

New Frontiers of Innovation

Furukawa Electric Group Sustainability Report **2012**

FURUKAWA ELECTRIC

FURUKAWA ELECTRIC GROUP PHILOSOPHY

CORPORATE PHILOSOPHY	Drawing on more than a century of expertise in the development and fabrication of advanced materials, we will contribute to the realization of a sustainable society through continuous technological innovation.
MANAGEMENT PHILOSOPHY	 With an eye to the future, we at the Furukawa Electric Group pledge to: Live up to the expectations and trust invested in us by society, with fairness and integrity. Apply the sum total of our expertise to satisfy our customers and grow with them. Continuously strive to achieve world-class technological innovation, and transform ourselves in every area of endeavor. Nurture human resources at every level, so that we can become a more diverse and creative organization.
THE FURUKAWA ELECTRIC GROUP CREDO	 Maintain high ethical standards, and value honesty and integrity above all. Continually improve, innovate, and lead, in every area of endeavor. Take a hands-on approach that addresses the reality of every situation—in the office, at the factory, and on site. Be proactive—take the initiative and work with others, persevering until a solution is found. Maintain open channels of communication between departments and divisions, so that we can share ideals and help each other grow.

Editorial Policy

Until 2011, each year Furukawa Electric published a CSR Report, detailing its corporate social responsibility (CSR) activities, and an Annual Report, which reported on operational and financial conditions.

However, we have now combined this information from the standpoint of the Furukawa Electric Group's sustainability. Accordingly, the 2012 version of these reports is a combined Sustainability Report. This initial report contains a message from the Group's new president and a special feature

Scope of This Report

Organizations Covered

This report covers Furukawa Electric Co., Ltd. and all members of the Furukawa Electric Group, including affiliated companies.

Period Covered

From April 1, 2011 to March 31, 2012

* Includes selected information on past initiatives and activities during fiscal 2013.

Scope of Data Covered

This report covers Furukawa Electric Co., Ltd. and its 116 consolidated subsidiaries. Exceptions to the scope of the data collected have been clearly stated.

Publication Timeframe

Publication date: September 18, 2012 Planned publication of next edition: September 2013 (previous edition published in November 2011)

Source Guideline

We referred to the GRI "Sustainability Reporting Guideline 2006 (3rd Edition)"* and the Ministry of the Environment's "Environmental Reporting Guideline 2007 Edition" in composing the Furukawa Electric Group Sustainability Report 2012.

Our own assessment places this report at the "B" standard in the GRI Application Level.

* Please refer to page 46, "GRI Guideline Table of Contents" which shows the correspondence of this report to the GRI Guideline. outlining our acquisition of SuperPower, Inc. of the United States. In this section, we explain our efforts to accelerate operations in the superconducting business by providing an overview of current conditions and our goals for the future.

This report includes information of particularly high priority; other CSR-related information is contained in the CSR Data Book, English-language financial information is provided in the Financial Review, and other detailed data can be found on our website.

Accuracy of the Data Disclosed in This Report

In order to maintain accuracy in data disclosure, the information provided in this report has been vetted by the divisions in charge of the relevant information, the Investor & Public Relations Unit and the Administration Department of the CSR Division, which is in charge of editing this report. We have also provided a third-party opinion so as to offer the point of view of an outside expert.

We are looking into obtaining third-party assurance of report content in the future.

Website

http://www.furukawa.co.jp/english/csr/index.htm

Inquiries

Administration Department, CSR Division Furukawa Electric Co., Ltd. TEL: +81-3-3286-3044 FAX: +81-3-3286-3920



Initiatives for the Environment **Condcting Projects** Related to Biodiversity **↓**P.26

New Frontiers of Innovation

Furukawa Electric Group Sustainability Report 2012







Global Supplier in the Field of **Superconductors** P.11→

Special Feature Becoming a Top

> P.30 Initiatives for Society Holding the Fourth Plant Tour for Individual Investors

↓ P.42



Contents

Furukawa Electric Group Philosophy/ Editorial Policy	01
Contents	02
Furukawa Electric Group Overview	03
AT A GLANCE	05
President Message	07
Special Feature Becoming a Top Global Supplier in the Field of Superconductors	11

Initiatives for the Environment 17

Environmental Management	18
Environmental Education	19
Material Flow	20
Targets and Performance (Environment)	21
Environmentally Sound Products	22
Environmentally Conscious Production/ Chemical Substance Management	23
Environmental Risk Management	25
Biodiversity Preservation	26

Initiatives for Society	27
Relations with Our Customers	28
Relations with Our Shareholders	30
Relations with Business Partners	31
Relations with Our Employees	32
Relations with Communities	37

Strengthening Management 39 Corporate Governance 40 CSR Management 41

Targets and Results	44
Third-Party Opinion	45
GRI Guideline Table of Contents	46

Furukawa Electric Group Overview*1

Net sales

918.8 billion yen (Consolidated, fiscal year 2012)

Number of employees

45,425 (Consolidated, as of March 31, 2012)

Number of companies

135 (116 subsidiaries and 19 affiliates accounted for using the equity method)

*1 There were no major changes in terms of organizational scale, structure or ownership during the reporting period.

*2 Figures excludes intersegment transactions

Net sales by Main Business Segment (Consolidated)

Telecommunications	s Electronics and	Automotive systems
14.4%		21.2%
¥144.5 billion		¥212.0 billion
Energy and Industrial products	Total:	Metals
27.2%	¥918.8*2	14.1%
¥272.2 billion	billion	¥141.6 billion
Services and Others	5	Light metals
3.6%		19.5%
¥36.5 billion		¥195.6 billion

Furukawa Electric Group Corporate Profile

Name	Furukawa Electric Co., Ltd.
Headquarters location	2-3 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8322, Japan
President	Mitsuyoshi Shibata
Founded	1884
Established	1896
Net sales	403.7 billion yen (Non-consolidated, fiscal year 2012)
Number of employees	4,192 (Non-consolidated, as of March 31, 2012

Domestic bases

Head Office

 Branch Offices Hokkaido Branch Offices, Tohoku Branch Offices, Chubu Branch Offices, Kansai Branch Offices, Chugoku Branch Offices, Kyushu Branch Offices

Branches

Hokuriku Branch, Shikoku Branch, Okinawa Branch

Works, Research Laboratories

Bases	Works	Research Laboratories
Nikko,Tochigi	Nikko Works Copper Foil Division	Metal Research Center
Ichihara,Chiba	Chiba Works	Power & System Laboratories, FITEL Photonics Laboratory
Yokohama,Kanagawa	Yokohama Works	Yokohama R&D Laboratories
Hiratsuka,Kanagawa	Hiratsuka Works	Ecology & Electronics Laboratories, Power & System Laboratories, R&D Center for Automotive Systems & Devices
Kameyama,Mie	Mie Works	
Amagasaki,Hyogo	Copper Tube Division	

Domestic Network

http://www.furukawa.co.jp/english/kaisya/01-03.htm

(FY)

Results (Consolidated)



Operation Bases



Total Assets/Net Assets



Research Expense/Capital Investment



AT A GLANCE

Related to Transmission Infrastructure



Telecommunications

•Optical Fiber and Cable Business •Photonics and Network Solutions Business

14.4%				
		(Bi	llions of yen)	
	FY2010	FY2011	FY2012	
Net Sales	135.5	149.3	144.5	
Operating Income	9.8	9.6	4.1	

Fiscal 2012 Topics

•Furukawa Industrial S.A. Produtos Electricos (FISA) in Brazil acquired Metrocable Industria e Comércio Ltda, which manufactures and sells optical fiber cables

Measures in Fiscal 2013

- •Establish joint venture in China to produce and sell optical fiber preform (July 2012)
- •Build new optical cable plant in Russia (July 2013)

Major Products



Optical fiber cables, optical fiber cable accessories and installations, optical components, optical semiconductor devices, metal communication cables, electronic appliance wires, network equipment, CATV systems, radio products



Energy and Industrial Products

- Energy Business
- Industrial Products Business

27.2%				
		(Bi	llions of yen)	
	FY2010	FY2011	FY2012	
Net Sales	208.8	253.0	272.2	
Operating Income	3.7	0.9	-0.8	

Fiscal 2012 Topics

- Riken Electric Wire to establish joint venture in elevator cable business with Hebei Huatong Wires & Cables Group
- Acquired SuperPower, Inc., a U.S. manufacturer of second-generation high-temperature superconducting wire

Measures in Fiscal 2013

- •Start production at new optical fiber compound overhead ground wires (OPGW) plant at FISA in Brazil (October 2012)
- Establish company integrating three of our electric component companies (October 2012)

Major Products



Copper wires, aluminum wires, power transmission cables, power transmission cable accessories and installations, insulated wires, cable conduits, water-feeding pipe materials, foam products, UV tapes for semiconductor manufacturing, electrical insulation tapes, electric material products

Net Sales Ratio



The Furukawa Electric Group is concentrating on business development in two areas: the transmission infrastructure business, for which substantial demand growth is expected in emerging markets, and the functional materials business, a high-value-added sector in which we can leverage the Group's unique advantages in materials.

Related to Functional Materials



Electronics and Automotive Systems

- •Automotive Parts Business
- •Electronics Components Business
- Magnet Wire Business



Fiscal 2012 Topics

- •Acquired controlling interest in ChonQing Chang Hua Automobile Harness in China and expand wire harness business
- •Acquired Automotive Connector Business from Mitsubishi Cable Industries

Measures in Fiscal 2013

•Start production at new wire harness plant in the Philippines (March 2013)

Major Products



Automotive components and wiring harnesses, magnet wires, electronic component materials, heat sinks, hard disc drive (HDD) aluminum blanks, battery products



Metals •Copper Strips Business •Copper Pipes Business •Copper Foils Business

(Billions of ven)				
	FY2010	FY2011	FY2012	
Net Sales	119.6	152.9	141.6	
Operating Income	- 2.2	3.2	0	

Fiscal 2012 Topics

 Revised system for domestic production of copper pipes

Measures in Fiscal 2013

•Commence production at new plant for electrodeposited copper foil (used in circuits and batteries) in Taiwan (June and August 2012)

Major Products



Wrought copper products (plates, strips, pipes, rods, wires), functionalsurface (plating) products, Electrodeposited copper foils, processed products for electronic parts, superconducting products, special metal materials (shape-memory and superelastic alloys)



Light Metals

- •Aluminum Rolling Business
- •Aluminum Extrusion Business
- •Aluminum Casting, Forging and Other

19.5%				
	EV2010	EV2011	EV2012	
	112010	112011	112012	
Sales	188.1	209.0	195.6	

- 0.2

11.5

5.7

Fiscal 2012 Topics

Net

Operating

Income

•Furukawa-Sky to invest in ARCO Aluminum of the United States

Measures in Fiscal 2013

•Furukawa-Sky to build aluminum rolling mill in Thailand (January 2014)

Major Products



Aluminum plates, extruded aluminum products, castings, forged products, processed light metal products



We will contribute to improving energy efficiency by utilizing our unique materials expertise.

Mitsuyoshi Shibata

Profile

Born in Tokyo in 1953. Graduated from the Department of Metal Materials, Faculty of Engineering, The University of Tokyo, and joined Furukawa Electric in 1977. Beginning in with production technology in the company's copper wire plant, experienced the development and commercialization of semiconductor lasers before heading the Patent & Licensing Department, the Yokohama R&D Laboratories, the Corporate Strategy Planning Department, and the Metals Company. Following a broad range of experiences, including the overseas investment related to copper foil and restructuring of the copper pipe business, appointed President in April 2012.

My name is Mitsuyoshi Shibata, and I was appointed President on April 1, 2012. I would like to thank all of our stakeholders for their ongoing support. Having taken the reins of the Furukawa Electric Group during such difficult times, I feel a strong sense of the seriousness of my task.

Review of Fiscal 2012

Japanese industry has faced a drastically changing environment over the past several years, and the Furukawa Electric Group now confronts a situation in which we must fundamentally reconsider the business structure in place up to now. Although there was some recovery after the Great East Japan Earthquake in fiscal 2012, the economic environment has continued to be difficult, due to factors such as the global economic slowdown, the persistently strong yen against the dollar and the euro, and the Thailand floods.

The Furukawa Electric Group has taken measures in the face of such headwinds, such as a complete withdrawal from the glass substrate business and the streamlining of our copper tube operations in Japan, but at the same time we also engaged in growth initiatives such as expanding capacity for production of copper foil for lithium-ion batteries and expanding the range of applications for microcellular foamed sheet (MCPET). Also, through our acquisition of the U.S. company SuperPower, Inc., the Furukawa Electric Group became the world's only total supplier of second generation high-temperature superconducting products, offering everything from wire through equipment. We also advanced our aluminum business globally by building new production bases in North America and China.

Nonetheless, the Furukawa Electric Group's consolidated results for fiscal 2012 reflect decreased

revenue and earnings due to factors such as the difficult operating environment and the fine paid for violating U.S. antitrust laws, which was posted as an extraordinary loss. This has forced us to forego payment of a year-end dividend.

Embark on Reform for Real Victory

Taking the above into account, I view the Furukawa Electric Group as having reached a stage where the steps we take toward structural reform must be more bold and effective than ever before-we must embark on reform for real victory. As we are engaged in a diversity of businesses, determining the direction of the Group and where to invest in also entails deciding which businesses require streamlining. We are looking into measures such as integrating operations in the optical fiber business globally, reorganizing production bases in the domestic optical cable business to attain improved earnings, and accelerating the shift from domestic production of copper foil and other products to overseas production. While that reorganization takes place we will also strengthen business in the social infrastructure sector, including energy and telecom, as well as in the nextgeneration vehicle sector, in which better environmental features are called for. Our goal is to build a business structure capable of handling even greater demand from global growth markets.

For a Sustainable Society

The world is currently facing some major energy issues, including steep rises in oil prices and the environmental impact of mass consumption of fossil fuels. For the world to achieve sustainability, countries around the globe must make progress in energy conservation and expand the use of renewables. Energy supplies must be stabilized while environmental impact is brought under control.

Furukawa Electric has been manufacturing and providing useful products made from a variety of materials, such as copper, aluminum, and plastic, since our founding in 1884. In recent years we have been using our unique materials expertise to help solve global issues, such as energy conservation and energy supply stability. Our R&D is focused on three categories—nextgeneration vehicles, energy/smart grids, and high-density optical telecommunications. The Furukawa Electric Group will concentrate our maximum materials technology on achieving energy efficiency in each of those categories.

For example, switching from copper wire harnesses to lighter aluminum wire harnesses for the internal wiring of next-generation vehicles helps improve fuel economy by making the vehicle lighter. We are also engaging in the energy/smart grid sector by developing high-volume storage batteries, which are vital to renewable energy

power plants because of susceptibility to fluctuations in power demand due to seasonal changes, as well as superconducting electric power cables and superconducting magnetic energy storage (SMES) units that broadly reduce power loss during transmission. Our efforts in the high-density optical telecommunications field include responding to the switch from metal to fiber for large computer internal circuitry, and we are proceeding with optical interconnection development for improved speeds and lower power consumption.

To develop new energy sector businesses, we established the Offshore Wind Power Project Team in March 2012 and the High-Temperature Superconductivity Business Development Team in April. We will contribute to solving social issues while at the same time adding new value to the businesses of our customers through our R&D and business development focusing on environment and energy. Superconductivity is a technology noted for its potential to create fundamental change in our existing energy infrastructure. We are evolving our business focus toward leading the world in superconductivity technology. Please see the Special Feature (pages 11–16) for details.

Resolving Environmental Issues

Environmental conservation is our responsibility to the next-generation, and as a socially responsible company we are tackling environmental issues head-on. The Furukawa Electric Group not only addresses societal issues by reducing the environmental impact of products, we also are moving forward with the indexing of product environmental performance based on lifecycle assessment (LCA) methodology, which broadly contributes to creating value for the customer. We emphasize environmental contribution in conducting our business, and promote environmentally themed R&D.

The Furukawa Electric Group also announced efforts to promote biodiversity in fiscal 2011, through our efforts emphasizing eco-system impact assessment, sustainable use of resources, and increasing the awareness of each employee. During fiscal 2012, we focused on eco-system impact and conducted risk assessments on biodiversity in all fields of Group businesses. Taking the results of those assessments into account, we plan to establish a Long-Term Environmental Vision and Activity Guidelines, so as to promote environmentally-conscious management across the entire Group value chain.

Restoring Trust

As announced in September 2011, Furukawa Electric paid a fine of US\$200 million as part of a plea agreement made with the United States Department of Justice related to cartel activities for automotive wire harnesses and related products. Furukawa Electric Group formed the "Third-Party Investigation Committee on Violations of the Anti-Monopoly Act" in 2009, and in December of that year that Committee announced its findings. In parallel with the Committee's activities, a thorough investigation by outside legal counsel was carried out. This investigation confirmed that all conduct suspected of being in violation of the Anti-Monopoly Act had ceased, and all illegal conduct had been eliminated by the time the Committee's report was issued. Although the automotive wire harnesses case concerned past conduct that was found by outside legal counsel

investigation rather than any new occurrences of illegal conduct, we once again humbly ask the forgiveness of our stakeholders for any distress or trouble this incident may have caused.

We are working to restore public trust by enforcing strict compliance at all affiliated companies in Japan and overseas. We are focused on building a global compliance structure through efforts this fiscal year such as conducting compliance seminars in China and supporting effective risk management and internal controls at overseas bases.

As noted in the Furukawa Electric Group Corporate Philosophy, contribution to the realization of a sustainable society is our core principle. To realize this philosophy, we are aware that we must maintain close communications with society so as to meet our stakeholders' desires and expectations, and are also aware that we must fulfill our corporate social responsibilities fully so as to remain an indispensable corporate citizen. It is my sincere hope that we may continue to enjoy the support of our stakeholders.

> Mitsuyoshi Shibata President

Mill Shites

Special Feature

By leveraging the proprietary technology we have accumulated over many years with technologies acquired through M&A activities, we are working to

Become a Top Global Supplier in the Field of Superconductors.

Furukawa Electric has conducted R&D in the field of superconductors since the 1960s, and has amassed some of the world's leading technologies in this sector.

In February 2012, we acquired SuperPower Inc. of the United States, one of only a few companies in the world currently manufacturing second-generation high-temperature superconductor wire materials. We converted this company to a subsidiary in order to bolster our competitiveness in world markets.

> Raising generation efficiency Creation

Electricity storage Storing large amounts of electricity without losses

钡

Electricity transmission

Lowering transmission loss

大学院

Special Feature Becoming a Top Global St in the Field of Superconducto

Successes Based on a Half Century of R&D Have Led Us to Possess Some of the World's Leading Technologies in the Superconductor Field.

Against the backdrop of increasingly severe global warming and electric power risks, throughout the world interest has grown in the practical application of superconductor technologies to use energy more effectively. Since the 1960s, Furukawa Electric has the leading role in R&D of superconducting technologies. Over that time, our efforts have included the spectrum of activity from low-temperature superconductivity using metallic materials to high-temperature conductivity with oxide materials. In the process, we have accumulated some of the world's leading technologies in this field.

 Furukawa Electric's Efformation 1963 Commenced R&D on superconductivity Began industrial prodimulticore wire 	low-temperature uction of NbTi		 2003 Delivered cables for th at CERN*1, becoming 1 world to provide detec large-scale conduction Based on this perform Hadron Award*2 2005 Performed field test or superconducting cable in the world at the time Central Research Instit Electric Power Industry 	e Large Hadron Collider the first company in the stion equipment for ance, won the Golden
	► 1973 Became the first in the world to succeed in producing ultrafine multicore wire using a compound of V3Ga and Nb3Sn	 1980 Constructed a large-scale accelerator, developed a model coil for research into nuclear fusion, conducted superconducting generator verification testing and participated in other large-scale projects in Japan and overseas 1986 Commenced R&D into high-temperature superconductivity 	► 2007 Achieved the world's lowest transmission loss through application of ultrafine wire processing technology and cable forming technology that reduces the perpendicular magnetic field**	 2011 Developed the world's highest-voltage 275 kV superconducting cable*5 2012 Through the acquisition of a U.S. company, became the world's only integrated manufacturer of second-generation high-temperature superconducting materials
1960 11 Worldwide Evolution of Superconducting Techn 1911 Phenomenon of sup Leiden University ir	ologies perconductivity first disc the Netherlands, using	 1990 1987 Yttrium superconductor material (2G H at the University of Houston, in the University of Houston, in the Universed at mercury 	TS) discovered ted States	2010 2011 Marked the 100th anniversary of the discovery of the phenomenon of superconductivity.

- ▶ 1953 Nb3Sn discovered to be a practical metallic

1

- superconducting material
- ▶ 1957 BCS theory proposed to explain superconductivity
- *1 The European Organization for Nuclear Research (CERN), which announced the discovery of the Higgs particle to a high degree of certainty in July 2012 *2 Golden Hadron Award: Prize awarded by CERN to manufacturers determined to have contributed
- substantially to the LHG plan
- *3 NEDO "Project for R&D on Basic Technologies for Superconducting AC Equipment"

Commenced Verification Testing in China of the World's Highest-Voltage Superconducting Cable

In the Chinese city of Shenyang, the Furukawa Electric Group will conduct long-term loading cycle tests of the world's highest-voltage 275 kV superconducting cable in October 2012. This test was commissioned by the New Energy and Industrial Technology Development Organization (NEDO) as part of its "Technological Development of Yttrium-based Superconducting Power Equipment Project." By conducting verification testing in China, where demand for transmission infrastructure is rising sharply, we aim to demonstrate the technological superiority of superconducting cables and enhance our international competitiveness.



Ceremonies held in

Japan and overseas

275 kV superconducting cable test layout

*4 NEDO "Project for the Development of a Technological Base for the

*5 NEDO "Technological Development of Yttrium-based Superconducting

Application of Superconductivity

Power Equipment Project

Special Feature

Becoming a Top Global S in the Field of Superconductors

Meeting Expanding Demand for Superconductivity in Regions throughout the World by Using Smart Grids as Key Materials

Now that a century has passed since the phenomenon of superconductivity was first discovered, technological development and commercialization is accelerating. In particular, attention is focusing on the use of smart grids, which are anticipated for use in next-generation social infrastructures. By adding the second-generation high-temperature superconductor (2G HTS) wire production technology of SuperPower, Furukawa Electric plans to reinforce its lineup of technologies aimed at realizing smart grids. We provide advanced technologies and products in a host of fields related to the generation, transmission and storage of electricity.

Lowering Transmission Loss

Electricity transmission

We help to transmit the electricity that power plants generate in a stable manner and without losses.

The electrical resistance of power cables means that some energy is lost when electricity is sent from power stations to locations where the power is used. In Japan, where reducing the use of electricity has become an important issue for society as a whole, approximately 5% of power is lost during transmission.

Cables that use superconducting technologies have no electrical resistance, so transmission losses are greatly reduced. By 2050, we estimate that approximately 4,000 km of copper cable will be replaced with superconducting cable, reducing annual power consumption by 3.1 billion kilowatts for every 2.6 million people. This equates to a decrease in the CO2 emitted during generation of 1.06 million tons (based Furukawa Electric's calculations).



Combining SuperPower's technologies in the mass production and lengthening of 2G HTS materials with Furukawa Electric's technologies in power cables will enable the mass production of superconducting cables of higher quality and at a lower price. This combination should enable us to meet increasing global demand.

Superconducting Cable Demand Forecast

(based Furukawa Electric's calculations) (Billions of yen per year)



billion/year

Storing Large Amounts of Electricity without Losses

Electricity storage

We are using superconducting magnetic energy storage (SMES) to stabilize supply and demand for electric power.

To encourage the spread of generation from renewable energy sources such as solar and wind power, systems are needed to store excess energy and thereby offset natural fluctuations. Rapid charging and discharging was difficult for the storage batteries used in the past, so the industry was unable to overcome generation irregularities.

SMES, which allows large amounts of electricity to be charged and discharged

instantaneously, can help to offset power fluctuations in real time. As a result, this technology is a subject of growing attention for use in electricity storage equipment at renewable energy generation facilities.

SuperPower's 2G HTS wires are ideal for the coils needed to generate the strong magnetic fields required by SMES. Therefore, we are collaborating with ABB, the University of Houston and Brookhaven National Laboratory to develop SMES systems.



SMES simulation model using a toroidal coil

Raising **Generation Efficiency**

By raising generation efficiency and making generation equipment more compact and lightweight, we are contributing to the proliferation of wind power generation.

Electricity creation

Wind power generation is a type of sustainable energy use that is gaining popularity throughout the world. At present, the largest wind power generators are around 5 megawatts in scale. Technological developments will be needed to increase this amount to 10 or 15 megawatts. With conventional technologies, increasing the amount of power generated required larger generators, which led to higher manufacturing and construction costs. However, using 2G HTS wire, which has zero electrical resistance and high current density, means that even very thin wires can transport a large amount of electricity. This situation results in more efficient generation and more compact and lightweight generation equipment.

At present, SuperPower is cooperating with TECO-Westinghouse and the University of Houston on research and development of 2G HTS wire for large-scale wind power generators of around 10 megawatts. Around the world, rising expectations are accelerating the uptake of large-scale wind power generation including conducting research that will contribute to the reduction of CO2 emissions and the use of oil resources.





Becoming a Top Global Supplie in the Field of Superconductors

Through the Acquisition of SuperPower, Becoming the World's Only Integrated Manufacturer of Second-Generation High-Temperature Superconductivity Wire

Only two companies in the world are capable of mass producing second-generation high-temperature superconductor (2G HTS) wire. Furukawa Electric has acquired one of these, SuperPower, thereby turning the Company into the world's only integrated manufacturer of 2G HTS wire.

In this section, SuperPower's President Shirasaka, assigned from Furukawa Electric, and heads of the company's management and sales divisions talk about synergies and the benefits of collaboration between SuperPower and Furukawa Electric.

Combining SuperPower's Wire Production Technology with Commercialization Capabilities Developed by Furukawa Electric

Yusei: The most significant element in this acquisition was the addition of the 2G HTS wire production technologies possessed by SuperPower to the lineup of superconducting technologies that Furukawa Electric has cultivated over many years. As 2G HTS wire using rare earth-based elements can be produced at a lower cost than bismuth-based first-generation materials, they are gaining attention as the mainstream superconducting material of the future. However, as the technological hurdles to producing 2G HTS wire are high, only two companies in the world are currently capable of producing it in mass quantities. By adding one of these

companies to the Furukawa Electric Group, we have become the only corporate group in the world able to supply mass quantities both 2G HTS wire and HTS-based equipment.

Art: I understand that Furukawa Electric has conducted research over a long period of time, from the era of low-temperature superconductivity. SuperPower's predecessor manufactured metallic superconductor wires as well, so I believe we have some points in common. If we can integrate the 2G HTS wire production technologies that SuperPower possesses with Furukawa Electric's technologies in power cables, wound wires and equipment development, we should be able to provide even more advanced superconductor materials to world markets.

Trudy: On the sales front, Furukawa Electric's global



President Yusei Shirasaka Furukawa Electric Co., Ltd. Executive Officer

Leader, High-Temperature Superconductivity Commercialization Team, R&D Headquarters Senior Director, Marketing and Sales Division Traute (Trudy) F. Lehner Vice President, Finance and Administration Arthur (Art) P. Kazanjian



network should be a major source of strength. Through this network, we will be able to provide even more detailed support services to our customers.

Aiming to Address the Issues Society Faces by Leveraging World-Leading Superconducting Technologies

Yusei: As the world's only comprehensive supplier in the 2G HTS arena, we have become highly competitive in world markets. Going forward, we will need to think about how to leverage this strength to meet society's needs.

Art: The benefit of superconducting technologies is that they offer zero electrical resistance, so current density is high. Superconducting technologies allow energy to be used more efficiently, so they should play a significant role in resolving energy and environmental problems.

Trudy: We are already progressing toward commercialization with applications for power cables and large-scale wind power generation equipment. For wind power generation in particular, superconducting technologies are gaining growing attention because they allow increases in generation efficiency and more compact equipment, which reduces construction costs.

Art: In non-energy fields, as well, metallic superconductor technologies are already being used in the medical field for magnetic resonance imaging and other applications. Switching over to the use of 2G HTS should result in higher-performance equipment that is more compact.

Yusei: The field of energy and the environment and the medical sector both involve some of the major issues that society is facing. We need to recognize that resolving these issues is one of our social responsibilities as a manufacturer.

Meeting Our Corporate Responsibilities and becoming a Trusted Corporate Group in Global Markets

Yusei: Being active in global markets requires competitive technologies and products; it also requires that a company be trusted by society. Furukawa Electric has been active in CSR activities for some time; what is the situation at SuperPower?

Trudy: Our headquarters and manufacturing operation are located in Schenectady, New York, and we contribute in many ways to the local community. I am on the board of directors of the Schenectady chamber of commerce. In 2010, the 10th anniversary of SuperPower's founding, we built and contributed an exhibit about superconductivity to the Schenectady Museum, where I am vice president of the board of trustees. We partner with local schools and universities to promote education in the area of superconductivity, including teaching courses in the field and hosting student interns.

Art: For a company to succeed, I believe that respect for diversity is important. The engineers at our company come from a range of different cultures and backgrounds, which leads to the development of more innovative technologies. The company also has two female managers, in addition Trudy, who is a company director.

Yusei: This is excellent. I am pleased to hear that we are likely to be sources of encouragement to each other on the social contribution front, in addition to the technology and business sides.

Initiatives for the Environment

The Furukawa Electric Group is striving to reduce its environmental impact throughout the product lifecycle.

- 18 Environmental Management
- 19 Environmental Education
- 20 Material Flow
- 21 Targets and Performance (Environment)
- 22 Environmentally Sound Products
- 23 Environmentally Conscious Production
- 24 Chemical Substance Management
- 25 Environmental Risk Management
- 26 Biodiversity Preservation

Access Cable Company Asahi Electric Works Co., Ltd. Inoue Manufacturing Co., Ltd. NTEC Ltd. FCM Co., Ltd. Okano Electric Wire Co., Ltd. Okumura Metals Co., Ltd. Kyowa Electric Wire Co., Ltd. Furukawa Electric Ecotec Co., Ltd. Furukawa Electric Ecotec Co., Ltd. Shodensha Co., Ltd. Seiwa Giken Inc. Totoku Electric Co., Ltd. FITEC Corporation Furukawa Automotive Systems Inc. Furukawa Sangyo Kaisha Ltd. Furukawa C&B Co., Ltd. Furukawa Industrial Plastics Co., Ltd. Furukawa-Sky Aluminum Corporation Furukawa Precision Engineering Co., Ltd. Furukawa Techno Material Co., Ltd. Furukawa Electric Advanced Engineering Service Co., Ltd. Furukawa Electric Industrial Cable Co., Ltd. The Furukawa Battery Co., Ltd. Furukawa Logistics Corporation Furukawa Life Service Inc. Miharu Communications Inc. Riken Electric Wire Co., Ltd. Furukawa Magnet Wire Co., Ltd.

Detailed data is provided in our CSR Data Book (PDF). http://www.furukawa.co.jp/english/csr/report/index.htm



The Furukawa Electric Group conducts its environmental protection activities to achieve the objectives set forth in its 2012 Medium-Term Plan for Environmental Preservation Activities, in accordance with the Basic Philosophy and Action Guidelines of its Basic Environmental Policy.

Furukawa Electric Basic Environmental Policy

Basic Philosophy

We, the employees of the Furukawa Electric Group, recognize that preservation of the global environment is a serious issue confronting the international community, and we pledge to contribute to a sustainable future for the world through technological innovation that utilizes our strength in advanced materials.

Action Guidelines

- 1. We shall comply with environmental laws and regulations as well as the demands of our customers and others, setting ever higher environmental targets as we continuously improve our global environmental conservation efforts.
- 2. We shall strive to develop products that are friendly to the Earth, and create new environmental businesses.
- 3. We shall strive to reduce environmental risk by incorporating anti-climate change and resource conservation/ recycling considerations, as well as a reduction in the use of environmental impact-causing substances, across the entire product lifecycle.
- 4. We shall evaluate the ecological impact of all of our businesses, and strive for the preservation of biodiversity and sustainable use of resources.
- 5. We will seek harmony with the natural environment and local communities through dialogue with our stakeholders.

Environmental Management Promotion Organization

Management Organization

The Furukawa Electric Group's Central Committee for Environmental Management, headed by the chief social responsibility officer (CSRO) and answering directly to the president, meets quarterly to formulate Group environmental management targets and follow up on their status. To reinforce Group environmental management, in April 2011 we inaugurated the Environmental Committee. Targeting



Environmental management promotion organization

Group companies in Japan, this committee integrates the twice-yearly Liaison Meeting for Consolidated Environmental Management and the Committee for Consolidated Environmental and Green Product Management. This committee is working to promote environmental activities throughout the Group in accordance with consistent environmental targets.

Fiscal 2013 will be the final year for the Furukawa Electric Group's 2012 environmental protection targets. Therefore, in February 2012 we set up the Working Group for Sustainability Planning, a cross-company organization chaired by the CSRO. The aim of this working group is to formulate a medium- to long-term environmental management plan.

Receiving Third-Party Verification

Our seven manufacturing works and all domestic affiliates participating in consolidated environmental management are acquiring ISO 14001 certification. Our overseas affiliates are collecting data and constructing management systems to this end.

Environmental Accounting

The Furukawa Electric Group conducts environmental accounting in conformance with the environmental accounting guidelines published by the Ministry of the Environment. The Furukawa Electric Group's overall environmental conservation costs in fiscal 2012 came to ¥1.6 billion in investment and ¥6.1 billion in expenses.

Environmental Accounting http://www.furukawa.co.jp/english/csr/enviroment/accounts.htm

Environmental Education

The Furukawa Electric Group focuses on education and other activities to raise groupwide environmental awareness in accordance with its Basic Environmental Policy.

Environmental Education System and Environmental Education Programs

The Furukawa Electric Group conducts various types of environmental education to cultivate among employees the understanding that is necessary to conduct environmental activities and raise their environmental consciousness.

In fiscal 2012, 45 employees attended our ISO 14001 Internal Environmental Auditor Course, 34 attended our FGMS* Auditor Course, and 16 participated in our EMS Upgrade Seminar.

* Furukawa branding Green products Management System

Category of New recruits Content educa ment training Education for new Training for General environmental recruits (once a new recruits protection activities year, mandatory) Environmental Policy and EMS activities purpose, goals and general (as needed. knowledge pertaining to the mandatory) environment Requirements of ISO IS014001-related standards, environmental education (two-day regulations, procedures for course) (twice a internal environmental audits year, voluntary) various drills One-day brush-Trends in environmental up course (once a regulations, various drills to brush up auditing skills year, mandatory) **Environmentally** sound design Environmental Environmental regulations subjects (as needed, voluntary Control of chemical substances contained in products Consolidated Seminars by experts on environmental management priority issues seminars

Environmental education programs

Environmental Awards System

To ramp up our environmental activities, in fiscal 2011 we introduced an environmental awards system. There are three award categories for Furukawa Electric on a standalone basis: expanding sales of environmentally sound products, global warming prevention activities, and group activities. Affiliated companies are awarded for overall environmental activities.

Award for Efforts to Increase Sales of Environmentally Sound Products

We provide the Award for Expanding Sales of Environmentally Sound Products to further promote sales of environmentally sound products. Each company is ranked by number of registrations and its percentage sales of environmentally sound products, with the top companies receiving awards.

In fiscal 2012, the Superior Excellence Award was given to the Energy & Industrial Products Company.

Global Warming Prevention Activity Award

To promote activities at the business divisions to prevent global warming, we have initiated the Global Warming Prevention Activity Award. This award is given to divisions that take superior initiative, and is tied to the improvement in motivation.

There were 14 entries for this award in the current fiscal year, six more than in the preceding year. In addition to three initiatives in the preceding year, including the development and commercialization of superior environmental technologies and internal production process improvements leading to reduced CO₂ emissions, we received reports on 11 ongoing projects. These included such measures as proper operation of a compressor, updates to high-efficiency lighting equipment, reducing standby power and thermal insulation processing.

As a result of the judging, the Copper Foil Division won the Superior Excellence Award for its process improvement measures that contribute to the substantial reduction of electricity used in the manufacturing process. In addition, we have granted two Excellence Awards and six Effort Awards.

Environmental Group Activity Presentation Meetings

We began holding our Environmental Group Activity Presentation Meetings in 2010 to promote a variety of environmental activities. At this event, each recommended group announces the content and results of environmental activities. Committee members review outstanding activities, with a focus on initiatives that are innovative and can be deployed groupwide.

The second of these meetings was held at corporate headquarters in September 2011, and presentations were made by seven teams recommended by each Works. Following strictly impartial judging by 10 committee members, including the CSRO, the Hiratsuka Works'

"Energy Conservation Activities Related to MCPET Production" was selected for the Superior Excellence Award. Initiatives by the Copper Tube Division and the Yokohama Works also received Excellence Awards.



Environmental Group Activity Presentation Meeting

Material Flow

The Furukawa Electric Group strives to reduce various kinds of environmental impact, resource use and energy consumption in the course of conducting business.

Environmental Impact of the Furukawa Electric Group in Fiscal 2012

Data has been compiled for Furukawa Electric, its 28 affiliated companies in Japan and 44 affiliated companies overseas.

INPUT OUTPUT								
Category	Domestic	Overseas	Unit		Category	Domestic	Overseas	Unit
Raw materials				Furukawa Electric	Waste			
Copper	155,258	164,397	tons	Seven works,	Total waste generated	64,730	32,460	tons
Aluminum	280,542	40,681	tons	28 domestic	Final waste disposal	1,014	7,170	tons
Iron	4,515	10,826	tons	affiliated companies	Recycling amount	59,709	17,201	tons
Nickel	568	_	tons	and				
Chromium	165	_	tons	44 overseas	Atmospheric emissions			
Manganese	1,507	_	tons	affiliates	CO2	819,835	393,108	tons-CO2
Magnesium	4,943	_	tons		SOx	132	-	tons
Other metals	40,700	_	tons		XOx	736	_	tons
Rubber	46	_	tons		Soot	35	_	tons
Glass	132	1,493	tons		Ohamiaal auhatanaaa			
Plastic	46,878	46,999	tons		Cnemical substances			
					Volume emitted	151		tons
Energy	17,918	6,589	TJ		Volume transferred	304		tons
Electricity (purchased electricity)	1,076,320	526,321	MWh		Westswater	24.065	1 261	1 000 m ³
Electricity (hydroelectric power)	147,835	22,840	MWh		wastewater	24,003	1,201	1,000 11
Electricity (solar power)	15	-	MWh		Public waterways	22,855	510	1,000 m ³
City gas	40,944	4,319	1,000 m ³		Rivers	21,298	218	1,000 m ³
LPG	40,118	2,325	tons		Sea	1,554	0	1,000 m ³
Heavy fuel oil A	11,223	1,042	kl		Other	2,783	292	1,000 m ³
Kerosene	14,500	7	kl		Sewer	1,210	751	1,000 m ³
Light oil	789	109	kl		BOD	69	_	tons
Water	26,938	2,148	1,000 m ³		COD	71	_	tons
Industrial water	20,165	74	1.000 m ³		SS	53	_	tons
Groundwater	5.575	327	1.000 m ³	1 A A A A A A A A A A A A A A A A A A A				·
Tap water	1,198	1,747	1,000 m ³		Product shipping volume	924,927	_	tons
Chemical substances								
	57 000		topo					
volume nandled '	07,329				Dreduct collection veloce	5 / 92	_	tone
Packaging*2					Product collection volume	5,405		
Cardboard	900	_	tons		< Type of cable	4,963		tons
Wood	37.156	74.405	tons		Plastics	438		tons
Plastic	1.079	3.883	tons		Metals	82	—	tons
Paper	601	557	tons					
				•	Volume of water	115,017	659,871	tons
Paper ^{*3}	1.084	_	tons	•	recycled and reused			Í

*1 PRTR-listed substances *2 Cardboard, wood, plastic, and paper used in product shipping

*3 OA paper, copy paper, etc. used at plants and offices

Targets and Performance (Environment)

The Furukawa Electric Group is proceeding with environmental conservation activities against medium-term targets in its 2012 Medium-Term Plan for Environmental Preservation Activities and the annual plan based upon it.

Activity Targets and Performance in Fiscal 2012

The Furukawa Electric Group defines medium-term targets every three years. (For fiscal 2012, these were in the form of the 2012 Medium-Term Plan for Environmental Preservation Activities.) Each year, we establish targets for environmental protection activities based on these plans. In addition to developing these activities at all of the Furukawa Electric Works, we are also making progress in consolidating the overall Group targets and activities by reflecting them in the environmental targets at each affiliate through the efforts of the Group Environmental Committee.

In fiscal 2012, we reached many of our targets in the categories of reducing emission of gases that cause global warming and lowering VOC emissions. However, we fell short of our targets in a number of activities. In fiscal 2013, we will redouble our efforts to do so from fiscal 2012 on, with the goal of fulfilling our 2012 Medium-Term Plan for Environmental Preservation Activities for the Group overall.

Activitico	Equirenmental pressruction estivity targets for fiscal 2012	Performance in fiscal 2012			
ACUVILLES		Perfo Furukawa Electric 97% 18.8% reduction 11.8% reduction 11.8% reduction h Achieved at 7/21 Divisions ur) 27.7% reduction 3s 100%	Rating	Affiliated companies	Rating
Masta reduction activition	97% or more recycling rate (95% or more for affiliates)	97%	0	89.2%	×
Waste reduction activities	Affiliates zero emissions achievement ratio: 80%	—	—	74%	×
	14% reduction in greenhouse gas emissions compared with fiscal 2001 level	18.8% reduction	0	20.5% reduction	0
	4% reduction in energy consumption compared with fiscal 2008 level	11.8% reduction	0	12.6% reduction	0
Activities to prevent global warming	1% reduction in specific energy consumption for manufacturing compared with the previous fiscal year	Construction Consumption for manufacturing compared with ear Achieved at 7/21 Divisions Achieved at 7/21 Divisions Consumption for transportation compared with % reduction at affiliates compared to the previous fiscal year) 13.8% reduction 10% reduction in emissions of volatile organic compounds 27.7% reduction	×	Achieved at 12/17 Works	×
	5% reduction in specific energy consumption for transportation compared with fiscal 2007 level (1% reduction at affiliates compared to the previous fiscal year)		0	Achieved at 8/12 Works	×
Chemical substance	Furukawa Electric: 10% reduction in emissions of volatile organic compounds compared with fiscal 2008 level ¹¹	27.7% reduction	0	_	-
management activities	Affiliated companies: 42% reduction in emissions of volatile organic compounds compared with fiscal 2005 $level^2$	_	_	58.9% reduction	0
Croop optivition	Procurement rate for 52 general-purpose products: 100%	100%	0	Achieved at 6 companies	0
dieen activities	Expand to Group companies	Expanded to 15 Group compani	es		0
Eco-design activities	Sales ratio for environmentally sound products: 25% or greater (Furukawa Electric only)	40.0%	0	_	_
Riodivorcity procorvation	Establish biodiversity impact guideline	Evaluation of rick and datarming	ation of ice	suce with regard to biodivorcity	
	Examine models for biodiversity action	Evaluation of hisk and determine	1001 01 153	Sues with regard to bloulversity	

*1 Revised by adding hydrocarbon-based detergent (Subject: All VOCs)

*2 As has been the case up to now, mainly two substances (toluene and xylene)

Fiscal 2013 Activity Targets

As fiscal 2013 will the last year for the 2012 Medium-Term Plan for Environmental Preservation Activities, we will intensify groupwide efforts to achieve the plan's final goals.

With regard to chemical substance management

activities, we have revised affiliated companies' targets for reducing VOC emissions. As for Furukawa Electric on a standalone basis, their new management target is all VOCs.

Activities		Environmental preservation activity targets for fiscal 2013	2012 Medium-Term Plan for Environmental Preservation Activities	
Waste reduction	Recycling rate	99% or more (97% or more for affiliates)	99% or more recycling rate	
activities	Group zero emissions achievement ratio	Affiliates zero emissions achievement ratio: 90%	Affiliates zero emissions achievement ratio: 90%	
	Greenhouse gas emissions	Reduce by 15% compared to fiscal 2001	Reduce by 15% compared to fiscal 2001	
	Energy consumption	Reduce by 5% compared to fiscal 2008	Reduce by 5% compared to fiscal 2008	
Activities to prevent global warming	Specific energy consumption for production	Reduce by 1% compared to the previous fiscal year	Reduce by 1% compared to the previous fiscal year	
	Specific energy consumption for transportation	Reduce by 6% compared to fiscal 2007 (Furukawa Electric only)	Reduce by 6% compared to fiscal 2007 (standalone only)	
Chemical substance		Furukawa Electric: Reduce by 15% compared to fiscal 2008	Optimal management of the quantity of chemica	
management activities		Affiliated companies: Reduce by 1% compared to the previous fiscal year ^{*1}	substances consumed	
Croop activition		Procurement rate for 52 general-purpose products: 100%	Evenneign of general purpose groop products	
Green activities		Expand to affiliates	Expansion of general purpose green products	
Eco-design activities		Sales ratio for environmentally sound products: 45% or greater (Furukawa Electric only)	Increase in the development and sale of environmentally sound products	
		Conduct of LCA for all important products:100%	Improvement in product environmental performance indices and increase in sales	
Biodiversity preservation		Formulation of biodiversity guidelines and creation of structures	Formulation of guidelines and establishments of systems	

*1: Targets all surveyed VOCs

Environmentally Sound Products

The Furukawa Electric Group certifies and registers low-environmental impact products as "environmentally sound products," and promotes their use.

Environmentally Sound Products and the e-Friendly Accreditation System

The Furukawa Electric Group certifies and registers as environmentally sound products those products with improved performance compared to existing products in the categories of materials and parts purchasing and manufacture, use, distribution and disposal.

We have created the "e-Friendly" environmental mark to

identify such environmentally sound products. This mark is placed on those products, as well as in catalogs.



The e-Friendly mark

Environmentally sound product categories

Category	Content
Prevention of global warming	Products with functions that help in the reduction of emissions as well as the absorption and stabilizing of greenhouse gases
Zero emission	Products made from recycled materials, products designed with easy- to-recycle components, products made from materials or with design facilitating volume reduction for lowering waste volume, products designed to share common components with other products or products designed as common components.
Elimination of materials that have an impact on the environment	Products that do not lead to an increase in the use of ozone-depletive substances during the manufacturing process, do not contain harmful substances above regulatory limits and do not generate harmful substances above these limits during use or disposal.
Resource savings	Products that result in overall energy savings by such means as reducing the use of raw materials and components as well as scarce resources, featuring enhanced longevity, allowing easier product and component maintenance, and reducing the use for resources in packaging.

Expanding Environmentally Sound Products

We are working to increase our overall percentage of environmentally sound products. We set targets based on percentage of sales, and confirm our progress and success on this basis.

In fiscal 2012, on a standalone basis Furukawa Electric reached its target for environmentally sound products of 40.0% of total sales, surpassing its goal of 25% or more. (The groupwide result was 19.7%) For fiscal 2013, we have raised this target to 45% or more, and we will continue with efforts accordingly.

Environmentally sound products as a percentage of sales



Environmental Performance Index ("Visualization")

In order to create environmental performance indicators for major product lines, the Furukawa Electric Group is using life-cycle assessment (LCA) to "visualize" CO₂ emissions.

In fiscal 2012, we performed LCAs on 22 additional product lines and created Product Category Rules (PCR) guidelines. This effort brought the total number of product lines up to 40, allowing us to use environmental performance indicators for products accounting for approximately 50% of total net sales.

In fiscal 2013, we will implement LCA evaluation targets for all major production lines. We will use the results of our calculations to define numerical targets for our next mediumterm plan and employ them on research and development on environmentally sound products.

Implementation of LCA evaluations on product lines

Company Business Division	2011	2012
Energy and Industrial Products Company	4	5
Telecommunication Company	9	11
Electronics and Automotive Systems Company	4	3
Metals Company	1	3
Total	18	22

Examples of Degree of Social Contribution (NC-WS Electrodeposited Copper Foil)

For one product on which LCA has been calculated, NC-WS electrodeposited copper foil, we calculated the degree of contribution to CO₂ reduction if the product were actually used in the lithium-ion batteries of electric vehicles.

At Eco-Products 2011, we introduced the results of these calculations and the degree of social contribution made by NC-WS.



The use of Furukawa Electric's copper foil would result in an estimated savings of 1.28 million tons per year by 2020.

Poster displayed at Eco-Products 2011

Environmentally Conscious Production/ Chemical Substance Management

The Furukawa Electric Group to enhance sustainability by reducing the environmental impact of production and distribution processes and appropriately managing chemical substances.

Reducing Greenhouse Gas Emissions

Initiatives at Works

The majority of the Group's greenhouse gas emissions consist of CO₂ generated from electricity, fuel and other energy sources. As emissions from manufacturing processes account for a large proportion, we work on reducing emissions by increasing the efficiency of production processes, switching fuels, replacing equipment with more efficient alternatives, insulating hot areas and other measures.

Total Group GHG emissions came to 820,000 tons of CO₂ in fiscal 2012, a reduction of 20.0% against fiscal 2001 levels, and energy consumption was down 12.3% compared with fiscal 2008 levels. On a non-consolidated basis, we achieved an equivalent of 244,000 tons of CO₂, a reduction of 18.8% compared to fiscal 2001. CSR Data Book



*1 The emissions coefficients of the respective power companies are used to convert power use volumes.
*2 CO₂ emissions attributable to hydroelectric power are deemed to be zero.

*2 CO₂ emissions attributable to hydroelectric power are deemed to be zero.

Initiatives in Logistics

In fiscal 2012, total transportation volume for the Furukawa Electric Group decreased 3.2% year-on-year to 460 million ton-kilometers. Of this total, Furukawa Electric alone accounts for 133 million ton-kilometers, down 1.0% compared with fiscal 2011. The Company decreased CO₂ emissions by 2.6% year-on-year to 14,900 tons, due largely to

Modal shift and specific consumption (Furukawa Electric)



enhancements in loading rates. In addition, Furukawa Electric achieved a reduction of 13.8% in specific consumption from fiscal 2007. Despite such factors as a decrease in long-distance shipping and a downward trend in the modal shift rate, we will continue to promote modal shifts, increased loading rates, joint shipping and similar measures to decrease the energy used in shipping. **CSR Data Book**

Reducing Waste

The Furukawa Electric Group began taking action to reduce outsourced waste disposal in fiscal 1994, and launched zero emission efforts in fiscal 2002 for reducing the volume of final disposal to less than 1% of the total volume of waste by directly transporting waste from each works to final disposal sites.

As a result of our efforts to meticulously sort waste and recycle waste acid and sludge into useful resources, the overall level of outsourced waste (which was not recycled) disposal for the Group for fiscal 2012 fell by 66.1% compared with fiscal 2005 to 5,021 tons. Also, the volume of waste directly sent to landfills fell by 78.1% (to 1,014 tons) in comparison to fiscal 2005 for Group companies in Japan, disposal for Furukawa Electric alone was zero.

Non-recyclable waste volumes







Also, in fiscal 2012, the target waste recycling rate (the ratio of recycled waste compared to total waste volume) was 95% or more for affiliated companies and 97% or more for Furukawa Electric on a standalone basis. Furukawa Electric met this objective, at 97.0%, but affiliated companies fell below their target, reaching 89.2%. **CSR Data Book**

Green Activities

Response to Customer Requests

When the Group receives a request from a customer for information concerning chemical substances in our products, it conducts a thorough environmental examination. We also monitor trends in laws and regulations covering the chemical substances contained in products and compile and update data as it becomes available, allowing us to respond promptly to customer requests. Furthermore, by collecting information from industrial organizations and conducting seminars, as well as participating in research groups, we can monitor environmental regulations and standards and social issues/items of concern. This enables us to incorporate customer needs in our environmental conservation targets.

Response to Overseas Regulations (REACH Regulations, RoHS Directive)

Substances of very high concern (SVHCs)* that are included in the Candidate List under the REACH regulations are updated twice each year. Each time additional SVHCs are published, the Furukawa Electric Group researches the status of its use of such substances. As of the end of fiscal 2012, we had conducted checks on 73 substances.

* Substance of Very High Concern. Use or marketing of SVHCs requires approval, and manufacturers are liable to submit notification if an SVHC exceeds 0.1% weight content.

Regular Auditing under the Furukawa Branding Green Products Management System (FGMS)

Our FGMS Regular Auditing in fiscal 2012 was conducted through self-checking and auditing at a Works of Furukawa Electric, four factories of affiliate companies, and two factories of affiliates' suppliers. To control chemical substances contained in products, we will continue to monitor environmental risks, and expand and implement auditing according to degree of importance.

Expansion of Green Procurement (General-Purpose Products) to Group Companies

We encourage the purchasing of OA equipment, office supplies and other items that conform to the Green Purchasing Law. Extending these activities to include affiliated companies, in fiscal 2012 we designed items for conformance at 15 affiliated companies. We continue to purchase conforming items.

Also, purchases of items for use in our products are made based on our Green Procurement Guidelines, with the selection of appropriate items based on the FGMS system at the supplier and confirmation of data on chemical substances contained in the products. We continue to implement Green Procurement in regard to our main suppliers and products purchased, and henceforth aim to expand it for application to all components.

Chemical Substance Management Activities

The Group works to reduce emissions of harmful chemical substances. In particular, we make every effort to actively reduce emissions of volatile organic compounds, one cause of photochemical smog. CSR Data Book

Overall Group emissions (of toluene and xylene) in fiscal 2012 were down 58.3% compared to fiscal 2005.

Among Group companies in Japan, there remains one that uses organic chlorine compounds, and we are considering the phasing out of their use at this company.

Emissions of volatile organic compounds (Group total: toluene and xylene)



Appropriate Management of Chemical Substances

At the Furukawa Electric Group, we confirm the properties and applicable laws and regulations regarding all chemical substances we use during the manufacturing process on their Material Safety Data Sheets and administrate them.

We also monitor the usage volume of chemical substances listed in the PRTR Law^{*}. CSR Data Book

* Law Concerning Reporting, Etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

Reducing Emission of Volatile Organic Compounds

We are voluntarily working to reduce emissions of VOCs. The main targets are toluene, acetone and n-decane.

In fiscal 2012, we reduced emissions 27.7% against fiscal 2008 levels, surpassing our target of a 10% reduction.

Environmental Risk Management

The Furukawa Electric Group recognizes the potential risks of environmental impact resulting from its business activities and formulates countermeasures for each type of risk.

Preventing Soil and Groundwater Pollution

The Furukawa Electric Group engages in the management of specific toxic substances and conducts regular inspections for leaks to prevent the pollution of soil and groundwater in nearby communities. We reduce the risk of pollution through measures to prevent leaks and through ongoing efforts to switch to substitute substances.

In fiscal 2012, we continued proper disposal of the slag stored in the Oyama area (a site of the former Furukawa Magnesium Co., Ltd.). Soil remediation through excavation and removal has been conducted at locations where site examinations have found contamination. We will confirm our plans as we continue with this work. Also, groundwater measures conducted in the previous fiscal year were ongoing at the site of the former Ibaraki Factory of Aoyama Kinsho Co., Ltd.

Effort to Prevent Atmospheric and Wastewater Pollution

At each of the Furukawa Electric Group's works and the business bases of affiliated companies, we maintain voluntary control limits and manage operations to avoid exceeding regulatory limits, such as those prescribed by the Air Pollution Control Law and Water Pollution Control Law. Atmospheric and wastewater quality data was all within regulatory limits at each works in fiscal 2012.

Management status at works http://www.furukawa.co.jp/english/csr/enviroment/risk.htm

PCB Management

The Furukawa Electric Group monitors the amount of PCB-containing equipment at each of our Works and affiliate company sites, and conducts proper storage and management. Based on this information, we register with the Japan Environmental Safety Corporation and entrust waste processing in accordance with plans. In fiscal 2012, processing of managed substances commenced at the Mie Works and the Copper Tube Division. Also, condensers and transformers removed from our facilities are examined for PCB content on a case-by-case basis. We are also proceeding with planned analyses of equipment containing even small amounts of PCB, with all examinations slated for completion by fiscal 2013.

WEB Number of instruments containing PCB http://www.furukawa.co.jp/english/csr/enviroment/risk.htm

Response to Asbestos Concerns

Although our company does not currently produce or import any products containing asbestos, some of the industrialuse products we made and sold in the past did contain asbestos. These include electrical wiring for ships, and fireresistant products for constructing telecommunications and electrical power facilities, etc. For details please visit our homepage.

In addition, we are currently examining the buildings and plants of Furukawa Electric and our affiliates to determine if asbestos-containing building materials have been used. Inspections for asbestos dispersal in buildings in which spray-on materials had been used have confirmed the presence of asbestos, and removal work or containment measures have been taken to prevent future dispersal. We have also proceeded to replace equipment and fixtures in which asbestos insulation has been used so as to prevent dispersal, with planned replacements of all items which are currently not dispersing asbestos with items not containing it. For other items, we conduct regular inspections and introduce alternates during facility renewals.

Response to Asbestos Concerns (Details) http://www.furukawa.co.jp/english/csr/enviroment/risk.htm

Environmental Accident Response

At the Furukawa Electric Group, we conduct annual checks for conceivable, clear environmental impact so as to prevent environmental accidents or prevent widespread impact in the event of an accident. We also conduct simulation drills that presuppose post-accident responses.

We regularly confirm environmental laws and other regulations to determine items requiring compliance, and we endeavor to comply accordingly. According to our fiscal 2012 survey on the status of our regulatory compliance, we were not in material violation of any regulations.

Biodiversity Preservation

Based on the three points of emphasis that the Furukawa Electric Group established in 2011, we conducted initiatives to minimize the impact of our business activities on biodiversity.

Three Important Biodiversity Effort Categories

We established the following three important biodiversity categories to specify Group biodiversity efforts, in recognition of the fact that our business, products and services are the result of biodiversity, and of our impact, whether positive or negative, on eco-systems.

Biodiversity Preservation: Three Important Categories

- 1. Assess the impact of business practices on eco-systems, and work to minimize the negative impact and maximize the positive.
- Promote sustainable resource use in consideration of biodiversity preservation through anti-climate change measures, resource conservation, and resource re-use, as well increasing efforts to reduce the use of environmental impact-causing substances.
- 3. By raising the consciousness of each individual, we actively promote biodiversity preservation in tandem with society.

Evaluating Relationships between Operations and Biodiversity and Analyzing Risks

Between August 24 and November 11, 2011, the Furukawa Electric Group worked extensively to determine all the business risks related to biodiversity, and we began taking part in a project to clarify outstanding issues. We recognized that to develop specific actions related to biodiversity preservation, we first needed to determine the current status. We outsourced the consulting on this project to a

Project Implementation Flow

Kick-off meeting	 Share the objectives of risk analysis Explain basic information related to companies and biodiversity
Hearings at individual divisions	 Determine and organize each division's risks Help each person in charge understand the relationship between their work and biodiversity
Internal workshops	 Share hearing results Reconfirm risks Identify major risks Determine the ideal state to reach by 2020

specialist in this field, Response Ability, Inc., which analyzed and evaluated the relationships between the Group's overall businesses and biodiversity.



Holding internal workshops as one aspect of the project

Project Outcomes

Through this project, we recognized the existence of biodiversity-related risks at all stages of recycling Furukawa Electric Group products. Based on this knowledge, we ascertained seven management issues involving the management of individual risks that should lead to Furukawa Electric's increased competitiveness.

Environmental Management Issues and Action Plans

Seven Environmental Issues	 Establish long-term vision and long-term targets for environmental management Create an organizational structure to support long-term environmental activities Promote environmentally conscious research and development Shift to sustainable energy Formulate guidelines (raw materials, land use, water, etc.) Promote the 3Rs (reduce, reuse and recycle) Communicate with multiple stakeholders 			
Action Plans	 Create a long-term plan for sustainability Incorporate biodiversity into R&D policy Take action in individual biodiversity-related themes that will have a rapid effect 			
 Establish working group to create a long-term plan for sustainability Formulate the next medium-term plan and organize a working group for individual themes 				

Of these, we identified the creation of a long-term vision for environmental management as a priority. We gathered people from related divisions to formulate a working group (the Sustainability Plan Working Group) to create a medium- to long-term plan on environmental management. To ensure a fit between this long-term vision and the next medium-term plan, we will share information and encourage communication among all related teams.

From fiscal 2013, to make our biodiversity preservation initiatives more concrete, we will draw up guidelines related to land use, procurement and other items.

Initiatives for Society

The Furukawa Electric Group values communication with all stakeholders throughout its corporate operations.

- 28 Relations with Our Customers
- 30 Relations with Our Shareholders
- 31 Relations with Business Partners
- 32 Relations with Our Employees
- 37 Relations with Communities

Detailed data is provided in our CSR Data Book (PDF). http://www.furukawa.co.jp/english/csr/report/index.htm

Relations with Our Customers

Furukawa Electric places the utmost emphasis on quality and aims to ensure customer satisfaction while endeavoring to manufacture excellent products from the customer's perspective.

Maintaining or Improving the Quality of Products, Services and Operations

Quality Control Policy

At every stage of our operations, from research and development to manufacturing, sales, customer service and management, in all sections and all hierarchies, we always strive to adhere to a PDCA management cycle based on actual facts, maintain and improve our products, customer services and the quality of our operations and put our management policies into practice.

To promote quality control at every level throughout the Company, Furukawa Electric has established the Central Quality Control Committee, which reports directly to the president, as its topmost quality control body. Under this committee's direction, Divisional Quality Control Committees, which have links to the heads of each division make every effort to maintain or improve the quality of our products, services and operations.

Status of Activities in Fiscal 2012

In fiscal 2012, we pursued activities in line with the quality policy introduced in fiscal 2011, placing the utmost emphasis on quality while endeavoring to manufacture excellent products from the customer's perspective. We moved forward with the following efforts: 1. Visualize design as well as manufacturing quality; 2. Work to prevent accidents and defects through experience; and, 3. Conduct quality training and personnel development programs.

One specific objective was to reduce the number of customer complaints throughout the Company by 10% or more compared with the preceding fiscal year. As a result of our efforts in this regard, we lowered the number of complaints by 37%, surpassing our goal. The current level is 92% lower than it was 10 years ago.

Similarly, in fiscal 2013 we will continue efforts in line with this policy. Through repeated application of the PDCA cycle, we will endeavor to provide products that satisfy customers.





QC Circle Activities

The Furukawa Electric Group forms its worksite employees into circles, promoting "QC Circle Activities" targeting quality improvement and personnel training. In principle, the content of these activities is left to the discretion of members of each circle. However, to ensure that these activities are not merely temporary, the Company follows up regularly on the status of activities and comments on their results. This approach encourages the members of circles to raise the level of their activities.

Furthermore, each manufacturing works holds QC Circle Meetings. Circles selected there are invited to participate in the QC Circle Conference, which takes place annually. This conference enables employees to share and compete on the quality of their activities and provides an opportunity to enhance awareness.

In fiscal 2012, the QC Circle Conference was held at the Mie Works. Representatives of eight circles from manufacturing works in Japan and four overseas circles recommended by individual companies attended and reported on their activities. The circle from FISA, an affiliated company in Brazil, won the silver award for its efforts, confirming that QC Circle activities are moving steadily ahead at our overseas locations.



Presentation by FISA-recommended circle



Commemorative photo of all participants at the close of the conference

Relations with Our Customers

Participation in an Experimental Offshore Wind Farm Project

Furukawa Electric is participating in an experimental offshore floating wind farm project sponsored by the Ministry of Economy, Trade and Industry.

Offshore wind farms are attracting attention around the world as potential next-generation large-scale power generation facilities. These facilities harness frequent and powerful ocean winds to generate electricity, which is then supplied to land via undersea cables. As they need not be located on land, wind farms are gaining a following in Japan, where space for on-land sites for generation facilities is limited. For demonstration experiments on this project, which is scheduled to last through 2015, three wind turbines capable of generating several thousand kilowatts each, as well as related equipment, are to be sited in the Pacific Ocean some 20 kilometers off the coast of Fukushima Prefecture.

Furukawa Electric is in charge of developing an ultrahighpressure riser cable* system to transmit the electricity the facility generates. As the wind farm will be floating rather than fixed to the ocean floor, it will be easy to site, but equipment will be easily affected by wind and waves. The riser cable must also cope with the facility's rocking on the waves and the motion of the seawater itself. For these reasons, in addition to being optimized to meet sea movement and flotation requirements, the cable must have the same useful life as the turbines themselves, and must have the durability to withstand repeated fatigue. Furthermore, the system itself must be raising the voltage in order to transmit massive amounts of electricity over a long distance. An optical communication system is therefore ideal. To overcome these hurdles, we plan to employ the deepwater design simulation, broad-ranging material and undersea cable technologies we have cultivated, and optical communication technologies, which meet requirements for both reliability and cost.

* A permanently suspended submarine cable for connecting to a floating structure. On an offshore wind farm, this cable connects the wind turbines with transmission cables on the ocean floor.

Conceptual illustration



Shanghai, China Technology Fair

To accelerate its development of overseas markets, centering on emerging countries, the Furukawa Electric Group takes a proactive stance on groupwide overseas marketing and efforts to expand trading areas. As part of this move, each year since 2009 we have held a joint Group technology fair in East Asia to promote our technologies and products.

During fiscal 2012, we held the final exhibition in this series, the FURUKAWA Innovation Expo 2011 in Shanghai, on July 22, 2011, at the Shanghai World Financial Center, a multistory high-rise that has become a landmark of the city. A total of 29 Group companies, including Furukawa Electric and 17 companies based in China, attended the expo. Themed on the environment, the fair featured 85 products and technologies divided into four categories: Smart Grid (energy/ construction), electronics, communications and transportation. The Company's president, CMO and CTO also conducted presentations that covered management strategy and other topics, and seven technology seminars were held to introduce recent technology trends. Through these presentations and seminars, we described the Furukawa Electric Group's products and technologies and global development strategies, and communicated our vision for the future. In July 2012, we hosted another technology fair in Jakarta, Indonesia, which is attracting attention due to increasing investment by the infrastructure and automotive industries. In addition to introducing products and technologies, we explained our efforts to contribute to industrial development in ASEAN

countries. Going forward, we intend to further expand our business in various regions, including Brazil, India, Europe and the United States.



Technology Fair in Shanghai

Relations with Our Shareholders

Furukawa Electric's investor relations (IR) focus is on mutual communications with shareholders and investors aimed at improving our enterprise value.

Information Disclosure Policy and IR Framework

The Furukawa Electric Group Basic Policy on CSR requires that the Group seeks to improve upon the sound, friendly relationships we maintain with all of our stakeholders. Our Own Regulations on the Timely Disclosure of Corporate Information meanwhile set out a framework for the disclosure of appropriate information at the appropriate time.

Based on this policy, all IR activities are overseen by the Chief Financial Officer (CFO) and are managed by the Investor & Public Relations Unit of the Corporate Strategy Planning Department.

Trends in shareholder distribution				
	March 31, 2011	March 31, 2012		
Individuals	30.0	33.1		
Financial institutions	42.1	38.3		
Domestic companies	7.2	7.3		
Overseas companies	18.0	18.6		
Securities firms, etc.	2.7	2.8		

Note: As of March 31, 2012, individual shareholders numbered 69,476 (up 1,691 from a year earlier) and held 33.1 % of the Company's shares. Note: As of March 31, 2012, foreign shareholders held 18.6% of the Company's shares.

Relations with Institutional Investors and Securities Analysts

In addition to holding management briefings (covering interim and year-end results and mid-term plans when announced)

for institutional investors and securities analysts, we actively encourage communication all year round.



Briefing for institutional investors

Main IR activities in fiscal 2012 (Furukawa Electric)

Relations with Individual Investors

In October 2011, we held our fourth plant tour for individual investors.

Visitors were selected by lottery from among those who responded to an open invitation, with 189 people invited to attend out of the 1,935 who responded. During the tour, we offered participants a number of opportunities to get a feel for Furukawa Electric. We introduced our production processes for optical fibers, copper products and automotive parts, and visited a hydroelectric power station. The tour also featured a simple explanation on the phenomenon of superconductivity.

At the opening of this tour, we apologized for and offered an explanation about the cartel issue. Participants indicated their emotional attachment to Furukawa Electric, but also said that they wanted us concentrate more heavily on compliance.





Nikko Works: Experiment to explain the phenomenon of superconductivity

Mie Works : A close-up look at just-produced 1100°C copper rod

Returning Profits to Shareholders

The basic policy of the Company is to pay stable dividends and, at the same time, distribute profits to shareholders commensurate to its future business operations, with an eye on future income trends from a long-term perspective.

For the fiscal year ended March 31, 2012, we paid an interim dividend of ¥2.5 per share. However, the Company decided to forego the year-end dividend, owing to a substantial decline in consolidated operating income, as well as the posting of a significant net loss.

April–June July–September October–Decer		October-December	January–March	
May Term-end results announcement		October Plant tours for individual investors		
June Visits from European investors	August	November Second quarter earnings announced	February	
June General Shareholders' Meeting	First quarter earnings announced	November Meetings in Singapore and Hong Kong	Third quarter earnings announced	
June Shareholders' Report issued		November Forum for investors in Japan		

Relations with Business Partners

Furukawa Electric's Group purchasing policy calls for stable and continuous purchasing on optimum terms. Therefore, we focus on establishing and maintaining relationships of trust with our business partners.

Optimum Purchasing on a Steady, Ongoing Basis

Furukawa Electric's Group purchasing policy is to establish strategic relationships with business partners to ensure optimum purchasing on a steady, ongoing basis. Based on this policy, Furukawa Electric strives to create cooperative relationships based on mutual trust with its business partners, thereby contributing to sustainable future development.

Furukawa Electric Group Procurement Policy

We will optimize our procurement through global partnering by:

- Establishing strategic business relations with trading partners to create a stable and sustainable procurement function;
- Establishing a system to facilitate centralized negotiations to promote group procurement activities from multiple locations;
- 3. Enforcing compliance and contributing to society;
- Securing stable and sustainable procurement of raw materials and parts for our key products;
- 5. Achieving medium-term goals through continuous cost reduction programs;
- 6. Expanding procurement from optimal locations;
- 7. Adopting procurement methods that match optimal lead times.

Conducting Training on Subcontracting Transactions

In order to forge sound relationships with business partners through fair transactions that comply with rules and regulations, the Furukawa Electric Group provides training for employees on subcontracting transactions.

In fiscal 2012, in addition to continuing with the courses we have conducted to date, we introduced a new e-learning program. This program is aimed at ensuring thorough awareness of the content of the Act against Delay in Payment of Subcontract Proceeds, Etc., to Subcontractors (Subcontract Law).

Partner Meetings and Partner Evaluation Scheme

The Company seeks to deepen awareness among our business partners through regularly held Partner Meetings, where we explain the state of the Company, our purchasing policy and individual company management strategies. For fiscal 2012, this meeting was held in August and was attended by 95 key business partners.

We also evaluate key business partners on the basis of quality, technology, price, delivery system, degree of social contribution and financial condition, and then hold meetings to provide feedback on our findings. We discuss the results

of our evaluations with them to more closely align our awareness of procurement activities. In fiscal 2012, we evaluated some 330 business partners and provided feedback to them.



Partner Meeting

Promoting CSR through Procurement Activities

Based on the CSR Deployment Guideline for Business Partners that we formulated in fiscal 2011, we take part in initiatives to ensure that our procurement activities involve thoroughly compliant and fair transactions and take into account human rights and safety, and consideration for the environment.

In fiscal 2012, we prepared an English-language translation of our new CSR Deployment Guideline for Business Partners. Using this translation, we aim to instill compliance awareness in our overseas business partners going forward, promoting CSR procurement activities throughout the supply chain.

We will respond to growing societal requests not to make use of resources procured from mines that neglect human rights and environmental considerations (so-called "dirty mining"). This effort is designed to encourage ongoing efforts on the part of our business partners.

VEB CSR Deployment Guideline for Business Partners http://www.furukawa.co.jp/sizai/english/guide.htm

Conflict Minerals*

In response to final disclosure regulations set forth in the U.S. SEC's Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, we will ask for the cooperation of our business partners in confirming the country of origin of the mine resources they provide and in not using minerals from proscribed locations.

* Defined as minerals (tantalum, tin, gold, tungsten or their derivatives) that originate in or near the Democratic Republic of the Congo that may help to finance armed conflict.

Relations with Our Employees

Furukawa Electric focuses on human resources skill development in our drive toward globalization. We also are building workplace environments where diversity can flourish.

Personnel Management Policy

Our basic personnel management policy focuses on continuously creating human resources who are capable of putting the Five Principles of the Furukawa Electric Group Credo into practice on their own initiative.

THE FURUKAWA ELECTRIC GROUP CREDO

- 1. Maintain high ethical standards, and value honesty and integrity above all.
- Continually improve, innovate, and lead, in every area of endeavor.
- Take a hands-on approach that addresses the reality of every situation—in the office, at the factory, and on site.
- 4. Be proactive—take the initiative and work with others, persevering until a solution is found.
- 5. Maintain open channels of communication between departments and divisions, so that we can share ideals and help each other grow.

In other words, we believe that a workplace environment that encourages among all employees compliance and consideration for human rights serves as the foundation upon which employees can maximize their capabilities. On this basis, we are devising and introducing a personnel system that will harness employees' diverse abilities and personalities. This should encourage employee creativity, setting the cornerstone for "continuous technological innovation."

Under New Frontier 2012, our mid-term management plan that went into place in fiscal 2011, we are cultivating a powerful workforce that will enable us to emerge victorious amid stringent global competition. We are raising this as a constructive mission for building collaborative ties with affiliates in Japan and overseas, and are augmenting current measures and putting new ones in place accordingly.

As part of this initiative, we identify personnel who we believe will contribute to the development of our business through their advanced specialties, regardless of position. In fiscal 2012, we introduced a Professional System to provide better support to these people. The system, which aims to cultivate people who are skilled at bringing about reforms, clearly identifies specialists in individual domains and seeks to put them in positions and offer training according a prearranged schedule that will prove helpful in achieving these objectives. As of April 2012, we had assigned 20 professionals under this program.

Human Resources Development

Enhancing Training and Educational Programs

We provide various opportunities that encourage employees who wish to do so to develop their skills through training, remote learning and by obtaining qualifications. Since fiscal 2009, we have concentrated in particular on fostering facilitation skills, which are needed to maximize and invigorate organizational capabilities.

We use multifaceted evaluations when training managers, helping to foster a sense of collaboration that will enable them to manage organizations efficiently. Employees who are about to be promoted to manager are encouraged to take the initiative to create group discussions in which they approach a situation logically, find out for themselves what the issues are, and talk over solutions. We also have in place an OJT Leader System targeting mid-level managers to enable them to teach younger people. In addition to group training, participants in this program share information about leadership issues and work together to resolve them, encouraging their awareness of responsibility.

Training Leaders Suited for the Global Environment

We launched the Global Business Leader Training Program in fiscal 2007 for the training of future management personnel. More than 100 graduates of this program are currently at important posts in Furukawa Electric and at our affiliates in Japan and overseas.

At the same time, we began leadership training in Japan for overseas management personnel. Called the Global Development Program, the training deepens understanding of the Group, and helps managers polish their cultural skills and leadership abilities through active discourse with Furukawa Electric's Japanese personnel. The goal of the program is to develop personnel who can thrive in the global environment.



Group deliberation as part of the global development program

Relations with Our Employees

Worksite Innovation Project

Since fiscal 2009, Furukawa Electric has been pursuing initiatives to bolster the manufacturing capabilities of its production sites. These activities focus on cultivating *gembaryoku* (worksite capabilities) by encouraging people at its production sites to think for themselves and act on their own initiative for the good of the customer.

We established the Furukawa Electric Group Gembaryoku Enhancement Training Center at the Yokohama Works in September 2010 for a variety of group training programs. Specifically for new recruits, we conduct programs for both technical and business employees. These include the Joy of Manufacturing, which provides onsite experience, and Craftsmanship Training, which fosters recognition of the dangers of the production site.

In fiscal 2012, we set rank-specific goals for employees at production sites and commenced a Basic Program aimed at raising skill levels for all these employees. We put up posters and distributed "*gembaryoku*" badges to employees undergoing training, encouraging them to put into practice the things that they had learned.

At each manufacturing works, we also conduct Chief Operator Training, as well as training for mid-level operators and younger staff. This training helps to transmit core knowledge at production sites, raise worksite awareness and encourage people to pass on technologies and skills. By providing an opportunity for headquarters and Group company employees to interact without regard to affiliation, these efforts support the sharing of expertise.



Badges with the "gembaryoku" logo distributed to trainees



Basic Program training underway (lecture by experienced officer)

Diversity

Diversity in Hiring

We are actively recruiting non-Japanese personnel and international students to support the globalization of our business. We also host students on internships from overseas universities.

We have a number of initiatives underway to recruit talented personnel. In addition to information exchanges to share know-how on hiring within the Group, we hold the

Furukawa Electric Group Forum, at which we conduct briefings in conjunction with Group affiliates, and work proactively to demonstrate to students the Furukawa Electric Group's appeal. CSB Data Book



Explaining the content of our business to international students

Hiring the Disabled

Furukawa Electric established Furukawa Newleaf Co., Ltd. as a special subsidiary in 2004 to actively employ people with learning disabilities. This is one of our efforts to increase the percentage of people with disabilities that we employ.

The company handles cleaning operations at the compounds of our works and currently employs a total of 32 people with disabilities, 11 at the Hiratsuka Works and 21 at the Chiba Works. The company also provides individualized guidance on everything from matters of daily conduct in the company through the building of good human relationships, to assist people with learning disabilities in becoming independent members of society.

We also invite caregivers with children with no work experience to tour our work and guidance sites, so as to better understand our efforts involving the employment of people with disabilities.



Furukawa Newleaf Co., Ltd., employees in action

Ratio of employees with disabilities (Furukawa Electric)



Although our employment ratio of people with disabilities was 1.95% in fiscal 2012, exceeding the statutory target, we intend to work on further expanding this group of employees, primarily through our special subsidiary.

Upgrading and Enhancing Workplace Environments

Introduction of a Volunteer Leave System

To support individual employees' efforts to participate in social contribution activities, we have introduced a Volunteer Leave system for people who have been employed for one year or more. We set the number of annual leave days that employees can take under this system at five, encouraging people to take advantage of this system to volunteer in support of restoration and reconstruction activities following the Great East Japan Earthquake. The system went into place on July 16, 2011.

My Volunteer Activity Report



I participated in volunteer activities to support reconstruction in the cities of Rikuzentakata and Ofunato, in Iwate Prefecture.

Koji Ohta Ecology & Electronics Laboratories

I took part in volunteer activities to support reconstruction of the area affected by the Great East Japan Earthquake for a one-week period starting September 18. Sleeping in the classroom of a closed elementary school, we worked from early morning until late in the evening at picking up rubble strewn across fields. The amount of rubble seemed never to decrease; there is still much work to be done in the stricken region, and more help is needed.

To participate in this project, I took part in the newly

introduced Volunteer Leave system, which makes it easy to take time off work. Social contribution is the goal, which encourages cooperation from the workplace.

I hope that more people will take advantage of this opportunity to volunteer for reconstruction support activities. This is an experience that is sure to remain with you.



Work underway in the city of Ofunato.

Going forward, we plan to enhance the Volunteer Leave system to support more employee participation in environmental contribution activities and increase the use of the Volunteer Leave program. CSR Data Book

Human Rights Awareness

The Furukawa Electric Group CSR Code of Conduct stipulates that we work to respect human rights, prohibiting discriminatory treatment and human rights infringement as well as prohibiting harassment. We have also established a consultation desk concerning human rights concerns that can be accessed from within or outside the company, and consultations by employees are promptly responded to jointly by the HR & Administration Department and the CSR Division in the event that issues are reported. As of the end of fiscal 2012 there had been no cases of involving human rights concerns within Furukawa Electric.

Furthermore, from the perspective of prevention, we have in place a training curriculum that covers employees from new recruits to top executives, including executives and managers at affiliated companies. The curriculum centers on raising awareness, covering such matters as prohibition of discrimination against female employees, promoting employment of seniors and people with disabilities, and improved understanding of Japanese social integration issues.

Improving the Working Environment through Labor-Management Opinion Exchanges

Furukawa Electric maintains a basic position that both labor and management should endeavor to engage in sincere discussions, and therefore we focus on issue resolution and deepening mutual understanding.

We hold our Central Management Briefings twice annually for public exchanges of opinion between labor and management. We have conduced such meetings for 60 years, since 1952. As of May 2012 we had held these briefings 119 times. Representatives from labor and management exchange frank opinions and share information about a broad spectrum of items at these briefings, such as the business environment, management, and topical matters.

We also have in place various committees such as the Personnel System Exploratory Committee and the Committee for Studying Shorter Hours that are designed to improve the working environment, which management and labor discuss on a daily basis. These discussions lead to improvements in various systems and strengthen monitoring functions, such as compliance response and the implementation status of other CSR activities.

Relations with Our Employees

Occupational Health and Safety

The Furukawa Electric Group health and safety efforts take into consideration our social responsibility to maintain a healthy, safe and comfortable working environment.

The Central Health and Safety Committee chaired by the Company's Chief Social Responsibility Officer, formulates our companywide Health and Safety Management Guidelines and monitors and issues guidance to our work sites concerning their efforts. We also conduct Safety Management Liaison Meetings throughout the Group for the sharing of examples of disaster preparedness and information about activities.

Furukawa Electric is also constructing labor safety and health management systems at each of its works. In addition to having received certification for our Chiba, Hiratsuka and Mie works, in fiscal 2012 the Nikko Works also obtained management system certification* from the Japan Industrial Safety & Health Association (JISHA). In fiscal 2013, we aim to receive certification for our Copper Tube Division.

We also hold Group Activity Presentation Meetings covering our safety activities, and we give awards to excellent teams. Each year, we hold meetings at each of our works, and groups chosen at those meetings participate in a companywide conference. In fiscal 2012, 13 teams

were selected from among the Works for presentations at the Companywide Presentation Meeting.

Organizations covered by the Occupational Safety Health Management System are certified as meeting JISHA standards.



Companywide conference

Forklift Truck Safety Skills Competition

Forklift accidents are the cause of many serious injuries, and are often caused by insufficient skills on the part of the operator. Therefore, we hold our Forklift Truck Safety Skills Competition, so as to improve awareness and operator skills. There were 23 entrants from companies affiliated with our Works and from other associated companies in our fiscal

2012 competition. Furthermore, even operators not taking part in the competition train on the competition courses within the Works.



The forklift truck safety skills competition

Educating Employees at "Anzen Dojos"

Furukawa Electric has placed "Anzen Dojos" (safety education centers) at all manufacturing sites to enable employees to get a sense of the dangers. These centers are designed as educational facilities where employees can experience various dangers, such as heavy items, edged tools, work in high places, revolving equipment and electricity, to raise their sensitivity to danger.

Reciprocal Patrols

Each month, patrols are conducted at our manufacturing works to confirm their safety. In addition, once each year a person in charge of health and safety at another manufacturing works performs a factory check, conducting inspections from a different point of view to confirm that no dangers have been overlooked. These checks also serve as good case studies, providing opportunities for people in charge of health and safety to exchange information. They also serve to improve the level of safety and health activities on the part of people conducting the checks and those undergoing them.

Labor Accidents

In 2011 (January to December 2011), the frequency of accidents resulting in absence from work was 0.49 for Furukawa Electric on a standalone basis and 0.72 for the entire Group.





Note 1: Frequency = (Accidents resulting in injury or death / total working

hours) × 1 million
Within the graph, figures for "manufacturing" and "all sectors" are taken from the "Fiscal 2011 Survey on Industrial Accidents," conducted by the Ministry of Health, Labour and Welfare.

Healthcare for Employees Working Long Hours

In accordance with the Guideline issued by the Labor Standards Bureau entitled "Measures to be Taken by Employers to Prevent Health Impairment Due to Overwork," we are focusing on managing the health of employees who work long hours by implementing strict limitations on worktime based on health checkups and arranging consultations by such workers with industrial physicians.

Mental Health Education

Our companywide mental health measures have been in place since fiscal 2002, and are based on the Guidelines for Promoting Mental Healthcare in the Workplace issued by the Ministry of Health, Labor and Welfare.

We invite industrial physicians and nurses to take part as lecturers in education and training programs targeting managerial and general employees. In the past, such training has focused on stress control for employees aged 30–35, as well as approaching mental health in terms of "work engagement"."

In fiscal 2012, we also held Pleasant Workplace Discussion Groups for workplace environment improvement throughout the Company.

* A mental health concept pertaining to motivation, devotion, and energy regarding work.

Strengthening Smoking Measures

n accordance with the Labor Standards Bureau Director-General's 2003 directive entitled "Guidelines on Smoking in the Workplace", as well as the "Anti-Passive Smoking Measures" issued by the Ministry of Health, Labor and Welfare in February 2010, we have been developing companywide programs to prevent exposure to passive smoke and encourage quitting smoking. As a result of such activities, the percentage of smokers among male employees fell from 53.3% in fiscal 2003 to 33.7% by fiscal 2012 within the company overall. As we eventually plan to go to an entirely smoke-free workplace, we are taking a multifaceted approach with three main thrusts: sharing information, supporting efforts to quit smoking and creating a smoke-free environment).

Smoking rates among Furukawa Electric employees (men)



Responding to Asbestos-Related Health Issues

During the period from fiscal 2005 to 2006, we once again investigated workplaces that previously handled asbestos products and we organized medical examinations focused on asbestos for all relevant employees. We also sent out notices urging retired employees who worked at the relevant sites to undergo medical examinations.

As of March 31, 2012, symptoms have been detected in one current employee and 10 retired employees. Also, a retired employee who had worked laying underground cables died from mesothelioma, and one died from lung cancer. These were confirmed to be industrial accidents.

We are continuing to deal with this by notifying retired employees who worked at the relevant site regarding changes to the requirements for issuing health cards in the wake of revisions to Occupational Health and Safety Regulations in April 2009.

Yokohama Works Receives Incentive Award from the Minister of Health, Labour and Welfare

In October 2011, Furukawa Electric's Yokohama Works received an incentive award, the fiscal 2012 "Awards from the Minister for Health, Labour and Welfare for excellent workplaces, organizations and persons who have contributed related to occupational safety and health." This same manufacturing works received the Kanagawa Prefectural Labor Director Award in 2011.

The current award was in recognition of the works' proactive efforts to prevent damage to health as a result of long working hours and to improve mental health, measures to prevent health damage through chemical substance management, and a focus on monitoring the working environments in areas that are a potential health hazard (hazardous work). The works was evaluated as having "superior health assurance measures."



Award (left) and letter of commendation (right)



The Furukawa Electric Group engages in social contribution from the perspectives of nurturing future generations, promoting sport and culture, and living in harmony with the natural environment and local communities.

Furukawa Electric Group Basic Policy on Social Contribution Activities

The Furukawa Electric Group will continuously undertake social contribution activities focusing on nurturing future generations, promoting sport and culture, and living in harmony with the natural environment and local communities, in addition to its business-related activities, in order to maintain and strengthen community ties built over centuries and create a better tomorrow for future generations.

CSR Awards

Furukawa Electric established the CSR Awards in fiscal 2010 to recognize the social contribution or environmental preservation efforts of our subsidiaries that notably exceed their regular business. In fiscal 2012, the third time for these awards, we focused on activities rooted in local communities and regions. Two companies received social contribution awards and one an environmental preservation award.

Social Contribution Award

P.T. Tembaga Mulia Semanan (TMS) The Republic of Indonesia

TMS's approach is to make small but ongoing social contributions, and the company has provided support to the poor in Indonesia in this way since around 1980. Using the company's own funds, as well as employee contributions, TMS provides funding and food aid, and distributes school supplies for single-mother households and orphans.



Child receiving aid to purchase school supplies



Support for widows

Social Contribution Award

Furukawa Metal (Thailand) Public Co., Ltd. (FMT) The Kingdom of Thailand

Since 2004, FMT has participated in Thailand's "To Be Number One" anti-drug campaign, of which Princess Ubolratana Rajakanya is project leader. The campaign uses three strategies for its committee, funding and activities: to campaign for awareness, to provide mental health immunization to youth in communities and to develop lifestyles and networks for prevention and assistance. In cooperation with local government institutions, as well as local residents, schools, training facilities and companies, FMT is taking an active part in raising awareness both within and outside the company through music and sporting activities. In recognition of the style and content of these activities, FMT took part in a nationwide competition commemorating 10 years of To Be Number One campaign

activities. FMT's team was selected to represent central and eastern Thailand. The competition is scheduled to take place over the threeday period from July 13 through 15, 2012.



Members of the activity secretariat selected to represent central and eastern Thailand in the nationwide competition

Environmental Preservation Award



Furukawa Industrial S.A. Produtos Eletricos (FISA) Federative Republic of Brazil

FISA has, on its own initiative, organized the industry's first LAN cable collection and recycling program, which covers the entire country of Brazil. This "Green IT" initiative targets the collection of used and discarded LAN cable to prevent it from being incinerated, leading to environmental pollution, with the aim of lowering CO₂ emissions. Under this program, participating companies are presented with environmentally friendly RoHS-compliant LAN cables in accordance with the amounts FISA collect. The plastic from the recovered LAN

cables is processed at FISA's plant, and copper wiring is sent to copper processing companies for recycling. Some 336 companies have taken part in this project since it got underway in 2008, collecting a total of 226,483 kg of LAN cable (as of June 30, 2012).

Trend in amount of LAN cable collected



Environmental Contribution Activity Case Study

Clearing Mountain Pathways (Nikko, Furukawa Electric)

The Furukawa Nikko mountaineering club of the Furukawa Electric Nikko Works has a history reaching back 80 years to the time of the works' establishment. The club is a core member of a mountain region federation involving Tochigi Prefecture and the city of Nikko. Each year, the club cares for the mountain pathways to prevent mishaps and mountainclimbing accidents. On June 23, 2012, these activities covered the Mt. Taro region of Okunikko. The club sets up public notice signboards, upgrades walkways and clears away brush and roots from mountain pathways with the mountain federation members. To promote safe mountainclimbing, the works plans to continue taking part in this initiative going forward.



Clearing brush from mountain pathways



Setting up a notice board



Taking away a fallen tree

Donating Disaster Stockpile Food Nearing its Best-By Date (Head Office, Furukawa Electric)

The Furukawa Electric head office maintains a stockpile of food against the eventuality of a Tokyo Metropolitan Earthquake. In February 2012, we recognized that some 1,800 cans of bread (75 boxes of 24 cans each) in its stockpile were nearing the end of their March best-by date, and that we therefore needed to bring in fresher food. Rather

than disposing of still-edible food, the Company decided to distribute it to those in need. We donated the food to Second Harvest Japan*, delivering it to their office

in Asakusabashi on February 29.

* This NPO gathers still-edible food that has been disposed of for various reasons and distributes it to the needy, as well as providing it free of charge to welfare institutions and organizations.



Stockpile of food nearing the end of its best-by date

Activities in regions throughout Japan http://www.furukawa.co.jp/english/csr/social/activity.htm

Overseas Affiliates Provide Reconstruction Support for the Region Affected by the Great East Japan Earthquake

Furukawa FITEL (Thailand) Co., Ltd. (FFT) The Kingdom of Thailand

FFT volunteers made and sold within the company T-shirts emblazoned with FFT's name. All the funds they raised in this way, after expenses, were provided as relief money.



Furukawa Electric Autoparts (Philippines) Inc. (FEAP) The Republic of the Philippines

FEAP provided its donations and funds solicited through employee donations as relief funds through the Philippine Red Cross Society.



Providing relief funds via the Red Cross

Strengthening Management

The Furukawa Electric Group properly monitors our business practices and endeavors to establish structures for improving them, so as to steadily meet our responsibilities to our various stakeholders, who view us from differing perspectives.



Corporate Governance

The Furukawa Electric Group strives to maintain sound management by constructing and upgrading highly transparent and efficient internal control systems.

Board of Directors and Board of Corporate Auditors

Board of Directors

The Furukawa Electric Board of Directors is composed of 11 directors, including two Outside Directors. This is so as to receive advice and opinions from an outside perspective in Board of Directors meeting discussions and decisions. It helps to ensure transparency in decision-making, and strengthens the oversight function in management overall.

The Outside Directors bring their rich experience from the worlds of trading and corporations, and provide valuable advice and guidance from a variety of perspectives, and the Board takes these into serious consideration in making decisions. Therefore, we have created a system that enables Outside Directors and Outside Auditors to perform their duties smoothly, which includes doing our best to schedule our Board of Directors meetings so that our Outside Directors and Outside Auditors are able to attend, provide them with documentation several days in advance and also to provide them with detailed prior explanations so as to deepen their understanding sufficiently in regard to items of discussion.

The Compensation Committee, which includes Outside Directors, is charged by the Board with the policy on compensation of directors and the details of individual compensation, so as to maintain transparency in the decision process and eliminate arbitrariness.

Board of Corporate Auditors

Furukawa Electric has in place a Board of Auditors. We place great importance on the function performed by our Corporate Auditors and Board of Corporate Auditors, which are independent of the Board of Directors. We continue to make every effort to strengthen our audit functions through close collaboration between our Corporate Auditors, Accounting Auditors and the CSR Division, which acts as our internal auditing department, including sharing information and exchanging opinions.

Operational Performance

Our operational structure is based on a company system and a chief officer system. Under the supervision of the president, who is responsible for overall operational performance, operations are run by company presidents, and operations relating to matters such as groupwide strategies, resource allocation and administration are handled by the relevant chief officer. Details are then reported back to the Board of Directors on a quarterly basis.

Internal Control

Our Group internal control system is implemented with the understanding that internal control maintains and enhances the efficiency of operational performance, ensures compliance, manages risk and information, and oversees Group companies. The CSR Division Administration Department Internal Control System Group upgrades the system, and also assesses and seeks to improve its operations. The Group J-SOX Committee and the CSR Division are responsible for composing the Furukawa Electric Group's financial reports as required under the Financial Instruments and Exchange Act, and maintaining and enhancing their credibility.



Corporate governance organization chart

CSR Management

The Furukawa Electric Group has created a specialized unit for taking a unified approach to CSR activities, including strengthening compliance and risk management.

CSR Promotion Framework

The Furukawa Electric Group established the CSR Division as a specialized unit for promoting CSR activities and appointed a Chief Social Responsibility Officer (CSRO) to supervise its operations in accordance with the Group's Basic Policy on CSR. It enhances the monitoring of overall corporate practices from the point of view of CSR concerns such as internal controls, compliance, risk management, safety, environmental conservation, and social contribution, and takes a unified approach to CSR-related activities. In the event a problem occurs, it provides a system for taking the necessary measures, such as investigating the background of the problem and elucidating the cause, establishing and implementing remedial and recurrence prevention measures, disclosure, etc.

Furukawa Electric Group Basic Policy on CSR

Based on the Furukawa Electric Group Corporate Philosophy, •We will operate our businesses in harmony with society and the environment and endeavor to create social value through technological innovation, complying with laws, social norms, and ethics as a member of the international community.

•We will strive to maintain and build sound and friendly relationships with all of our stakeholders and contribute to the sustainable development of society.

CSR Promotion Framework

http://www.furukawa.co.jp/english/csr/management/csr_manage.htm

Risk Management

Risk Management

Our CSR and Risk Management Committee conduct regular risk assessments, identifying and evaluating risks. The committee defines important risks that require a companywide response and promotes measures to address them.

The CSR and Risk Management Committee Secretariat reports the status of progress on these measures to the committee and the Board of Directors and follows up, as

Important companywide risks and priority management items (fiscal 2012)

Important Companywide Risks	Priority Management Items (Fiscal 2012)
 Compliance Quality control Large-scale disasters, such as	 Occupational safety Management of toxic and poisonous
earthquakes Information security Affiliated company controls	substances

necessary.

In line with the Group's development of business in global markets, the risks that it faces grow more diverse and complex each year. Going forward, we plan to reorganize our risk management structure, integrating it with the management control function to create a more effective risk management organization.

Business Continuity Management (BCM)

The Furukawa Electric Group has established a Business Continuity Management System (BCMS). We pursue groupwide BCM activities based on this system.

In fiscal 2012, we distributed a companywide questionnaire to evaluate our response to the Great East Japan Earthquake. Based on the responses we received, we revised our Crisis Management Rules (Companywide Rules) and Emergency Response Headquarters Establishment and Operation Manual (CSR Standards) and created a new Emergency Contact Card.



Emergency Contact Card

Furthermore, we conducted BCP Exercise Assuming a Tokai Earthquake at our Hiratsuka Works (October), BCP Exercise Assuming a Tokyo Metropolitan Earthquake at our Chiba Works (November) and Incident Response Exercise Assuming a Tokyo Metropolitan Earthquake at our headquarters (December). We confirmed the viability of the abovementioned rules and manuals, and held discussions to envision potential situations. The Central Disaster Prevention and Business Continuity Management Promotion Committee, the body that promotes groupwide disaster prevention and BCM activities, deliberated the results of these discussions, and we are now in the process of making further revisions.

Four of our affiliated companies suffered damage from the flooding in Thailand in October 2011, and temporarily suspended production. We had alternative production in place within two months, but we recognize that our response to this risk had been insufficient. Learning from this experience, we will improve our BCM activities going forward.

In recognition of our efforts, in April 2012 we received the BCAO Award 2011*, the "Award for Practical Excellence" from the Business Continuity Advancement Association (BCAO), a specified nonprofit organization managed by the Japanese Cabinet Office. We were evaluated highly in three areas: "efforts to promote companywide BCM activities through committee action," "the rapid restoration of works following the Great East Japan Earthquake through

the actual operation of established BCPs," and "proactively communicating information pertaining to the experience outside the company."

* This award is presented to recognize individuals and organizations in Japan that contribute to the spread and implementation of business continuity (BC) activities.



Award ceremony

Compliance

Instilling Compliance Globally throughout the Group

The Furukawa Electric Group is working to augment groupwide compliance, including at overseas bases. These efforts are designed to identify changes in the business environment resulting from global developments and changes in the positioning of compliance within international society, as well as taking into account our international scope of activities.

In fiscal 2012, in accordance with our March 2011 revision of the Furukawa Electric Group CSR Code of



International and China area versions of our CSR Compliance Handbook

Conduct, we issued the fourth edition of the Furukawa Electric Group CSR Compliance Handbook, which serves as an instruction manual. Furthermore, to instill at overseas affiliated companies our Group corporate philosophy and code of conduct, we held meetings to exchange ideas in China and Southeast Asia, and we published international and China area version of the handbook. In addition, to ensure our compliance with individual countries' competition laws, we published a bilingual Japanese/English Competition Laws Compliance Guide that outlines the content that overseas affiliated companies need to put into practice. We have shared this information groupwide to prevent any recurrence of breaches of conpetition laws.

Exchanges of Ideas in China and Southeast Asia

In August 2011, our CSR Division hosted Internal Control Presentations/Exchanges of Ideas Pertaining to Compliance in Shanghai, Tianjin and Bangkok. The representatives of affiliated companies in China and Southeast Asia participated

in these activities. After explaining the revisions to the Furukawa Electric Group CSR Code of Conduct, we had exchanges of ideas on global compliance promotion.



Meeting to exchange ideas (Tianjin, China)

Preventing Bribery

Anti-bribery laws, including but not limited to the U.S. Foreign Corrupt Practices Act and the UK Bribery Act have recently being strengthened, and government agencies are increasingly active on their enforcement. Accordingly, the Furukawa Electric group is continuously determined that the groupwide management of bribery risks is of the utmost importance.

During fiscal 2012, we conducted bribery risk assessments targeting overseas affiliated companies to determine the degree to which they were currently facing the risk of bribery. To enhance our own measures in this area, in April 2012 we formulated the Furukawa Electric Group Anti-Bribery Statement.

Going forward, we will create a groupwide bribery risk management system, drawing up guidelines for consistent action across the Group and conducting awareness activities.

CSR Management

Monitoring

Voluntary Compliance Checks

Furukawa Electric has designated October and November of each year as "Compliance Months," during which we execute compliance activities. During this period, one such effort was our Voluntary Compliance-Checking Activities.

In fiscal 2012, we asked each department conduct selfchecks with check sheets covering four areas: the Anti-Monopoly Act, dispatch and contract work, subcontracting transactions and occupational safety. We plan to expand areas covered by such check sheets in an effort to enhance this activity. In addition, we are developing the information in check sheets for affiliated companies in order to raise groupwide awareness.

Employee Compliance Awareness Surveys

We conduct compliance awareness surveys targeting the employees of Furukawa Electric and affiliated companies in alternate years. Designed to gauge employee awareness and understanding of compliance, these surveys aim to encourage recognition of compliance. In fiscal 2012, we conducted such surveys targeting approximately 5,400 employees. In fiscal 2013, we plan to boost compliance awareness and strengthen risk management based on survey results.

Compliance Education

The Furukawa Electric Group conducts compliance education for employees at every level of the Company, from new recruits to directors. Furthermore, we hold theme-based group training such as seminars related to the Anti-Monopoly Act and e-learning courses, and conduct groupwide compliance education.

VEB Compliance education in fiscal 2012 http://www.furukawa.co.jp/english/csr/management/comp.htm

Report on Anti-Monopoly Act Violations

In September 2011, the Company entered into a plea agreement with the U.S. Department of Justice concerning allegations of cartel activities with certain competitors involving transactions of automotive wire harness products. In court proceedings following this agreement, the Company was assessed a fine of US\$200 million. Investigations involving transactions on these same products are also underway by the authorities of some countries, including the European Commission. In Japan, the Japan Fair Trade Commission submitted an order related to transactions on these products in January 2012. Although we were not the recipient of this order, we were cited within the order as being in violation.

Furthermore, in July 2011, we received from the Japan Fair Trade Commission cease and desist as well as administrative surcharge orders in relation to Anti-Monopoly Act violations by two of our domestic subsidiaries involving transactions related to wire and cable products for construction and interior wiring. Also in July 2011, equity method affiliate VISCAS Corporation received from the European Commission a Statement of Objections* related to transactions involving power cables and related products, and this investigation is ongoing.

On December 10, 2009, the Furukawa Electric Group released the report of the Third-Party Investigation Committee on Violations of the Anti-Monopoly Act. Prior to releasing the report, we had investigations conducted by outside attorneys with the aim of preventing and eradicating activity considered to be in potential violation of the Anti-Monopoly Act, and we introduced groupwide recurrence prevention measures, based on the committee's findings. Although the abovementioned proceedings and investigations result from transactions prior to December 2009, we apologize sincerely to all related parties for the concern and trouble we have caused them over a prolonged period. We will continue working to restore public trust through thorough compliance activities at each company in the Furukawa Electric Group, both in Japan and overseas.

^{*} A "Statement of Objections" indicates a provisional opinion by the European Commission concerning suspicion of infringement of European competition laws, and requests a statement by the party or parties involved. The Statement of Objections document is currently under examination, and no final determination has been made.

Targets and Results

The Furukawa Electric Group sets firm targets for our CSR efforts based upon our CSR Code of Conduct, and seeks to upgrade these efforts through use of the PDCA Cycle.

Initiatives for Society

	Fiscal 2012 Targets	Fiscal 2012 Results	Achievement	Fiscal 2013 Targets
Quality (P. 28)	 Reduction of quality complaints. 10% in comparison with fiscal 2011 	Reduced by 37% compared with fiscal 2011	0	•Reduce by 10% compared with fiscal 2012
Procurement (P. 31)	 Execute partner assessments and feedback consultations Disclosure of CSR Deployment Guideline (English edition) for overseas partners 	 Assessed main partners and held feedback consultations Posted the English version of the CSR Deployment Guideline on our website 	0	 Continue to conduct partner assessments and feedback consultations Roll out CSR Deployment Guideline for business partners
	 Continue with Global Development Program (GDP) 	 Performed GDP targeting overseas local corporate members (19 people in frontline leadership positions) 	0	 Continue with GDP (targeting section managers) By fiscal 2014, reconfigure content of training in line with new global human resource training system
Personnel Development and Working Environment (PP. 32–34)	 Develop worksite capability training at all works Increase number of Senior Trainers 	 Completed basic system for Manufacturing Training Commenced Readiness Activities for people in charge of operations at all works Completed deployment of worksite capability training at all works 	0	 Introduce new training program Training for forepersons, special training Cultivate lecturers Increase number of instructors and conduct brush-up training Promote creation of rules for global Group development
	 Look into and execute work systems in response to disaster-related power shortages 	 Began operating the systems indicated below in preparation for rolling blackouts and other unforeseen power outages (through March 31, 2013) Temporary suspension of work Annual leave allotment in hourly units Flex-time without core hours Working from home 	0	_
	 Work from home system for use during childcare leave, introduce return to work system for employees who dropped out due to childbirth or childrearing 	 Introduced the following systems (from April 30, 2012) Work from home system for employees on childcare or nursing leave Return to work for employees who dropped out due to childbirth or childrearing (employment upon return) 	0	 Introduce into regular use a system of flex-time without core hours, as well as work-at-home system for employees other than those raising children
Industrial Safety	•Reinforce safety activities 0 serious accidents, accidents requiring leave 1 or fewer	•0 serious accidents, 4 accidents requiring leave	×	 O serious accidents, accidents requiring leave 1 or fewer
(PP. 35–36)	 Construction of labor safety and health management system 	 Acquisition of JISHA OSHMS certification by the Nikko Works 	0	 Acquisition of JISHA OSHMS certification by the Copper Tube Division
Social Contribution (PP. 37–38)	•Active social contribution efforts	 Introduced volunteer leave system to provide support for restoration and reconstruction related to the Great East Japan Earthquake Provided information on intranet site about supporting volunteer activities 	0	 Increase applicability of volunteer leave system Introduce volunteer activities conducted by employees on a voluntary basis both within and outside the Company

Strengthening Management

	Fiscal 2012 Targets	Fiscal 2012 Results	Achievement	Fiscal 2013 Targets
Risk Management/ Compliance (PP. 41–43)	 Cultivate compliance awareness and promote its spread on the front line 	 Held "heart-to-heart communication between president and employees" at the head office, 3 branches and 7 business sites Executed 2nd Employee Compliance Awareness Survey 	0	 Conduct CSR roundtables at each works Conduct compliance awareness surveys targeting employees of Group companies in Japan
	 Enhance compliance education 	 Published Furukawa Electric Group CSR Compliance Handbook (4th Edition), distributed and used in training Published international and Chinese-language versions of handbook 	0	 Conduct training related to safety-guaranteed export management and bribery regulations Hold compliance seminar for companies in China
	 Promote efforts to prevent recurrence of infringements to the Anti-Monopoly Act and competition laws, as well as compliance self-checking activities 	 Published groupwide Competition Laws Compliance Guide Conducted self-check activities at each division using Area-Specific Check Sheets 	0	 Formulate basic Group policies and guidelines on preventing bribery Create checklist for people with management responsibility at overseas offices
	 Revise BCP and make it more thorough 	 Based on issues raised as a result of the Great East Japan Earthquake, completely revised crisis management rules and related manuals Conduced BCP training at the Chiba and Hiratsuka Works, and reflected results in our BCP 	0	 Promote response in relation to ISO 22301, the international standard on business continuity management (BCM) Conduct education for internal auditors to reinforce BCM system

Initiatives for the Environment ► Refer to Targets and Performance (Environment) in this report (P.21)

Third-Party Opinion



Dr. Naoki Adachi CEO Response Ability, Inc.

Studied plant ecology at the University of Tokyo, where he was awarded a doctorate from the Graduate School of Science. Undertook research concerning tropical forests at the National Institute for Environmental Studies (NIES) and also at the Forest Research Institute Malaysia (FRIM). After leaving NIES, he set up his own consultancy business, specializing in corporate efforts to conserve biodiversity and CSR procurement (supply chain management). In addition to roles as a member of the Standing Committee of the Ecological Society of Japan, an advisor to the Sustainable Management Forum of Japan and Executive Director of Japan Business Initiative for Biodiversity (JBIB), he also serves on the Ministry of the Environment's Committee on Biodiversity Private Sector Activities Guidelines and many other governmental committees.

Furukawa Electric has this year elected to synthesize the information formerly contained in its CSR and annual reports as a "Sustainability Report." This appears to be in response to the trend, particularly in Europe, to disclose a variety of non-financial information, including that pertaining to environmental, social and governance (ESG), to investors. It is important in such reports to employ clear indicators and show the items that companies are targeting specifically. At this point, numerical targets are provided mostly in the environmental field. Going forward, using more easy-to-understand indicators for the society and management categories would make the report even easier to understand and simplify comparisons. This report also deserves high marks for the introduction, in President Shibata's own words, of the businesses that Furukawa Electric will develop going forward (pages 7-10) and the special features on second-generation high-temperature superconductor technologies (pages 11–16), which explains specifically what sort of technologies the Company has that will enable it to develop business in this field. These introductions are detailed and clear.

As to sustainability, in times when life was much simpler, clothing, food and housing were the main elements of people's lives to be sustainable. I believe that nowadays, energy and information needed to be added to that list. Furukawa Electric's businesses support these two needs, and the Company's technologies to efficiently transmit, store and create electricity should each make major contributions to realizing a sustainable society. As Furukawa Electric already possesses these technologies, it has a definite advantage in exploiting them to develop related businesses. The question that needs to be considered from a sustainability perspective is how the Company will achieve these developments and realize the business. Regardless of how many sophisticated technologies a company has, products cannot be made without resources. As last year's flooding in Thailand demonstrated, unless a company can adapt to weather disasters which are expected to be much more severe, business stability will be lost. I would like to see Furukawa Electric explain specifically how it will respond to such issues and what it is doing to guarantee the sustainability of the businesses themselves. According to this report, at present the Company has only short-term goals looking two to three years into the future. I definitely hope that the Working Group for Sustainable Planning (page 18) established this year will set targets and formulate plans to realize sustainability over the much longer term, and that the Company will pursue activities accordingly.

These initiatives should focus not just on contributing to society through technology but also take the lead in promoting new activities that will enable the Company to boost its own sustainability, as well as that of society as a whole. For instance, in addition to promoting energy conservation, it should become possible to shift to more renewable energy sources and to generate renewable energy. Looking just at superconducting cables, for example, by 2030 demand is expected to be 1.6 times the current level (page 13). Resource requirements are likely to grow in direct relation to this demand increase. Such questions will arise as how to procure increasingly scarce metal resources and how to shift from the use of petroleum-derived to biologically-derived plastics. The Company needs to describe a clear path and start on specific actions.

In fiscal 2012, Furukawa Electric analyzed and evaluated the relationship between biodiversity and its businesses and formulated an action plan based on the issues discovered (page 26). I was also involved in this process and became aware that Furukawa Electric had a truly diverse relationship with biodiversity. The reason companies undertake to conserve biodiversity is that biodiversity is directly connected to their business risks. Even more important, however, is that biodiversity and the ecosystem services are supporting corporate activities, so are they essential. For this very reason, it is essential to minimize the loads that businesses place on ecosystems; limiting this impact to the level that nature allows is the ultimate condition for sustainability. Though this is an extremely challenging issue, I hope the Company will look more deeply into this matter, and look forward to Furukawa Electric showing the world exactly what a sustainable company looks like.

GRI Guideline Table of Contents

No.	Indicators	Page				
1. Strategy an	d Analysis					
1.1	Statement from the most senior decisionmaker of the organization about the relevance of sustainability to the organization and its strategy	7-10				
1.2	Description of key impacts, risks, and opportunities	7-10, 11-16				
2. Organizatio	nizational Profile					
2.1-2.8	Organizational profile	3-4, 5-6				
2.9	Significant changes during the reporting period regarding size, structure, or ownership	No major changes				
2.10	Awards received in the reporting period	CSR Data Book, page 6				
3. Report Parameters						
3.1-3.3	Report Outline	1				
3.4	Contact point for questions regarding the report or its contents	1				
3.5	Process for defining report content	1, 39				
3.6-3.8	Boundaries and scope of the report	1, 3-4				
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report	Data page				
3.10-3.11	The reasons for and effects of restatements of information provided in earlier reports, as well as significant changes since the previous reporting period	No repetition from the previous report's content nor major changes				
3.12	Table identifying the location of the Standard Disclosures in the report	46				
3.13	Policy and current practice with regard to seeking external assurance for the report	1, 45				
4. Governance	e, Commitments, and Engagement					
4.1-4.3	Outline of corporate governance	40				
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	30, 34				
4.5-4.7	Corporate governance details	40				
4.8	Internally developed statements of mission or values, codes of conduct, and principles	1				
4.9-4.10	Process whereby the highest governance body oversees the organization's identification and management of economic, environmental, and that body's process for evaluating social performance	40-41				
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	40-42				
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	39				
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations	Not indicated (Japanese Electric Wire & Cable Makers' Association, etc.)				
4.14-4.17	Stakeholder engagement	30-31, 34, 39				
5. Performance	e Indicators					
Economic	Management approach	5-6, 7-10				
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, inkind, or pro bono engagement	37-38				
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	18, CSR Data Book, page 4				
Environmental	Management approach	7-10,21,31				
ENI	Materials used by weight of volume	20				
ENG	Direct energy consumption by primary energy source	20 22.24. CSP Data Pools page 2				
CNI	Energy saved due to conservation and enciency improvements	23-24, USR Data BOOK, page 2				
EN6	these initiatives to provide energy-encient of renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	11-16, 22, 29				
EN/	Initiatives to reduce indirect energy consumption and reductions achieved	23				
EN8	lotal water withdrawal by source	20				
EN14	Strategies, current acuons, and lottine plans for managing impacts on biodiversity	20				
	Initiatione to reduce greenhouse gas emissions by weight	20, 23-24				
ENIO	Initiatives to reduce greenhouse gas emissions and reductions achieved	20, 23-24				
EN22	Total weight of waste hy type and disposal method	20				
EN26	Initiatives to mitinate environmental impacts of products and services, and extent of impact mitination	11-16 22 29				
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	23				
EN30	Total environmental protection expenditures and investments by type	18, CSR Data Book, page 3				
Product	Management approach	28-29. 44				
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	28-29				
Labor	Management approach	32-36, 44				
LA1	Total workforce by employment type, employment contract, and region	3				
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	36				
LA11 Human rights	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings Management approach	32-33 31, 32-34				
HR3	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	43, web (Compliance Education)				
Society	Management approach	42-43, 44				
S03	Percentage of employees trained in organization's anti-corruption policies and procedures	43, web (Compliance Education)				
S04	Actions taken in response to incidents of corruption	42-43				
S07	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes	43				



Administration Department, CSR Division

2-3 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8322, Japan Tel: +81-3-3286-3044 Fax: +81-3-3286-3920 http://www.furukawa.co.jp/english/