



FURUKAWA BATTERY REPORT 2013



Corporate Philosophy

Guiding Principle	Drawing on many years of expertise in battery technology, the Furukawa Battery will contribute to the realization of a rich and sustainable society through continuous technological innovation.
Management Principles	 With an eye to the future of people and our planet, Furukawa Battery pledges 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 technology 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.
Furukawa Battery 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

help each other.

Editorial Policy

Furukawa Battery manufactures and sells batteries that are designed to store energy and then release it as required. We are committed to producing environmentally friendly products, as a provider of energy supply systems that form an essential part of people's everyday lives. We have edited this report with the aim of concisely outlining our initiatives based on our targets, results and activities, as well as specific examples. We have also based this report around the seven core subjects set out under ISO 26000. In publishing this report, we have combined CSR-related content with financial information to produce what you have in front of you now, the "Furukawa Battery Report."

■Organizations covered by this report This report covers The Furukawa Battery Co., Ltd. and all of its consolidated subsidiaries. Environmental data relates to Furukawa Battery's Iwaki and Imaichi Plants.

■Reporting period

Fiscal 2012 (April 2012 – March 2013) *The report may also include selected information from earlier than fiscal 2012 or 2011.

Date of publication

August 2013

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■Reference guidelines

- Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (Ver.3)
- Environmental Reporting Guidelines (2012, Ministry of the Environment)
- ISO 26000

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This report has been compiled using the latest information at the time of editing. Please bear in mind that forecasts and other forward-looking statements are subject to change. Actual results may vary due to any number of reasons. Solar panel installation (in front of the Iwaki Plant R&D Center, completed March 2013) We installed solar panels in conjunction with a peak-shift storage battery system, in front of our R&D Center. We are currently running trials on the installation, using it as a model facility for renewable energy.

THE FURUKAWA BATTERY CO., LTD.

FURUKAWA BATTERY REPORT

2013

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Our social responsibilities as a battery manufacturer

Looking back on 2012

Although March this year marked two years since the Great East Japan Earthquake, the aftermath is still very much in evidence throughout the region. We would like to once again extend our heartfelt sympathies to all those affected.

Looking back on 2012, the Japanese economy started to show signs of a recovery, with demand fueled by reconstruction following the Great East Japan Earthquake. The economy made little progress overall however, due to factors such as limited consumer spending and sluggish exports as a result of the strong yen.

We may want to just get on with our lives, but we are having to think more and more about crisis management, in the wake of the economic crisis in the EU, natural disasters on



Katsutoshi Tokuyama, President



a global scale and a string of serious incidents and conflicts.

On the domestic front, the general election led to a change of government, which looks set to take the country in a considerably different direction.

It was a year of major upheaval in other countries too. The US President may have been reelected, but new national leaders came into power in other countries such as China and the Republic of Korea. This could prove to be a significant turning point in the current era.

We will need to keep an eye on political and economic trends at home in the future, whilst also monitoring developments in other countries, so that we can continue make the right decisions with regard to our operations.

Global evolution and responsible business activities

With that in mind, we intend to evolve our business activities based on a number of companywide initiatives and specific targets in each division, as outlined on the following page.

CSR activities with a firm focus on the future

We have a responsibility to contribute to society at every level, through the manufacture and sale of batteries and other products. In fiscal 2012, we started to provide environmental education for children, on whose shoulders the next generation will rest. Activities focused particularly on batteries, such as the ones we produce, and the fact that they will play an important role in energy management in the future.

We intend to continue with these activities for the foreseeable future, in the hope that children will have a better understanding of how to use energy without impacting on the environment and be able to lead more comfortable lives when they grow up. On other fronts, we continue to work with our suppliers to reinforce management of hazardous substances, so that we can provide people with products they can use with total confidence.

Our role as a company recognized by society

Times may be tough at the moment, but we are "challengers." We are passionate and have the power to initiate, to change and to fail. We are determined to overcome whatever obstacles lie in our way, and to create a company that people will take to their hearts.

As well as presenting to you the Furukawa Battery Report 2013, we remain committed to contributing to society through our CSR activities, based on the underlying principles of health and safety, quality and compliance.

We are challengers

1. Six companywide initiatives for fiscal 2013

"Providing the world with environmentally friendly products created in a comfortable working environment"

- Environmental enhancement measure strengthening
- Reinforce compliance
- · Increase efficiency and improve profitability
- Strengthen synergy with the Furukawa Electric Group
- Reinvigorate back office departments
- · Comprehensively reduce expenses

2. Division-specific initiatives

- Business divisions
 - (1) Continue to reduce costs and improve quality.
 - (2) Do everything possible to maximize revenue, with an eye to expanding our operations and market on a global scale.
- Sales divisions

Maximize operating revenue through new market development and business productivity, and reinforce credit management.

• Equipment and production technology divisions

Formulate forward-thinking capital investment plans aimed at contributing to revenue.

· Research and development divisions

Continue to develop products with an emphasis on reducing lead times to market and increasing efficiency, by refining our focus and working on speeding up development of new products.

· Head Office and related divisions

Improve capabilities with regard to planning, concepts, solutions, information gathering, analysis and information transmission.

Long-Term Vision

Getting Fukushima back on its feet

In 2011, we formulated a long-term vision running all the way through to 2020. We set ourselves the target of increasing sales to ¥100 billion and our percentage of overseas sales to 60%, both of these figures being double the equivalent totals in fiscal 2010. As well as going ahead with capital investment in order to expand buildings at our Iwaki Plant (Fukushima prefecture), we intend to consolidate our start on restructuring our plants by the end of fiscal 2014. We are also planning to break into overseas markets and take our operations global during this period. As the Iwaki Plant is our mother plant however, we are sending out a range of messages from Iwaki in an effort to breathe life back into Fukushima at the same time, by contributing to the recovery process following the earthquake. We continue to do our bit to boost employment in Fukushima prefecture too.

The global energy structure meanwhile continues to change, with ecofriendly cars becoming more popular and more people using renewable energy. It is with that in mind that we are implementing the following measures to achieve our long-term vision.

Automobile batteries

We are hoping to get manufacturers to use our strategic UltraBattery products as high performance batteries in vehicles with idle-stop systems, demand for which is on the increase. We have also launched the ECHNO series of maintenance batteries, which are compatible with idle-stop systems and hybrid vehicles, in an effort to increase our share of the after-sales market.

Industrial storage systems

Demand for industrial storage systems increased following the Great East Japan Earthquake, for use as emergency power sources in hospitals and power plants for example. As demand is expected to keep on increasing, in areas such as power peak shift and next-generation energy, we are planning to launch the new FCP series of industrial batteries, offering outstanding cyclability.

We are aiming to develop commercial UltraBattery systems for industrial use too.

On the subject of lithium ion batteries (LiB) meanwhile, we are developing a highly safe iron phosphate-based product. As LiB and lead-acid batteries both have their own advantages, we are developing a balanced sales strategy policy that effectively combines the two. To date, we have been developing a system in conjunction with our parent company Furukawa Electric Co., Ltd., and have supplied both LiB and lead-acid batteries to the Ministry of Economy, Trade and Industry for use in trials.



Work to expand plant buildings

Putting our overseas expansion strategy into practice

We are conducting ongoing market research in an effort to achieve our target of increasing our percentage of overseas sales to 60%. With demand for automobile batteries on the rise in countries such as Indonesia and India, we are planning to increase the annual production capacity at our plant in Thailand to 4.4 million units (including batteries for automobiles and motorcycles) by the end of the next fiscal year. That will be more than 30% higher than production levels in fiscal 2010. Given the increasingly urgent need to procure batteries for motorcycles in particular, we are also thinking about rolling out operations to new facilities, including the possibility of licensing technology to local manufacturers in India and other countries.

With improvements in infrastructure development in Southeast Asia meanwhile, we believe that there are further business opportunities out there with regard to industrial batteries. This is an area we intend to actively expand into in the future.

Restructuring production at our domestic plants

To make more efficient use of human and management resources, we intend to consolidate production of automobile batteries at our Iwaki Plant (Fukushima prefecture) in stages from fiscal 2014 to 2015. Our Imaichi Plant (Tochigi prefecture) will then concentrate on industrial batteries and power source systems. Rather than scaling back our domestic operations, this is a policy aimed at boldly restructuring production so that we can pave the way to implement our growth strategy.

Increasing production capacity at our Iwaki Plant

As well as transferring automobile production facilities away from our Imaichi Plant, we are also looking into installing new facilities to manufacture UltraBattery products and other high performance lead-acid batteries for use in eco-friendly vehicles. We plan to go ahead with active investment from fiscal 2014 onwards, over and above depreciation. We are also looking to expand industrial battery facilities at our Imaichi Plant, to make use of the space left behind once automobile battery production facilities have been relocated.

Business Continuity Plan (BCP)

Because we fully appreciate our social responsibilities as a company, we have formulated a business continuity plan (BCP) that will enable us to minimize damage from unforeseen risks and continue operating in the event of a major earthquake with a magnitude of six or higher, in accordance with our Basic BCP Policy. Based on our experiences during the Great East Japan Earthquake and flooding in Thailand, we are planning to formulate a new BCP and shift to a system of business continuity management (BCM) in phases from fiscal 2013 onwards, as well as implementing the PDCA cycle.

Basic BCP Policy

1. Human safety

Implement disaster prevention measures to ensure the safety of employees, contractors, family members, visitors and all other concerned parties.

2. Business continuity

Ensure that facilities can be quickly restored, even in the event of damage to company premises, and operations can continue in line with customers' requirements.

3. Other considerations

Work with residents and the local authorities to assist with recovery.

* What is a business continuity plan (BCP)? A business continuity plan (BCP) sets out plans for what should be done normally as well as the methods, procedures and other measures to continue business activities in an emergency situation. The aim is to minimize damage to business assets and maintain core operations, or enable them to be quickly restored, in the event that the company is affected by a natural disaster or an accident of some sort.

BCP should include measures such as maintaining backup systems, speeding up safety confirmation procedures, securing personnel and replacing production facilities.



Conceptual outline of a BCP

Dealing with the unexpected ►►►

We stockpile emergency supplies so that we are prepared in the event of a disaster.

Every member of staff at Head Office has pre-prepared supplies somewhere in the vicinity of their desk to enable them to get home in an emergency, including a helmet, and basic food and water in an emergency bag.

We have also started to store water, food, blankets and other supplies in case members of staff have to stay on company premises.



Profile of Furukawa Battery

Helping to create a better society through technology and products people can trust

Corporate Profile

Corporate Name The Furukawa Battery Co., Ltd.		
Head Office	Hoshikawa SF Bldg., 2-4-1 Hoshikawa, Hodogaya-Ku, Yokohama City, Kanagawa Prefecture 240-0006 JAPAN	
Established	September 1, 1950 (Spun off from Furukawa Electric Co., Ltd.)	
President	Katsutoshi Tokuyama	
Paid-in Capital	1.64 billion JPY (As of March 31, 2013)	
Number of Emplo	oyees 1,946 [Consolidated], 855 [Non-Consolidated] (As of March 31, 2013)	

Major Products

• Lead-Acid Storage Batteries:

For automobiles, motorcycles, electric powered vehicles, trains, aircrafts, ships, emergency lighting, telephone switchboards, information devices, uninterruptible power supplies (UPS), security systems, industrial solar power systems, wind power systems, etc.

Alkaline Storage Batteries:

For measurement instruments, space satellites, fire alarms, emergency broadcast systems, shutters, aircrafts, railway cars, etc.

• Power Supply Systems:

DC power supply systems, AC uninterruptible power supply systems (UPS), inverters, etc.

Other Items:

Converters, battery chargers, battery monitoring systems, battery testers, electrical work, telecommunications work, and others.





Head Office and Plants



Group companies

Automobile battery sales
 Furukawa Battery Marketing
 Kita-Nihon Co., Ltd.
 Furukawa Battery Marketing
 Higashi-Nihon Co., Ltd.
 Furukawa Battery Marketing
 Chubu Co., Ltd.
 Furukawa Battery Marketing
 Nishi-Nihon Co., Ltd.
 Furukawa Battery Marketing
 Nishi-Nihon Co., Ltd.
 Furukawa Battery Marketing
 Kyushu Co., Ltd.
 Niigata Furukawa Battery Co., Ltd.

Automobile battery production and sales

Siam Furukawa Co., Ltd. (Thailand)

Others

Daiichi Giken Kogyo Co., Ltd. HD Holdings Co., Ltd. FB Finance Co., Ltd. FB Package Co., Ltd.

History

- 1914 Furukawa Electric Co., Ltd. established its battery factory in Amagasaki City, Hyogo Prefecture, and started production of lead-acid batteries.
- 1937 Relocated the battery plant to Hodogayaku, Yokohama City for business expansion.
- 1950 Spun off from Furukawa Electric Co., Ltd. and founded as The Furukawa Battery Co., Ltd.
- 1970 Completed an automobile battery plant in Imaichi City (now Nikko City), Tochigi Prefecture.
- 1978 Completed an automobile battery plant in Iwaki City, Fukushima Prefecture.
- 1986 Constructed FB Plant (Nikko)
- 1995 Obtained ISO 9001 certification
- 1999 Obtained ISO 14001 certification (Iwaki & Imaichi Plants)
- 2001 Completed companywide certification under ISO 9001 (2000)
- 2002 Additionally acquired shares of Siam Furukawa Co., Ltd. to make it a subsidiary.

- 2003 Successfully developed the world's first lithiumion bat tery for space application, which was installed in the "Hayabusa" asteroid explore. Provided the "Akatsuki" Venus climate 2010 orbiter with a lithium-ion battery. Received a certificate of commendation from the Ministry of Education, Culture, Sports, Science and Technology, for the development of batteries installed on board Hayabusa, the compact planetary exploration craft that has achieved the world-first of bringing samples back to earth from an asteroid
- 2011 Obtained the highest environmental rating from the Development Bank of Japan, the first time that rating has been awarded in the lead-acid battery industry
 - Launched long-life control valveregulated stationary lead-acid cycleservice battery (FCP Series)

Furukawa Battery's "Smart Grid" and "Smart Community" initiatives

The Great East Japan Earthquake, and the nuclear disaster and power supply restrictions that followed, gave added momentum to initiatives to introduce solar power, wind power and other forms of natural energy, and to efforts to level out variations in power. At the same time, research, development and testing is well underway on a whole host of power storage devices, designed to make efficient use of such unstable energy sources and level out variations in power.

In last year's CSR Report, we mentioned that testing had started in Kitakyushu as part of the Kitakyushu Smart Community Project, one of the areas selected under the Ministry of Economy, Trade and Industry's Next-Generation Energy and Social Systems Demonstration Project. This is just one of many smart grid and smart community trials that we are currently running. This feature takes a look at the latest progresses in those trials.

Kitakyushu Smart Community Project

Under this project, community-installed storage battery systems are being installed that are capable of controlling power locally and directly via a community energy management system (CEMS), making the most of private sector systems already up and running in the Yahata Higashida area of Kitakyushu. The aim is to absorb fluctuations in power output and demand through the use of renewable energy, and to operate systems efficiently at the community level, taking into account demand response¹. We are developing and running trials on next-generation lead-acid storage batteries (industrial UltraBattery²) and next-generation lithium ion batteries*3 that will construct part of the community-installed storage battery systems linked to the aforementioned local control system and CEMS.

As part of our trials, we have set up nextgeneration lead-acid battery systems capable of handling 10 kW, 100 kW and 300 kW (UB100, UB500, UB1000) depending on system demand, and a next-generation lithium ion battery system capable of handling 10 kW (Figure 1), and are running tests to optimize storage capacities and performance (models and chemistries).

Trials have been going smoothly since they got underway in spring of 2012, with systems helping to suppress power peaks and reduce CO_2 emissions. We are also carrying out bench testing in parallel with these trials, and fully expect the batteries we have developed to achieve the target level of performance.

¹ Demand response refers to the process of changing power consumption patterns in order to minimize power usage by consumers, so as to maintain stable power supplies through measures such as varying electricity charges and paying out incentives.



Next-generation lead-acid storage batteries (stationary UltraBattery)





Next-generation lithium ion storage battery

- ² Our next-generation lead-acid storage batteries (industrial UltraBattery) are a new type of industrial lead-acid battery, with an ultra-long lifespan and outstanding charging performance thanks to a built-in capacitor. Under a partial state of charge (PSOC) condition, they are ideally suited for use in smart grid and smart community storage facilities.
- ³ Our next-generation lithium ion storage batteries are a new type of industrial lithium ion battery with lithium iron phosphate positive electrodes. They offer outstanding performance in terms of safety, rates, efficiency and ultralong lifespan.



Figure 1: Trial storage battery systems as part of the Kitakyushu Smart Community Project

Keihanna Eco City Next-Generation Energy and Social Systems Demonstration Project

We are also taking part in trials at Keihanna Science City, another Next-Generation Energy and Social Systems Demonstration Project. As part of this project, we are developing and running trials on 30 kW next-generation lithium ion storage batteries that will construct part of a building energy management system (BEMS) at Keihanna Plaza, a complex building that houses a range of facilities with different uses and draws on a number of different energy supply sources. The key feature of the power storage system in this case is that we have used a parallel system to increase capacity. One of our aims is to demonstrate that systems can be easily added to and scaled up, not only to be made redundant.

We finished installing the storage system at the beginning of 2013 (photo, right), and have been running trials since spring 2013.

Keihanna Science City



Research into a diverse range of batteries

We are researching and developing a diverse range of batteries. As a prime example, we recently conducted a road trial on a three-wheeled electric vehicle (trike) applied with the magnesium air battery.



President Tokuyama raises the starting flag as the sun rises on a three-wheeled electric vehicle applied with the high-capacity magnesium air battery

Road trial

The trial got underway shortly after 6:30 on the morning of December 11, 2012, as the sun rose over our Iwaki Plant in Fukushima prefecture. With the planned route out of action due to snow, we had to choose an alternative route that would avoid icy roads. We switched to a new route starting in Ogawamachi, partway along the course, and decided to follow the road to Minamisoma, located in a comparatively warm area facing the Pacific, to the north of Fukushima Daiichi Nuclear Plant. Driving along National Route

Smart Grid Trials in New Mexico, USA

In fiscal 2010 we were commissioned by New Energy and Industrial Technology Development Organization (NEDO) to start trials as part of the New Mexico Smart Grid Project. The State of New Mexico is developing and trialing comprehensive smart grid technologies, as one strand of smart grid research in the United States. The project itself is a joint Japan-US project to conduct smart grid trials and research, in conjunction with NEDO. One of the smart grids in New Mexico is a "microgrid" that uses solar, gas engine and fuel cell technologies connected to the existing power distribution system of a building located in a commercial area of Albuquerque. We have installed the advanced lead-acid batteries (FCP500) used in the microgrid and are currently running trials (photo, right).

Trials got underway in spring 2012 and are going according to plan. We have confirmed that the advanced lead-acid batteries can effectively handle fluctuations in power on the microgrid installed in the existing building.



90 kW advanced lead-acid battery system (commercial building in Albuquerque)

The human race has long since benefited from the various different energy sources that the earth provides. It is only now however that we are starting to face the reality of those energy sources running out, in the near future. We need to change, to become an environmentally friendly society that works in the harmony with the world around us.

That is where advanced technology comes in, to enable us to create a future society in which people live in harmony with the planet. We are doing our bit to make that a reality, through storage batteries.

6, through the lingering scars of the earthquake and tsunami, the trike headed northwards into a strong wind, which increased energy consumption. The route covered approximately 110 km and finished at the Tohoku Bureau of Economy, Trade and Industry, in Aoba ward of Sendai, Miyagi prefecture. The trike was a commercially available three-wheeled electric vehicle, applied with the magnesium air battery (generating capacity: approx. 4 kWh) and a lithium ion battery (approx. 3 kWh) charged by the magnesium air battery. It was driven by Professor Yasuaki Kohama, an expert in hydrodynamics from the New Industry Creation Hatchery Center at Tohoku University. He commented, "I know these batteries were developed as an emergency power source and power generation systems, but we seem to have proved that they can be used in electric vehicles too."



The three-wheeled electric vehicle applied with the magnesium air battery and members of the project team (in front of Sendai Joint Government Office Building No.1, in Aoba ward of Sendai, having completed the first journey of its kind in the world)

Special Feature 2

Basic philosophy on human resource development

Environmental Education Program

As a battery manufacturer, we consider it our duty to develop human resources, so that they will be able to make more effective use of energy in the future. We have therefore set out an education program and provide support to help educate students and children, in the interests of future generations.

Working with Iwaki City Board of Education, members of staff from our Environment Division went out to two elementary schools in Iwaki in December 2012 and January 2013, and organized environmental classes aimed at raising awareness of storage batteries, and their crucial role in the future of energy policy. Around 120 fifth and sixth graders were taught about subjects such as the future of energy use and environmental issues, focusing particularly on storage batteries. Classes started with an introduction to batteries and covered topics such as future ways of using renewable energy and global warming. They also offered opportunities for children to learn more about the future of electricity, by watching videos and making mini windmill kits.

Our Engineering & Development Division meanwhile organized a 50-minute talk for 150 first year students at Iwaki Meisei University in June 2012. The talk was given by an employee who graduated from the same university, who touched on subjects ranging from their experiences as a student to battery technology, based on their current duties and unique aspects of development activities. In December 2012, we also invited two classes of first-grade students from Iwaki High School to visit our Iwaki Plant. We provided them with an all-round educational experience, including a tour of the plant and a talk, based on the theme of batteries and how their studies will be useful in the future.

Our Safety & Environment Division organized training in occupational health management in the workplace for a group of four third-year students



Environmental education



Thank you letters from children

from Kitasato University School of Allied Health Sciences. Training included measurement techniques, which the students learnt about by actually measuring working environments at our plant.

As well as providing education on subjects such as batteries and energy, we have also introduced an internship scheme in order to train people in an industrial environment.

We will continue to actively engage in educational support activities such as these in the future.

Column

(Thailand)

Supporting employees' children through the SFC Scholarship scheme

In an effort to encourage employees' children in their academic pursuits, Siam Furukawa (SFC) administers and presents children who have passed with "SFC Scholarships" annually. A total of 17 children received scholarships in 2012. SFC will continue to provide learning support, to help create a brighter future for our children.



Basic philosophy on human resource development (aims of education and training)

Our motto here at Furukawa Battery is "we are challengers." That is also our guiding principle when it comes to education too. We provide our employees with the support they need to improve their individual skills, through training courses for instance. We have put in place an educational framework that enables every employee to contribute to the company's growth with a strong desire to take on new challenges and a broad outlook. We improve our training courses every year, to enable employees to acquire the skills they need based on vocational qualifications and recommendations, and continue to raise awareness and motivation with regard to goals and targets.

Education Office's guiding principles		
The power to initiate	If you have an idea, give it a try! See for yourself! Get out there!	
The power to change	Don't make do with how things are! Always try to change and broaden your horizons!	
The power to fail	You'll never get anywhere if you don't try! Have the courage to take on new challenges!	

Main training courses

Course description	Job- specific	Selection- based
Training for department heads	\checkmark	
Training for newly appointed managerial staff	\checkmark	
Training for global leaders		\checkmark
Leadership development training		\checkmark
Training for leaders of on-the-job training (OJT)		\checkmark
Third year employee training	\checkmark	
Second year employee training	\checkmark	
Follow-up training for new employees	\checkmark	
Training for new employees	\checkmark	
In-house English conversation		\checkmark



The challenge of training a wide range of human resources

Noriko Ito (Administration Department) We organized lots of training programs in fiscal 2012, and managed to increase participation too. The aim of training is to encourage employees to become more aware, discover things for themselves and take the initiative to improve the company as a whole. We arrange meetings after employees have finished training and organize follow-up training, as well as supporting trainees through changes and monitoring them to ensure that training translates into improvements in the workplace. To enable as many employees as possible to take part in training on a companywide scale, we also organize educational activities at the divisional level, overseen by individual divisions as well as the Administrative Department. We will continue to provide support, to help employees improve their skills, and are committed to creating an environment in which all employees can fulfill their potential within their given role, as true "challengers."

Global human resource development

We make every effort to create environments in which individual employees can master the skills they need and fulfill their potential, so that we can keep on forging ahead with globalization. We have established a range of development and support systems, so that we can produce more human resources with a talent for global business.

The following are comments from employees, regarding global business, overseas human resources and globalization as a whole.



Teaching in-house English conversation Mayu Yamauchi

(Industrial Section, Overseas Sales & Marketing Department)

Last year, we organized a total of seven in-house English conversation courses. As a firsttime scheme planned by employees, the Administration Department

organized the courses and I took on the role of teacher. With an emphasis on role-playing activities, involving dealing with overseas customers, and other types of conversation with a sprinkling of humor, I tried to teach classes so that employees could get used to English while still enjoying themselves. I hope that these courses will help raise awareness and make a small contribution to the overseas development of the company as a whole. This has been a fantastic experience for me too, thanks to participants giving me such a warm welcome, despite being a new employee and their teacher!



Taking part in global leader training Norihiko Maeyashiki

(Planning Department, Strategic Planning Division / Internal Control Division)

I took the training course for global leaders. Rather than simply studying English, training involved quickly drawing conclusions and

giving presentations in groups with other participants, so there were lots of opportunities to speak out. We submitted proposals to the company's executives at the end of the course. The ones that were selected are now being implemented as group projects. The course was a great opportunity to think about what makes a global company. I intend to gain more expertise and experience, and develop a better understanding of other cultures, rather than worrying about my language ability. I am determined to make a difference as a global human resource.

Organizational Governance

We ensure compliance with legislation and corporate ethics at all times, and do our level best to run the company in the best interests of our stakeholders.

Corporate Governance

System of Corporate Governance

In June 2011, we introduced the executive officer system to improve the speed and efficiency of management. We separated the management oversight functions from the business execution functions, positioned the Board of Directors as the institution to make management decisions and supervise the execution of duties, separating these functions from the business execution functions.

The Company operates a system under which management decisions are made with sufficient deliberation at meetings of the Board of Directors, which are held regularly once a month and attended by nine directors including two outside directors and four audit and supervisory board members including three outside auditors. It also operates a system under which an extraordinary meeting of the board of directors can be convened whenever necessary to deal with any issues.

To enhance the audit function, we have in place a system under which we appoint audit assistants to support the auditing duties of audit and supervisory board members.

We hold management meetings and business liaison meetings attended by directors, executive officers and full-time auditors to improve the speed and efficiency of execution of duties.



Internal Control

We established Internal Control Basic Rules for the purpose of pursuing efficiency and effectiveness in the business operation of the Furukawa Battery Group, compliance with relevant laws and ordinances, ensuring the reliability of financial reporting, seeking to preserve assets, and helping maintain and enhance corporate value. We also established institutions such as the Internal Control Dept., the Risk Management Committee and the Compliance Committee for the same purpose, and are working to put internal controls in place.

Basic Policy on the Elimination of Antisocial Forces

Furukawa Electric Co., Ltd. has set forth the Furukawa Electric Group CSR Code of Conduct as a code of conduct for its group companies. This code clearly specifies that Group companies should adopt a resolute approach to antisocial forces. Furukawa Battery's Board of Directors determined that Furukawa Battery shall adopt a resolute approach to any antisocial forces that threaten the safety and order of society, and its Compliance Rules stipulate it as compliance conduct guidelines.

Compliance

Report on the results of compliance

awareness surveys

As a result of workshops and discussion sessions on compliance during 2011 and 2012, we conducted an employee compliance awareness survey from October 17 to November 9, 2012. A total of 791 Furukawa Battery Group employees took part in the survey, the aim of which was to confirm how well established compliance is amongst employees, whilst raising levels of awareness and interest in compliance at the same time.

The results indicated a significant improvement in levels of awareness in most categories compared to the previous survey, at group companies as well as Furukawa Battery itself.

At the same time however, we evidently need to continue working on areas such as *"horenso"* (report, contact and consult) initiatives and creating open workplaces.

We intend to conduct surveys on a regular basis and clearly set out areas in need of improvement, so that we can continue to promote compliance in the future.



Complying with the Furukawa Electric Group CSR Code of Conduct

One of the Furukawa Battery Group's Management Principles is to "live up to the expectation and trust invested in us by society, with fairness and integrity." To put that into practice, our Group Credo states that each and every one of our employees and executives must "maintain high ethical standards, and value honesty and integrity above all."

To enable us to carry out corporate activities in accordance with those ideals, we have set out and comply with the Furukawa Electric Group CSR Code of Conduct, as a set of basic guidelines telling employees and executives how they should behave from the standpoint of corporate social responsibility (CSR).

We conduct follow-up activities on a regular basis, by asking all employees to review their performance based on

Establishing a whistle-blowing contact

system

In an effort to prevent compliance violations, we have established a system that enables employees and executives to report violations, or suspected violations, within Furukawa Battery or any group company directly to the Compliance Committee. We offer three separate points of contact; (1) an internal whistle-blowing hotline, (2) anonymous contact with a full-time Audit & Supervisory Board Member, or (3) an external whistle-blowing hotline enabling employees to report violations anonymously (Furukawa Electric Group Hotline). Information from all three sources is then collected by the Compliance Committee's administrative office, enabling us to respond to incidents as soon as they are reported, whilst also taking sufficient care to protect the whistleblower. the Furukawa Electric Group CSR Code of Conduct each year, and then giving them the opportunity to discuss the results with their head of department. We are committed to working as a team here at the Furukawa Battery Group, so that we can create open workplaces



Reception at Head Office

based on a constant awareness of compliance, and ensure that each and every one of our employees is living up to the serious expectations of our stakeholders.



Human Rights and Working Practices

Creating better working environments, through working conditions and employment practices based on respect for human rights

Disabled employment

We aim to create workplaces in which a wide range of human resources can fulfill their potential, and actively employ people with disabilities at our Head Office, Imaichi Plant and Iwaki Plant.

As well as taking part in job fairs around the country and providing training for occupational counselors, we seek out jobs that are suitable for disabled people and devise ways for them to work independently. We provide support so that disabled employees can establish themselves in the workplace and go about their lives with a greater sense of stability.

We also offer regular internship placements for students with mental disabilities from local special schools. We provide interns with training while they are still in school and then take them on as new graduates.



Packaging instruction manuals

Mutual trust between labor and management

With the exception of managerial staff, retired workers (with continuing employment contracts), and employees on fixed-term contracts, all employees at Furukawa Battery belong to a labor union.

Communication between labor and management is crucial in order to facilitate business management, expand the company's operations and improve working conditions. That is why we organize central management briefings twice a year, to provide explanations on subjects such as our business plans and results.

We also organize divisional labor-management meetings at the divisional level, to go through monthly profit and loss figures, as well as monthly Labor-Management Subcommittee meetings to resolve issues. Labor-management health and safety patrols meanwhile take place at each of our sites twice a year.

It is thanks to labor-management discussions such as these that we have been able to review our regulations, establish a new simultaneous leave system and introduce a five-day working week.

We continue to provide opportunities for dialog, so that we can keep on improving mutual trust between labor and management at every level.



Health and safety patrol

Occupational health and safety management

We introduced an occupational health and safety management system in fiscal 2010, with a firm focus on employee health and safety.

Our chief policy is to maintain and improve employees' health. With that in mind, since fiscal 2012 we have launched a series of mental health measures, worked on improving related standards and reviewed how we implement initiatives via an external body.

As the first phase of our mental health initiatives, we organized mental health training for managerial staff. We have also started to compile mental health improvement plans and are working to reinforce our systems.

We intend to implement mental health improvement plans at individual sites from fiscal 2013



Seminar by an industrial physician

onwards, as we start to tackle mental health issues in earnest.

Companywide policy on health and safety activities

We carry out a range of activities to ensure that all employees have working environments in which they can work safely and securely, based on the slogan "establishing health and safety systems, and eliminating accidents through safety and risk assessments."

We also set out a companywide policy on health and safety activities every year, and carry out activities based on key companywide priorities and targets. Our activities for fiscal 2013 are based on the policy on the right.

Structurally reinforcing health and safety

In an effort to create environments in which our employees can work with confidence, we have a Central Health & Safety Committee, which is chaired by the President and meets twice a year, and organize biannual plant patrols by the executive in charge of labor-management relations. We hold monthly Health & Safety Committee meetings at each of our sites, chaired by the head of the relevant facility (Health & Safety Officer). We also organize monthly Divisional Health & Safety Meetings at each of our sites, under the supervision of the relevant Health & Safety Committee.

To reaffirm the true meaning of safety, last year we got health and safety instructors to retrain all members of staff in every division at our Imaichi and Iwaki Plants using our Health & Safety Training Textbook, which is our bible when it comes to health and safety training.

FY2013 companywide policy on health and safety activities

1. Basic policy

Improve safety and the environment to create safe, comfortable and pleasant workplaces

2. Key priorities

- (1) Eliminate unsafe conduct and equipment
- (2) Take steps to control harmful substances
- (3) Continue to raise awareness of health and safety standards, and implement structured mechanisms
- (4) Maintain and improve employees' health

Industrial accidents

Although no serious industrial accidents occurred during fiscal 2012, we did have one accident that resulted in lost work time. We are determined to completely eliminate industrial accidents, by systematically carrying out risk assessments in all workplaces and getting all employees to submit "near-miss" reports.





Employment policy and recruitment activities

We make every effort to provide long-term stable employment, by creating working environments and mechanisms to ensure that employees feel motivated and can do their jobs with confidence.

With Japan facing an aging population and dwindling birthrate, we offer a variety of different working patterns every year depending on current conditions, ranging from graduate and mid-career recruitment to disabled employment, reemployment of retired workers, assignment to other group companies and temporary employment.

• Recruiting graduates to shoulder the next generation

As a member of the Furukawa Electric Group, we participate in the Furukawa Electric Group Forum. We also visit individual universities to give presentations on the company and make a concerted effort to secure human resources. We recruit individuals based on their personal qualities, regardless of nationality, and place a particular emphasis on interviews. As a result, we recruit students with a wide range of personalities every year.

Mid-career recruitment with an emphasis on ability

In an increasingly globalized world, we need human resources with advanced expertise and language skills. We recruit individuals with experience and expertise across a wide range of professions.

Employment figures

	Total/Average
Employees	855
Average age	41.44
Average length of service	16.31 years
Graduate recruits (FY2012)	22
Mid-career recruits (FY2012)	15 (+ 23 transfers)

(As of the end of March 2013)

Maintaining relations with the company after retirement

We run the Furukawa Battery OB Society for former employees who have retired.

The society holds an annual meeting in October every year, giving members a chance to find out what others are doing, celebrate their longevity and look through the society's financial reports.

The annual meeting is followed by a reception, during which members can get to know one another better and get the latest information on the company.

As the number of members has continued to increase in



FY2012 Furukawa Battery OB Society annual meeting (Iwaki)

recent years, we have started to hold meetings at our Imaichi and Iwaki Plants too, as well as at Head Office. Events continue to grow in scale every year.

Support systems for a diverse range of working patterns

We respect our employees' individual lifestyle choices and provide a range of support systems to enable them to strike a work-life balance, between their job and their home life.

Accrued leave system

If employees have any days of annual leave remaining at the end of the year, they can carry over anything up to 20 days, for a maximum period of five years. They can then use accrued leave if they need to care for or look after a family member, or undergo treatment for personal injury or illness.

Continuing employment contract system

If an employee wishes to seek reemployment after reaching retirement age (60), they may sign a continued employment contract with the company. Although they have to meet certain conditions from the second year onwards, it is possible for employees to work through to the age of 65. We also organize "silver seminars" for employees who are approaching retirement age, to give them a chance to think about planning their lives after retirement.

Improving support systems

We have introduced a number of systems to help employees caring for children or family members to strike a balance between their job and their care responsibilities, including our childcare and family care leave systems, reduced working hours, and nursing care leave. Although these support systems have all been set out in accordance with the law, we are continuing to explore ways of improving our systems in fiscal 2013, so that we can provide employees with an even more pleasant working environment.

Support systems

	System	Details
Childcare	Childcare leave	Available to employees with a child aged up to one year old (or up to one year and six months in certain circumstances)
	Reduced working hours	Option to reduce working hours, providing that the employee still works for six hours a day Available for preschool children only
	Child nursing care leave	Leave to provide nursing care for a sick or injured child (preschool children only, five days a year) Up to ten days a year if there are two or more children
Family care	Family care leave of absence	Available for up to one calendar year for each family member requiring care
	Reduced working hours	Option to reduce working hours, providing that the employee still works for six hours a day Up to one calendar year for each family member requiring care
	Family care leave	Leave to provide care for a family member requiring care (five days a year) Up to ten days a year if there are two or more family members requiring care

Childcare leave system – User's comments

Fusae Muramatsu, Finance & Accounting Department



I used the childcare leave system following the birth of my second child and came back to work in April 2013. I was really grateful that the company and my colleagues were so understanding and supportive. While on leave, I was able to focus all my energy on caring for my two children. As well as watching my children grow day by day, I was able to enjoy every day to the full as a mother (not that I had any room to breathe!). Since returning to work, I have been using the company's reduced working hours system, so that I can take my children to and from daycare. I am going to do my level best at work and at raising my children in the future, so that I can repay the understanding that everyone has shown me.

VOICE

View from the Iwaki Clinic

Lifestyle-related diseases, brought on by problems such as a poor diet, smoking habits, lack of exercise or stress, are an extremely serious issue. The same applies to mental health problems too.



If our regular checkups indicate that an employee is suffering from any of these issues, we provide them with advice via a one-on-one consultation with an industrial physician.

We always try to pay close attention to communication, in order to help alleviate the health problems and anxieties that employees face.

We make every effort to detect conditions as early as possible, and will continue to provide support to help employees lead healthy lives in the future.



Becoming a fully-fledged coordinator

Chaturong Rungsangthongsuk (Overseas Technology & Engineering Department)

I joined the company in 2012 and am currently responsible for assisting overseas customers and engineers

who come to Japan for meetings or training. That includes preparations, accompanying visitors during their stay, translating documents for overseas technical partners into English and facilitating negotiations with customers. I did a different job at my previous company, so I try to get my colleagues to simply explain background information and other details ahead of time. I can speak Thai, Japanese and English, but I want to improve my knowledge of storage batteries, so that I can reply to people immediately using highly specialist terms and take my career to the next level. In the future, I hope to prove myself as a fully-fledged coordinator, dealing with customers on my own two feet.

Presentations during divisional management meetings

We organize meetings for executive members of staff in spring and fall every year. To make the most of this opportunity, we invite prominent figures from different fields to come in and give presentations. The subjects may vary, but presentations provide a rare glimpse into how people have overcome difficulties and always contain useful information in terms of personal development.

Junji Ogura, Honorary President of the Japan Football Association, was the guest speaker at the latest meeting. His presentation, entitled "having dreams makes you stronger," proved to be inspirational for all those present.



Presentation by Honorary President Junji Ogura

Cultural activities

Ice hockey club

The club has been up and running since shortly after operations commenced at the Imaichi Plant. Ice hockey is a very popular sport in Nikko, which even has its own professional



team. Players have great fun competing in league matches at various different levels, regardless of age or gender.

Soccer club

Column

The team was put together mainly by young employees with experience playing soccer and currently plays in a local league. The club has recently started to focus more on futsal (five-aside soccer).



Tennis club

Once a year, tennis fans from our Imaichi and Iwaki Plants get together for a tennis camp. Players at the Imaichi Plant enjoy playing matches on local tennis courts every month.



Basketball club

Spurred on by a new employee who had played in the All Japan High School Basketball Championship, a group of employees with experience playing basketball got together and started up club activities in



2011. Since then, they have entered local tournaments.

Activity club

The club organizes a softball tournament in early June every year, so that employees can get to know one another better and stay in shape. There have been 24 tournaments to date, since the first one back in 1989. Once the matches are over, the club holds a fun prize draw every year, without fail.



Success two years running at the CSR-DIW Awards, hosted by the Thai Ministry of Industry Department of Industrial Works



Siam Furukawa Co., Ltd. (SFC) has won a CSR-DIW Continuous Award, presented by the Thai Ministry of Industry Department of Industrial Works (DIW) in recognition of its commitment to ongoing CSR activities. Of the five levels available, SFC intends to tackle CSR-DIW advanced level 4 in 2013. In addition to CSR activities in the local community, including helping to improve academic abilities in English and other subjects at local elementary schools, SFC will be carrying out activities with a particular emphasis on "Green Culture" in an effort to protect the environment.

DIY activities for SFC employees



SFC has set up a series of DIY* courses for employees after work. With food prices continuing to soar in recent years, the company decided to set up a home cooking course, to help employees manage their household budgets by eating out less. A specialist instructor was brought in to teach a workshop, which was attended by around 20 employees. The cooking course covered how to prepare noodle dishes and light meals, and even how to clear up afterwards. Other courses have included subjects such painting chairs and making fabric cases for mobile phones.

As well as enabling employees to save money at home, activities such as these also help to make life more enjoyable and fulfilling.

* DIY is short for "do it yourself," and means precisely that. It usually refers to carrying out repairs or improvements yourself, rather than calling in a professional.

Environment

Harnessing storage battery technology to promote environmentally friendly, efficient energy use

Outline of our environmental policy

Our production facilities are located in beautiful natural surroundings in Fukushima and Tochigi prefectures. As well as complying with environmental legislation and agreements with the local authorities, we also carry out environmental preservation activities focusing on the following key points.

Saving energy to prevent global warming

Promoting the effective use and recycling of key raw materials (lead, sulfuric acid and caustic soda) in order to conserve resources and protect the environment Reducing waste and promoting recycling to make effective use of resources and minimize environmental impact

Developing products with fewer environmental contaminants in order to minimize environmental impact

: Achieved

👕 : Not achieved

Targets and results

In fiscal 2012, we carried out activities based on the following environmental targets.

Policy Target (FY2012) Summary of results (1) Make comprehensive improvements to EMS in (1) Underwent routine ISO 14001 screening on accordance with ISO 14001 (2004) February 14, 2013 and had certification renewed Implement environmental (2) Educate and raise awareness amongst all employees (2) Organized educational activities for all management system (EMS) (3) Increase number of employees with environmental and employees in line with training plans related qualifications (3) Increased number of qualified employees by six (1) Maintained 100% compliance with figures Legal compliance (1) Maintain 100% compliance with agreed figures agreed with the local authorities (environmental preservation (2) Achieve a self-assessment score of at least 90 for (2) Maintained a score of at least 90 on legally activities) preventive measures required self-assessment forms (1) Reduce power consumption (1) Specific power consumption per unit of Reduce specific power consumption by at least 1% production increased by approximately (year on year) 6% (year on year) Saving energy (2) Reduce CO₂ emissions (2) Specific emissions increased per unit of Achieve an annual reduction in specific CO₂ emissions production by approximately 5% (year on of at least 5% vear (1) Reduce lead waste (1) Specific waste increased by approximately Recycle usable resources Reduce waste by at least 1% (year on year) 3.8% (1) Recycle at least 95% of all waste by fiscal 2013 Reduce waste (1) Recycled 96.3% of all waste in fiscal 2012 (including heat recovery) (1) Develop at least seven products per year (1) Developed four products with lower Reduce size and weight of products Develop products with environmental impact, with development lower environmental impact Increase percentage of recyclable raw materials of a further three continuing into next year Reduce usage of hazardous substances

Progress with our environmental management system

We obtained environmental management system certification (ISO 14001) at our Iwaki Plant in March 1999 and at our Imaichi Plant in June 1999. We obtained combined certification for both plants in March 2002, meaning that all of our domestic production facilities (two domestic plants) are now certified. Registration number: JQA-EM0380 We underwent routine screening for fiscal 2012 over the course of three days from February 12 to 14, 2013.

We have also obtained ISO 14001 certification for our overseas production facility at Siam Furukawa Co. Ltd. in Thailand.

Monitoring and reducing environmental impact as part of our business activities



Power consumption (specific

consumption)

Specific power consumption per unit of production increased by approximately 6% in fiscal 2012 compared to fiscal 2011.

We are implementing ongoing activities aimed at increasing production efficiency and reducing energy consumption.



Waste

We recycled 96.3% of all waste in fiscal 2012. We are committed to recycling and will continue to reduce the volume of waste we generate in the future.



CO₂ emissions

We reduced CO_2 emissions by 2.3% in fiscal 2012 compared to fiscal 2000. Specific CO_2 emissions per unit of production of lead-acid storage batteries increased by 7.6% compared to fiscal 2000.



[Reference] Specific CO₂ emissions per number of hours worked

Although we have always measured emissions per unit of production, we are looking for a more suitable unit to use, in light of increased energy consumption and personnel in non-production divisions. As part of a new trial, we have been monitoring CO_2 emissions per number of hours worked by our employees since fiscal 2009, as outlined below.



The above figures are based on a power to CO_2 conversion factor of 0.378 (kg-CO₂/kWh), to enable comparison between fiscal years.



Fuel

31,787 t-CO₂ **7278** t-CO₂



Wastewater

Wastewater levels at all sites were maintained within figures agreed with the relevant local authorities. We also maintained minimum wastewater levels at all sites.





*1: Main raw materials used to manufacture storage batteries

- *2: Chemicals specified under the PRTR Act, with the exception of lead, cadmium, nickel and compounds thereof
- *3: Power to CO₂ conversion factors are based on annual figures from individual power companies

*4: Estimated volume of lead-acid and alkali storage batteries shipped in fiscal 2012

Improving transport efficiency

We were designated as a specified shipper (30 million ton-km) in accordance with the revised Energy Conservation Act of April 2006 and have continued to work on improving transport efficiency since then.

Although we reduced CO_2 emissions by approximately 36% in fiscal 2012, compared to fiscal 2006, specific emissions increased by approximately 20% per unit (compared to fiscal 2006).

Emissions have remained level since fiscal 2009. We are nonetheless determined to keep on increasing transport efficiency in the future.



Emissions and transfers of substances subject to PRTR Act

The following figures were taken in fiscal 2012 in accordance with the PRTR Act (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof). We will continue to work on reducing emissions in the future.

Facility	Chemical	Total emissions (kg/year)	Total transferred (kg/year)
	Antimony and compounds	0.0	8.1
	Cadmium	0.2	0.0
t	Ferric chloride	0.0	0.0
Pla	Cobalt and compounds	0.0	43.2
/aki	Lead compounds	5.7	1704.0
2	Nickel	6.2	1304.6
	Nickel compounds	4.2	889.0
	Arsenic and inorganic compounds	0.0	0.7

Facility	Chemical	Total emissions (kg/year)	Total transferred (kg/year)
	Antimony and compounds	1.6	0.0
ant	Ferric chloride	0.0	0.0
i Pl	Toluene	2103.0	0.0
aich	Lead compounds	63.0	488.0
l	Arsenic and inorganic compounds	0.0	0.0
	Methylnaphthalene	7.0	0.0

* Emissions: Substances emitted into the air or public waters Transferred: Subcontracted waste treatment

Environmental accounting (annual figures)

Environmental preservation costs for fiscal 2012

(Unit: Thousand yen)

	Category	Details	Investment	Costs
	Preventing pollution	Costs relating to the prevention of air pollution and water contamination	7,117	8,153
Business area costs	Preserving the global environment	Costs relating to saving energy	19,380	3,407
	Recycling resources	Costs relating to waste disposal	0	19,323
Upstream/dc	wnstream costs	Costs relating to environmental preservation, aimed at minimizing environmental impact associated with our main business activities, at the procurement stages or after products have been shipped	0	0
Management	t activity costs	Costs relating to the maintenance of environmental management systems, environmental education for employees, and tree-planting activities onsite and in the local area	0	17,243
R&D costs		Costs relating to research and development, including products that help to preserve the environment	0	0
Social activity costs		Costs relating to off-site environmental improvement measures, including protecting the natural environment, planting trees, making areas more beautiful and preserving the landscape	0	0
Environmental remediation costs		Costs relating to the restoration of the natural environment	0	0
		Total	26,497	48,127

* Investment: Capital investment during fiscal 2012

Costs: Includes the cost of maintaining and managing equipment used as part of environmental measures, related personnel costs and depreciation

Environmental auditing and guidance

As well as ensuring that our own business activities are environmentally friendly, we also check on the environmental friendliness of the operators we work with, including waste disposal subcontractors and material suppliers.

When we collect used batteries from our users, we subcontract recycling and treatment of the resulting waste to operators that are licensed to dispose of industrial waste (or specially controlled industrial waste).

To use recycled resources from waste efficiently, we make sure that we go out to visit the relevant subcontractor, to conduct an environmental audit and check that the waste has been adequately processed.

We also visit plants operated by our suppliers, to check on chemical management procedures and the environmental credentials of the materials we are purchasing. After visiting operators, we instruct them to make any necessary improvements based on audit and assessment results. We then provide assistance with improvements, in areas such as health and safety in the workplace as well as



An environmental audit in progress

environmental friendliness, in an effort to improve environmental standards in partnership with the relevant operator.

We are committed to procuring materials, and transporting and disposing of waste, in an environmentally friendly manner, and will continue to implement joint environmental activities with operators in the future.

Launching a used battery recycling scheme for SECOM Co., Ltd.

Adequately disposing of used products and helping to create a recycling society in partnership with the customer

In October 2012, we launched a recycling scheme for the compact control valve-regulated lead-acid batteries that we sell to SECOM Co., Ltd. Using our approved status for the collection of waste over a wide area, we collect and adequately dispose of used products that we have previously sold. After disposal, the lead is recycled back into new lead and reused in compact control valve-regulated lead-acid batteries. This feeds back into our products, which are once again delivered to the customer.

With so many deliveries and outlets producing waste, we operate and manage this scheme using barcode data from delivery forms.



Scanning barcodes

Establishing an industry-wide recycling system

We are constantly working to recycle the products that we sell, in an effort to make harness resources more effectively and create a recycling society.

We also make every effort to help reduce environmental impact, in order to protect the planet and leave behind a healthy environment for future generations.

The "New Recycle System" for used automobile lead-acid batteries (starter batteries, including for motorcycles) was launched in July 2012. The aim is for the Lead Acid Storage Battery Recycle Association (SBRA)* to obtain approval for the widearea collection of batteries, ensure that batteries are disposed of appropriately and promote resource recycling throughout Japan.

We have been actively involved in the development of the New Recycle System ever since the SBRA was established.



New Recycle System

* Lead Acid Storage Battery Recycle Association (SBRA)

Jointly financed by the Battery Association of Japan (BAJ) and domestic storage battery manufacturers, the SBRA was established in October 1994 with the aim of voluntarily collecting and recycling lead-acid storage batteries, in order to help create a recycling society.

Presented with Environmental Preservation Award at the 4th CSR Awards

We have received an Environmental Preservation Award at the 4th CSR Awards organized by Furukawa Electric.

Awards are presented to Furukawa Electric Group subsidiaries that have made a noticeable difference in terms of their social contribution or environmental preservation activities. Companies that contribute to society through ongoing innovative activities on a daily basis are selected to receive awards every year.

We were selected for this year's awards in recognition of our outstanding battery recycling activities.

At the award ceremony, President Katsutoshi Tokuyama was presented with a certificate and confirmation of the award by Furukawa Electric President Mitsuyoshi Shibata.



The car battery recycling process



Award ceremony



Representatives from all of the award winning companies



Certificate

Environmentally friendly initiatives at the departmental level

List of environmentally friendly initiatives

We believe that we can achieve greater results in terms of environmental friendliness by bringing together detailed initiatives in each department. This section lists a number of example initiatives carried out by individual departments in fiscal 2012

Site	Category	Initiatives	Department responsible	
		Recycling wastewater		
		Switching to LED lighting	Production	
		 Improving yield (1) Reducing waste lead (increasing recovery and recycling rates, reducing waste generated, improve takt times (2) Reducing excess lead (modifying molds, reviewing variation management) 	Engineering Department	
		Reducing defects, improving process operating rates	Production Technology & Engineering Department / Production Department	
		Reducing wastewater (increasing processing recycling, reducing usage, preventing and controlling leaks)	Production Technology &	
		Improving processing costs (improving productivity)	Engineering Department / Equipment Department	
	Environment	Saving energy by using LED lighting, motion sensors and individual switches	Equipment	
Imaichi		Upgrading underground Bunker A oil tanks to aboveground tanks	Department	
Flam		Developing high efficiency switching units	Power Source	
		Developing and expanding products subject to RoHS	Department	
		Requesting and monitoring environmental activities by suppliers		
		Asking drivers to turn off engines when idling onsite, etc.	D I I	
		Combining loads from multiple suppliers, and increasing the efficiency of collection schedules and routes	Purchasing Department	
		Checking environmental initiatives as part of subcontractor audits		
		Improving the efficiency of power supply systems	Power Source	
		Developing power saving products with improved inverter conversion efficiency		
		Increasing usage of lead-free solder	Development	
		Extending and promoting non-usage of environmentally harmful substances	Department	
		Promoting the use of power saving equipment		
	Community involvement and development	Promoting technical cooperation with universities (acquiring new technologies, promoting education) (1) Technical cooperation with Utsunomiya University Faculty of Engineering (2) Technical cooperation with Tokyo Metropolitan University	Power Source Development Department	
		Improving process wastewater recycling rates, reducing raw materials costs		
		Reducing defects, improving process operating rates	Production	
		Developing innovative processes (lighter plates, higher efficiency chemical processes)	Engineering	
Iwaki Plant		Saving power from injection molding systems (switching from hydraulic to electric systems, saving power from heaters)	Department	
	Environment	Trialing a storage battery system and installing 20 kW solar panels at the Iwaki Plant		
		Commercializing UltraBattery (UB1000) control valve-regulated lead-acid cycle- service batteries (on sale from April 2013)	UB Business Department	
		Commercializing ECHNO IS Series UltraBattery batteries for vehicles with idle- stop systems (on sale from April 2013)		
		Developing and trialing smart grid lithium ion batteries and storage battery systems	Development Department	
		Conducting joint research with Iwaki Meisei University		
	and development	Conducting joint research with Fukushima National College of Technology	Department	
	and development	Conducting joint trials with lwaki United Renewables and lwaki Meisei University		

Iwaki Plant microgrid

We have installed a microgrid onsite at our lwaki Plant. Intended as a model facility to test storage battery control systems running on renewable energy, the microgrid combines solar power with a storage battery system, using our very own UltraBattery next-generation lead acid batteries.

We also installed 20 kW solar panels in March 2013.

As well as continuing to store power overnight, we will now be able to generate solar power and store it in storage batteries. This will enable us to alleviate peaks in demand, by using the storage battery system to supplement power consumption during the day, when demand is higher.

In the interests of visualization meanwhile, we have installed dedicated monitors in two locations at the lwaki Plant, so that anyone can see the amount of power being generated by the storage battery system and the level of charge in the batteries.

We intend to use this model facility to run full-scale trials on renewable energy usage in the future. Storage battery facility

<image>

Panel outlining the storage battery system

Managing chemicals contained in our products

In fiscal 2012, we started sending members of staff from our Environment Promotion Department and Purchasing Division out to visit manufacturers of key raw materials, in order to check their processes, conduct interviews and exchange information regarding hazardous chemicals contained in their products. We are committed to effectively managing hazardous chemicals contained in all of our products.

We also manage chemicals contained in our products and provide information in accordance with legislation such as the Waste Electrical and Electronic Equipment (WEEE) Directive and the Restriction of Hazardous Substances (RoHS) Directive, particularly in Europe.

Article 6, Paragraph 1 of the WEEE Directive (2002/96/EC) requires companies to remove and separately dispose of any materials that could potentially have a negative impact on the environment from collected electrical or electronic equipment, before proceeding with any further treatment.

As batteries are included in the list of relevant materials, as specified in Annex II, this means that the disposal of batteries once they have been removed is subject to the Battery Directive.



The revised RoHS Directive (2011/65/EU) meanwhile clearly states that the Battery Directive takes precedence. The following is extract is from Paragraph (14) of the preamble.

(14) This Directive should apply without prejudice to Union legislation on safety and health requirements and specific Union waste management legislation, in particular Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and Regulation (EC) No 850/2004.

Batteries are also exempted from the RoHS Directive under Paragraph (29) of the preamble to the new Battery Directive (2006/66/EC) issued on September 26, 2006, as stated below.

Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment does not apply to batteries and accumulators used in electrical and electronic equipment.

With this mind, we make every effort to provide information on the basis that batteries are not subject to the RoHS Directive.

The Battery Association of Japan (BAJ) has published a paper setting out a similar position on its website.

WEB http://www.baj.or.jp/recycle/recycle09.html

Product content sheet

Promoting environmental activities on a lifecycle basis



Business Practices

Our business activities are underpinned by compliance with ethical standards, and open and fair competition.

Fair procurement

Working in partnership with suppliers

We form strong partnerships with our suppliers and procure raw materials, parts, equipment and other supplies in accordance with the following basic procurement policy, to ensure that both sides fulfill their social responsibilities.

Basic procurement policy

- We engage in fair procurement activities based on legal compliance and high ethical standards.
- We take safety and the environment into consideration as part of our procurement activities and make every effort to fulfill our corporate social responsibilities.





Visiting one of our suppliers

Fair trade

We maintain and develop strong business relationships with our suppliers, based on fairness and mutual benefit, so that we can provide our customers with better quality products whenever they need them.

We organize regular annual training on the Act Against Delay in Payment of Subcontract Proceeds etc. to Subcontractors every year to ensure compliance. We are constantly sending procurement staff to outside seminars and workshops too, so that they can bring accurate information back with them and share it with other employees.

Preventing information leaks

Information security system

We have set out a basic information security policy for the Furukawa Battery Group to ensure that all information is managed and used in an appropriate manner, as a key requirement in terms of fulfilling our social responsibilities.

We have also established an information security management system and formulated an information security risk management plan, so that we can actively implement information security measures in line with social changes.

Information security training

From January to March 2013, members of our Systems Department organized group training seminars outlining information security for employees handling information assets at company and group company facilities. Seminars focused on the importance of USB memory, user ID and password management, in order to effectively protect valuable information assets provided by our customers and highly confidential information belonging to the company. They also covered basic points that employees need to bear in mind when using their computers at work or using their laptops, including the company's information security regulations, the threat of computer viruses, and what to do if your computer is infected. As well as providing information security training, members of the Systems Department also held discussion sessions with participants, to clear up any questions they had with regard to handling information assets. Having established a renewed appreciation of the importance of information assets as a result of these activities, we are confident that will contribute to our corporate activities in the future.



Information security training



Materials used for information security training

Column Siam Furukawa Co., Lto (Thailand)

Presented with TCC Best Ethics Award 2012 from the Thai Chamber of Commerce



To encourage all companies to engage in sound corporate governance, the Thai Chamber of Commerce (TCC) has a committee that presents TCC Best Ethics Awards to organizations that have achieved the required standard based on strict assessment criteria every year. Having carried out interviews with the company's customers, suppliers, employees and executives, the judging panel then assessed Siam Furukawa (SFC) based on ten categories relating to CSR, including social activities and environmental awareness.

SFC made it through to the final selection and won an award. It was one of just eight small and medium sized companies to receive awards in 2012. This is testament to SFC's outstanding ethical standards in Thailand.

Consumer Issues

We strive to improve quality standards and provide more information, in order to strengthen communication with our customers.

Improving quality standards

Striving to improve quality standards

We have obtained ISO 9001 certification and carry out quality assurance activities in order to put our quality policy into practice. We obtained companywide certification under ISO 9001:2000 in August 2001. We then passed screening to maintain certification under ISO 9001:2008 in July 2009, when the certifying body praised the fact that we effectively operate a companywide quality assurance system. This prompted us to start carrying out quality improvement activities based on a standardized quality management system applicable to all divisions and employees, in accordance with our companywide quality policy. We have substantially improved our attitude towards quality standards as a result.

Having undergone renewal screening in July 2012, we received a renewal recommendation and successfully renewed our registration.

Our quality policy and key priorities for fiscal 2012 are as follows.

We will make every effort to understand our customers' needs, ensure quality and reliability, and improve the standard of our work in all areas. We will monitor and evaluate customer satisfaction, in order to continually improve the effectiveness of our quality management systems.

We formulated detailed quality targets for each division at the start of the year, based on the above policy, and have continued to monitor progress through activities such as management interviews (twice a year).

Example quality initiatives

Our Quality Assurance Division carries out process patrols, as part of its activities to prevent non-conformity from recurring or even occurring in the first place. Members of staff go on regular patrols to check that manufacturing management is being adequately carried out.

We also record corrective and preventive measures in response to quality non-conformity, and monitor progress with measures as one of our priority criteria when we conduct internal audits. We continue to carry out quality improvement activities such as these on a daily basis, so that we can provide our customers with the standard of products they require.



Process patrol activities

Connecting with the stakeholders who use our products

As we always put the customer first, we strive to provide products and services that will keep our customers satisfied. Part of our slogan is "services that guarantee satisfaction." With that in mind, we work as a team to maintain and improve quality standards to the satisfaction of our customers, and are committed to developing new products in order to contribute to society. We carry out all of our activities on a customer-first basis.

Another part of our slogan is "reliable quality." That is

why each of our divisions takes responsibility for carrying out quality assurance activities, from research, development and production technology to sales and marketing. To get customers to appreciate our technical development capabilities and the features of our products, so that we can build long lasting, strong trusting relationships, we publish a technical research journal called FB Technical News. This is just one of the ways in which we actively and continuously provide information, along with exhibitions, product catalogs and our website.

Website

We are constantly updating our website, and make every effort to quickly and accurately provide people with the information that they need.

Information on our website includes our corporate profile, information for investors, employment opportunities and details of CSR activities. We will continue to provide stakeholders with information on our corporate activities in the future, in an effort to continually expand and improve our website.





Warning labels

Safety advice

Automobile and other types of batteries can be dangerous if not handled in the correct manner. To ensure that customers use our batteries safely, we put symbols on our products to indicate potential risks that could occur.

Labeling products to keep our customers safe

Warnings and classification

<u>∧</u> Danger	This indicates that there is an imminent risk of death or serious injury if this warning is ignored and the product used incorrectly.
<u>∧</u> Warning	This indicates that there is a risk of death or serious injury, and an increased likelihood of minor injury or physical damage to property, if this warning is ignored and the product used incorrectly.
 Caution	This indicates that, although there is little risk of serious injury, there is still a risk of minor injury or physical damage to property if this warning is ignored and the product used incorrectly.

Recycling labels

We use symbols on our products to encourage people to recycle batteries.



Do not mix with regular garbage

It is prohibited to dispose of this battery with your regular garbage.



explosion if handled incorrectly.

involved, to touch this battery

Important safety symbols and their meanings

or spark, as this could cause it to ignite or explode.

and ensure that it is used correctly and safely.

Do not place this battery near a naked flame, or allow it to short circuit

Wear protective glasses when handling this storage battery, to protect yourself in the event of an explosion or exposure to sulfuric acid. Do not allow children, or any other persons with an insufficient understanding of how to handle this storage battery and the risks

The electrolytic solution inside this storage battery is sulfuric acid. Exposure to the eyes or skin may result in loss of sight or burns. Read the instructions carefully before handling this storage battery

This storage battery produces hydrogen gas, which could cause an

Promoting recycling

The metal (lead) used in this battery will be recycled.

Product safety information

We publish safety information on the products we manufacture via our website, in the form of chemical safety data sheets (SDS).

We are continuously revising information in line with developments such as SDS in accordance with the Global Harmonized System of Classification and Labeling of Chemicals (GHS) and the enactment of the new JIS Z 7253.

We also compile and provide SDS for our battery products if requested by any of our customers.

Participating in exhibitions

From February 27 to March 1, 2013, we took part in International Rechargeable Battery Expo (Battery Japan) at Tokyo Big Sight. Based on the concept of "offering new products for new markets, whilst still maintaining the low cost, safety and reliability of lead-acid batteries," we showcased our research and development activities in the field of storage battery technology. We exhibited UltraBattery, the industry's first capacitor hybrid lead-acid storage battery designed for both industrial and automobile uses.



Technical seminar and promotional video shoot in Mongolia



Technical seminar

On December 19, 2012, our Automobile Technology Department organized a technical seminar on automobile batteries for members of staff at DAC, a company we are supporting in Mongolia, in the northern part of East Asia.

A total of 71 people took part in the seminar, in three separate groups. Each of the groups listened intently and asked lots of questions, underlining the tremendous significance of the seminar.

We also shot a promotional video in Mongolia ahead of the seminar, at the start of fiscal 2012. Having re-edited the video, it is currently being broadcast as a commercial on Mongolian television.

The video features a vehicle equipped with one of our automobile batteries, showing that its engine starts at low temperatures, when many other batteries perform poorly. It was actually filmed at -30°C using a real vehicle. We plan to re-edit the video again and use it as a promotional video to showcase our product capabilities and increase sales. The aim is to screen it in other cold regions outside Mongolia, including Russia and parts of Japan such as Hokkaido.



Comments from the shop floor Yuki Handa

(Large Battery Section, Industrial Machinery Department, Industrial Machinery Division)

My work involves primary and secondary assembly of industrial batteries, improving charging capabilities and general administration, but I focus mainly on

process improvement activities and reviewing standard operations, in order to improve productivity and quality. My top priority is to put quality first as part of manufacturing, so that we can provide our customers with the best quality products. I also try to improve processes and eliminate waste, in an effort to reduce defects and minimize environmental impact. With everyone on the shop floor so dedicated to manufacturing, I am constantly trying to come up with ways to make processes easier for them. Now that more and more attention is being focused on industrial batteries, I am determined to make products that offer the very best in quality.



Comments from colleagues in the workplace

Akitoshi Yabuki (FB Package Co., Ltd.)



Now in his 19th year with the company, Akitoshi Yabuki is a key player in the workplace.

His job is to take shipping details from the data terminal, pick the relevant products from their storage rack and check them according to their destination.

There is a tendency to lose momentum during the final process in the workplace, so he always works with a sense of vigilance.

He has the satisfaction of knowing that products manufactured at the lwaki Plant pass through his own hands before being shipped around the country and enjoys working closely with his colleagues. "I always do my best to set an example!" says Yabuki.

Column Siam Furukawa Co.,

Siam Furukawa Co., Ltd (Thailand)

Siam Furukawa QC team wins second place TCC-QCC Award for 2012 (Group 4)



A QC team^{*1} from Siam Furukawa (SFC) has won the second place TCC-QCC Award for 2012, in Group 4 of the QCC Awards. Organized annually by the TCC^{*2}, the awards are open to all suppliers working with the Toyota Group. The team in question, which came from Production 2 (assembly line) and is called "Sai Pan Mai," won the award for resolving issues with plate defects in COS equipment and ultimately achieving a 0% defect rate. A total of 97 companies took part. Of the 16 companies that entered in Group 4, the team managed to finish second. This goes to show how highly regarded Siam Furukawa is by the TCC.

*1 QC (quality control) teams consist of employees from the same workplace, who work together to improve quality standards.

*2 The TCC (Toyota Cooperation Club) is a cooperative organization representing the Toyota Group in Thailand. It is the equivalent of the cooperative organizations Kyohohai and Eihokai in Japan.

Community Involvement and Development

Actively participating and assisting with local community activities

Relationship with the local community

Certificate of appreciation for lifesaving activities from the Mayor of Nikko



Nakayama (right) receiving his certificate of appreciation

Kazuo Nakayama, a member of staff at our Imaichi Plant, has received a certificate of appreciation from Nikko City and the Imaichi Fire Department for saving the life of a local citizen.

On October 13, 2012, Nakayama's quick thinking and decision to administer cardiac resuscitation saved the life of a member of the local community.

A presentation ceremony took place in the reception room at the Imaichi Plant on November 29, and was attended in person by Nikko Mayor Fumio Saito and Imaichi Fire Chief Masamichi Kaneko.

Registration of new AED stations with Nikko City

In addition to previously registered facilities, we have now registered our Imaichi Plant and FB Plant with Nikko City as official AED stations.

The aim is to enable onsite AED (automated external defibrillators) to be used to help local residents in an emergency.

Around 40 employees have undergone training in lifesaving techniques, including how to use AED.



Employees undergoing training in lifesaving techniques

Donating blood

Every spring, the Japanese Red Cross Tochigi Blood Center sends a blood donation bus to our Imaichi Plant so that employees can give blood. We always get around 40 members of staff to donate blood, mainly young employees who are in good shape.



Taking part in Iwaki Sunshine Marathon

The 4th Iwaki Sunshine Marathon took place on February 10, 2013 in Iwaki City. 28 of our employees took part in total, with one entering the 5km category, 17 going in the 10km category and 10 running the full marathon.

Cheered on by spectators lining the route, all of our employees successfully finished the race.

We will continue to work with local people and actively take part in local events in the future, in an effort to breathe new life into the community and improve communication within the company too.



Collecting Ecocaps

We started collecting "Ecocaps" in February 2009. We ask all of our employees to save the caps from PET bottles and deposit them in dedicated boxes positioned next to vending machines in the workplace. Every year, employees have continued to bring in more and more bottle caps from home. We drop off the collected caps at a volunteer center in Hodogaya ward of Yokohama three or four times a year.

The volunteer center passes on the Ecocaps we have collected to the NPO Ecocap Movement. The caps are then used to produce polio vaccines, which are donated to children in Africa.

We will continue to collect Ecocaps on a companywide scale in the future.



Ecocaps collected by our employees

Traffic safety course organized by JAF Aichi Regional HQ (Furukawa Battery Marketing Chubu Co., Ltd.)



Traffic safety course

On March 25, 2013, Shinji Okada from the Aichi Regional HQ of the Japan Automobile Federation (JAF) came in to run a traffic safety training course. Fourteen members of staff took the course, consisting mainly of sales representatives who depend on driving on a daily basis. The course itself focused on avoiding dangers through spoken driving, meaning that the driver vocalizes every aspect of what they are doing. This has the same effect as the "point and call" system in the workplace or on the shop floor. Based on the idea that vocalizing ("check turn signal", "check oncoming traffic", "ready to overtake", etc.) encourages safer driving, all those present listened intently to the course and were able to improve their awareness with regard to safe driving. Next time, we are planning an outdoor practical course.

Sending a positive message from Tochigi to the rest of Japan! Co-sponsoring Eco-Mori Fair 2012

Every year at our Imaichi Plant, we co-sponsor Eco-Mori Fair, an event organized by Tochigi Prefecture with the aim of raising awareness regarding environmental preservation and forestation.



Column Siam Furukawa Co., Ltd (Thailand)

Carrying out renovations at a local elementary school



Sunmaka Boknoisamakkee Elementary School is a public school with 65 students and seven teachers, located in the Bualoy Sub-District, near Siam Furukawa (SFC). Due to insufficient government funding, the school buildings are old and the learning environment is far from ideal for the school's students.

Working with teachers and students, employees from SFC carried out renovations on the school buildings on Sundays and have re-painted the school in green, which also happens to be SFC's corporate color. This has brightened up the school buildings and created a more pleasant environment. SFC intends to keep on providing support for learning environments at local schools in the future.

The challenge of promoting and commercializing electric vehicles

The first solar car race in Japan took place in the Noto region of Ishikawa prefecture in 1992, thanks to strong support from the Federations of Electric Power Companies of Japan (FEPC) and the Agency for Natural Resources and Energy. The contrasting themes of increasing energy consumption and environmental preservation attracted a great deal of interest, prompting



The top teams from the first event in Ogata (1995) and the race in Sugo

growing demand for development and the commercialization of vehicles powered bv electricity and other clean energy sources. Even so, the Great East Japan Earthquake in March 2011 once again demonstrated the sheer power of nature and underlined just how great a responsibility we have in terms of scientifically creating electrical energy, and making effective use of the precious electricity we produce.

Eighteen years on from the world's first energy saving race for electric vehicles, which lasted two hours, the top team taking part in a race in the Akita prefecture village of Ogata beat the record by 50%, with a distance of 63.798km (approx.100wh). At the Sugo Circuit in Miyagi prefecture meanwhile, which is similar to normal road conditions, the record was broken by 60%, with a distance of 42.6km (approx. 250wh). Records achieved with the same electrical energy over the same distance paved the way for the development of energy saving machinery (electric vehicles). As distances have increased however, so too have the speeds involved, meaning that safety measures have become more and more essential.

It is generally accepted that saving energy is crucial if we want to strike a balance between preventing global warming and maintaining economic growth. More and more people in nearby Asian countries meanwhile are complaining that they can't continue to commute to work by bicycle while breathing the polluted air forever. As a result, there is increasing momentum behind the development of energy saving electric vehicles, and the publication of new ideas and technologies. A prime example is EconoMove, an energy saving race for electric vehicles, whereby entrants and officials from all over the world come together to take on new challenges in an effort to promote and popularize fully functioning electric vehicles. We will continue to provide support in various different ways in the future.

We have high hopes for the future, as a pioneer in promoting and commercializing electric vehicles.



Reporting on the world's first race

Co-sponsoring J-League soccer team JEF United

We co-sponsor JEF United Ichihara Chiba, a soccer team that plays in the J-League, and also provide support for a wide range of other sporting events.



JEF United's mascots (from left) Jeffy, Mina and Unity

Co-sponsoring the 2012 World Triathlon Series in Yokohama



©Delly Carr/ITU Media

In an effort to help promote sport in Yokohama, where our Head Office is located, we co-sponsored the Yokohama leg of the 2012 World Triathlon Series on September 29-30, 2012.

The venue featured a number of EXPO exhibits and disaster relief booths, to assist with the recovery process following the Great East Japan Earthquake. A number of our employees took part in the event and helped out with sales, in an effort to support the area affected by the earthquake.

We will continue to co-sponsor World Triathlon Series events in Yokohama in the future.



Employees helping out with sales at one of the booths

Representative in Singapore

Fumio Kitamura (Global Sales & Marketing Department)



I was appointed as a representative in Singapore at the start of fiscal 2012.

Selling industrial batteries and related products keeps me busy on a daily basis, but I also go on business trips to neighboring countries every month, to promote sales in other countries as well as Singapore.

Birthday charity activities



Looking down on the streets of Singapore from our office

Column Siam Furukawa Co., Ltd (Thailand)



(Human Resource & General Affairs Dept. Assistant Manager)

As part of birthday charity activities overseen by the Human Resource & General Affairs Department, Siam Furukawa (SFC) employees with a birthday in August took part in a lunch event with students from a special school in Lopburi province.

We hope to provide even more opportunities for exchange with the local community in the future.



Group photo after the lunch event

Five-Year Consolidated Financial Highlights

The Furukawa Battery Co., Ltd. and its consolidated subsidiaries

-iscal years ended March 31 Uni								
	FY2012	FY2011	FY2010	FY2009	FY2008			
Sales	44,380	42,064	43,204	40,206	46,900			
Operating income	2,731	2,494	3,385	3,437	3,810			
Ordinary income	2,870	2,604	3,364	3,378	3,542			
Current net income	1,847	1,365	1,843	2,054	2,296			
Capital investment	1,896	1,789	1,429	1,368	1,171			
Depreciation expense	1,705	1,661	1,661	1,640	1,555			
Research and Development expense	1,518	1,547	1,120	978	970			
Cash flow for business operations	3,606	628	4,652	3,350	4,817			
Cash flow for investment activities	-1,974	-1,699	-1,717	-1,543	-1,057			
Cash flow for financing activities	-1,131	-674	-2,583	-2,017	-2,669			
Balance at the end of current fiscal year								
Total assets	35,057	34,093	34,972	35,077	31,687			
Interest-bearing debt	5,992	6,815	7,212	9,511	10,647			
Equity capital	12,360	10,170	9,195	7,508	5,397			
Equity capital ratio	35.3%	29.8%	26.3%	21.4%	17.0%			

Sales



Current Net Income



Operating Income / Ratio to Sales (%)



Total Assets





Return on Total Assets (ROA)

Interest-Bearing Debt



Business summary

In the battery industry, the "smart city," market is emerging in Japan as well because of greater public awareness of this concept triggered by the energy problem following the Great East Japan Earthquake.

In addition, due to growing awareness of global energy and environmental issues, there are an increasing number of applications for batteries in environmental automobiles. One example is storage batteries for idle-stop vehicles.

The Furukawa Battery Group is strengthening its activities in the storage battery business. Developing automobile batteries like a capacitor hybrid lead-acid storage battery (UltraBattery[™]) for environmental vehicles is one measure. Other examples are activities involving environmental businesses like the smart grid and the development of very safe lithium-ion batteries for industrial use. In addition, we will contribute to earthquake recovery activities by using our designation as a company eligible to receive a subsidy for the restoration of industrial activity in Fukushima prefecture.

Consolidated sales increased 2,315 million yen, or

5.5%, to 44,380 million yen. There were strong sales of railway and other industrial-use batteries, orders at the subsidiary in Thailand for batteries for new cars increased following the flooding of 2011, and sales of replacement automobile batteries were higher.

There were increases in promotion expenses as sales increased and depreciation expenses were higher because of an increase in capital expenditures. This was offset by a decrease in supplies expenses and other items. As a result, operating income increased from 2,494 million yen to 2,731 million yen and ordinary income increased from 2,604 million yen to 2,870 million yen.

There was extraordinary income of 112 million yen for state subsidies, including a Ministry of Economy, Trade and Industry subsidy for industries that create low-carbon employment. Extraordinary losses included a loss of 12 million yen on investment securities valuation and a loss of 12 million yen on disposal of noncurrent assets. After the deduction of taxes, net income was 1,847 million yen compared with 1,365 million yen one year earlier.

Results in each segment

The headquarters of business operations are at the Furukawa Battery head office and there are separate organizational units to oversee operations for specific products and services. Each unit establishes comprehensive strategies for Japan and other countries for its products and services and performs operations based on these strategies.

Consequently, business segments are based on products and services in accordance with these administrative units. Operations are divided into three reportable segments: automobile, industrial and real estate.

Automobile segment

...Manufacture and sale of storage batteries for automobiles and motorcycles.

Sales increased 1,408 million yen, or 5.2%, to 28,391 million yen. In Japan, there was a decline starting in the second quarter of sales primarily for batteries for new cars following the end of the eco-car subsidy. But at the subsidiary in Thailand, there were higher sales of batteries for new cars and replacement batteries.

Industrial segment

...Manufacture and sale of storage batteries for the operation of equipment, UPS (uninterruptible power system) and other products.

Sales increased 1,036 million yen, or 6.8%, to 16,224 million yen. Growth was attributable mainly to higher sales of aircraft batteries and strong sales of alkaline batteries in China.

Real estate segment

...Leases space in buildings to tenants.

Sales decreased 62 million yen, or 13.9%, to 387 million yen. A decline in leasing income was the main cause of these decreases.



Rental property

* The "others" category includes insurance and other activities that are not included in the reportable segments. (765 million yen)



Overseas Sales / Ratio of Overseas Sales

					Unit: Million yen			
	FY2012	FY2011	FY2010	FY2009	FY2008			
Sales	44,380	42,064	43,204	40,206	46,900			
Sales by region								
Japan	32,739	33,481	33,824	32,565	38,222			
Asia	10,414	6,883	7,591	5,824	6,098			
Others	1,226	1,699	1,788	1,817	2,580			
Ratio of overseas sales	26.2%	20.4%	21.7%	19.0%	18.5%			

Overseas sales were 11,641 million yen. Our overseas sales are generated by lead-acid batteries for automobiles and motorcycles which are sold in non-Japanese regions. The batteries are produced by our overseas subsidiary, Siam Furukawa and us, Furukawa Battery.



Ratio of Overseas Sales





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