

# Group Overview and Business Report

## Company Profile

<b>Company Name</b>	Furukawa Electric Co., Ltd.
<b>President</b>	Mitsuyoshi Shibata
<b>Founded</b>	1884
<b>Established</b>	1896
<b>Paid-in Capital (As of March 31, 2014)</b>	¥69,395 million
<b>Net sales (Years ended March 31, 2014)</b>	¥931,781 million (Consolidated) ¥428,301 million (Non-Consolidated)
<b>Number of Employees (As of March 31, 2014)</b>	47,045 (Consolidated) 3,590 (Non-Consolidated)
<b>Head Office</b>	Marunouchi Nakadori Bldg., 2-3, Marunouchi 2-chome, Chiyodaku, Tokyo 100-8322, Japan
<b>TEL</b>	+81-3-3286-3001

## Major Products and Services

### Telecommunications

Optical fiber cables / Metal communication cables / Semiconductor optical devices / Electronic appliance wires / Optical components / Network equipment / Optical fiber cable accessories and installations / CATV system / Radio products, etc.

### Energy and Industrial Products

Copper wires and Aluminum wires / Power transmission cable / Insulated wires / Power transmission cable accessories and installations / Cable conduits / Water-feeding pipe materials / Foam products / UV tapes for semiconductor manufacturing / Electrical Insulation Tape / Electric material products, etc.

### Electronics and Automotive Systems

Automotive components and wiring harness / Magnet wires / Electronic component materials / Heatsinks / Hard disc drive (HDD) aluminum substrates / Battery products, etc.

### Metals

Copper and copper alloy products (plates, strips, pipes, rods, foils, and wires) / Functional surface products (plating) / Electrodeposited copper foil / Processed products for electronic parts / Superconducting products / Special metal materials (Shape-memory and super-elastic alloys), etc.

### Light Metals

Aluminum plates / Extruded aluminum products / Casting products / Forged products / Processed light metal products, etc.

## Services and Others

Logistics / Information processing service / Software development / Service business (real-estate leasing, hydraulic power generation and so on), etc.

### Global Network



# R&D Laboratories, developer and producer



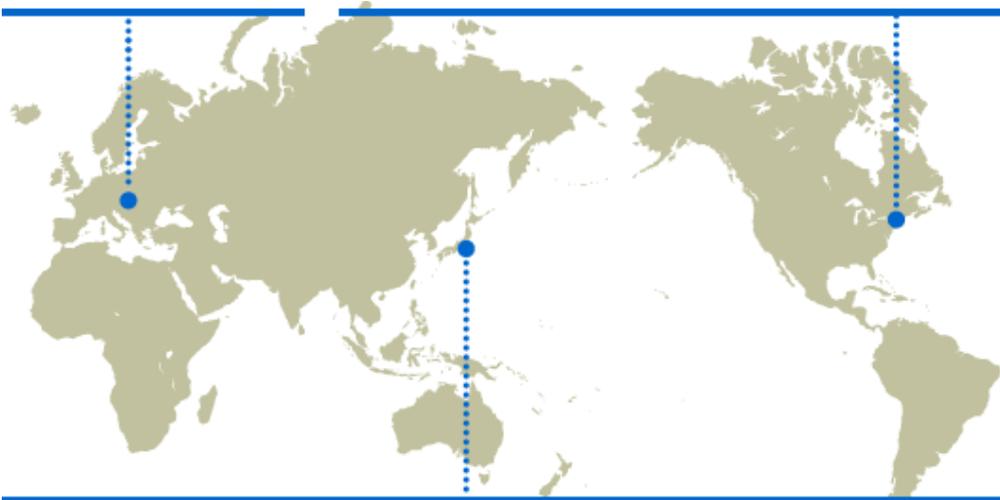
FETI: Furukawa Electric Institute of Technology (Hungary)  
<http://www.furukawa.co.jp/kenkai/eng/profile/feti.htm>  
 - Simulation development  
 - Algorithm development  
 - Process optimization



OFS Labs. (USA)  
<http://www.furukawa.co.jp/kenkai/eng/profile/ofs.htm>  
 - Fibers  
 - Components



SuperPower (USA)  
<http://www.furukawa.co.jp/kenkai/eng/profile/superpower.htm>  
 - 2G HTS wir



Metal Research Laboratories (Nikko)



Power & System Laboratories (Chiba)



Polymer Materials R&D Laboratories (Hiratsuka)



Yokohama R&D Laboratories (Yokohama)

FITEL Photonics Laboratories (Chiba)

Power & System Laboratories (Hiratsuka)

Automotive System & Device Laboratories (Hiratsuka)

## Business Field

Contributing to society with a wide array of businesses leveraging a variety of cutting-edge technologies



### Telecommunication

**Optical communication is an advanced technology that meets the needs of the communication age, Furukawa Electric provides diversified support for information-oriented society.**

We are living in an age of global communication. Currently, the Internet Links the entire world, allowing information from overseas to be obtained in real time, not only in offices but also at home. In this advanced information-oriented society, optical communication systems are a key technology for enabling people to access important information easily. Furukawa Electric is firmly supporting an ideal base for communication by providing various technologies and products that realize the "FTTH" project, in which optical fiber networks are provided to homes.

Telecommunication Products  
<http://www.furukawa.co.jp/english/seihin/it.htm>

### Electronics

**Ever-evolving Semiconductors and their Peripheral Technologies Amplify New Possibilities for the Electronics Industry.**

Semiconductors are the basis on which electronic products are continually decreasing in size, and increasing in functional capability at a rapid pace. In LSIs, several hundred thousand to tens of millions of electronic components are incorporated on a chip in an area of several square mm, to process large amounts of information. In the field of semiconductors, Furukawa Electric has developed many products ranging from compound semiconductors to complete devices. It has also provided various other products that are densely mounted in the periphery of semiconductors; reflow ovens for mounting these products; and heat pipes essential for cooling microprocessors. Each of these products is backed by reliable, established technologies.

[Electronics Products](#)<http://www.furukawa.co.jp/english/seihin/electronics.htm>

## Automobile

### **Themes Are Safety, Comfort, and Harmony with Environments. Furukawa Is Challenging Transportation Possibilities Using Total Technologies.**

In the field of transportation including automobiles, trains, ships, airplanes, and H II rockets, Furukawa Electric combines its proprietary material, electronics, and mechatronics technologies to develop various products forming comfortable transportation environments. In particular, in the field of automobiles, we offer various electronic components and aluminum body materials including wire harnesses. Furthermore, we are challenging advanced technologies such as ITS systems and has established a firm status as an indispensable supplier for the automobile industry.

[Automobile Products](#)<http://www.furukawa.co.jp/english/seihin/car.htm>

## Energy

### **Using Total Technologies to Construct Advanced Power Networks While Meeting the Needs for Energy Saving and Environmental Preservation**

Few things are as essential for our daily lives and industries as electric power. Furukawa Electric has been meeting the increasing electric power demand through "power transmission systems" and "power distribution cables". We are also actively responding to the demands of the times for resource saving and environmental preservation. Furukawa is contributing to society by providing various leading-edge technologies such as superconductors and solar generation systems, which are the focus of wide spread attention as energy sources for the next generation.

[Energy Products](#)<http://www.furukawa.co.jp/english/seihin/energy.htm>

## Construction

### **Unifying Advanced Material and Processing Technologies Together While Creating Amenity Environments for Cities, Buildings, and Housings**

What is a comfortable space? Whether it is required in a city or a building, constructing such a space requires correct perspective and advanced technologies for achieving ideals. While applying the accumulated technologies, Furukawa Electric has been developing various products supporting comfortable lives. Our objective for pursuing harmony between the functions of peoples' lives and environments is found in each of our products ranging from construction materials through wire materials and fire prevention products to housing facilities.

[Construction Products](#)<http://www.furukawa.co.jp/english/seihin/construction.htm>

## Material

### **Constant Challenges to Material Renovation and Development of New Materials Are Facilitating Unlimited Extension of Applications in Every Industry.**

Over 120 years since its establishment, Furukawa Electric has been constantly offering advanced materials ranging from copper and aluminum materials to wires and cables, as well as various related materials. Constant challenges to material innovation are facilitating creation of materials with new potentiality and unlimited extension of applications from familiar products to the high technology field. These materials dramatically change our lives and the foundation of the industries.

Material Products

<http://www.furukawa.co.jp/english/seihin/material.htm>

# Key Indicators

(Years ended March 31)

## Net Sales

(Billions of yen)



## Operating income (loss)

(Billions of yen)



## Operating income (loss) (Ratio to net sales)

(%)



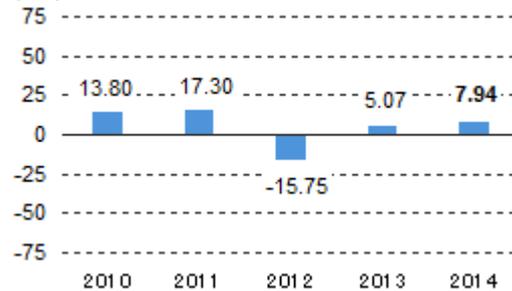
## Net income (loss)

(Billions of yen)



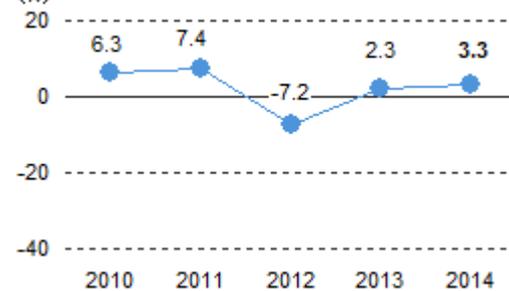
## Net income per common share

(Yen)



## Return on equity

(%)



## Cash flows

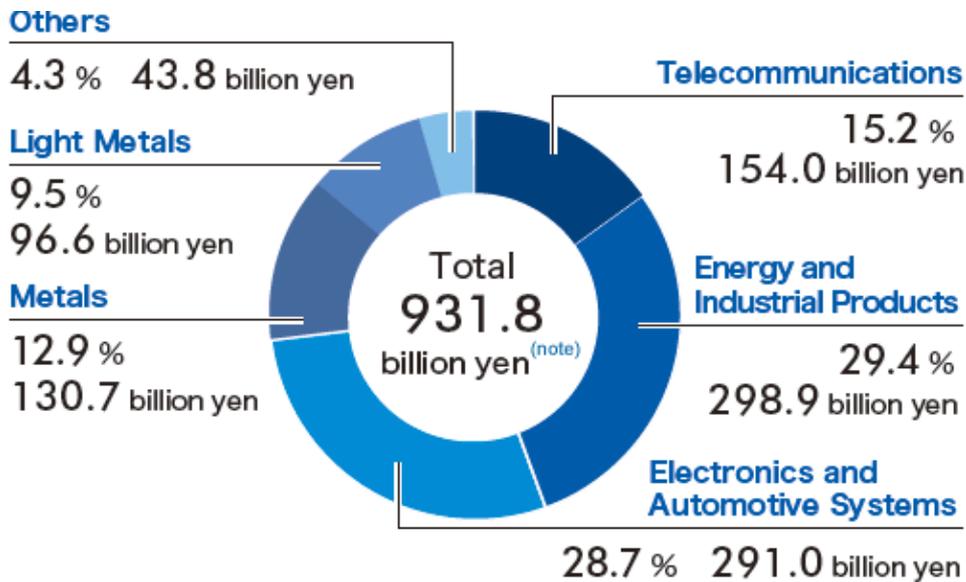
(Billions of yen)



(note) Shareholders' equity excludes minority interest and gain and loss on deferred hedge.

## AT A GLANCE

### Net sales by Main Business Segment (Consolidated, fiscal year 2014)



## Telecommunications

### Optical Fiber and Cable

**Japan:** We have achieved effects from structural reforms by merging production bases.

**Europe and United States:** Cuts to fixed costs during the second half of FY2014 made a full contribution and the market is continues to move towards recovery.

**Brazil:** LAN solutions and fiber optic business expanded.

### Optical Parts and Networking Equipment

**Japan, China and United States:** Demand for new products (ITLA/ integrated signal light sources) to supply next-generation high-speed telecommunications (digital coherent telecommunications) expanded.

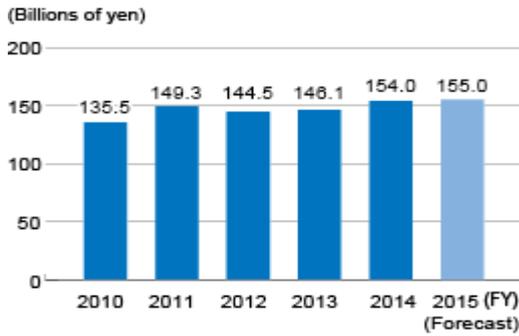


Factory of FISA (Brazil)

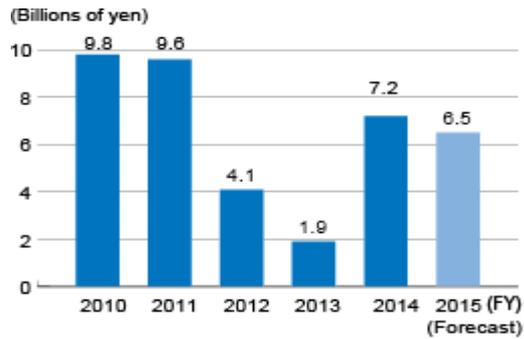


Conventionally sized ITLA (top) and micro ITLA (bottom)

### Net Sales



### Operating Income



## Energy and Industrial Products

### Ultrahigh-Voltage Transmission Cables

**Japan:** Submarine power cables for offshore wind power generation were developed.

**China:** A Chinese subsidiary improved its cost structure and promoted sales expansion in overseas markets.

### Industrial Products

**Europe:** Improvements were achieved through the sale of unprofitable Russian bases, etc.

**Japan:** Strong demand is expected to continue for cableprotecting conduit line materials in mega-solar applications.

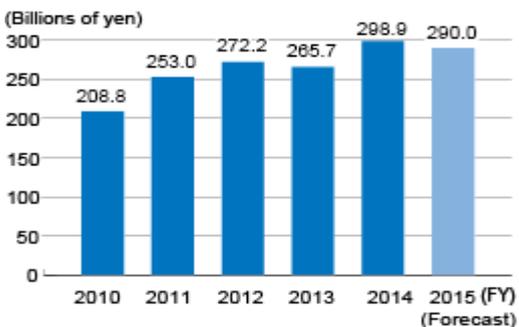


Shenyang Furukawa Cable Co., Ltd.  
(China)

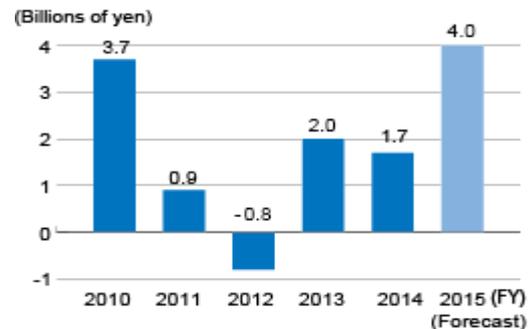


Laying a submarine transmission cable

### Net Sales



### Operating Income



## Electronics and Automotive Systems

### Automotive Parts

**Japan:** Despite an expected fall in demand caused by the increase in consumption tax and other factors, strong sales of wire harness for new models are expected to cover the impact of reduced production in Japan.

**Overseas:** We have begun to achieve the potential of new wire harness bases in Asia and Mexico and promoted an expansion in SRC sales in South America.

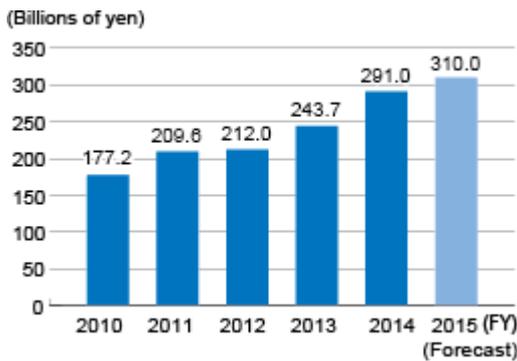


Wire Harness factory (China)

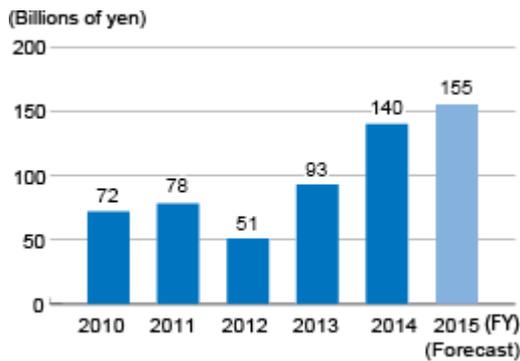


SRC (Steering Roll Connector)

### Net Sales



### Operating Income



## Metals

### Copper foil

**Japan:** Conditions are expected to improve after realizing the effects of production base centralization and completing the transfer of manufacturing to Taiwan.

**Taiwan:** Battery foil business is expected to grow, particularly in automotive applications, and circuit foil volumes are expected to recover.

### Copper strips

**Japan:** A fall in operating income of 3.6 billion yen is forecast as a result of the impact of snow damage in February at Nikko Works. We plan to achieve complete restoration by the end of the year.



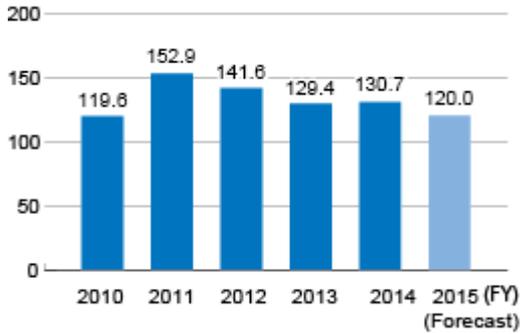
Electrodeposited copper foil



Furukawa Electric Copper Foil Taiwan Co., Ltd.

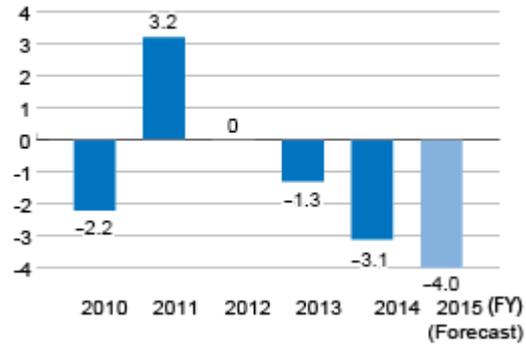
### Net Sales

(Billions of yen)



### Operating Income

(Billions of yen)



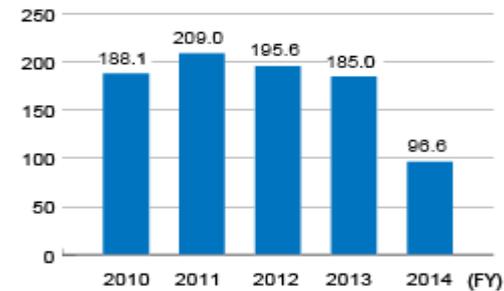
## Light Metals

### Rolled Aluminum Products

Only the first-half operating income was recorded in FY2014 because of the inauguration of UACJ in October 2013. In the second half of FY2014, operating income was recorded as “equity in net income of affiliates” under non-operating income.

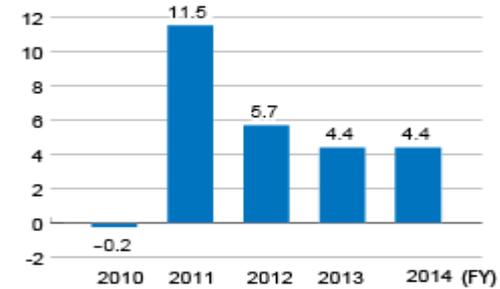
### Net Sales

(Billions of yen)



### Operating Income

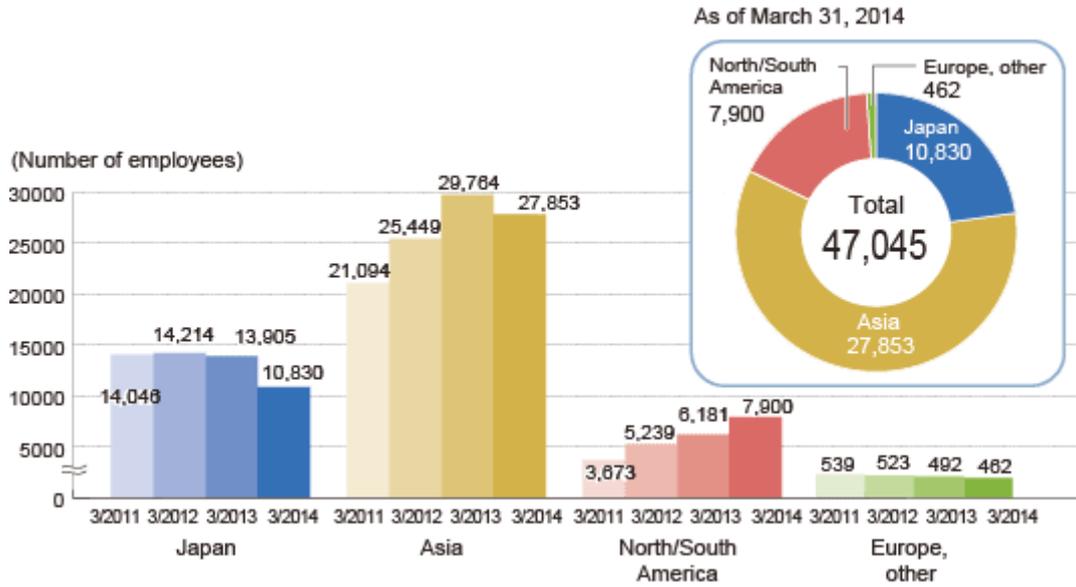
(Billions of yen)



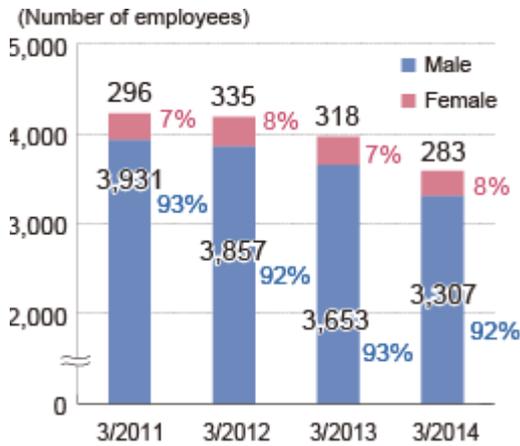
(note) Since the second half of fiscal 2014 and fiscal 2015 it has been recorded in equity in net income of affiliates

# Non-financial Key Indicators

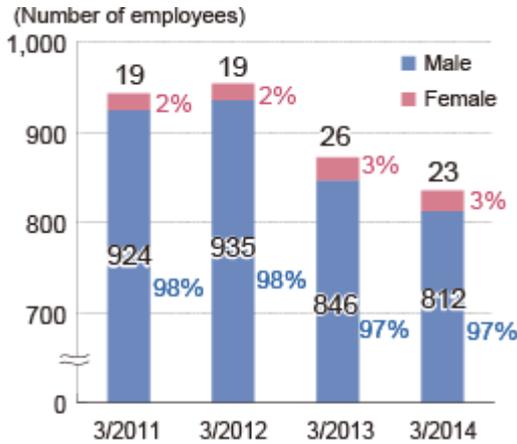
## Number of Group Employees by Region (Consolidated)



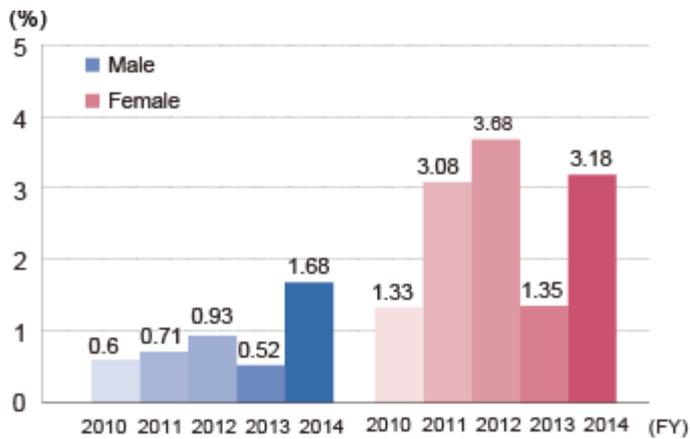
## Gender ratio of Employees (Furukawa Electric)



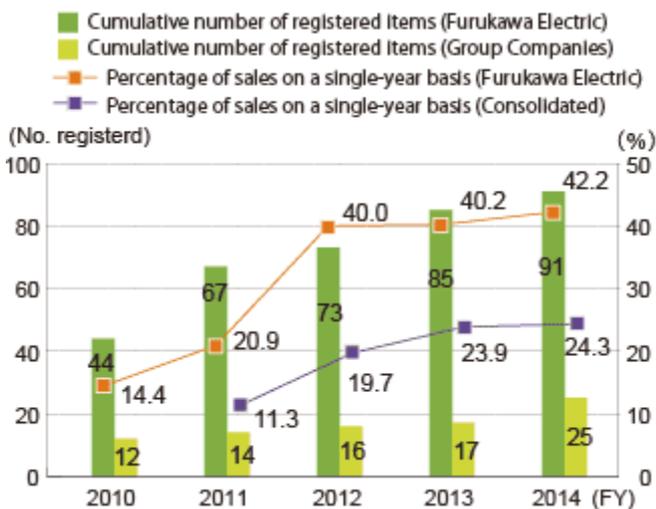
### Gender ratio of Managers (Furukawa Electric)



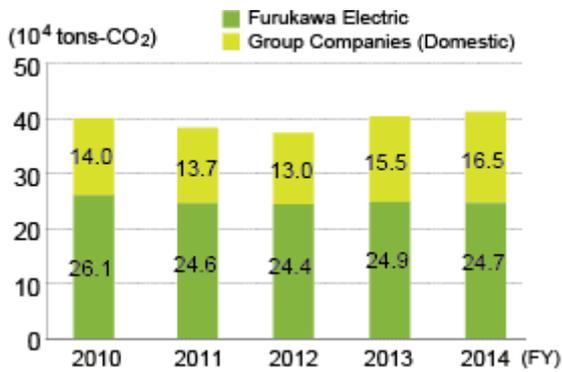
### Employee turnover rate by gender (Furukawa Electric)



### Environmentally friendly products as a percentage of sales



## CO<sub>2</sub> emissions



(note 1) The amount of power consumed is calculated using the emission factor of each power company.

(note 2) Assuming that hydroelectric power produces zero CO<sub>2</sub> emissions.

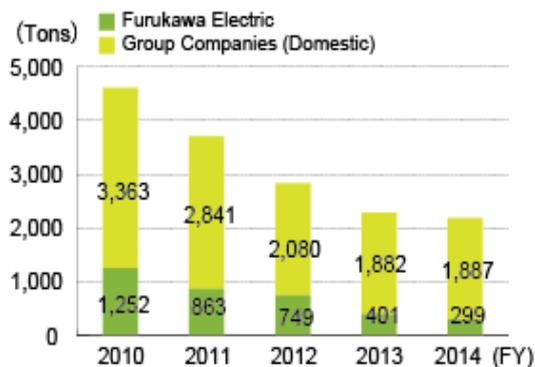
(note 3) UACJ Corporation was transferred to other related companies in fiscal 2014 and so the figures for past fiscal years have been retroactively adjusted.

## Energy consumption



(note) UACJ Corporation was transferred to other related companies in fiscal 2014 and so the figures for past fiscal years have been retroactively adjusted.

## Processing volume of non-recyclable waste



(note) UACJ Corporation was transferred to other related companies in fiscal 2014 and so the figures for past fiscal years have been retroactively adjusted.