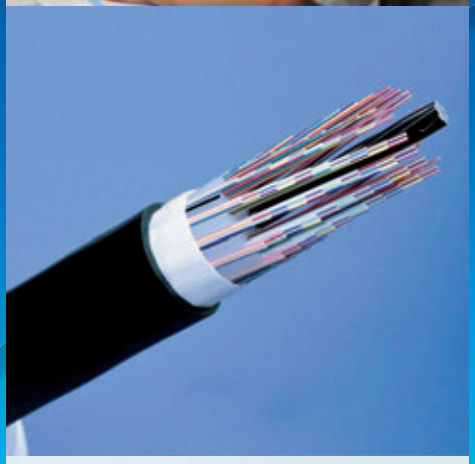
Feature

Initiatives for Preventing Global Warming

Clearly recognizing the need for a low-carbon society and acknowledging the importance of responding to this need through a group-wide effort, the Furukawa Electric Group is taking action to prevent global warming throughout the entire lifecycle of its products, including production and logistics, toward the creation of a genuinely successful and sustainable society. In fiscal 2009, we will include initiatives for preventing global warming in our medium- and long-term plans and reinforce additional efforts in the four areas of production, products and services, logistics and non-production activities.



Furukawa Electric Group in a united effort to prevent global warming

Policies

- Reducing greenhouse gases
- Promoting energy savings
- Switching fuels and using clean energy sources
- Reducing transportation energy consumption

Initiatives

Product Development

- Development of environmentally-friendly products
- Hydroelectric power
- Recycling system of Furukawa Electric Ecotec

Production

- Converting to energy saving facilities
- Switching fuels

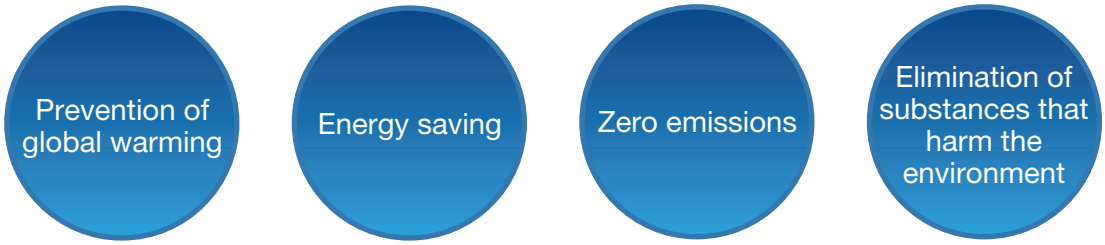
Logistics

- Implementing modal shift
- Improving loading rates

We are Aggressively Developing Products that Reduce Greenhouse Gases

The Furukawa Electric Group is pursuing the development and popularization of environmentally-friendly products in four areas: prevention of global warming; zero emissions; elimination of substances that harm the environment, and energy saving. We renewed our environmental mark in fiscal 2008 to deploy the “e-Friendly” mark throughout the Group.

Four Areas for Developing and Popularizing Environmentally-Friendly Products



Major environmentally-friendly products related to these four areas

- MCPET
- Lead batteries for automobiles
- Green trough
- Environmentally-friendly wires and cables
- Easy-to-dissemble optical fiber cables

Environmentally-Friendly Products

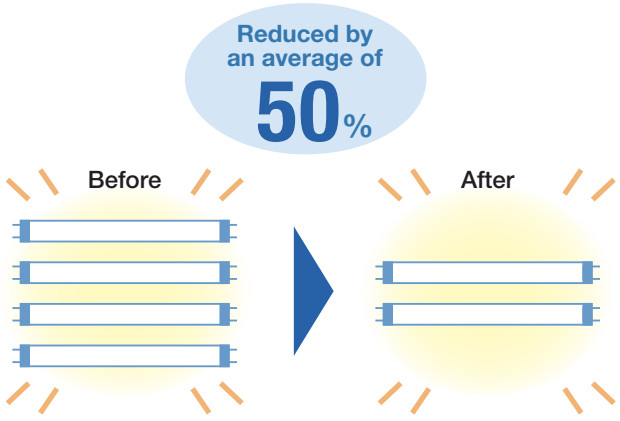
World’s top-class light reflexivity for saving energy

MCPET® (Microcellular reflective sheet)

Delivering the world’s top-class light reflexivity with microcellular foaming technology

MCPET is a microcellular foamed sheet of PET resin with air bubbles smaller than 10 μm. Due to this structure, MCPET boasts the world’s top light reflexive performance. It has a relative reflexivity of 99% and is used as backlight for LCD and reflective sheets for such uses as convenience store signs. Applications have recently expanded to include lighting equipment such as LED downlights.

Reduction in fluorescent lamps by corporate customers that have adopted MCPET (Our research)



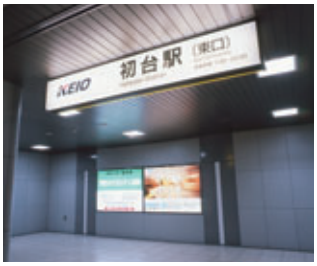
A Word from Sales

We hope to make MCPET an even more satisfying product for our customers by standardizing its energy saving method so that the benefits of economizing on energy are easily understood by customers and by seeking to balance flame resistance and processability. We are also planning to ship MCPET as an end-product in addition to supplying it as a material.

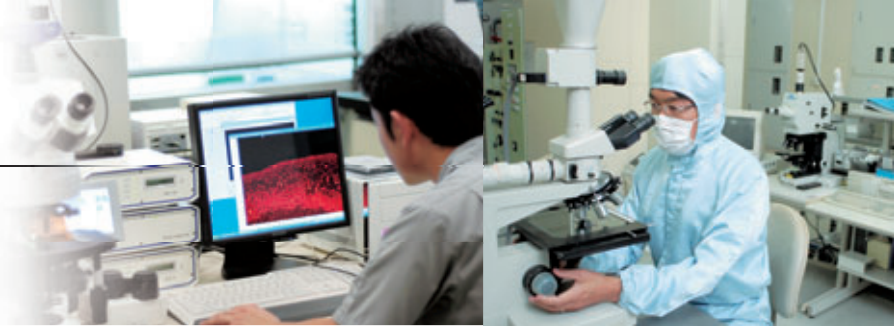
Koji Katsura
Foamed Products Division
Industrial Product Division
Energy and Industrial Products Company

Applications

Illuminated signboard type 1



Illuminated signboard type 2



Environmentally-Friendly Products

Improving automobile mileage with high-performance batteries

Commercial lead batteries for automobiles (The Furukawa Battery Co., Ltd.)

Eco battery reduces CO_2 emissions and saves energy

Many of the latest fuel-efficient cars carry charge control systems for lowering fuel consumption. This is enabled by computerized control of the alternator to reduce burden on the engine when the car battery is charged to a certain level. While this system effectively lowers fuel consumption, the repeated charging and discharging of the battery requires high charge acceptance for efficient charging over short periods of time. Through improvements such as optimizing the design of negative and positive plates as well as the ratio of active materials, we were able to improve charge acceptance by 15% over conventional products. We are also pursuing green procurement with consideration to the environment by developing a car battery recycling system that uses recycled material for the package, lead and battery case, making the FB (FURUKAWA BATTERY) an environmentally-friendly battery from several perspectives.

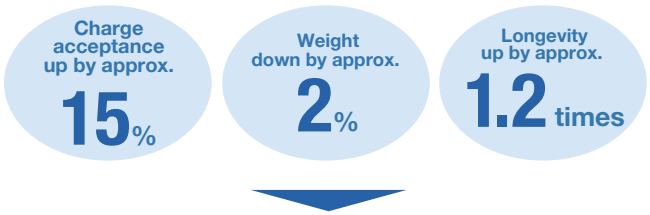
Our flagship model that reduces fluid loss to guarantee non-rehydration through our newly developed double-lid structure.

A Word from one of our Engineers

Reducing battery weight significantly contributes to boosting automobile mileage, and in turn reduces CO_2 emissions by approximately 3%. We will seek to further reduce battery weight while enhancing performance factors, such as charge acceptance.

Takashi Mizuno
Technical Service Section
Technical Department
The Furukawa Battery Co., Ltd.

Comparison with conventional products



Increases automobile mileage and energy savings

Data from The Furukawa Battery;
compared with its own conventional products

T O P I C S

Our Exhibit at Eco-Products 2008

The Furukawa Electric Group exhibited at Eco-Products 2008, held from December 11 to 13, 2008, at Tokyo Big Sight.

At our booth, we introduced our initiatives for promoting environmentally-friendly products and the new “e-Friendly” mark. We also showcased our own related products as well as a series of products manufactured with a recycling technology for used wires and cables.

We also showcased the Furukawa Electric Group’s environmental initiatives and highlighted the fact that over 90% of the energy used by the Group is generated by hydroelectric power from Furukawa Nikko Power Generation Inc., accounting for a 112,000-ton reduction in annual CO_2 emissions.

Furukawa Electric booth

In addition, we drew attention to our participation in the Lake Toya Summit in Hokkaido, where we exhibited our superconducting cable, expected to achieve energy savings of 3,120 GWh and reduce CO_2 emissions by 1,060,000 tons per year after it replaces the existing 4,000-kilometer cable network. We were able to share the Furukawa Electric Group’s environmental initiatives with many visitors.

Overview of Eco-Products 2008

Dates: December 11 to 13, 2008 Venue: Tokyo Big Sight

This was the tenth Eco-Products exhibition, one of Japan’s largest environmental trade shows. Reflecting strong interest in the environment over recent years, many companies took part in the event, which was deemed a great success and drew 173,917 visitors over the three-day period including businesspersons, students and the general public.

We are Working to Utilize Renewable Energy in Addition to Improving Our Production Facilities and Manufacturing Processes

Furukawa Electric has pursued activities for reducing CO_2 emissions under our 2009 Mid-Term Plan for Environmental Preservation Activities. To further strengthen these efforts in fiscal 2008, we set up a CO_2 Emissions Reduction Committee chaired by the Chief Social Responsibility Officer and comprising Company Presidents and heads of the works along with other members to further reduce CO_2 emissions.

The Furukawa Electric Group is also focusing on utilizing renewable energy sources.

Priorities for Preventing Global Warming Associated with Production Operations for Fiscal 2008

- Efficient use of energy
- Renewable energy sources
- Creation of groundbreaking plan for reducing CO_2 emissions
- Switching fuel

Major Initiatives in Fiscal 2008

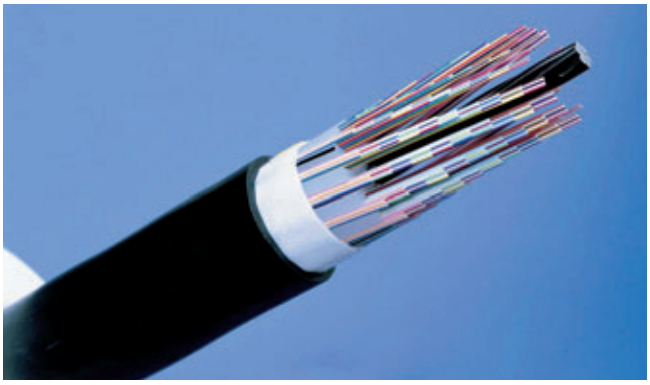
Fuel conversion at the Chiba Works

The use of electricity at Chiba Works accounts for 70% of the location's CO_2 emissions, whereas the consumption of fossil fuels such as gas and oil account for 30%. While electricity is procured through an electric power company and thus CO_2 emissions cannot be directly reduced, fossil fuel consumption can be reduced by converting to fuels that release less CO_2 during combustion. We have been systematically working on fuel conversion since 2008. Specifically, we are laying a main 2,000-meter pipeline inside the Works to convert from LPG, heavy fuel oil A and kerosene to city gas. We completed the conversion to city gas for the LPG-based copper melting furnace in 2008 and plan to change fuel sources for boilers currently burning heavy fuel oil A in 2009 and to replace the use of kerosene over the coming years. We reduced CO_2 emissions by approximately 2% in 2008 through an upgrade to energy-saving combustion burners and boilers and intend to achieve our goal of reduction by another 2% in 2009.

Laying a 2,000-meter city gas pipeline for switching fuel

Concentration of the cable manufacturing process

Domestic demand for optical fiber cables is expected to remain stagnant for some time, and we have been looking into a number of activities for increasing profit at a lower level of operations. After recognizing that improving the production processes within each work would not lead to significant results, we decided to pursue full-scale improvement in capacity utilization by integrating and reorganizing production across several sites. At the same time, we factored in environmental considerations such as reduced CO_2 emissions and achieved considerable decreases in utility costs, such as for air conditioning and lighting, which had been generated as a fixed cost from each site. As a result, we reduced electricity use by 5,231 MWh per year and LPG by 151 tons per year, roughly equivalent to 2,179 t-CO_2 per year in CO_2 emissions. While these efforts have achieved some success in reducing CO_2 emissions, a priority issue for the global environment, we intend to continue making further reductions.



Tape slot-type optical fiber cable

Constructing an Efficient Logistics System

In our logistics activities, we set up a Transport Energy Reduction Committee in 2007, chaired by the Chief Social Responsibility Officer. Responsible employees at affiliate Furukawa Logistics Corporation and each work have led the effort to promote a modal shift and enhance loading rates (transport energy reduction activities). In the latter half of fiscal 2008, Nikko Works began round-trip transport between Utsunomiya and Osaka using 31-foot containers in cooperation with Sumitomo Electric Industries, Ltd., thereby reducing CO_2 emissions.

Priorities for Preventing Global Warming Related to Logistics for Fiscal 2008

Major Initiatives in Fiscal 2008

Eco-driving seminars in eastern and western Japan

Training sessions on energy saving driving, or eco-driving seminars, were held for drivers of partner transportation companies at the Shiga Branch, Oyama Branch and Oyama Center of Furukawa Logistics. We intend to continue our support for energy saving driving, which is friendly to the environment and also encourages safe driving. (Cooperation: Hino Motors, Ltd.)

Practical skills training for eco-driving

Promotion of modal shift

In our effort to promote a modal shift for cargo shipped from the Nikko area to customers in the Shikoku area, we are striving to reduce CO_2 emission as much as possible on a daily basis by choosing transportation by truck and by 5-ton JR freight containers depending on the monthly volume of cargo.

Loading cargo into a container

Logistics Environmental Conservation Award

Our Nikko-Osaka 31-foot Container Round-trip Transportation project, launched in cooperation with Sumitomo Electric Industries, Ltd. in October 2008, was a joint recipient of the Logistics Environmental Conservation Award from the Japan Federation of Freight Industries along with the Modal Shift Solution Team (members: Japan Electric Wire & Cable Makers' Association, Japan Freight Railway Company, Gotsu Co., Ltd., Tobu Transportation Co., Ltd., Sumitomo Electric Industries, Ltd., SEI Loginet Co., Ltd., Furukawa Electric, Furukawa Logistics). This award was one of several presented at the 10th Logistics Environment Award. In this project, truck transportation operated separately by the two companies was replaced by round-trip rail transport and the shared use of two freight containers. Furukawa Electric transports its cargo from Utsunomiya to Osaka, and Sumitomo Electric uses the same container for the return trip. This was the first case in the industry of a joint modal shift undertaken between companies in the same industry, and the two companies won recognition for the project's impact, reducing annual CO_2 emissions by approximately 242 tons.

Round-trip transportation between Nikko and Osaka using 31-foot containers