities.

#### **Environmental Management Framework**

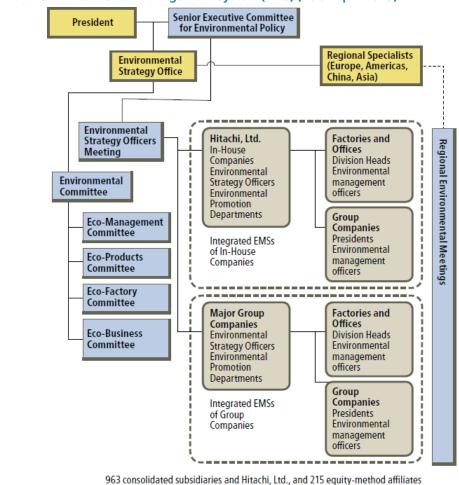
Our global environmental management system supports environmental decision making and implementation at Hitachi, Ltd., 963 consolidated subsidiaries, and 215 equitymethod affiliates.

The Environmental Strategy Office is responsible for developing Group-wide environmental policies. It drafts basic management policies and action plans that are deliberated on and approved 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 environmental strategies are implemented throughout the Group. We also have an Environmental Committee and committees of working-level experts for each policy area who develop targets and the steps to achieve them.

To strengthen our global management framework and to promote evironmental action outside Japan, we deployed environment representatives in Europe, the Americas, China, and Singapore. At regional environmental meetings, we reported on progress in implementing the Third Environmental Action Plan and shared information on the latest environmental regulations, while exchanging views on local environmental issues in each region. We have been creating environmental networks connecting Japan and each region to share trends in environmental regulations and related information. We take advantage of being a multi-industry company by mutually exchanging information with each business and each region, leading to a more global approach. We will continue using these worldwide regional networks to improve our global activities, reflecting the local situation.

#### Hitachi's Environmental Management System (EMS) (As of April 2013)

Hitachi Group Sustainability Report 2013



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

For efficient management of each business site's environmental load, we have set criteria for environmental management. There are approximately 270 business sites that meet these criteria. The R&D Group, five in-house companies, and 15 Group companies, together with the Environmental Strategy Office, have developed and implemented the Hitachi Group Environmental Promotion Organization EMS (environmental management system) to promote the consistent implementation of environmental policies.

## Criteria for Environmental Management Level (major items)

<b>Employees</b> ≥ 500		
Electric power consumed	≥ 6,000 MWh/year	
Waste generated	≥ 500 tonnes/year	
Water used	≥ 600 m³/day	
Paper purchased	≥ 50 tonnes/year	

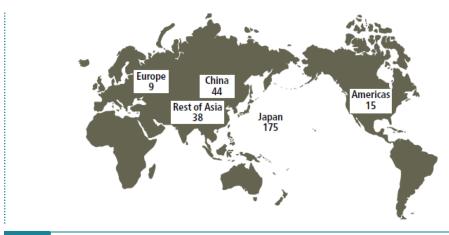
At the same time, every business site meeting the criteria for environmental management continues to maintain ISO 14001 certification. Business sites that did not meet the criteria have also obtained ISO certification.

chapter 1
Governance Report
026

Hitachi Group Sustainability Report 2013

	Japan	Outside Japan	Total
No. of Certified Sites*1	175	106	281

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



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List of ISO 14001-certified sites http://hitachi.com/environment/activities/data/iso14001.html

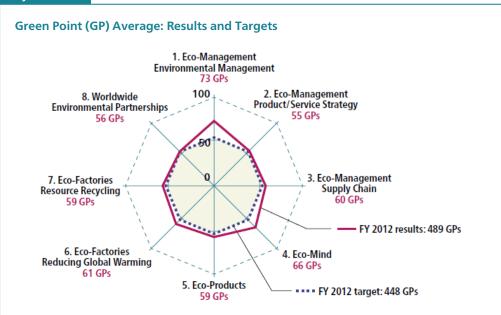
#### **Monitoring Environmental Performance Data**

For effective environmental management, we collect environmental performance data on business operations using the Environmental Load Evaluation System. This system collects environmental load data from some 270 Hitachi business sites worldwide on such items as energy use, CO<sub>2</sub> emissions, and waste generated, together with information on outside complaints, honors 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 the performance levels can be further raised.

#### **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 53 items on a scale from 1 to 5, then showing the results on radar charts. For any category, a perfect score is 100 green points (GPs). The results of GREEN 21 evaluations are incorporated into the business performance evaluations of all Hitachi in-house companies and some Group companies. We surpassed our fiscal 2012 target of 448 GPs with a score of 489 GPs. As we further raise the level of environmental activities, we are aiming at a target of 640 GPs for fiscal 2015.

Hitachi Group Sustainability Report 2013



#### **Categories and Evaluation Items**

- Environmental management, environmental accounting, compliance with laws and regulations
- 2. Progress toward goal of reducing CO2 emissions by 100 million tonnes; environment business strategies
- Gathering and communicating environmental information across the supply chain
- 4. Environmental education, training environmental experts

- 5. Assessment of products and services
- 6. Reducing CO2 emissions, improving energy efficiency, energy savings in transportation
- 7. Resource recycling, chemical substances management
- 8. Information disclosure, communication activities, global citizenship activities, preserving ecosystems

#### **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, technologies, and activities. Awards are based on multiple criteria, including the results of GREEN 21 overall environmental evaluations, reduction of environmental load, innovation, and ongoing benefit. In fiscal 2012, 11 awards were given out.

#### Fiscal 2012 GREEN 21 Awards

Category	Recipient (business site/individual)	Achievement
Environmental Mana	agement & Communication	
Grand Prize	Hitachi (China), Ltd.	Conducting Mengmo's Eco Classroom throughout the Group to promote environmental programs in China
Excellence Prize	Hitachi Construction Machinery Co., Ltd. Environment Policy Division	Creating the construction industry's only recycling program for construction machinery counterweights
Eco-Business and Ec	o-Products	
Grand Prize	Hitachi Appliances, Inc.	Developing the vacuum-chilled Sleep Preservation SL series of refrigerators
Select Excellence Prize	Information & Telecommunication Systems Company, Hitachi, Ltd. IT Platform Division Group, IT Platform R & D Management Division	Hitachi Unified Storage 100 Series
Honorable Mention	Power Systems Company, Hitachi, Ltd. Hitachi Works	Promoting the sale of large-scale solar power systems
Eco-Factory and Eco-	-Office	
Grand Prize	none	
Select Excellence Prize	Power Systems Company, Hitachi, Ltd. Hitachi Works, Kokubu Engineering and Production Division	Making the new main office building into an Eco Office with energy- saving LED lighting, natural ventilation, and full adoption of heat exchangers
	Hitachi Elevator (Shanghai) Co., Ltd.	Maintaining "zero emissions" for wastewater by adding treatment facilities to handle wastewater from increased production
Honorable Mention	Central Research Laboratory, Hitachi, Ltd.	Generating half of the electricity used in the dining room by installing a 54.72 kW solar power system
	Hitachi Consumer Products (Thailand), Ltd.	Taking various measures in areas such as energy efficiency, including the conversion to high-efficiency equipment (annual reduction in CO2 emissions of 282.9 tonnes)
	Hitachi Kokusai Electric Inc., Toyama Works Kokusai Electric Techno Service Co., Ltd.	Reducing CO <sub>2</sub> emissions by carrying out a modal shift in product transportation
	Hitachi IE Systems Co., Ltd.	Reducing final disposal amounts by switching to a waste management system, and by achieving 100 percent computerization

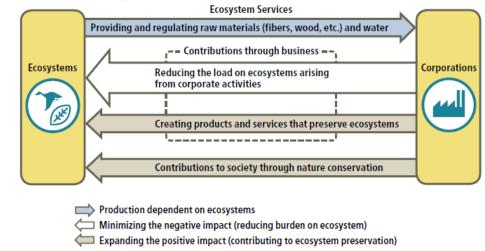
## **Preserving Ecosystems**

We have made the preservation of ecosystems a pillar of our environmental vision and incorporated this into our Action Guidelines for Environmental Conservation. In fiscal 2012 we focused on encouraging employees to understand the relationship between corporate activities and ecosystems as well as world trends in this area, and to reflect this understanding in our business operations. For these reasons, we revised the *Hitachi Group Guide to Preservation of Ecosystems* that was originally issued in March 2011, and conducted a trial of the Business Assessment on the Preservation of Ecosystems program. We were also active outside the company, serving as co-chair of 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 carry out medium- to long-term programs involving the entire Group. In addition, by taking action outside the company we are laying the groundwork for other ecosystem preservation initiatives.

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

Corporations depend on "ecosystem services," or the benefits received from ecosystems, including raw 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 during the product life cycle (raw material procurement, production, transportation, use, recovery, recycling, and appropriate disposal), as well as increasing the number of products and services for direct preservation of ecosystems through water and air purification. Seeing 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 in volunteer programs, along with other programs that preserve ecosystems.

#### **Corporations and Ecosystems**



#### **Tackling Medium- to Long-Term Goals**

Hitachi Group Sustainability Report 2013

In the *Hitachi Group Guide to Preservation of Ecosystems* issued in March 2011, we presented all 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 enhance understanding, in May 2012 we issued *Business Assessment on the Preservation of Ecosystems* and began self-evaluating the impact of our business operations on the ecosystem. We will regularly review this assessment program and make improvements throughout the Group. In December we held internal training sessions within the Hitachi Group and had experts from government agencies and NGOs describe policy trends and thinking. Discussions were stimulated by Business Ecosystems Training (BET), new course materials for teaching employees about the relationship between corporate activities and ecosystem preservation developed by the WBCSD. We plan to offer similar training while reviewing the content.

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

Outside the company, as a WBCSD member we assisted with the World Conservation Congress held in Jeju, South Korea, in September 2012. This event is held once every four years by the International Union for Conservation of Nature (IUCN), the world's largest global conservation organization. At this event we introduced the Corporate Ecosystem Valuation (CEV)\*1 methodology developed by the WBCSD and the BET program, along with Hitachi initiatives for ecosystem preservation. We also take part in the Council on Competitiveness-Nippon (COCN), a private group bringing together business leaders and experts from all areas to give advice on policies for making Japanese industries more competitive. We created English-language versions of the final report of the COCN Business and Biodiversity Study Group, and a checklist for assessing the impact of corporate activities on biodiversity (issued March 2012), introducing these to the WBCSD and its members. WBCSD published a report introducing tools for ecosystem preservation and presented the COCN report and the checklist as an example from Japan.

\*1 CEV: A method for making better business decisions by evaluating both ecosystem degradation and the benefits provided by ecosystems

# Using IT for Ecosystem Preservation: IT Eco Experimental Village

The IT Eco Experimental Village was established in Hadano, Kanagawa Prefecture, in April 2011 as a venue for using information technology (IT) for ecosystem and biodiversity preservation, and for conducting trials and studies to determine the usefulness of IT for ecosystem preservation. The site is a *satoyama* (natural woodland near a populated area) of around 7,000 m². In cooperation with local residents, officials, and schools, fallow farmland, bamboo groves, and forests are being restored, turning them into rural habitat. IT systems are being used to gather information on flora and fauna.

Thanks to the cooperation of so many people, the village is now in its third year. Through this village, we have been demonstrating that local environmental regeneration and corporate environmental activity can work well together, in tandem with the local community and with the contribution of our products. While the scope is still limited, we are thinking about further improving this village. We would particularly like to enhance the range and areas of activities to increase interest in *satoyama* conservation. We are also thinking about strengthening collaborative creation with local officials and universities, for example, by using IT to gather regional data and to collaborate with local data centers, further contributing to ecosystem preservation.



Mitsukiyo Tani,
Assistant Department
Manager,
Environment Policy Division,
Strategy Planning &
Development Office,
Information &
Telecommunication
Systems Company, Hitachi,
Ltd.
Mayor, IT Eco Experimental
Village

#### **Environmental Education**

Hitachi Group Sustainability Report 2013

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 2012 we carried out education for employees whose operations involve air and water quality or waste management, to provide basic knowledge as well as recent legal amendments and guided 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 an Internet-based e-learning course in three languages: Japanese, English, and Chinese. To date 151,341 employees worldwide (97% of the target employees) have taken this course.

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

Tar	get	Introductory	Beginning	Intermediate	Advanced
General education	All employees	Online e-learning: (General Topics: Glo issues, environment	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 (development & op- management syster	-level employees aste, air/water materials, etc.) eration of	opment training r training	
	Internal environmental auditors			Brush-up training tauditors  ISO 14001 auditor certification training	ISO 14001  ISO 14001 senior auditor certification training

#### **Next Steps**

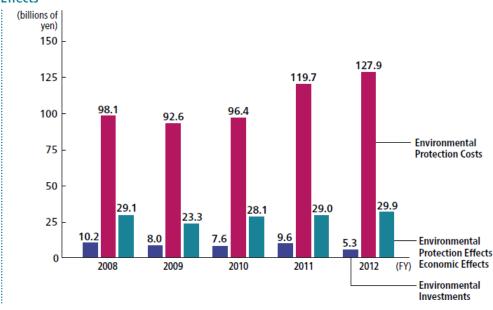
From fiscal 2013, we will continue with education to enhance the knowledge and skills of staff in charge of factory management as well as to prevent environmental accidents.

# **Environmental Accounting**

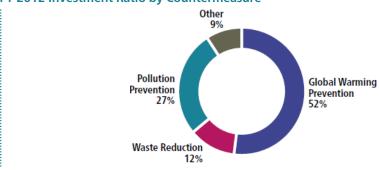
We have adopted, and are making public, environmental accounting procedures that conform to the Environmental Accounting Guidelines issued by the Ministry of the Environment in 2005. The results help us to raise the efficiency of environmental investments and activities by more effectively allocating management resources to our ongoing efforts that benefit the environment. The increase in R&D expenditures related to the environment in recent years has resulted in higher environmental protection costs. At the same time, environmental investments were down year on year. This is mainly because large expenditures were accelerated in fiscal 2011 to deal with changes in electric power supply and demand.

#### **Achievements**

Trend in Environmental Investments, Environmental Protection Costs, and Economic **Effects** 



#### **FY 2012 Investment Ratio by Countermeasure**



#### **Environmental Investments**

Item	Description	Costs (billions of yen)				
		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Total investment	Investment in energy-saving equipment and equipment that directly reduces environmental load	10.17	7.95	7.60	9.61	5.28

chapter 1
Governance Report
026

#### **Environmental Protection Costs**

Hitachi Group Sustainability Report 2013

Item		Description	Costs (billions of yen)				
			FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Expenses	Business area	Costs of maintaining equipment with low environmental load, depreciation, etc.	33.31	28.20	27.98	27.78	31.84
	Upstream/downstream	Green procurement expenses, recovery and recycling of products and packaging, recycling expenses	1.97	1.70	1.60	1.43	1.38
	Administration	Labor costs for environmental management, implementation and maintenance of environmental management system	11.20	8.92	8.61	8.25	7.67
	Research and development	R&D for the reduction of environmental burden caused by products and production processes, product design expenses	50.25	52.81	57.56	79.81	84.71
	Social activities	Planting, beautification, and other environmental improvement expenses	0.35	0.25	0.31	0.45	0.41
	Environmental remediation	Environmental mitigation costs, contributions, and charges	0.99	0.68	0.37	1.94	1.90
	Total		98.06	92.56	96.44	119.66	127.91

Equipment depreciation costs are calculated using the straight-line method over five years.

#### **Environmental Protection Effects**

Economic Effects*								
Item	Costs (billions of yen)				Major FY 2012 Activities			
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012			
Net income effects	10.90	8.30	9.62	13.72	17.85	Recovering value from waste by sorting and recycling		
Reduced expenses effects	18.24	15.00	18.45	15.27	12.07	Reducing resource costs through resource and energy conservation; reducing waste disposal costs through waste reduction		
Total	29.14	23.30	28.07	28.98	29.92			

Economic effects include the following items:

- Net income effects: benefits for which there is real income, including income from the sale of resalable material
- and income from environmental technology patents
- Reduced expenses effects: reduction in electricity and waste treatment expenses arising from environmental load reduction activities

	Physical Effects									
Item	Amount Reduced					Major FY 2012 Activities				
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012					
Reduction in energy used during production	158 million kWh	191 million kWh	129 million kWh	93 million kWh	107 million kWh	Switching to LED lighting, installing more efficient air-conditioning equipment, optimizing equipment operation rates, etc.				
Reduction in amount of waste for final disposal	6,752 t	5,955 t	3,623 t	4,754 t	3,788 t	Encouraging recycling, reducing volume or recycling of liquid waste, etc.				

Benefits from equipment investment are calculated using the straight-line method over five years, as with costs.

#### **Efficiency of Environmental Load Reduction**\*1

116 Hitachi Group Sustainability Report 2013

ltem	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Efficiency of reduction in energy consumption (million kWh/100 million yen)	3.3	4.2	2.6	2.0	1.7
Efficiency of reduction in amount of waste for landfill (t/100 million yen)	194	229	121	183	146

<sup>\*1</sup> The amount of environmental load reduction divided by the cost of the reduction.

#### **Environmental Communication**

We publish reports every year on our environmental protection initiatives, their results, and our plans. The *Hitachi Group Environmental Report*, issued each year starting in fiscal 1998, was combined in fiscal 2011 with the *Hitachi Group Corporate Social Responsibility Report* as the *Hitachi Group Sustainability Report*, in response to the global need for a sustainability 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.

#### **Website Communication**

The Environmental Activities section on the Hitachi website provides highlights of the environmental programs that we take for Hitachi Group products and services, along with environmental activities. This site was overhauled in December 2012, making it more readable and informative.

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**Environmental Activities** 

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

**WEB** 

CSR/Environmental reports published by Hitachi Group companies http://www.hitachi.com/environment/activities/data/rpt\_open.html

#### **External Environmental Awards**

Hitachi's products and services received environment-related awards in fiscal 2012: 2 MW Downwind Wind Power Generation System received an award at the 9th Eco-Products Awards; Super Amorphous XSH series, Hitachi's super energy-saving transformer, and FLEXMULTI High Efficiency, the multi-split air-conditioning system for buildings, received the Energy Conservation Grand Prize 2012.

**WEB** 

**External environmental awards** 

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

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

Valuing the opportunity for direct dialogue with stakeholders, we participate in environment-related exhibitions. In Japan, we ran environmental booths at the Hitachi Innovation Forum 2012 in July and at the Eco-Products Exhibition in December 2012, as we have every year since the first exhibition. Outside Japan, we took part in the Eco-Products International Fair in



Hitachi booth at Eco-Products Exhibition in 2012

Singapore in March 2013 and the Greentech & Eco Products International Exhibition (IGEM) in Malaysia in October 2012. We also host forums to discuss environmental issues with stakeholders. The Hitachi Environment Forum was held in December in New Delhi as part of the 60th anniversary celebrations of diplomatic relations between India and Japan. We discussed the environment-related issues faced by India, such as increasing urban populations, lack of social infrastructure, and environmental degradation. At the Eco-Engineering Forum held in Washington, DC, we discussed the theme of water resources. At WBCD, we played a leading role at sessions on ecosystem preservation and electric power projects.

Governance Report 026 chapter 2 | Environmental Report

061 Message

062 Environmental Activities Worldwide 064 Corporate Environmental Management Strategies and Initiatives 071 Environmentally Conscious Products and Services

086 Environmentally Conscious Production 105 Environmental Management Framework and Communication Social Report 120

Hitachi Group Sustainability

Report 2013

List of environmental exhibitions

http://www.hitachi.com/environment/showcase/employee/event/index.html

WEB

**Preserving Ecosystems** 

http://www.hitachi.com/environment/activities/stakeholder\_collabo/ecosys.html

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Participating in the Development of International Standards http://www.hitachi.com/environment/activities/ecoproducts/global.html

#### **Worldwide Environmental Partnerships**

We promote environmental communication, deepening the exchange on environmental themes with local stakeholders, and we conduct social contribution activities with them. In fiscal 2012, we carried out environmental education and tree planting as well as cleanup activities in regions around the world.

For education, and to help raise the eco-awareness of children who will lead the next generation, we provided learning opportunities through hands-on training, experiments and explanations of Hitachi Group activities. To conserve the environment as a global citizen, we promote environmental beautification and natural conservation in cooperation with employees, their families, and local residents. These local environmental protection activities are promoted by consulting with local authorities or working with NGOs and NPOs that specialize in local environmental situations and activities.

#### **Raising Environmental Awareness**





We are helping to raise environmental awareness through activities such as putting up nest boxes for the Eastern Bluebird and installing a bench made of recycled plastic engraved with environmental messages. Hitachi Computer Products (America), Inc.

#### **Natural Barriers**



Under the supervision of local government officials, employees spent two days planting 60 coconut trees and 500 mangrove seedlings, which act as a natural barrier against the sea. (Hitachi Air Conditioning Products (Malaysia) Sdn. Bhd.)

#### **Observation and Conservation of Bats in Forests**





In collaboration with a local administrative agency, company employees helped with counting and observing flight patterns of bats, animals important for forest development in the Subic Bay area. We are helping with the conservation of bats as well as to raise environmental awareness (Hitachi

Chapter 1
Governance
Report
026

chapter 2 | Environmental Report

061 Message

062 Environmental Activities Worldwide 064 Corporate Environmental Management Strategies and Initiatives 071 Environmentally Conscious
Products and Services

Products and Services

086 Environmentally Conscious Production

105 Environmental Management

Framework and Communication

chapter 3 Social Report 120 **Tree Planting** 



For the third consecutive year, about 1,000 members took part in planting 1,500 trees, under the slogan, "Plant trees and protect the earth." (Taiwan Hitachi Co., Ltd.)

#### **Corporate Forest Maintenance**



Together with the local community, company employees cut back grass, trimmed trees, and built pathways in forests, as well as planted trees, to help maintain forests. (Hitachi Kokusai Electric Inc., Toyama Works)

# **Social Report**



Hitachi Human Rights Workshop (July 2012)

# Stepping Up Global Procurement and Reinforcing CSR in the Supply Chain

The Hitachi Group is accelerating global procurement to lock in a stable supply of materials and to boost cost competitiveness for global business expansion. At the end of fiscal 2012, we have 25 overseas procurement offices, primarily in emerging countries. As well, regional chief procurement officers have been appointed for North America, Europe, China, and the rest of Asia to bolster our procurement management. We have held briefings in China and Eastern Europe to explain our procurement guidelines, while building partnerships and cultivating new suppliers. To improve training for local staff, we are adding CSR procurement education to our procurement skills training.

We have established the Hitachi Group Procurement CSR Committee to deal with increasing potential risk, and as a way to share procurement policy and programs Group-wide. The committee selects suppliers, mainly outside of Japan, for CSR monitoring. In fiscal 2012, as part of our drive to further reinforce supply chain risk management for global procurement, we performed supplier audits outside Japan, based upon the results of this monitoring.



Shinichiro Omori Vice President and Executive Officer, General Manager of Corporate Procurement Division, Hitachi, Ltd.



Naoki Mitarai Vice President and Executive Officer, General Manager of Human Capital Group and Corporate Administration Division, Hitachi, Ltd.

# Promoting Diversity as Our Core Strategy to Improve Human Capital Capacity

We created the Global Human Capital Management Strategy in fiscal 2011 to optimize individual and organizational performance. Our first steps: building the Global Human Capital Database, a global grading system, and other foundational elements. Diversity management is at the heart of that strategy, and we are concentrating on securing and training a wide range of talented staff globally.

Specifically, our aim is to optimize organizational and staff performance through IT-based performance management. We are using tools, such as our Global Leadership Development program, to accelerate the development of mechanisms for selecting and training managers Group-wide, regardless of gender or nationality. A key focus is boosting support for women in the workplace as a touchstone for promoting diversity, including announcing numerical goals for appointing female executives and managers in Japan.

We are using several initiatives from a social perspective, including creating and announcing the Hitachi Group Human Rights Policy, based on the United Nations Guiding Principles on Business and Human Rights. We will strive to ensure that all Hitachi Group employees have a safe workplace and find fulfilment as we place the right people in the right positions.

# **Respect for Human Rights**

Cherishing humanity has been fundamental to management at Hitachi since our foundation. As a global company, we respect human rights of all our stakeholders based on international standards while appreciating the diverse cultures of each country and region we operate in.

# **Adoption of Human Rights Policy**

In May 2013, we adopted the Hitachi Group Human Rights Policy to supplement the Hitachi Group Codes of Conduct. 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 outlines Hitachi's approach to meeting our responsibility to respect human rights including developing and implementing human rights due diligence<sup>\*1</sup> in line with the UN Guiding Principles on Business and Human Rights, providing appropriate training, 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 will start developing human rights due diligence processes. Hitachi strives to respect the human rights of all people, not only those of our employees.

\*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 will also entail tracking the effectiveness of actions to address impacts and communicating externally.

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**Hitachi Group Human Rights Policy** http://www.hitachi.com/csr/renew/pdf/human\_rights\_policy.pdf

# Framework for Promoting Respect for Human Rights and **Activities**

Hitachi, Ltd. established the Corporate Human Rights Promotion Committee to gauge the impact of business activities on stakeholders' human rights and deliberate on mechanisms and policies to prevent human rights violations. An executive officer chairs this body, whose members include representatives from sales, procurement, human resources, 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 Group-wide human rights awareness based on guidelines discussed and decided by the Corporate Human Rights Promotion Committee. We develop human rights leaders in the various units, while business units use their own regular group training, seminars, and videos to educate their staff. We have appointed a CSR team in Europe—in our opinion the most advanced region addressing human rights—to lead the development of educational materials and to consider due diligence based on the views of our six operating bases: the Americas, Europe, Japan, China, India, and elsewhere in Asia. This framework brings a global perspective to the human rights initiatives of the

Governance 026

chapter 2 Environmental 060

# chapter 3 | Social Report

- 121 Message 122 Respect for Human Rights
- 127 Supply Chain Management 133 Diversity Management
- 147 Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
- 159 Communication with Shareholders and Investors
- 163 Employee Health and Safety
- 167 Global Human Capital Development 173 Social Contribution Activities

#### Hitachi, Ltd. Framework for Promoting Respect for Human Rights



# European Stakeholder Dialogue 2013: Human Rights Policy and **Due Diligence**

In February 2013, Hitachi's European CSR team convened business and human rights experts to gather feedback and input on the development of our global human rights policy and due diligence approach. Participants included representatives from the European Commission, the ILO, NGOs, specialist lawyers, and external companies. The first session featured a presentation on the development of the global policy and the elements included in it, followed by a discussion on the policy text. Many constructive suggestions and comments were provided by the stakeholders; the major contributions included that we should ensure that the policy highlights our contribution to the realization of human rights as well as to the prevention of human rights violations. Our policy text was updated in light of this feedback.

During the second part of the day some of Hitachi's European business leaders outlined their companies' approaches to human rights impact assessment. The leaders from our rail and power business spoke about human rights issues, particularly among local communities, when building new facilities. Another business leader from Hitachi's Finger Vein Business articulated the work his team does to ensure privacy of information for customers in the banking system. The external experts highlighted the need to engage stakeholders early on when assessing human rights impacts and also the importance of involving rights holders in the process. All outputs from the day are extremely valuable and will contribute to Hitachi's creation of effective human rights impact assessment processes.

<sup>159</sup> Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

<sup>173</sup> Social Contribution Activities

# Sharing the UN Guiding Principles on Business and Human Rights

Hitachi Group Sustainability Report 2013

In July 2012, 55 managers from Hitachi, Ltd. headquarters, business divisions, key Group companies, and regional headquarters gathered in Nasu Town, Tochigi Prefecture, for a workshop on the Guiding Principles on Business and Human Rights adopted by the United Nations. We invited representatives from the NPO Shift\*1 to lead the session, with participants discussing business and human rights beyond divisions and borders, boosting



Hitachi human rights workshop in Japan

their understanding of cultural and legal differences, and learning about Hitachi's responsibilities. In line with the UN Guiding Principles, we have also developed a common global human rights e-learning course to foster Group-wide recognition of respect for human rights as a corporate responsibility. This course will be rolled out to all Group companies in fiscal 2013.

\*1 Shift: An NPO made up of members of the team that shaped and wrote the UN Guiding Principles on Business and Human Rights under the guidance of Prof. John Ruggie, former Special Representative of the UN Secretary-General for Business and Human Rights.

# **Human Rights Education in China**

A human rights workshop on the UN Guiding Principles on Business and Human Rights was held in China, a market that represents massive sales volumes for Hitachi and is home to many Group companies. In August 2012, we invited Dr. Liang Xiaohui from the Peking University Law School to lead the workshop for Hitachi Group CSR officers in China. Around 50 officers participated from 30 Group companies, addressing the



Human rights workshop in Shanghai

topic of companies and human rights in a global environment. They specifically learned about what human rights are, the impact companies have on human rights, the UN Guiding Principles and what Hitachi can do. Comments from participants included, "I realized that human rights was an issue closely related to daily business operation," and "Hearing about incidents at other companies, I was inspired to make sure that those incidents would not happen here at Hitachi." In February 2013, a similar CSR workshop was held for Hitachi Group CSR officers in Hong Kong. The speaker was Dr. Surya Deva from the City University of Hong Kong, and the workshop was attended by 14 officers from 13 Group companies.

# **European Senior Manager Training on Business and Human Rights**

Building on previous training sessions that introduced the topic of business and human rights and that have started to gain the understanding of senior managers in Europe, the CSR team provided further training in the region in January 2013. The two sessions held in the UK and Belgium were facilitated by an issue expert from the business and human rights organization, Shift.

Governance 026

chapter 7 Environmental 060

#### chapter 3 | Social Report

- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
- Communication with Shareholders and Investors
- 163 Employee Health and Safety
- Global Human Capital Development 167 Social Contribution Activities

The training began with an overview of the UN Guiding Principles on Business and Human Rights, the corporate responsibility to respect human rights and a case study on human rights due diligence (HRDD). Attendees then participated in an exercise that took them through an HRDD methodology. They started by identifying potential and actual human rights impacts related to their business, before assessing the risks of the impacts. By prioritizing the risks, the senior managers were able to consider how to address them through prevention, mitigation or remediation. Many valuable lessons were learned about impacts that may not previously have been considered, as well as the need for adequate knowledge on human rights risks and why it is important to conduct HRDD. Going forward, further training sessions will be held to support the implementation of Hitachi's global human rights policy.

# **Contributing to International Discussions**

As a member of the United Nations Global Compact (UNGC)\*1 Human Rights and Labour Working Group, we help to create case studies on human rights initiatives in frontrunning companies, develop business and human rights tools, promote the UNGC's human rights principles, and improve the understanding and implementation of the UN Guiding Principles on Business and Human Rights. In Europe, we participate in a working group on human rights run by CSR Europe, a business network promoting CSR across the region, which is supporting the implementation of key human rights in business with examples of best practices and practical tools. In December 2012, we were the only Japanese company to participate as a panelist in the UN Forum on Business and Human Rights in Geneva, presenting the background on human rights issues in Japan and introducing Hitachi's initiatives in this area. We will continue our role in international discussions on human rights, deepening our understanding of global human rights trends and contributing to activities that promote respect for human rights — beyond Hitachi and our industry sectors.

\*1 UN Global Compact: An international accord that Kofi Annan, the former Secretary-General of the United Nations, proposed and which was adopted in 2000. This compact's 10 principles on human rights, labor, the environment, and anti-corruption encourage the building of a sustainable society. The United Nations asks corporations, nongovernment organizations, citizens groups, and other entities to base their actions on these principles. Hitachi became a signatory in 2009.

<sup>150</sup> Quality Assurance Activities 153 Customer Satisfaction Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

<sup>173</sup> Social Contribution Activities

#### Implementing Hitachi's New Policy Commitment on Human Rights

policy, in line with the UN Guiding Principles on Business and Human Rights, which has been developed with expert stakeholder input. Hitachi has also conducted a number of internal human rights training sessions to help build understanding and support for the new policy, including with senior managers in Europe, leaders from Global CSR, Human Resources and other functions and business units in Japan, and also with its CSR team in China. Adopting a policy commitment is an essential first step in implementing Hitachi's responsibility to respect human rights. The next steps for Hitachi will be to embed the policy throughout the company—including through further internal awareness-raising and capacity-building and to develop the human rights due diligence and remediation processes needed to implement it effectively. This is a significant undertaking by Hitachi and following through on the new commitment will take time, particularly given the global reach and sectoral diversity of Hitachi's business. It will be important that Hitachi seeks to manage raised stakeholder expectations through meaningful engagement and communication about its plans and progress against specific goals. As a participant in Shift's Business Learning Program, Shift looks forward to continuing to support Hitachi as it works to meet its human rights commitments.

This year, Hitachi launched a company-wide human rights



Rachel Davis
Managing Director,
Shift and former Legal
Advisor to Professor John
Ruggie, UN Special
Representative
on Business and Human
Rights

<sup>9</sup> Communication with Shareholders and Investors

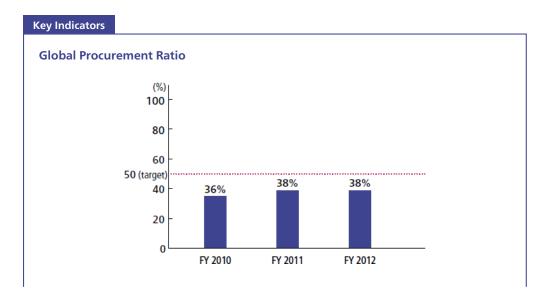
<sup>163</sup> Employee Health and Safety

# **Supply Chain Management**

One priority in the 2012 Mid-Term Management Plan is to expand our global procurement ratio, particularly by increasing purchasing in emerging countries. This will reinforce our competitiveness in global markets and our operational foundation. In procurement, we respect human rights, including basic work rights, of everyone in our supply chain. We collaborate with suppliers in promoting CSR by sharing guidelines and communicating proactively.

## **Promoting Global Procurement**

Using the 2012 Mid-Term Management Plan, we intended to raise the Hitachi Group's global procurement ratio from 36 percent (fiscal 2010) to 50 percent by fiscal 2012. We therefore formulated the Hitachi Group Mid-Term Procurement Strategic Plan. The key aims were to establish global partnerships to create Group procurement strategies, to stabilize the supply of materials, and to reinforce CSR and sustainability within the supply chain. In fiscal 2012, however, the impact of factors such as changes in the parameters of our business portfolio kept the global procurement ratio at 38 percent. In fiscal 2011, we appointed procurement officers for the first time to oversee local procurement in China, the rest of Asia, Europe, and the Americas. These officers are responsible for expanding the pool of suppliers in emerging markets, as well as for reinforcing our responsiveness to CSR risks, a growing concern as the supply chain expands globally.



Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

# **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 companies in the Hitachi Group follow these guidelines.

These 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 quidelines 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
- (1) HITACHI shall not request quotations from suppliers with whom there is no intention to enter into a future business relationship.
- (2) In accordance with specified internal procedures, the 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
- 5. HITACHI members are prohibited from receiving any personal gifts or offers from suppliers.

Revised in 2009

<sup>159</sup> Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

# **Building Global Partnerships**

Our basic principles on procurement call for forging partnerships, mutual understanding, and reliable relationships with all suppliers with an eye on the long term. For these reasons, as well as the principle of free competition, we disclose procurement items to all suppliers, inside and outside of Japan, to cultivate and expand our pool of suppliers. For this goal, we held supplier meetings aimed at developing new supplier partners in Dalian in July 2012, Istanbul in December, and in Kaohsiung and Bangkok in March 2013. We will continue to develop relationships with suppliers in new areas in response to globalization, focusing on the emerging countries that we have positioned as major markets.

# **Hitachi Group CSR Procurement**

CSR risks are a growing concern as globalization accelerates. Recognizing that supply chain procurement risk could cause management problems, we are reinforcing our risk identification and management systems to avoid and mitigate risk as much as possible.

#### **CSR Procurement Promotion Framework**

To strengthen our CSR supply chain management, we established a CSR Green Procurement Center within the Hitachi headquarters in fiscal 2011. We have also established the Hitachi Group CSR Green Procurement Committee, which includes committee members from our in-house companies and Group companies. This completes a framework that will enable our CSR procurement and green procurement philosophy and initiatives to be shared throughout the Group.

#### Formulating a CSR Code of Conduct and Standards and Informing Suppliers

In fiscal 2009, we revised the Hitachi Group Supply Chain CSR Deployment Guidebook, which conforms to the Supply Chain CSR Deployment Guidebook of the Japan Electronics and Information Technology Industries Association (JEITA). Our guidebook serves as a CSR code of conduct and standards that we expect our suppliers to comply with. We have distributed this guidebook to around 22,000 suppliers of our in-house companies and Group companies (around 12,000 sites of in-house companies' suppliers, and around 10,000 sites of Group companies' suppliers) to inform them of their CSR responsibilities.

Hitachi Group Supply Chain CSR Deployment Guidebook (PDF, 612 Kb) http://www.hitachi.com/procurement/policy/\_\_icsFiles/afieldfile/2010/08/30/SC\_CSR\_E\_2.pdf

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

Hitachi Group

Sustainability Report 2013

#### **Implementing Self-Checks by Key Suppliers**

To check the extent that the codes of conduct and standards indicated to suppliers are being met, since fiscal 2009 we have asked key suppliers to undertake selfchecks using the check sheet attached to the JEITA Supply Chain CSR Deployment Guidebook, and have collected the results. Since fiscal 2011, we expanded the scope of suppliers to include companies in emerging markets (China and the rest of Asia).

#### **Data on Self-Check Results**

FY	Suppliers in Japan	Suppliers outside Japan	Total
FY 2007	100	0	100
FY 2009	132	0	132
FY 2011	0	102	102
FY 2012	57	41	98
Total	289	143	432

#### **Auditing with the Support of External Auditing Organizations**

Since July 2012, we have been auditing suppliers from emerging markets (China and the rest of Asia) from among the suppliers providing self-check results. In fiscal 2012, we conducted CSR audits of 12 suppliers: 10 in China, one in Korea, and one in Indonesia. For these audits, we engage JACO and DNV.\*1 Local auditors familiar with local laws and regulations check suppliers' performance on labor and human rights, health and safety, the environment, and ethics. No major infringements have emerged from these audits, but there are areas needing improvement, and we are working with suppliers to that end. We will systematically continue audits of suppliers, mainly in China and elsewhere in 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.





Auditing manufacturing and environment-related sites of a supplier in an emerging country

#### **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 less environmental impact, so that suppliers help to protect the environment.

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

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.

- 121 Message
- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management
- Public Policy Initiatives
- - 150 Quality Assurance Activities 153 Customer Satisfaction
  - Communication with Shareholders and Investors
  - 163 Employee Health and Safety
  - 167 Global Human Capital Development 173 Social Contribution Activities

The guidelines set out supplier requirements for environmental conservation, including building an environmental management system and acquiring certifications. There are also requirements for reducing the environmental impact of products supplied to Hitachi, such as conserving resources and energy in production, recycling, managing chemical substances, and fully disclosing related information.

In fiscal 2012, 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, Authorisation and Restriction of Chemicals (REACH) regulations 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 guidelines were revised to match the changes and distributed to suppliers.

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). We also encourage them to use information transmission systems and to minimize the amount of labor involved.

- \*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.).

**WEB** 

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

#### **Helping Build Environment Management Systems**

We call suppliers who acquire environmental certifications and who develop environmental management systems (EMSs) Green Suppliers. In fiscal 2009, we launched the New MMM Club\*1 with these Green Suppliers, providing them with information on advanced environmental technologies and environmental regulations to support their EMS development.



Presentation at the New MMM Club General Meeting

In fiscal 2012, 97 suppliers attended a general meeting of the New MMM Club. At the meeting, we explained our environment philosophy, environmental footprint trends, and waste management. We also invited a speaker from the Japan Environmental Management Association for Industry (JEMAI), who gave a presentation entitled "Trends in regulations on chemical substances contained in products and the need to pass information along the supply chain." Suppliers gave presentations on their own environmental programs.

\*1 The New MMM Club: An organization run primarily by suppliers who have acquired environmental certification through Hitachi's activities to support their own environmental programs. Mottainai, which means regrettable waste in Japanese, is now an international environmental term. The three Ms come from the first letter of

#### chapter 3 | Social Report

- 121 Message
- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management
- Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
- 159 Communication with Shareholders and Investors
- 163 Employee Health and Safety
- 167 Global Human Capital Development

#### **Promoting Green Purchasing**

We are improving our green purchasing 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. For fiscal 2012, our green purchasing rate reached 92 per cent, two per cent up on the previous fiscal year.

# Hitachi Group Sustainability Report 2013

# Response to the Conflict Minerals Issue

In August 2012, the U.S. Securities and Exchange Commission (SEC) adopted and issued a final rule obliging companies with securities registered in the United States that use any conflict minerals in their products to report this to the SEC pursuant to Article 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, which was signed into law in July 2010. Conflict minerals include columbite-tantalite, cassiterite, gold, and wolframite, the four minerals determined to be financing conflicts that are produced in the Democratic Republic of Congo (the "DRC") and adjoining countries (together the "DRC countries"). The goal of this law is to cut off revenues from armed groups that use violence and violate human rights in the conflict-ridden DRC countries. Because Hitachi, Ltd. has not been listed in the United States since March 2012, we have no legal obligation to report. However, we strive to ensure that we do not, directly or indirectly, abet the human rights violations identified in the DRC countries. To continue our responsible procurement practices, we are working with Group companies, suppliers, and the industry association JEITA to strengthen supply chain transparency and to ensure that the minerals we procure do not finance or benefit armed groups committing human rights violations.

# **Diversity Management**

The diversity of people can be seen externally through aspects such as gender and age, which are easy to distinguish from appearance. People also differ by internal aspects, such as character and values, which are not immediately visible. External factors such as gender and age are important in understanding each other. It is equally important to respect the internal aspects of diversity.

# **Hitachi Group Diversity Management**

Our diversity management views external and internal differences as making up the individuality of a person. We intend to get the most out of every employee by respecting them as individuals.

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 and their expectations of our organization. We are committed to building a diverse organization that is inclusive of all aspects of diversity. We want to build professional environments where employees can demonstrate and develop their capabilities, collaborate with each other, and talk to bring creativity and innovation to their work.

The range of our business domains, technologies, geographic coverage, and types of customers are among the broadest in the world, making employee diversity a genuine competitive advantage for us. We are proud of our diversity, and will use it to the full, getting the best from our talented employees to strengthen our organizational capacity, create synergies, boost company productivity, and expand our operations.

#### **Diversity for NEXT100**

We have developed the "Diversity for Next 100" initiative to promote diversity management as a key management strategy to best use our wide range of personnel. Drawing on the strong commitment from our senior management, we are enhancing our personnel capacity Group-wide. We are also pursuing greater diversity at the management level. In fiscal 2012, we appointed three non-Japanese directors (including two from outside Hitachi) to our Board of Directors, as well as one female Japanese director from outside Hitachi. Then in fiscal 2013, we appointed one female non-Japanese as an outside director.

One of our initiatives to support female employees in the workplace was to establish inhouse day care centers in fiscal 1990, ahead of other companies, to help women balance work and child care. We have also developed and extended systems for child care leave and working from home. In fiscal 2000, we launched the Gender-Free & Family-Friendly Plan (FF Plan), while increasing the number of women hired for management positions. Support programs have been reinforced, including developing and enhancing programs supporting balance between work and home. Recently, we have been raising awareness among all employees through diversity education and Work-Life Balance-up! Month. These initiatives aim to create a more inclusive corporate culture. Thanks to these efforts, the ratio of female employees has grown steadily to reach 16.0 percent in fiscal 2012, 3.5

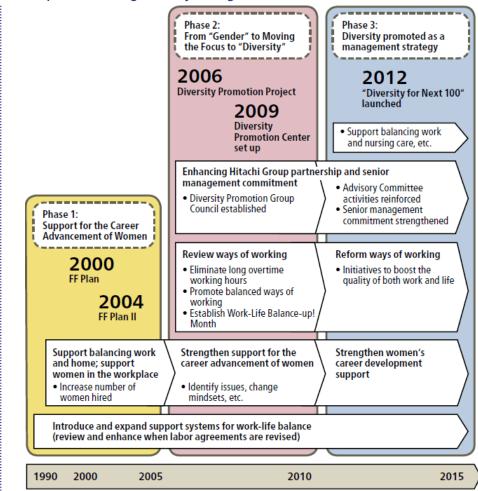
<sup>159</sup> Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

percent in the case of female managers. Our focus going forward will be to have more women in leadership positions, participating in management and decision making.

Hitachi Group Sustainability Report 2013

#### **Roadmap for Promoting Diversity Management**



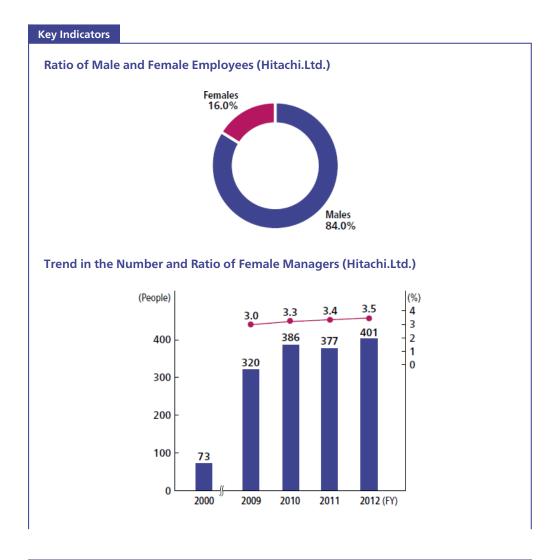
#### Goals for Hitachi, Ltd.

To develop female employees and support their promotion in the workplace, we have set two new goals: appointing female executives and increasing the number of female managers in Japan to 1,000 by fiscal 2020 (2.5 times more than at the end of fiscal 2012). This is an expression of our commitment within and beyond Hitachi to provide even more support to women in the workplace and to enhance diversity management. In addition to bolstering existing programs, we will make visible the progress of programs and issues faced in each business division and set numerical goals for each business division in order to strengthen our management commitment. We will also provide education for women at the general manager level and above to boost their engagement and performance, creating an environment where they can use their skills in leadership and business

The Group will be a frontrunner in diversity management promotion, implementing workforce planning that places the right people in the right roles regardless of gender, nationality, career, or age.

#### chapter 3 | Social Report

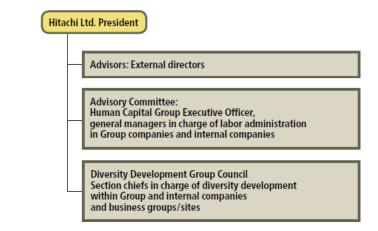
- 121 Message
- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management 147 Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
- Communication with Shareholders and Investors
  - 163 Employee Health and Safety 167 Global Human Capital Development
  - 173 Social Contribution Activities



# **Diversity Promotion Project Structure**

The Diversity Promotion Center, established in fiscal 2009, was placed under the direct supervision of the Human Capital Group in January 2013 to strengthen its activities. The Advisory Committee and the Diversity Promotion Group Council, in which all 24 Group companies participate, hold in regular information exchanges to thoroughly energize our diversity management policy and share best practices to promote diversity across the Hitachi Group. To promote diversity, we hold regular meetings to exchange opinions with labor unions.

<sup>163</sup> Employee Health and Safety167 Global Human Capital Development



#### **Diversity Promotion Group Council**

The Diversity Promotion Group Council was launched to promote diversity among inhouse companies, business sites and Group companies. We have now divided this council into two: the Advisory Committee primarily made up of general managers and officers in charge of labor administration in Group companies, and the Diversity Development Group Council, bringing together heads of departments in charge of diversity development to clarify their roles and review operations. The Advisory Committee is tasked with direction setting and creating action guidelines, while the council will exchange information and views on specific activities. We will deepen our efforts from simply respecting diversity and creating a strong management commitment to expanding diversity as a management strategy aimed at establishing competitive advantages and accelerating diversity management initiatives Group-wide.

**WEB** 

**Diversity Promotion Group Council Proceedings Prior to the Ninth Meeting** http://www.hitachi.com/csr/society/diversity/project/index.html

<sup>163</sup> Employee Health and Safety

<sup>167</sup> Global Human Capital Development

# **Diversity Activities (1)**

#### Women's Summit Tokyo 2012

Date: January 18, 2012 (Friday)

Headquarters Conference Room, Asahi Breweries, Ltd.

Participants: 56 (6 companies)

This regular cross-industry networking event is cosponsored by six Japanese and foreign-affiliated companies from various industries to support the advancement of women in the workplace and diversity management. Themes at the fifth event in 2012 included presenting role models for working women, leadership, and networking outside the company. The keynote speech by Takako Konishi, Executive Vice President of Pola, Inc., was followed by workshops and



Women's Summit Tokyo 2012

group discussions with lively exchanges of views and information.

Participating companies: Asahi Breweries, Ltd., Aozora Bank, Ltd., NTT DATA Corporation, Hewlett-Packard Japan, Ltd., Sumitomo 3M Limited, the NPO GEWEL, and Hitachi, Ltd..

#### **Diversity Training for Managers**

Fostering recognition in the entire workplace helps to promote and instil diversity. Given the central role of managers, building diversity awareness among them is particularly important. Our diversity training for managers features group discussions on specific company- or worksite-related issues that encourage the adoption of a new mindset. This program asks managers to review their management experiences and rethink their approach to maximizing the potential of people and organizations. We expect concrete changes to emerge from all participants. Around 570 managers have participated in the program from the second half of fiscal 2010 through fiscal 2012.

#### **Diversity Workshops**

It is important that the workplace as a whole puts diversity and work-life management into practice, and that our diversity workshop approach is effective. 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 based on their own experiences. More than 1,000 Hitachi Group employees have already 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. In fiscal 2013, we created a handbook so that Group and in-house companies can hold their own workshops, publicizing the approach across the Group.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

Global Human Capital Development 167 Social Contribution Activities

#### 138

Hitachi Group

Sustainability Report 2013

#### **Prior to Maternity Leave/Return-to-Work Support Seminars**

We introduced seminars to address challenges particular to women, such as putting careers on hold for childbirth, child care, and concerns about balancing work with child care. Women 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. Since more employees aim to balance work and child care, we plan to hold seminars twice a year.



Return-to-work support seminar

#### **Union-Hosted Work-Life Balance Partnership Forum**

Labor unions are also proactively addressing work-life balance, for example by holding study meetings to boost awareness among their members. In April 2013, the Federation of Hitachi Group Workers Unions held a Partnership Forum for union members from Group companies.

At the forum, company policies and programs on promoting diversity were highlighted, and an outside speaker gave a lecture on career development. This was followed by group discussions on workplace issues and their solutions for achieving a work-life balance. The forum gave participants the chance to think about their own work-life balance, furthering their understanding of the importance of taking concrete action for better ways of working.



Lecture



Group discussion

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety Global Human Capital Development 167

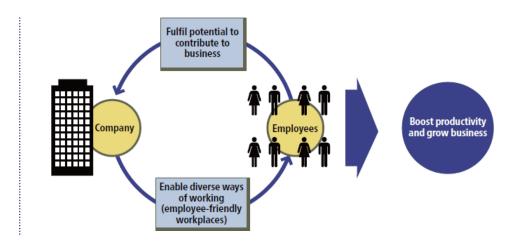
# **Work-Life Management**

Hitachi Group Sustainability Report 2013

Our diversity management initiatives are designed to enable all employees to reach their full potential, as well as to enhance our organizational capability and 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 Group's Work-Life Balance Is Work-Life Management

The Hitachi Group looks beyond simply achieving work-life balance. We aim to create an employee-friendly work environment, from the perspective of work-life management, where employees can create the best combination of work and life for themselves, and enhance both, toward maximizing their capabilities.



#### Work-Life Balance-up! Month

In fiscal 2010, we began holding the Work-Life Balance-up! (WLB-up!) Month every November to inform employees of our approach how to managing the balance between work and life. The main activities during the third WLB-up! Month in November 2012:



- Promoting understanding of the systems supporting work-life balance
- Improving work-life management and creating a corporate culture that encourages people to use these programs
- Boosting individual employee's awareness of work-life management

<sup>159</sup> Communication with Shareholders and Investors

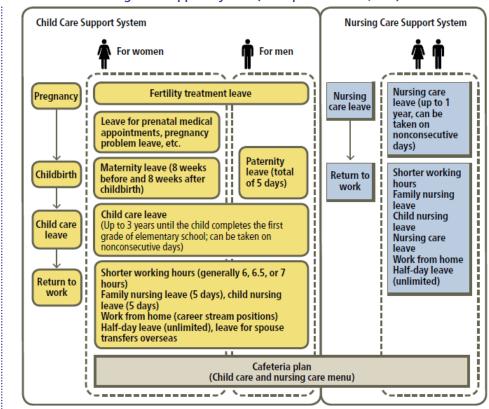
<sup>163</sup> Employee Health and Safety Global Human Capital Development 167

#### **Developing Work-Life Balance Support Systems**

Since fiscal 1990, 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.

Hitachi Group Sustainability Report 2013

#### Child Care and Nursing Care Support System (Example of Hitachi, Ltd.)



## **Key Indicators**

#### Using Work-Life Management Support Systems (Hitachi, Ltd.)

System	System Use (People)				
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Key Indicators Child care leave	414	<b>7</b> 486	<b>7</b> 542	533	<b>7</b> 540
Key Indicators Shorter working hours for child care	449	<b>7</b> 473	<b>7</b> 531	<b>7</b> 614	<b>7</b> 625
Key Indicators Nursing care leave	14	8	<b>7</b> 10	<b>7</b> 12	<b>7</b> 17
Key Indicators Shorter working hours for nursing care	6	<b>7</b> 7	<b>7</b> 8	8	<b>7</b> 10
Paternity leave	117	<b>7</b> 133	<b>7</b> 156	<b>7</b> 209	<b>7</b> 230
Family nursing leave	161	<b>7</b> 173	<b>7</b> 204	195	194
Work from home	93	43	<b>7</b> 187	<b>7</b> 289	<b>7</b> 320

#### chapter 3 | Social Report

<sup>159</sup> Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

<sup>167</sup> Global Human Capital Development 173 Social Contribution Activities

#### **Setting Up In-House Child Care Centers** Genki Club

Hitachi Group Sustainability Report 2013

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 60, 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, the labor unions of related companies, and many other groups who work together to provide support.







Christmas party

<sup>150</sup> Quality Assurance Activities 153 Customer Satisfaction159 Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety167 Global Human Capital Development

#### **Main Assessments and Awards**

Hitachi, Ltd. has received the following assessments and awards from the media and other external organizations to recognize our diversity and other initiatives that create a more employee-friendly workplace.

#### Hitachi, Ltd. Recognized in FY 2012 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



METI Parliamentary Vice Minister and representatives from award-winning companies

employees, including women, different nationalities, older employees, and people with disabilities.

The Hitachi Group is accelerating work on diversity management. Not only is our diversity message communicated directly by the president and company executives, but dedicated organizations are also being set up within each company and division to meet specific goals. We also have regionally oriented programs such as the European Diversity Project, which we launched in fiscal 2009.

#### **Kurumin Certification**



In February 2011, we acquired Kurumin certification in Japan under the Act on Advancement of Measures to Support Raising Next-Generation Children, which came into force in April 2005. Certification is granted to companies that create action plans for child care support in line with this legislation and that meet performance requirements. We develop and implement 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

#### Other Assessments and Awards

- Nihon Keizai Shimbun, 2012 Ranking of Companies with the Best Working Conditions: 2nd place
- Nikkei Business Publications, Inc., 2013 Ranking of the Best 100 Companies that Encourage Working Women: 33rd place

Work-Life Balance Category: 4th place

Active Use of Women's Ability Category: 5th place

 Fortune Magazine of the United States named Hitachi Data Systems Corporation one of the "100 Best Companies to Work For" in 2012.

- 127 Supply Chain Management133 Diversity Management
- Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
  - Communication with Shareholders and Investors
- 163 Employee Health and Safety
- Global Human Capital Development 167

# **Diversity Activities (2)**

Hitachi Group Sustainability Report 2013

# Support for Women's Leadership Networks (WLNs) in North America

Hitachi, Ltd. and all of our Group companies believe that diversity of our business lines, technologies, and people enables social innovation. By embracing diversity and differences, Hitachi can drive social innovation by developing individual talents and cohesive teams that provide the best solutions for our global customers. One of the ways that Hitachi promotes diversity and inclusion is by supporting Women's

Leadership Networks (WLNs) in North America. As with any employee resource group (ERGs) or affinity groups, these are open to men and women who have a shared interest. The WLNs focus on topics such as professional development, time management, people skills, and networking opportunities. The WLN leaders at each company hold quarterly teleconferences to share resources, make book recommendations, and discuss how their groups are growing. All employees are encouraged to create other ERGs to support their interests.

In addition, many of our locations host international appreciation days. Some of these events tie into our annual North America Food Drive and others host learning days at other times of the year. One of our locations celebrated diversity by performing and hosting a Japanese tea ceremony where the employees learned about Japan's cultural traditions and history.

Respecting differences increases employee satisfaction, which in turn motivates employees to work at their highest level both personally and professionally. This in turn translates into greater innovation, company sustainability, and growth. We strive to create an environment where the unique strengths and abilities of a wide array of people are brought together to produce new value and develop innovative solutions.

#### **Promoting Diversity in Europe**

Hitachi in Europe continues to address diversity and inclusion, driven by the reality of demographic change, an aging population and an intensifying "war" for talent in the region. Having a diverse workforce and an inclusive workplace culture is particularly important for increasing innovation and therefore business performance. A recent annual survey of Hitachi Group companies in Europe indicated that overall the proportion of female employees in Europe has remained the same as in 2012, approximately 29 percent. There has been a small increase in the number of female senior managers. However, more needs to be done to ensure that female managers are equipped to take on senior level roles. This issue is being addressed, for example in 2012 four times more women graduated from Hitachi's European Leadership Programme than in 2011.

Hitachi Europe has seen a rise in the proportion of female managers from 21 percent in 2012 to 30 percent in 2013. Our policy is to hire and promote the best candidates for each position, and in 2012 twice as many women as men were promoted to management positions. In recruitment processes, standard job description terminology was reviewed to make it more gender neutral and recruitment agencies were briefed on implementing a more diversity friendly approach to attracting people to work for Hitachi. Three female managers were recruited to work for Hitachi Europe in 2012, a threefold increase from 2011.

A series of management level meetings was kicked off in December 2012 coinciding with a visit by Ms Yukari Tominaga, Executive Officer, Hitachi Solutions. Ms Tominaga shared her desire to improve gender diversity within Hitachi with a number of female managers

# chapter 3 | Social Report

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

<sup>173</sup> Social Contribution Activities

144

and acknowledged that Europe faces similar challenges to Japan, particularly for women leaving work to have children and the need to develop women for senior roles. Follow-up meetings took place in 2013 to outline the specific challenges facing women's development and ways to address these on a regional level.

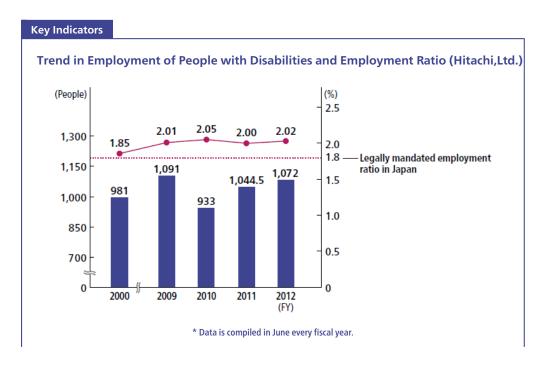
Hitachi Group Sustainability Report 2013

<sup>163</sup> Employee Health and Safety167 Global Human Capital Development

# **Employing People with Disabilities**

The policy of the Hitachi Group is to respect individual differences and to seek ways to harness every employee's individuality and capabilities. People with disabilities are using their skills in a wide range of workplaces from design, development and manufacturing through to human resources, accounting, and other workplaces.

As of June 2012, the employment ratio of people with disabilities was 2.02 percent at Hitachi, Ltd. and 1.95 percent for the entire Group, topping Japan's legally mandated ratio of 1.8 percent. With the legally mandated ratio rising to 2.0 percent (as of April 2013), we will maintain our Group-wide drive to hire more people with disabilities. We also outsource tasks to a sheltered workshop in Ibaraki Prefecture, helping to create jobs for around 80 people.



#### **Hitachi Group Special Subsidiaries**

Five special subsidiaries within the Hitachi Group employ 211 physically, intellectually, mentally, and developmentally challenged people. They work at the parent company and affiliated companies performing a large variety of roles suited to their abilities.

#### Hitachi Group Special Subsidiaries (as of June 1, 2012)

Special subsidiary	Parent company	No. of people with disabilities	Main tasks
Hitachi You and I Co., Ltd.	Hitachi, Ltd.	93	Cleaning, mail, shredding, cafeteria work, clerical work assistance
Hallow, Ltd.	Hitachi Metals, Ltd.	40	Machining, checking, aluminum wheel grinding, mail
Hitachi High-Tech Support Corporation	Hitachi High-Technologies Corporation	25	Mail, business card creation, travel expense calculation, bookbinding
Building Care Staff, K.K	Hitachi Building Systems Co., Ltd.	48	Digitization of documents, office work assistance, cleaning, shredding
UJKC Social Enterprise, K.K.	Hitachi Automotive Systems Steering, Ltd.	5	Auto parts assembly

- Respect for Human Rights
- Supply Chain Management Diversity Management 133
- 127 Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
- 159 Communication with Shareholders and Investors
- 163 Employee Health and Safety
- Global Human Capital Development 167 Social Contribution Activities

#### 146

# Fostering Understanding of People with Mental Disabilities and **Employment**

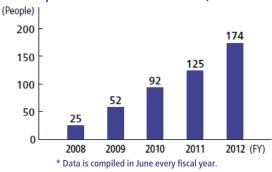
Hitachi Group Sustainability Report 2013

Hitachi, Ltd. proactively participated in a model project of the Ministry of Health, Labour and Welfare called Promoting the Employment of People with Mental Disabilities. We hold study meetings to share the employment and retention expertise developed through the project Group-wide, as well we created the Handbook on Employment of People with Mental Disabilities for distribution to all Group companies in Japan. Our initiatives to boost employment have raised the number of mentally challenged employees in the Hitachi Group to 195 (as of December 2012).



Handbook on Employment of People with Mental Disabilities

#### Trend in Employment of People with Mental Disabilities (Hitachi Group)



Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety167 Global Human Capital Development

<sup>173</sup> Social Contribution Activities

# **Public Policy Initiatives**

Partnerships with governments and policymakers around the world are vital for growing our Social Innovation Business to create a sustainable society. We are enhancing external relations so that we can respond to social expectations as a company supplying social infrastructure and then feeding back social and policy trends to management.

#### **External Relations Promotion Structure**

#### **Background to and Vision for Government & External Relations**

Partnerships with government institutions in and outside Japan are becoming increasingly critical for the global expansion of our Social Innovation Business. Deepening our relationships with the government institutions that are the main agents for social infrastructure will enable us to more precisely identify local business needs and contribute to the creation of optimal societies. Working with the Japanese government to best use the systems that the government has in place to support the export of infrastructure business will also be a powerful business driver.

#### **External Relations Structure and Mission**

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, responding to the management policy of strengthening our Social Innovation Business, as well as the growing support offered by the Japanese government for infrastructure system exports. Through this division, including executive managers, we talk with policymakers so that government institutions can get a better understanding of our business. We then offer policy recommendations with a view to stimulating industry as a

In addition to appointing external relations personnel in in-house companies and Group companies, 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 regular meetings to share cases and issues, with an eye to boosting the efficiency of our activities.

# **Specific Initiatives**

#### **Participating in International Conferences**

Hitachi gives presentations at international conferences held by Japanese and other government institutions to contribute to policymaking from an industry standpoint. In fiscal 2012, the Mekong-Japan Industry and Government Dialogue, a Ministry of Economy, Trade and Industry (METI) initiative aimed at boosting Japan's presence in the five Mekong countries, was attended by representatives from Hitachi Group local subsidiaries. They offered their views on infrastructure projects in the Mekong region. Hitachi executives also attended the Japan-France Energy Forum held in the Chamber of Commerce and Industry of Paris, highlighting the importance of an effective energy mix.

Governance 026

chapter 7 Environmental 060

# chapter 3 | Social Report

121 Message 122 Respect for Human Rights

127 Supply Chain Management 133 Diversity Management

147 Public Policy Initiatives

150 Quality Assurance Activities 153 Customer Satisfaction

159 Communication with Shareholders and Investors

163 Employee Health and Safety 167 Global Human Capital Development

173 Social Contribution Activities

# **Participating in Policy Deliberations**

Hitachi Group Sustainability Report 2013

We exchange views on the Japanese government's support for infrastructure system exports. In fiscal 2012, executives attended the Subcommittee on Infrastructure and Advanced Systems Strategy under METI's Industrial Structure Council and the Ministry of Land, Infrastructure, Transport and Tourism's Advisory Council on Promotion of International Infrastructure Deployment, proposing specific types of support.

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

Operating through business and industry associations is another critical aspect of our external relations. For example, the European Union Parliament is currently revising the proposal on the General Data Protection Regulation for the protection of personal data. We are working as a member of the Japan Electronics and Information Technology Industries Association (JEITA) to put our views to the European Union Parliament, as well as to develop, in consultation with METI, a Japanese industry response. Hitachi is also a member of Keidanren (Japan Business Federation), serving as vice chair as well as participating on several committees. As the planning and coordination chair for the subcommittee on Europe, we urged the Japanese and European governments to enter negotiations on a Japan-EU Economic Partnership Agreement. With that decision reached in March 2013, we will continue to support the progress of negotiations.

#### **Using Government Support**

METI provides a program supporting global human resource development and the creation of international networks, part of their support for infrastructure system exports. In fiscal 2012, 14 Hitachi Group employees took part in this program, which sends, for several months, working-level employees from private companies to government institutions and local companies in emerging countries. Participating in this kind of program will enable us to more accurately identify the needs of emerging countries. Hitachi has also been contracted by the New Energy and Industrial Technology Development Organization (NEDO) to participate in the Japan-US Island Grid Project on the island of Maui in Hawaii in a bid to convert 40 percent of the island's power generation to renewable energies by 2030. This demonstration project, running until the end of fiscal 2014, is a collaboration with partners including the State of Hawaii, the Hawaiian Electric Company, Inc., the University of Hawaii, and the Pacific Northwest National Laboratory.

## **External Relations in the US**

The Hitachi Group Corporate Office in Washington, DC, examines the impact on business of US government legislation. To promote mutual understanding and improve business opportunities, we communicate to key stakeholders how Hitachi's business can contribute to the growth of US society.

For example, we launched the Hitachi Government Relations Network (HGRN) in fiscal 2011. With more than 20 members—primarily from Group companies—the HGRN serves as a venue 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 representatives.

We provide information to policymakers and government representatives on Hitachi's specialist technologies in the Social Innovation Business to convey directly and indirectly how Hitachi technologies can contribute to US society. For example, communication with

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

researchers at influential institutions, such as the Brookings Institution, the American Association for the Advancement of Science, the Center for Strategic and International Studies, and the Council on Foreign Relations, deepens their understanding of Hitachi's business and technological capacity, helping them to reflect our specialist technologies in the policymaking of their institutions.

#### **External Relations in Europe**

The Hitachi Corporate Office, Europe, located in Brussels, gathers, analyzes, and disseminates information on policy trends in Europe, makes recommendations on European Union policies, and serves as a link to European institutions. Participating in European policy debates from the perspective of a global company will enable us to not only understand the future business environment, but to seize the opportunity to have some influence on shaping it. We believe that these activities will contribute to maintaining an appropriate quality of management as a global company. Especially in recent years, there have been discussions involving stakeholders in the fields of business and human rights that have the potential to impact the business environment as well as policy trends in Europe. From this point of view, in fiscal 2012, we contributed to the discussion on business and human rights led by the European Commission. When the European Commission was creating sector guidance for putting the United Nations Guiding Principles on Business and Human Rights into practice, we formulated views on sector guidance through the CSR Committee of the Japan Business Council in Europe (JBCE), which Hitachi chairs, and submitted them to European institutions. We also hosted the JBCE Japan-Europe Business and Human Rights Roundtable focusing on internal communication from a practical perspective and published the summary of the roundtable for wide distribution.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

<sup>167</sup> Global Human Capital Development 173 Social Contribution Activities

# **Quality Assurance Activities**

To reinforce our management structure, we continuously improve the quality of products and services globally for diverse customers through our tradition of monozukuri craftsmanship.

# **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. Quality assurance programs are carried out Group-wide, with special priority on organizations and management, technology, and human resources. From fiscal year 2010, the three-year Hitachi Group Quality First (QF) Innovation Movement ensured product safety, compliance with laws and regulations, human resource development, and quality enhancement. We have also been concentrating on quality improvements outside Japan, especially in China and the rest of Asia, since fiscal 2007.

# **Activities Supporting Quality Assurance**

Organization & Management	Management of defective product accidents     QF emphasis management system     OCHIBO HIROI (gleaning)     Management of hazardous chemicals
Technologies	Quality reliability committee     Product safety     Technical law compliance     Work process improvements
Human Capital	- Cultivation of OCHIBO HIROI spirit - Improvement of engineers' ethical awareness - Education on quality and reliability - Quality awareness improvement movement

# **Key Quality Assurance Programs**

## **OCHIBO HIROI**

Meaning gleaning in English, OCHIBO HIROI identifies the fundamental causes of product accidents and ways to prevent them from reoccurring. The quality assurance executive officer works with divisions to identify fundamental causes and preventive measures. They examine not only technical causes but also the procedural, 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 diverse areas as planning, research, design, manufacturing, quality assurance, and maintenance. 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 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

chapter 1 Governance 026

chapter 7 Environmental 060

- Respect for Human Rights
- 127 Supply Chain Management 133 Diversity Management
- Public Policy Initiatives
- - 150 Quality Assurance Activities 153 Customer Satisfaction 159 Communication with Shareholders and Investors
- 163 Employee Health and Safety
- 167 Global Human Capital Development 173 Social Contribution Activities

regulations with amendment trends and enforcement dates. We have also created compliance guidelines to share within the whole Group that include clarifying productspecific laws (product-specific laws map), continual improvement processes—based on our compliance management system, designed to satisfy the 2008 ISO 9001 standards and providing education on compliance, in an effort to raise overall compliance awareness.

# **Quality and Reliability Education**

Our training courses for all technical and skill levels at divisions working in design and quality assurance cover reliability (fundamentals and applications) 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. In fiscal 2012, we developed a second e-learning program that draws on the results of analyses of past product accidents to identify weaknesses that our engineers should be aware of and should overcome, building monozukuri craftsmanship into their daily activities.

Quality assurance training centers at manufacturing sites and locations in Hitachi City, Ibaraki Prefecture, help to increase production, inspection, and maintenance skills through their own specialized technical courses.

# 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 quality production 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 quality reliability courses in Beijing, Shanghai, and Guangzhou in China and Bangkok,



First Advanced Reliability Course in 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 course, managers hold group discussions on past accidents to identify the fundamental causes, including process-related, organizational, and psychological factors. The goals are to boost problem identification and problemsolving skills as well as to develop accident prevention procedures. We will continue to expand the number of regions where we conduct these courses.

- \*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.

<sup>159</sup> Communication with Shareholders and Investors

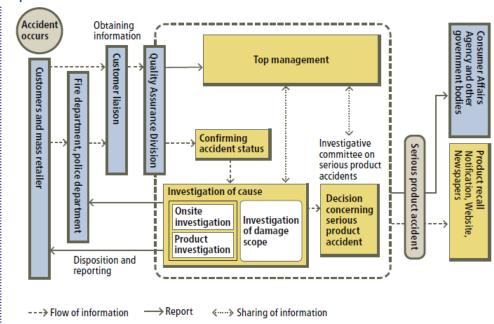
<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

<sup>173</sup> Social Contribution Activities

# **Handling Product Accidents**

If a product malfunctions, 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 quickly submit a status report to top management and then take fast remedial action Group-wide. At the same time, we promptly comply with legal requirements to report to government agencies, and we publish the incident information through our website and other channels. When we decide that a product recall is necessary, we notify the public through our website or in newspaper notices, then repair or replace these products.

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



# **Ensuring Hitachi Home Appliance Safety**

We are eliminating consumer appliance accidents in line with Hitachi's Customer Satisfaction (CS) Management Guidelines, which take the avoidance of accidents as their 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 as many as 2,862 fires in electrical products between May 14, 2007 and March 31, 2012.\*1 By product, room air conditioner accidents were the most common. Only one of those room air conditioners was from Hitachi, and this was a simple case of smoke coming from an internal component that had deteriorated over time; there was no external fire. 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 Ministry of Economy, Trade and Industry website

Communication with Shareholders and Investors

<sup>163</sup> **Employee Health and Safety** Global Human Capital Development 167

Social Contribution Activities

# **Customer Satisfaction**

Using the Customer Satisfaction (CS) 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**

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

Formulated in 1994

# **CS Improvement Activities**

# **Reflecting Customers' Voices**

We use CS surveys tailored to every business operation. We also analyse customer opinions submitted to the Hitachi Customer Answer Center and reflect their feedback in our product development and business operations.

# **Sharing Information within the Hitachi Group**

We regularly hold Hitachi Group Service Business Liaison Council meetings, chaired by the president of Hitachi, Ltd. Other members are presidents and department officers from Hitachi in-house and Group companies. The participants at these gatherings share information to enrich after-sales service for our products and systems, including repairs and maintenance, and we use that information to improve service quality and to offer appropriate service costs. At the time of the Great East Japan Earthquake, cooperation among many departments enabled the smooth delivery of emergency vehicles and supplies to the affected operation sites.

#### **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--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 2012, 165 Hitachi Group employees took this course (bringing the total to 442 participants since the course began), which features case studies based on responses to inquiries. Going forward, we will work together with Group companies to respond more quickly and effectively to customer inquiries, using the website as an important contact tool.

<sup>150</sup> Quality Assurance Activities 153 Customer Satisfaction 159 Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

Sustainability Report 2013

# **Electric Home Appliances**

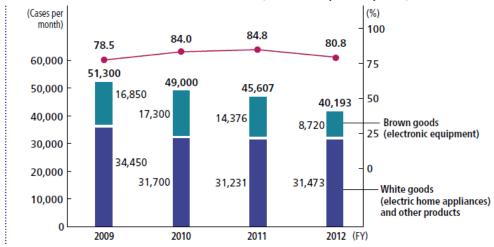
The Electric Home Appliances Customer Satisfaction Division has enabled the expansion of Hitachi business from electronic and electric equipment to the environment business by drawing up a vision for environment value creation, actively promoting various service areas.

The Hitachi Contact Center for Customer Support in Japan and their website handle repair requests, customer inquiries, and complaints about LCD TVs, washing machines, and other appliances. The center receives about 3.7 million phone calls, faxes and e-mails a year within Japan. We have undertaken the following initiatives to better respond to inquiries and to reflect customer feedback in our monozukuri craftsmanship:

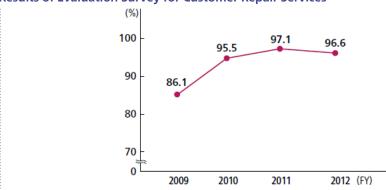
- Third-party assessments of customer support center employees
- Training for personnel in the design and quality assurance departments to listen to the actual voices of the customers
- Improving rates of customer contact by promoting outsourcing of a part of the Contact Center function
- · Creating a database of customer feedback, including consultations, inquiries and complaints
- 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 by promoting employee education, especially through CS training courses and CS improvement awareness months. 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.

#### Rates/Number of Cases of Customer Contact (without Repair Requests)



#### **Results of Evaluation Survey for Customer Repair Services**

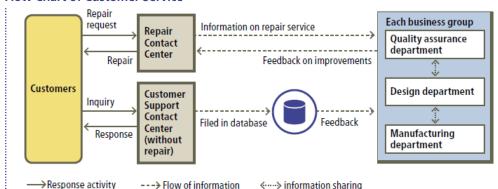


chapter 1 Governance 026

chapter 2 Environmental 060

- Respect for Human Rights
- 127 Supply Chain Management
- Diversity Management 133 Public Policy Initiatives
- 159
- 150 Quality Assurance Activities 153 Customer Satisfaction Communication with Shareholders and Investors
  - 163 **Employee Health and Safety**
  - Global Human Capital Development 167 Social Contribution Activities

#### Flow Chart of Customer Service



# Hitachi Group Sustainability Report 2013

# Management of Elevators and Escalators and Building Facilities

Hitachi provides safe, comfortable, and convenient elevators and escalators as well as maintenance services matching our customers' diverse needs. We also offer high value-added services for total facilities management, including security and energy saving. For building facilities management, in response to customers' needs to improve the efficiency of their management operation, we provide systems that support customers' businesses. For example, we have developed BIVALE, an integrated building facility management system



HBS Mindbook

that unifies the management of energy, security and building facilities at multiple buildings through the Internet. Our maintenance services subsidiary, Hitachi Building Systems Co., Ltd., has 350 service

sites throughout Japan to swiftly respond to customers' requests. Our latest remote monitoring and diagnostic systems observe and analyze elevators, escalators, and building facilities around the clock for preventive maintenance. Hitachi Building Systems has also created the HBS Mindbook to encourage all employees to consider the customer's perspective.

For risk management, after learning from the lessons of the 1995 Great Hanshin Earthquake, we created a wide-area disaster response manual in fiscal 1996. Since fiscal 2006, we have also been carrying out annual wide-area disaster response training and updating the manual. This training was applied to the Great East Japan Earthquake in March 2011 and enabled us to quickly establish a disaster response headquarters in Hitachi, Ltd. and to send people to assist in the disaster areas.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety Global Human Capital Development 167

# **Universal Design**

### Hitachi's Universal Design Philosophy

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 the 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. 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. In February 2013, this initiative was selected for the 5th Kanagawa Barrier-Free Urban Development Awards, hosted by Kanagawa Prefecture. Hitachi Appliances, Inc. and View-Net Kanagawa jointly received the award from the Kanagawa Prefectural Governor.

We have also launched a range of measures to improve the accessibility of increasingly complex consumer electronics appliances for the elderly and disabled. DVDs providing clear explanations on product use are included with products, while some products have Braille labelling on their buttons.



Instruction DVD



Verifying audio text files for product operation

<sup>159</sup> Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

 <sup>167</sup> Global Human Capital Development
 173 Social Contribution Activities

## **Public Equipment and Systems**

Public equipment and systems are used by a large number of people, including children, either individually or together, 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

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.



AKe-S next-generation ATM

\*1 Certification was obtained using Hitachi, Ltd.'s recommended screen design specifications.



An arched guide frame leads hands naturally toward the



A deeper space below provides better wheelchair access



The screen accommodates various types of color vision

#### chapter 3 | Social Report

Public Policy Initiatives

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

<sup>167</sup> Global Human Capital Development 173 Social Contribution Activities

#### 158

# Hitachi Group Sustainability Report 2013

#### 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



Screenshot of the Assistance for Color

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.

The Assistance for Color Generation by CSS3 (CSS3 Generator) tool uses CSS3, \*2 enabling the rendition 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/IEC40500:2012 standard on October
- \*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.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

<sup>167</sup> Global Human Capital Development 173 Social Contribution Activities

# **Communication with Shareholders and Investors**

To ensure that shareholders and investors can make sound investment decisions, we enhance communication with them by providing the information they require in a fair, transparent and appropriate way.

# **Information Disclosure Policy**

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

<sup>150</sup> Quality Assurance Activities 153 Customer Satisfaction 159 Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

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 2012, we held quarterly financial results briefings and corporate strategy meetings on the progress of the 2012 Mid-Term Management Plan. Following on from fiscal 2011, we hosted a Hitachi IR Day 2012, where in-house company presidents and CEOs explained their business strategies under the 2012 Mid-Term Management Plan. Feedback from institutional investors and analysts was positive. Their comments included, "Hearing explanations from the



Corporate strategy meeting on the progress of the 2015 Mid-Term Management Plan

heads of the various businesses 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 intend to hold this event annually.

We held a corporate strategy meeting on the power transmission and distribution business to deepen understanding of our power systems operations. Furthermore, we conducted around 650 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, and in fiscal 2012, in-house company presidents and CEOs went to see investors outside Japan. 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 and stock price trend charts on our IR website. We constantly seek to expand that content and make it more user friendly.

**WEB** 

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

#### **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

<sup>159</sup> Communication with Shareholders and Investors

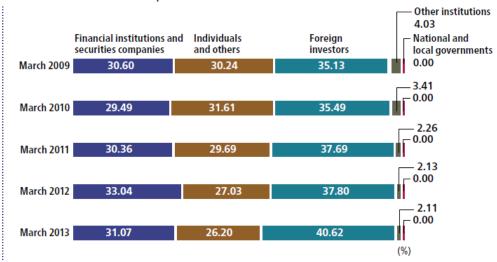
<sup>163</sup> Employee Health and Safety

<sup>167</sup> Global Human Capital Development 173 Social Contribution Activities

# **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**



#### Hitachi as an SRI\*1 Investment

The Hitachi Group welcomes external assessments as a socially responsible and sustainability investment.

For four years in a row (since fiscal 2009), DJSI World, \*2 a leading global sustainability investment index, has listed Hitachi, Ltd. as a component stock. Five Group companies, including Hitachi Chemical Co., Ltd., Hitachi Capital Corp., and Hitachi Koki Co., Ltd., 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, with the Group performing well overall in these external assessments.

- \*1 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 FTSE4Good Index Series: One of the indexes calculated by the London Stock Exchange-owned FTSE Group that selects component stocks based on their ESG performance, specifically environmental management, climate change mitigation, human rights and workers' rights, supply chain labor standards, bribery and corruption prevention, and corporate governance

150 Quality Assurance Activities 153 Customer Satisfaction

Institution	Index	Companies selected
RobecoSAM	DJSI World	Hitachi, Ltd.
	DJSI 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. / Hitachi Koki Co., Ltd.
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. Realizing the benefits from these management policies requires that they be continued for a period of time. For this reason, 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 stock nor is there a specific threat, neither does the Company intend to implement specified 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 course of action when a party attempts 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 the 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 that a party attempts to acquire a large percentage of the shares of a Group company.

# **Employee Health and Safety**

The Hitachi Group's health and safety policy ensures that the health and safety of employees are key priorities. Employees work together to create safe and secure work environments aiming to be accident free.

#### **Hitachi Group Health and Safety Policy**

"Health and Safety Comes First."

- 1. To continually be involved in health and safety activities in order to prevent work-related injuries and sicknesses through designating the health and safety of employees as management's top
- 2. To comply with the local laws and regulations in each company regarding health and safety.
- 3. To develop a safe and comfortable work environment by encouraging employees to maintain their own health and through taking a proactive stance on health and safety activities in the
- 4. To require from partner companies an understanding of Hitachi's principle, and promote health and safety awareness of all business partners of the Hitachi Group.
- 5. To 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.

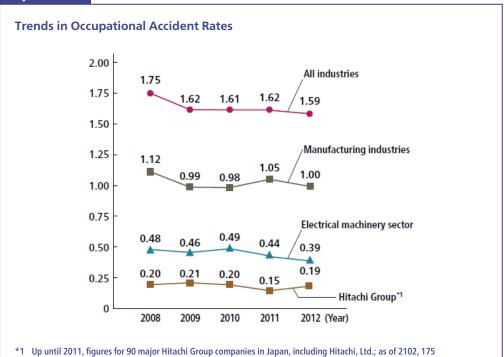
Adopted January 2011

# **Health and Safety Programs**

Based on top management policies, each Group company and business unit maintains a health and safety program matching its specific work health and safety management system. People in each workplace collaborate on programs that improve health and safety management standards. We reinforce basic activities, such as workplace safety checks and job-based education, based on the nature of the business site. We also work to reduce the risk of accidents by thoroughly assessing risk.

<sup>159</sup> Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety



# **Measures for Improving Health and Safety**

Hitachi Group companies in Japan, including Hitachi, Ltd.

Despite our health and safety programs, we have unfortunately had occupational accidents that affected employees of Hitachi, Ltd., Hitachi Group companies, and their affiliates. The entire Group takes seriously the fact that accidents can happen, and we have implemented measures that further improve health and safety management standards.

#### **Health and Safety Presentation and Conference**

Once a year, we hold the Hitachi Group Health and Safety Research Presentation Meeting for Hitachi health and safety officers. The 56th gathering, in November 2012, 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 within the Hitachi Group, such as industrial physicians and nurses, participated in the 12th Hitachi



56th Hitachi Group Health and Safety Research Presentation Meeting

Group Industrial Health Conference in January 2013. After presentations on specialized research, the participants discussed qualitative improvements in industrial health programs at business sites and talked about training for industrial healthcare workers.

## Hitachi Group Key Safety Management Designation System

In fiscal 2011, we introduced a system to help improve safety at Hitachi Group companies and business sites that have experienced serious occupational accidents in improving

- 121 Message
- 122 Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management
- 133 Diversity Management 147 Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
- 59 Communication with Shareholders and Investors
- 163 Employee Health and Safety
- 167 Global Human Capital Development 173 Social Contribution Activities

safety. These companies and business sites take on both management-driven and bottom-up initiatives to improve safety under the leadership of top executives. As well as extensively investigating the cause of serious accidents, these workplaces have now reorganized their companywide safety management systems and have formulated more safety-oriented programs.

Hitachi Group Sustainability Report 2013

#### Hitachi Group Health and Safety Portal System

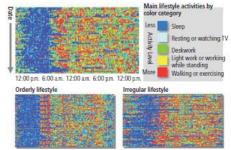
We constructed the Hitachi Group Health and Safety Portal System to ensure that every Hitachi Group company can track the progress of Hitachi health and safety management programs. The system also promotes the sharing of information about accidents within Hitachi, including causes and responses, from a register on all occupational accidents, the goal being to prevent similar incidences.

# Life Microscope: A Support Tool for Returning to Work after a Mental Illness

Life Microscope is the fruit of collaboration between the Hitachi Group's internal research laboratories and industrial doctors. This wristband lifestyle monitor uses a threedimensional acceleration sensor and power supply to record a wearer's real-time movements and temperature. This device records detailed activity levels, sleeping times and other data. Used within a fully secure, cloud-based environment, this tool helps improve the daily routines of employees returning to work after mental illnesses, and has proven effective in preventing relapses.



Wristband lifestyle monitor



Managing daily routines to improve lifestyles

#### **Developing the Coping with Stress Program for Younger Employees**

In fiscal 2008, we developed the Coping with Stress Program to counsel employees on ways to reduce stress so that they can work happily and productively, in turn benefitting the entire organization. We encourage young and middle-aged Hitachi Group employees to take these programs. The 16 trainers from our labor section and industrial health personnel deliver these programs primarily to employees aged 40 years and under. Each session is around four hours long, covering three steps: stress theory, self-analysis, and practical relaxation. Participants check their own stress levels and identify the best way to cope with stress for them personally. From fiscal 2008 through to March 31, 2013, around 18,700 employees have participated in the program. We will continue to run this program and encourage employees to further improve their stress management.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

Social Contribution Activities

#### 166

Hitachi Group Sustainability Report 2013

# **Recognition for an Outstanding Occupational Safety Record**

Based in Totsuka Ward, Yokohama, the Telecommunications and Network Systems Division of Hitachi, Ltd. extended their industry record of work time accident-free hours to 148,310,805 as of March 31, 2013, remaining number one in Japan. The Hitachi Group Health and Safety Award Program, awards Hitachi Group companies that either extend accidentfree records or win external prizes for health and safety. In fiscal 2012, we recognized three Group companies for continuing to improve their record after



Hitachi Group Health and Safety Award ceremony

achieving a Class 5 zero accident rate from the Japanese Ministry of Health, Labour and Welfare.

# **Global Human Capital Development**

Hitachi Group Sustainability Report 2013

Hitachi is globalizing operations, especially in the Social Innovation Business. To keep pace with the growing proportion of sales generated outside Japan and our strategy for the global marketplace, we are strengthening local management and developing new, globally focused human resource management systems.

# **Global Human Capital Management Strategy**

Hitachi, Ltd. created the Global Human Capital Management Strategy to support the Group's worldwide growth. We established the Global Human Capital Division on July 1, 2011 to drive that strategy. The new division establishes a common framework for human capital management, while optimally matching human capital management programs with the specific requirements of regions, businesses and market needs in collaboration with the other business divisions. In this global framework, we treat Japan in the same way as our as our other major operating regions. We aim to further develop the global human capital management framework, systems, and knowhow and then to implement them globally.

At Hitachi, we project sales ratios between inside and outside Japan for each business in our Mid-Term Management Plan. For greater accuracy, we have developed a template that determines the number of employees that will be needed in each region at a particular time to ensure that we have the people we will need. The template also calculates the gaps between available and required personnel. We will continue to plan and deploy human resource programs to meet the needs of the businesses.

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

Transforming the perspective from "Japan + overseas" toward global human capital management

#### Accelerating globalization of Japanese employees

#### Employment of global personnel (from fiscal 2013<sup>\*1</sup>)

- 100 percent employment of global personnel, in principle
- People from outside Japan representing
- 10 percent of all employees

#### Providing young employees with overseas experience (from fiscal 2011)

- Sending 1,000 employees outside Japan
- every year

#### Fully revised management training (from fiscal 2011)

- Global and leadership focuses

**Cultivating local** personnel

#### Developing programs for local personnel

- Discover Hitachi program
- Global training system for newly promoted managers

Optimizing the performance of employees and organizations

Group-wide borderless sharing of managers

#### Personnel cultivation, employment and conditions shared globally across the Group

- Global talent management (development
- programs for local managers)
- Total rewards\*2
- Global Human Capital Database
- Global Grading System
- Performance management
- Global recruiting
- Employer surveys

#### Personnel management optimized according to regional and business characteristics

- Business partnering
- Collaboration as business line partners
- Group collaboration in priority regions



Comprehensive remuneration that combines non-financial factors such as opportunities for learning and growth with salaries and other financial compensation

# Accelerating the Globalization of Japanese Employees

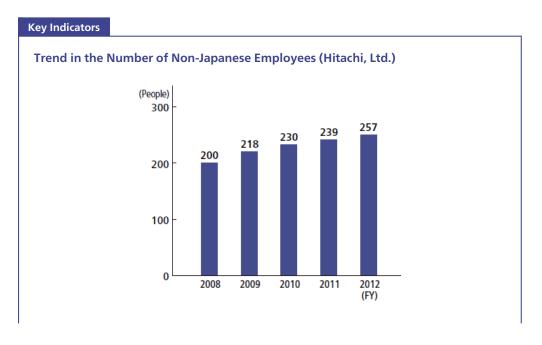
To find market opportunities outside Japan, we intensified programs for the globalization of employees in fiscal 2011 and 2012, and are accelerating programs centered on (1) recruiting people in Japan who can promote global operations, (2) providing more young Japanese employees with experience outside Japan, and (3) comprehensively revising management development for Japanese employees.

#### **Recruiting for Global Operations**

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 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.

- 121 Message
- 147 Public Policy Initiatives
- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management
- 150 Quality Assurance Activities 153 Customer Satisfaction
  - 159 Communication with Shareholders and Investors
  - 163 Employee Health and Safety
    - 167 Global Human Capital Development
    - 173 Social Contribution Activities

We are committed to employing the right talent, regardless of nationality. In fiscal 2013, we recruited around 50 non-Japanese from universities in Japan and worldwide, and around 20 Japanese graduates from universities outside Japan.



#### **Providing More Young Employees with Overseas Experience**

We maintain broad programs to systematically cultivate and secure people who can succeed in global business. To create a pool 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 dispatched more than 1,000 young employees in both fiscal 2011 and 2012, allowing them to take part in more than 80 programs, including apprenticeships, local field studies, and language studies. We plan to dispatch approximately 1,000 again in fiscal 2013.

# **Comprehensive Revision of Management Development Program**

We help employees to develop their skills by offering on-the-job training and supplementary training programs. The Hitachi Group's training facilities include the Hitachi Institute of Technology and the Hitachi Institute of Management Development, which run many of the training programs. These programs cover management development, training for engineers, production workers, globalization training, sales education, and other job-based training. In fiscal 2011, we completely revised management training, shifting the focus from skills and knowhow to successful global leadership. While specific content varies according to the course, the focus is now on practical training. So, in addition to lectures on cases within Hitachi and management simulation exercises, participants also give growth strategy presentations for their particular areas to senior executives. In 2012, about 2,200 employees participated in these programs.

# **Developing Local Personnel**

With our operations taking on an increasingly global focus, it is essential that all managers working on the global frontlines understand our history, founding spirit,

chapter 1 Governance Report 026

chapter 2 Environmental Report 060

- 121 Message Respect for Human Rights
- 127 Supply Chain Management 133 Diversity Management Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
  - 159 Communication with Shareholders and Investors
  - 163 Employee Health and Safety
  - 167 Global Human Capital Development 173 Social Contribution Activities

company operations, common values, corporate philosophy, and basic management approach. Since fiscal 2006, we have provided the Global Fundamental Course for new managers in the Hitachi Group to have a sound understanding of our core values. These core values are harmony, sincerity and the pioneering spirit that underpins Hitachi. The course also covers the Corporate Credo and guidelines for conduct. In 2012, 174 managers participated in this course. We will continue to offer this course while extending its geographical reach and personnel covered as well as improving training methods.

In November 2012, we held the Global Advanced Program for Leadership (GAP-L) in Singapore to develop personnel who can lead and control our operations in the everexpanding Asian market toward our goal of becoming a major global player. The aim is for participants to develop superior leadership abilities and skills that will contribute to the global growth of the Hitachi Group, as well as to understand the special characteristics of emerging markets. This program offers lectures, group discussions, and case studies of the Hitachi Group's global operations, which are all conducted over five days. In fiscal 2012, there were 21 participants, including six Japanese.

# **Optimizing Employee and Organization Performance**

Our Group-wide personnel management initiatives optimize both personnel and organizational performance toward achieving Hitachi's goal of becoming a major global player.

For example, 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 human capital in and outside Japan, and to assess 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.

In fiscal 2013, we introduced a global performance management platform to link the goals of both business operations and individual competency, toward sustained improvement and growth. To support the advancement of employees outside Japan as our global operations expand, we are forming global contracts with recruitment agents and introducing common global hiring systems to secure talented people, boost efficiency, and reduce costs in our hiring practices.

From September 2013, we will conduct annual employee surveys targeting office employees from around the Group. These surveys will enable us to identify the strengths and weaknesses of the whole Group as well as individual organizations. We will also provide feedback on the results to divisions in order to improve staff engagement and to improve organizational performance.

We are working with in-house and Group companies to build a personnel management system to be used by all regions, focusing on Hitachi's 11 key regions.

<sup>150</sup> Quality Assurance Activities 153 Customer Satisfaction 159 Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

<sup>173</sup> Social Contribution Activities

# **Career Development Support**

We believe that empowering every employee to work with vigor and enthusiasm is beneficial for the Hitachi Group. We support employees in developing their own careers and abilities as part of our drive to foster independent, self-motivated employees. We focus particularly on enabling satisfying careers within Hitachi.

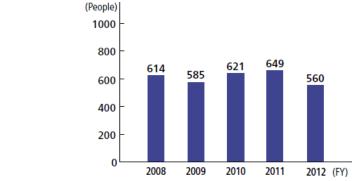
# **Career Development in the Workplace**

Because we regard the workplace as the center of career development, our career development support emphasizes growth in daily work. Our approach builds employees' engagement and motivation via two key mechanisms: an "MBO (management by objectives)" developed between employees and their supervisors—where both parties discuss and agree on short-term work goals—and career consultations to gain mutual understanding of medium-to long-term career plans, training and skills development. Applying the PDCA (plan-do-check-act) cycle to goal management improves employees' individual abilities and gradually raises the level of their objectives, as well as their results. This in turn links individual growth to organizational growth.

#### **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' careers. These programs are geared to every employee's career development and life stage, from young employees to more senior. The Career Development Workshop (CDW) 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 understanding and affirm 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)



#### **Next Steps**

We will develop our human capital through career development geared to the global expansion of our business operations, creating mechanisms that enable a diverse range of people to work with enthusiasm.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety Global Human Capital Development 167

# **Employee Welfare**

Hitachi has instituted a range of programs designed to support richer, more stable lives for employees and their families.

Hitachi Group Sustainability Report 2013

### **Supporting Employee Self-Help and Independence**

Hitachi, Ltd. has designed programs that 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 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."

#### **Employee Life Planning Support through Corporate Pensions**

With Japan's declining birth rate, the aging of society, and the growing diversity of postretirement lifestyles, corporate pensions are being positioned to play an increasingly important role.

In response to the diversification of post-retirement lifestyles, changes in the employment system, and revisions to legal systems, the Hitachi Group has fundamentally revamped retirement allowances and pensions. Defined contribution and defined benefit plans have been introduced within the systemic infrastructure--across the Group--to provide life planning support for employees.

For defined contribution plans, we encourage the active participation of employees in their postretirement planning through, for example, education on asset management and investments. For defined benefit plans, we have boosted the number of benefit options in response to employees' diverse needs.

# **Social Contribution Activities**

Hitachi Group Sustainability Report 2013

Hitachi's wide-ranging social contribution programs are tailored to local needs, but help to resolve the challenges facing a global society. Particularly in emerging countries, we are tackling poverty, hunger, disparities in education and medical care, and environmental issues.

# **Social Contribution Activities Philosophy and Policy**

We approach social contributions based on our Social Contribution Activities Philosophy and Policy, keeping in mind our Vision. To better integrate Group activities at both the global and local levels, we have selected education, the environment, and social welfare as medium-term priorities for fiscal 2012 onward, and are pursuing a range of programs in and outside of Japan.

We believe that our social contribution activities and the support we provide for volunteer work by Group employees help us to build trust with communities as a good corporate citizen. They also inspire the expression of individuality, greater social awareness, and more flexible thinking in those employees who volunteer. These in turn become a source of strength driving our Social Innovation Business, enabling us to contribute to the development of both sustainable society and business. In fiscal 2012, the social contribution expenditure of the Hitachi Group companies and our five foundations in Japan totaled approximately 3.3 billion yen.

#### Philosophy

The Hitachi Group strives to demonstrate good corporate citizenship in response to social needs and expectations, while helping to enrich the quality of life and realize a better society.

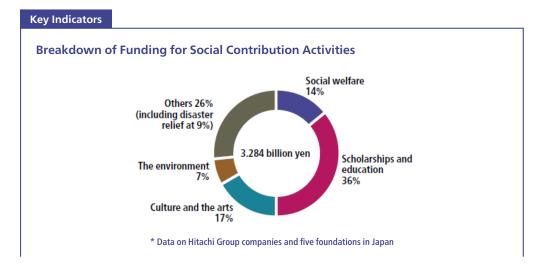
#### **Policy**

The Hitachi Group promotes various corporate citizenship activities to build a vibrant society based on fostering leadership that will implement reforms 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.

Adopted February 2002

<sup>159</sup> Communication with Shareholders and Investors

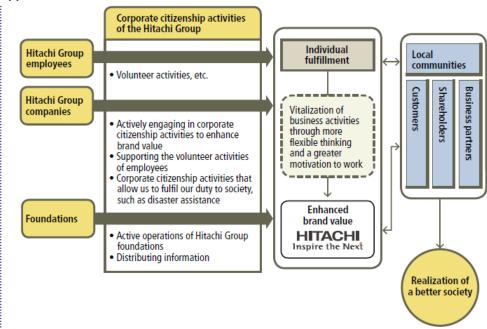
<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development



#### **Mid-Term Priorities for Social Contribution Activities**

- **1. Education:** Community development activities that support the development of the next generation
- **2. The Environment:** Promote global environmental sustainability based on the Hitachi Environmental Vision
- 3. Social Welfare: Empower economically and socially vulnerable people

#### **Approach to Social Contribution Activities**



<sup>159</sup> Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety167 Global Human Capital Development

#### **Education**

Hitachi Group Sustainability Report 2013

Monozukuri, or designing, manufacturing and repairing products, the heart of our business as a manufacturer, is founded on sound human resources. We instill a keen sense of social awareness in every employee through their communication with society and we focus on nurturing ambitions to meet new challenges and to improve technical strengths to achieve dreams. Our wide range of activities ensure that the technical and other expertise that our people have accumulated, including science education for young people, is useful for developing the next generation.

#### **Hitachi Science Seminars**

One way we support education is through the Hitachi Science Seminar program, launched in fiscal 2011 to encourage children's interest in science and monozukuri. In this hands-on program, Hitachi Group companies engage children in science experiments and construction projects in an enjoyable way to communicate the skills and knowhow developed through the Group's manufacturing business. In fiscal 2012, Hitachi Metals, Ltd., Hitachi Maxell, Ltd., Hitachi



Making magnets with Hitachi employees

High-Technologies Corporation, and Hitachi, Ltd. held the Hitachi Science Seminar series at the Science Museum in Tokyo. About 70 elementary and junior high school children had the opportunity to create paperclip motors using magnets and dry cell batteries, and to observe the micro world through electron microscopes, use flocculation magnetic separation to purify water, and use computers for voice synthesis. At the Creating Tohoku's Future: A Day with Hitachi in Kesennuma event, which the Hitachi Group companies in Tohoku hosted in disaster-affected areas in September, parents and children enjoyed creating paperclip motors. We will continue holding these fun and educational hands-on seminars harnessing the knowledge areas and characteristics of various Group companies.

#### **Universal Design (UD) Classroom Program**

We organize volunteer visits by employees from the Hitachi Group to elementary schools to give hands-on workshops on Universal Design (UD), the concept of designing products and services that are easy to use for everyone. This program shows children the importance of UD from a product developer's perspective. Launched in Japan in 2005, the program has now been extended to the United States and the United Kingdom, with more than 10,000 children around the world participating to date.



Designing a remote control based on the principles of UD

In the UK, we developed educational tools with the help of Cambridge-Hitachi (Cambridge Hitachisoft Educational Slutions Plc.) and other experts so that more children could participate in the program. These tools are available for free on the laboratory's website so that even at schools that our volunteers can't visit, teachers can use computers or interactive whiteboards to run similar programs.

- 121 Message
- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management Public Policy Initiatives

- 150 Quality Assurance Activities 153 Customer Satisfaction
- Communication with Shareholders and Investors
- 163 Employee Health and Safety
- 167 Global Human Capital Development 173 Social Contribution Activities

Hitachi Group

Sustainability Report 2013

# Using StarBoard Interactive Whiteboards and Tablet PCs to Support **Education**

Hitachi Solutions, Ltd. has been teaching classroom programs in elementary schools since fiscal 2011. In fiscal 2012, the company created a social studies seminar program on the theme of information technologies (IT) for the future, encouraging children to think about the connections between IT and daily life. Incorporating the social sciences, IT education, and career education, the program is designed to stimulate children's interest in the IT that underpins the social



Group work using tablet PCs

infrastructure, and it helps them to acquire information and communication technology literacy for the years ahead. Every seminar has a preparatory lesson given by a teacher and a special seminar given by a Hitachi Solutions' employee.

Interactive classes use a Hitachi Solutions interactive whiteboard called StarBoard together with tablet computers. The teacher poses questions on the whiteboard which the students answer using iPad tablets; their answers are then displayed on the whiteboard.

Seminars held in elementary schools in Tokyo's Suginami and Koto wards in February 2013 received positive feedback from students. One child found that the iPad enabled them to take an active part in the class, while another learned that IT could be used as a tool for helping everyone achieve their dreams. We were able to hold classes where students took the initiative for their own learning. The level of proficiency in accessing information with a tablet in these classes reached 88 percent. Hitachi Solutions will continue this program, further tailoring it to meet social demand and expectations, while developing new content.

### **Supporting Science Education through Tabletop Electron Microscopes**

Hitachi High-Technologies Corporation has been providing children with the opportunity to experience the world at the micro and nano levels by supporting science education using electron microscopes. Its tabletop microscope is compact, meaning it can be taken out to schools, museums, and other places, and used in a broad range of activities that include traveling exhibitions using scientific devices and science-related exhibits loaded on to a trailer. As well, Hitachi High-Technologies loans out tabletop microscopes and cooperates on demonstrations for STEM\*1 education events in the US that are aimed at



Inspire STEM Education website for STEM educators

developing human resources in the science and technology fields.

Particularly in the US, Hitachi High-Technologies is bolstering support for teachers and is helping to develop future scientists and engineers. Hitachi High-Technologies makes available, via a special website, content including tabletop microscope-based lesson plans and other teaching tools for all educational levels from kindergarten through to university.

\*1 STEM: Science, technology, engineering, and mathematics

- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management
- Public Policy Initiatives
- - 150 Quality Assurance Activities 153 Customer Satisfaction Communication with Shareholders and Investors
  - 163 Employee Health and Safety
  - Global Human Capital Development 167
- Social Contribution Activities

Hitachi Group

Sustainability Report 2013

#### **Hitachi-CFR Fellowship Program**

Hitachi, Ltd. has been running the Hitachi-CFR Fellowship Program since fiscal 1997 in partnership with the Council on Foreign Relations (CFR), an influential American think tank. Every year, the program provides from three to five leaders of the next generation in the US with the opportunity to pursue their research in Japan on their own topics. So far, 50 fellows have come to Japan. In fiscal 2012, to mark the



15th Anniversary reception

15th anniversary of the program, a commemorative reception was held at the Japanese ambassador's residence in Washington, DC, with the cooperation of then-Ambassador of Japan to the United States, Ichiro Fujisaki. At the reception, Ambassador Fujisaki and Ms. Carla Hills, Co-Chairman of CFR and former US Trade Representative, acknowledged the program's success in deepening the friendship between Japan and the US.

#### **EU Hitachi Science & Technology Forum**

The EU Hitachi Science & Technology Forum is held in Europe every two years and the purpose of the forum is to provide a platform for key figures from government, business, and academia to debate and make proposals on how technology can help to resolve societal issues in the daily life of European citizens. The 13th forum, with the theme of "Transport and Mobility towards 2050," was held in London in May



Speakers at the 13th forum

2012 and attended by more than 150 people. There were also presentations by representatives from several organizations, including Mr. Marcel Rommerts, Director General of Mobility & Transport, European Commission; Dr. Lewis Fulton, Head of Energy Technology Policy Division, International Energy Agency (IEA); and Dr. Ilja Radusch, Head of Automotive Services & Communication Technologies Department, Fraunhofer FOKUS. A summary of the forum's findings was distributed to the European Commission, the European Parliament, and other bodies.

# The Hindu-Hitachi Scholarship Program

Since fiscal 1960, Hitachi, Ltd. has been running The Hindu-Hitachi Scholarship Program together with the influential Indian English-language newspaper The Hindu to nurture young Indian engineers. Every year, engineers from the Indian government and private sector are invited to Japan for technical training at factories of the Hitachi Group companies. To date, 134 engineers have completed the training.



At 2012 Engineers' final presentations

One of the three 2012 engineers studied process centrifugal compressor design at the then-named Hitachi Plant Technologies, Ltd., while two others studied electrical systems in power plants at the Hitachi Works, Ibaraki Prefecture. In December 2012, when Hitachi's first board meeting outside Japan was held in New Delhi, scholarship alumni were invited to the Environment Forum, held together with the Embassy of Japan in India. We also held a reunion for alumni, and they exchanged views on promoting further cooperation between Japan and India.

- Respect for Human Rights
- 127 Supply Chain Management Diversity Management 133
- Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
- Communication with Shareholders and Investors
- 163 Employee Health and Safety Global Human Capital Development 167
- Social Contribution Activities

178

Hitachi Group Sustainability Report 2013

The engineers who completed the program in fiscal 2012 commented that they learned a lot not only from the technical training but also from Japan's people and culture. The training helped them define their career goals of becoming outstanding engineers, and they also learned important life lessons at Hitachi about passion, dedication, and a sense of responsibility. Program alumni also said that they found the experience extremely valuable for their career paths.

<sup>163</sup> Employee Health and Safety167 Global Human Capital Development

## The Environment

The Hitachi Group's environmental management mitigates increasingly serious global environmental threats and helps to achieve a more sustainable society. In our social contribution activities too, Group employees and members of their families are involved in environmental conservation projects, working together with the community based on our two main Environmental Vision priorities: preventing global warming and preserving ecosystems.

#### Kasumigaura Basin Environment Conservation and Community Stimulation

In fiscal 2012, to commemorate the company's 50th anniversary, Hitachi Chemical Co., Ltd. worked with the Asaza Fund and Shibanuma-syouyu Co., Ltd. to launch the Connecting with Nature through Soy Sauce Project. The aim of this project is to protect the natural environment of the Kasumigaura Basin and to stimulate the local economy.

Company volunteers planting soy beans

Abandoned fields were cultivated, a biotope was built as a habitat for the frogs and dragonflies that eat

harmful insects, and organic soybeans were grown. The harvested soybeans, together with other Ibaraki Prefecture soybeans and wheat and natural salt from Okinawa, were "reborn" as soy sauce using Shibanuma's 300-year-old traditional techniques. Some 382 Hitachi Chemical Group employees participated as volunteers over one year from April 2012 at all stages, from digging fields to soy sauce preparation. The company will continue with grassroots environmental conservation, including working with local elementary school children to create soy sauce packaging labels and names.

# **Hakone Forest Regeneration Project**

To address the goal of preserving the environment, identified in the Environmental Vision 2025, the Information & Telecommunication Systems Company, with many factories and offices in Kanagawa Prefecture, has encouraged employees every year since fiscal 2010 to experience the blessings of nature and to learn the importance of environmental conservation. This has been done under the guidance of forestry instructors at the Prefectural 21st Century Forest



Experiencing the benefits of forests

(Minami-Ashigara, Kanagawa Prefecture). In October 2012, 140 people, including employees and their families from Hitachi, Ltd. and nine Group companies, joined the vice president & executive officer in thinning out trees and clearing underbrush, as well as walking on nature trails guided by instructors, and using wood from the thinned trees to make handicrafts. In this way, adults and children learned the value of trees and the benefits of forests. During short lectures after lunch, they learned about the ecology of broad-leafed and conifer forests, the significance of forest conservation, and the importance of forest ecosystems.

- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management
- Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction Communication with Shareholders and Investors
- 163 Employee Health and Safety
- 167 Global Human Capital Development Social Contribution Activities

#### 180

Hitachi Group Sustainability Report 2013

# Participating in the 2012 Corporate Competition! MOTTAINAI Mt. Fuji Clean -up Competition

The Mottanai movement was set into motion by Dr. Wangari Maathai, a female activist from Kenya awarded the Nobel Peace Prize for "her contribution to sustainable development, democracy and peace," when she advocated that the Japanese word mottainai should be used internationally for environmental conservation. The aim is to build a sustainable and cyclical society with lifestyles that don't place a significant burden on the global environment. As part



Picking up trash

of this campaign, the Corporate Competition! MOTTAINAI Mt. Fuji Clean-up Competition is held every year, bringing together employees from companies that support the campaign to "sweat and compete" over the amount of trash they can pick up. Eight members of the ALAXALA Networks Corporation—from the president down—formed a team for the competition held on October 20, 2012 on the Tagonoura coast near Fuji City, Shizuoka Prefecture. They and the other teams collected enough trash in under two hours to fill a 1.5-tonne truck two and a half times over. The matching towels that the team members wore around their foreheads and the way the whole team worked together to clean the beach from end to end made such an impression that they were given an award.

#### **Mengmo Eco Education Classroom**

Hitachi Group companies in China hold the Mengmo Eco Education Classroom program around the country to raise awareness among Chinese children about environmental conservation. Company volunteers play the role of the dream-eating baku, or tapirs, also called mengmo in Chinese, and use picture books to present environmental issues to the children in an understandable way.



Class in Beijing

The program kicked off in June 2012 at the Beijing Foreign Language School, affiliated with Beijing Foreign Studies University, with volunteers from Hitachi (China) Ltd. holding a class, including giving quizzes about environmental issues, for 80 third grade students. In fiscal 2012, employees from Hitachi (China) Ltd., Hitachi Construction Machinery (Shanghai) Co., Ltd., Hitachi Construction Machinery (China) Co., Ltd., Hitachi Group Companies in Hong Kong, and Hitachi High-Technologies (Shanghai) Co., Ltd. and other Group companies held classes in 11 schools in Beijing, Shanghai, Guangzhou, Dalian, and Hong Kong, with 844 children participating. We will continue to offer this program in China to foster interest in the environment among the children who will be the next generation and encourage them to protect the environment.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety Global Human Capital Development

Hitachi Group

Sustainability Report 2013

## **Preserving Mangrove Forests**

To raise awareness of environmental conservation among employees, Clarion Asia (Thailand) Co., Ltd. helps in the tree planting that is preserving local mangrove forests, which have been declining every year. On August 18, 2012, as part of a staff trip, around 50 employees planted about 400 mangrove seedlings on the Bangjakreng coast of Samutsongkram Province southwest of Bangkok. Tree planting encourages



Volunteers planting mangrove seedlings

communication among employees and helps them share awareness of environmental conservation.

# **Environmental Volunteer Programs**

Activities held by the CSR Division at Hitachi, Ltd. are designed to boost Group employees' and their families' awareness of the natural environment and ways to preserve ecosystems, as well as to create opportunities to think about what they can do to help and to begin taking concrete action. For these activities, we often partner with NGOs and NPOs who are expert on environmental initiatives. For example, in the Activities to Conserve an Endangered Butterfly Living near Mt. Fuji, since fiscal 2006 we have been



Studying Reverdin's Blue butterfly larvae and adults

working, under the guidance of researchers, with the NGO Earthwatch Institute (Japan) to help investigate the larval and adult stages of the endangered Reverdin's Blue butterfly. Since fiscal 2007, we have also been holding Hitachi Group Volunteer Experience Tours for the Horgin Desert Greening Project in China. In cooperation with the NPO G-Net, these tours give employees the opportunity to promote desert greening in the Horqin Desert in the Inner Mongolia Autonomous Region of China. We will continue with these and similar programs so that as many Hitachi Group employees as possible can experience the importance of environmental conservation.

<sup>150</sup> Quality Assurance Activities 153 Customer Satisfaction Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety Global Human Capital Development 167

Social Contribution Activities

## **Social Welfare**

We support social welfare projects so that everyone can enjoy the benefits of technological progress, placing special emphasis on promoting the education of the young, the independence of people with disabilities, and helping the elderly.

Hitachi Group Sustainability Report 2013

## **Supporting Food Banks**

Hitachi Europe Ltd. celebrated its 30th anniversary in January 2012, prompting employees to organize commemorative fundraising and volunteer activities over the year that contribute to European society. They held internal sports competitions and Christmas charity events. As well, they sold calendars featuring photographs taken by employees, raising 20,000 euro (about 2.9 million yen) for the European Federation of Food Banks (FEBA), a charity that fights hunger,



Christmas charity event raising money for food banks

poverty, and food waste. FEBA is the umbrella organization for the food banks in 21 European countries that collect non-standard products from food processing plants and distributes them for free to welfare and other groups.

Hitachi Group companies in North America hold an annual food drive every July, spearheaded by local employee groups called Community Action Committees. In fiscal year 2012, 26 Group companies participated in 55 locations. Employees helped to collect some 16 tons of food and around US\$135,000 (about 13.5 million yen), which was then donated to food banks, providing assistance to people in need.

# Applying Finger Vein Authentication to Health and Demographic Studies in **Developing Countries**

There is an urgent need to improve the accuracy of data analysis related to infectious diseases and public hygiene in some developing countries and areas such as Africa and Asia, where no civil registration or basic demographic information is available. To solve this problem, Hitachi's finger vein authentication technology has been applied to studies undertaken by the Institute of Tropical Medicine of Nagasaki University and the Research Institute for Humanity and



Registering finger vein pattern

Nature (RIHN) of the National Institutes for the Humanities, Japan, Inter-University Research Institute Corporation. Without basic civil registration, identifying every local resident was a major problem but Hitachi's finger vein authentication system has made it a lot easier and more accurate. The residents only need to place their fingertip on the device and then the system accurately identifies them and their samples, boosting the efficiency of these studies.

Nagasaki University surveyed the health of 500 infants in the Kwale District of southeastern Kenya in March 2012. In July 2012, RIHN worked with the Lao PDR's Ministry of Health on a survey of forest environments and malarial infection for 4,000 villagers aged six and above around the town of Sepon in Savannakhet Province. In December 2012, RIHN also conducted stool examinations for 500 junior and senior high school students in Song Khone in the same province. Hitachi also sent staff to join the

#### chapter 3 | Social Report

- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management
- Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction Communication with Shareholders and Investors
- 163 Employee Health and Safety
- 167 Global Human Capital Development
- 173 Social Contribution Activities

study teams, operating the finger vein authentication system and helping with data registration.

We will continue to help boost comprehensive healthcare and to help improve hygiene in developing nations.

### VOICES

# **Unusual Experience Fosters Responsibility in the Next Generation**

I spent six weeks from March 2013 at an NPO in India as part of my company's international corporate volunteering program (Ryushoku Program). Under this program, employees work with local people as well as NPOs and companies in emerging countries to resolve social issues. My NPO operated its own schools, provided teaching materials to other schools, and gave assistance to teachers. Because of the big disparity in children's academic levels, they are divided into several groups to provide an education geared to their individual needs. This requires assessing every child and developing an individual education strategy. Using my experience as an IT engineer, I worked on the development of tools for managing and analyzing data on computers that had until then been managed on paper. I spoke with teachers, data input staff, and those analyzing the data, and showed them visually the current status and results. I worked particularly hard to improve input efficiency, and I consider the positive feedback that I received as my greatest achievement. Working with local people to solve problems made me realize how difficult it is to raise children's education levels, but I was also able to experience firsthand the children's desire to learn, and that really motivated me to develop robust, high-quality tools. I was delighted to see the growing number of students attending the origami classes that I held to introduce students to Japanese culture, and that the teachers decided to continue the class as part of the formal curriculum.

Interacting with the children made me strongly aware of my responsibility to the next generation. Before this, I hadn't been conscious of the necessity of creating a sustainable society, but through my experience in India, I feel as though I've come to understand this, at least in part. Operating outside the framework of my professional experience has left me with a real desire to become an engineer who can take an unusual or "beyond-the-square" approach.



Osamu Torigoe IT Platform Division Group Information & Telecommunication Systems Company, Hitachi, Ltd

<sup>159</sup> Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

<sup>167</sup> Global Human Capital Development 173 Social Contribution Activities

## **Hitachi's Foundations**

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 to Japan, helping with environmental conservation, supporting the development of young people, and promoting good corporate citizenship in the United States.

- 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)

## **Environmental Science Cafés**

Resolving environmental issues requires widening the circle of action so that everyone public administrations, companies, schools, and citizens—understands the issues and works to improve the environment. As part of our work to raise environmental awareness, the Hitachi Environment Foundation has been holding Science Café events since 2011. Participants deepen their understanding of environmental issues over a cup of coffee with experts and researchers who look at environmental issues from a scientific perspective.

The six lectures held in Tokyo in fiscal 2012 each covered a different theme. For example, Professor Hiroyuki Enomoto from the National Institute of Polar Research spoke on global warming, while Hiroyoshi Higuchi, Professor Emeritus of The University of Tokyo, gave a presentation on bird migration and protecting the global environment. About 260 people attended the lectures and contributed to a lively exchange of views. The Hitachi Environment foundation makes transcripts of all the lectures available on its website so that as many people as possible can gain the same recognition of and insight into environmental issues as Science Café participants. The five lectures on climate change given by Professor Ryuji Tada from The University of Tokyo between February and October 2011 have been published as a book that is now available for sale.



Environmental Science Café



Transcripts collected as a book

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

Global Human Capital Development 167 Social Contribution Activities

# **Support for Volunteers**

The Hitachi Group supports employees who volunteer by providing useful information, time off, and financial assistance. We inform employees about volunteer opportunities via seminars and our intranet. For time off, in addition to an annual paid leave, we offer paid volunteering leave that employees can use for team building work or personal development. Our volunteer support program, The Growing Tree, provides funding for employees in Japan to participate in or financially support specific activities run by Japanese non-profit organizations.

### **Hitachi Volunteer Seminars**

These informative seminars, held as part of our support for volunteering, provide opportunities for our employees to experience volunteering and to regularly participate in volunteer activities. Developed and carried out in cooperation with the Tokyo Voluntary Action Center, the seminars are designed for easy participation and cover a wide range of volunteer activities. Over 40 seminars have been held since they were launched in fiscal 2002. In fiscal 2012, around 85



Employees doing volunteer group work

Hitachi Group employees took part in disaster prevention experiences and workshops to gain knowledge about disaster recovery and to improve their disaster prevention skills. They also participated in voluntary transcription work and provided learning support for non-Japanese children.

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

<sup>173</sup> Social Contribution Activities

## **Disaster Relief**

## **Great East Japan Earthquake Relief**

Our Buy and Help Society! bazaars enable welfare organizations and a wide range of NPOs to sell their goods and present their activities to employees, allowing employees to easily contribute to society. In fiscal 2012, the program theme was support for disaster-affected areas. From December 2012 to February 2013, we invited the Tono City Disaster Relief Network, the Association for Aid and Relief, Japan, and other groups working in affected areas to participate



Product sales by groups working in affected areas

in these bazaars. The bazaars were held in venues belonging to Hitachi Medical Corporation, Hitachi Kokusai Electric Inc., and Hitachi Systems, Ltd. The sweets and handicrafts bought by Group employees raised around 1.16 million yen for operating funds for these groups.

Hitachi, Ltd. participates in a project operated by the NPO XYZ (Cross Wise) to supply picture books to children around the world. In March 2013, we donated picture books to 427 public elementary schools in Miyagi Prefecture.

Hitachi Solutions, Ltd. is running a pro bono <sup>\*1</sup> project and will carry out pro bono activities to benefit disaster affected areas.

\*1 Pro bono, or pro bono publico, (literally "for the public good" in Latin) is voluntary work where people use their professional skills and/or knowledge.

#### **Disaster Relief**

Hitachi Group companies in the United States donated US\$ 167,000 (around 16.7 million yen) to the American Red Cross and other groups to help victims of Hurricane Sandy, which struck the east coast of the United States in October 2012, and to aid in reconstruction. The companies also applied a matching system\* 1 for employee donations, responding to employees' desire to contribute to the quick recovery of the areas affected. To aid the victims of Typhoon Bopha, which struck the Philippines in December 2012, Hitachi, Ltd., Hitachi Asia Ltd. and Hitachi Group companies in the Philippines donated around one million pesos (approximately 2.3 million yen) to the Philippine Red Cross.

\*1 Matching system: System where the company donates an amount equal to donations made by employees.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety 167 Global Human Capital Development

# **Contributing to Local Communities**

# **Hitachi Hospitals Support the Community**

In 1938, Hitachi, Ltd. founded the Hitachi Hospital as a company hospital in Hitachi City, Ibaraki Prefecture, with the fundamental philosophy of contributing to factory hygiene and public health. We subsequently established six company hospitals, located in the regions where our production plants and businesses operate. Even now, five of our hospitals provide medical care to both local residents and Hitachi Group employees. These hospitals work with local healthcare institutions to improve local medical care. They also cooperate in the Hitachi Group's health care businesses by sharing expertise on medical treatments. Only about 20 percent of patients are Hitachi Group employees, firmly establishing these hospitals as hospitals open to the local community.

#### The Five Hitachi Company Hospitals

Name	Location	Year Established
Hitachi Hospital	Hitachi City, Ibaraki Prefecture	1938
Taga Hospital	Hitachi City, Ibaraki Prefecture	1942
Hitachinaka Hospital	Hitachinaka City, Ibaraki Prefecture	1945
Odaira Memorial Tokyo Hitachi Hospital	Bunkyo Ward, Tokyo	1960
Hitachi Yokohama Hospital	Yokohama City, Kanagawa Prefecture	1952

### Hitachi Hospital

Hitachi Hospital launched an emergency medical center—the first facility of this type in the area—in October 2012 in northern Ibaraki Prefecture to improve emergency medical care. The center accepts critically ill and emergency patients requiring multidisciplinary treatment 24 hours a day, all year round, enabling the hospital to contribute to the local community by providing advanced, comprehensive



Hitachi Hospital

medical care. Designated as an Ibaraki Prefecture regional cancer center, a disaster base hospital, and as a medical institution for infectious diseases, the hospital also serves as a regional center for the coordination of cancer diagnoses and treatment and disasterrelated medical care for northern Ibaraki.

## Hitachinaka Hospital

Hitachinaka Hospital is part of Ibaraki Prefecture's Hitachiota-Hitachinaka second medical area, covering a population of around 400,000. As the only general hospital for the Hitachinaka City and Tokaimura area, this hospital works with the regional branch of the Japan Medical Association and with medical institutions in the adjacent Mito medical area, as well as with the Hitachi Hospital, contributing to local



Hitachinaka Hospital

residents' medical care and health management. It operates as a disaster base hospital, quickly responding to large-scale disasters, as a medical institution designated for treating infectious diseases, and as a "hospital that cares for its community." In addition, the hospital contributes to the Hitachi Group's healthcare businesses, providing feedback

#### chapter 3 | Social Report

- Respect for Human Rights
- 127 Supply Chain Management133 Diversity Management Public Policy Initiatives
- 150 Quality Assurance Activities 153 Customer Satisfaction
  - Communication with Shareholders and Investors
  - 163 Employee Health and Safety 167 Global Human Capital Development
  - Social Contribution Activities

## **Community Activities at Hitachi Group Factories and Offices**

In line with the medium-term themes of our social contribution activities, people from Hitachi Group offices and factories help protect the environment by cleaning up nearby rivers and wetlands and by planting trees. They nurture the next generation by conducting science programs and by taking students on field trips. Other community activities include using rooms and facilities of business/manufacturing sites to host events for local residents, as well as participating



Pond on the grounds of the Central Research Laboratory

in local festivals and environmental protection programs and events.

For example, the grounds of the Hitachi, Ltd. Central Research Laboratory in Kokubunji City in Tokyo contain a riverhead and a lush natural environment rarely found in urban areas, and we work to protect them. On the laboratory's biannual open days, many visitors from the neighborhood and beyond enjoy this pocket of nature, contributing to a positive relationship between the laboratory and the community.

Communication with Shareholders and Investors

<sup>163</sup> Employee Health and Safety

Sustainability Report 2013

# **List of Key Indicators**

Key indicators reported in Hitachi Group Sustainability Report 2013 are listed below. Comparative tables with GRI Guidelines and ISO 26000 Core Subjects, as well as our Policy, Vision, and Guidelines, are available on our website.

WEB	Comparative Table with GRI Guidelines http://www.hitachi.com/csr/download/gri/
WEB	Comparative Table with ISO 26000 Core Subjects http://www.hitachi.com/csr/download/iso/
WEB	Comparative Table with the UN Global Compact http://www.hitachi.com/csr/download/gc/
WEB	Policy, Vision, and Guidelines http://www.hitachi.com/csr/download/policy

#### Governance

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Innovation Management					
R&D Efficiency (ROI) (%)	0.31	0.54	1.10	1.00	1.24
R&D Expenditures to Revenues (%)	4.2	4.2	4.2	4.3	3.8
Intellectual Property					
Patent Application Ratios outside Japan (%)	47	47	51	55	57

#### Scope of data

Hitachi, Ltd. and consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies)

Number of companies:

FY 2008: 944; FY 2009: 901; FY 2010: 914; FY 2011: 940; FY 2012: 964

## **Environment**

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Environmentally Conscious Products and Services					
No. of Eco-Product Models (models)	6,954	8,387	9,456	10,476	11,731
Contributions to CO <sub>2</sub> Emission Reduction (millions of tonnes)			15.5	19.0	22.7
Environmentally Conscious Production					
CO <sub>2</sub> Emissions (ktCO <sub>2</sub> )	4,312	3,879	4,324	3,121	3,132
CO <sub>2</sub> Emissions from Transportation in Japan (ktCO <sub>2</sub> )	155	128	125	138	124
Waste Generation (kt)	737	608	738	701	655
Water Use (outside Japan) (millions of m³)	13.3	12.9	16.4	8.9	9.9
VOC atmospheric Emissions (t)	4,549	3,737	3,653	4,285	4,127

#### 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 2008: 944; FY 2009: 901; FY 2010: 914; FY 2011: 940; FY 2012: 964

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.

## Social

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Corporate Citizenship Activities					
Funding for Corporate Citizenship Activities *1 (billions of yen)	1.439	1.347	1.605	_	_
Funding for Corporate Citizenship Activities *2 (billions of yen)	_	_	_	3.471	3.284
Supply Chain Management					
Global Procurement Ratio (%)	_	_	36	38	38
Diversity Management					
Ratio of Male and Female Employees (Hitachi, Ltd.) (%)	86:14	85:15	84:16	84:16	84:16
Ratio of Female Managers (Hitachi, Ltd.) (%)	2.9	3.0	3.3	3.4	3.5
Number of Employees Taking Childcare Leave (Hitachi, Ltd.)	459	510	542	533	540
Number of Employees Taking Nursing Care Leave (Hitachi, Ltd.)	18	11	10	12	17
Number of Employees Working Shorter Hours for Childcare (Hitachi, Ltd.)	449	473	531	614	625
Number of Employees Working Shorter Hours for Nursing Care (Hitachi, Ltd.)	6	7	8	8	10
Employment Ratio of People with Disabilities (%)	2.06	2.01	2.05	2.00	2.02
Global Human Capital Development					
Number of Non-Japanese Employees (Hitachi, Ltd.)	200	218	230	239	257
Employee Health and Safety*3	,			"	
Occupational Accident Rate (Hitachi, Ltd.)	0.12	0.06	0.07	0.10	0.14
Occupational Accident Rate (Hitachi Group*4)	0.20	0.21	0.20	0.15	0.19

- \*1 Hitachi, Ltd. and five foundations in Japan
  \*2 The Hitachi Group and five foundations in Japan
  \*3 Statistics from January to December 2012
  \*4 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

# **Independent Assurance**

To enhance the reliability of the data disclosed in the Hitachi Group Sustainability Report 2013, we have received third-party audits and reviews.

## **Governance Report / Social Report**

Regarding the Governance Report (pp. 026–059) and the Social Report (pp. 120– 188) focusing mainly on fiscal 2012, 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 information and reference purposes only. In the event of a discrepancy between the Japanese and English versithe Japanese version will prevail. nt assurance statement prepared in Japanese and is for

#### Independent Assurance Report

Date: November 25 2013

Mr. Hiroaki Nakanishi President Hitachi, Ltd.

> Kenji Sawami Representative Director,

Ernst & Young Sustainability Co., Ltd.

#### 1. Scope and Purpose of Assurance Engagement

We, Ernst & Young Sustainability Co., Ltd., have been commissioned by Hitachi, Ltd. (hereafter the "Company") to provide limited assurance on the "Governance Report" and the "Social Report" of the Hitachi Group Sustainability Report 2013 posted on the Company's Web site (hereafter the "Report").

The purpose of our assurance engagement is to perform the limited assurance work to determine whether the Key CSR Performance Indicators '(hereafter the 'indicators') of the Company and its major subsidiaries for the year ended March 31,2013 included in the Report were measured, calculated and reported in accordance with the Company's Reporting Standards<sup>12</sup> and the Company's policies and standards, and were contained in all material respects and to express a conclusion based on the work performed.

The Company is responsible for the preparation of the Report. Our responsibility is limited to independently express a conclusion on the Indicators.

- "Indicators" means the information defined in "Part 3. Society" of the Sustainability Reporting Assurance and Registration
- Criteria (Revised in February 2011 by The Japanese Association of Assurance Organizations for Sustainability Information).

  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.

### Summary of Assurance Procedures Performed

We performed limited assurance procedures in accordance with the International Standard on Assurance Engagements - Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000), revised in December 2003 by the International Federation of Accountants and Practical Guidelines for the Assurance of Sustainability Information, revised in December 2012 by the Japanese Association of Assurance Organizations for Sustainability Information. In a limited assurance engagement, assurance procedures are more limited than those of a reasonable assurance engagement conducted in accordance with ISAE3000. Therefore, the level of assurance provided is not as that provided by a reasonable assurance

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;
- · Performing analytical procedures of the Indicators at the headquarters and
- Agreeing to supporting documents and recalculating with part of the Indicators at the headquarters on a test basis;

Based on the assurance procedures performed, nothing has come to our attention that caused us to believe that the Indicators for the year ended March 31, 2013 were not measured, calculated and reported in accordance with the Company's Reporting Standards and the Company's policies and standards and were not contained in all material respect.

#### 4. Independence

We have no conflict of interest relationships with Company that are specified in the Code of Ethics of the Japanese Association of Assurance Organizations for Sustainability Information.

Hitachi Group

### **Environmental Report**

Regarding the fiscal 2012 results in the Environmental Report (pp. 060-119), we have received a review by Bureau Veritas Japan Co., Ltd.\*1

Sustainability Report 2013

For energy use, 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

The standards, guidelines, and calculation methods used in collecting data are posted on our website.

WEB

Calculation methods for environmental load data:

http://www.hitachi.com/environment/activities/third/method.html

\*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.

## **Third-Party Verification Report on Environmental Report**

#### Hitachi Group Sustainability Report 2013 Independent Verification Report



Bureau Veritas Japan Co. 110 System Certification Services Headquarte

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) has been engaged by Hitachi, Ltd. (Hitachi) to conduct an interpendent of the verification and review of its environmental data selected by Hitachi for inclusion in the Hitachi Group Sustain ability. Report 2013 (the Report), issued under the responsibility of Hitachi. The aim of the verification is to consider the accuracy of Environmental data within the Report and to provide a verification opinion based on objective evidence. The aim of the review to make an independent statement concerning the reliability and accuracy of the environmental data.

## 1. Verification and Review Outline

1) Environmental load data generated through business operations in FY2012

Bureau Veritas conducted a verification of energy consumption data and CO<sub>2</sub> emissions data from energy use within Japan only, and

Data verified or Reviewed	Site Visited	Verification or Review Methodology	
90%(*1) of environmental load data generated through business operations of Hitachi and 963 consolidated companies (*1) based on Hitachi calculations.	Hitachi Head Office	Review of documentary evidence produced by Hitachi Head Office and the sites visited     Interviews with relevant personnel of Hitachi Head Office and the sites visited	
Environmental load data reported by the sites visited to the Hitachi Head Office	Kasado Works, Rail Systems     Company, Hitachi, Ltd.     Sawa Works, Powertrain & Electronic     Control Systems Division, Hitachi     Automotive Systems, Ltd.     Shimodate Works, Hitachi Chemical     Company, Ltd.	Head Omce and the sites visited . Site inspection about data monitoring procedure . 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

Data used for registration of two products Loria usea not registration of two products

The number of models registered as Eco-Products in FY 2008, 2009, 2010, 2011 and 2012

The sales ratio of Eco-Products in FY2011 and 2012

The share of Eco-Products sales by segment in FY2012

The number of models registered as Eco-Products Select in FY

Review Methodology

Review of documentary evidence produced i
Hitachi Head Office
Interviews with relevant personnel of Hitachi
Head Office
Comparison beautiful Comparison beautiful Comparison beautiful Comparison beauti Comparison between the data used for the registration and the supporting documentary evidence

3) Amount of contribution to CO2 emission reduction through the use of Hitachi products and services delivered to market by the end of FY2012 Bureau Veritas conducted a review of the following data

Data Reviewed	Site Visited	Review Methodology
The amount of contribution to CO <sub>2</sub> emission reduction through the use	Hitachi Head Office	<ul> <li>Review of documentary evidence produced by Hitachi Head Office and the companies in charge of the relevant products and services</li> </ul>
of 23 different products and services		<ul> <li>Interviews with relevant personnel of Hitachi Head Office and the companies in charge of the products and services</li> </ul>
		<ul> <li>Comparison between the data used in the calculation of emissions reductions and the supporting documentary evidence</li> </ul>
		The GHG Protocol for Project Accounting (WBCSD/WRI) was used as a reference for the review.

#### 2. Findings

gh business operations in FY2012 nvironmental load data stated in the

- in the Report is consistent with the data collected and consolidated by Based on the verification work, the environmental load data stated in the Report is consistent with the data collected Hitachi Head Office.

  No significant error was detected in the environmental load data reported by the sites visited to Hitachi Head Office.

- No significant error was detected in the environmental load data reported by the sites visited to Hitachi Head Office.
   Eco-Products registration data
   The criteria applied in the 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 segment.
   No significant error was detected in the number of models registered as 'Eco-Products Select'.
- 3) The amount of contribution to CO2 emission reduction through the use of Hitachi products and services delivered to market by the end of
  - The criteria used in the calculation of CO<sub>2</sub> emissions reductions are consistent with the calculation criteria prepared by Hitachi Head

Office for the purpose.

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 tiday to day business activities. We are particularly vigilant in the prevention of conflicts of interest. Bureau Veritas activities for Hitachi are fo 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.



YOKOHAMA Bureau Veritas Japan Co. Lid 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 2013 for

#### 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:

the period of April 1, 2012 through March 31, 2013.

- ·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 calculations) are included. Hitachi Group consists of Hitachi and 963 consolidated subsidiaries: a total
- 2) Scope 3 emissions:
  - ·CO<sub>2</sub> emissions from transportation of goods within Japan only, that are associated with Hitachi's business

#### 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.

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 implemented by Hitachi.

Verified greenhouse gas emissions				
Scope 1	Scope 2	Scope 3		
592,000 t-CO <sub>2</sub> e	1,551,000 t-CO <sub>2</sub> e	124,000 t-CO <sub>2</sub> e		

[Statement 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:



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