

## Hitachi Group Sustainability Report 2011

VALUE CREATION FOR A SUSTAINABLE SOCIETY



Hitachi Group Sustainability Report 2011

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#### Symbol Marks Used in This Booklet

- † Technical terms, proper nouns, etc., in the text requiring explanation
- \* Additional explanation of terms, etc., in tables or diagrams
- WEB Indicates the title and URL of the Web page related to the article. The Environmental Report (pages 049–090) can be downloaded as a file from the Web site below http://www.hitachi.com/environment/data/

#### **Management Information Disclosure**

We disclose non-financial information, mainly our activities in fiscal 2010, ended March 31, 2011, in the *Hitachi Group Sustainability Report 2011*. Operating and financial information for shareholders and other investors is in the *Annual Report 2011*. Our Web site provides the latest information on these and other topics.

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





H.1

WEB CSR (Corporate Social Responsibility) http://www.hitachi.com/csr/ index.html

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

environment/index.html



WEB Global Community Relations and Activities (Social Contribution Activities) http://www.hitachi.com/Int-e/skk/ index.html

Hitachi Group Sustainability Report 2011

#### **Financial Information Reports**





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

Annual Report 2011

Note: We also disclose operating and financial information on Hitachi, Ltd. in the Form 20-F filings with the United States Securities and Exchange Commission (see page 102).

#### **Sustainability Report Editorial Policy**

The Hitachi Group Sustainability Report 2011 is a combination of the Hitachi Group Corporate Sustainability Report and the Hitachi Group Environmental Sustainability Report, which we published through fiscal 2010. We publish the Hitachi Group Sustainability Report 2011 Digest (24 pages), a summary of policies, areas of special social interest, and reports on key management issues from the larger Hitachi Group Sustainability Report 2011 (149 pages), which is issued as a PDF. (The Japanese and English versions of this digest are scheduled to be released in September and October, respectively.) Our Web site also reports on detailed activity, as well as news releases and other up-to-date information.





#### Reports on Detailed Activities Hitachi Group Sustainability Report

#### Hitachi Group Profile Top Commitment

Effect of the Great East Japan Earthquake and Hitachi's Response

#### Hitachi's Management Strategies and CSR

Corporate Credo and Management Plan / 2012 Mid-Term Management Plan / Creating a Sustainable Society / Material Issues for Hitachi

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Next-Generation Smart Cities by Hitachi

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

#### **Environmental Report**

Message from the Executive Officer for Environmental Strategy / Corporate Environmental Management Strategies and Initiatives / Activities to Preserve Ecosystems / Environmentally Conscious Products and Services / Environmentally Conscious Production / Environmental Management Framework and Communication

#### **Social Report**

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

Comparative Table with GRI Guidelines / Comparative Table with ISO 26000 Core Subjects / Comparative Table with the UN Global Compact / Policy, Vision, and Guidelines / Major Results Data

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

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#### Hitachi's Management Strategies and CSR

Corporate Credo and Management Plan / 2012 Mid-Term Management Plan / Creating a Sustainable Society / Material Issues for Hitachi

#### FEATURE

Next-Generation Smart Cities by Hitachi

Caring for the Environment / Respect for Human Rights/ Supply Chain Management / Diversity Management / Public Policy Initiatives



#### Latest information Major CSR (Corporate Social Responsibility) Content on the Web Site

The CSR Web site has a full PDF version with details on our activities and the following content. The Environmental Activities Web site reports on environmental protection initiatives. The Social Activities Web site discloses social contributions.

#### **Contents Disclosed Solely on the Web Site**

CSR at HITACHI: Vision and Policies Highlights: Spotlighting 2005 through 2010 Policies on preventing the recurrence of misleading representations Diversity management\* Employee safety and health\* Welfare Supplementary data for Environmental Report\*

\*Expanded version of detailed activities report (PDF)

#### Scope of Reporting

#### [Period]

The main period covered is fiscal 2010 (April 1, 2010, to March 31, 2011) [Companies]

Hitachi, Ltd. and 913 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 914 companies

#### [Scope of data]

*Financial data* Hitachi, Ltd. and 913 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies) and 164 affiliated companies that use the equity method *Social data* Scope of data indicated under each item

*Environmental data* Hitachi, Ltd. and 913 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 914 companies. However, for environmental load data generated through business operations, companies that cover 90% 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 have been revised in accordance with the scope of data for fiscal 2010.

#### Guidelines Referred to in Preparing This Report

"Environmental Reporting Guidelines" (FY 2007 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

This sustainability report is published annually.

#### Initiatives That We Participate in

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



We have been a member of the World Business Council for Sustainable Development since 1995.



World Business Council for Sustainable Development

#### **External Evaluations**

We were selected in September 2010 for the Dow Jones Sustainability World Indexes (DJSI World), one of the world's leading sustainability investment fund indexes. We were also awarded the Silver Class in the Sustainable Asset Management (SAM) Sustainability Yearbook 2011 (February 2011 issue).



#### Company Profile (as of March 31, 2011)

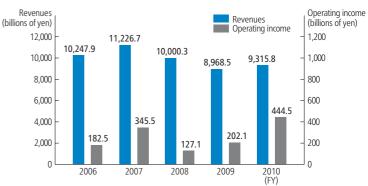
Corporate Name	Hitachi, Ltd.
Incorporated	February 1, 1920 (founded in 1910)
Head Office	1-6-6 Marunouchi, Chiyoda-ku,
	Tokyo 100-8280, Japan
Representative	Hiroaki Nakanishi, Representative
	Executive Officer and President

Capital	409,129 million yen
Number of employees (unconsolidated basis)	32,926
Number of employees (consolidated basis)	361,745
Number of consolidated subsidiaries	913
(Japan: 351	, outside Japan: 562)
Number of equity-method affiliates	164
(Japan: 7	2, outside Japan: 92)

#### **Consolidated Business Overview and Results for Fiscal 2010**

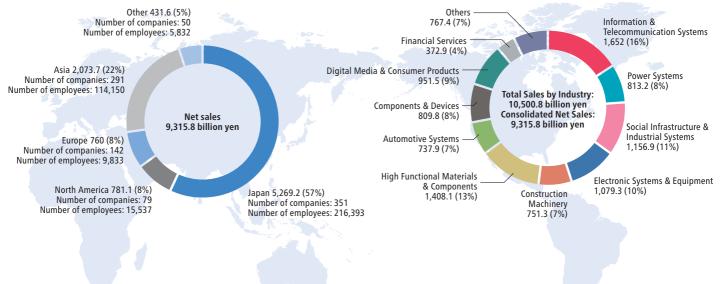
Revenues	9,315.8 billion yen
(104%	compared with the previous year)
Operating income	444.5 billion yen
(220%	compared with the previous year)
Capital investment	556.8 billion yen
(102%	compared with the previous year)
R&D expenditures	395.1 billion yen
(106%	compared with the previous year)
Overseas output as a pe	rcentage
of consolidated net sale	s 27%

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



#### Sales Revenue by Geographic Region (billions of yen)

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



#### **Major Fields of Business and Products**

#### Information & Telecommunication Systems

- Systems integration, outsourcing services, software, disk array subsystems, servers, mainframes, telecommunications equipment, ATMs
- Hitachi-Omron Terminal Solutions, Corp., Hitachi Computer Products (America), Inc., Hitachi Computer Products (Europe) S.A.S., Hitachi Electronics Services Co., Ltd., Hitachi Information & Control Solutions, Ltd., Hitachi Information Systems, Ltd., Hitachi Solutions, Ltd., Hitachi Consulting Corporation, Hitachi Data Systems Corporation, Hitachi Information & Telecommunication Systems Global Holding Corporation



Enterprise storage platform

#### **Power Systems**

- Thermal, nuclear, hydroelectric, and wind power generation systems
- Babcock-Hitachi K.K., Hitachi-GE Nuclear Energy, Ltd., Hitachi Engineering & Services Co., Ltd., Hitachi Power Europe GmbH, Hitachi Power

Systems America, Ltd.

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

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

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

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

#### **Components & Devices**

- Hard disk drives, LCDs, information storage media, batteries
- Hitachi Displays, Ltd., Hitachi Maxell, Ltd., Hitachi Display Device (Suzhou) Co., Ltd., Viviti Technologies Ltd.

#### **Financial Services**

Leasing, loan guarantees Hitachi Capital Corporation



Hitachi High-Technologies' device

characterization system

Hitachi Chemical's carbon

2.5-inch hard disk drive

Technologies

IC card

by Hitachi Global Storage

HITACHI

batteries

anode materials for lithium-ion

#### **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.



Sewage treatment plant built by Hitachi Plant Technologies, Ltd. in Malaysia

#### Construction Machinery

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



Hitachi Construction Machinery's hydraulic excavator

#### **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.



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

Hitachi Automotive

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



Syo-ene No Tatsujin PREMIUM, Hitachi Appliance's Air Conditioners for use in shops and offices

#### Others

Logistics, property management Chuo Shoji, Ltd., Hitachi Life, Ltd., Hitachi Transport System, Ltd., Hitachi America, Ltd., Hitachi Asia Ltd., Hitachi (China) Ltd., Hitachi Europe Ltd.



Hitachi Transport System's Keihin Distribution Center, a distribution center equipped with security systems

👂 Major Products & Services 📕 Major Consolidated Subsidiaries (as of March 31, 2011) The products marked with an asterisk (\*) in the table above are those of Hitachi, Ltd. (Notes.) 1. Hitachi Solutions, Ltd. was formed through a merger between Hitachi Software Engineering Co., and Hitachi Systems & Services, Ltd. as of October 1, 2010.

2. Hitachi Automotive Products (USA), Inc. changed its name to Hitachi Automotive Systems Americas, Inc. as of January 1, 2011.

Hitachi Capital's multifunctional

3. Viviti Technologies Ltd. is a holding company whose operating companies include Hitachi Global Storage Technologies, Inc., a company engaged in the manufacture and sale of hard disk drives, and was established on October 5, 2010.

# Creating social and economic value at the same time to contribute to realizing a sustainable society

I would like to begin my message by offering the deepest condolences of everyone in the Hitachi Group to the victims of the Great East Japan Earthquake on March 11. I'm afraid some of our customers experienced disruptions due to Hitachi's supply chain in the affected disaster areas. Although the earthquake damaged several Hitachi Group plants, we restored most of the affected manufacturing operations through concerted companywide efforts.

Hitachi was established a century ago in Hitachi City, Ibaraki Prefecture, northeast of Tokyo, and just south of the accident at the Fukushima Nuclear Power Station. Hitachi has since grown within the community of Ibaraki as well as the region as a whole. We believe that it is our responsibility to give back to the city and the region that nurtured our business, as well as to help eastern Japan recover from the earthquake by rebuilding devastated towns in safer and more sustainable ways. To that end, we are focusing our energies to use our technologies and expertise in a concerted effort to help deal with and overcome the accidents at the Fukushima Daiichi Nuclear Power Station.

#### Changing Perceptions of Value Following the Great East Japan Earthquake

The earthquake damage temporarily halted production at many plants across Japan, while it deeply affected the global value chain, and has cast doubt on the business continuity planning of Japanese manufacturers. As part of Japan's social infrastructure, we are reinforcing our risk and crisis management policies for business continuity planning and the entire value chain.

The earthquake caused temporary shutdowns of electricity, telecommunications, water, and sewage, as well as other parts of the infrastructure that people take for granted. It highlighted many risks for a secure and reliable infrastructure, including the possibility of major power shortages. Today, as I write this, I feel that this disaster forces us to reprioritize our commitments for the social infrastructure. Accordingly, I now believe that our mission is to help create safe, secure, and vibrant communities, and that we contribute to building a social, industrial, and daily life infrastructure that can better withstand disasters. We will continue striving to create a sustainable society that conserves resources and energy. We will fulfill this mission by focusing on our Social Innovation Business.

#### **Pursuing Further Growth**

Despite the impact of the earthquake, our 2012 Mid-Term Management Plan has borne fruit in several respects during fiscal 2010, the first year of the plan. For example, while all business segments were profitable, we re-engineered our in-house company system and began other internal reforms.

I'm firmly committed to position Hitachi to lead the drive toward creating a sustainable society, amid economic globalization, by devising and implementing growth strategies centered on Social Innovation Business. We will therefore concentrate investments in eleven key regions, such as the Asian Belt Zone<sup>†1</sup> where economic growth is remarkable, South America, and Central and Eastern Europe. We will achieve true global and transnational management by positioning Japan as one of the key areas, and by strengthening local leadership. We will recruit globally and employ the right people in the right places.

#### CSR: the Foundation of Global Management

I believe that CSR is the foundation of global management and, indeed, any management. The world faces such global problems as climate change and ecosystem destruction, as well as energy depletion, human rights abuse, and other issues. I think that in order to resolve these fundamental social issues in line with Hitachi's corporate credo, it is important to create value that can be handed down 10 to 20 years in the future by collaborating with partners and stakeholders. We will contribute to building a sustainable society by simultaneously creating social and economic value and by integrating CSR with management and strategy. We aim to become the world's most trustworthy and reliable enterprise.

July 2011

1 Asian Belt Zone consists of countries and areas, 24 in all, such as China, the ASEAN countries, India, Middle Eastern countries and other countries located within those territories.

Hiroaki Nakanishi President, Hitachi, Ltd.



# Dialogue with WBCSD President on Sustainable Development and the Role of Firms

#### Björn Stigson, President, WBCSD (left) Hiroaki Nakanishi, President, Hitachi, Ltd. (right)

#### About the World Business Council for Sustainable Development (WBCSD)

The WBCSD is a CEO-led, global coalition of some 200 companies advocating for progress on sustainable development. Its mission is to be a catalyst for innovation and sustainable growth in a world where resources are increasingly limited. The Council provides a platform for companies to share experiences and best practices on sustainable development issues and advocate for their implementation, working with governments, non-governmental and intergovernmental organizations. The membership has annual revenues of US\$ 7 trillion, spans more than 35 countries and partner organizations, a majority of which are based in developing countries.



During his May 2011 trip to Japan, WBCSD (World Business Council for Sustainable Development) President Björn Stigson visited Hitachi to talk with Hitachi, Ltd. Representative Executive Officer and President Hiroaki Nakanishi.

Hitachi, Ltd. has been a WBCSD member company since fiscal 2010 and co-chairs the WBCSD Ecosystems Focus Area Core Team. This team has been developing ESR\*<sup>1</sup> and CEV\*<sup>2</sup> as tools for evaluating the ecosystem impact of corporate activities as part of its mission to gauge the impact of corporate activities on ecosystems and to preserve ecosystems.

At their meeting, Mr. Stigson and Mr. Nakanishi discussed issues such as the impact of the Great East Japan Earthquake on Japan and Hitachi, the status of the recovery from the disaster, the mediumto long-term business environment outlook, how to handle business in emerging countries, contributions to ecosystem preservation, and the role of the WBCSD.

Mr. Stigson lauded Hitachi Group's Social Innovation Business as an innovative societyfocused strategy that clearly delineates the role of companies. He noted that a combination of innovation, markets and appropriate regulation would be essential in achieving a sustainable society.

Details of the meeting appear on Hitachi's environmental Web site.

\*1 ESR: The Corporate Ecosystem Services Review

WEB http://www.wbcsd.org/web/esr.htm (various languages)

\*2 CEV: The Guide to Corporate Ecosystem Valuation
WEB http://www.wbcsd.org/web/cev.htm (various languages)

# Effect of the Great East Japan Earthquake and Hitachi's Response

We wish to express our deepest condolences to all those affected by the earthquake that occurred off the Pacific coast of northeastern Japan on March 11, 2011 and the subsequent tsunami and aftershocks. We sincerely hope for the fastest possible recovery in all regions.

The March disaster heavily impacted the Hitachi Group too, particularly our production plants in prefectures in the Tohoku and Kanto regions. We also lost six of our staff to the tsunami. The disaster brought fiscal 2010 sales down by 130 billion yen and operation income fell by 75 billion yen. Given the current economic trends, we expect that fiscal 2011 sales will drop by around 350 billion yen and operation income by around 110 billion yen. Our stakeholders too have felt anxiety and have been inconvenienced by the damage to production equipment and disruption to material and resource procurement and logistics.

Immediately after the disaster, at our head office we established the Hitachi Group Emergency Headquarters for Response to the Tohoku Earthquake, headed by Hitachi, Ltd. President Hiroaki Nakanishi, to provide support for affected areas and customers, gather information on losses and damage suffered by employees and their families and our various plants, and to launch emergency measures. On March 23, the role of the Coordination Headquarters was expanded by launching the Hitachi Group Headquarters for Post-earthquake Reconstruction and Redevelopment to accelerate recovery and redevelopment activities. We recognize, however, that the extensive impact of the disaster will require a long-term response. Drawing on our experiences following the March disaster, we will build greater disaster resilience into our corporate structure and lend our weight as a company involved in the Social Infrastructure Business to the recovery of not only Hitachi but also of Japan.

#### 1. Effect of the Disaster on Group Management and Recovery Status

(1) Effect on Factories and Recovery Status

Our factories in Ibaraki Prefecture in particular suffered damage to buildings and production facilities, but extremely rapid recovery work has seen our main factories now almost fully restored.

Hitachi created business continuity plan (BCP) guidelines back in December 2006, and many of our factories have BCPs in place to deal with outbreaks of a novel strain of influenza and earthquakes. We also conduct yearly tabletop exercises covering the eventuality of a major earthquake, as well as carrying out regular drills and installing emergency facilities, including having satellite phones set up in key factories. As a result, we were able to establish the Hitachi Group Emergency Headquarters for Response to the Tohoku Earthquake on the same day as the earthquake to centralize information and share it across the Group, and to launch immediate recovery support. Due also to the hard work of our staff, the recovery proceeded much faster than anticipated, despite the enormous damage.



Pillar damaged at Mito Works



Response room at Hitachi Works

Timing		Action
March 11 14:46		Great East Japan Earthquake occurs
	15:07	First damage reports received by Risk Management HQ from Group companies
	15:10	Hitachi Group Emergency Headquarters for Response to the Tohoku Earthquake established
	15:40	First Group-wide notification sent out from Risk Management HQ (earthquake outline, request for damage status reports)
March 12		First relief supply delivered (12 loads, mainly to districts in Ibaraki and Sendai), including 50,000 liters of water, 65,000 packages of food, and 11,000 rolls of toilet paper
March 13		Meeting of the relevant board members Status update, "people first" policy confirmed
March 14		Board meeting held Decision to move swiftly on response measures, including gauging the situation, providing relief supplies, and dispatching personnel
March 15		Board Chairman Takashi Kawamura visits factories to confirm the damage
March 17		Confirmation of one employee death, thought to be due to the tsunami
March 23		Hitachi Group Headquarters for Post-earthquake Reconstruction and Redevelopment set up

#### Actions Taken Immediately after the Great East Japan Earthquake

#### Hitachi Works Recovery Initiative

On March 11, 2010 at 14:46, Hitachi, Ltd.'s Hitachi Works was struck by a powerful shock with a strong seismic intensity of a high 6. Violent tremors continued for the next two minutes, causing an unprecedented amount of damage.

However, restoration of key infrastructure elements, such as power, gas and water in the Hitachi district, saw commuting return to normal as of March 22, when Hitachi launched a full-scale initiative involving up to 2,000 people to restore production line and design office operations. Thanks to employees laboring day and night—with manufacturers of large processing machinery, tools, and jigs offering unstinting support—Hitachi was able to resume production at the remarkably early date of March 29. A week later, on April 3, a gas turbine was shipped from the Hitachi Port in Hitachi City, Ibaraki Prefecture, for the first time since the disaster. That first gas turbine to ship from Hitachi Port, which was massively damaged in the March disaster, epitomizes the Hitachi Works' determination to get manufacturing back up and running.



Cracked road at Hitachi Works (top left) Toppled air conditioner inside the plant (bottom left) Power generation machinery assembly resumes (top right) First post-disaster gas turbine shipped from Hitachi Port (bottom right) (2) Impact on Customers and Subsequent Recovery Status

Widespread factory damage, rolling power outages, and ongoing problems in procuring materials and resources caused major delays in deliveries of car parts and other items, but that backlog has now been almost cleared. Hitachi's full and careful response to customers' radiation concerns also prevented any impact on product shipments. Long-term measures will, however, be needed in areas such as power saving and repairing damage to our reputation. To support customers' safety and security, Hitachi will gear production to the parts and material inventory on hand and ensure that products are delivered on schedule, as well as enhancing our service information.

#### 2. Support for Affected Regions

Up to June 2011, Hitachi Group companies worldwide have together provided support totaling 940 million yen to aid victims of the disaster and to assist in recovery, including the provision, free of charge, of flat-panel TVs, dry cell batteries and Disaster Victim Support Systems for local authorities. Some company housing in Tokyo has also been lent to disaster victims. Hitachi will continue to take swift support action geared to conditions in the affected regions. We have also been sending staff volunteers to the Corporate Volunteer Program Supporting People in Regions Affected by the Great East Japan Earthquake. This program, organized by the Joint Committee for Coordinating and Supporting Voluntary Disaster Relief Activities,<sup>‡1</sup> enables members of the One Percent Club<sup>‡2</sup> to volunteer for affected regions, in response to local requests.



Clearing away the sand piled up on roads by Cleaning and sorting precious photographs the tsunami

Photo credits: Joint Committee for Coordinating and Supporting Voluntary Disaster Relief Activities

11 Joint Committee for Coordinating and Supporting Voluntary Disaster Relief Activities: A network organization made up of companies, NPOs, social welfare councils, community chests, and other organizations. In normal times, it engages in surveys and research, human resource development, and education related to disaster support. When disaster strikes, a wide range of institutions, organizations, and people work together to provide victim support.

12 Keidanren 1% (One Percent) Club: Established by Keidanren (Japan Business Federation) in 1990. Members are enterprises and individuals who pledge to contribute one percent or more of their ordinary profits or disposable incomes to social contribution activities. Hitachi is a 1% Club member.

#### 3. Supporting Social Infrastructure Restoration

(1) Assistance at the Fukushima Daiichi Nuclear Power Station

Hitachi established the 24-hour Emergency Response Center for Nuclear Power immediately after the earthquake struck, and has collaborated with GE-Hitachi Nuclear Energy to help improve the situation at the power plant. To date, Hitachi has worked on recovering electricity within the power station, pouring seawater and fresh water, and installing nitrogen injection systems. We will continue to install nuclear fuel cooling systems, water decontamination systems, and nuclear reactor covers. About 2,200 staff members of Hitachi Group have been providing support and assistance, with around 1,200 employees dispatched to the site. We will

continue to extend our full cooperation in response to requests from the Tokyo Electric Power Company (TEPCO) and the government.

(2) Assistance Resolving the Power Supply Shortage

Immediately after the earthquake, the Emergency Response Center for Thermal Power that included Group companies was established and 140 employees were deployed to provide an immediate response to requests for resumption of operations at the various power companies' thermal power plants. 400 engineers and other staff have been dispatched to power plants, and we will continue sending them as they are required. Resolving power supply shortages will require the installation of new power sources, and the Hitachi Group is throwing its full weight behind fitting new gas turbines and other power generation facilities as well as expanding existing facilities. We have also begun to supply some of the power outside the company that is produced by Hitachi, Ltd.'s three in-house power generation facilities.

(3) Disaster Recovery Support Services

To respond quickly to requests from affected customers, Hitachi has set up a dedicated Damage Response Reception Center. We are also providing a wide range of disaster recovery support services for between 3 and 12 months at no charge, including disaster support system creation, email and Web security services, data backup, teleconferencing systems, and small-scale wireless telecommunication systems. Our main focus is on systems and cloud services for local governments and companies.

#### 4. Timing of FY 2012 Recruitment Selection Period and Selection Methods

To provide students who have been personally affected or whose families have been affected by the disaster with the same opportunity as all other students for taking examinations, the start of the recruitment selection period at Hitachi, Ltd. was changed from April 1 to June 1. Open recruitment final selection was also held not only in Tokyo and Osaka but also in Sendai in the Tohoku Region.

#### 5. Summer Electricity Conservation Activities

Based on the Japanese government's energy conservation action plan, as well as discussions with customers and various industry organizations, Hitachi will reduce power use in regions where power is supplied by TEPCO and the Tohoku Electric Power Company (Tohoku EPCO) by at least 15 percent. In other regions too, we will actively promote various measures, making every possible effort to reduce power consumption at the Group's activities.

(1) Equalization of Summer Weekday Power Use through Rolling Holidays and Dispersed Summer Vacations

From July to September in regions where power is supplied by TEPCO and Tohoku EPCO, Hitachi will shift employees' regular weekly holidays from Saturdays and Sundays to weekdays (Monday to Friday) on a rolling basis to spread these holidays throughout the week (generally excluding hospitals, sales and service divisions). Summer vacations, which in normal years are concentrated around August 15, will be dispersed based on the business group. Other employee vacation days, such as national holidays that were originally scheduled for October onward, will also be rescheduled as substitute holidays to fall within the July–September period, adding approximately five vacation days. These efforts will help cut maximum power use by at least 15 percent during the summer period from July to August when power consumption peaks.

Hitachi will add rolling holidays and spread out summer vacations for a number of programs to assist employees caring for children or nursing care for family members. These

include a subsidy system for child and nursing care facility and service costs; temporary workplace childcare facilities; and the promotion of working from home and "flextime," together with child-caring and nursing care leave.

(2) Energy Conservation Measures at Each Works

In May 2011, we launched the Hitachi Group Summer Energy Conservation Campaign, promoting energy-saving measures such as cutbacks in the use of indoor lighting, adjusting air-conditioning temperatures, suspending the operation of some elevators, and extending the period of time during which employees may come to work without neckties and jackets (based on the Ministry of the Environment's "Cool Biz" campaign). At our manufacturing bases, we are striving to equalize production and increase efficiency to level out and reduce production line power use. We are also promoting other measures, such as using "Green Curtains,"<sup>+1</sup> which help to reduce room temperatures at around 300 production bases, branches, and training facilities, as well as distributing bitter gourd seeds for planting to Hitachi Group employees.

(3) Use of real-time electric power monitoring systems

Hitachi's own "smart meters," which measure power use in real time, have already been installed at most plants for real-time monitoring and data gathering. In regions where electric power is supplied by TEPCO and Tohoku EPCO, these real-time electric power monitoring systems will be further expanded, and we will build cloud computing systems using Hitachi's EcoAssist-Enterprise, an environmental information management system. These steps will increase the visibility of power use at the Hitachi Group in those regions and encourage more efficient management of power consumption.

11 Green Curtains: When climbing vines are grown in front of windows or on walls, the effects of transpiration and sunlight blocking by the leaves can reduce room temperatures by 3–5°C.

#### 6. Hitachi's Position on Nuclear Power Business

Nuclear power plants are one of the key elements of the social infrastructure, and nuclear power is a valuable energy source for protecting the global environment, enabling, for example, reduced CO<sub>2</sub> emissions. Recognizing that outside Japan too, several countries are planning to introduce nuclear power to meet energy demand, we will continue our nuclear power business while giving full consideration to safety. Nuclear power is an essential element of our core Social Innovation Business, and we will continue to cooperate with those countries around the world that need to generate electricity by nuclear power.

We will also reinforce our work on thermal power generation—the current power generation mainstay—and in natural energies for the future, helping to diversify power sources and further stabilize the electric power supply.

WEB Material in this section is based on current information as of the end of June 2011. For more details and updates, please refer to the Hitachi Web site: http://www.hitachi.com/New/cnews/index.html (News Release: Corporate) VISION

# Hitachi's Management Strategies and CSR

We have integrated management strategies and CSR as part of our goal to transform into a truly global enterprise that shares society's values

#### Corporate Credo and Management Plan

The Hitachi Group formulated a Group Vision to help resolve fundamental issues facing a global society and to pursue a safer, more comfortable society in line with the Corporate Credo which is Hitachi Founding Spirit. We also created the Hitachi Group Codes of Conduct, which apply to all Hitachi Group employees worldwide.

Based on the 2012 Mid-Term Management Plan, produced in fiscal 2010, we deployed management policies to pursue growth through our Social Innovation Business, to solidify our financial position, and to help resolve global social issues. Corporate Credo Adopted June 1983 WEB http://www.hitachi.com/about/vision/credo/

#### **Hitachi Group Vision**

We will contribute to the solution of fundamental global issues, and pursue the realization of a better, more prosperous global society, in line with Hitachi's founding spirit, utilizing the Group's knowledge and technology. Adopted November 2006

> Hitachi Group Codes of Conduct Adopted August 2010

WEB http://www.hitachi.com/about/vision/conduct/

#### 2012 Mid-Term Management Plan

Growth driven by Social Innovation Business Solid financial base

Formulated May 2010

#### **Social Innovation Business Focus**

We intend to strengthen our Social Innovation Business by focusing on global, fusion, and environmental issues.

#### Three Focuses of Social Innovation Business Global

Leverage the Group's knowhow, experience, as well as the trust of our regional customers and partners, to become a truly global enterprise. **Fusion** 

Address every nation's need for Social Innovation Business by integrating our social infrastructure and IT expertise to produce unique value.

#### Environment

Draw on a wide range of environmental technologies and accumulated experience to build better environmental systems, helping to resolve global environmental issues.

#### **Management Goals**

We intend to generate revenues of 10 trillion yen and an operating margin of more than 5 percent by fiscal 2012. We will drive growth through the Social Innovation Business, which is around 60 percent of revenues.

We will reinforce our financial position by improving operating income while steadily increasing net income to consistently secure earnings of around 200 billion yen from fiscal 2012.

	Fiscal 2010 results	Fiscal 2012 targets
Revenues	¥9,315.8 billion	¥10 trillion
Operating income	4.8%	Over 5%
Net income attributable to Hitachi, Ltd.	¥238.8 billion	Consistently generate at least ¥200 billion
*Debt-to-equity ratio	1.03	0.8 times or below
Total Hitachi, Ltd. stockholders' equity ratio	15.7%	20%

\*Including the non-controlling interests and liabilities associated with the consolidation of securitized entities

#### Three Key Management Policies in the 2012 Mid-Term Management Plan

	Fiscal 2010 results	Fiscal 2012 targets
Outside Japan revenue ratio	43%	More than 50%
Percentage of employees outside Japan	33%*	36%

I. Global Growth Strategies to Harness Hitachi's Strengths

\* Reflecting HDD business transfer

We will boost revenues from outside Japan to more than 50 percent of net sales, partly through employing more local people.

The prime focus of our global growth strategy is to localize and expand worldwide. Based on our New Globalization Plan, we chose 11 key regions

and strengthened the six-part global framework close to markets to speed up strategies that use local leadership.

The second focus is to collaborate with partners for more opportunities, working with government agencies and other partners, particularly in fast-growing emerging nations, to increase opportunities for Social Innovation Business.

The third focus is to use our strengths to create business, employing our technologies and experience to build environmentally conscious cities and other next-generation urban areas, suggesting a new lifestyle as a total solution.

#### II. Focusing Business Resources on the Social Innovation Business

	Investments from fiscal 2010 to 2012
Investment	¥1,100 billion
R&D investment	¥670 billion

From fiscal 2010 through 2012, we will invest over 1,700 billion yen in Social Innovation Business, up 170 billion yen from our target. We intend to generate growth as well as medium- and long-term expansion. From the total, we are allocating 1,100 billion yen to investment, including data center operations and high-efficiency thermal power systems, and 670 billion yen to R&D for smart grids, lithium-ion batteries, and other technologies.

#### III. Strengthening the Business Structure to Secure Profitability

We will reinforce our business structure and stabilize earnings by pursuing speedy operational management and by bolstering our financial position

#### 1. Cost-structure reform

 Transform cost structure to be cost competitive globally Conduct companywide project, while strengthening individual businesses by promoting the in-house company system

#### 2. Reinforce financial position

 Reduce total assets and improve asset efficiency • Reduce interest-bearing debt by pooling funds

#### 3. Global human capital

 Talent management to realize Hitachi's targeted value • Rebuild the Hitachi Group's entire human capital platform

#### 4. Value creation and CSR

· Create both social and economic value at the same time and contribute to the creation of a sustainable society

VISION

Hitachi's Management Strategies and CSR

### Creating a Sustainable Society

For us, CSR means making our Corporate Credo and Group Vision a reality. We address the UN Millennium Development Goals of ending poverty and hunger, universal primary education, combating diseases, and environmental sustainability with our technologies and solutions. We create social and enterprise value with social and management sustainability.

Our 2012 Mid-Term Management Plan will help us tackle society's fundamental problems based on the Social Innovation Business. We will work on key areas of our main focuses—global, fusion, and environment—looking at them from management and social perspectives, using dialogues with stakeholders, and will reduce risks and improve management.

Also, we will apply our CSR Policy throughout the Group, drawing on dialogue and stakeholder

#### **Hitachi Social Innovation Business**

Our core competency is Social Innovation Business, which draws on intelligent IT to provide an advanced social infrastructure. Social Innovation Businesses include information and telecommunication systems, power systems, as well as industrial, transportation and urban development systems—all combined fieldsengagement to integrate management and CSR, and to become a truly global company.

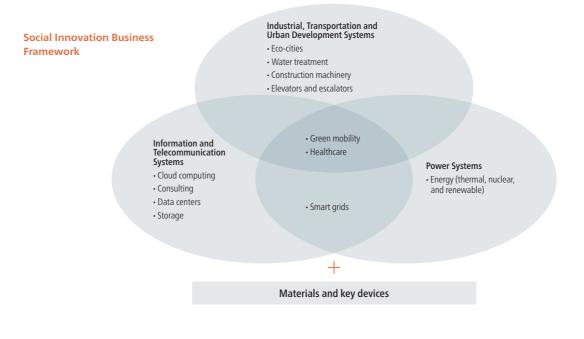
#### **CSR Policy of the Hitachi Group**

- 1. Commitment to Corporate Social Responsibility (CSR)
- 2. Contribution to Society through Our Business
- 3. Disclosure of Information and Stakeholder Engagement
- 4. Corporate Ethics and Human Rights
- 5. Environmental Conservation
- 6. Corporate Citizenship Activities
- 7. Working Environment
- 8. Responsible Partnership with Business Partners

Adopted March 2005

WEB CSR Policy of the Hitachi Group http://www.hitachi.com/csr/introduction/hitachi-csr/

supported by materials and key devices. The five major business segments, information and telecommunication systems, power systems, social and industrial systems, construction machinery, and high functional materials & components, together account for around 60 percent of consolidated net sales.



#### VISION

Hitachi's Management Strategies and CSR

### Material Issues for Hitachi

Hitachi includes the participation of stakeholders in the decision-making process for CSR activities. We engage in stakeholder dialogue worldwide

#### 1. Products That Create a Sustainable Society (Sustainable Business)

Developing innovative technologies and products is vital to growing our business and realizing a sustainable society. We are developing products that both lower environmental burden and improve the quality of life so that we can contribute to a prosperous, safe, and secure society.

#### 2. Protecting the Environment

We feel that we can help protect the environment by reducing the environmental burden of products throughout their life cycles. We have created our Environmental Vision with three pillars: prevention of global warming, conservation of resources, and preservation of ecosystems. Under this vision, we provide environmentally conscious products and services by reducing the environmental burden from operations and improving their energy efficiency.

#### **3. Public Policy Initiatives**

**Material Issues for Hitachi** 

Our Social Innovation Business is subject to the policies of national governments, therefore we assess policy trends while engaging in dialogue with stakeholders who influence public policy and regulations. As a result, we can propose technologies and solutions that both benefit society and contribute to better policies.

to identify social and environmental issues, conducting assessments and verifications from the perspectives of stakeholder materiality and the impact on management. We report on these key issues in the *Sustainability Report Digest*.

#### 4. Respect for Human Rights

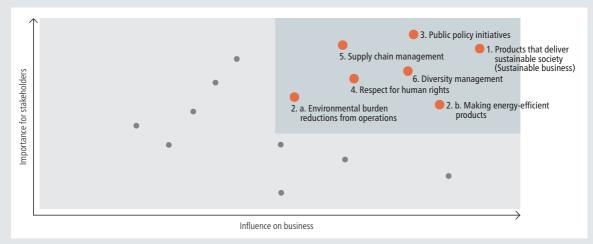
As a global enterprise, we face risks because we operate under different national laws, cultures and business practices. We respect the laws and ordinances of every country, and we act with respect for international norms to prevent human rights violations.

#### 5. Supply Chain Management

Supply chain risks are gradually increasing with the globalization of business, especially for the environment and human rights. We openly share our procurement policies with suppliers, and we reduce supply chain risk through ongoing surveys of CSR practices with our suppliers.

#### 6. Diversity Management

We believe that diversity is much more than the human rights issue of gender equality. It is a fundamental challenge for sustainable management, generating synergies beyond the Hitachi Group, business fields, and globalization. We therefore have initiated worldwide programs that maintain personnel systems while respecting diversity, by improving workplace environments, and by cultivating human capital that can accelerate the globalization of Hitachi and contribute to market-based sustainability needs.



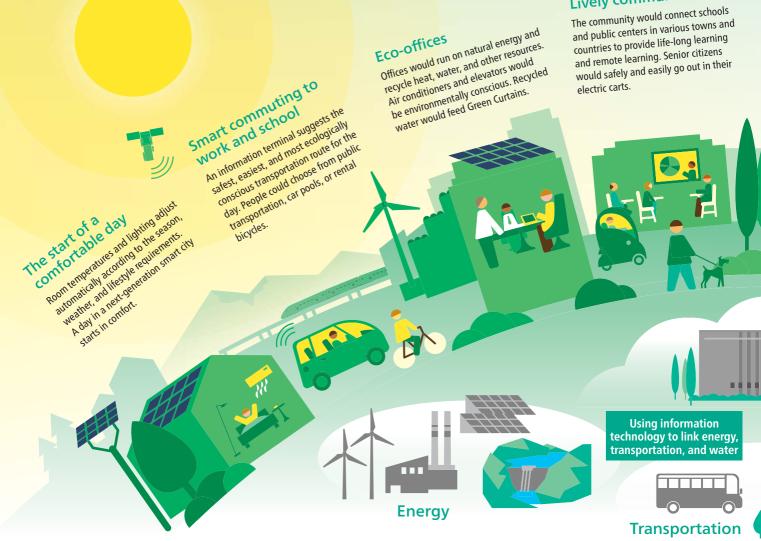
#### Selection Process for Material Issues

We evaluate and verify issues identified through stakeholder dialogue 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 influence on business includes 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.

# **Next-Generation Smart Cities by Hitachi**

We offer comprehensive solutions combining social infrastructure systems for energy, transportation, and water with Intelligent IT to build nextgeneration cities—safe, convenient, comfortable living spaces that are environmentally conscious and address issues such as an aging society

# Lively communities



#### New Cities That the World Desires

Since we entered the 21st century, such issues as global warming, resource depletion, urban crowding, economic disparities, and aging have come to the fore. The common need of all nations is to resolve these issues to ensure social sustainability. In cities around the world, people want their cities to overcome all these challenges.

#### Hitachi's Vision for Next-Generation Smart Cities

In April 2010, Hitachi established the Smart City Business Management Division for proposing new cities that will be comfortable and environmentally conscious. These cities would mainly be in emerging economies that are continuing to invest heavily in infrastructure. Hitachi designs cities with a vision giving consideration to lifestyles and values. These cities would efficiently and stably supply electricity and sewage systems as well as provide and treat water, enabling balanced demand and supply. They would also deliver safe, convenient, and energy-saving transportation, advanced medicine and education, and government services. All these services would be part of a comprehensive social infrastructure package that



is linked and managed by safe, high-capacity information and telecommunications systems using cloud technology and eco-conscious data centers. Hitachi's vision for next-generation smart cities: ensuring comfortable living spaces while reducing the environmental burden. Cities would grow and develop sustainably and be distinctively attractive for citizens.

#### Drawing on Our Expertise in Social Infrastructure to Build Next-Generation Cities

To support lifestyles, Hitachi has long been

an innovator of such social infrastructure systems as energy, transportation, water, and telecommunications. We believe our mission is to bring to the world our Corporate Credo: "contribute to society through the development of superior, original technology and products."

We propose solutions that link infrastructural components by integrating social infrastructure systems with IT and telecommunications. The Hitachi Group contributes to create a sustainable society by building next-generation smart cities that maintain an effective relationship between people and the earth.

### Urban Planning for Tianjin Eco-City

Hitachi is helping to construct Sino-Singapore Tianjin Eco-City, a joint project between the Chinese and Singaporean governments, by providing smart grid technologies and solutions



#### Hitachi's Involvement in Tianjin Eco-City

- · Providing advanced energy and mobility technologies required for eco-conscious cities and supplying information control platform solutions.
- Helping construct the Eco Central Business District.
- Participating in the Eco-City New Electric Vehicle Alliance.
- Deploying our home energy management systems for
- high-rise residential buildings under construction.

#### Harnessing Our Smart City Business to Participate in an Eco-Conscious **Urban Development that Has Captured** Worldwide Attention

We are capitalizing on our global smart city expertise to participate in China's Sino-Singapore Tianjin Eco-City Project, an initiative capturing worldwide attention.

Sino-Singapore Tianjin Eco-City is a large model eco-city that is a joint venture between Sino-Singapore Tianjin Eco-City Investment and Development Co., Ltd. (SSTEC), and the Chinese and Singaporean governments. The goal is to build a city of 350,000 with 110,000 houses by around 2020 on a 30-square-kilometer salt evaporation

pond on the outskirts of Tianjin.

The new city will use 26 KPIs to minimize the environmental burden of housing, energy, and transportation. As well, it will recycle resources, including renewable energy for 20 percent of total energy, make all tap water 100 percent drinkable, and recycle 60 percent of waste. The city will have 90 percent green transportation and 100 percent green buildings.

#### Leveraging Our Expertise from **Tianjin Eco-City to Contribute to Environmentally Conscious Urban** Planning in China

The project heads of Sino-Singapore Tianjin Eco-City want energy-saving technologies, new energy and storage battery technologies, and information control platforms from Japanese companies. In May 2010, Hitachi and SSTEC agreed to evaluate and use Hitachi's technologies and solutions. We intend to help develop environmentally conscious cities by setting up a smart city R&D center in Sino-Singapore Tianjin Eco-City to create advanced solutions for further progress in this field in China.

Specifically, we will help build the Eco Central





Business District that minimizes CO<sub>2</sub> emissions and enhances worker convenience. Our wide-ranging business contributions include solar power and other new energy technologies and solutions; efficient community, building, and home energy management systems; and charging systems for electric vehicles, as part of the Eco-City New Energy Vehicle Alliance. We also will collaborate on building data centers and other IT infrastructure.

The smart city business is pivotal to our Social Innovation Business. Through our involvement in Sino-Singapore Tianjin Eco-City, we will contribute to lower environmental burden urban development in China, reinforcing the development of our own smart city business.

#### VOICES

Solid Collaboration in Low Environmental Burden Urban Development



Lim Kingboon General Manager, Economic Promotion, Sino-Singapore Tianjin Eco-City Investment and Development Co., Ltd. (SSTEC)

SSTEC and Hitachi have cooperated since signing an agreement in May 2010 to develop Sino-Singapore Tianjin Eco-City. Hitachi is unique, offering all parts of information control and IT, including products and solutions. This is China's first large urban development that cuts environmental burden by conserving and recycling. We plan to try many new ideas, and believe that Hitachi's expertise will be essential. I look for Hitachi to showcase itself at this city, and I hope to build stronger ties in the years ahead.

#### F E A T U R E >>> Next-Generation Smart Cities by Hitachi

## Hitachi Projects Extending around the World

We have undertaken feasibility studies and experiments worldwide for building nextgeneration cities as part of our Social Innovation Business. We have also started projects in health care—essential in an aging Japan.

# Supplying Charging Management Systems for Rental Electric Vehicles in Japan

- Providing Infrastructure to Aid in the Spread of Electric Vehicles in Okinawa
- Yokohama Smart City Project

The Advanced Energy Company (AEC) adopted Hitachi's electric vehicle (EV) charging system as part of Okinawa Prefecture's plan to install a rapid and medium-speed charger infrastructure for EVs rented to tourists. That program began in February 2011.

Hitachi's solution is a system that processes information and monitors user authentication, fees, and payments for chargers in tourist and commercial areas. AEC plans to install 50 rental EV charging stations on Okinawa's main island by 2014. The company intends to eventually set up stations throughout the main island so residents can use rental cars once they have finished service. We will therefore continue to provide our charging management solution.

Kanagawa Prefecture chose our energy management system for recharging electric vehicles for the Yokohama Smart City Project, and we are pushing ahead with other experiments.





Charger for rental electric vehicles in Okinawa

Storage battery from Hitachi Group company Shin-Kobe Electric Machinery Co., Ltd., that was adopted for the Yokohama Smart City Project



#### Contributing to the Development of a Low-Carbon Economy by Building a Low-Carbon Metropolis in China

## Building Guangzhou Knowledge City Dalian Eco-Science and Technology City

Hitachi is the first Japanese company to participate in Guangzhou Knowledge City, a next-generation city being built by the governments of Guangdong Province and Singapore. When completed in 2030, the city—on 123 square kilometers outside Guangzhou—will house around 500,000.

For this city, we launched a development center and are conducting a feasibility study for energy management, renewable energy, IT platforms, and next-generation transportation.

Hitachi is also collaborating with the city of Dalian on smart grids, water treatment, and appliance recycling. We will supply technologies, products, and solutions.

#### Verifying Environmentally Conscious Package Infrastructure

#### Helping Set Up a Low-Carbon, Environmentally Conscious Infrastructure for India

Delhi-Mumbai Industrial Corridor, a joint Japan-India project, is a 1,500 km highspeed freight line between New Delhi, India's capital, and Mumbai, its largest city, with industrial sites, roads, ports, and other infrastructure over 300 km from south to north. In Dahej in Gujarat, a petrochemical zone, we made a study for a smart community in 2010. In 2011, Japan's METI commissioned us to explore a low-carbon infrastructure there. We will help create the infrastructures for urban and regional communities.

#### Natural Energy Control Technologies in Smart Housing in Japan

#### Smart Grid Experiment in Rokkasho Village

In September 2010, we jointly launched Japan's first smart grid in Rokkasho, Aomori Prefecture, a project for wind, solar, and other energy, with our partners, Japan Wind Development, Toyota Motor Corporation, and Panasonic Electric Works. We are testing energy applications between users and suppliers with energy storage equipment and management. For wind and solar, as well as smart meters for electricity generation and consumption in houses, we provide the demand and supply controls, including HUB batteries. We also monitor EcoCute water heaters and ensure efficiency of surplus electricity from solar power.



Rokkashomura-Futamata Wind Power Station



Hitachinaka Hospital, the focus of the Health & Vitality Development Project

#### Participating in a Consortium: Industry, Academia, and Government in Urban Planning for a Graying Society in Japan

### Health & Vitality Urban Development Project in Hitachinaka Gerontology Consortium, the University of Tokyo Industry-Academia Collaboration\*

Believing that next-generation cities should be safe, secure and foster physical and mental health, we participate in graying society projects. We collaborate on the Health & Vitality project in a company hospital in Hitachinaka, Ibaraki. In the Gerontology Consortium, we propose solutions and roadmaps, together with various member companies, toward realizing an ideal graying society. We will continue helping with rural and urban revitalization through industry-academia-government collaboration, contributing with the realization of next-generation cities for a graying society.

\*This initiative continued from June 2011 as the University of Tokyo Industry-Academia Collaboration Gerontology Network

#### Improving Water Environments with Intelligent Water Systems

### Water and Sewage Management in the Maldives Waste Water Recycling in Dubai

Since June 2010, the Water Environment Solution Division has provided "intelligent" water solutions—cycling water more efficiently with improved processing, information control and energy conservation. In the Republic of Maldives, we digitalized water distribution information, downsized purification plants and streamlined water and sewage systems. In Dubai, the UAE, our advanced waste water treatment helps with water shortages by recycling water and desalinating seawater as well as treating ballast water to preserve the environment. With "intelligent" water systems, we are increasing water cycle efficiency. Building a water and sewage management facility in the Maldives



# **Third-party Expert Opinions**

The number of companies integrating sustainability in their business strategy is growing every year, underlying the importance of non-financial aspects in increasing the value of a company. Considering sustainability aspects in corporate strategy is perceived to have a positive impact on long-term value generation, innovation capability, operational efficiency, and reputation through the better management of stakeholders' expectations. Companies are required to demonstrate a superior ability in managing sustainability issues and communicating transparently to their stakeholders.

For companies of Hitachi's size, stakeholders' expectations are high: through its operations, the company has the ability to shape business, society, and the environment. For that reason, broad and transparent public communication is paramount. Besides extensive reporting on key environmental and social performance indicators, qualitative aspects and materiality analysis also deserve a central role in Hitachi's reporting. Showing progress on targets set is considered best practice. Notable is the section devoted to innovation and intellectual property management, a field where companies tend to be reluctant in disclosing details to stakeholders. Hitachi's Sustainability Report is therefore very complete from an international standpoint.

The environmental reporting section discusses the direct environmental impact of the company's own operations and the indirect environmental impact of its products and services. Hitachi addresses both aspects extensively by describing its approach, formulating targets, and presenting achievements and examples for different product groups. Noteworthy is the comprehensive product lifecycle approach Hitachi uses for evaluating the environmental performance of its products.

In the social section of Hitachi's Sustainability Report, material challenges impacting employees, communities and supply chains, are seriously discussed, supported by numerical evidence and targets. For a global company like Hitachi, the management of diversity and community impact deserves special attention. The report covers aspects such as diversity development, human rights, and supply chains, providing sufficient data. Considering the strategic company focus on social innovation, more indicators, targets and achievement are expected to be reported in the future.

What stands out in the 2011 Report is the clear description of how corporate social responsibility is integrated into the company's management strategy and vision. Sustainability analysis, besides being an important pillar for the definition of the key corporate policies and medium-term targets, is also used to ascertain the materiality for stakeholders of the many environmental and social issues that Hitachi faces. Regular communication with stakeholders on themes related to sustainability enables Hitachi to further refine the business strategy around its social innovation core competency.



**Jvan Gaffuri** Senior Manager Sustainability Services SAM Research AG

Management Report



# HITACHI Inspire the Next

MESSAGE

#### Globally Reinforce Group Governance to Cultivate Highly Transparent CSR Management

From a global perspective, CSR has progressed dramatically in recent years, in part because of the trend that CSR is core to management and strategy, but also because of a new international standard (ISO 26000), which is a newly signed international social responsibility agreement. We have also seen vigorous debate, particularly in Europe and the United States, over corporate transparency, especially on disclosure obligations related to corporate governance, the environment, and social issues.

All Hitachi Group companies have traditionally grown their businesses independently, in line with a spirit of respect for management independence and innovation originality. However, today when we generate more than 40 percent of our business outside Japan, it's not enough to comply with other countries' business practices, laws, and regulations. We need to extensively and continually communicate on sustainable corporate strategies, business operations and compliance based on leading international concepts, customs and trends.

These considerations prompted us to create the Hitachi Group Codes of Conduct in fiscal 2010. This document codifies our corporate philosophy, the Hitachi Founding Spirit, and respect for human rights and so on. We shared these codes with Group companies globally by translating it into 17 languages. We will establish a global framework of six regions—the Americas, Europe, India, Southeast Asia and China, complementing Japan—to reinforce local governance by giving them regional corporate responsibilities. To respond swiftly to social demands and expectations, we will implement highly transparent CSR management by engaging regularly with our stakeholders.

Through our Social Innovation Business, we aim to solve fundamental global issues and contribute to social and environmental progress that creates a sustainable society. Moreover, we will respond to market-based sustainability challenges by collaborating with local communities and pursuing activities tailored to their particular circumstances in order to help them resolve their sustainability challenges.



#### Toshiaki Kuzuoka,

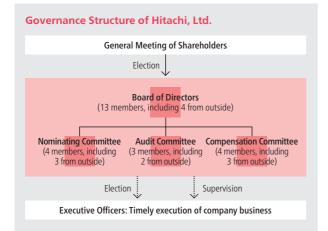
Senior Vice President and Executive Officer in charge of Human Capital, Government & External Relations and Corporate Auditing Hitachi, Ltd.

### **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.<sup>11</sup> We have strictly separated business supervision and execution to establish a business structure for speedy, highly transparent management. We task outside directors to draw on their knowledge, experience, and independent perspective when supervising executives and other senior managers to reinforce the role of the Board of Directors. We formulated the Hitachi Group Codes of Conduct to develop common values for all Group members and to enable us to share among all Group companies a common understanding of our corporate social responsibility.



11 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.

#### Compensation

Compensation for every director and executive officer is set by the Compensation Committee based on the Japanese corporate law 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 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 scheme for directors and executive officers was revised to eliminate retirement allowances. In fiscal 2010, executives were compensated as follows:

#### FY 2010 Compensation

Catanani		end allowances or based bonuses
Category	Recipients (number)	Total amount (millions of yen)
Directors (outside directors)	12 (5)	231 (99)
Executive officers	28	1,586
Total	40	1,817

\* The number of directors indicated doesn't include three serving concurrently as executive officers.

\* Compensation to directors includes the monthly salaries, from April 2010 to the time of retirement, of three directors who retired upon the expiration of their terms, effective as of the close of the 141st Ordinary General Meeting of Shareholders on June 29, 2010.

\* We additionally provided ¥3 million in retirement allowances to two outside directors who retired on June 24, 2011, and ¥313 million in retirement allowances to seven executive officers who retired on March 31, 2011.

#### **Internal Control**

As a public company listed on the New York Stock Exchange, Hitachi, Ltd. is registered with the U.S. Securities and Exchange Commission and is subject to the Sarbanes-Oxley Act (SOX<sup>+1</sup>). A comparable assessment and report on internal control over financial reporting (J-SOX<sup>+2</sup>) came into effect in Japan at the beginning of fiscal 2008. Accordingly, the Hitachi Group as a whole and all listed Group companies now evaluate internal control systems and report the results on a consolidated basis.

The Hitachi Group is committed to full compliance with these and other applicable laws and regulations. Beyond that, we consider it an important social responsibility to thoroughly implement our internal control systems, to improve the transparency and credibility of our businesses, and to strengthen our management structure by clarifying, examining, and visualizing our management and operational frameworks.

As a conglomerate of many companies, we have adopted a framework that assigns accountability at the Group level, including responsibilities for the design and operation of internal controls. Therefore, all Hitachi Group companies are required to revise, document, and evaluate the effectiveness of their operations in line with guidelines determined by specific levels of corporate scale and business content. Management assessment of each company is collected at the Group level, and is reported to Hitachi, Ltd. along with certifications.

1 SOX: Section 404 of this act, enacted in July 2002, mandates company management with the responsibility of establishing, maintaining, and evaluating internal control over financial reporting, and requires that control be assessed by independent auditors.

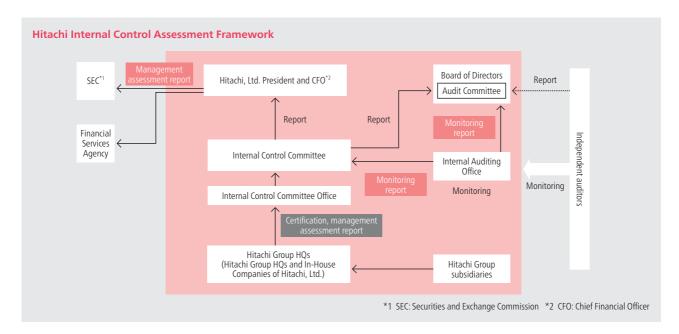
†2 J-SOX: A framework for evaluating and reporting internal control over financial reporting under the Japanese Financial Products Transaction Law. It came into effect since April 2008 with the promulgation of the Financial Instruments and Exchange Law in June 2006.

#### **Group Management**

Hitachi, Ltd. optimized the management structure and instituted an in-house company system in October 2009 to ensure swift management action and to become more competitive by restructuring, particularly in the Social Innovation Businesses. These eight in-house companies (businesses) are Power Systems, Rail Systems, Industrial & Social Infrastructure Systems, Urban Planning and Development Systems, Information & Control Systems, Information & Telecommunication Systems, Defense Systems, and Battery Systems. From fiscal 2011, we rated each company and transferred authority to them so that they could speedily pursue independent management. We base the ratings of each company on such factors as FIV,<sup>+1</sup> operating profit, and cash flow, reflecting these ratings in compensation evaluations for company management teams.

The Group Strategy Committee deliberates on Group-wide management measures to optimize overall Group strategies and management resources.

†1 FIV (Future Inspiration Value): Hitachi's economic value-added evaluation index, in which the cost of capital is deducted from after-tax operating income.



### **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 also mindful of our vision to contribute to the solution of fundamental global issues and to pursue the realization of a better, more prosperous global society. We intend to become a truly global entity that shares its values with society by integrating CSR into management and operation strategies.

#### **CSR Management Structure**

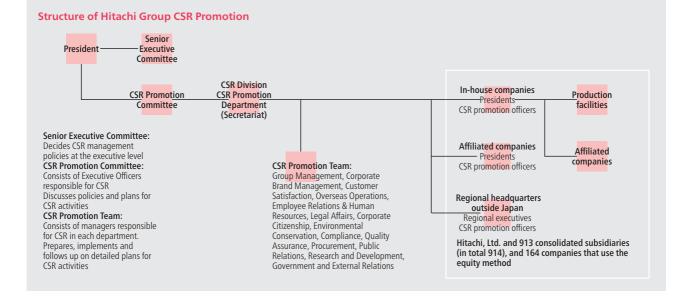
To promote CSR, Hitachi executive officers in charge of corporate divisions on the CSR Promotion Committee discuss Group-wide CSR issues and policies. The committee develops specific global initiatives with the CSR Promotion Team of the CSR-related departments within Hitachi, Ltd. and CSR promotion officers at regional headquarters outside Japan. Hitachi, Ltd. and Group company CSR promotion officers meet regularly to discuss issues that need attention and to follow a common direction.

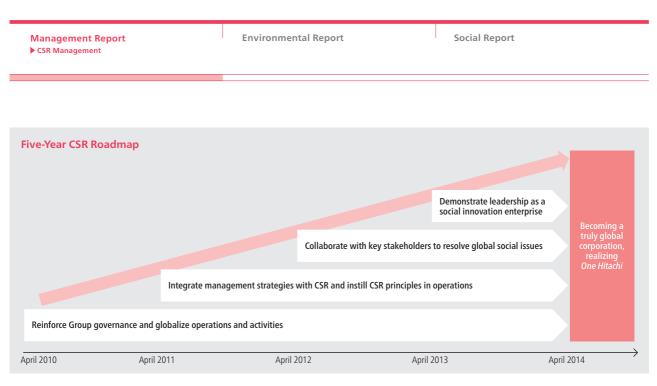
To meet our responsibilities as a global enterprise, we take on sustainable activities for the entire Group by using two management systems. One is the jointly developed CSR Self-Assessment Tool, which we use to improve Group-wide activities and to clarify the issues that we face as a global entity, and the other is the materiality process. By engaging in dialogue with global stakeholders, we proactively integrate global social issues within management to create sustainable management and social programs. Management issues identified through these processes are presented to and discussed at the CSR Promotion Committee on a semiannual basis to investigate and decide on new initiatives for the upcoming fiscal year.

#### The Five-Year CSR Roadmap

We marked the centennial of Hitachi, Ltd. in fiscal 2010 by creating the Five-Year CSR Roadmap, a medium-term plan for CSR. The goal is to coordinate this initiative with the medium-term management plan, or corporate strategy, to become a truly global enterprise. Using this roadmap, we have reinforced the foundation of Group-wide operations, quantitatively measured CSR activities, and improved corporate transparency to demonstrate leadership in resolving global challenges and opportunities confronting society.

Based on this roadmap, CSR promotion





team at Hitachi, Ltd. and our overseas regional headquarters outside Japan have created action plans and set assessment targets to make CSR programs more effective (see pages 032 and 033).

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

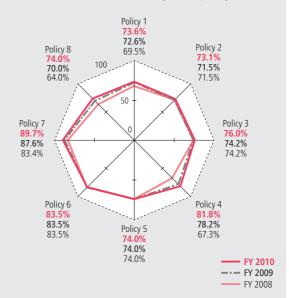
In fiscal 2008, Hitachi, Ltd. and Group companies jointly developed the Hitachi Group CSR Self-Assessment Tool, which benchmarks our companies against other leading global companies. The goal is to tackle issues and clarify initiatives based on our policies for pursuing CSR and continuously improving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

Including Hitachi, Ltd., 35 Group companies-23 in Japan and 11 in North America and Asiaemploy this tool, which has been translated into English and Chinese.

#### **Results of Fiscal 2010 Self-Assessment**

Hitachi's scores in fiscal 2010 were higher than a year earlier, including those for commitment to CSR, corporate ethics and human rights, and the working environment. The prime reasons for this success are holding CSR courses for Group company directors, the Hitachi Group Codes of Conduct, wider implementation of e-learning, and the creation and publication of the Hitachi Group Health and Safety Policy. In fiscal 2011, we plan to review these evaluation items, using ISO 26000 standards, to attain even higher global results.

FY 2010 Self-Assessment Results (Hitachi, Ltd.)



#### 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; 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; awareness of ethics; compliance; human rights Policy 5: Environmental Conservation
- Carbon management strategies; resource recycling; ecosystem conservation
- Policy 6: Corporate Citizenship Activities Strategic social contribution; participation in local communities; social enlightenment
- Policy 7: Working Environment
- Respecting diversity; fulfilling work environments; work-life balance Policy 8: Responsible Partnership with Business Partners CSR procurement; communication with suppliers

#### FY 2010 Results and FY 2011 Plans

CSR Policy of the Hitachi Group	Hitachi Group Activities in FY 2010	Results in FY 2010	Achievement level	Page(s)	FY 2011 Goals/Plans
1. Commitment to Corporate Social Responsibility	Increase the number of companies worldwide using the Hitachi Group CSR Self- Assessment Tool	Twenty-four companies within Japan and 11     outside Japan used our CSR Self-Assessment     Tool	***	p. 031	<ul> <li>Review CSR Self-Assessment Tool based on ISO 26000 and other standards, and develop these for the entire Group</li> <li>Build a comprehensive risk assessment structure and PDCA techniques</li> </ul>
	Strengthen the risk management system	Expanded risk assessments to cover all companies, Group companies, and research laboratories to consolidate and collectively assess risk	**	p. 034	
2. Contribution to Society through Our Business	<ul> <li>Implement CSR-oriented business assessments and reflect the results in business strategy, operations, and/or management issues</li> </ul>	<ul> <li>Conducted third-party assessments of business areas in 22 countries where we can resolve social issues and where we can make the greatest contribution, and incorporated these results into business and communication strategies</li> </ul>	**	pp. 046–048	Hold stakeholder dialogues based on business materiality and cultivate business opportunities from the perspective of CSR Continue implementing Hitachi Group QF Innovation Movement
	Continue to implement process improvement for business divisions prioritized by the need for quality improvement and to reinforce OCHIBO HIROI* <sup>1</sup> activities	Launched the Hitachi Group QF (Quality First) Innovation Movement and continued to improve processes for priority business divisions and OCHIBO HIROI Held quality assurance (QA) managers' conferences in China and Thailand	***	pp. 093–094	<ul> <li>and assess the results</li> <li>Complete work on global network for Web inquiry responses</li> </ul>
	Improve our responses to Web inquiries worldwide     Expand access to and enhance the Web Inquiry Responsiveness Improvement Course	<ul> <li>Produced a global network improvement plan based on inquiries</li> <li>176 Hitachi Group employees took the Web Inquiry Responsiveness Improvement Course</li> </ul>	**	p. 095	
3. Disclosure of Information and Stakeholder	Engage in stakeholder dialogues globally	Conducted dialogues in Asia, the Americas, and Europe about Hitachi's solutions for regional social issues	***	pp. 099–100	Continue to hold stakeholder dialogues worldwide     Participate in international debate on sustainability, and express our views
Engagement	Strengthen internal dissemination of CSR information	Held CSR training courses for Group     company directors	***	p. 031	
4. Corporate Ethics and Human Rights	• Expand global human rights initiatives	Produced educational materials covering global human rights issues     Held human rights discussions with stakeholders in Europe	***	pp. 116–118	<ul> <li>Promote human rights globally and collaborate with non- governmental and other organizations working in this area</li> <li>Publish and distribute <i>Hitachi</i> <i>Group Codes of Conduct</i> <i>Handbook</i></li> <li>Produce English and Chinese versions of e-learning tools on the Hitachi Group Codes of Conduct</li> <li>Continue educating and auditing regional headquarters outside Japan</li> </ul>
	Corporate Ethics Month every October October And translated Hitachi Group Codes of and translated it into 17 language	Formulated Hitachi Group Codes of Conduct and translated it into 17 languages     Used e-learning tools to broadly publish the	***	pp. 036–037	
	Raise compliance awareness relating to operations outside Japan	<ul> <li>Held a briefing by legal and compliance officers, including those from regional headquarters outside Japan, on measures to prevent corruption</li> </ul>	***	p. 037	
5. Environmental Conservation	• Reduce CO <sub>2</sub> emissions from Hitachi products (target for the year: 14 million tonnes)	Helped reduce CO <sub>2</sub> emissions by 15.51     million tonnes	**	pp. 051–053	Reduce CO <sub>2</sub> emissions from Hitachi products

Citizenship Activities	Deploy programs where employees contribute to society, focusing on biodiversity	<ul> <li>Implemented programs involving volunteers, including those preserving endangered species, an afforestation tour to China's Horqin Desert, and conservation initiatives for satoyama (woodlands)</li> </ul>	***	pp. 108–109	<ul> <li>Set up and published medium- term themes to Group businesses globally</li> <li>Improve disclosure of external information</li> <li>Continue to implement social contribution programs on the environment, energy, and other areas</li> </ul>
	Implement social contribution programs in emerging countries and markets to meet their social needs	Undertake training programs for young South African and Indian engineers	***	p. 105	
	Undertake social contribution programs covering the environment, energy, and other areas	Implemented educational support programs on the environment for children in China Held forums in Singapore and the United Kingdom on the environment and energy	***	p. 100	_
7. Working Environment Promote the diversity of human resources and work styles • Promotion of more female executives and managers • Encourage employment of more people with disabilities within the Hitachi Group	Promotion of more female     executives and managers	Produced plan for appointing female executives at in-house companies     Hitachi Europe produced e-learning materials in four languages	***	р. 123 р. 126	Follow up once a year on progress with the hiring plans of each company     Establish balanced working styles by continuing to implement WLB-Up Month     Strictly comply with legal employment rate for disabled people at all Hitachi Group companies in Japan
	more people with disabilities	Implemented WLB (Work-Life Balance) -Up Month to help people balance their work with their lives	***	pp. 123–124	
		<ul> <li>Held four study sessions on employing people with disabilities within the Hitachi Group</li> <li>Hired six people as part of the Japan's Ministry of Health, Labour and Welfare's model business program to promote hiring the mentally disabled</li> </ul>	***	p. 129	
8. Responsible Partnerships with Business Partners	Rebuild supply chain from global perspective	In addition to creating the Global Procurement Promotion Department, we improved our worldwide procurement network in several ways, including setting up a procurement unit in Brazil	**	p. 119	Plan monitoring suppliers globally     Continue to convey useful information for suppliers' environmental management
	Support voluntary environmental management initiatives by suppliers through the New MMM Club* <sup>2</sup>	Launched the New MMM Club, and exchanged information on environmental regulations and outstanding environmental case studies at suppliers	***	p. 121	-

\*\*\*

Achieved Partially achieved

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

\*2 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.

## **Risk Management**

Reducing the frequency and impact of risks globally by strengthening policies and programs to meet the goals of the 2012 Mid-Term Management Plan.

# Responding to the Great East Japan Earthquake

A massive earthquake, followed by a devastating tsunami, hit Japan's Tohoku region and the 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. Some facilities were heavily damaged, particularly some in Ibaraki and Fukushima prefectures. In response, we broadened the emergency headquarters' role and established the Hitachi Group Headquarters for Post-Earthquake Reconstruction and Redevelopment, headed by the president, on March 23, which functions as a "control tower," combining information on damage with assistance requests. The headquarters is driving the concerted Group initiative to optimize support and restoration (see pages 010-014).

#### Reinforcing the Risk Management System

We manage the business and operational risks of every division with internal audits. The entire Group is reinforcing management systems to address increasingly global and complex risks. In fiscal 2009, we audited the risks of Hitachi, Ltd. Group corporate divisions and those at regional headquarters outside Japan (in the Americas, Europe, China and elsewhere in Asia). In fiscal 2010, we expanded auditing to all in-house companies, Group companies, and research institutes to assess risks that could undermine Group-wide credibility and business sustainability. Such risks include environmental and reputation risks, as well as emerging human rights issues that include employee diversity and poor working conditions in the supply chain. Other risks are more traditional, such as natural disasters, the market environment, and raw material prices.

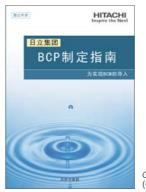
We will reinforce our risk management framework by improving our assessment standards, by analyzing and evaluating accumulated risk information in greater detail, and by evaluating responses at the management level. In addition, we will improve risk awareness among all employees, especially through information sharing, education and training.

#### Business Continuity Plans (BCPs)<sup>+1</sup>

To guard against risks, and being deeply committed to the social infrastructure, we are enhancing our BCPs to minimize the impact on society of any interruption to business operations. Since December 2006, the Hitachi Group has disseminated the *Guidelines for Formulation of BCPs* to all Group companies to mitigate risks, such as major natural disasters.

In fiscal 2010, we translated our BCP guidelines into English and Chinese, and then distributed them to all Group companies around the world. Every Hitachi Group company and business site prepares for emergencies by producing a BCP using the guidelines that are relevant to them.

**†1** Business Continuity Plan (BCP): A plan for ensuring the continuation of core operations and for promptly restoring operations in the event of a disaster or accident.



Guidelines for Formulation of BCPs (Chinese version)

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

In 2008, as a precaution against a novel strain of influenza that gave rise to fears of a pandemic, we set up a special organization called the Risk Management Headquarters, headed by the president. In the event of a worldwide outbreak, the Risk Management Headquarters will take the lead in securing the safety of all Hitachi Group employees and their families. Every effort will be made to ensure that operations essential for maintaining social functions, such as medical services, public security, and lifelines, are continued without interruption.

As part of these preparations, we formulated the *Guidelines for Pandemic*<sup>+1</sup> Influenza Preparedness in 2009. We distributed these to all Group companies in fiscal 2010, after translating them into English and Chinese.

**†1 Pandemic**: An infectious disease epidemic that spreads worldwide



Guidelines for Pandemic Influenza Preparedness (English version)

# Tabletop Exercise to Prepare for Large-Scale Disasters

Hitachi, Ltd. has held annual disaster simulation drills since fiscal 1998—so far at 18 sites throughout Japan. For these drills, teams of people make decisions under disaster scenarios that have been developed over six months and include a range of crises. The objective is to verify and improve the effectiveness of prevention plans for large disasters. Personnel in charge of risk management at business sites participate in the drills, then report on their experience and results at a general assembly of around 200 officers responsible for handling risk. We are reinforcing our plans for large-scale disasters by sharing the results of tabletop drills with the entire Hitachi Group. We also hold monthly drills that use a satellite communications system.

# Providing Information through Our Internal Web Site

The Hitachi Group internal Web site has provided a risk response page for all Group employees since 1997. This internal Web site features information from wire services and Japan's Ministry of Foreign Affairs as well as problems that Hitachi Group employees have experienced. If emergencies arise, this site presents responses and alerts based on top management policies and disseminates information on damage.

The risk response Web site adds or updates around 80 news items every day. Page views per month reached one million when the H1N1 flu spread worldwide; the average number of page views per month is about 400,000. These figures underscore the essential role that the internal risk response Web site plays for risk response activities. This page also has top management policies and disaster updates for the Great East Japan Earthquake for the entire Hitachi Group.

## Compliance

Raising awareness and reinforcing compliance among Group companies worldwide during international expansion to ensure fair competition.

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

Hitachi, Ltd. formulated the Hitachi Group Codes of Conduct in August 2010 as specific common conduct codes for the 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 17 languages, consolidated subsidiaries worldwide then formulated their own codes of conduct in line with the same content. We ensure broad awareness of the Hitachi Group Codes of Conduct by displaying them on computer startup screens during Hitachi Group Corporate Ethics Month. We also produced an e-learning tool based on case studies for specific code items to help employees consider how best to act, and are extending this tool to Group employees in Japan. We ask managers to submit a statement electronically confirming that they have taken the course and are pledging to comply with the code. In fiscal 2011, we are extending this request to consolidated subsidiaries outside Japan.

#### **Implementing Corporate Ethics Month**

Corporate ethics and compliance are the bedrock of all our activities. Every October has been Hitachi Group Corporate Ethics Month since fiscal 2009. Top management leads the way to improving adherence to ethics and complying fully with laws and regulations. Executives and employees are making compliance central to all their actions. In fiscal 2010, we also distributed top management messages on compliance to all Group employees and familiarized employees with the Hitachi Group Codes of Conduct (described here). In addition, we arranged a presentation by an outside, non-Hitachi lawyer for compliance officers and managers to reinforce awareness of the Hitachi Group Codes of Conduct. During the month, we placed computerized learning tools on our intranet. To date, 20,000 employees throughout the Hitachi

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WEB Hitachi Group Codes of Conduct http://www.hitachi.com/csr/csr\_images/codeofconduct.pdf Management Report
Compliance

Group in Japan have participated in seminars and video courses on specific risk levels.

#### **Compliance Reporting System**

To prevent illegal or unethical behavior, to promptly address infractions, and to enhance the ability to self-regulate, we instituted a company-wide compliance reporting system. Employees can report directly to the division responsible at Hitachi (Compliance Division) or to an outside attorney. This system can be used not only by Hitachi employees but also by former employees, business partner companies, and temporary staff. Another system—Channel to the Board of Directors—has been introduced to allow employees to report problems anonymously straight to Hitachi's board of directors.

#### **Preventing Corruption**

Our 2012 Mid-Term Management Plan focuses on Social Innovation Businesses and strategic progress in emerging nations. Global compliance is now becoming ever more important, as Japanese corporations face tighter controls on bribery of foreign public officials. Key examples include the United Kingdom and the United States, which have enacted new bribery prevention laws.

In fiscal 2008, we formulated corporate rules and guidelines to prevent bribery worldwide, and we are ensuring adherence through audits and education. In the second half of fiscal 2010, we requested top executives at Group companies in the Americas, Europe, China, and elsewhere in Asia to further improve compliance. In March 2011, we held a meeting at which legal and compliance officers from subsidiaries overseeing businesses in the Americas, Europe, China, and Asia reported on bribery prevention. Two hundred and twenty-four compliance officers and managers from Hitachi, Ltd. and Group companies in Japan attended the meeting and shared information and case studies.

#### TOPICS

#### Recognized as One of the World's Most Ethical Companies

After a rigorous review, Ethisphere Institute, a U.S. think tank that researches, develops and promotes best practices in CSR and corporate ethics, awarded its Ethics Inside Certification to Hitachi Data Systems Corporation in the United States in November 2010. Ethisphere certifies organizations that establish, maintain, and share ethical conduct beyond legal requirements and which can be models for other organizations. In March 2011, Ethisphere also chose Hitachi Data Systems as one of the World's Most Ethical Companies for 2011. For this award, the institute evaluates several thousand companies from 36 industries in more than 100 countries, choosing one or two companies per industry. Ethisphere recognized the commitment to compliance of Hitachi Data Systems' management and lauded the company's innovative initiatives, including a video-based education program and computer tools that give employees timely, relevant information on ethics.



World's Most Ethical Companies mark



Hitachi Data Systems employees

#### Preventing the Recurrence of Misleading Representations

The entire Hitachi Group is working to prevent a recurrence of misleading information following the Hitachi Appliance, Inc. misrepresentation of refrigerators in fiscal 2009. Hitachi Appliances has since reinforced their systems to check environmental information in catalogs and other publications. We decided to make April the month for improving representations, and now use intensive education to ensure that all regulations are followed, particularly the Act against Unjustifiable Premiums and Misleading Representations. In June 2010, representatives from consumer groups inspected manufacturing, product testing, and appliance recycling at Hitachi Appliances' Tochigi Works, which manufactures refrigerators and air conditioners.

The entire Hitachi Group is now setting up a check system for corporate rules, making internal audits, and building understanding through ecology awareness education and training tailored to personnel levels. By February 2011, we had held seven regular meetings of an advisory group on product environmental information and expressions, which we created in fiscal 2009, and obtained advice on consumer perspectives from outside experts. We explained this advice at a training seminar, sponsored by the Nippon Association of Consumer Specialists, to consumer product managers.

# Protecting Personal Information and Information Security

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

## (1) Precautionary measures and prompt security responses

Hitachi clearly classifies information assets to be protected and takes safeguarding measures based on vulnerability and risk analysis. We also have an emergency manual for security breaches, based on the assumption that these are inevitable, not just possible.

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

Hitachi has prepared a curriculum tailored to various personnel levels—staff, managers, etc.—and is working to raise the prevailing sense of ethics and security awareness through Group-wide education using e-learning. We are also working on the use of audits to identify and address problems early on.

#### **Protecting Personal Information**

We established a personal information protection management system based on our Personal Information Protection Policy. With this system, through e-learning courses for all employees and through periodic audits, we ensure the protection and safe handling of personal information. Hitachi, Ltd. received Privacy Mark certification in March 2007 and renewed certification in March 2011. As of March 2011, 72 Hitachi Group companies have received the Privacy Mark.<sup>11</sup>

In July 2007, the Odaira Memorial Tokyo Hitachi Hospital became the first corporate medical institution in Japan to earn Privacy Mark certification. The Hitachi Yokohama Hospital and Ibaraki Hospital Center (both are located in Japan) also obtained certifications. These hospitals work hard to protect and carefully handle personal information. Hitachi also strives to safeguard personal information at Group companies outside Japan based on the Personal Information Protection Policy and in accord with all national and regional legal and social requirements.

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

1 Privacy Mark: Certification awarded by the Japan Information Processing Development Corporation to companies and organizations to recognize effective personal information management.



#### **Information Security Initiatives**

The rapid spread of digital information and computer networks has made it essential for businesses to strengthen security to maintain public trust.

For that reason, we established information security policies and processes. We are striving company-wide to improve security in line with our information security management system. For example, we develop information security procedures, educate employees about security, and audit information security.

We formulated the Three Principles for Preventing Leakage of Confidential Information, ensuring accident prevention and the highest level of care of customer information. Our policies ensure that we minimize damage in the event of accidents by promptly contacting customers, reporting to government agencies, investigating causes and acting to prevent recurrences.

Group companies worldwide are taking these steps to prevent information leaks: using *Hibun* encryption software; security PCs that do not store data; *Katsubun* electronic document access control and expiration processing software; and email and Web site filtering.

Group companies worldwide are reinforcing information security management in line with Global Information Security Administration standards. We have set up PC security and other specific policies, coordinating extensively with units in the United States, Europe, Southeast Asia, and China to ensure that these measures are being taken. The Information Security Report details our initiatives.

#### WEB Information Security Report (only in Japanese) http://www.hitachi.co.jp/csr/csr\_images/securityreport.pdf

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

Rule 1.

In principle, confidential information cannot be taken from the workplace.

Rule 2.

Permission must be obtained from an information assets administrator when employees are required to take confidential information from the workplace for business. Rule 3.

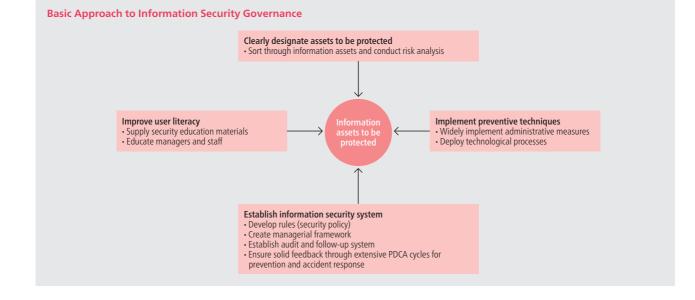
Necessary and appropriate measures to prevent information leaks are mandatory for confidential information that needs to be taken from the workplace for business.

Notes

- 1. Confidential information includes all trade information for which access is restricted to internal areas and relevant third parties.
- 2. These rules also apply to confidential information taken from customer business sites.

#### **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 continue to strive for the strictest possible export controls.

This means screening the destination, enduse, and end-user of all goods and technologies intended for export and promoting all legal compliance. In addition, we are promoting Groupwide export controls by providing guidance to all Hitachi Group companies worldwide on rules and organizations for export control, as well as supporting education and compliance training to ensure that every Hitachi employee follows the same export control policies.

In fiscal 2010, we held meetings for export control managers at regional Group companies in China, Singapore, the United Kingdom, and Thailand, and provided practical training on export control. We augmented the Japanese version of the e-learning course with a Chinese version, and broadly implemented basic education courses.

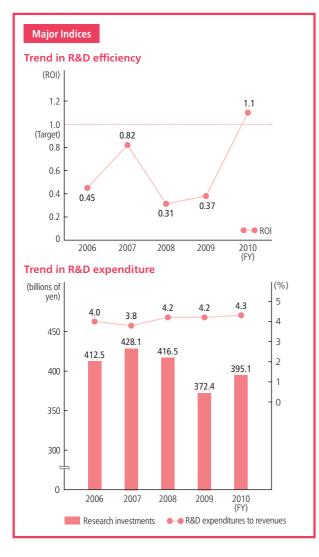
Hitachi Group Sustainability Report 2011 040

## **Innovation Management**

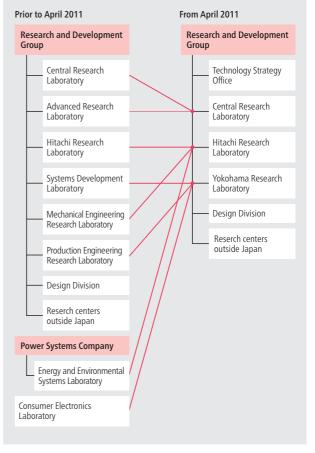
Since the beginning, Hitachi has applied R&D to fulfill our Corporate Credo of contributing to society through the development of superior, original technology and products. The sustainable growth of the Hitachi Group is driven by this continuous generation of innovation with R&D at its core.

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

The Hitachi Group is investing 670 billion yen in R&D in the Social Innovation Business areas in order to accelerate research and promote growth in the global market based in this business area. This



represents 60 percent of the total R&D investment of 1.2 trillion yen allocated for fiscal 2010–2012. Further, to enhance R&D efficiency and speed up technology development supporting the Social Innovation Business, locally-led research outside Japan will be increased and the role of domestic laboratories in disseminating cutting-edge technologies to the world will be reinforced. In April 2011, the Technology Strategy Office was established within the Research and Development Group to integrate the technology strategy for the entire Hitachi Group as well as to formulate medium-to-long-term technology and development plans linked with business strategies.



#### New R&D Organization of Hitachi, Ltd.

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

The R&D expenditures of the Hitachi Group are being maintained at around 4 percent of total revenue. For R&D investment efficiency, our target is to deliver an ROI,<sup>+1</sup> operating income divided by R&D expenditure, of greater than 1.0. For the R&D contribution to the environment, we use a "green research" index, which is defined as research for the development of environmentally compatible products. The target is for 100 percent of research to be green research by fiscal 2015. We also use the number of papers accepted by the Institute of Electrical and Electronics Engineers (IEEE), the world's largest professional technology association, as a benchmark for the Hitachi Group's technology standards and activities worldwide. In fiscal 2010, the IEEE adopted 47 research papers from the Hitachi Group, ranking us number three in the world electronics industry and number one in Japan.

**†1 ROI**: return on investment

#### **Enhancing Overseas Research Bases**

As our Social Innovation Business expands globally, the four key R&D bases outside Japan

#### **Global Research Policies at Four Bases outside Japan**

#### **Initiative 1**

Increase overseas personnel FY 2012: approx. 300 (2x) Initiative 2 Foster global R&D human capital FY 2012: 90%+ local staff, 30%+ doctoral degree holders Initiative 3 Focus on local Social Innovation Business themes

#### China

Participate in national Social Innovation Business programs
 R&D base for local Hitachi Group companies

#### Europe

- Promote open innovation in cutting-edge physics
- Accelerate development in Social Innovation Business such as rail and power systems

#### United States

- Reinforce R&D in next-generation storage systems
- Develop environmentally conscious vehicle technologies

#### Asia

- · 2011 establishment of R&D base in India
- Alliance with research organizations in India

will be enhanced to target regional needs. First, the number of R&D personnel outside Japan will be doubled from the current 150 to roughly 300 in fiscal 2012, localization will be reinforced, and collaboration with local government, business and research institutions will be strengthened. We will pursue locally-led R&D that is grounded in regional needs. Further, we will select R&D themes focusing on the Social Innovation Business being promoted in each region.

#### **R&D Plan and Investment**

At Hitachi, Ltd., 70 percent of R&D investment comes from sponsored and advanced sponsored research from Hitachi in-house companies and Hitachi Group companies. The remaining 30 percent

#### TOPICS

#### Hitachi Cambridge Workshop

In August 2010, the Hitachi Cambridge Laboratory invited eight British and Japanese students to the Hitachi Cambridge Workshop. The goal was to foster mutual cultural understanding and a sense of community. Four British students and four Japanese students, aged 16 and 17, formed a nanotechnology project team to explore the future of electronics.

The students designed, assembled, and measured simple electronic devices, then made presentations at the end of the workshop on what they had learned.



Hitachi Cambridge Workshop participants

Management Report

Innovation Management

comes from corporate funds and is allocated for basic and platform research. Sponsored and advanced sponsored research is conducted with a target of expanding core business, and aims at commercialization within three to five years. Basic and platform research is based on the midto-long-term Technology Plan, and aims to create innovative technologies forming the base for future core businesses.

#### **Hitachi Fellow System**

In June 1999, the Hitachi Fellow system was established to recognize the distinguished service and contributions of an employee to the progress of science and technology on a global level, and for the international acknowledgement of Hitachi's high standard of technology. The position of Hitachi Fellow is appointed by the Board of Directors, and it is the highest technical position within the company. The position of Hitachi Fellow is equivalent to that of executives. A Fellow is assured freedom of choice for research theme, research funding and support for external professional activities.

#### Hitachi Fellows (as of March 2011)



**Dr. Akira Tonomura** Field: Holographic electron microscopy



**Dr. Toshihiko Odaka** Field: Mainframe computers



**Dr. Hideki Kambara** Field: DNA sequencers



**Dr. Hideaki Koizumi** Field: Optical topography

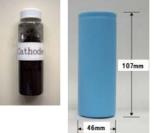


**Dr. Kiyoo Itoh** Field: Semiconductor memory

WEB Fellow details http://www.hitachi.com/rd/fellow\_intro.html

#### **Examples of R&D Achievements** Long-Life Lithium-Ion Batteries

A new manganese-based cathode material which roughly doubles the life of industrial lithium-ion batteries was developed. A prototype battery cell was developed in collaboration with Shin-Kobe Electric Machinery Co., Ltd. employing this material. After evaluation, it was confirmed that the battery capacity could be roughly reduced by half, thus opening the way to achieving a battery life of 10 years or more. Prospective applications include power storage in renewable energy generation such as wind power, and as a power source for electrical construction machinery and other industrial equipment designed to reduce greenhouse gas emissions.



New manganese-based cathode material (left) Prototype battery cell (right)

#### Service Robots

Under a unique concept of "human symbiosis," Hitachi, Ltd. has developed EMIEW to co-exist with humans, applying various technology such as agility, obstacle avoidance and distance communication. In EMIEW2, mobility and voice recognition features are further improved. EMIEW2 is able to safely move over small ground obstacles such as thresholds or electric cables, as

well as clearly distinguish human voices from background noise. Such features will improve the functionality of EMIEW2 in safely serving the daily needs of people in hospitals or offices as a guide, or as a surveillance robot during rounds. We aim to realize a society in which robots can safely serve people in various ways.



EMIEW2 service robot

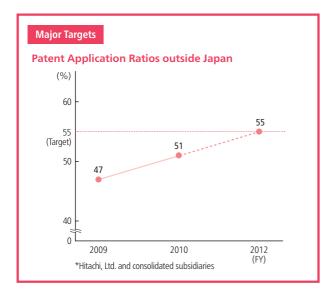
# Intellectual Property (IP)

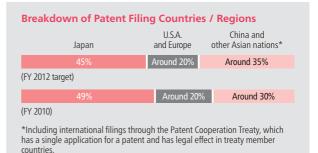
The mission for our intellectual property activities is to maximize their contribution to business. While these contributions can vary from one business to another, we categorize them by differentiation and prevention, securing business freedom, and patent licensing income. We will forge ahead with our IP strategy, that is in line with a management focus on global, fusion, and environment—or more specifically, global development that fuses social infrastructure with intelligent IT and environmental systems.

#### **Globalization of Intellectual Property**

Increasing the number of patent applications is vital for the globalization of intellectual property activities. We will strengthen our benchmarks against those of other companies and reinforce our patent position.

Assuming that revenues from outside Japan will account for more than 50 percent of net sales in fiscal 2012, we intend to generate 55 percent of our patent applications outside Japan in that year, up from 51 percent in fiscal 2010.





#### Reinforcing Intellectual Property Initiatives in Emerging Markets

Our growth strategy mainly targets China and elsewhere in Asia, as well as emerging countries. We intend to increase the number of patent applications in these areas.

The number of patents that the Hitachi Group has obtained in China over the past five years is comparable to major rivals in the Social Innovation Business. We will also file more patents in emerging countries using Patent Cooperation Treaty applications.

#### **Building a Strategic Patent Portfolio**

We are supporting management strategies focused on global, fusion, and environment with our intellectual property by building a patent portfolio that is consistent with our management strategy.

## Field Key themes Global Storage systems Smart grids Fusion Information platform for social infrastructure Environment New power devices Inverters Lithium-ion batteries Green mobility

#### **Examples of Focused Themes of IP Activities**

# Strengthening International Standardization

We are leveraging our combined human capital, knowhow, knowledge, and other resources for standardization so that we can expand our strong businesses. For example, at our environmentally conscious data centers, we have standardized interfaces for IT and air-conditioning control equipment. We also have key leaders from inside the company working within global standardization organizations, notably through the vice-presidency, chairmanship, and other positions on the International Electrotechnical Commission.

#### **Business Contributions**

Intellectual property activities have no value unless they contribute to supporting businesses. We categorize the results from IP by differentiation and prevention, securing a degree of business freedom, and patent licensing income.

We start by building a patent portfolio that focuses on technology consistent with Hitachi's strengths, from the standpoints of market needs and technology trends. We prevent other companies from using our technologies without our authorization and we differentiate our products and services. We have built a competitive patent portfolio, and have cross-licensing agreements with other companies to ensure business freedom. We also obtain patent licensing income from other companies and invest it in new research and development.

Constantly aware of these results, we have been filing and prosecuting patent applications, and enforcing our patents so that we contribute to and protect our businesses.

#### **Respect for Intellectual Property**

We respect the intellectual property rights (IPR) of other companies as we expect them to respect ours. We follow in-house rules on preliminary searches of other companies' patents to avoid infringements during product development. For IPR that belongs to others, we obtain licenses from IPR holders before using them. For our own IPR, in principle, we provide licenses to businesses wishing to make use of these IPRs, subject to royalty payment. If any company is found to have infringed our IPR, we encourage them to acquire the necessary license, and we will take legal actions, if necessary.

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

We motivate employees on the research and development frontlines with a reward system for new inventions. We more clearly defined these rewards in 2005, when Article 35 of Japan's amended Patent Act took effect. We revised, and carefully manage, our reward system for employee inventions to increase the satisfaction of inventors. Hitachi provides rewards for filed patent applications and granted patents, as well as performance-based rewards for patents which are used for our products/services and/or bring in patent licensing income. We do not set any upper limit for performance-based rewards.

#### **Cultivating Human Capital**

We drive forward IPR initiatives by cultivating quality human resources who are highly skilled and globally aware. As of April 1, 2011, our Intellectual Property Group had 100 registered patent attorneys and seven lawyers registered in the U.S.A. or the UK. Every year, we assign four to six people for internships at patent and law offices in the United States and Europe. To date, 60 people have served as interns outside Japan.

## **Brand Management**

To grow Hitachi's Social Innovation Business worldwide, we must improve our brand recognition and reputation, and establish the Hitachi brand as a social innovation company. We communicate globally in many ways with stakeholders to ensure a full understanding so that we increase the value of, or minimize damage to, our brand.

#### **Global Brand Strategy**

For developing business globally, we need to correctly communicate our vision and brand promise to our stakeholders. People have tended to perceive Hitachi as an appliance or consumer products manufacturer, particularly outside Japan. So, to establish a reputation as a social innovation company, we must promote the brand externally through advertising, public relations, and CSR initiatives, while raising our own employees' awareness of the brand promise and encouraging employees to engage in activities based on that brand promise. Together as *One Hitachi*, we will evaluate the effectiveness of our activities to improve the value of the Hitachi brand.

WEB Hitachi Brand Strategy http://www.hitachi.com/about/vision/brand/

#### Improving the Global Brand

Inspire the Next, our corporate statement, embodies our brand vision. We set up corporate communication departments in North America, Europe, Asia, and China to completely localize and convey this vision to stakeholders. Market characteristics and business methods differ from region to region. So, by employing effective communications and combining core businesses and solutions for specific markets, we convey messages that are consistent with our commitment to environmental issues as a social innovation company.

For example, we concluded that mass media advertising is an effective way to promote our

brand in such emerging nations as China and India. There, we focus on corporate advertising campaigns through television commercials, newspaper advertising, and on our Web sites. The corporate advertising campaigns have improved our brand recognition and brand image in those countries. In advanced nations, however, we found that word of mouth and Web sites are more effective, and therefore in those markets we mostly focus on the Internet.

We participate extensively in environmentrelated exhibitions and other events around the world, including eco-product shows, to spotlight how we address environmental issues.



Corporate advertising campaign in North America

#### Web Management

We have responded to increased Internet use worldwide by enhancing our Web portal sites in every country and region, making them the key tools for publishing important information. We convey consistent Group brand messages, while improving Internet searches, to match local needs. As well, in every region, we produce content that focuses on our local businesses. In recent years, we have built Web sites in the emerging nations that we position as focused markets.

At the end of March 2011, we had 58 Web sites in 27 languages covering 47 countries and regions, and we unified our brand image with a common design format.

WEB Portal: Portal site to access Web content http://www.hitachi.com/

#### **Internal Brand Management**

Our employees are important contact points for building the brand, as they deal directly with stakeholders. We promote internal initiatives globally as well as increase awareness of Hitachi Group's brand promise to ensure that employees thoroughly understand and apply the Hitachi brand's vision, mission, and value.

In fiscal 2010, 1,103 employees attended 12 brand seminars worldwide. We strengthen employee awareness of the Hitachi Brand by giving an award to good initiatives that help improve Hitachi brand value. These awards are called "The Inspiration of the Year awards." In fiscal 2010, we received 382 applications for the Inspiration of the Year awards. A program that improved the value of the Hitachi brand through our UK rail business won the Special Top Prize. During fiscal 2010, we commemorated our centennial by increasing the number of awards, with around 50 entrants receiving Grand Prix, Innovation/Reliability, and Eco-Spirit Awards.





Brand education content: Growing the Brand

WEB Hitachi Brand Platform

http://www.hitachi.com/about/vision/brand/statement/index.html

#### **Evaluating the Effectiveness of Brand Initiatives**

We evaluate the effectiveness of communications for our brand strategy with questionnaires and online surveys. We summarize the responses and evaluations of customers and other targeted stakeholders, then we use this information to make improvements. We also conduct an annual brand image survey to create a snapshot of the global strength of the Hitachi brand. We use these findings to analyze and report on the overall impact of brand initiatives.

When conducting these assessments and brand image surveys, we set benchmarks based on the Hitachi Brand Platform, and use them for monitoring brand initiatives.

#### **Reputation Management**

Globally, all Hitachi Group companies share the Hitachi brand. This sharing generates group synergies for innovation and trust in the brand. We recognize that accidents and rumors can damage the brand globally, so we set up communication divisions at regional headquarters outside Japan to handle risks to our reputation. These divisions ensure the broad recognition of our activities by regularly informing the media and government agencies, as well as members of nongovernmental organizations and opinion leaders in every country who are particularly interested in human rights and environmental issues. These divisions work hard to correct public misperceptions about our operations. Hitachi, Ltd. and regional headquarters outside Japan collaborate to mitigate risks to the brand and resolve problems arising from accidents or rumors. Moreover, they seek to proactively prevent future occurrences by investigating similar and related

incidents in other areas or businesses.

# Action against Infringement of the Brand Value

The Hitachi brand is an important and clear "promise" to all stakeholders of our fundamental worth, and that includes our management philosophy, social mission, and specific corporate activity. To reach our goals, it is essential to communicate consistently with one voice based on the integral principles of the Hitachi brand.

#### Management of the Hitachi Brand Impression

We globally unified the presentation and use of our logo and trademark to roll out our message as a single global entity, or *One Hitachi*. The *Hitachi Group Identification Standards Manual* lays out how to use the logo. We have integrated visual impressions of the Hitachi brand, by developing a design system for each medium.

#### Safeguarding the Hitachi Brand

We provide legal protection for the Hitachi brand by working hard to eliminate counterfeit appliances 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 anti-counterfeiting programs.

HITACHI Inspire the Next

Corporate statement logo

# Environmental Report



Wind Power Ibaraki Co., Ltd's Wind Power Kamisu (seven 2,000-kW wind power turbines)

#### Based on Our Commitment to the Environment, We Will Deploy Our Social Innovation Business Worldwide to Help Resolve Global Environmental Issues

Nations around the world must work together if we are to deal with increasingly apparent climate change, ecosystem destruction, and other global environmental threats. We must also foster high levels of environmental consciousness in each of our employees and use their core business strengths to help resolve environmental problems.

The Hitachi Group is currently focusing management resources on the Social Innovation Business to contribute to the development of a sustainable social infrastructure. In 2008, we created Environmental Vision 2025, our long-term plan for reducing CO<sub>2</sub> emissions—a top-priority issue-through business operations. Our goal is to help reduce annual CO<sub>2</sub> emissions by 100 million tonnes by fiscal 2025 through Hitachi products and services. In fiscal 2010, we succeeded in reducing CO<sub>2</sub> emissions by 15.51 million tonnes. We achieved this reduction through the use of highly efficient gas turbines, wind power generation systems, and other energy infrastructure that emit less CO<sub>2</sub>, as well as through the global provision of powersaving products and services. Sales of Eco-Products, products meeting rigorous environmentally conscious criteria, jumped by 7 percent on the previous year to 60 percent of all sales. We aim to make all Group products and services Eco-Products by fiscal 2025.

The recent Great East Japan Earthquake prompted countries around the world to review their energy policies as well as energy supply and demand. Current mechanisms will have to be revised in the coming years to respond to increasingly diverse energy-related values and needs.

The Hitachi Group will lead the way by supplying products and services, such as low-carbon power supply systems, energy-saving solutions for transportation and industry, and IT-based energy control and monitoring technologies. We will also contribute to the use of sustainable energies that offer energy security through technology development geared to diversifying needs. In the short term, we will focus on optimizing and



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

boosting the efficiency of products and services; over the long term, that focus will shift to developing city functions that enable high energy efficiency and minimal environmental loads.

In fiscal 2011, we launched the Third Environmental Action Plan, which sets out a highlevel goal of reducing global CO<sub>2</sub> emissions by 10 percent per unit of production by fiscal 2015 (compared with fiscal 2005 levels). We will steadily move ahead with that plan, as well as work to develop more environmentally conscious products, factories, and offices. We also look forward to working together with customers using Hitachi products and services to help reduce CO<sub>2</sub> emissions through our products.

We are committed to reflecting world trends and stakeholder views in our future improvements and innovations, growing as a corporate group that contributes to the realization of a sustainable society. Environmental Report
Corporate Environmental Management
Strategies and Initiatives

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

Corporate environmental management is a focus of the Hitachi Group 2012 Mid-Term Management Plan looking ahead to fiscal 2012 (see pages 015–016).

When providing products and services, and during our business operations, we believe that initiatives to reduce the load on the environment are essential for the Mid-Term Management Plan pillars of growth driven by social innovation business and establishment of a solid financial base. Based on this management policy, and guided by the Environmental Vision aimed at achieving a sustainable society, our corporate environmental management is being carried out to implement the long-term Environmental Vision 2025 and our Environmental Action Plan.

#### The Hitachi Environmental Vision

We have drawn up our Environmental Vision describing the aim of our corporate environmental management to achieve a sustainable society. The world's population will reach 7 billion in 2011 and is expected to exceed 9 billion by 2050.<sup>11</sup> At the same time, the annual growth in worldwide GDP has averaged more than 3 percent for at least the past 20 years, except for the downturn that

#### **Hitachi's Environmental Vision**



Reduce CO<sub>2</sub> emissions in energy production

Towards a Sustainable Society

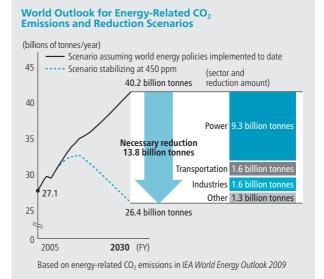
occurred in 2009.<sup>12</sup>

With the increase in economic and social activities has come growing demand for energy, water, minerals, and other resources, making environmental problems worse, from resource depletion to climate change. These are problems faced by the entire world. To solve them, the load on the environment must be limited to the least possible and society must be made sustainable. The Hitachi Environmental Vision, giving priority to actions for prevention of global warming, conservation of resources, and preservation of ecosystems, shows our commitment to contributing through our business to solving environmental problems. As a milestone on the road to realizing this Environmental Vision, we drew up the longterm plan Environmental Vision 2025 for the period to fiscal 2025.

- 11 According to the United Nations report: World Population Prospects: The 2010 Revision
- **†2** According to the World Bank: World Development Indicators

#### Long-Term Plan Environmental Vision 2025

In its Fourth Assessment Report published in 2007, the Intergovernmental Panel on Climate



Change (IPCC), a UN panel assessing and advising nations on the causes and effects of climate change, concludes that CO<sub>2</sub> emissions must peak by 2015 and be reduced by 50 to 85 percent of their 2000 levels by the year 2050 in order to meet the minimum stabilized density scenario for greenhouse gases (450 ppm stabilization scenario).

The International Energy Agency (IEA) has drawn up a CO<sub>2</sub> emission reduction scenario indicating the fields where CO<sub>2</sub> emissions can most feasibly be reduced for meeting the 450 ppm stabilization scenario, and the percentages of reductions in each field. These fields extend widely across the Hitachi Group, including the electric power, transportation, and industrial sectors.

On this basis, the long-term Hitachi Group Environmental Vision 2025 states our goal of helping to reduce annual  $CO_2$  emissions by 100 million tonnes by fiscal 2025 through Hitachi products and services.

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

The target of 100 million tonnes was calculated based on growth strategies in each business sector. It breaks down to 70 million tonnes in the power sector, 20 million in the industrial sector, and 10

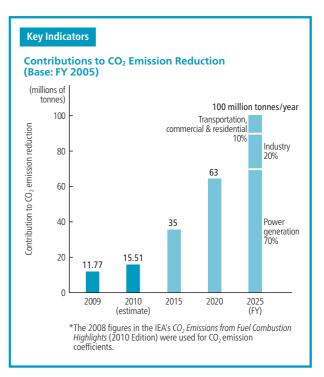
#### Initiatives in Each Sector toward Achieving Targets

Power sector*	Building nuclear power plants     Delivering high-efficiency coal-fired thermal     power plants and gas turbines     Providing equipment for renewable energy
Industrial sector	<ul> <li>Providing high-efficiency inverters and transformers</li> <li>Providing high-efficiency information equipment and energy-saving solutions for data centers, etc.</li> </ul>
Transportation, commercial, and residential sectors	Providing lithium-ion batteries for industrial and automotive use     Making home appliances more energy efficient

\*The accident at the Fukushima Daiichi Nuclear Power Station, due to the Great East Japan Earthquake, is expected to prompt a global review of and changes in energy policies, including plans for new installation and operation of nuclear and thermal power plants. In case this review results in major changes to the business plans of the Hitachi Group power sector, the effects of the changes on the long-term plan Environmental Vision 2025 will be assessed and goal achievement strategies or targets may be revised. million in the transportation, commercial, and residential sectors.

A leading indicator on the way to this goal is the extent to which we can make all our products Hitachi Eco-Products (see page 063) by fiscal 2025, reducing their burden on the environment. We plan to expand business opportunities further by working with partners in global markets and by developing and creating new environmentally conscious products and businesses.

Since the amount of contribution to CO<sub>2</sub> reduction is an important indicator of our business management that requires effective progress assessment and information disclosure, we are receiving reviews by a third-party organization about the calculation methods and results to ensure trustworthiness.



WEB Details of methods for calculating contribution of Hitachi products and services to the reduction  $CO_2$  emissions http://www.hitachi.com/environment/activities/third/method.html

#### **Fiscal 2010 Results and Coming Initiatives**

Our contribution to CO<sub>2</sub> reduction in fiscal 2010 is estimated to be 15.51 million tonnes, meeting the target of 14 million tonnes. A wide range of services and products contributed to this reduction in emissions, including high-efficiency gas turbines and inverters, energy-saving information systems and hard disk drives, and parts and materials used in energy-efficient products. In fiscal 2010, the methods for calculating CO<sub>2</sub> emission reductions and the results were subjected to third-party reviews in the case of 17 products, including hydro power plants, hard disk drives, monorail systems, transformers, drilling machines, amorphous metal ribbons, and cordless impact drivers (see page 090). To improve trustworthiness, these reviews will be expanded to include more products in fiscal 2011 and the following years.

#### **Environmental Report** Corporate Environmental Management Strategies and Initiatives

#### Main Products Contributing to CO<sub>2</sub> Emission Reductions in Fiscal 2010

Gas turbines

Power Systems Company, Hitachi, Ltd.



Cogeneration power plant equipment: Jingyuang Redian in China adopting the H-25 gas turbine

Hitachi gas turbines are highly regarded for their reliability and efficiency. They are in operation around the world for power generation and general industrial use, and as gas turbines in oil and gas fields. The 30 MW-class H-25 gas turbine achieves high reliability with its heavy

#### Servers

Information & Telecommunication Systems Company, Hitachi, Ltd.



Blade server BladeSymphony 2000

Facing sharply rising information volume, and increases in power use by IT equipment as a consequence, Hitachi servers use the latest processors and high-capacity memory while applying a variety of power-saving techniques. Our BladeSymphony 2000 blade server and HA8000/RS220 PC servers, for example, use high-efficiency power supplies with 80PLUS® GOLD certification (power conversion efficiency of 92 percent or above\*). They also use a fan control system to adjust rotation speed based on the temperature inside the server. In these ways, they reduce overall power consumption. Wasteful power and power supply costs can also be reduced through virtualization techniques that use server resources carefully, and by power capping to control processor performance so it doesn't exceed a preset power consumption level. The use of servers with improvements like these in information processing capacity and energy efficiency accounted for a reduction in CO<sub>2</sub> emissions by 0.42 million tonnes in fiscal 2010.

duty design<sup>†1</sup> and outstanding durability. Due to high-performance turbine cooling and compressor technologies, the thermal efficiency when using natural gas is 34.8 percent, the highest level among gas turbines in the same class. It can be used with multiple fuels including light oil, natural gas, and LPG, and it supports environmental measures using wet/dry low-NO $_{\rm X}$  burners. In December 2010 the H-25 began operation as a gas turbine in cogeneration power equipment<sup>12</sup> at a coke production plant in China. Gas generated in the coke production process is used as fuel in the H-25 to supply electrical power. At the same time, the heat generated by the H-25 is used to produce steam in a heat recovery boiler, achieving thermal efficiency of 80 percent or more for the facility as a whole and contributing to effective energy use. Moreover, capitalizing on our experience with conventional power generation systems, we developed an 80 MW-class H-80 gas turbine with a thermal efficiency of 38 percent, which is a heavy duty twoshaft gas turbine with the world's largest capacity.<sup>†3</sup> The first unit is in operation at a Kyushu Electric Power Company power plant.

In fiscal 2010, some 30 new gas turbines went into operation, including the 30 MW-class H-25 and the 80 MW-class H-80. These turbines, along with the 89 units already in operation, contributed to a reduction in CO<sub>2</sub> emissions by 1.55 million tonnes in fiscal 2010.

- Heavy duty design: Highly reliable gas turbines which need less **†1** frequent maintenance
- Cogeneration power equipment: Equipment supplying electric power **†**2 and heat at the same time
- t3 As of February 22, 2010 (Hitachi, Ltd. survey)

#### **Distribution transformers** Hitachi Industrial Equipment Systems Co., Ltd.



Amorphous transformer

When supplying electric power, limiting energy loss during transmission—in addition to efficient generation and natural energy utilization—is an important issue for reducing CO<sub>2</sub> emissions.

Hitachi Industrial Equipment Systems has been working on ways of raising efficiency and reducing energy loss from distribution transformers. Since fiscal 2006, we manufacture and ship transformers that are top-level in the industry in energy use. Among these, amorphous transformers which use an amorphous metal alloy as the steel core, are greatly contributing to CO<sub>2</sub> reduction with an energy efficiency of 40 percent or more. Approximately 23,000 high-efficiency transformers including amorphous transformers were shipped in fiscal 2010, for a cumulative total of around 124,000 since fiscal 2006. The use of transformers accounted for a reduction in CO<sub>2</sub> emissions by 0.28 million tonnes in fiscal 2010.

#### **Environmental Action Plan**

The Hitachi Group adopts environmental action plans every five years that define specific action items and targets for achieving the Environmental Vision and for promoting the long-term plan Environmental Vision 2025. One aim is to achieve *emission neutral* by fiscal 2015. The last year of the Second Environmental Action Plan was fiscal 2010, so we reviewed the results of the actions to date, and drew up Third Environmental Action Plan with high targets that will push us to further lower the environmental load.

#### **Emission Neutral**

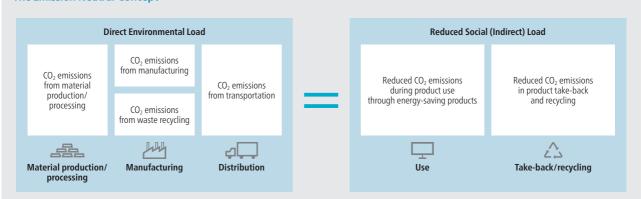
The emission neutral concept is geared at minimizing the environmental load throughout the life cycle of products. Emission neutral is achieved when the direct environmental load becomes an equal to the reduction in environmental load during product use and disposal (social environmental load). Direct environmental load means the total impact in the stages from raw materials refining and processing to production and distribution. It includes such impacts as greenhouse gas emissions, waste materials, chemical emissions, and other environmental loads that can be reduced by self efforts. Social load reduction means the amount reduced in greenhouse gas emissions during product use and recycling, waste generated, and so on compared with products marketed in fiscal 2005 through product energy efficiency and resource conservation. Besides pursuing efficiency improvements that will reduce the direct

environmental load from production, we are expanding efforts at social load reduction through development and sales growth of Eco-Products, with the aim of achieving *emission neutral* by fiscal 2015.

# Successes of the Second Environmental Action Plan

When implementing the Second Environmental Action Plan, covering fiscal years 2006 to 2010, we used 17 action items and targets as main indicators for environmental management. In fiscal 2010, the final year of the plan, we were able to exceed our targets for 16 of these items. One standout achievement, aimed at reducing the environmental load by providing environmentally conscious products and services, was reaching 60 percent of Eco-Product sales (compared with the target of 55 percent). Tackling the global environmental issue of CO<sub>2</sub> emissions, we invested 29.7 billion yen in energy efficiency measures over the five-year period starting in fiscal 2006, resulting in a reduction in CO<sub>2</sub> emissions by 290,000 tonnes. In addition, through energy conservation measures taken by the Hitachi Group as a whole, such as fuel switching and energy efficiency diagnoses, we achieved a 21-percent reduction in Japan (target: 12 percent) and a 7-percent improvement outside Japan per unit of production (target: 5 percent), compared with fiscal 1990 levels.

The one area where we fell short of our target was in the percentage sales of Super Eco-Products (actual 26 percent versus target of 30 percent;



#### The Emission Neutral Concept

Management Report

Environmental Report Corporate Environmental Management Strategies and Initiatives Social Report

see page 066). In the Third Environmental Action Plan, the target management indicator has been changed to the number of product models so that progress can be assessed more accurately. Environmental Report
Corporate Environmental Management
Strategies and Initiatives

Social Report

#### **Sustainability Compass**

The Sustainability Compass depicts the four directions of environmental initiatives to be taken based on the Hitachi Group Environmental Action Plan. All the initiatives are designed and carried out in accord with the Action Guidelines for Environmental Conservation (see page 059).

Hitachi Group Second Environmental Action Plan: Targets and Results

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Eco-Mind & Global Environmental Management Next-Generation Products & Services Super Eco-Factories & Offices Worldwide Environmental Partnerships

Item	Action goal	Index		Fiscal 2010 targets	Fiscal 2010 results	Achievement level	Page(s)	
Eco-Mind & Globa	al Environmental Management							
Establish environmental management systems (EMSs)	Set up an integrated environmental management system in every in-house company/Group company	Integrated EMS certification		Integrated EMS certified	Integration completed in 8 divisions	***	p. 082	
Nurture environmental literacy	Boost percentage of employees receiving Hitachi Group-wide training (environmental e-learning)	Percentage of employees receiving training		90%	95%	***	p. 085	
Green purchasing	Purchase products such as environmentally conscious office products	Green purchasing percentage		90%	95%	***	рр. 120–122	
Next-Generation	Products & Services							
Promote Eco-Products Expand		Percentage	of sales	55%	60%	<b>***</b>		
		Percentage	ICT systems, digital media, consumer products, etc.	100%	100%	***	- p. 065	
	Expand Eco-Product lineup	of registered products	Power systems, social/ industrial systems, high functional materials & components, etc.	80% or more	86%	***		
		Percentage	of Super Eco-Products	30%	26%	<b>*</b>	p. 066	
Environmentally	Conscious Factories & Offices							
Promote Super Eco-Factories & Offices	Build industry's most advanced factories and offices	Certification of Super Eco-Factories & Offices		30 production facilities (total)	35 production facilities (total)	***	рр. 071–072	
Prevent global warming	Reduce CO <sub>2</sub> emissions from energy sources	CO <sub>2</sub> emission reduction rate (base: FY 1990, Japan)		12%	21%	***	_ pp. 072–074	
		Rate of reduction in $CO_2$ emissions per unit production (base: FY 2003, outside Japan)		5%	7%	***		
	Reduce energy used in transportation	Rate of reduction in energy for shipping per real unit output (base: FY 2006, Japan)		11%	29%	***	p. 074	
	Reduce waste	Rate of waste volume reduction (base: FY 2000)		25%	33% (total reduction) 25% (per unit production reduction)	***	pp. 075–077	
Use resources efficiently	Promote resource recycling	Resource re (base: FY 20		10%	13%	<b>***</b>	075-077	
	Use water effectively	Rate of reduction in water used (base: FY 2005, outside Japan)		10%	10%	<b>***</b>	рр. 077–078	
Chemical	Reduce chemical substance	Rate of reduction in VOC* atmospheric emissions (base: FY 2000, Japan)		50%	69%	***		
substance management emissions		Rate of reduction in the ratio of VOC atmospheric emissions (base: FY 2005, outside Japan)		10%	29%	***	- pp. 079–080	
Worldwide Enviro	nmental Partnerships							
Environmental communication	Enhance environmental activities through more two-way communication	Improve dissemination of environmental action		Continue to improve dissemination	Introduced initiatives on Web site Placed ads in newspapers and magazines Issued press releases, etc.	***	pp. 087–089	
	Communication	Participate i	n eco-product exhibitions	Continue to participate in exhibitions	Exhibited at Eco-Products 2010 Exhibited at 7th Eco-Products International Fair (India)	***		

\*Volatile Organic Compounds

#### ◆ ◆ ◆ Achieved



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

The Third Environmental Action Plan covering fiscal years 2011 to 2015 seeks to strengthen the initiatives of the second plan, and sets higher targets for environmental load reduction for each of the action items. New action plans and targets were also drawn up in order to have the entire Hitachi Group become involved in preserving ecosystems, a pillar of the Hitachi Environmental Vision.

In addition, the existing certification programs for Super Eco-Products and Super Eco-Factories & Offices were changed to Eco-Products Select and Eco-Factories & Offices Select programs, with revised certification criteria. The new certification program Eco-Products Select has the additional requirement of a large CO<sub>2</sub> reduction rate for the product, in order to accelerate the contribution to reducing CO<sub>2</sub> emissions through our products. The new Eco-Factories & Offices Select program now defines separate certification criteria for factories and offices, taking into account their different characteristics, rather than setting the same criteria as before. Moreover, higher levels of achievement have been set, reflecting current technology levels. Through these programs, we will expand the number of certified products, factories, and offices, promoting a further reduction in environmental load.

Category	Action goal	Ind	ex	Fiscal 2011 targets	Final fiscal year (2015) targets	
Eco-Mind and Global	Environmental Management					
Establish environmental management systems (EMSs)	Ecosystem (biodiversity) preservation	Assessment on ecosystem preservation Strategy proposals		Preparation of ecosystem-preserving assessments for business	Completion of ecosystem- preserving assessments for business and their announcement	
Next-Generation Proc	ducts and Services					
Promote Eco-Products	Europed Fee Dreduct lineur	Percentage of Eco-Product sales		58%	65%	
Promote Eco-Products	Expand Eco-Product lineup	Number of models in Eco-P	roducts Select program	20 models	100 models	
Environmentally Cons	scious Factories & Offices					
Build industry's most advanced factories & offices	Promote Eco-Factories & Offices Select certification	Eco-Factories & Offices Select certification		Roll-out of new certification criteria	Average of one or more certifications per company/ group company	
	Reduce CO <sub>2</sub> emissions	Rate of reduction in CO <sub>2</sub> emissions (base: FY 1990, Japan)		16%	20%	
Prevent global warming	Improve CO <sub>2</sub> emissions per unit production	Rate of reduction in $CO_2$ emissions per unit production (base: FY 2005)		6%	10%	
Reduce energy used in transportation	Improve energy for shipping per real unit output	Rate of reduction in energy for shipping per real unit output (base: FY2006, Japan)		12%	15%	
	Improve waste generation per unit production	Rate of reduction in waste generation per unit production (base: FY 2005)	High Functional Materials Group	7%	15%	
			Assembly Industry Group (other than high functional materials)	16%	20%	
	Use water effectively	Rate of reduction in water use per unit production (base: FY 2005, outside Japan)		16%	30%	
Reduce VOC atmospheric emissions	Decrease ratio of VOC atmospheric emissions (emissions/used amounts)	Ratio of VOC atmospheric emissions (emissions/used amounts)		5.8%	5 percent or less	
Worldwide Environm	ental Partnerships					
Global citizenship program	Social contributions through environmental activities	Carry out environmental communication as the flagship activity of each company or group company		Five-year plan drafting and implementation	One or more flagship activity per company/group company	

#### Hitachi Group Third Environmental Action Plan

#### Hitachi Action Guidelines for Environmental Conservation

#### Purpose

In order to realize an environmentally harmonious and sustainable society through products and services, Hitachi is committed to meeting its social responsibilities by promoting globally-applicable 'MONOZUKURI' (designing, manufacturing or repairing of products), which is aimed at reducing environmental burdens of products throughout their entire life cycles, ensuring global environmental conservation.

#### **Action Guidelines**

- 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.
- 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.
- Members of the board in charge of environmental conservation are responsible for facilitating appropriate environmental conservation activities.

Departments responsible for environmental conservation should endeavor to promote and ensure environmental conservation activities, including improving environment-related rules and regulations and setting goals for environmental burden reduction. These departments should also confirm that their environmental conservation activities are conducted in a proper manner and ensure that these activities are maintained and improved.

- 4. Hitachi will promote globally-applicable 'MONOZUKURI' with the aim of understanding and reducing environmental burdens at every stage, including product research and development, design, production, distribution, sales, usage, and final disposal.
- 5. Hitachi will investigate and review the environmental impact caused in the course of its 'MONOZUKURI' processes. Hitachi will also introduce excellent technologies and materials useful to safeguard the environment, in other words, to reduce environmental burdens through energy and resource saving, recycling, chemical substance management, consideration for the ecosystem, and other measures.
- 6. Hitachi's environmental conservation efforts are not only to be focused on observing international environmental regulations and those of national and local governments, but also on conserving the environment by implementing voluntary environmental standards when necessary.
- 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.
- 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.

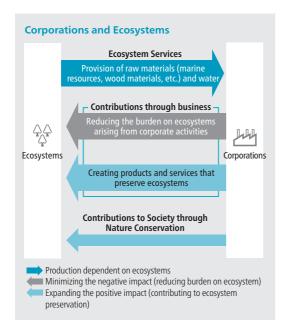
- Hitachi will evaluate potential environmental problems and prevent them from occurring. In the event that any environmental problem occurs, Hitachi will take appropriate measures to minimize the environmental burden.
- 10. Hitachi will make efforts to disclose information on its environmental conservation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

Adopted March 1993, revised July 2010

#### **Activities to Preserve Ecosystems**

**The Concept of Ecosystem Preservation** To promote ecosystem preservation, we have made the preservation of ecosystems a pillar of our environmental vision. We have also incorporated consideration for ecosystem preservation into our Action Guidelines for Environmental Conservation. Specific initiatives in this area are defined in the Hitachi Group Ecosystems Preservation Guideline and are conducted accordingly.

Corporations depend on ecosystem services such as the paper used in the manufacturing stage (use of wood, a biological material) and water use in factories (use of clean water). In order to maintain and recover these ecosystem services, we believe that we can contribute to ecosystem preservation both through business and through contributions to society in the area of nature conservation. Specifically, for contributions through business, we are promoting designs and production that reduce the impact on ecosystems during the product life cycle (material procurement, production, transportation, use, recovery, recycling and



appropriate disposal), as well as increasing the products and services for direct preservation of ecosystems in such areas as water and air purification. For contributions to society in the area of nature conservation, we encourage tree planting and ecological surveys of rare plants and animals by employees in volunteer programs, along with other programs that lead to ecosystem preservation.

# Assessing the Corporate Relationship with Ecosystems

Corporate Ecosystem Valuation (CEV) is an assessment methodology used to evaluate both ecosystem degradation and the benefits provided by ecosystem services, so that improved business decisions can be made that will lead to ecosystem preservation. The Hitachi Group, as a member of the World Business Council for Sustainable Development (WBCSD), has helped to develop the *Guide to Corporate* Ecosystem Valuation, as well as translating it into Japanese. We will perform CEV within the Hitachi Group on a trial basis and contribute to the widespread use of CEV outside the Group in the days ahead. In 2010, Hitachi, Ltd.'s Representative Executive Officer and President, Hiroaki Nakanishi, was appointed co-chair of the WBCSD Ecosystems Focus Area Core

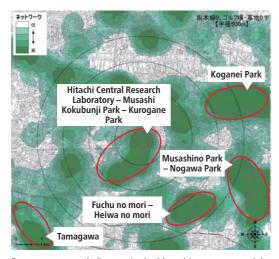


Guide to Corporate Ecosystem Valuation Team (policy board). The Hitachi Group is committed to supporting these efforts and contributing to ecosystem preservation.

#### **Preserving Greenery at Company Sites**

Since Hitachi's Central Research Laboratory was built in 1942, the wild natural environment of the site has been preserved, respecting the instructive message of the Hitachi, Ltd. founder "not to cut down good trees but to build around them." This landscape continues to be maintained and managed today. A pond on the site formed from the water of natural springs, which are the source of the Nogawa River, is a habitat for swans and mallards. Approximately 27,000 trees, including more than 120 species such as zelkova trees and Himalayan cedars, provide a resting place for over 40 species of wild birds, among them Chinese bamboo partridges and gray starlings.

To understand the role played by this natural environment in preserving the ecosystems of the surrounding areas, we have conducted an analysis of the satellite images of the area supported by Mitsui Sumitomo Insurance Co., Ltd. and InterRisk Research Institute & Consulting, Inc. The studies showed that because of its large



Ecosystem network diagram in the Musashino area around the Central Research Laboratory (example of satellite image-based analysis; data provided by Eco-Asset Consortium)

scale, the greenery of the Central Research Laboratory site plays the role of a "core green space" necessary for maintaining an ecosystem, and contributes to the formation of an ecosystem network of the rivers having their source in the natural springs on the laboratory site.

The Hitachi Group has many more business sites that retain green space. Six of these sites were chosen as among the 100 Outstanding Examples of Preservation, Creation, or Utilization of Accessible Greenspace by Corporations announced in fiscal 2010 by the Urban Green Space Development Foundation. By continuing to maintain these green spaces in the future, we will contribute to the preservation of local ecosystems.

# Contributions to Society through Nature Conservation

The Hitachi Group contributes to society through nature conservation at many company locations (see pages 108–110).

Protecting endangered species is an important part of maintaining biodiversity. Working with the NPO Earth Watch Japan every year since fiscal 2007, we have taken part in habitat surveys of the Reverdin's Blue butterfly (Lycaeides argyrognomon), an endangered species, around Mt. Fuji.



Reverdin's Blue butterfly



Habitat survey for Reverdin's Blue butterfly

#### **IT Eco Experimental Village**

The Information & Telecommunication Systems Company, Hitachi, Ltd. opened an IT eco experimental village in Kanagawa Prefecture in April 2011 as part of the GeoAction 100 plan, a nature restoration project intended to contribute to the environment through IT. In cooperation with local residents, fallow farmland and forests that had been overrun with bamboo are being restored, turning them into rural landscapes full of life. Experiments are also being carried out using IT systems for information gathering and observations of living creatures to find out how IT can be used in the future for preserving ecosystems.



IT eco experimental village (April 2011)

Environmental Report Environmentally Conscious Products and Services

## **Environmentally Conscious Products and Services**

We assess the environmental burden of products and services at the design and development stage, designating those products with a reduced environmental burden as Eco-Products. In fiscal 2010, 60 percent of our sales were for Eco-Products.

We are moving ahead with designing and developing environmentally conscious products to meet the goal set in our longterm Environmental Vision 2025 of making all Hitachi products Eco-Products by fiscal 2025.

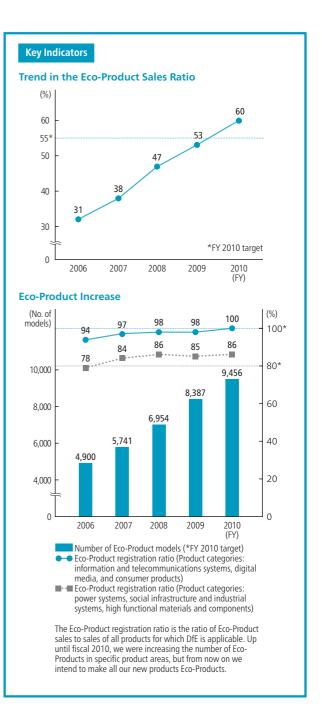
#### **Increasing the Ratio of Eco-Products**

In 1999, we introduced a Design for Environment (DfE) assessment system (see page 064) that 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. One of our goals is to increase the Eco-Product sales ratio, or the ratio of Eco-Product sales to total product sales.

In fiscal 2010, the number of models designated as Eco-Products rose by 1,069 to 9,456. This brought the Eco-Product sales ratio to 60 percent, topping our goal of 55 percent. Key factors driving the improved sales ratio were the registration of more Eco-Products for systems, software, and services, as well as business growth in construction machinery and automobiles.

#### **Next Steps**

Our Third Environmental Action Plan (FY 2011–2015) sets the goal of boosting the Eco-Products sales ratio to 65 percent by fiscal 2015. Given the growing localization of design, production and sales in recent years, our particular focus is to use DfE assessments to promote more Eco-Product development outside Japan.

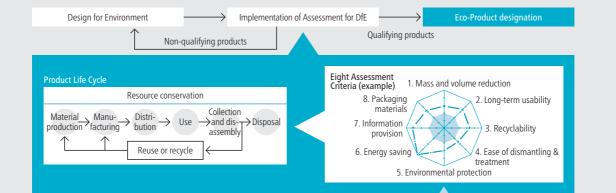


#### How a DfE Assessment Is Performed

Under the DfE system, the environmental load for each product life cycle stage—from material procurement to production, distribution, use, and disposal—is quantitatively assessed using the eight DfE assessment criteria such as environmental protection and energy efficiency, with results recorded as a level from 1 through 5. If a product scores at least equal to or more than level 2 (the reference level before the latest major model change) in all 8 criteria and its average over all the criteria is level 3 or more, it is designated as an Eco-Product.

Management of the whole environmentally conscious design and development process is coordinated using the Hitachi Group Ecodesign Management Guidelines. Based on the IEC 62430 international standard on generic procedures for environmentally conscious design, the guidelines require divisions, such as business planning, design, procurement, manufacturing, and quality control, to be environmentally conscious and keep records on processes and results. This includes the use of DfE assessment and Eco-Product development.





#### 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)
1. Mass and volume reduction	Material production, manufacturing	Size and weight reduction, yield of parts and materials, assessment of mass and volume reduction of the product
2. Long-term usability	Use	Upgradability, ease of maintenance and repair, durability, reliability
3. Recyclability	Reuse or recycling	Selection of materials and parts that are reusable or recyclable, use of recycled resources, recyclability rate
4. Ease of dismantling & treatment	Manufacturing, collection and disassembly	Structure for easy disassembly, ease of separation, reduction of disassembly time, easy collection and transportation of product, safety in treatment, ease of crushing treatment
5. Environmental protection	Material production, manufacturing, collection and disassembly, disposal	Environmental protection of parts and units, safety of equipments and materials for maintenance, environmental protection in manufacturing process, environmental protection for facilities
6. Energy saving	Material production, manufacturing, use, collection and disassembly, disposal	Energy-saving design of products, energy saving in production process, energy saving in distribution
7. Information provision	Use, collection and disassembly	Information provision to requesting parties, mechanism for information provision
8. Packaging materials	Distribution	Reduction in mass and volume of packaging materials, recycling of packaging material, ease of collection and transportation of packaging materials, environmental protection in treatment and final disposal of packaging materials

Sector	Information & Telecommunication Systems	Electronic Equipment & Systems, Components & Devices	Power Systems, Social Infrastructure & Industrial Systems, Construction Machinery, Automotive Systems	Digital Media & Consumer Products	High Functional Materia & Components, Other
Breakdown (sales ratio)	18%	17%	35%	9%	21%
Key products	Transmitters	Transmission electron microscopes	Highly efficient gas turbines	HD televisions	Eco material cables
					00
	Monitoring software for IT systems	TFT LCD modules	Amorphous transformers	Washer-dryers	Anisotropic conductive filr

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



#### • Product: AMS 2500

Top model in the Hitachi Adaptable Modular Storage 2000 family of mid-range disk arrays

- Information & Telecommunication Systems Company, Hitachi, Ltd.
- Environmentally conscious features and characteristics
- Hitachi's Tray Power Saving technology enables stopping power

supply to extra disk drives not in use, achieving a power saving of up to 75 percent across the whole system, compared with times when this feature is not used.

- Hitachi Dynamic Provisioning, volume capacity virtualization reduces the number of hard disk drives by maximizing capacity. This means, for example, if 30 TB is initially used for an eventual capacity of 40 TB, power consumption can be reduced by around 20 percent before the extra 10 TB is required (in the case of a Serial Attached SCSI 300 GB drive in an AMS2300 model).
- Third-party evaluation
  - Received the Green IT Promotion Council Chairman's Award in the Energy Consumption of IT category of the Green IT Awards 2010<sup>12</sup>
- 1 Disk array: A data storage equipment using a redundant array of independent disks (RAID) attached externally to a computer; it boosts storage capacity, performance, reliability, and availability.
- †2 Green IT Awards: Awarded to IT equipment, software, and services, as well as proposals using them, which achieve outstanding energy savings (from the Green IT Promotion Council, backed by METI).

#### High-Performance Steel for Diecasting die Improves durability of molds and improves resource use

Advanced die steel for diecasting (Hitachi Metals, Ltd.)

Environmentally conscious features and characteristics

DAC-MAGIC diecasting die steel retains the toughness<sup>11</sup> of traditional

die casting steel but has greater strength at high temperatures.



• Product: DAC-MAGIC™

- Makes more effective use of mold steel by extending the life span 1.5 to 2 times more than traditional diecasting die steel.
- Greater strength at high temperatures, as well as greater heat crack resistance, helps boost the productivity of aluminum die cast products which opens the way for lighter cars with lower fuel consumption and more recyclability.
- Third-party evaluation Received the Best 10 New Product Prize<sup>†2</sup> at the 53rd Best 10 New Product Awards in 2010
- **11 Toughness:** Steel's resistance and ability to withstand external forces **12 Best 10 New Products Awards:** Sponsored by Nikkan Kogyo Shimbun, a leading newspaper, for new products meeting one of these criteria: an original invention with major impact in Japan and other countries; world-leading performance; a major contribution to enhancing Japan's industrial technology; or a pioneering role in promoting the advancement of industry or society.
- Hitachi Group Sustainability Report 2011 065

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

Eco-Products that meet even more demanding requirements are designated as Super Eco-Products. Super Eco-Products must have either a global warming prevention factor or resource factor of 10 or more, or be leaders in their industry for their energy efficiency standard achievement rate<sup>11</sup> or other similar factors, or be highly rated outside the company. Factor 10 or more indicates that the product has a global warming prevention efficiency or resource efficiency of at least ten times more than reference products that were sold in fiscal 2000 in principle. We are committed to increasing the number of Hitachi Super Eco-Products by improving the Super Eco-Product ratio, which is the ratio of Super Eco-Products to total Eco-Product sales.

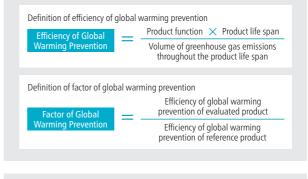
In fiscal year 2010, an additional 182 models were designated as Super-Eco Products, bringing the total to 721. However, booming Eco-Product sales produced a relatively low Super Eco-Product ratio of 26 percent, under the 30 percent target.

- 1 Energy efficiency standard achievement rate: Based on the Act on the Rational Use of Energy (also known as the Energy Conservation Law), 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.
- 12 Amount of resources used over the product's life cycle: amount of new resources + discarded resources



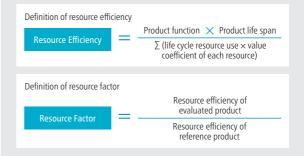
#### **Global Warming Prevention Factor Calculation**

The global warming prevention factor is 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 gauge 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 is the amount of improvement in resource efficiency compared with a reference product. Drawing on the same concept as global warming prevention efficiency, we gauge the improvement in product value by function and life span, using the amount of resources used over the product life cycle<sup>12</sup> to calculate the reduced environmental load.



#### **Next Steps**

Our Third Environmental Action Plan (FY 2011-2015) raises the environmental performance standards for the designation of Super-Eco Products even higher, introducing a new designation: Eco-Products Select. The reference products used to calculate the global warming prevention and resource factors have been changed from fiscal 2000 products to fiscal 2005 products. Product function, one element used in calculating global warming prevention efficiency and resource efficiency, will now be assessed based on the function creating the added value most vital to that product. We have also introduced a new condition: the carbon emission reduction must be at least 50 percent greater than fiscal 2005 products. Through these changes, we aim to lift the environmental performance of our product development to new heights, gaining Eco-Products Select for 20 models by fiscal year 2011 and 100 models by fiscal year 2015.

Super Eco-Products that meet these new standards will be designated as Eco-Products Select.

#### **Addressing Carbon Footprint**

The Carbon Footprint of Products (CFP) is the carbon 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. It is displayed on an easily understood label. This allows people to compare the CFP of similar products and services to select the product or service with the lowest environmental burden, and also helps businesses supply products and services to improve their own global warming prevention efforts.

We participated in the CFP Pilot Project run by the Japanese Ministry of Economy, Trade and Industry (METI) and other ministries, and in fiscal year 2010 acquired permission to use the CFP label for our interactive whiteboard (StarBoard) based

CFP Label for the Interactive Whiteboard StarBoardbased Teleconferencing System



提定使用年数:10年 シフットプリント試行事業 http://www.cfp-japan.jp 検証番号:CV-BI02-001

The top figure (4,750 kg) is the amount of GHGs that will be emitted over the product's entire life cycle, where it is used in the following scenario during use for ten years.

#### Product scenario

Hitachi Solutions holds a 1.15-hour conference involving six people 0.89 times per week (53.2 hours and 46.3 times per year) over the 500 km distance between Tokyo and Osaka. Details of the system setup are available on the official CFP Web site (http://www.cfp-japan.jp/)

GHG emissions per conference hour: 8.93 kg The 8.93 kg figure is the amount of GHGs emitted over the product's entire life cycle where it is used for one-hour conferences based on this scenario.

\*This figure was calculated and verified based on a particular scenario; if the scenario changes, so will the figure

teleconferencing system.

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

In 1999, Hitachi introduced an environmental information labeling system that uses symbols and data sheets to provide environmental information on environmentally conscious products. Hitachi's environmental mark indicates that a DfE assessment has shown the product to be an Eco-Product, informing stakeholders that the product's environmental burden has been highly improved. We also use our Web site to disclose environmental information, such as data sheets that include power consumption for each environmentally conscious product and case studies of products that helped 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 http://www.hitachi.com/environment/library/pdf/factorx\_en.pdf

#### **Recycling Product Resources**

To promote resource recycling, the Hitachi Group is building used product recovery systems and developing recycling technologies.

#### **Developing Rare Earth Recycling Technologies**

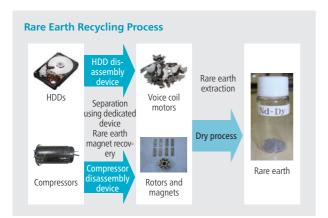
Rare earth magnets containing rare earths<sup>11</sup> can be used at very high temperatures and can exert a strong magnetic force. Since these properties make products highly energy efficient, rare earth magnets are in increasing demand for cars, generators and consumer appliance motors, as well as for hard disk drives (HDDs). However, the uneven global distribution of rare earths makes it vital for us to develop alternative materials, as well as to secure a stable rare earth supply by, for example, recovering these resources from products.

Hitachi has been working since fiscal 2008 to recycle rare earths by developing technologies to remove the rare earths from the magnets in hard disk drives and compressors.

In fiscal 2010, we developed a dedicated device to separate and recover rare earth magnets from used HDDs and compressors, and we succeeded in extracting rare earths from magnets through an experimental dry process that uses a special extraction medium.<sup>12</sup> This extraction device reduces the amount of time required to separate and recover rare earth magnets from used products to around one-tenth of the time for doing this by hand. In addition, because the new process does not employ the chemicals now often used, recycling will be both cheaper and have a smaller environmental burden.

The next steps will be to conduct more verification experiments using the dry process to extract rare earths, and to investigate the reuse of the rare earths from rare earth magnets for launching the full operation of rare earth recycling in 2013.

- 1 Rare earths: 17 elements including lanthanum and scandium. Rare earth magnets are magnetic alloys of rare earth elements such as neodymium and dysprosium.
- 12 Undertaken using a FY 2009 New Resource Recycling Promotion Project Subsidy (Urban Resource Recycling Promotion Project: Development of technologies for recycling rare earths from high-performance magnetic motors, etc.)



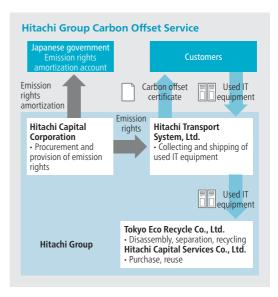
#### Product Recycling in the Information/ Telecommunications Field

We set up the Hitachi Recycle Hotline in fiscal year 2002 to provide recovery and recycling of computers and peripheral devices via the Internet and other methods. Over the nine years up to fiscal year 2010, we recovered 284,000 units (3,090 tonnes) and have recycled 2,090 tonnes of resources. In fiscal year 2010, we set up the Product Recycling Service Center to bring in and recycle even more used IT products. At this center, we consult with sales and other divisions to devise plans for recovering end-of-life IT products from corporations. This includes recycling or purchasing for reuse, according to the type and condition of the product. In fiscal year 2010, Hitachi recovered around 5,700 tonnes of used IT products through the Hitachi Recycle Hotline and product recovery services. Looking ahead, we plan to improve recycling using the technologies we are currently developing for extracting rare earths from used HDDs.

#### TOPICS

#### **Carbon Offset Service**

To prevent global warming, reducing carbon emissions needs to be considered not just when a product is manufactured or in use but across the entire product life cycle, including reuse, recycling and disposal. We meet this need by adding the Carbon Offset<sup>†1</sup> Service to our reuse and recycling package.



The Hitachi Group offers a carbon offset service to customers using the emission credit to compensate for carbon emitted in the course of reusing and recycling used IT equipment. We handle the collecting, shipping and disposal of used IT equipment and also procure and pass on the emission credit, for providing the customer with a carbon offset certificate. We transfer the carbon credit to the Japanese government free of charge, helping Japan meet its Kyoto Protocol commitments.

In fiscal 2010, we arranged 17 carbon offsets.

**†1 Carbon offset:** Greenhouse gas emissions not easily reduced by direct measures are offset by purchasing the equivalent greenhouse gas reduction or absorption amount achieved in another location or by another company, or by undertaking projects that achieve emissions reductions and absorption.

WEB Status of product packaging recycling http://www.hitachi.com/environment/activities/data/wrapping.html

#### Managing Chemical Substances Contained in Products

To manage the chemical substances contained in products, we created Regulations for Environmental CSR-Compliant Monozukuri in 2005. This helps us to manage chemical substances from product development and design to procurement, production, quality control, and sales. To voluntarily control chemical substances, we have defined 13 prohibited substances (Level 1) and 13 controlled substances (Level 2), including potential REACH<sup>11</sup> substances added in 2009. 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 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.

Registration for the EU's REACH regulations was completed by November 2010 for the substances and compounds the Hitachi Group exports to Europe for more than 1,000 tonnes per year. Investigations and preparations are also underway on submitting the REACH notification on particular substances in articles by the June 2011 deadline.

1 REACH regulation: the European Union's regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (EU)

#### Working with the Supply Chain

Working closely with suppliers and customers, we have been gathering and sending out information about chemical substances across the supply chain via the Integrated Management System for Chemical Substances Contained in Products. In July 2009, we linked this management system to the cross-industry JAMP<sup>+1</sup> information exchange platform via Hitachi's enterprise cloud service TWX-21.<sup>†2</sup> The direct connection between customer and supplier databases has opened the way for fast, efficient information collection and transfer across the entire supply chain. At the end of March 2011, chemical substance information for 890,000 parts and products was registered in our integrated management system.

 1 JAMP: Joint Article Management Promotion-consortium
 12 TWX-21: Cloud-based business service providing an intercompany e-marketplace

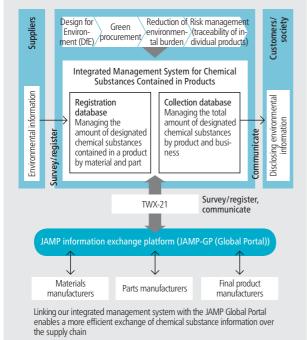
#### Hitachi Group's Voluntarily Controlled Chemical (VCC) Substances

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, bis (tributyltin) oxide (TBTO), polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), polychlorinated biphenyls (PCB), polychlorinated naphthalene (with 3 or more chlorines), short- chain chlorinated paraffin, asbestos, azo dyes and pigments, and ozone layer depleting substances
Level 2 Controlled substances	Substances that are not restricted for inclusion in procured products but for which monitoring and control are required by domestic or foreign regulations, or for which special consideration for recycling or appropriate disposal is required	Antimony and its compounds, arsenic and its compounds, beryllium and its compounds, bismuth and its compounds, nickel and its compounds (excl. alloys), selenium and its compounds, brominated flame retardants, polyvinyl chloride (PVC), phthalate esters, tributyltins (TBT) and triphenyltins (TPT), ozone layer depleting substances (HCFC), radioactive materials, and potential REACH SVHC

Environmental Report

Environmentally Conscious Products and
Services

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



# Participating in the Development of International Standards

We work with the following international standards organizations for environmental issues and environmentally conscious product technology: the International Organization for Standardization (ISO), Ecma International, the International Telecommunications Union (ITU-T), the World Business Council for Sustainable Development (WBCSD), and the International Electrochemical Commission (IEC). This helps us discover global business opportunities and ensure our products' competitiveness. In fiscal 2010, the IEC Technical Committee for Environmental Standardization for Electrical and Electronic Products and Systems (TC111), which is chaired by Hitachi, Ltd., adopted Japan's proposal on a method for quantifying greenhouse gases emitted across the product life cycle. Hitachi also serves as a co-chair for the WBCSD Ecosystems Focus Area Core Team and supported its creation of the Guide to Corporate Ecosystem Valuation (see page 060). In recent years, Hitachi has been making proposals for the development of international standards for Smart

Cities, which have been attracting attention, particularly in emerging nations, as a conceptual framework for building environmentally conscious cities.



Proposing international standards for Smart Cities at a WBCSD meeting

Environmental Report Environmentally Conscious Production

## **Environmentally Conscious Production**

To reduce the environmental burden of business activities, we have set targets for reducing greenhouse gas emissions, waste, chemical substance emissions, and water use. Facilities that show a high level of environmental consciousness as well as outstanding results in these areas receive Super Eco-Factory & Office certification as a way of promoting environmentally conscious production and encouraging environmental activities.

# Creating Super Eco-Factories and Offices

Super Eco-Factory & Office certifications are given to facilities that have achieved an industry-leading environmental load reduction. We certify those

#### **Examples of Super Eco-Factories**



facilities as Eco-Factories & Offices that have both met their targets for the fiscal year under our GREEN 21 system for comprehensively evaluating environmental action (see pages 083–084) and have performed above the given criteria in areas

Offices and Factories

#### Hitachi Elevator Motor (Guangzhou) Co., Ltd.



Hitachi Elevator Motor in Guangzhou, China, makes hoists, a core component of elevators. To save energy, production efficiency has been boosted on production lines, which use many types of machine tools. The plant has also promoted introducing high-efficiency air conditioners, LED lighting, and other energy-saving devices. For example, all 1,360 ceiling lights are now LED. Also, a new building which was added due to the need for production growth is designed for optimal use of natural light inside the building to reduce power consumption. As a result, the five-year average energy consumption rate per unit for fiscal 2010 was improved by 10 percent. Other environmentally conscious manufacturing initiatives include changing the type of forklifts used in the plant from diesel engines to electric (battery) motors, and using adsorption instruments to lower VOC emissions during the painting process.

#### Hamura Works, Hitachi Kokusai Electric Inc.



The Hamura Works designs and manufactures wireless communications systems, and has many production areas to accommodate manufacturing of a wide range of the products. Hamura Works has cut power usage by improving the layout of assembly areas and by sharing facilities with other Group companies located nearby. Adoption of energy-saving machinery and equipment, such as high-efficiency Hf inverter fluorescent lights and air conditioners, enabled Hamura Works to improve its five-year average energy consumption rate per unit by 8.2 percent for fiscal 2010.

Waste paper, including documents on specifications and other confidential documents, accounts for more than 20 percent of the Hamura Works' total waste. In fiscal 2010, the Works achieved zero final waste disposal rate through rigorous sorting and recycling, including using wet shredders so that waste paper can be recycled into copy paper.

The works has more energy-saving plans, including using LED lamps on employees' desks, and shifting the responsibility of switching on and off the fluorescent lights in the work area from the managers to individuals. The amount of power used across the whole Works will also be monitored using a demand controller.

such as energy efficiency, improvements in resource recycling, and volatile organic compound (VOC) emissions reduction. Our target was to bring up to 30 facilities, or 10 percent of the approximately 300 facilities eligible for certification, to the level of Super Eco-Factories & Offices by fiscal 2010, and the facilities themselves have worked hard to achieve a high level of load reduction in order to be certified. As a result, three more facilities were named Super Eco-Factories & Offices in fiscal 2010, bringing the total to 35 (23 in Japan and 12 outside Japan).

To encourage environmental conservation, information on initiatives at these facilities are shared within the Group, along with energysaving and water-processing technologies that are relevant to other Group companies. Facilities yielding outstanding results after introducing Hitachi Group energy-saving products conduct factory tours to demonstrate these products to people within Hitachi and to others.

### **Next Steps**

As part of our Third Environmental Action Plan, we will review Super Eco-Factory & Office certification criteria and mechanisms, launching a new designation: Eco Factory & Office Select. Certification criteria will be developed individually according to the characteristics of our manufacturing (factory) and non-manufacturing (office) divisions. For factories, standards will be raised for energy efficiency, renewable energy use, as well as water recycling and other Super Eco-Factory & Office certification criteria used to date. For offices, evaluation criteria will be established in areas such as energy saving for lighting, renewable energy use, and a building's overall environmental protection.

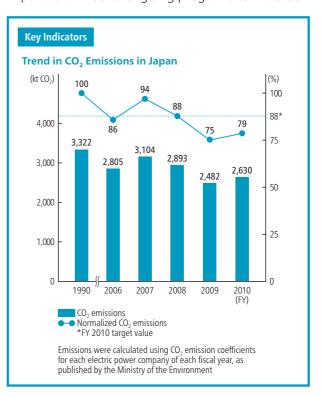
To maintain and raise the level of environmental activities in Eco Factories & Offices Select, certified facilities will be re-evaluated every year to check whether their performance for that fiscal year still meets the certification criteria. Our goal is for every in-house company and Group company to have at least one facility certified by fiscal 2015.

Facilities already certified as Super Eco-Factories & Offices will be re-evaluated based on the new criteria.

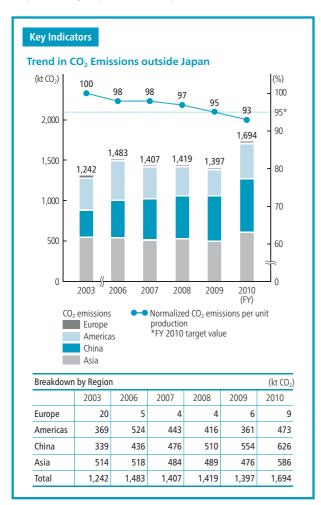
## **Reducing Greenhouse Gas Emissions**

We are promoting reduced energy-related CO<sub>2</sub> emissions from production activities as well as CO<sub>2</sub> emissions from shipping to help cut greenhouse gases and prevent global warming.

To reduce energy-related CO<sub>2</sub> emissions in Japan, we intend to cut CO<sub>2</sub> emissions by 12 percent from fiscal 1990 by fiscal 2010. Outside Japan, we aim to improve CO<sub>2</sub> emissions by 5 percent per unit of production from fiscal 2003, a goal reflecting the increase in both the number of production sites outside Japan as well as the increase in capacity of those sites. In Japan, our sustained investment programs in energy saving include the introduction of energy efficient machinery and switching to alternate fuels. Outside Japan, we have improved production processes and also introduced the knowhow for energy savings which proved outstanding in Japan and resulted in improvements in efficiency of energy use. The amount of  $CO_2$ emissions rose in fiscal 2010 due to the increase in production of auto-related parts in Japan as well as production growth in China and Southeast Asia in particular. Due to ongoing programs to increase



efficiency, however, we cut domestic  $CO_2$  emissions to 79 percent of the fiscal 1990 level in Japan, while outside Japan,  $CO_2$  emissions per unit of production improved by 7 percent compared with fiscal 2003.



# Improving Energy Efficiency through Sustained Investment in Energy Saving

As part of our Second Environmental Action Plan for fiscal 2006–10, we implemented sustained

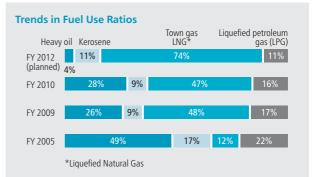
Energy Conservation Investment and CO<sub>2</sub> Emission **Reduction in Japan** 2007 2006 2008 2009 2010 Energy 77 conservation 53 64 52 51 investment CO<sub>2</sub> emission 58 102 50 44 32 reduction

(unit: investment (billion yen), emission reduction (kt))

investment. Over that five-year period, we invested 29.7 billion yen in high-efficiency equipment and fuel switching, achieving a 290,000-tonne reduction in CO<sub>2</sub> emissions. In fiscal 2010, we installed solar power generation equipment in two more factories and made progress on switching to LED tube lamps for a drastic reduction in CO<sub>2</sub> emissions.

### **Fuel Switching Initiative**

Based on our plan to reduce heavy fuel oil use across the entire Group to one-tenth or less from fiscal 2005 by fiscal 2012, since 2006, we systematically switched to natural gas in the 10 plants which accounted for 80 percent of the Group's heavy fuel oil use in fiscal 2005. In fiscal 2010, Hitachinaka General Hospital was also switched entirely to electricity when it was renovated. This and other measures have reduced heavy fuel oil use by around 45% compared with the fiscal 2005 level.



## Global Energy Conservation Diagnoses

The Hitachi Group conducts energy conservation diagnoses worldwide. Group engineers with



Local energy conservation diagnoses

advanced knowledge of the total equipment (air conditioning and boilers, for example) propose measures to improve energy use that will reduce CO<sub>2</sub> emissions. Especially now when more factories are being built in China and Southeast Asia and when Japanese production lines are being moved there, CO<sub>2</sub> emissions from production facilities outside Japan account for around 40 percent of total Group emissions. This is making energy conservation an urgent task. We provide facilities outside Japan with energy conservation support programs to encourage them to make their own daily and ongoing improvements. Hitachi experts with energy conservation knowhow developed in Japan have also gone to the Philippines, Malaysia and other countries to conduct energy conservation diagnoses, identifying wasteful energy use and introducing high-efficiency equipment upgrades to improve energy conservation. In fiscal 2010, energy conservation diagnoses were conducted in 12 Japanese plants and 4 plants in Thailand, bringing the number of factories diagnosed since fiscal 2005 to more than 50. We will continue to implement these global energy conservation diagnoses, outside Japan in particular, to spread energy conservation expertise and to train energy conservation personnel.

### Introducing Renewable Energy

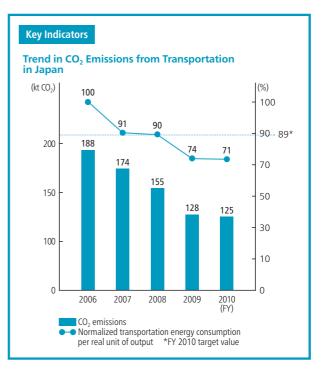
We are committed to using solar and wind power, and other renewable energy sources. In fiscal 2010, we introduced a 170 kW solar power generator, bringing the amount of power generated from renewable sources to 1,245 MWh from solar power and 76 MWh from wind power. We have also bought Green Power Certifications from Japan Natural Energy Company for around 1,000 MWh of natural energy every year, using it for Hitachi, Ltd. offices and for trade fairs, etc.



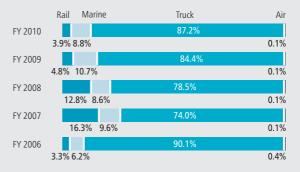
Green Power Certification symbol

### **Reducing Transportation Energy**

We have worked to curb  $CO_2$  emissions from transportation toward the target of improving transportation energy consumption per real unit of output by 11 percent from fiscal 2006 by fiscal 2010. Key steps to reach this goal include reducing product sizes, weights, and packaging to improve truck load efficiencies; making modal shifts from truck to rail and ship transportation; shipping complete rather than part orders for large products; and combining truck, rail, and ship transportation to boost efficiency. As a result, we improved transportation energy consumption per real unit of output by 29 percent in fiscal 2010 and reduced  $CO_2$  emissions by 63,000 tonnes from fiscal 2006.







### **Next Steps**

To promote energy-related CO<sub>2</sub> emission reduction, our Third Environmental Action Plan (FY 2011–15) sets the goal of reducing CO<sub>2</sub> emissions per unit of production across all Group production facilities by 6 percent from fiscal 2005 by fiscal 2011 and by 10 percent by fiscal 2015. For production facilities in Japan, the target is a 16-percent reduction in CO<sub>2</sub> emissions from fiscal 1990 by fiscal 2011, and a 20-percent reduction by fiscal 2015. To reach these overall targets, each in-house company and Group company has been assigned a target according to growth in their particular business area.

Steps taken toward achieving our targets include systematic fuel switching and using high-efficiency machinery. We will also create a mechanism for monitoring monthly CO<sub>2</sub> emissions at every in-house and Group company and assess the status of reaching that fiscal year's goals, bolstering the PDCA cycle.

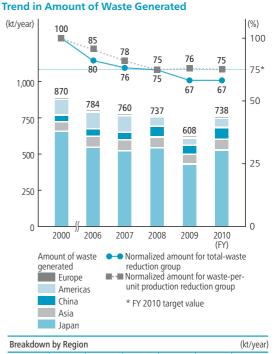
To curb CO<sub>2</sub> emissions from transportation, we are aiming for an ongoing reduction of 1 percent per year in transportation energy consumption per unit of output. We will press ahead with modal shifts and product weight reduction to cut transportation energy consumption per unit of output in Japan by 12 percent from fiscal 2006 by fiscal 2011, and by 15 percent by fiscal 2015.

# **Reducing Waste**

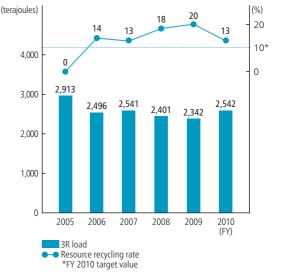
We reduce and recycle waste materials generated during manufacturing, including valuable resources (reusable resources with residual value). To meet our goal of reducing waste by 25 percent from fiscal 2000 by fiscal 2010, we have promoted the reuse of resources from manufacturing by recycling material residue as raw resources, as well as by filtering and reusing cleaning oil. These technologies and measures were shared across the Group, enabling the total-waste reduction group to achieve a 33-percent cut by fiscal 2010 and the waste-per-unit production reduction group to achieve a 25-percent reduction, both meeting the year's targets.

We will also recycle waste into resources rather than disposing of it in landfills. Using the Group's 3R load index to assess the environmental load





	2000	2006	2007	2008	2009	2010	
Europe	2	2	0	0	1	1	
Americas	113	73	52	53	38	54	
China	39	52	58	59	51	80	
Asia	64	60	60	61	54	78	
Japan	652	597	590	564	464	525	
Total	870	784	760	737	608	738	



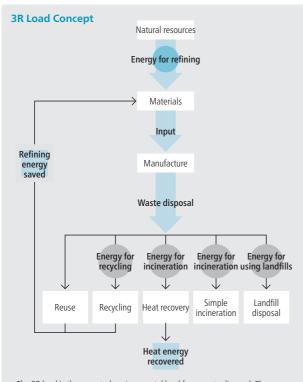
Trend in Resource Recycling Rate in Japan

incurred in waste disposal, we are developing technologies and applications to promote reuse and recycling. In fiscal 2010, we raised the resource recycling rate<sup>11</sup> in Japan by 13 percent from fiscal 2005, clearing the year's goal of 10 percent. In our initiative to boost the number of zero emission<sup>12</sup> sites that have minimized landfill disposal, 159 facilities achieve that goal in fiscal 2010.

- 1 Calculated as (base year 3R load minus subject year 3R load) divided by base year 3R load
- 12 Defined as a final disposal rate (landfill disposal/waste) of no more than 1 percent and less than 5 tonnes of final waste in any given year

#### WEB Zero emission sites

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



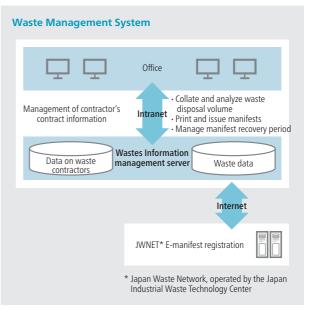
The 3R load is the expected environmental load from waste disposal. The smaller the environmental load, the more resources are being recycled. The following are totaled for each waste type and disposal method: 11 Inerray used in refining natural resources into materials

- [2] Energy used in waste disposal
- [3] Heat energy recovered through waste recycling and reduction in refining energy

### **Promoting Appropriate Disposal**

To reduce the risk of inappropriate waste disposal, we have developed a waste management system that electronically records information from manifests<sup>11</sup> on waste type, disposal method and disposal completion, and can register the e-manifests<sup>12</sup> being promoted by the government. We have bolstered our mechanisms for ensuring appropriate waste disposal, with the system now issuing a warning if there are mistakes in a manifest or if disposal cannot be completed. A function has been added for collating data on waste volume, disposal methods, and disposal volume from electronic manifest information to boost operational efficiency and promote resource recycling. In fiscal 2010, enhancing support mechanisms for the introduction of e-manifests to promote greater e-manifest use within the Group, which resulted in 62 facilities adopting e-manifests.

- 1 Manifest: An evidence document for industrial waste management issued by waste generators and relayed along the waste stream to ensure appropriate disposal
- 12 Electronic manifest (e-manifest): Mechanism for centralized management of digital manifests, with waste generators and waste disposal companies sharing relevant information



# TOPICS

# Reducing Waste from Transportation Packaging

Hitachi Transport System is promoting activities to reduce waste by improving packaging. The initiative in fiscal 2010 was to reduce wood waste by switching from one-way wooden packing crates to collapsible, reusable metal crates. These crates were made more compact to fit into Japan Freight Railway Company five-tonne containers, enabling a modal shift from truck to rail transport and helping to reduce CO<sub>2</sub> emissions during transportation. The shorter unpacking time has also enhanced work efficiency and service. Due to these improvements, the company received an **Electric Equipment Packaging Category** Award at the Japan Packaging Contest 2010, which is sponsored by the Japan Packaging Institute.



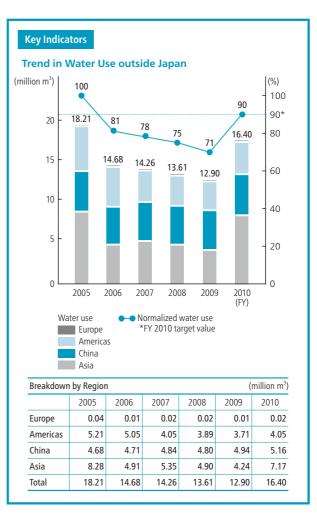
One-way wooden crates (left) replaced by collapsible, reusable crates (right)

### **Next Steps**

Our Third Environmental Action Plan (FY 2011–15) aims to further reduce the amount of waste generated by increasing the target for improving waste generation per unit of production from fiscal 2005 by 16 percent in fiscal 2011 and by 20 percent by fiscal 2015. Facilities manufacturing high-function materials, such as copper products and magnetic materials, are expected to achieve a 7-percent improvement by fiscal 2011 and 15 percent by fiscal 2015, considering the heavy energy use of production processes in these areas. To improve appropriate waste disposal rates, our target is to lift the e-manifest registration rate in Japan to at least 90 percent by fiscal 2015. The definition of zero emissions will be revised as of fiscal 2011 and the final disposal rate (landfill disposal/waste) will be cut from no more than 1 percent to less than 0.5 percent, as we work to develop and increase the number of zero-emission sites.

# **Water Conservation**

Given the global shortage of water resources, we are committed to promoting effective use of the water by reducing the amount of water consumed in our operations. Outside Japan, where water conservation is a pressing issue, our production facilities had recovered and recycled water during manufacturing process or reused it for non-technical uses to reach the goal of reducing water consumption by 10 percent from fiscal 2005 by fiscal 2010. In fiscal 2010, the 10-percent target was achieved despite increased water



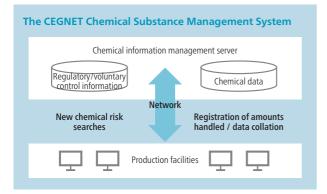
use—particularly in China and Southeast Asia—due to the rise in production volume. We will pursue a range of measures to boost water use efficiency, ensuring a steady reduction.

### **Next Steps**

Our Third Environmental Action Plan (FY 2011–15) aims to balance increased production outside Japan with water resource conservation by improving water use per unit of production by 16 percent from fiscal 2005 by fiscal 2011 and by 30 percent by fiscal 2015.

# **Chemical Substance Management**

To deal with chemical risk and comply with laws and regulations, we assess chemical substances, managing risk in three ways: prohibition, reduction, and control. Since 1998, we have operated an online database for chemical substance management called CEGNET to index the latest laws and regulations and our own voluntary regulations, ensuring appropriate management of newly introduced chemical substances. Chemical substances used in our operations are also registered with CEGNET. Collecting and aggregating the data on the amount of chemical substances used, emitted, or transferred helps to reduce our use of chemicals. In addition, we train chemical substance managers and regularly communicate the risks to deepen local residents' understanding of how we manage chemical substance risk.

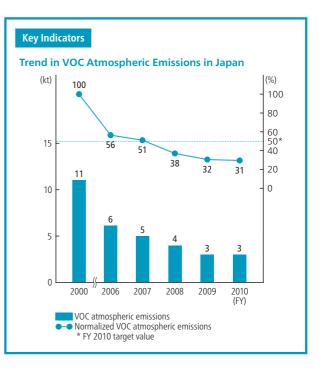


### **Reducing Chemical Substances**

To prevent air pollution, we cut emissions of 41 volatile organic compounds (VOCs) based on a program from the Ministry of the Environment. Our

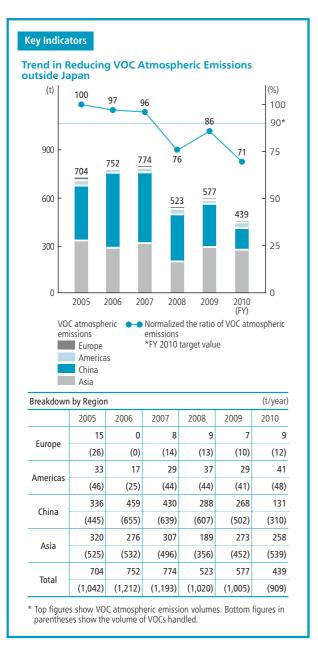
goal was to reduce VOC atmospheric emissions in Japan by 50 percent from fiscal 2000 by fiscal 2010, and to cut the rate of reduction of VOC atmospheric emissions<sup>11</sup> outside Japan by 10 percent from fiscal 2005. The rate of reduction of VOC atmospheric emissions-intended to reduce the ratio of emissions to the volume of VOCs handled—is used as an indicator outside Japan because of production growth there. We are improving manufacturing processes to introduce VOC alternatives and install equipment to recover and render them harmless. Hitachi Construction Machinery, for example, has achieved a 40-percent reduction in the volume of VOC emissions by adopting low-solvent paints and introducing an electrodeposition coating process using water-based paint for coating large hydraulic shovels. Outside Japan, Hitachi Elevator (Shanghai) has cut the volume of VOC emissions to less than 1 percent by introducing devices for absorbing and recovering VOCs during the painting process for elevator parts and by switching to water-based paints. As a result of all these activities, in fiscal 2010, we cut VOC emissions in Japan by 69 percent from fiscal 2000, and outside Japan reduced emissions by 29 percent from fiscal 2005, in both cases achieving our targets.

We comply with Japan's PRTR Law<sup>+2</sup> through



Group-wide monitoring of chemical substances released into the atmosphere or into public waters, or transferred 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, provided the amount is 10 kilograms or more per year, so that we can control these substances as well.

- 1 The rate of reduction of VOC atmospheric emissions: The percent difference between the 2005 emission ratio and the emission ratio in the subject year. The emission ratio is calculated as VOC atmospheric emissions divided by total volume of VOCs handled.
- 12 PRTR Law: Pollutant Release and Transfer Register Law



### **Next Steps**

To reduce the ratio of VOC emissions to VOCs used, our Third Environmental Action Plan (FY 2011–15) established the rate of reduction of VOC atmospheric emissions as the indicator used worldwide. It sets the targets of reducing that rate to 5.8 percent in fiscal 2011 and to less than 5 percent in fiscal 2015, further reducing VOC emissions into the atmosphere.

### **Managing Environmental Risk**

In the Hitachi Group, we go the extra mile in environmental management by considering the environmental burden of all our business activities and setting voluntary management criteria more stringent than regulations. At every business site, we monitor water quality and noise, for example, and work to minimize environmental risk. We also share information on environmental regulations and violations to prevent recurrences and to strengthen management.

In fiscal 2010, four incidents exceeded statutory environmental limits and there were nine noise complaints, and all were promptly resolved. We will continue to audit and monitor data to prevent recurrences.

To prevent soil and groundwater contamination caused by chemical leaks, we replace underground pipes, pits, and tanks with ones above ground.

We have now completed soil and groundwater decontamination or confirmed the sites where chemical substances were used to be conatmination free. Cleanups and monitoring will continue at the remaining sites.

### **Violations of Statutory Standards**

	Water quality	Air	Total
Japan	2	0	2
Outside Japan	2	0	2

### Environmental Load Data Generated through Business Operations (FY 2010)

This chart shows resource inputs and the environmental load for Hitachi Group business activities in fiscal 2010.

### **Total Input of Resources**

Total Energy Input		F
In Japan 71%	Outside Japan 29%	Total energy consumption (crude
Electricity 81%		oil equivalent) 2.07 million kl
G	as 12% 🔟 📘	Fuel oil 7%
	In Japar	n Outside Japan
Electricity	4.7 billion kWł	n 2.1 billion kWh
Gas		
Town gas, LNG	100 million m	<sup>3</sup> 24 million m <sup>3</sup>
LPG	42,000	t 18,000 t
Fuel oil (heavy oil, kerosene, etc.)	109,000 k	l 14,000 kl

### **Total Input of Materials**

**Total Water Input** 

L Surface water 21%

Surface water

Groundwater

Industrial water

In Japan 77%

In Japan 55%	Outside Japan 45%	Materials	
Metals 57%	Other 35%	3,519 kt	
Plastics 7%	- Rubber 1%		
	In Japan	Outside Japan	
Metals	1,275 kt	722 kt	
Plastics	169 kt	83 kt	
Rubber	6 kt	21 kt	
Other materials	478 kt	764 kt	
Chemical substances Handling volume for chemica covered under the PRTR Law	l substances 1 183 kt	14 kt	
Handling volume for ozone- depleting substances	2 t	543 t	
Handling volume for greenhouse gases	1,531 t	374 t	

### **Total Output of Environmental Load** Volume of products shipped: 3,378 kt (in Japan); 831 kt (outside Japan)

Greenhouse Gas Emissior	15	-
In Japan 62%	Outside Japan 38%	Greenhouse gases (GHGs) 12
CO <sub>2</sub> emissions 98%	1	4,431 GWPkt
	L	- Other 2%
	In Japa	in Outside Japan
CO <sub>2</sub> emissions	2,630	kt 1,694 kt
Other GHGs SF <sub>6</sub> (sulfur hexafluoride)	68 GWPI	kt 0
PFCs (perfluorocarbons)	18 GWPI	kt 0
HFCs (hydrofluorocarbons)	17 GWPI	kt 4 GWPkt

### **Total Volume of Waste**

In Japan 71%	Outside Japan 29%	Waste generated
Recycling 82%		738 kt
Waste reduction 6%	L <sub>Fi</sub>	nal disposal 12%
	In Japan	Outside Japan
Waste reduction	33 kt	15 kt
Recycling	450 kt	151 kt
Volume reused	80 kt	5 kt
Volume of material recycled	341 kt	144 kt
Volume of thermal (heat) recycled	29 kt	2 kt
Final disposal	42 kt	47 kt
Chemical substances		
Discharge or transfer volume of substances covered under the P		
substances covered under the r	4.6 kt	0.4 kt
SOx (sulfur oxides)	47 t	10 t
NOx (nitrogen oxides)	471 t	45 t
Volume of discharge for ozone- substances	depleting 2 t (0.1 ODP <sup>†3</sup> t)	0.3 t (0 ODPt)

### **Total Volume of Wastewater** Volume of

Coutside Japan 24%

	In Japan 76%			l		Wastewater
3	Public water 65%		Sewerage system 31%		1	66.31 million m <sup>3</sup>
		-		L		nderground filtration, etc. 4%
			In	Japa	n	Outside Japan
	Public water	39.9	2 mil	ion m	1 <sup>3</sup>	3.29 million m <sup>3</sup>
	Sewerage system	8.6	4 mil	ion m	1 <sup>3</sup>	12 million m <sup>3</sup>
	Underground infiltration, etc.	1.7	4 mil	ion m	1 <sup>3</sup>	$0.71 \text{ million m}^3$
	Water quality BOD (biological oxygen demand	d)		247	t	455 t
	COD (chemical oxygen demand)			187	t	1,024 t

Industrial water 43% Groundwater 36%

Outside Japan 23%

In Japan

6.51 million m<sup>3</sup>

25.65 million m<sup>3</sup>

22.9 million m<sup>3</sup>

Water used 71,470,000 m<sup>3</sup>

Outside Japan

8.74 million m<sup>3</sup>

4.75 million m<sup>3</sup>

2.9 million m<sup>3</sup>

t1 The 354 chemical substances covered under Japan's PRTR Law
 t2 GWP (Global Warming Potential): Coefficient derived by converting the global warming potential into CO<sub>2</sub> equivalent tonnes
 t3 ODP (Ozone Depletion Potential): Coefficient derived by converting the global depletion potential into trichlorofluoromethane (CHC-11) equivalent tonnes

water reused

In Japan: 34.61 million m Outside Japan: 4.46 million m

Environmental Report

 Environmental Management Framework

 and Communication

# **Environmental Management** Framework and Communication

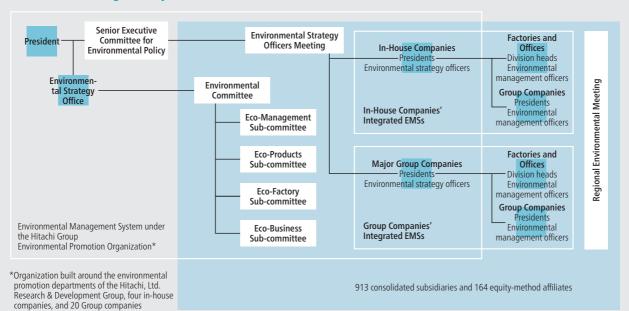
In the Hitachi Group, we have built a global network and are using environmental management systems to foster sound environmental practices and instill "Eco-Mind" in all our employees. We also work to deepen stakeholders' understanding of our environmental activities by disclosing information, and we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

# Environmental Management Framework

The Hitachi Group is made up of Hitachi, Ltd.'s in-house companies and Group companies. We are building a global environmental management system to support environmental decision making and action at Hitachi, Ltd., 913 consolidated subsidiaries, and 164 equity-method affiliates.

The Hitachi, Ltd. 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 for Environmental Policy, 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 subcommittees of working level experts in each policy area who develop specific targets and measures for achieving them. In fiscal 2011, we established the new Eco-Business Committee to promote the globalization of our environmental business operations.

Outside Japan, we hold regular regional environmental meetings to promote environmental action. In fiscal 2010, information was shared during meetings in China, the United States, and Europe on the Third Environmental Action Plan (FY 2011-15) and the latest environmental regulations. In addition, views were exchanged on local environmental issues. We will continue using these worldwide regional networks to improve our global activities, keeping the special character of each region in mind.



#### **Environmental Management System (EMS)**

### **Building Environmental Management Systems**

To ensure efficient management of each business site's environmental load, we have set the criteria for environmental management. Twenty-five business units which have approximately 300 sites meeting these criteria—the R&D Group, four inhouse companies, and 20 Group companies—and the Environmental Strategy Office have together developed and implemented the Hitachi Group Environmental Promotion Organization EMS to consistently promote the implementation of environmental policies.

In fiscal 2010, the Hitachi Group Environmental Promotion Organization EMS had its first ISO 14001 surveillance audit since a recertification audit. No corrective action was required, and certification remains in effect.

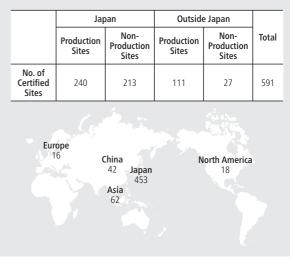
Also, at the same time, the in-house and Group companies covered by the Hitachi Group Environmental Promotion Organization EMS have been working to develop their own EMSs. In fiscal 2010, three in-house and five Group companies carried out EMS integration for multiple business sites. With this completed, EMS integration has now been done at all major in-house and Group companies.

Every business site meeting the criteria for environmental management continues to maintain ISO 14001 certification. In fact, business sites that did not meet the criteria have also obtained certification, so that 591 Hitachi Group business sites were certified as of March 2011.

# Criteria for Environmental Management Level (major items)

- Employees Electric power consumption Waste generated Water used Paper purchased
- ≥ 500
   ≥ 6,000 MWh/year
   ≥ 500 tonnes/year
   ≥ 600 m3/day
   ≥ 50 tonnes/year

### Status of ISO 14001 Certifications (as of March 2011)



WEB List of ISO 14001–certified sites http://www.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 300 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. We will continue to expand this system to keep pace with new laws and policies. For example, we added a function for registration to the electronic manifests promoted by the Japanese government to prevent inappropriate disposal of wastes (see page 76) and upgraded our system to collect and analyze energy-use data from all relevant sites in response to Japan's amended Energy Conservation Law.<sup>11</sup>

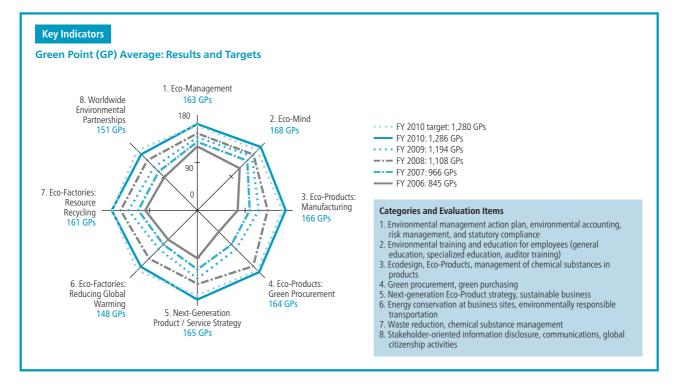
Further improvements will allow the system to assess progress toward reduction targets for  $CO_2$  emissions and other environmental load indicators. These measures will heighten awareness of what needs to be done to meet the goals of the Environmental Action Plan.

**†1 Energy Conservation Law:** Act on the Rational Use of Energy

### **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 55 items on a scale from 1 to 5, then showing the results on radar charts. For any category, a perfect score is 200 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. In fiscal 2010, the final year, we surpassed the overall Group target of 1,280 GPs with a total score of 1,286, due to steady improvements at business sites around the world. In the areas of reducing global warming and worldwide environmental partnerships, where results fell short of their targets, we intend to improve scores in the future by continuing the shift to more energy-efficient systems and by ramping up communication on environmental action outside Japan.

Under our Third Environmental Action Plan (FY 2011–15), we are adding new GREEN 21 evaluation items with which we increase the level of activity: contributing to business growth and preservation of ecosystem through expanded environmental business operations, and collecting and communicating environmental data across our supply chain.



### 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 2010 there were 30 entries, 10 of which were selected for awards.

Category		Recipient	Achievement
Grand Pr	ize	Hitachi Works, Power Systems Co. (Hitachi, Ltd.) Hitachi Engineering & Services Co., Ltd.	Contributing to $\mbox{CO}_2$ emission reduction through development and spread of wind power generation system
Division Awards Environmental Management		Hitachi Elevator (China) Co., Ltd.	Adopting green policies to save energy, reducing toxic chemicals, etc., and implementing them at sites around China; winner of China's Excellent Corporate Citizen in China award
	Next-Generation Products & Services	Hitachi Plant Technologies, Ltd.	Product development of onboard ballast-water purification system using magnetic separation; winner of the 7th Eco-Products Awards, Minister's Prize, the Ministry of Land, Infrastructure, Transport and Tourism
	Worldwide Environmental Partnerships	Shenzhen Hailiang Storage Products Co., Ltd.	Promoting environmental education and conservation through community programs involving employees, their families, and local residents
	Super Eco-Factories & Offices	Hamura Works, Hitachi Kokusai Electric Inc.	Improving energy efficiency and reducing volume of final waste disposal (see pages 075–077)
Special A	ward	Hitachi Global Storage Technologies, Ltd.	Global company-wide GREEN 21 campaign
Honorab	le Mentions	Hitachi IE Systems Co, Ltd.	Air-conditioning system for environmentally conscious modular data center
		Taga Home Appliance Works, Home Appliance Group, Hitachi Appliances, Inc.	Developing low-steam-emission rice cooker that steams without added water for lower electricity and water consumption and improved taste
		Shikoku Area Operation, Hitachi, Ltd.	Contributing to the environment and the local community through afforestation
		Sakado Operations, Hitachi Intermedix Co., Ltd.	Adopting energy conservation and waste-reducing measures to win METI's Commerce and Information Policy Bureau Director-General Award for energy- efficient factories

## Fiscal 2010 GREEN 21 Awards

#### **GREEN 21 Grand Prize**

Grand Prize Winner: Contributing to CO<sub>2</sub> Emission Reduction through Development and Spread of Wind Power Generation System

### Criteria for Decision

- Hitachi Works, Power Systems Co. (Hitachi, Ltd.)
- Developed a 2 MW downwind turbine, among the world's largest, and commissioned 19 turbines as of the end of FY 2010, contributing to an annual  $CO_2$  emission reduction of 45,000 tonnes. Hitachi Engineering & Services Co., Ltd.
- Launched first output power stabilization system for wind power generation in Japan with a combined power rating of 15.44 MW and equipped it with an energy storage system using long-life lead-acid batteries. Minimized power generation cost increases and reduced fluctuations in output to ensure consistent power supply. Opened facilities to viewing by more than 150 visitors from around the world, helping spread wind power generation.
- Offered environmental education by giving more than 800 schoolchildren and local residents tours of wind farms during construction from FY 2006 to FY 2010.







Elementary school children touring wind farms during construction

# **Environmental Education**

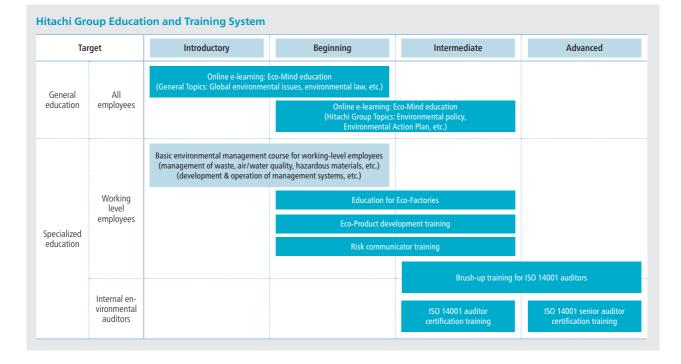
Hitachi Group Training is offered to all Group employees with a view to raising awareness and spreading understanding of environmental issues. Training is divided into general education, covering subjects such as Hitachi's Environmental Vision and environmental strategies, and specialized expert training.

For general education, we offer an Internetbased e-learning course in three languages: Japanese, English, and Chinese. To date 174,977 employees worldwide (95% of the target group) have taken this course.

Specialized training aims to nurture skilled personnel in such areas as environmentally

conscious product design, risk communication regarding chemicals, and factories' environmental protection. In fiscal 2010, we instituted a new training course for staff in charge of factory management to familiarize them with the latest environmental laws and explanations of amendments. In addition to Hitachi Group Training, individual companies and units provide special education tailored to their own business area.

From fiscal 2011, we will intensify training to enhance the knowledge and skills of staff in charge of factory management, using case studies to illustrate compliance, noncompliance, and the need for environmental management, while providing opportunities for discussion with outside experts.



**Environmental Report** Environmental Management Framework and Communication

# **Environmental Accounting**

We have adopted, and are making public, environmental accounting conforming to Japan's Environmental Accounting Guidelines. The results help us to raise the efficiency of environmental investments and activities.

### **Environmental Protection Costs**

	ltem		Cos	ts (billions of y	Overview		
	item	FY 2006	FY 2006 FY 2007 FY 2008 FY 2009 FY 2010		Overview		
Expenses	Business area	39.24	39.72	33.31	28.20	27.98	Costs of maintenance, of equipment with low environmental burden, depreciation, etc.
	Upstream/ downstream	2.89	2.79	1.97	1.70	1.60	Green procurement expenses, recovery and recycling of products and packaging, recycling expenses
	Administration	10.31	11.30	11.20	8.92	8.61	Labor costs of environmental management, implementation and maintenance of environmental management system
	Research and development	41.66	46.63	50.25	52.81	57.56	R&D for the reduction of environmental burden caused by products and production processes, product design expenses
	Social activity	1.20	0.48	0.35	0.25	0.31	Planting, beautification, and other environmental improvement expenses
	Environmental remediation	2.89	0.80	0.99	0.68	0.37	Environmental mitigation costs, contributions, and assessments
	Total	98.18	101.72	98.06	92.56	96.44	
Total investm	nent	15.48	15.38	10.17	7.95	7.60	Investment in energy-saving equipment and equipment that directly reduces environmental load

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

### **Environmental Protection Effects**

Economic Effects\*1

ltem		Co	sts (billions of ye	Major FY 2010 Activities			
nem	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Major PT 2010 Activities	
Net income effects	12.28	14.50	10.90	8.30	9.62	Finding value from waste by sorting and recycling	
Reduced expenses effects	20.15	22.02	18.24	15.00	18.45	Reducing resource costs through resource and energy conservation; reducing waste disposal costs through waste reduction	
Total	32.43	36.52	29.14	23.30	28.07		

#### Physical Effects

	Amount Rec	duced (parenthes	ses: equivalent n			
Item	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Major FY 2010 Activities
Reduction in energy used during production	159 million kWh (46,000)	161 million kWh (34,000)	158 million kWh (33,000)	191 million kWh (40,000)	kWh	Reviewing clean room operating conditions; consolidating worksites and facilities (relocation of production bases); limiting the number of refrigerator units and switching to inverter technology; partnering with electric supply companies to save energy
Reduction in amount of waste for final disposal	6,375 t (42,000)	7,361 t (53,000)	6,752 t (48,000)	5,955 t (43,000)	(26,000)	Switching to PRF (solid waste fuel); recycling grinding sludge and slag; reducing effluent volumes; reducing packaging materials for goods received

Benefits from equipment investment are calculated using the straight-line method over five years, as with costs. \*1 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
 \*2 Calculation for household-number equivalent for energy-use reduction: decrease in energy used during production (or during product use) ÷ total annual power

consumption per household.

Source: The Energy Conservation Center, Japan, FY 2008 Survey on Standby Power Consumption (only in Japanese). \*3 Calculation for household-number equivalent for final-waste disposal reduction: decrease in final waste generated during production ÷ (total annual volume of nonindustrial final waste ÷ number of households).

Sources: Ministry of the Environment, Annual Report on the Environment in Japan 2009; Statistics Bureau, 2005 Population Census.

Environmental Report

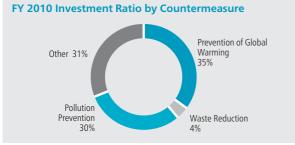
 Environmental Management Framework

 and Communication

#### Efficiency of Environmental Load Reduction\*

Item	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Reduction in energy used during production (million kWh/billion yen)	0.30	0.28	0.33	0.42	0.32
Reduction in amount of waste for final disposal (t/billion yen)	18.0	20.0	19.4	22.9	14.7

\*This is an indicator of the efficiency of environmental load reduction, calculated as the amount of environmental load reduction divided by the expenses needed for the reduction.



# **Environmental Communication**

### **Communicating Environmental Information**

We publish reports every year on our environmental protection initiatives, their results, and our plans. In fiscal 2011, taking into account the global need for a sustainability report, we combined our *Hitachi Group Corporate Social Responsibility Report* and the *Hitachi Group Environmental Sustainability Report* into a single report. The Environmental Activities page on the Hitachi's Web site also provides information on the environmentally conscious features of the Hitachi Group's main products, as well as customer feedback. In fiscal 2010, for its clear themes and the high standard of environmental activities, our Web site won the prize in the corporate category of the Environmental goo Awards.

Our environmental campaign TV commercial on



Environmental Activities page on Hitachi's Web site

high functional materials and components, which began screening in August 2010, won the grand prize in the environmental TV commercials category of the 14th Environmental Communication Awards. Judges lauded Hitachi's skilful portrayal of the environmental contribution of the materials business, recognizing that while these materials are critical to the environmental business, they are difficult to explain to viewers.

Also, we cooperate with socially responsible investment<sup>+1</sup> ratings and other environmental surveys (see pages 102–103).

1 An approach to investing where shares are selected partly on the basis of criteria relating to CSR

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

WEB External environmental awards http://www.hitachi.com/environment/activities/data/commendation.html

### **Participation at Exhibitions**

We value the opportunity for direct dialogue with stakeholders, so we participate in environmentrelated exhibitions. In fiscal 2010, we took part in exhibitions around the world, setting "towards a sustainable society" as our core concept.

In Japan, we participated in Messe Nagoya 2010, held in October to coincide with COP 10, as well as the Eco-Products Exhibition 2010 in December



Eco-products International Fair in India

(an annual event for us). Outside Japan, we held the Hitachi Eco Conference 2010 in September in Singapore as a private Hitachi Group event. Also, we exhibited at both the 2010 International Greentech and Eco Products Exhibition in October in Malaysia and the Eco-products International Fair 2011 in February in India. At these events, we demonstrated to visitors our environmentally conscious products and services, deepening their understanding of Hitachi.

At exhibitions, we also work to reduce the environmental load of our booths. The Hitachi booth at Eco-Products Exhibition 2010 was built with environmental consciousness in mind, using LED lamps for all lighting and a carpet made from recycled plastic bottles. For these initiatives, Hitachi booth won the Eco & Design Booth Prize granted to environmentally conscious exhibition booths.

#### WEB List of environmental exhibitions http://www.hitachi.com/environment/ads\_events/event/index.html

### **Partnerships with Stakeholders**

We promote environmental communication, deepening the exchange on environmental themes with local stakeholders, and we conduct social contribution activities with them.

In fiscal 2010, we carried out environmental education and tree planting as well as restoration projects in various regions worldwide. As far as environmental education is concerned, to help raise the eco-awareness of children who will lead the next generation, we provided easy learning opportunities through hands-on training and 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. Through these activities, we also support local environmental conservation, by holding meetings with local authorities and working with NGOs and NPOs that specialize in local environmental situations and activities (see pages 108–110).



We provide specialized environmental education courses using visual aids to teach children about the ecosystems of forests and animals. (Hitachi Global Storage Technologies Philippines Corp.)



To deepen exchanges with local residents, we opened our office to the public and provided opportunities to learn about environmental technologies by exhibiting models running on solar cells, etc. (Hitachi Works, Hitachi, Ltd.)



As part of our support for university students' research, we deepened mutual understanding by explaining our waste management activities and exchanged opinions. (Hitachi Chemical (Johor) Sdn. Bhd., Malaysia)



We planted trees in Hill Park, Nanshan, China, with the participation of 55 employees and their families. (Shenzhen Hailiang Storage Products Co., Ltd.)

Social Report



Designating an "Environment Day," we promote environmental conservation activities, such as clean ups in the area around our office and publicize these activities in an environment column in the company newsletter. (Hitachi Building Equipment Manufacturing (Tianjin) Co., Ltd.)

WEB Other environmental communication activities Hitachi Eco-Activities http://www.hitachi.com/environment/showcase/employee/index.html

### **Independent Review**

To enhance the reliability of the data disclosed in this report, we have received a review by Bureau Veritas Japan Co., Ltd.\* on our fiscal 2010 performance.

\*A certification agency providing inspection, audit, and certification services in areas such as marine; building compliance; health safety and the environment; systems; and consumer products.

The standards, guidelines, and calculation methods used in collecting data appear on our Web site.

WEB Calculation methods for environmental load data http://www.hitachi.com/environment/activities/third/method.html

Hitachi Group Sustainability Report 2011 Independent Review Report				
To: Hitachi, Ltd.				BU P 2 A U VERITAS July 25, 2011
				Bureau Veritas Japan Co., Ltd. System Certification Services Headquarters
review of its environmental data selected t	by Hitach ponsibilit	i for inclusion in y is to make a st	he H	Hitachi, Ltd. (Hitachi) to conduct an independent Hitachi Group Sustainability Report 2011, issued tent from an independent position; it is not to
1. Review Outline				
1) Environmental load data generated thro	ugh busi		in F	Y2010 Review Methodology
Data Reviewed 90%(*1) of environmental load data generated through business operations of Hitachi and 913 consolidated companies (*1) based on Hitachi calculations. Environmental load data reported by the	Site Visited Hitachi Head Office Hitachi Power Systems			<ul> <li>Review Metrodougy</li> <li>Review of documentary evidence produced by Hitachi Head Office and the sites visited</li> <li>Interviews with relevant personnel of Hitachi Head Office and the sites visited</li> <li>Site inspection about data monitoring procedure</li> <li>Comparison between the reported data and the supporting documentary evidences</li> </ul>
sites visited to Hitachi Head Office	Hitachi	Company & Hitachi Works, Hitachi Metals Headquarters & Yasugi Works		
2) Eco-Products registration data	_	1	_	
Data Reviewed Data used for registration of 5 products in F	Y 2010	Site Visited Hitachi Head	- R	Review Methodology eview of documentary evidence produced by Hitachi
The percentage of products registered as Eco-Products, the number of registered n and the sales ratio of Eco-Products in FY 2007, 2008, 2009, and 2010     The percentage of Super Eco-Products an number of registered models in FY2010     The share of sales by segment in FY2010	2006, id the		-0 -	terviews with relevant personnel of Hitachi Head Office omparison between the data used for the registration and the supporting documentary evidences
3) Amount of contribution to CO <sub>2</sub> emission market by the end of FY2010 Data Reviewed	reductio	n through the us Site Visited	e of	Hitachi products and services delivered to Review Methodology
Data Reviewed The amount of contribution to CO <sub>2</sub> emission reduction through the use of 17 different produc and services		Hitachi Head Office	Review of documentary evidence produced by Hitachi Head Office and the companies in charge of the relevant products and services Interviews with relevant personnel of Hitachi Head Office and the companies in charge of the products and services - Comparison between the data used in the calculation of emissions reduction and the supporting documentary evidences (GHG Accounting and Reporting Principles in GHG Protocol Corporate Standard were used as review references.)	
2. Findings				
<ol> <li>Environmental load data generated throphone - According to the environmental load data Report 2011 is consistent with the data - No significant error was detected in the environmental sector and the sector sector and the sector and</li></ol>	that Bure collected	au Veritas reviewe and consolidated b	d, the y Hit	e information stated in the Hitachi Group Sustainability achi Head Office.
purpose. - No significant error was detected in origi	nal data a percentage percentage	nd evaluation resu e of products regist e of Super Eco-Pro	ts for ered ducts	as Eco-Products, the number of registered models, s and the number of registered models.
- No significant error was detected in the p				e of Hitachi products and services delivered
<ul> <li>No significant error was detected in the p</li> <li>No significant error was detected in the s</li> <li>3) The amount of contribution to CO<sub>2</sub> emis to market by the end of FY2010</li> </ul>				ent with the calculation criteria prepared by Hitachi

Bureau Veritas Japan review report

# Social Report





**Makoto Ebata** Senior Vice President and Executive Officer in charge of Procurement and Consumer Business, Hitachi, Ltd.

# Changing Our Business through Sustainable Procurement Activities Improving Transparency and Cultivating Human Capital for a Global Supply Chain

Escalating costs and a tightening supply of raw materials stemming from increases in worldwide demand, as well as the globalization of our operations, have transformed procurement for us in recent years. We must therefore accelerate the globalization of our entire supply chain while consistently procuring the materials we need.

Our key challenges are to ensure the transparency of our entire supply chain, to share information with suppliers, and to cultivate human capital worldwide. In Japan, we have built close relationships with, and have grown together with, our suppliers in what is essentially a family relationship. But these ties have eroded somewhat in a global procurement climate where equal partnerships have become the prime focus. We intend to build a global supply chain based on trust by localizing human capital while cultivating professionals worldwide.

"We'll change our business through sustainable procurement activities." With such a high aspiration and commitment, we'll create a sustainable procurement system that manages risk and builds business partnerships that meet mutual social responsibilities.

# Becoming a Corporate Group that Champions Diversity Seeking to Be a World-Class Enterprise Where All Employees Can Work Safely and Happily

We aim to be a global business solving global issues, and expect our businesses to grow worldwide and dramatically over the next decade, particularly in emerging countries. We therefore need to develop locally oriented management and employ, evaluate, and cultivate human capital worldwide, finding leaders to play key roles within the Hitachi Group.

That said, we have not yet fully identified the career and educational experience, and the skills, of all of our employees around the world. In keeping with our commitment to be a global company, I am eager to create a worldwide human capital database as well as a global grading system that we can use for developing the careers of our employees, worldwide.

We must maintain high standards of worker safety to develop globally, which is why we formulated the Hitachi Group Safety and Health Policy in fiscal 2010.

We intend to become a world-class, sustainable corporate group that motivates employees by helping them to achieve work-life balance and by accelerating diversity management.



Naoki Mitarai Vice President and Executive Officer General Manager of Human Capital Group, Hitachi, Ltd. **Environmental Report** 

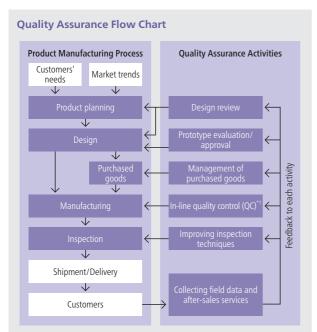
Social Report > Quality Assurance and Customer Satisfaction

# **Quality Assurance and Customer Satisfaction**

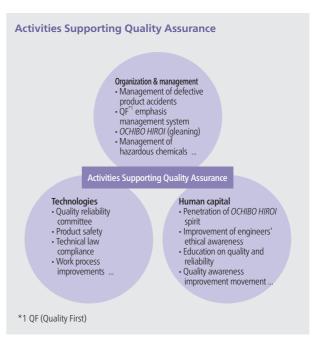
To reinforce our management structure, we improve the quality of products and services globally through our tradition of *monozukuri*<sup>+1</sup> craftsmanship.

## **Quality Assurance Activities**

To preserve our tradition of *monozukuri* craftsmanship from the customer's perspective, we are fully committed to Group-wide quality assurance—covering everything from product planning and development through to delivery and after-sales service. We support quality assurance in particular by activities that place the priority on organizations and management, technology, and human capital. In fiscal 2010, we launched the three-year Hitachi Group QF (Quality First) Innovation Movement to ensure product safety, compliance with laws and regulations, human resource development, and improved quality. We also concentrate on quality improvement outside Japan, especially in China and the rest of Asia.



\*1 In-line QC: Review and verification for identifying potential defects at the development and prototype stages of the product life cycle.



+1 monozukuri: manufacturing that combines innovative technologies with experience gained over many years.

# **Quality and Reliability Education**

We develop training courses for all technical and skill levels at divisions engaged in design and quality assurance. The courses include Reliability (Fundamentals and Applications) and Product Safety.

In fiscal 2009, we augmented management training with a course that reaffirms the mental attitude of Hitachi engineers. In fiscal 2010, we reinforced our *monozukuri* capabilities by starting a new course for section chiefs and above to reaffirm their way of thinking on technology and design.

A quality assurance training center at a manufacturing site in Hitachi City, Ibaraki Prefecture, Japan, helps to increase production, inspection, and maintenance skills. Other locations and manufacturing sites offer their own specialized technical courses.

# Strengthening Quality Assurance (QA) Systems in China and throughout Asia

China and other Asian nations account for much of our offshore production. We are therefore reinforcing systems and training to improve quality there. For example, we host the annual Conference for QA Managers in China to improve quality awareness and to share information. In fiscal 2010, we held a Conference for QA Managers in Thailand, our first such meeting in Southeast Asia.

We provide the two following quality reliability courses to develop QA skills in people worldwide by improving their quality awareness and inspection techniques:

- Basic Reliability Course: Deepens understanding of such basic issues as Hitachi's *monozukuri* craftsmanship, quality management, and labor safety.
- Intermediate Reliability Course: Boosts understanding of more practical issues in such areas as Hitachi's *monozukuri* craftsmanship, ISO 9001, defect elimination, design for reliability, and purchasing and vendor management.

# **Handling Product Accidents**

If a product malfunctions, the division responsible acts swiftly to resolve the problem from the customer's perspective, coordinating with other business units as needed. For an especially serious accident, we quickly submit a status report to top management, and the responsible company and Hitachi join hands to take fast remedial action. At the same time, we promptly comply with legal requirements to report to government agencies. We then publish the incident information through our Web site and other channels.

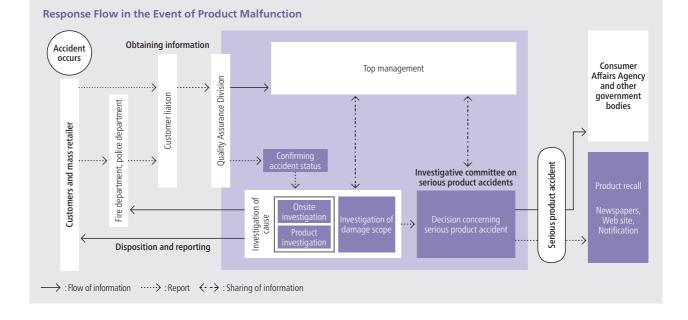
When we decide that a product recall is necessary, we notify the public through newspaper advertisements or our Web site, then repair or replace these products. Our Web site also provides detailed product safety information.

# **Customer Satisfaction**

Using the Customer Satisfaction (CS) Management Guidelines, one of the pillars of Hitachi's business management, we continue to improve CS with the goal of "creating innovation through collaboration with customers." We use CS surveys tailored to each business operation. In addition, we analyze customer opinions submitted to the Hitachi Customer Answer Center.

We host the annual Hitachi Group Service Business Liaison Council, chaired by the president of Hitachi, Ltd., whose members are presidents and departmental officers from Group and in-house service companies.

Participants at these gatherings share intra-Group information to reinforce after-sales service



for products and systems, including repairs and maintenance, and use that information to improve service quality and to ensure appropriate service costs.

### Customer Satisfaction Management Guidelines • Our customers determine the value of products and

- services · Information from our customers is the 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

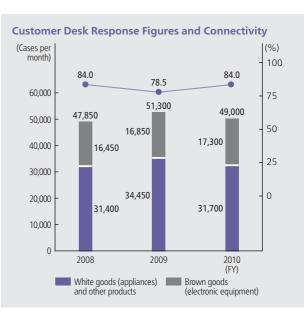
### Web Site Customer Support

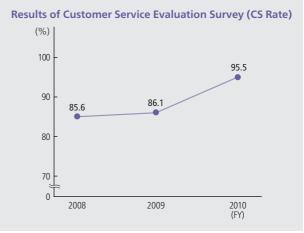
Our Web site provides comprehensive customer support. It enables us to process customer inquiries, opinions, requests, and complaints in collaboration with the customer support units of Group companies to improve our products and services. We also use educational and other initiatives to speed up and improve our response to these inquiries.

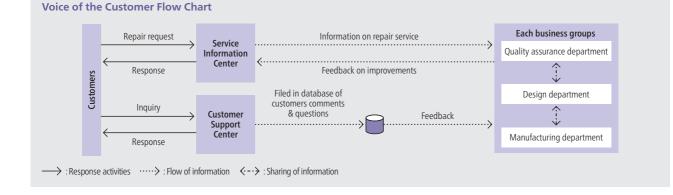
One of our initiatives is to hold the Web Inquiry Responsiveness Improvement Course, something we have done since fiscal 2009. To date, 176 Hitachi Group employees have taken this course, which features case studies based on responses to inquiries. Going forward, we will collaborate with Group companies to respond more quickly and effectively to customer inquiries, using this Web site as an important point of contact.

# **Electronic & Electric Equipment**

To ensure customer satisfaction, the Hitachi Customer Contact Center and a Web site handle customer inquiries and complaints about LCD TVs, washing machines, and other appliances.







The center receives about 600,000 phone calls and emails a year. We have undertaken the following initiatives to better respond to inquiries and to reflect customer feedback in our *monozukuri* craftsmanship:

- Third-party assessments of individual call center employees
- Training via monitoring the "voice of the customer" for design, quality assurance, and other departments
- Improved connectivity by outsourcing some operations during busy seasons
- Creating a database of direct customer feedback, including consultations, questions and complaints We conduct semiannual customer service

evaluation surveys at 100 service centers around Japan. Based on the survey findings, we improve service by upgrading employee education, especially through CS training courses and CS improvement months.

# Elevators and Escalators, Building Facilities Management

When we design and develop elevators and escalators, we use proprietary technologies to ensure peoples' safety and comfort. We make technical improvements based on their feedback. For elevators, for example, we adopt Universal Design when we design buttons, sensors to detect dog leads stuck in doors, as well as emergency systems that safely stop at the nearest floor and evacuation instructions during power outages or earthquakes. For building facilities management, our products improve our customers' efficiency and we respond to demands for more effective building facilities management. For example, we developed BIVALE, an integrated building facility management system that coordinates energy and security at multiple locations through the Internet. Our maintenance services subsidiary, Hitachi Building Systems Co., Ltd., has 350 service sites around Japan to swiftly respond to customers. State-of-the-art remote building monitoring and diagnostic systems observe and analyze elevators and escalators, and building facilities, 24/7, to perform preventive maintenance.

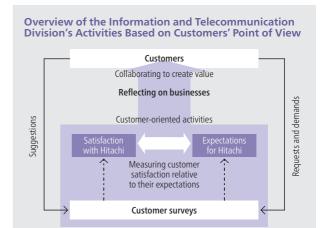
# Information and Telecommunication Systems Products and Services

The IT Systems Division is contributing to customer's business innovation by "collaborative creation" with its customers, drawing on Group-wide expertise and information technology. "Collaborative creation" is based on our customers' point of view, so we conduct an annual survey to gauge customers' satisfaction with our products and services.

Another goal of this survey is to improve our business by reflecting customers' opinions, not only satisfaction with our products and service, but also expectations of Hitachi. With customers' consent, we have donated the fee that customers received for participating in our survey to Good Earth Japan,<sup>+1</sup> a non-profit organization, since fiscal 2007.



Maintaining an elevator control board



+1 Good Earth Japan (GEJ) is a non-profit organization which is mainly engaged in helping people to rebuild their livelihoods in post-mine-clearance areas in Cambodia. GEJ started its activities in March 2007.

# **Universal Design**

Our operations touch on many aspects of society and daily living, and 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 before the product is purchased through to disposal.

### **Product Development Cycle and UD Guidelines**

In keeping with our UD philosophy, we maintain an "upward spiraling" product development cycle that completely involves customers and experts in basic research, guideline formulation, and product development. We draw on extensive research into consumer behavior and their characteristics to formulate UD guidelines for product development. The information obtained during product development goes into a database that our businesses share, and we distribute some of this information externally to promote open-source standardization and education initiatives.

### **Digital and Home Appliances**

We define people as customers as soon as a product interests them, so it is essential to consider quality in everything from pre-sales to disposal. Key attributes are usability, features, harmony with the environment, safety, and maintenance. Our intention is to tailor products to people's needs and lifestyles so that they become attached to them.

With washing and drying machines, for example, we widened doors and put in shallower drums to make it easier to remove clothes from the bottom of the drum. At the same time, we added a large white LCD display that is more visible and easier to use, as well as a "talking" button that instructs, indicates status, and helps resolve problems—at the press of a button.



The wide door



"Talking" button

Large white LCD display and "talking" button

### **Public Equipment and Systems**

Since these are to be used in public spaces, it is vital to design public equipment and systems that even children can use while optimizing security, privacy, and safety.

For example, we researched and commercialized a tabletop electron microscope to encourage more children to enjoy science. We made this microscope easy to use for novice teachers and children. This product received the Minister of Economy, Trade and Industry (Japan) Award in the Future Products Category of The 4th Kids Design Award 2010, sponsored by Kids Design Association.<sup>†1</sup>



Tabletop electron microscope

1 Kids Design Association: a nonprofit organization founded in 2007; started by companies and other organizations in Japan dedicated to creating and disseminating designs that promote the safe, secure and healthy development and growth of children.

### Web and Information Systems

These systems are vital for gathering information and communicating. For example, people with disabilities rely heavily on these systems and so we aim to make them more accessible, usable, and secure.

We developed a prototype gesture-based user interface for public information boards for large street maps, building floor guides, and other displays in public spaces. We lowered the screen and made it horizontal so wheelchair users and young children can operate it easily. This product won a Universal Design Award from Universal Design Germany<sup>†1</sup> in 2011 and also won an award in the Consumer Favorite category.



Person using a hand gesture to operate a public display screen

†1 Universal Design Award from Universal Design Germany: Sponsored by universal design e.V. of Hannover, Germany, and universal design GmbH. A panel of top international designers adjudicates on the Universal Design Award, while 100 consumers vote in the Consumer Favorite category.

# **Public Policy Initiatives**

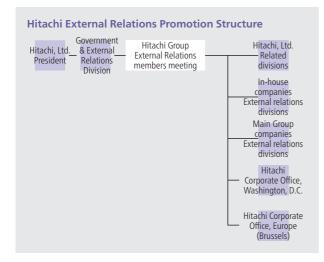
Partnerships with governments and policymakers around the world are vital for creating a sustainable society and growing our Social Innovation Business. Through external relations like these, we are able to have discussions with governments and groups from Japan, as well as other countries and regions, with the goal of providing optimal and relevant solutions for society.

### **External Relations Policy**

Our basic plan is to participate in decision making in countries and regions around the world and to contribute to developing a sustainable social infrastructure. In particular, we respond to social expectations by identifying risks within the Hitachi Group at an early stage and by making policy recommendations. For example, we may focus on the environment and "smart cities" as our particular area of expertise. With that plan in mind, we hold dialogues with a range of stakeholders, including government officials, non-governmental organizations (NGOs) and research institutes that have influence on social policies.

# **External Relations Structure**

We previously allowed every division to manage external relations for information and global



business. In fiscal 2009, however, the Government & External Relations Division (initially known as the Government & External Relations Office) was established within our headquarters to integrate and coordinate external relations. Outside Japan, we set up offices in Washington, D.C. and Brussels to monitor policy trends in North America and Europe. The key external relations initiatives include lobbying and communicating with governments; participating in government-led study groups and councils; contributing to policymaking by sending people to international institutions, public offices and external groups; and by participating in international groups such as the World Business Council for Sustainable Development (WBCSD). These activities are reported back to the Group as a whole through the Hitachi Group External Relations members meeting.

# **Stakeholder Engagement**

To help resolve sustainability issues, we invite local policymakers to stakeholder dialogues that we hold regularly, worldwide. In this way, we participate in wide-ranging exchanges of views on issues such as public-private cooperation and corporate involvement in policymaking. The increasingly globalized and complex nature of social and environmental issues requires flexible, dynamic partnerships that transcend governments, international institutions, NGOs and companies. Through dialogues with stakeholders in many



Stakeholder dialogues in Asia

regions, we will continue to identify problems that we can help solve as a company and thought leader in the area of Social Innovation Business. We take a multi-sided approach to sustainability issues, while ensuring full transparency in policy participation.

# Partnerships for Combating Global Warming

To help combat global warming, the Ministry of Economy, Trade and Industry (METI) of Japan has been investigating a new credit scheme where energy-saving products, high-efficiency coalfired thermal power plants, and other products and technologies where Japan leads the world, are only partially being used under the existing Clean Development Mechanism (CDM). We are committed to working with Group companies to contribute to this new scheme with our energysaving products and solutions. One example: in October 2010, Hitachi Plant Technologies was selected by METI for an open call for feasibility studies on a project to reduce carbon emissions by air conditioning using deep sea water in the Republic of Maldives.

# **Global External Relations Initiatives**

**Partnerships to Create Next-Generation Cities** We are pushing forward with a range of initiatives to create next-generation cities that have a low environmental burden by exploiting advanced technologies based on smart grids.

In fiscal 2010, we participated in the Japan Smart Community Alliance, established by the New Energy and Industrial Technology Development Organization (NEDO), as a member of the board. We are conducting studies and verifications on smart community projects not only in Japan but also in China, Spain, Hawaii, etc. , with the support of government organizations such as METI, Ministry of Land, Infrastructure, Transport and Tourism (MLIT) of Japan, and NEDO.

# The 12th EU Hitachi Science and Technology Forum

Hitachi Europe Ltd. and Hitachi, Ltd. have been organizing the EU Hitachi Science and Technology

Forum since 1998 to provide a platform for public policy debate, discussing how science and technology can contribute to solving Europe's social issues.

In May 2010, to celebrate Hitachi's 100th anniversary the Science and Technology Forum was organized by addressing the theme of Smart Energy Usage for a Sustainable Society. Over 140 people attended the forum, including business and government representatives, researchers from universities and research institutes, and other key figures from industry, government and academia, as well as representatives from NGOs. At the forum, we introduced technologies for a low-carbon society, such as hybrid trains and environmentally conscious data centers. During panel discussion, the topic of policies towards energy-efficient end-use and energy-efficient technologies was vigorously discussed.

Forum results were compiled into a report and shared with the European Commission, officials in the various European governments, and our business partners.



Panel discussion at the EU Hitachi Science and Technology Forum

Social Report
Communication with Shareholders and
Investors

# **Communication with Shareholders and Investors**

To ensure that shareholders and investors can make sound investment decisions, we provide the information they need in a fair, transparent and appropriate way that strives to enhance communication with them.

# **Policy on Information Disclosure**

We communicate with shareholders and investors guided by 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, including their relation to creating sustainable long-term value.

### **Disclosure Policy**

#### 1. Basic Policy

Hitachi's corporate credo 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 all stakeholders, including shareholders and other investors, customers, business partners, employees and regional communities. We will fulfill our 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 way, in compliance with the laws and regulations of the stock exchanges on which the Company is listed.

Hitachi discloses not only information required by laws and regulations, but also management and financial information that is regarded as useful in deepening stakeholder understanding of Hitachi management policy and business activities. Hitachi also discloses non-financial information on the social and environmental impact of Hitachi Group 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 laws and regulations of the stock exchanges on which the Company is listed. The Company also posts this information on Web sites immediately after it is disclosed. Hitachi also discloses information not required by laws and regulations by distributing news releases, holding press conferences and presentations, posting information on Web sites, 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

For disclosures, Hitachi may make statements that constitute forward-looking statements that reflect management's views with respect to certain future events and financial performance at the time of disclosure and include any statement that does not directly relate to any historical or current fact. Such statements are based on information available at the time of disclosure and are subject to various risks and uncertainties. Certain forwardlooking 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 diverse investor relations 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 2010, we held quarterly financial results briefings and corporate strategy meetings on the 2012 Mid-Term Management Plan, which promotes "Growth Driven by Social Innovation Business" and "Solid Financial Base." We hosted the first Hitachi IR Day, where company presidents and CEOs explained their businesses strategies under the 2012 Mid-Term Management Plan. Feedback from institutional investors and analysts was positive. One said, "We are better able to understand Hitachi's businesses ..., which I found useful for analysis." We plan to hold this event regularly. We also communicate extensively with individual investors through brokerage-sponsored briefings. We conduct one-on-one meetings with institutional investors and analysts worldwide. We convened more than 600 similar meetings in fiscal 2010, a

significant increase over last year. 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 briefings and other materials on our investor



The corporate strategy meeting on 2012 Mid-Term Management Plan

### **Disclosure Tools**

- Financial results
- Annual and quarterly reports pursuant to the Financial Instruments and Exchange Law of Japan
- Form 20-F filings with the United States Securities and Exchange Commission (SEC)
- Annual reports
- Hitachi Group Corporate Sustainability reports\*
- \* From fiscal 2011, Hitachi Group Sustainability Report

relations Web site. A part of the site, specifically designed for individual investors, provides information that cultivates a deeper understanding of the Hitachi Group.

# **General Meeting of Shareholders**

At the ordinary general meeting of shareholders, we offer audio-visual reports designed to give shareholders a thorough understanding of our situation.

After the general meeting of shareholders, our Web site discloses management policy explanations from the president for shareholders and investors. We post notices of general meetings of shareholders earlier than legally required to give stakeholders more time to consider our proposals.

# Socially Responsible Investment (SRI<sup>+1</sup>) and Sustainable Investment Assessments in Fiscal 2010

The Hitachi Group performed well in external assessments as a socially responsible and sustainability investment.

In fiscal 2010, DJSI World, a leading global sustainability investment index, chose Hitachi, Ltd. as a component stock for the second year in a row. This benchmark assesses the sustainability of around 2,500 companies worldwide, first looking at economic, environmental, and social development, then selecting the top 10 percent of companies in



Institution	Index	Companies selected	
SAM	DJSI*1 World	Hitachi, Ltd.	
	DJSI Asia Pacific Index	Hitachi, Ltd. / Hitachi Chemical Co., Ltd.	
EIRIS	FTSE4Good Global Index*2	Hitachi Chemical Co., Ltd. / Hitachi Capital Corp. / Hitachi High-Technologies Corp. / Hitachi Maxell, Ltd. / Hitachi Koki Co., Ltd.	
Morningstar	SRI Index	Hitachi, Ltd. / Hitachi Cable, Ltd. / Hitachi Chemical Co., Ltd. / Hitachi Construction Machinery Co., Ltd. / Hitachi High-Technologies Corp. / Hitachi Transport System, Ltd	

1 DISI (Dow Jones Sustainability Index): A global sustainability investment index that was developed by Dow Jones & Company (U.S.A.) and Sustainability and Sustainability investment index (SAM) Group (Switzerland). The Asia Pacific Index—covering Japan, Asia, and Australia—was launched in 2009.
\*2 FTSE4Good Global Index: An index developed in the UK by Ethical Investment Research Services (EIRS), which evaluates corporations, apart from specific industries, based on their environmental, social, and human rights performance.

each industry. We received the highest score in our industry for our new economic criteria for brand management and new environmental criteria for water-related risks. Our environmental initiatives scored the highest among all the companies. We also made the Silver Class in the Sustainability Yearbook 2011, published in February 2011, by SAM<sup>+2</sup> and PricewaterhouseCoopers.

1 SRI: Socially responsible investment, where investment funds evaluate companies and select stocks from a CSR perspective.

**†2** SAM: Sustainable Asset Management. A Swiss sustainability investment research and asset management company.

# **Basic Policy for Prevention of Takeovers**

We invest considerable management resources in basic research for the future and for the development of pioneering products and businesses. To ensure that these management measures bear fruit, it is necessary to maintain the continuity of management policies over a certain period of time. To this end, we keep shareholders and investors informed not only about management results for each term but also management measures looking ahead to the future.

We do not deny the significance of stimulating corporate activities or the economy through the transfer of management control rights. However, regarding large purchases of Hitachi and Hitachi Group companies' shares, it is necessary to cautiously assess the impact that such a purchase or purchase proposal would have on our corporate value and shareholders' joint profits, based on considerations such as the purchaser's business profile, future plans, and past investment behavior.

At present there is no imminent concern that any particular party will acquire a large amount of Hitachi's shares, and we have not established any special measures (anti-takeover measures), should such a purchaser appear.

Nevertheless, as a natural duty to our shareholders and investors, we constantly monitor Hitachi share transactions and movements, and if a party appears attempting to purchase large amounts of shares, we will immediately take the measures considered appropriate. Specifically, this will mean assessing the purchase proposal with the assistance of external experts, as well as negotiating with the purchaser. In addition, when such an acquisition does not contribute to our corporate value and the joint profits of shareholders, we will promptly determine the need for and contents of specific countermeasures, and set up a framework for their implementation. A similar response will be made in the event of any attempt to purchase large amounts of the shares of any Hitachi Group company.

# **Social Contribution Activities**

Our social contributions are tailored to local needs, but help to resolve the challenges facing a global society. In emerging economies, we are tackling poverty, starvation, disparities in education and medical care, and destruction of the environment.

# **Philosophy and Policy**

For social contributions, we are committed to resolving the basic social issues in the communities where we operate. We work in cooperation with Group employees, Group companies and our six foundations, based on our Social Contribution Philosophy and Policy. We are always mindful of our Group Vision of "tackling the basic issues faced by global society."

These activities help us to build trust with

## **Social Contribution Philosophy and Policy**

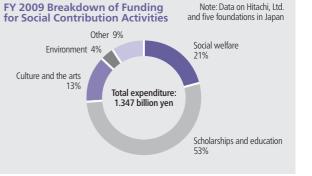
#### Philosophy

The Hitachi Group strives to demonstrate good corporate citizenship in response to social needs and expectations, while endeavoring to enrich the quality of life and realize a better society.

Policy

The Hitachi Group promotes various social contribution activities to build a vibrant society based on fostering leadership to implement reformation for the next era. This is achieved by making optimal use of our knowledge and information technology in three specific areas: education, the environment, and social welfare.

Adopted February 2002



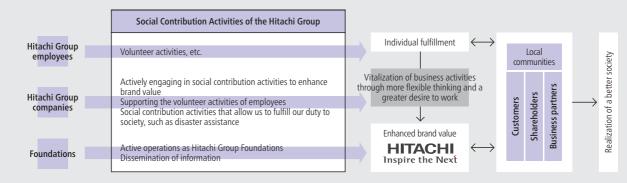
communities as a good corporate citizen and to inspire more flexible thinking, as well as a greater commitment in those employees who are helping to improve the social infrastructure in their communities. Through our innovations and social contributions, we foster the development of both local communities and sustainable business.

Hitachi, Ltd. and the five foundations in Japan contributed around 1.35 billion yen as social contributions in fiscal 2009.

WEB Hitachi: Global Community Relations and Activities http://www.hitachi.com/Int-e/skk/index.html

# **Education**

*Monozukuri*, the heart of our business manufacturing approach, is founded on sound human resources. We instill a keen sense of social awareness in our engineers and we nurture their ambition and technical capabilities to overcome



### **Approach to Social Contribution Activities**

new challenges and achieve their dreams. We do this to ensure that the technical and other expertise that our people have accumulated is useful for the development of the next generation of engineers.

# Providing Educational Support in Emerging Countries

Emerging markets are vital to Hitachi's business, while these same markets urgently need to create outstanding engineers and technicians to drive national development. We provide support for the development of young engineers and technicians in these countries.

In India, Hitachi operates the Hindu-Hitachi Scholarship Program in conjunction with a leading Indian newspaper, *The Hindu*. Under this program, three young engineers are invited to Japan every year from India for six months of training in technical skills, such as design and quality assurance as well as in the Japanese language. Around 130 young trainees have completed this program since it began in 1960.

To develop the next generation of leaders in Indian manufacturing, Hitachi India is also cooperating in the development of the Visionary Leadership for Manufacturing Program conducted by the Indian Institute of Management Calcutta, the Indian Institute of Technology Kanpur and the Indian Institute of Technology Madras and sponsored by the Confederation of Indian Industries. This program develops leaders with a clear vision and creates strong partnerships between industry and academia through cuttingedge research and development based on the needs of India's manufacturing sector. So far, Hitachi India has held two month-long internship programs, where students have gained a deeper understanding of the Hitachi Group. They also participated in a real industry project.

Hitachi will continue with these activities to help boost the level of manufacturing technologies in India.

Elsewhere in Asia, we have conducted the Hitachi Young Leaders Initiative since 1996 to offer university students from Indonesia, Japan, Malaysia, the Philippines, Singapore, Thailand and Vietnam, opportunities to raise their awareness of common issues in Asia by taking part in forums, panel discussions and fieldwork. In fiscal 2010, to celebrate the 10th anniversary of the program, and our own centennial, a special Alumni Forum was organized. We brought together alumni to discuss the theme of "Driving Asia to a new paradigmwhat is Asia's role in the global arenas?" At the opening of the forum the guest of honor, Mr. Teo Chee Hean, Singapore's Deputy Prime Minister and Minister for Defense, spoke of his hope that the program alumni and other promising young leaders would make a sustained social contribution. Asia's now global importance is expected to grow still further in the years ahead, so we will continue to contribute to a bright future and further growth in Asia through the development of next-generation human resources.



Students taking part in the Hindu-Hitachi Scholarship Program

## **Supporting Science Education**

We provide children with many opportunities to learn about science and technology. Our goal is to overcome an increasing disinterest in science, math and technology among the young generation and stimulate their interest and desire to learn.

Having concluded a basic agreement on partnership and cooperation with Hitachi City, Ibaraki Prefecture, Japan, in 2009 to back the city's drive to enhance science education, Hitachi, Ltd. provides support for the operation of the Hitachi Science Club, a non-profit organization founded in May 2009. The club consists of around 100



Conducting a scientific experiment (Hitachi Science Club)

retired employees from our plants and research institutes, including doctors, professional engineers, manufacturing engineers, and senior engineers with top-class specialist skills, who volunteer their services.

The Hitachi Science Club offers six programs, including dispatching volunteers to support science classes at elementary and junior high schools, operating a science and mathematics academy for junior high school students with a strong interest in these subjects, and organizing classes for hands-on experiments in making magnetically powered cars and water rockets. In fiscal 2010, 280 classes were held for 15,673 students. This year, volunteers are visiting 19 of Hitachi City's 25 elementary schools twice a week as special science consultants. They help to prepare science experiments and answer students' questions. This program will be extended to all elementary schools in the area during fiscal 2011. We are committed to supporting the Hitachi Science Club, so that these senior engineers can use the expertise and skills built up over the years to educate children and provide them with the opportunity to experience for themselves the joy of science and the wonder of creation.

Hitachi Plant Technologies, Ltd. has been running the Community Partnership Academy of Wisdom, an environmental and science program for students that leverages the company's expertise in air conditioning and water treatment. In fiscal 2010, instructors visited the Cairo Japanese School in the capital of the Arab Republic of Egypt to give some 30 pupils the opportunity to learn about buoyancy using model hot air balloons and about water purification using magnets (ballast water<sup>†1</sup> treatment experiment). The children took part in these experiments with enthusiasm, learning while having fun. This program has also been held in the United Arab Emirates and China. Hitachi Plant Technologies will continue to hold these locally geared programs worldwide to stimulate the interest of the children who are our future.

1 Ballast water: Seawater used for balancing a ship, which can harm marine ecosystems because the water is taken aboard and then discharged in different parts of the sea



Experiment using a hair dryer to suspend a model hot air balloon (Egypt)

### Some Other Hitachi Group Education Initiatives

Company	Initiative	Overview		
Hitachi Chemical Co., Ltd	Chemical experiment classes	Summer vacation observation classes for parents and children as well as chemical experiment classes are held at the company's four plants. In fiscal 2010, classes, including those for chemical experiments, were held at the Ibaraki University College of Science, Kaisei Academy and Hitachi City's Hitachi Eco-City Fiesta in Japan.		
Hitachi Maxell, Ltd.	Kyoto Edison Program	Hitachi Maxell's Kyoto Works has held an annual workshop for parents and children on building dry cell batteries every year since fiscal 2006. In fiscal 2010, the first classroom visits were held in elementary schools in Nagaokakyo City in Kyoto Prefecture, Japan. So far, classes have been held at 11 schools for 880 people.		
Hitachi Solutions, Ltd.	Internship program for solution experts	Internships are offered to undergraduate or postgraduate students about to move into the workplace so that they can experience firsthand and understand systems engineering and sales and marketing in an IT company. Since fiscal 2007, the company has hosted around 6,800 students, who have participated in business simulations and systems development under the guidance of company staff.		
Hitachi Construction Machinery Educational support for elementary school students Indonesia, PT (HCMI)		HCMI staff volunteers teach mathematics and English to children from disadvantaged homes at elementary schools in Bekasi and Cibitung in Indonesia. Since fiscal 2009, 12 HCMI employee volunteers have taught more than 100 students at three elementary schools.		



Chemical experiment classes (Hitachi Chemical)





Education support by staff volunteers (HCMI)

### TOPICS

### Outstanding Performance Commendation in the Barrier-Free, Universal Design Contributors Awards<sup>†1</sup>

One Hitachi program organizes volunteer visits by employees from the Hitachi Group to elementary schools to give hands-on workshops on Universal Design (UD). This program shows children the importance of UD from a product developer's perspective. In 2010, this program received the Minister of State for Special Missions' Outstanding Performance Commendation in the Ninth Barrier-Free, Universal Design Contributors Awards sponsored by the Cabinet Office in Japan. Since the program was launched in 2005, approximately 6,000 children from 98 schools have participated in 187 workshops.

Drawing on the experience of this program in Japan, a similar program has been launched, as of 2009, for elementary school students in the United States. Preparations are also underway for programs in the United Kingdom and Malaysia. This program will also be gradually extended to other countries and regions where the Hitachi Group operates, helping more children understand the UD philosophy.



Children's ideas for a remote control (U.S.)



A hands-on UD workshop

†1 Barrier-Free, Universal Design Contributors Awards: Launched by the Cabinet Office, Japan, in fiscal 2002, these awards honor individuals or organizations for service or performance in facility development or product development, promotion and dissemination of barrier-free UD.

### **The Environment**

Hitachi'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 planting trees and other environmentally conscious projects in keeping with the two main Environmental Vision priorities: prevention of global warming and preservation of the ecosystem.

### **Desert Afforestation Volunteer Program**

Since fiscal 2007, Hitachi, Ltd. has been organizing annual volunteer experience tours in conjunction with G-Net, a non-profit afforestation organization working in the Horqin Desert in Inner Mongolia, China. This program was designed to raise awareness of the environment and ecosystems among Hitachi Group employees in Japan and China and their families through their participation in afforestation. As well, it encourages them to consider what they can do personally and how they can begin to take action.

In fiscal 2010, 22 people—employees of the Hitachi Group in Japan and China and their family members—participated in the fourth tour, which ran for six days from September 17. To celebrate the International Year of Biodiversity, as well as Hitachi's 100th anniversary, one area of the desert was designated the Hitachi Group Forest. For the next decade, we will provide support for this afforestation project.



Volunteer Experience Tour to the Horqin Desert Afforestation Project in China

We will continue to work to preserve ecosystems, encouraging as many employees as possible to experience firsthand the importance of ecosystem preservation and to instill a sense of unity across the Group.

### **Woodland Preservation**

Hitachi Volunteer Seminars encourage employees to volunteer for worthy causes. In fiscal 2010, to mark the International Year of Biodiversity, three outdoor seminars were held in Okutama, Tokyo. The theme was going out into local woodlands on weekends. These woodlands are critical for preserving local ecosystems, recharging water resources and preventing natural disasters, but the impact of urbanization, depopulation, and aging in rural villages has caused woodlands to deteriorate. To help stem this trend, Hitachi Group employees and their families take on practical seasonal tasks, such as cutting back summer undergrowth, autumn thinning, and winter pruning. They learn firsthand the importance of preserving woodlands and the benefits of forests. About 100 people participated in these three seminars.



Woodland preservation in Okutama, Tokyo

### Other Hitachi Group Environmental Protection Programs

Company	Initiative	Overview
Hitachi Solutions, Ltd.	Terraced rice paddy restoration	The Hitachi Solutions Rice Paddy Project restores a part of rice terraces in Yokosawairi in Akiruno City in Tokyo. From June to November 2010, 66 employees took part. After the paddies were restored, though harvests have been small, some fireflies have returned.
Hitachi Electronics Services Co., Ltd. Kansai Regional Office	Forest preservation	In May 2010, company employees and their families, about 25 people in all, thinned trees in a forest in Sendaiji in Ibaraki City, Osaka Prefecture, Japan. They used the wood to try their hand at making charcoal. In November, 15 employees cleared away and thinned trees on the hillsides behind the Ibaraki City Satoyama Center.
Hitachi, Ltd. Information & Telecommunication Systems Company	Hakone Forest Restoration Project	In October 2010, around 150 Hitachi Group employees and family members helped conserve trees in the 21st Century Forest (Minamiashigara City, Kanagawa Prefecture, Japan) in conjunction with the Kanagawa Forest Instructors' Association. In addition to thinning trees and clearing underbrush, they observed nature and learned woodcraft.
Hitachi Terminals Mechatronics Philippines Corporation (HTMP)	Adopt-A-Forest Program	Since fiscal 2006, HTMP has been participating in the Adopt-A-Forest Program, a project initiated by the Subic Bay Metropolitan Authority (SBMA) Ecology Center, Philippines. In June 2010, 18 HTMP employees planted around 400 fruit tree seedlings. HTMP plans to continue with regular maintenance and planting.



Terraced paddy field restoration (Hitachi Solutions)



Making charcoal (Kansai Regional Office, Hitachi Electronics Services)



Adopt-A-Forest Program (HTMP)

### **Social Welfare**

We also support social welfare projects to ensure 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 Activities in North America

The Hitachi Community Action Partnership (HCAP) is a program of The Hitachi Foundation (U.S.) and the Hitachi group in North America. Community Action Committees (CACs) led by employees from Hitachi Group companies throughout the region, provide support for non-profit organizations with programs focused on local needs. Today, 40 CACs are active in North America, with employees representing 47 business locations from 19 Group companies.

In April 2010, 16 Hitachi Consulting employees from the southern California area volunteered to build houses with Habitat for Humanity. This NGO builds houses for people in need, including victims of disasters, in 100 countries around the world. In July, more than 7,350 employees from 28 Hitachi Group companies in North America also took part in the 11th Annual Hitachi North America Food Drive, a month-long food donation campaign. They collected around 21 tons of food and received about US\$80,000 (around 6.8 million yen) in donations. All the food and cash donations were given to local food banks and NPOs (non-



Habitat for Humanity volunteers



Participants in Food Drive

profit organizations) in North America offering food programs. The total was about enough to feed 27,000 people for a week.

To improve their effectiveness, CACs use a selfassessment tool called the Mastering Community Action Framework that measures their operations and activities against clear, concrete benchmarks.

# Making a Social Contribution through Sign Language

For visitors with impaired hearing, Team Swan, formed in February 2005 by Hitachi Group employees with hearing disabilities, provides sign language services at events around Japan. Team Swan began with the goal of providing accurate information through detailed explanations for the hearing impaired, who are often left behind as information becomes more diverse and complex.



Employees on Team Swan talking to customers in sign language

In March 2011, the team had eight signers, who provide explanations at company and outside events as well as at retail consumer electronics stores. They also hold exchange meetings with schools for the hearing impaired. These volunteers normally work in their departments, but say that being able to help other people in the same position through Team Swan has boosted their own motivation to work. In 2010, Team Swan was featured on *The Nikkei* Web site and in *Shougaisha ga Kagayaku Soshiki* (Organizations Where the Hearing Impaired Shine), a book available from Nikkei Publishing.

### TOPICS

### **IT Education at Child Care Centers**

Hitachi Information Academy Co., Ltd. (Hitachi IA) is an IT training organization that operates Smile Delivery, a program that sends Hitachi volunteers to child care centers to teach children basic computing skills. In June 2009, the company launched a "wish" system for all employees to suggest ideas; the Smile Delivery program grew out of a suggestion from one employee. In February 2009, this Hitachi IA employee—who was participating in social contribution evening classes<sup>†1</sup> organized by Hitachi, Ltd.—heard a lecture on support for child care institutions. She realized that if she didn't act, nothing would change. Once her suggestion was adopted, an email was sent to all employees looking for volunteers. Thirty people responded, and thanks to their cooperation and understanding, the program was launched in March 2010. It operates under the auspices of Kibo-no-le (Hope House), a social welfare public corporation based in Katsushika Ward, Tokyo. Three classes have been held so far. The children have said that it was an interesting first-time experience, and that it was so much

fun that they would like the volunteers to visit again. Ms. Asami Matsuno, the person who suggested this idea, hopes that the project will continue, becoming a model not just for her own company but also for other Group companies.



Asami Matsuno (right) from the Training Service Division, original proponent of Smile Delivery, and volunteer Aoi Kozuki from the Marketing Division

1 Social contribution evening class: Lectures given regularly to foster the volunteer spirit in Hitachi Group employees

<b>Other Hitachi</b>	Group	Social	Welfare	Initiatives
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Company	Initiative	Overview
Hitachi Information Systems, Ltd.	Interview support for people with disabilities	To help people with disabilities find work and to participate in social activities, we work with Tsukuba University of Technology, Ibaraki Prefecture, Japan, to hold mock job interviews for people with disabilities, who also receive guidance on job seeking, including how to market themselves and how to write a résumé.
Hitachi Cable, Ltd.	Volunteer activities of the Marathon Club (Support for visually impaired athletes)	Employees in the Marathon Club volunteer in local communities. At the Kasumigaura Marathon and International Blind Marathon held at Ibaraki Prefecture, Japan, they assist visually impaired runners, including running alongside as escorts.
Hitachi Transport System, Ltd.	Traffic safety education	Hitachi Transport System provides traffic safety education for elementary school students. In addition to learning basic traffic safety, students take part in experiments. For example, they learn about blind spots and the difference between where a truck's front and back wheels go when it turns a corner. In fiscal 2010, 305 students took part in this program. Traffic safety education was also provided for the elderly, with around 30 people participating.
Hitachi Global Storage Technologies China Operation	Morning Sun Program	In this voluntary program, Hitachi employees contribute 800 yuan per year— individually or as a group—towards a fund for children who are living in poverty in Gongby Town in Guangdong Province, China. In fiscal 2010, more than 50 employees helped support 16 children. The fund supports the children by providing them with the daily necessities.



Volunteers escort blind runners (Hitachi Cable)



Traffic safety education for children (Hitachi Transport System)



Hitachi employees visited the children supported by the Morning Sun program with the school bags donated by the company. (Hitachi Global Storage Technologies China Operations)

### **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 sound development of young people, and developing good corporate citizenship in the United States.

### **Hitachi's Foundations**

The Odaira Memorial Hitachi Education Foundation The Hitachi Environment Foundation The Kurata Memorial Hitachi Science and Technology Foundation The Hitachi Mirai Foundation The Hitachi Scholarship Foundation The Hitachi Foundation (U.S.)

WEB The Foundation in Hitachi Group http://www.hitachi-zaidan.org/global/index.html

### Yoshiyama Young Entrepreneurs Program

In fiscal 2010, The Hitachi Foundation (U.S.) launched the Yoshiyama Young Entrepreneurs Program, the successor to the Yoshiyama Award for Exemplary Service to the Community, which had run since 1988, more than two decades. The original Yoshiyama Award honored high school seniors in the U.S. for their community service and social change efforts. The award included a cash prize and participation in a four-day program that included a commendation ceremony and leadership training.

The new program provides young entrepreneurs who are operating a business aimed at helping to improve the lives of underprivileged individuals in the United States, and who began their businesses before they reached the age of 30. In fiscal 2010, nine young people were named Yoshiyama Young Entrepreneurs. They represent six enterprises that help farm and forestry workers, female immigrants, and support underprivileged entrepreneurs. Each enterprise received a cash prize of US\$50,000 (given out over two years) as well as mentoring and technical assistance to help grow their business.

The Hitachi Foundation looks forward to



Award winners growing gourmet mushrooms with waste

drawing on the experiences and lessons learned by these young entrepreneurs to address the sustainable business practices and the role of business in improving lives and strengthening communities.

WEB The Hitachi Foundation (U.S.) http://www.hitachifoundation.org/

### **Support for Volunteer Activities**

We support employees who volunteer in three ways: with information, time off, and funding support. For information, we publish information about volunteer activities at seminars and on our intranet. In fiscal 2010, we sponsored four seminars, including three outdoors. For time off, we provide employees with special annual paid leave on top of their regular holidays which they can use for volunteering or for other forms of selffulfillment. For funding support, we operate The Growing Tree, a volunteer program that provides financial assistance to non-profit organizations that Hitachi employees are involved with or support as volunteers. Assistance was given in 12 cases for around 3.2 million yen in fiscal 2010.

### Main Activities Supported by The Growing Tree (FY 2010)

Training volunteers for environmental protection

Helping Japan's farmers, who are struggling with a labor shortage because of depopulation, aging, and the falling rate of food self-sufficiency

Putting up side fences for sports fields for blind soccer players

# Disaster Relief and Recovery

# Recovery Support for Areas Affected by the Great East Japan Earthquake

As of June, 2011, the Hitachi Group decided to provide support with a total value of 940 million yen, including the provision of flat-panel TVs, dry cell batteries, and Disaster Victim Support Systems<sup>†1</sup> for local municipalities with no charge and to aid victims of the disaster and to assist in recovery efforts (see pages 010–014).

†1 Disaster Victim Support Systems: A system that provides support to operations undertaken by municipal governments in the event of an earthquake or other natural disaster. The system's program is provided by the Local Authorities Systems Development Center (LASDEC).

### Support for Disaster Recovery in Oceania

Torrential rains in northeastern Australia at the end of 2010 caused catastrophic flooding. In Queensland, collapsed river banks and dykes, among other problems, created terrible flood damage over a wide area. Hitachi Australia and four Hitachi Group companies donated AU\$50,000 (around 4.1 million yen) to the Premier's Disaster Relief Appeal administered by the Queensland government.

Following the 6.3-magnitude earthquake that occurred in Christchurch, New Zealand, in February 2011, the Hitachi Group donated NZ\$100,000 (approximately six million yen) for victim relief and for rebuilding the city.

# **Respect for Human Rights**

Cherishing humanity is fundamental to management at Hitachi. When operating globally, we respect human rights based on international codes for all of our stakeholders, appreciating the cultures of every country and region to enhance our understanding of their values.

### **Human Rights Policies**

We established the Hitachi Group Codes of Conduct in 2010. Central to these rules are respect for national and regional laws as well as universal human rights based on international norms. Our codes clearly require: respect for the individuality and personalities of everyone related to our business; the elimination of discrimination in recruitment and employment; and respect for basic human rights in all workplaces. We have translated the codes into 17 languages to improve human

### Hitachi Group Codes of Conduct Chapter 4 Respect of Human Rights

### 4.1 Promoting Respect of Human Rights

(1) We will respect international standards of conduct regarding human rights, and strive to ensure that we do not engage in any conduct that obstructs or interferes with human rights.

### **4.2 Eliminating Discrimination**

(1) We will respect every person's character and individuality in the recruitment and treatment of employees, the conduct of commercial transactions, and all other company activities, and not engage in any acts that impair individual dignity or discriminate on the basis of sex, age, nationality, race, ethnicity, ideology, belief, religion, social status, family origin, disease, disability, etc.

### 4.3 Respect of Human Rights in Information Management

(1) We will establish information ethics based on consideration of human rights and the maintenance of security in information handling, to prevent in advance the emergence of problems from personal information leaks, computer viruses, and unauthorized access.

### 4.4 Respect of Basic Rights at Work

(1) We will advance employment with proper consideration for corporate social responsibility. We will hire employees in accordance with the governing domestic, foreign and local laws in each country and region. We will not use child labor that employs children below the minimum working age or coerced labor that is against the will of the workers.

- (2) We will conduct procurement with proper consideration for corporate social responsibility, and will not procure goods or services from enterprises that utilize child labor or forced labor.
- (3) Considering the laws and regulations and labor practices in each nation and region, and respecting the basic rights of employees presented as the principles of the United Nations Global Compact, we will strive to have employees and managers better understand each other's problems and resolve issues jointly through genuine and constructive dialogue.

rights awareness among all Group employees worldwide.

# Framework for Promoting Respect for Human Rights

Hitachi, Ltd. established the Central Human Rights Promotion Committee to deliberate on mechanisms and policies to prevent human rights violations. A Hitachi, Ltd. executive officer chairs this body, whose members include representatives from sales, procurement, human resources, and other corporate units. Information from deliberations is

# Hitachi, Ltd. Framework for Promoting Respect for Human Rights Central Human Rights Promotion Committee Chairperson: Executive Officer Members: Personnel in charge of corporate divisions such as marketing, procurement, human resources, and other divisions Company and Business Site Committee Chairperson: In-House Company Presidents and Division Heads Members: Division managers Company and Business Site Committee Chairperson: In-House Company Presidents and Division Heads Members: Division managers Company and Business Site Committee Chairperson: In-House Company Presidents and Division Heads Members: Division managers Members: Division managers

shared with all employees through company and business site committees, led by company and division executives.

### **Raising Awareness of Human Rights**

Hitachi improves Group-wide human rights awareness based on guidelines from the Central Human Rights Promotion Committee. We augment business units' regular group training, seminars, and video education sessions with the human rights e-learning course that the 260,000 employees of all 440 Group companies in Japan take once every three years.

We collaborate with our European CSR team to produce educational materials that include concepts from regions where human rights practices are advanced. We maintain a framework to more swiftly detect and resolve internal and external human rights violations. This framework includes the Compliance Reporting System, a sexual harassment consultation system, and employee awareness surveys. We strive to identify human rights risks globally through regular management and business risk assessments.

### **Applying Human Rights Worldwide**

We have developed educational programs and management best practices in Europe, which we believe is the most advanced in addressing human rights and business. We intend to apply these programs and practices worldwide as a global enterprise to ensure that Hitachi Group employees and businesses consistently respect human rights.

Our European CSR team collaborated with European Group companies to launch a human rights project. We follow the work of Professor John Ruggie, Special Representative of the Secretary-General of the United Nations on business and human rights, and support his framework, Protect, Respect and Remedy. The work during the early stages of the project is setting up Hitachi in Europe to implement the framework across its businesses. We are educating employees on human rights, ensuring that all relevant standards and policies are up to date, and establishing business specific action plans. Sixty percent of senior management-level employees at European Group companies completed Senior Manager training in fiscal 2010. In March 2011, Hitachi Europe, Ltd. conducted a stakeholder dialogue on human rights with representatives from the European Commission, international bodies, national governments, and nongovernment organizations. Executives from Hitachi, Ltd. attended this gathering. We gained valuable insights into the human rights activities that the Hitachi Group must consider in global business activities.



Stakeholder dialogue in Europe



### Acting with a Sense of Global Responsibility



**Richard Howitt MEP** European Parliament Rapporteur on Corporate Social Responsibility

I welcome this Sustainability Report and Hitachi's journey to move beyond being a Japanese headquartered company to being a truly global company. With this global status also comes a global responsibility.

It is vital that as a leading player in sustainability that Hitachi continues to take a leadership role on Corporate Social Responsibility (CSR). Your focus on Social Innovation Business from clean trains to smart grids marks a step forward in promoting measurable advances on sustainability,

Hitachi has also been one of the few companies who commit publicly to a human rights approach. Your objective is clear, to foster a culture where there is awareness, understanding and appreciation of human rights at all employee levels, and to ensure that international human rights standards are understood and met across your business. I hope Hitachi will actively take a leading role in promoting both the UN Guidelines on Business and Human Rights as well as increased transparency, bringing financial and environmental, social and governance issues together, side by side in one integrated report.

During the year I had the pleasure of visiting your plant in Narashino and meeting both management and workers which was truly enlightening for me in my work on global CSR. I look forward to working more closely with you as part of my continuing work, and hope for your support in developing collaborative ventures on CSR between the Japanese Ministry for Economy Trade and Industry (METI) and the European Commission.

In conclusion, although establishing itself globally Hitachi will I am sure never forget its roots in Japan and will be part of the work to rebuild the Japanese economy and Japanese communities following the horrific earthquake and tsunami. The challenges are huge but the determination is tangible.

Social Report Supply Chain Management

# **Supply Chain Management**

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

### **Promoting Globalization**

Using the 2012 Mid-Term Management Plan, we intend to raise the Group's global procurement ratio from 36 percent to 50 percent by fiscal 2012. We therefore formulated the Hitachi Group Medium-Term Procurement Strategic Plan. The key aims are 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 order to accelerate these Group-wide activities, we set up the Global Procurement Promotion Department within the Corporate Procurement Division to boost the global procurement ratio. We are continuing to reinforce our responsiveness to CSR risk, a growing concern as the global supply chain expands.



### **Sharing Procurement Policies**

We revised the *Hitachi Guidelines for Procurement Activities* in June 2009 in line with the United Nations Global Compact.<sup>11</sup> These guidelines are the basis of our procurement activities. The revision added the elimination of discrimination in employment and occupations as well as all forms of child and forced labor. We will share global supply chain issues within the Group and reinforce procurement in line with the *Hitachi Guidelines for Procurement Activities.* 

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. As of March 2011, 8,711 organizations are supporting the UN Global Compact (of these, 139 are Japanese).

### **Guidelines for Procurement Activities**

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

- 1. Overall procurement activities of Hitachi shall adhere to the "HITACHI Company Conduct Standards."
- 2. HITACHI shall maintain proper partnerships, mutual understanding, and reliable relationships with suppliers with a view to the long term results.
  - 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.
  - HITACHI responds to all suppliers' offers sincerely, and is always willing to offer the information necessary for suppliers to compete on an even playing field.
  - (2) HITACHI shall periodically check and review suppliers' performance and will consider offering more advantageous business opportunities when comparison with other resources allows.
- 4. Through a designated selection process, suppliers shall be evaluated by product quality, reliability, delivery, price, suppliers' business stability, technical development ability, fair and transparent information release, compliance with societies'

rules, regulation compliance, respect for human rights, elimination of discrimination in respect of employment and occupation, elimination of all forms of forced and compulsory labor, environmental preservation activities, social contributions, good working environment, and recognition of social responsibilities with business partners.

- (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 suppliers.
- 5. HITACHI members are prohibited from receiving any personal gifts or offers from suppliers.

Revised in 2009

\*All companies in the Hitachi Group act in accordance with these guidelines.

### **Building Partnerships**

The Hitachi Group values partnerships and an open-door policy with suppliers. We strive to maintain and reinforce mutual understanding and trust over the long term. We also employ worldwide perspectives, choosing suppliers in line with the principles of free competition and equal opportunity. One special priority is to cultivate and expand the pool of suppliers in the emerging nations that we have positioned as major markets.

Following a 2009 initiative, we dispatched another team in October 2010 to seek new suppliers in Vietnam. We gathered information from the Japan External Trade Organization and other countries' trade bodies on companies that were the focus of our research. We are reinforcing procurement in Southeast Asia, China, South Korea, India, and Eastern Europe to build our Social Innovation Business. We also set up a procurement unit in Brazil in April 2010 to broaden our South American supplier network.

### **Helping Create International Guidelines**

As a founding member of the advisory group for the United Nations Global Compact on Sustainable Supply Chains, we support initiatives to build and foster sustainable supply chains that follow UN principles on human rights, labor, the environment, and anti-corruption. In fiscal 2010, we helped formulate guidelines on supply chain sustainability, supply chain Web sites, and on-line assessment and study tools for organizations participating in the UN Global Compact. We will keep serving as an opinion leader by supporting these UN activities, drawing on our expertise from our global



operations in dealing with sustainability issues, such as human rights and the environment.

Guidelines on Supply Chain BSR Sustainability

WEB UN Global Compact http://www.unglobalcompact.org/

### **Sharing CSR Awareness**

In fiscal 2009, we produced the *Hitachi Group Supply-Chain CSR Deployment Guidebook*, which conforms to the guidelines of the Japan Electronics and Information Technology Industries Association. We distributed this publication both throughout the Group and to our suppliers. We plan to evaluate progress on CSR among suppliers worldwide to reinforce mutual understanding and communication about social issues.

WEB Hitachi Group Supply-Chain CSR Deployment Guidebook http://www.hitachi.com/procurement/policy/\_\_icsFiles/afieldfile/2010/08/30/ SC\_CSR\_E\_2.pdf

### Green Procurement<sup>+1</sup>

In keeping with our commitment to *monozukuri* craftsmanship, we use green procurement in our supply chain.

**†1 Green procurement**: Procuring parts and materials that reduce the environmental burden from suppliers that protect the environment.

### **Green Procurement Guidelines**

We developed Green Procurement Guidelines

to secure the understanding and cooperation of suppliers in conservation and in reducing environmental burdens when developing and making their products. There are six specific supplier requirements: (1) conserve resources, (2) conserve energy, (3) pursue the 3Rs,<sup>11</sup> (4) reduce packaging, (5) rigorously manage chemical substances, and (6) fully disclose information. For requirements (1) through (4), we present case studies of initiatives that have benefited both the environment and suppliers because they have cut costs and improved product functionality. For requirement (5), we specify the chemicals used in products from suppliers and have them register those substances in the Green Procurement System.

†1 3Rs: Reduce, reuse, and recycle

WEB Green Procurement Guidelines http://www.hitachi.com/environment/library/pdf/green\_en.pdf

### Helping Build Environmental Management Systems

To promote green procurement, we ask suppliers to develop environmental management systems that third parties can certify. Suppliers with these certifications become Green Suppliers. With these Green Suppliers, we launched the New MMM Club,<sup>+1</sup> where members exchange information on advanced environmental technologies, regulations, and outstanding environmental initiatives by suppliers. We will continue to encourage suppliers to lower environmental risk and costs, while we keep building win-win relationships with these suppliers through green procurement.

†1 The 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 mottainai.



New MMM Club General Meeting

### **Orientation on REACH<sup>†1</sup> Compliance**

Hitachi, Ltd. business sites and Group companies held a supplier orientation on REACH compliance. To ensure compliance with Europe's REACH regulations, they focused on surveys of chemical substances in products.

Suppliers found the event stimulating. We explained our response and other REACH-related initiatives to the over 900 participants at the fiscal 2010 gathering.

1 REACH regulation: Registration, Evaluation, Authorization and Restriction of Chemicals (EU)

### **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-sourcingMall. This system has a range of environmentally conscious products. It promotes purchasing by clearly labeling these products. For fiscal 2010, our green purchasing rate reached 95 percent, clearing the year's goal of 90 percent.

### **Response to Conflict Minerals<sup>†1</sup> Issue**

The Dodd-Frank Wall Street Reform and Consumer Protection Act was signed into law in the United States in July 2010. One provision under the Act obliges companies with securities registered in the U.S. that use in their products any conflict minerals produced in the Democratic Republic of Congo (the "DRC") and adjoining countries (together the "DRC countries") to report this to the U.S. Securities and Exchange Commission (SEC). The aim of the provision is to cut off revenues from armed groups that are engaged in violence and other serious breaches of human rights in the conflict-ridden DRC countries. Pursuant to the Act, the SEC plans to promulgate regulations requiring that companies using any conflict minerals in their products disclose in their annual reports whether these conflict minerals originated in the DRC countries.

Hitachi is committed to the pursuit of responsible procurement practices and has no intention, directly or indirectly, of abetting the human rights violations identified in the DRC countries. Accordingly, we are working with Group companies and suppliers to boost supply chain transparency and to ensure that the minerals we procure do not finance or benefit armed groups committing human rights violations.

**†1 Conflict minerals**: "Conflict minerals" are defined under the Dodd-Frank Act as the following minerals or their derivatives:

- Columbite-tantalite, also known as coltan (the metal ore from which tantalum is extracted);
- Cassiterite (the metal ore from which tin is extracted);
- Gold;
- Wolframite (the metal ore from which tungsten is extracted); and
  Any other mineral or its derivatives determined by the U.S. Secretary of State to be financing conflicts in the DRC countries.

# **Diversity Management**

We have a range of initiatives that help us become a company that develops employees' abilities or ideas and empowers them to realize their potential. We are committed to creating an attractive work environment by, for example, appointing more female managers, and improving child and nursing care support.

### **Diversity Development Project**

We launched the Diversity & Inclusion Development Project in fiscal 2006 to encourage a good worklife balance. Initiatives within the program include developing and enhancing support for employees in balancing work with child care or nursing care for family members. We also advance women in the workplace through the strategic development of female managers and a proactive hiring policy, in line with our goal of ultimately achieving an equal ratio of males and females in key management positions.

In addition, we continue to educate and raise the awareness of employees. We are expanding our training options to include courses on deepening understanding of diversity management as well as courses that employ corporate lectures and World Café-style dialogues.

In May 2010, we received the Corporate Prize in the Best Mother Awards held by the NPO Japan Mothers Society in recognition of our programs.



Award ceremony for the Best Mother Awards

President (o	verall executive in charge)
	Advisors: External directors
	Advisory Committee: Executive Vice Presidents, Vice President in charge of personnel, managers in charge of labor administration in Group companies
Diversity De	velopment Group Council
	Secretariat: Diversity Development Center
	Members: People in charge of diversity development within Group or internal companies and offices
In promoting of opinions with	liversity, we hold regular meetings to exchange labor unions.

### **Diversity Development Project Structure**

### Work-Life Balance-up! Month

As part of the Diversity Development Project, we are improving employees' work-life balance. In November 2010, we held the Work-Life Balance-up! Month (WLB-up! Month) throughout the company to increase awareness and understanding of how we support work-life balance. At the start of the month, a message from the president was sent out, and a pamphlet was distributed outlining child care and nursing care support programs and how to use them. Other steps included delivering a mail magazine, calls for *senryu* (satirical poetry) submissions, and release of the WLB-up! Declaration.<sup>+1</sup> Individual companies and offices also had their own campaigns geared to their particular circumstances. Employees reported back that the campaign was easy to understand, and that they would like it to keep going. To meet these expectations, we will continue, as well as improve, these programs.

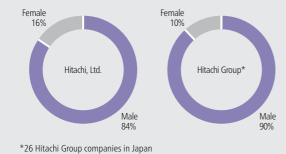


**†1 WLB-up! Declaration**: An initiative where all employees outline their own work and life goals, which are shared in the workplace

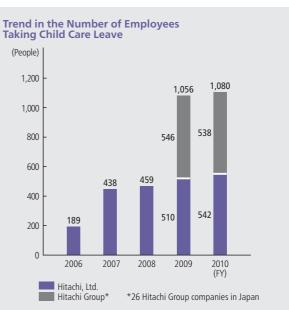
### Acquiring "Kurumin" Certification

In February 2011, Hitachi, Ltd. acquired certification under the Act on Advancement of Measures to Support Raising Next-Generation Children, also known as "Kurumin" certification. This is granted to companies that create action plans for child care support in line with the act and meet the performance requirements.

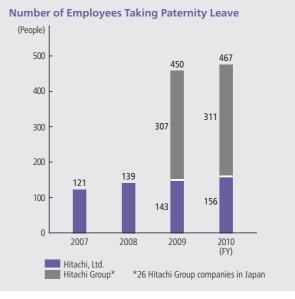


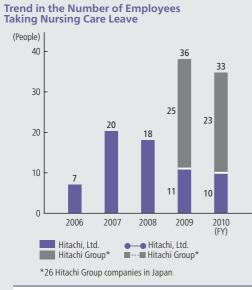






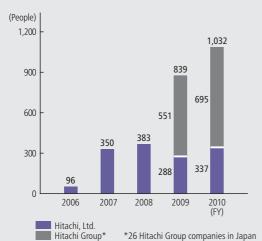
Breakdown of Male and Female					
	2006	2007	2008	2009	2010
Female	183	436	451	504 (533*)	525 (522*)
Male	6	2	8	6 (13*)	17 (16*)
Total	189	438	459	510 (546*)	542 (538*)





Breakdo	Breakdown of Male and Female					
	2006	2007	2008	2009	2010	
Female	5	10	8	6 (10*)	7 (9*)	
Male	2	10	10	5 (15*)	3 (14*)	
Total	7	20	18	11 (25*)	10 (23*)	

### Trend in the Number of Employees Working Shorter Hours



Breakdown of Male and Female					
	2006	2007	2008	2009	2010
Female	94	349	381	287 (543*)	330 (688*)
Male	2	1	2	1 (8*)	7 (7*)
Total	96	350	383	288 (551*)	337 (695*)

## TOPICS

### **Family Day**

One workplace-specific event during WLB Month was a family day; it was also held at Hitachi, Ltd. headquarters in December 2010.

Employees' families were invited to the headquarters office on a holiday to see the place where their family members work, to learn about Hitachi's history and to eat in the cafeteria. The goal was to deepen the families' understanding and empathy toward employees' jobs and encourage a sense of pride and satisfaction for working at Hitachi.

On that day in December, 180 people from 56 families came to the office, getting an up-close look at workplaces and learning about our company.



Employee family members looking around the workplace

### Main Assessments & Awards

Hitachi, Ltd. has received the following assessments and awards from the media and related organizations to recognize diversity and other initiatives that create more employee friendly workplaces:

- Nihon Keizai Shimbun, 2010 Ranking of Companies with the Best Working Conditions: 4th place
- Nikkei Business Publications, Inc., 2011 Ranking of Companies that Encourage Working Women: 12th place

### **European Diversity Project**

We believe that workplaces that value diversity attract the best human resources and that they excel at innovation and business. Hitachi Group companies in Europe have undertaken the European Human Rights and Diversity Project as one way of addressing the priority issue of human rights, promoting equal opportunity and eliminating all forms of discrimination.

According to a survey conducted by Hitachi Group companies in Europe in fiscal 2010, the ratio of Group female employees, including managers, was below the average of other European companies.

To boost diversity awareness among all employees at Hitachi Group companies in Europe,

the European Human Rights and Diversity Project team developed an e-learning program available in English, French, German and Italian that was distributed to all Group companies in Europe. The aim is to educate 80 percent of employees by the end of fiscal 2011.

In the coming years, Group companies will track the goals and ratios for gender in employment and management positions, and Hitachi Europe Ltd. too is looking at appointing female executives by the end of fiscal 2013.

These activities have been welcomed in Europe and have been presented at the Enterprise 2020 MarketPlace of CSR Europe and other international conferences.

### VOICES



### Internship Program for Female Athletes

Lisa Dearborn Senior Director, Diversity, College Programs, and Communications Hitachi Data Systems

Hitachi Data Systems is launching a program in the United States that focuses on recruiting college women who are athletes: the Women's Athletic Intern Program (WAIP). The motivation for WAIP is simple: to be successful in their chosen sport while attending top colleges, athletes must possess a winning combination of teamwork skills, competitiveness, time management, and determination. These are attributes that the company seeks in recruiting new employees. For the pilot program, 10 women athletes are being selected for internships from top colleges in the area, including Stanford and Santa Clara University, and will receive development and mentoring specifically tailored for the program.

Hitachi Data Systems is focusing not only on recruitment of women with winning attributes but on leadership development. Its Women's Leadership Network (WLN) begins its fourth year in 2011 and has continued to expand its activities and membership. In addition, the company hand selects women managers with high potential for participation in the year-long Women Unlimited leadership programs.

### VOICES



### **Great Chances for Women**

Karin Weintoegl Lawyer Head of Commercial Proposals Vice President Hitachi Power Europe GmbH

The main challenge for women at Hitachi Power is driven by the fact that the plant engineering and construction business is traditionally a male-dominated business. When I started my career in 2004 at Hitachi Power Europe GmbH in Germany, we were only 4 female professionals out of some 300 employees–until today this did not change fundamentally. I am grateful that I not only had the chance to start my career in this male-driven surrounding but was also promoted to lead a core department in our company—as a woman. The necessary improvement from a quantitative view is with the company until today. From the quality side it is with our society, which is often not used to women in technology-driven companies and/or executive positions.

Therefore I would advise all women, who currently have to decide where to apply for a job, not to leave out companies such as Hitachi, which might not be known as typical "female," but which grants great chances—as I might be the perfect proof for.



### Balancing a Fulfilling Job and Family

**Ms. Hua Ping** Chief Representative/ Shared Services / Human Resources Hitachi GST China Operations

As a woman leader, especially an Asian woman, I think family is in equal importance with career. How to balance our work and life is usually one of the biggest challenges women leaders have.

I would say Hitachi GST does a good job at diversity. There are a number of excellent women leaders in our company who are making important business decisions and who are involved in the company's strategic planning and development. At our China sites, nearly half of our management teams are women. We do not feel any gender barriers in promotions nor other career advancement opportunities. Flexible working schedules and locations in some positions which do not impact business delivery will further support women's career development by providing them more flexibility in arranging job and family issues.

Bearing a positive mindset, maintaining our professionalism and try as much as we can to manage self-emotions at all times, especially when handling tough situations, can always help us mitigate the stress from work and achieve success. Enjoy your work and enjoy your life as well.

### VOICES



### Diverse Human Resources Are the Wellspring of Innovation

Shen Liping Shanghai Region General Manager and Director of Advanced Technology Innovation Research Laboratory Hitachi (China) Research & Development Corporation

In 2004 I returned to China from Japan and joined Hitachi (China) Research & Development Corporation as a senior researcher. After working for two years on launching research projects and building research teams, I was promoted to the position of research laboratory director. Looking back a few years, I think I was able to advance this far thanks to Hitachi's corporate culture of giving opportunities to employees regardless of gender.

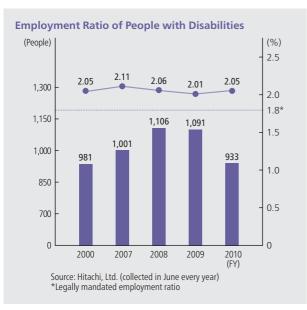
As research laboratory director, I was in a position to foster young researchers. Based on my own experience, when I was hiring researchers or instructing them, I placed priority on their abilities. I realize that men and women of course differ in certain respects, but I think it is more important to understand the unique characteristics of each individual and provide opportunities for them to realize their full potential. In addition, rather than attempting to foster the same kind of human resources in the organization, I try to bring together people with different abilities and diverse personalities in order to bring innovation into our research. I will continue to strive to foster the human resources who will be the future of Hitachi.

### **Employing People with Disabilities**

We employ around 3,000 disabled people in a broad range of areas. To help them adapt to work environments, we have taken actions geared to their particular needs. These include installing magnifying reading devices, computers with speech recognition, and warning lights for those with hearing impairments.

There are also four special subsidiaries within the Hitachi Group where 200 or so disabled or challenged employees perform tasks such as collecting and distributing internal mail, office cleaning, and clerical work. In fiscal 2010, those in charge of employing disabled people came together for information exchange meetings, workshops, visits to special support schools, and other events. The goal was to deepen their understanding of disabilities. We have also collaborated on the employment of disabled workers with Public Employment Security Offices by holding a Hitachi Group job fair for disabled jobseekers.

In June 2010, the employment ratio of people with disabilities was 2.05 percent at Hitachi, Ltd. and 1.88 percent as a consolidated domestic Group company. This reached the legally mandated ratio of 1.8 percent. We are committed to creating even more employment opportunities.



### Model Project for Promoting the Employment of People with Mental Disabilities

We have a number of programs that create attractive environments for people with mental disabilities. These are part of our two year commitment, from May 2009, to the Ministry of Health, Labour and Welfare to undertake a model project entitled Promoting the Employment of People with Mental Disabilities. Key measures include creating work geared to the particular kind of disability, promoting understanding in the workplace, and training "natural supporters" with whom employees can feel comfortable consulting on workplace issues. Within the workplace, we have assigned psychiatric social workers to manage the health of mentally disabled employees and provide them with advice. We are also using special training and group work to ensure healthy work for people with mental disabilities and how to develop smooth personal relationships. This project has led to the employment of new employees with mental disabilities since fiscal 2009 and six have joined the company as of March 2011. Hitachi has also adopted a flexible work system that has the new employees gradually building up from three four-hour days per week. One employee commented that Hitachi was the first place where he had been able to continue working for more than a year, while another was grateful that there was someone close at hand to provide advice. We will report on these results to Group companies and other companies to help promote understanding and recognition of the employment of people with mental disabilities.



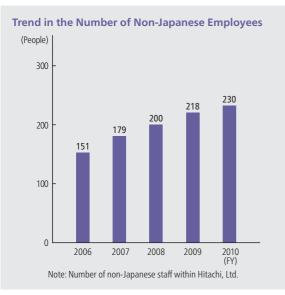
Supporter training

# **Global Human Capital Development**

Because we believe that maximizing employee potential is vital for creating new value, we work hard to improve employees' abilities and to develop their careers. Given the accelerating pace of globalization, we urgently need to develop leaders capable of competing in the global arena. We are pushing ahead with a range of initiatives to enhance and expand our global business.

### **Aligning Hiring with Global Business**

To globalize more effectively, we have identified eight key qualities for global human resources. These include the ability to see from the other party's perspective and the ability to communicate clearly. These key qualities are being used in the selection of new employees from the 2012 graduate pool. We approach hiring with the goal of having all new graduates move into global business at sometime in the future. This includes new graduates hired in Japan for office jobs and 50 percent of those hired for engineering jobs. We also intend to have foreign students make up 10 percent of our new graduate intake. In addition, we led the way for other companies with the 2001 introduction of a job-matching scheme for



hiring engineers. By matching the positions that applicants want with where we need staff, we are increasing both the satisfaction of new hires and the quality of our human resources.

For hiring outside Japan, we are prioritizing regions and jobs with an eye on establishing common Hitachi Group hiring practices, in cooperation with head offices in each region.

### Global Education for Young Employees

We are considering several ways of strategically securing and training people who will thrive in the global business arena. For young employees in particular, we have created programs that include practical training outside Japan, fieldwork, and overseas language study. By giving these employees the opportunity to experience life in other countries, we will equip them to handle the challenges of globalization. We are currently developing programs to send young employees outside Japan from fiscal 2011 so that they can acquire not just language skills but experience working with a variety of people. Along with the business experience they will receive, they will grow to understand local cultures and lifestyles firsthand. We plan to send 2,000 employees outside Japan through these programs by the end of fiscal 2012. We consider speaking English an essential skill for global business, so we will strengthen English language training for future leaders, with a particular emphasis on global business.

To deepen overseas employees' understanding of Hitachi and of Japan, we are also systematically increasing opportunities for high-potential employees to work in Japan.

### **Global Manager Training**

With our operations taking on an increasingly global focus, it is necessary that all managers working on the global frontlines to understand our history, founding spirit, company operations, common values, corporate philosophy, and basic management skills. To instill this understanding, we provide a four-day course called Global Fundamental Course—Ready to Inspire, which offers the same training to all Hitachi managers around the world.

Since fiscal 2006, when it was launched, this course has been taken by approximately 1,369 managers. We plan to continue to offer this course from fiscal 2011 on, while broadening the regions and personnel covered, as well as improving the training methods.



Participants in the Global Fundamental Course

### **Training Future Managers**

To compete with the world's top companies in the years ahead, Hitachi Group managers will have to create their own business models as well as develop and manage the methods to achieve them. We intend to offer intensive business training courses to help them reach their goals. Business training for managers within Japan has been completely revamped, and we plan to have around 4,000 staff take the new training courses. In addition to training managers for a global leadership styleidentifying a vision, motivating, and providing clear feedback—senior management candidates in particular will learn strategic business planning and leadership over a six-month period through weeklong sessions taught in English with fieldwork outside Japan. We also provide opportunities for discussions between talented non-Japanese employees and executives at Hitachi headquarters, and they are given training in Japan to help them build networks and groom them for senior management positions.

### **HITACHI BASIS**

We have specified the HITACHI BASIS as a common basic education platform for sharing our Corporate Credo, work approach, and way of thinking with all Hitachi Group companies worldwide. On that foundation, we operate a two-tiered employee education system that uses human resource development tailored to the needs of individual business fields and regions.

As of fiscal 2010, we have begun evaluating the effectiveness of education in the main Group companies. As part of the HITACHI BASIS initiative, we also took the opportunity of Hitachi's centennial to develop Discover Hitachi, a program targeting Group employees worldwide that reaffirms our history, Hitachi Founding Spirit, management policies and business operations.



HITACHI BASIS portal Web site

### **Training System**

We have supplemented in-house education—based on on-the-job training—with an extensive training system consisting of a number of educational programs: Management Development, Education for Engineers, Production Worker Training, Education for Globalization, Sales Education, and Training by Job Function. These programs are offered across the Hitachi Group by the Hitachi Institute of Technology, the Hitachi Institute of MONOZUKURI Skills and Engineering, and the Hitachi Institute of Management Development as common Group educational courses. During fiscal 2010, 22,666 Hitachi Group employees took these training courses.

Other kinds of training are provided by different companies and offices.

# **Employee Health and Safety**

The health and safety of employees is our highest priority. Based on the Hitachi Group Health and Safety Policy, we work hard to ensure that employees are healthy and safe by constantly improving conditions for them. The English version of the Hitachi Group Health and Safety Policy is scheduled to be published within fiscal 2011.

### **Health and Safety Programs**

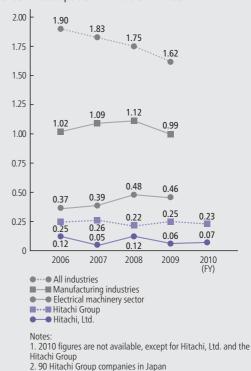
Based on the policies developed by top management, we ensure that basic activities such as regular workplace inspections and 5S<sup>+1</sup> activities are conducted in line with our labor, health and safety management system. We also work continually to prevent accidents and to reduce the risk of accidents through risk assessments and other hazard prediction and preventive systems.

The Hitachi Group Health and Safety Research Presentation Meeting is held every December to find ways to improve the level of health and safety throughout the Group. In fiscal 2010, the 54th meeting attracted 250 participants from 70 companies, and featured five case study presentations as well as special lectures by outside experts. Reports on best practices and new measures learned from serious mishaps in the past were followed by vigorous discussions that stimulated health and safety activities across the Group as a whole.

At the same time, health and safety levels within the Group are far from perfect, with serious accidents continuing to occur. We are committed to working, Group-wide, to improve the level of health and safety still further and to achieve zero workplace accidents.



Hitachi Group Health and Safety Research Presentation Meeting



### **Trends in Occupational Accident Rates**

<sup>+1 5</sup>S activities: The five principles for maintaining and improving workplace environments are seiri (sorting), seiton (setting in order), seiso (systematic cleaning), seiketsu (standardizing) and shitsuke (self-discipline).

### **Mental Health Care**

Ensuring physical and mental health is another key priority. To enable every employee to work in a healthy environment, we consult with health insurance associations and other groups to maintain high levels of employee health.

In recent years, the number of employees taking leave from work because of mental health issues has increased. For our first line of prevention, we have been cutting back on long working hours and providing education programs designed to strengthen resistance to stress and to improve

### TOPICS

### Application of Wristband Activity Monitoring Devices

Hitachi has developed a wristband activity monitoring device called Life Microscope. This small, light, battery-operated device is attached to the wrist and records the wearer's movements as well as pulse, body temperature, and other information. As this device can capture detailed, objective data, such as levels of activity and sleep periods, we may use it to support the return to work of people who took leave for mental health issues. Worn when someone is preparing to return to the workplace, and then for a period after their return, the information obtained can be used as reference data for consultations with industrial doctors, for example. This device is proving to be effective as a tool to support the return to work. We will increase the number of trial subjects before full-scale practical use.



Life Microscope

communication skills. Second-line programs include early identification and treatment through EAP,<sup>†1</sup> as well as counseling from industrial health professionals. For the third line, we created a program for employees returning to work based on our workplace return support guidelines, and we have adopted a system that allows employees to gradually come back to work. We are also considering Life Microscopes, wristband devices that monitor daily activities.

11 EAP (Employee Assistance Program): provides employees with psychological, physical, and social support

### **Basic Attitudes to HIV/AIDS**

Since 1995, Hitachi, Ltd. has promoted an understanding within the Hitachi Group of HIV/ AIDS based on the following three points:

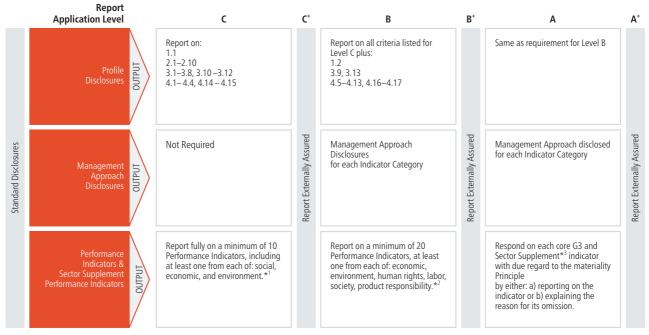
### **Basic Attitudes Concerning HIV/AIDS**

- We will actively build AIDS awareness in keeping with the understanding that the most important thing is "to cultivate accurate knowledge and understanding of HIV/AIDS on the part of every employee."
- We will respond to known cases of infection by giving the highest consideration to respecting the human rights of those infected, and consider how to delay the onset of illness.
- 3. With a view to protecting the privacy of individuals, no testing for HIV/AIDS will be conducted as a part of any routine physical examinations for employees done within the company, whether the physical examination is legally sanctioned or not (i.e., voluntary).

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### **Comparative Table with GRI Guidelines**

In formulating the Hitachi Group Sustainability Report 2011, we used the GRI Application Levels indicating compliance with GRI Sustainability Reporting Guidelines. This provides an objective measure of the extent to which version 3.1 of the guidelines (G3.1) and other GRI Reporting Framework elements have been applied. We evaluated this year's report as achieving Application Level B+ by self-assessment. A comparative table with GRI Guideline indexes is included below.



\*1 Performance Indicators may be selected from any finalized Sector Supplement, but 7 of the 10 must be from the original GRI Guidelines \*2 Performance Indicators may be selected from any finalized Sector Supplement, but 14 of the 20 must be from the original GRI Guidelines \*3 Sector supplement in final version

ltem	Index	Items Disclosed	Related Pages in This Report and Other References
1. Strategy	and Analysis		
1.1	Statement from the most senior decision-maker of the organization (e.g.,	Top Commitment	pp. 007–008
	CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy	Message from the Chief Environmental Strategy Officer	p. 050
1.2	Description of key impacts, risks, and opportunities	Hitachi Management Strategies and CSR	pp. 015–018
		FY 2010 Results and FY 2011 Plans	pp. 032–033
		Corporate Environmental Management Strategies and Initiatives	pp. 051–062
		Hitachi Group Second Environmental Action Plan: Targets and Results Third Environmental Action Plan	pp. 057–058
2. Organiza	tional Profile		
2.1	Name of the organization	Hitachi Group Profile	pp. 005–006
2.2	Primary brands, products, and/or services	Hitachi Group Profile	pp. 005–006
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site
2.4	Location of organization's headquarters	Hitachi Group Profile	pp. 005–006
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	Hitachi Group Profile	pp. 005–006
2.6	Nature of ownership and legal form	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site

2.8	Scale of the reporting organization, including:		
	Number of employees	Hitachi Group Profile	pp. 005–006
	Number of operations	Hitachi Group Profile	pp. 005–006
	Net sales (for private sector organizations) or net revenues (for public sector organizations)	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site
	Total capitalization broken down in terms of debt and equity (for private sector organizations)	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site
	Quantity of products or services provided	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site
2.9	Significant changes during the reporting period regarding size, structure, or ow	nership including:	
	The location of, or changes in operations, including facility openings, closings, and expansions	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site
	Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations)	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site
2.10	Awards received in the reporting period	Results of External SRI Assessments in Fiscal 2010	p. 103
		External Environment Awards	Hitachi, Ltd. Web site Hitachi Group Environment Activity
3. Report I	Parameters		
Report Prof			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided	Sustainability Report Editorial Policy	p. 003
3.2	Date of most recent previous report (if any)	Sustainability Report Editorial Policy	p. 003
3.3	Reporting cycle (annual, biennial, etc)	Sustainability Report Editorial Policy	p. 003
3.4	Contact point for questions regarding the report or its contents	Contact information	p. 149
Report Sco	pe and Boundary		
3.5	Process for defining report content, including:		
	Determining materiality	Material Issues for Hitachi	p. 019
	Prioritizing topics within the report     Identifying stakeholders the organization expects to use the report	Results of External SRI Assessments in Fiscal 2010	p. 103
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance	Sustainability Report Editorial Policy	pp. 003–004
3.7	State any specific limitations on the scope or boundary of the report	Sustainability Report Editorial Policy	pp. 003–004
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations	Hitachi Group Profile	pp. 005–006
3.9	Data measurement techniques and the bases of calculations, including	Bases of calculations are described if necessary	_
	assumptions and technique's underlying estimations applied to the compilation of the Indicators and other information in the report	Environmental Load Information Collection Methods	Hitachi, Ltd. Web site: Environmental Activities
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/ acquisitions, change of base years/periods, nature of business, measurement methods)	Explanation is given if necessary to complement data descriptions	
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	None	_
3.12	Table identifying the location of the Standard Disclosures in the report	Comparative Table with GRI Guidelines	pp. 134–143
Assurance			
3.13	Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s)	Independent Review	p. 090
4. Governa	ance, Commitments, and Engagement		
Governance	e		
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	Strengthening Governance	p. 028
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement)	Strengthening Governance	p. 028
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members	Strengthening Governance	p. 028
		1	1

4.4	Mechanisms for shareholders and employees to provide recommendations or	Compliance Reporting System	p. 037				
	direction to the highest governance body	Compliance Reporting System					
4.5	Linkage between compensation for members of the highest governance		pp. 101–103				
4.5	body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance)	Strengthening Governance	p. 028				
4.6	Processes in place for the highest governance body to ensure conflicts of	Strengthening Governance	p. 028				
	interest are avoided.	Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct	p. 036				
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	Strengthening Governance	p. 028				
4.8	Internally developed statements of mission or values, codes of conduct, and	Hitachi Management Strategies and CSR	рр. 015–018				
	principles relevant to economic, environmental, and social performance and the status of their implementation	FY 2010 Results and FY 2011 Plans	pp. 032–033				
		Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct	p. 036				
		Corporate Environmental Management Strategies and Initiatives	pp. 051–062				
		Hitachi Group Second Environmental Action Plan: Targets and Results	p. 057				
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social	Initiatives That We Participate in	p. 004				
	performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	Hitachi Management Strategies and CSR	pp. 015–018				
		Strengthening Governance; Internal Control	pp. 028–029				
		Supply Chain Management	pp. 119–122				
		Respect for Human Rights	pp. 116–118				
		Corporate Environmental Management Strategies and Initiatives	pp. 051–062				
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	Strengthening Governance	p. 028				
Commitmer	ts to External Initiatives						
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	Reinforcing the Risk Management System	p. 034				
		Business Continuity Plans (BCPs)	pp. 034–035				
		Managing Environmental Risk	p. 079				
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or	Initiatives That We Participate in	p. 004				
	endorses	Participating in the Development of International Standards	p. 070				
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization:						
	Has positions in governance bodies	None	-				
	Participates in projects or committees	Strengthening International Standardization	p. 045				
		Participating in the Development of International Standards	p. 070				
	Provides substantive funding beyond routine membership dues	None	-				
	Views membership as strategic	None	-				
Stakeholdei	Engagement		1				
4.14	List of stakeholder groups engaged by the organization	None	-				
4.15	Basis for identification and selection of stakeholders with whom to engage	None	-				
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Preventing the Recurrence of Misleading Representations	p. 038				
		Environmental Communication	pp. 087–089				
		Public Policy Initiatives	pp. 099–100				
		Voices: Acting with a Sense of Global Responsibility	pp. 117–118				
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics	Material Issues for Hitachi	p. 018				

5. Management Approach and Performance Indicators

Item Performance Index: Core (C) / Add (A)

Economic

	Disclosure on Management Approach	
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011	i management Approach							
	Economic Performance	Financial Results for the First Quarter of the Year Ended March 31, 2011	Hitachi, Ltd. Web site					
	Market Presence	Form 20-F filed with the U.S. SEC	Hitachi, Ltd. Web site					
	Indirect Economic Impacts	FY 2009 Breakdown of Funding for Social Contribution Activities	р. 104					
		Environmental Load Data Generated through Business Operations (FY 2010)	p. 080					
	Goals and Performance	Financial Results for the First Quarter of the Year Ended March 31, 2011	Hitachi, Ltd. Web site					
	Policy	2012 Mid-Term Management Plan	pp. 015–016					
	Additional Contextual Information	Hitachi Group Sustainability Report 2011						

Economic P	erformance Indicators		
<b>c</b> FC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community	Hitachi Group Profile	pp. 005–006
ECT	investments, retained earnings, and payments to capital providers and governments	Interpretation     Interpretation       Interpretation     FY 2009 Breakdown of Funding for Social Contribution Activities     p. 104       Environmental Accounting     pp. 086–087       ization's     Corporate Environmental Management strategies and Initiatives     pp. 051–062       None     —       Iocal     None     —	p. 104
		Environmental Accounting	pp. 086–087
<b>C</b> EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change		pp. 051–062
<b>C</b> EC3	Coverage of the organization's defined benefit plan obligations	None	_
<b>C</b> EC4	Significant financial assistance received from government	None	_
Market Pres	sence		
A EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	None	_
C	Policy, practices, and proportion of spending on locally-based suppliers at	Sharing Procurement Policies	pp. 119–120
EC6	significant locations of operation	Building Partnerships	p. 120
		Sharing CSR Awareness	p. 120
		Green Procurement	pp. 120–121
		Response to Conflict Minerals Issue	pp. 121–122
<b>C</b> EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	None	-
Indirect Eco	nomic Impacts	·	
C EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	Social Contribution Activities	pp. 104–115
A EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	Environmental Accounting	pp. 086–087

### Environmental

Disclosure on Management Approach

Disclosure	on Management Approach		
	Materials	Environmentally Conscious Products and Services	pp. 063–070
		Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
	Materials         Energy         Water         Biodiversity         Emissions, Effluents, and Waste         Products and Services         Compliance         Transport         Overall         Goal and Performance         Policy         Organizational Responsibility         Training and Awareness         Monitoring and Follow-up         Additional Contextual Information         Materials used by weight or volume         Percentage of materials used that are recycled input materials         Direct energy consumption by primary energy source         Indirect energy consumption by primary source         Energy saved due to conservation and efficiency improvements         Initiatives to provide energy-efficient or renewable energy based produ         Initiatives to provide energy-efficient or renewable energy based produ	Environmentally Conscious Products and Services	рр. 063–070
		Reducing Greenhouse Gas Emissions	pp. 072–075
		Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
	Water	Water Conservation	p. 077–078
		Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
	Biodiversity	Activities to Preserve Ecosystems	pp. 060–062
	Emissions, Effluents, and Waste	Reducing Waste	pp. 075–077
		Water Conservation	рр. 077–078
		Chemical Substance Management	рр. 078–079
		Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
	Products and Services	Environmentally Conscious Products and Services	pp. 063–070
	Compliance	Managing Environmental Risk	р. 079
	Transport	Reducing Transportation Energy	p. 074
	Overall	Environmental Management Framework	pp. 081–084
	Goal and Performance	Hitachi Group Second Environmental Action Plan: Targets and Results Third Environmental Action Plan	pp. 057–058
	Policy	Hitachi Action Guidelines for Environmental Conservation	p. 059
	Organizational Responsibility	Environmental Management Framework	pp. 081–084
	Training and Awareness	Environmental Education	p. 085
	Monitoring and Follow-up	Building Environmental Management Systems	p. 082
	Additional Contextual Information	Hitachi Group Sustainability Report 2011	
/laterials			I
N1	Materials used by weight or volume	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
N2	Percentage of materials used that are recycled input materials	None	_
nergy			
: N3	Direct energy consumption by primary energy source	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
N4	Indirect energy consumption by primary source	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
N5	Energy saved due to conservation and efficiency improvements	Reducing Greenhouse Gas Emissions	pp. 072–075
N6	Initiatives to provide energy-efficient or renewable energy based products and services and reductions in energy requirements as a result of these	Environmental Accounting	pp. 086–087
	initiatives	Environmentally Conscious Products and Services	pp. 063–070
<b>a</b> IN7	Initiatives to reduce indirect energy consumption and reductions achieved	The Hitachi Environmental Vision; Long-Term Plan Environmental Vision 2025	pp. 051–053
Vater	·		
N8	Total water withdrawal by source	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
		Water Conservation	pp. 077–078
<b>a</b> N9	Water sources significantly affected by withdrawal of water	None	_
<b>a</b> EN10	Percentage and total volume of water recycled and reused	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
		Water Conservation	pp. 077–078

Biodiversity			
<b>C</b> EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	None	-
c	Description of significant impacts of activities, products, and services on	Activities to Preserve Ecosystems	pp. 060–062
EN12	biodiversity in protected areas and areas of high biodiversity value outside protected areas	Social Contribution Activities: The Environment	pp. 108–109
<b>A</b> EN13	Habitats protected or restored	None	-
<b>a</b> EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	Activities to Preserve Ecosystems	pp. 060–062
<b>a</b> EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	None	-
Emissions, E	iffluents, and Waste		
<b>C</b> EN16	Total direct and indirect greenhouse gas emissions by weight	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
		Reducing Greenhouse Gas Emissions	pp. 072–075
<b>C</b> EN17	Other relevant indirect greenhouse gas emissions by weight	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
		Reducing Greenhouse Gas Emissions	pp. 072–075
<b>C</b> EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
		Reducing Greenhouse Gas Emissions	pp. 072–075
<b>C</b> EN19	Emissions of ozone-depleting substances by weight	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
<b>C</b> EN20	NO, SO, and other significant air emissions by type and weight	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
		Chemical Substance Management	pp. 078–079
<b>C</b> EN21	Total water discharge by quality and destination	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
		Water Conservation	рр. 077–078
<b>C</b> EN22	Total weight of waste by type and disposal method	Environmental Load Data Generated through Business Operations (FY 2010)	p. 080
		Reducing Waste	рр. 075–077
<b>C</b> EN23	Total number and volume of significant spills	Managing Environmental Risk	p. 079
<b>A</b> EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	None	_
<b>A</b> EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	None	_
Products an	d Services		
<b>C</b> EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	Increasing the Ratio of Eco-Products	pp. 063–067
<b>C</b> EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Product and Package Recycling	Hitachi, Ltd. Web site
Compliance		1	1
<b>C</b> EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Managing Environmental Risk	p. 079
Transport		1	-1
<b>A</b> EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	Reducing Transportation Energy	p. 074
Overall		1	1
<b>A</b> EN30	Total environmental protection expenditures and investments by type	Environmental Accounting	pp. 086–087

Labor Practices and Decent Work

Labor Pract	ices and Decent Work		
Disclosure o	n Management Approach		
	Employment	Aligning Hiring with Global Business	p. 130
	Labor/Management Relations	Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct	p. 036
	Occupational Health and Safety	Employee Health and Safety	pp. 132–133
	Training and Education	Diversity Development Project	p. 123
	Diversity and Equal Opportunities	Diversity Management	pp. 123–129
	Equal Remuneration for Women and Men	None	_
	Goals and Performance	Major Results Data	pp. 147–148
	Policy	CSR Policy of the Hitachi Group	p. 017
	Organizational Responsibility	Diversity Development Project	p. 123
	Training and Awareness	Diversity Development Project	p. 123
	Monitoring and Follow-up	Diversity Development Project	p. 123
	Additional Contextual Information	Hitachi Group Sustainability Report 2011	
mployment	t		
A1	Total workforce by employment type, employment contract, and region, broken down by gender	Hitachi Group Profile	pp. 005–006
A2	Total number and rate of new employee hires and employee turnover by age group, gender, and region	None	-
<b>A</b> A3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operations	None	-
: A15	Return to work and retention rates after parental leave, by gender		
abor/Mana	gement Relations		
: A4	Percentage of employees covered by collective bargaining agreements	None	-
A5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements	None	_
ccupationa	I Health and Safety		
A6	Percentage of total workforce represented in formal joint management- worker health and safety committees that help monitor and advise on occupational health and safety programs	None	
A7	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Trends in the Occupational Accident Rates	p. 132
A8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	Model Project for Promoting the Employment of People with Mental Disabilities	p. 129
		Business Continuity Plans (BCPs)	pp. 034-035
		Mental Health Care	р. 133
<b>λ</b> Δ9	Health and safety topics covered in formal agreements with trade unions	None	

Training and Education

**A** LA9

<b>C</b> LA10	Average hours of training per year per employee by gender, and by employee category	None	_
<b>A</b> LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Global Human Capital Development	pp. 130-131
<b>A</b> LA12	Percentage of employees receiving regular performance and career development reviews, by gender	None	_
Diversity and	Equal Opportunity		
<b>c</b> LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group	Diversity Management	pp.123–129
LATS	membership, and other indicators of diversity	Aligning Hiring with Global Business	р. 130

Equal Remu	uneration for Women and Men	1	
<b>C</b> LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	None	-
Human Rig	ghts		
Disclosure (	on Management Approach	1	1
	Investment and Procurement Practices	Guidelines for Procurement Activities	pp. 119–120
		Hitachi Group Supply-Chain CSR Deployment Guidebook	p. 120
		Hitachi Group Codes of Conduct: Chapter 1.3 Procurement Activities	p. 036
	Non-Discrimination	Hitachi Group Codes of Conduct: Chapter 4.2 Eliminating Discrimination	p. 036
	Freedom of Association and Collective Bargaining	Hitachi Group Codes of Conduct: Chapter 4.4 Respect of Basic Rights at Work	p. 036
	Child Labor	Hitachi Group Codes of Conduct: Chapter 4.4 Respect of Basic Rights at Work	p. 036
	Prevention of Forced and Compulsory Labor	Hitachi Group Codes of Conduct: Chapter 4.4 Respect of Basic Rights at Work	p. 036
	Security Practices	Hitachi Group Codes of Conduct: Chapter 4.4 Respect of Basic Rights at Work	p. 036
	Indigenous Rights	Hitachi Group Codes of Conduct: Chapter 4.4 Respect of Basic Rights at Work	p. 036
	Assessment	Reinforcing the Risk Management System	p. 034
	Remediation	Reinforcing the Risk Management System	p. 034
	Goals and Performance	FY 2010 Results and FY 2011 Plans: 4. Corporate Ethics and Human Rights	p. 032
	Policy	Hitachi Group Codes of Conduct: Chapter 4 Respect of Human Rights	p. 036
	Organizational Risk Assessment	Reinforcing the Risk Management System	p. 034
	Impact Assessment	Reinforcing the Risk Management System	p. 034
	Organizational Responsibility	Framework for Promoting Respect for Human Rights	p. 116
	Training and Awareness	Raising Awareness of Human Rights; Applying Human Rights Worldwide	p. 117
	Monitoring, Follow-up and Remediation	Applying Human Rights Worldwide	p. 117
	Additional Contextual Information	Hitachi Group Sustainability Report 2011	
nvestment	and Procurement Practices		
<mark>:</mark> HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening	None	_
c HR2	Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken	Sharing Procurement Policies; Sharing CSR Awareness	pp. 119–120
r 1R3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Raising Awareness of Human Rights; Applying Human Rights Worldwide	p. 117
lon-Discrir	nination	1	
: 1R4	Total number of incidents of discrimination and corrective actions taken	None	-
reedom of	f Association and Collective Bargaining		
<b>c</b> HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	None	-
Child Labor	· · · · · · · · · · · · · · · · · · ·	1	<u> </u>
c HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct	p. 036

:	Compulsory Labor	Formulating and Ensuring Augrapage of the	n 020
R7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct	p. 036
ecurity Pra	actices		
R8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	Raising Awareness of Human Rights	p. 117
ndigenous	Rights	·	
R9	Total number of incidents of violations involving rights of indigenous people and actions taken	None	_
ssessmen	t		
R10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	None	-
emediatio	n		
R11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	None	-
ociety			
ísclosure	on Management Approach		
	Local Communities	Philosophy and Policy Hitachi Group Codes of Conduct: Chapter 3.2 Contribution to Local Communities; 3.6 Observance of Laws and Regulations and Respect of the Culture and Customs of Each Nation and Region	p. 104 p. 036
	Corruption	Preventing Corruption	p. 037
	Public Policy	Public Policy Initiatives	рр. 099–100
	Anti-Competitive Behavior	Hitachi Group Codes of Conduct, Chapter 1.2 Sales Activities	p. 036
	Compliance	Formulating and Ensuring Awareness of the Hitachi Group Codes of Conduct	p. 036
	Goals and Performance	FY 2010 Results and FY 2011 Plans: 4. Corporate Ethics and Human Rights	p. 032
	Policy	CSR Policy of the Hitachi Group	p. 017
	Organizational Responsibility	CSR Management Structure	p. 030
	Training and Awareness	Implementing Corporate Ethics Month	рр. 036–037
	Additional Contextual Information	Hitachi Group Sustainability Report 2011	
ocal Comr	nunities	-	
01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Philosophy and Policy	p. 104
09	Operations with significant potential or actual negative impacts on local communities	Managing Environmental Risk	p. 079
010	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	Environmentally Conscious Production	pp. 071–080
orruption			
02	Percentage and total number of business units analyzed for risks related to corruption	Reinforcing the Risk Management System	p. 034
03	Percentage of employees trained in organization's anti-corruption policies and procedures	Preventing Corruption	p. 037
04	Actions taken in response to incidents of corruption	Preventing the Recurrence of Misleading Representations	p. 038
ublic Polic	y		
05	Public policy positions and participation in public policy development and lobbying	Public Policy Initiatives	pp. 099–100

<b>A</b> 506	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	-	-
	etitive Behavior	1	1
<b>c</b> \$07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	None	-
Compliance	e	1	
<b>C</b> SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Preventing the Recurrence of Misleading Representations	p. 038
Product Re	esponsibility	1	
Disclosure	on Management Approach		
	Customer Health and Safety	Quality Assurance and Customer Satisfaction	рр. 093–098
	Product and Service Labeling	Increasing the Ratio of Eco-Products	pp. 063–067
	Marketing Communications	Customer Satisfaction	рр. 094–096
	Customer Privacy	Protecting Personal Information and Information Security Initiative	pp. 038–039
	Compliance	Compliance	pp. 036–040
	Goals and Performance	FY 2010 Results and FY 2011 Plans: 2. Contribution to Society through Our Business	p. 032
	Policy	Customer Satisfaction Management Guidelines	p. 095 pp. 094–096 pp. 094–096
	Organizational Responsibility	Customer Satisfaction	
	Training and Awareness	Customer Satisfaction	
	Monitoring and Follow-up	Customer Satisfaction	pp. 094–096
	Additional Contextual Information	Hitachi Group Sustainability Report 2011	
Customer H	Health and Safety	1	1
<b>C</b> PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	Quality Assurance Activities	p. 093
<b>A</b> PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	Handling Product Accidents	p. 094
Product an	d Service Labeling	1	1
<b>C</b> PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	Increasing the Ratio of Eco-Products	pp. 063–067
<b>A</b> PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	Preventing the Recurrence of Misleading Representations	p. 038
<b>A</b> PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	Customer Satisfaction	pp. 094–096
Marketing	ommunications		
<b>C</b> PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	Hitachi Group Codes of Conduct: Chapter 1.2 Sales Activities	p. 036
<b>A</b> PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	Preventing the Recurrence of Misleading Representations	p. 038
Customer F	Privacy		
<b>A</b> PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	None	-
Compliance	e		
<b>C</b> PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	None	-
	·	·	•

### Comparative Table with ISO 26000 Core Subjects

Hitachi's engagements are shown together with the corresponding seven core subjects of ISO 26000 (*Guidance on Social Responsibility*).

Core Subjects	Issues	Hitachi's Engagements	Related Pages in This Report
Organizational Governance	Organizational Governance	Corporate Governance     CSR Management     Brand Management     Public Policy Initiatives	pp. 028–029 pp. 030–033 pp. 046–048 pp. 099–100
Human Rights	<ol> <li>Due diligence</li> <li>Human rights risk situations</li> <li>Avoidance of complicity</li> <li>Resolving grievances</li> <li>Discrimination and vulnerable groups</li> <li>Civil and political rights</li> <li>Economic, social and cultural rights</li> <li>Fundamental principles and rights at work</li> </ol>	Respect for Human Rights	pp.116–118
Labour Practices	<ol> <li>Employment and employment relationships</li> <li>Conditions of work and social protection</li> <li>Social dialogue</li> <li>Health and safety at work</li> <li>Human development and training in the workplace</li> </ol>	Diversity Management     Global Human Resource Development     Employee Health and Safety	pp. 123–129 pp. 130–131 pp. 132–133
The Environment	<ol> <li>Prevention of pollution</li> <li>Sustainable resource use</li> <li>Climate change mitigation and adaptation</li> <li>Protection of the environment, biodiversity and restoration of natural habitats</li> </ol>	Corporate Environmental Management Strategies and Initiatives     Environmentally Conscious Products and Services     Environmentally Conscious Production     Environmental Management Framework and Communication	pp. 051–062 pp. 063–070 pp. 071–080 pp. 081–089
Fair Operating Practices	<ol> <li>Anti-corruption</li> <li>Responsible political involvement</li> <li>Fair competition</li> <li>Promoting social responsibility in the value chain</li> <li>Respect for property rights</li> </ol>	Risk Management     Compliance     Intellectual Property     Supply Chain Management     Activities to Preserve Ecosystems	pp. 034–035 pp. 036–040 pp. 044–045 pp. 119–122 pp. 060–062
Consumer Issues	<ol> <li>Fair marketing, factual and unbiased information and fair contractual practices</li> <li>Protecting consumers' health and safety</li> <li>Sustainable consumption</li> <li>Consumer service, support, and complaint and dispute resolution</li> <li>Consumer data protection and privacy</li> <li>Access to essential services</li> <li>Education and awareness</li> </ol>	Quality Assurance and Customer Satisfaction	pp. 093–098
Community Involvement and Development	1. Community involvement     2. Education and culture     3. Employment creation and skills development     4. Technology development and access     5. Wealth and income creation     6. Health     7. Social investment	<ul> <li>Impact of the Great East Japan Earthquake and Hitachi's Response</li> <li>Social Contribution Activities</li> </ul>	pp. 010–014 pp. 104–115

\*1 Examination of the potential negative effects that an organization's decisions and activities may have on society, the environment, and the economy

### Comparative Table with the UN Global Compact

Items in Hitachi Group Codes of Conduct and Hitachi's engagements are shown together with the corresponding 10 principles of the UN Global Compact.

Area		Principles	Hitachi Group Codes of Conduct	Hitachi's Engagements	Related Pages in This Report
Human Rights	Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights	<ol> <li>Procurement Activities</li> <li>Observance of Laws and Regulations and Respect of the Culture and Customs of Each Nation and Region</li> <li>Promoting Respect of Human Rights</li> <li>Eliminating Discrimination</li> </ol>	Respect for Human Rights     Supply Chain Management	рр. 116–118 pp. 119–122
	Principle 2	Businesses should make sure that they are not complicit in human rights abuses	4.2 Enhimating Discrimination 4.3 Respect of Human Rights in Information Management 4.4 Respect of Basic Rights at Work		
Labor	Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	<ol> <li>1.3 Procurement Activities</li> <li>4.1 Promoting Respect of Human Rights</li> <li>4.2 Eliminating Discrimination</li> <li>4.3 Respect of Human Rights in Information Management</li> <li>4.4 Respect of Basic Rights at Work</li> <li>5.4 Arranging a Work Environment That Draws Out</li> </ol>	Diversity Management     Global Human Capital Development     Employee Health and Safety     Supply Chain Management	pp. 123–129 pp. 130–131 pp. 132–133 pp. 119–122
	Principle 4	Businesses should uphold the elimination of all forms of forced and compulsory labour	Employee Strengths		
	Principle 5	Businesses should uphold the effective abolition of child labour			
	Principle 6	Businesses should uphold the elimination of discrimination in respect of employment and occupation			
Environment	Principle 7	Businesses should support a precautionary approach to environmental challenges	2.1 Promoting Environmental Management 2.2 Environmentally Conscious Business Activities and Environmental Management 2.3 Communication with Stakeholders	Corporate Environmental Management Strategies and Initiatives     Environmentally Conscious Products and Services	pp. 051–062 pp. 063–070
	Principle 8	Businesses should undertake initiatives to promote greater environmental responsibility		Environmentally Conscious Production     Environmental Management     Framework and Communication	pp. 071–080 pp. 081–089
	Principle 9	Businesses should encourage the development and diffusion of environmentally friendly technologies			
Anti- Corruption	Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery	<ol> <li>Relations with Politics and Government Administration</li> <li>Regarding Gifts, Business Entertainment, Etc.</li> </ol>	Compliance	pp. 036–040

### Policy, Vision, and Guidelines

Policy, vision, and guidelines reported in *Hitachi Group Sustainability Report 2011* are listed below.

	Category	Policy, Vision, and Guidelines	Related Pages in This Report
Hitachi's Management Strategies and CSR		Corporate Credo	p. 015
		Hitachi Group Vision	p. 015
		Hitachi Group Codes of Conduct	p. 015
		2012 Mid-Term Management Plan	pp. 015–016
		CSR Policy of the Hitachi Group	p. 017
Management Report	Risk Management	Guidelines for Pandemic Influenza Preparedness	p. 035
	Compliance	Hitachi Group Codes of Conduct	p. 036
		Basic Approach to Information Security Governance	p. 039
		Personal Information Protection Policy	p. 038
		Three Principles for Preventing Leakage of Confidential Information	p. 039
	Brand Management	Hitachi Brand Platform	pp. 047–048
Environmental Report	Environmental Management Strategies and	The Hitachi Environmental Vision	p. 051
	Initiatives	Long-Term Plan Environmental Vision 2025	pp. 051–052
		Hitachi Action Guidelines for Environmental Conservation	р. 059
Social Report	Quality Assurance and Customer Satisfaction	Customer Satisfaction Management Guidelines	p. 095
	Communication with Shareholders and Investors	Disclosure Policy	p. 101
		Basic Policy for Prevention of Takeovers	p. 103
	Supply Chain Management	Social Contribution Philosophy and Policy	p. 104
		Guidelines for Procurement Activities	pp. 119–120
		Hitachi Group Supply-Chain CSR Deployment Guidebook	p. 120
		Green Procurement Guidelines	pp. 120–121

### **Major Results Data**

Major results data reported in Hitachi Group Sustainability Report 2011 are listed below.

### Management

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Related Pages in This Report
Innovation Management						
R&D Efficiency (ROI) (%)	0.45	0.82	0.31	0.37	1.1	p. 041
R&D Expenditures to Revenues (%)	4.0	3.8	4.2	4.2	4.3	p. 041
Intellectual Property						
Patent Application Ratios outside Japan (%)	37	45	47	47	51	p. 044

Scope of data Hitachi, Ltd. and consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies)

No. of companies: FY 2006: 934; FY 2007: 911; FY 2008: 944; FY 2009: 901; FY 2010: 914

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Related Pages in This Report
Environmental Management Strategies and Initiatives						
Contributions to $CO_2$ Emission Reduction (millions of tonnes)	-	_	-	11.77	15.51	p. 052
Environmentally Conscious Products and Services						
Eco-Product Sales Ratio (%)	31	38	47	53	60	p. 063
No. of Eco-Product Models (models)	4,900	5,741	6,954	8,387	9,456	p. 063
Environmentally Conscious Production						
CO <sub>2</sub> Emissions in Japan (kt-CO <sub>2</sub> )	2,805	3,104	2,893	2,482	2,630	p. 072
CO <sub>2</sub> Emissions outside Japan (kt-CO <sub>2</sub> )	1,483	1,407	1,419	1,397	1,694	p. 073
CO <sub>2</sub> Emissions from Transportation in Japan (kt-CO <sub>2</sub> )	188	174	155	128	125	p. 074
Waste Generation (kt)	784	760	737	608	738	p. 075
Water Use outside Japan (millions of m <sup>3</sup> )	14.68	14.26	13.61	12.90	16.40	p. 077
VOC atmospheric Emissions in Japan (kt)	6	5	4	3	3	p. 078
VOC atmospheric Emissions outside Japan (t)	752	774	523	577	439	p. 079

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)

No. of companies:

FY 2006: 934; FY 2007: 911; FY 2008: 944; FY 2009: 901; FY 2010: 914 For environmental load data generated through business operations Companies that cover 90% of the load (based on Hitachi calculations)

### Social

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Related Pages ir This Report
Social Contribution Activities		1	1	1		1
Breakdown of Funding for Social Contribution Activities <sup>+1</sup> (millions of yen)	1,412	1,472	1,439	1,347	_	p. 104
Supply Chain Management						·
Global Procurement Ratio (%)	_	_	_	_	36	р. 119
Diversity Management			L. L	1		1
Ratio of Male and Female Employees (Hitachi, Ltd.) (%)	86:14	86:14	86:14	85:15	84:16	p. 124
Ratio of Male and Female Employees (Hitachi Group <sup>†2</sup> ) (%)	_	_	_	89:11	90:10	p. 124
Ratio of Female Managers (Hitachi, Ltd.) (%)	-	2.5	2.9	3	3.3	p. 124
Ratio of Female Managers (Hitachi Group <sup>+2</sup> ) (%)	-	_	-	1.2	1.3	p. 124
No. of Employees Taking Child Care Leave (Hitachi, Ltd.) (people)	189	438	459	510	542	p. 124
No. of Employees Taking Child Care Leave (Hitachi Group*2) (people)	_	_	_	546	538	p. 124
No. of Employees Taking Nursing Care Leave (Hitachi, Ltd.) (people)	7	20	18	11	10	p. 125
No. of Employees Taking Nursing Care Leave (Hitachi Group*2) (people)	_	_	_	25	23	p. 125
No. of Employees Working Shorter Hours (Hitachi, Ltd.) (people)	96	350	383	288	337	p. 125
No. of Employees Working Shorter Hours (Hitachi Group <sup>+2</sup> ) (people)	-	_	_	551	695	p. 125
Employment Ratio of People with Disabilities <sup>+2</sup> (%)	2.05	2.11	2.06	2.01	2.05	р. 129
Global Human Capital Development						
No. of Non-Japanese Employees (Hitachi, Ltd.) (people)	151	179	200	218	230	р. 130
No. of Employees Taking Group-Wide Training (Hitachi Group <sup>13</sup> ) (people)	-	_	_	_	22,666	p. 131
Employee Health and Safety						
Occupational Accident Rates (Hitachi, Ltd.) (%)	0.12	0.05	0.12	0.06	0.07	p. 132
Occupational Accident Rates (Hitachi Group <sup>+2</sup> ) (%)	0.25	0.26	0.22	0.25	0.23	р. 132

Scope of data
11 Hitachi, Ltd. and five foundations in Japan
12 Twenty-seven Hitachi Group companies in Japan
13 Hitachi, Ltd. and consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies) No. of companies: FY 2006: 934; FY 2007: 911; FY 2008: 944; FY 2009: 901; FY 2010: 914

### Inquiries

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