

Fuji Electric Report **2014**



*Innovating Energy Technology*

## Brand Statement

# *Innovating Energy Technology*

Through our pursuit of innovation in electric and thermal energy technology, we develop products that maximize energy efficiency and lead to a responsible and sustainable society.

## Corporate Philosophy

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### Corporate Mission

We, Fuji Electric, pledge as responsible corporate citizens in a global society to strengthen our trust with communities, customers and partners. Our mission is to:

- Contribute to prosperity
- Encourage creativity
- Seek harmony with the environment

## Management Policies

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1. Through our innovation in energy technology, we contribute to the creation of responsible and sustainable societies.
2. Achieve further growth through our global business expansion.
3. Maximize our strengths as a team, respecting employees' diverse ambition.

## Fuji Electric Code of Conduct

The Code of Conduct outlines principles to guide and unify the conduct of the Fuji Electric and its employees, by articulating the values we share in the pursuit of our corporate principles.

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Fuji Electric and its employees, from a global perspective always strive to meet our corporate mission of "We, Fuji Electric, pledge as a responsible corporate citizens in a global society our strengthen our trust with communities, customers and partners."

1. Respect and value our customers
2. Respect and value all people
3. Respect and value the global environment
4. Respect and value our shareholders and investors
5. Respect and value interaction with society
6. Respect, value and conform with all applicable laws and regulations

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To Our Stakeholders

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Business Report

## Special Features

Fuji Electric is promoting initiatives to realize a sustainable society. These special features highlight several examples of how the Company is helping to solve issues faced by customers and society at large.

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Special Features

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Management

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Corporate Information

# Fuji Electric's Business Fields

Fuji Electric is contributing to the creation of responsible and sustainable societies through its five business segments, namely Power and Social Infrastructure, Industrial Infrastructure, Power Electronics, Electronic Devices, and Food and Beverage Distribution, which are based on its core electric and thermal energy technology.

## Power and Social Infrastructure

By integrating environmentally friendly electric power plants and energy management, Fuji Electric will contribute to the realization of smart communities.



Subsegments	Main Business Areas
Power Plant	Thermal / Geothermal / Hydraulic power generation
	Nuclear power-related equipment
	Solar power generation systems
	Fuel cells
Social Engineering Systems	Energy management systems
	Smart meters
Social Information	Information systems

## Industrial Infrastructure

Fuji Electric supplies diverse customers in the fields of industry with “energy savings” and “lifecycle services” for production lines and infrastructure equipment.



Subsegments	Main Business Areas
Transmission and Distribution	Transmission and distribution equipment, Industrial power supply equipment
Machinery and Electronics Systems	Industrial drive systems, Heating and induction furnace equipment
	Factory energy management systems
	Data centers, Clean room facilities
Instrumentation and Control Systems	Plant control systems, Measurement systems
	Radiation monitoring systems
Equipment Construction	Electrical and air conditioning equipment installation

## Power Electronics

Fuji Electric supplies products that incorporate power electronics technology to improve the efficiency and stability of energy.



Subsegments	Main Business Areas
Drive	Inverters / Servo systems, Motors
	Transportation power electronics
Power Supply	Uninterruptible power supply systems
	Power conditioners
ED&C Components	Power distribution and control equipment

## Electronic Devices

Fuji Electric supplies power semiconductors and other essential electronic devices to the fields of industrial equipment, automobiles, information equipment, and new energy.



Subsegments	Main Business Areas
Semiconductors	Power semiconductors
	Photoconductive drums
Magnetic Disks	Magnetic disks

## Food and Beverage Distribution

With our freezing technology at the core, Fuji Electric integrated mechatronic technology and IT to offer optimal products and solutions to our customers.



Subsegments	Main Business Areas
Vending Machines	Food and beverage vending machines
Store Distribution	Retail distribution systems
	Showcases
	Currency handling equipment

## To Our Stakeholders

# Our mission is to contribute to the realization of a safe, secure and sustainable society through our energy-related businesses



**Michihiro Kitazawa**  
President and Representative Director  
FUJI ELECTRIC CO., LTD.

### A proud history of helping to solve energy problems through technology

On behalf of Fuji Electric, I would like to express our sincere gratitude to our stakeholders for their continued support and understanding.

We, Fuji Electric, pledge as responsible corporate citizens in a global society to strengthen our trust with stakeholders. Our basic philosophy is to apply ourselves earnestly in carrying out our mission.

Since the Great East Japan Earthquake, significant changes have been made in the way energy is used in Japan. We have seen the proactive introduction of renewable energy and reforms to the electric power system aimed at providing a stable supply of electricity.

On the other hand, emerging countries, especially in Asia, are beginning to experience energy shortages with their ongoing rapid economic growth. These countries are hurrying to implement measures to increase the supply and quality of their electric power, and to use energy more efficiently and reduce their environmental impact.

Our mission is to contribute the realization of a safe, secure and sustainable society through energy-related businesses that make full use of the electrical and thermal energy technologies we have developed over the 90 years since our founding. I strongly sense that our capabilities are valued and needed by society today more than ever.

### Fiscal 2013 Marked a Major Turning Point in Our Management Direction as a “New Base Year for Aggressive Management”

As the business restructuring implemented through fiscal 2012 had progressed to a certain point, we designated fiscal 2013 as a “new base year for aggressive management.” In July 2013, we formulated the FY2015 Medium-Term Management Plan, and during the fiscal year we worked to establish a growth foundation and to strengthen profitability.

On a consolidated basis, net sales increased ¥14.1 billion year on year to ¥759.9 billion, while operating income grew ¥11.1 billion year on year to ¥33.1 billion. The improvement in operating income was mainly attributable to thorough cost cuts and

expense reductions achieved through the “Pro-7 Activities” to improve profits, as well as the benefits of the business restructuring carried out in the power semiconductors and drive businesses in fiscal 2012.

### Expansion of Business in Japan and Asia to Establish a Growth Foundation

In fiscal 2013, we focused on expanding our business in Japan and Asia with the aim of establishing a growth foundation.

In Japan, investment in electric power has been brisk as the market environment surrounding energy undergoes significant changes. Amid these changes, mega solar power generation has been rapidly growing in the market, triggered by the introduction of the feed-in tariff system, and Fuji Electric has been supplying power conditioners, a key component, in a timely manner. We have also fully demonstrated our strength in plant engineering technology, winning many orders for engineering, procurement, and construction (EPC) projects in the mega solar power generation field.

We were awarded a contract from Tokyo Electric Power Company, Incorporated to provide the company with smart meters, which are a vital element for creating smart communities that use energy efficiently. To support this new demand, we made a capital investment in an automated production line at our subsidiary GE Fuji Meter Co., Ltd.’s Azumino Factory.

In the food and beverage distribution business, we leveraged our thermal energy technologies to develop a next-generation portable cold storage container with the objective of increasing safety and reliability. We will work to increase the market penetration of this product by presenting it to a variety of industries, in particular the food and beverage industry, as a product that will help raise the quality of temperature control.

Meanwhile, in Asia, we bolstered our base in both the industrial infrastructure and the power electronics businesses in order to capitalize on the demand for stable electric power supply and quality improvement, thereby expanding our business in this region.

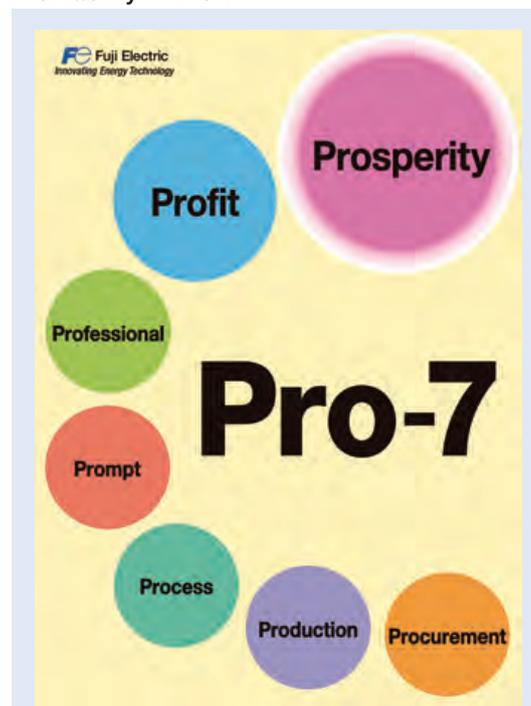
In order to accomplish our goal of continued growth in Asia, we established Fuji Tusco Co., Ltd. after making capital investments in Tusco Trafo Co., Ltd., a transformer manufacturer in Thailand. In addition, we launched a new factory at an existing

facility in Thailand and commenced production of inverters and uninterruptible power supply systems. Furthermore, in China, we established joint ventures in the area of medium-voltage inverters with state-owned Shanghai Electric Group Co., Ltd.

We will continue to increase local procurement and production, and enhance our lineup of competitively priced transformers and power electronics equipment. In addition, we will accelerate our business growth in markets in Asia and China by fully leveraging our strong sales network with deep local roots.

Alongside these initiatives, we also invested in our state-of-the-art technologies for power semiconductors, the source of Fuji Electric’s competitiveness. In addition to launching a cutting-edge production line in the Yamanashi Factory, we built a SiC (silicon carbide) power semiconductor production line at the Matsumoto Factory with the expectation that SiC power semiconductors will become a next-generation device.

### Company-Wide Activities to Boost Profitability — Pro-7



Pro-7 Activities are a company-wide initiative to improve operating performance. By having every employee approach work with a strong sense of professionalism and prompt action, we are emphasizing business execution processes and working to boost production efficiency and reduce procurement costs.





## Responding to Diverse Social Issues with Concerted Team Strength

In fiscal 2013, Fuji Electric celebrated its 90th year in business. In order for us to continue to grow and prosper as a company, I believe it is important that our employees work together as a team to tackle the issues we face.

It is particularly important that we respect and channel the strengths of individuals. We must capitalize on our employees' diverse attributes, including nationality and gender, as well as their differing values and beliefs.

Particularly in Japan, we are focusing on encouraging our female employees to play larger roles. We will continue to hire more female employees and enhance career development support for

them, while working to create a workplace where female employees can work comfortably. We will also be proactive in developing female employees for advancement to managerial positions.

In addition, we have decided that the best way for Fuji Electric to continue to grow its businesses globally is for local employees to run our local business operations since they know the culture and practices of their particular country or region. Based on this decision, we are placing local employees in top management positions at key sites and proactively transferring skills and abilities to the local employees responsible for manufacturing our products and carrying out engineering projects.

## Continuing Our Company's Contributions to Society

Our brand statement, "Innovating Energy Technology," expresses the value that Fuji Electric offers society. The brand statement reflects Fuji Electric's desire to contribute to a safe, secure and sustainable society, through innovation in electric and thermal energy technology. Putting this brand statement into practice is our corporate social responsibility (CSR).

At the same time, Fuji Electric places a strong emphasis on its trusting relationships with stakeholders in its approach to management, and participates in the United Nations Global Compact (GC). We view the 10 universally accepted principles in the areas of human rights, labor, the environment, and anti-corruption as vital guidelines in our global business development and have reflected the GC in the Fuji Electric Code of Conduct, which we

rigorously follow.

We will continue to play a vital role in society as a company through our energy-related businesses that are helpful to the world and founded on our strengths. As we take on these challenges, I would like to ask all of our stakeholders for their continued support and understanding.

July 2014

**Michihiro Kitazawa**  
President and Representative Director  
FUJI ELECTRIC CO., LTD.

# Consolidated Financial Highlights

Fiscal year					Millions of yen	Thousands of U.S. dollars*1
	2009	2010	2011	2012	2013	2013
<b>Operating Results</b>						
Net sales	¥691,223	¥689,065	¥703,534	¥745,781	<b>¥759,911</b>	<b>\$7,450,117</b>
Japan	513,616	510,843	525,096	567,314	<b>582,223</b>	<b>5,708,076</b>
Overseas	177,607	178,221	178,437	178,466	<b>177,688</b>	<b>1,742,041</b>
Operating income	924	11,917	19,252	21,992	<b>33,136</b>	<b>324,870</b>
Net income	6,757	15,104	11,801	26,368	<b>19,582</b>	<b>191,984</b>
<b>R&amp;D and Capital Investment</b>						
R&D expenditures	¥ 24,296	¥ 32,568	¥ 32,247	¥ 31,160	<b>¥ 32,029</b>	<b>\$ 310,014</b>
Plant and equipment investment*2	19,124	27,223	24,989	31,771	<b>26,916</b>	<b>263,882</b>
Depreciation and amortization*3	26,053	27,945	29,755	31,054	<b>30,849</b>	<b>302,444</b>
<b>Cash Flows</b>						
Cash flows from operating activities	¥ 11,923	¥ 53,853	¥ 28,314	¥ 55,342	<b>¥ 53,651</b>	<b>\$ 525,998</b>
Cash flows from investing activities	(528)	84,241	(13,489)	(24,286)	<b>(9,649)</b>	<b>(94,604)</b>
Free cash flow	11,395	138,094	14,825	31,055	<b>44,002</b>	<b>431,394</b>
Cash flows from financing activities	(62,575)	(93,468)	(32,593)	(56,827)	<b>(50,570)</b>	<b>(495,784)</b>
<b>Financial Position</b>						
Total assets	¥908,938	¥805,797	¥792,848	¥765,563	<b>¥810,774</b>	<b>\$7,948,766</b>
Total net assets	196,134	174,935	183,217	215,672	<b>251,225</b>	<b>2,462,992</b>
Interest-bearing debt	359,790	274,019	255,865	226,717	<b>199,504</b>	<b>1,955,922</b>
<b>Financial Indicators</b>						
Ratio of operating income to net sales (%)	0.1	1.7	2.7	2.9	<b>4.4</b>	—
ROE (Return on equity) (%)	4.4	9.0	7.4	14.7	<b>9.3</b>	—
ROA (Return on assets) (%)	0.7	1.8	1.5	3.4	<b>2.5</b>	—
Total net assets ratio (%)	19.7	19.3	20.6	25.4	<b>28.0</b>	—
Net debt-equity ratio (times)*4	1.8	1.2	1.2	1.0	<b>0.7</b>	—
Debt-equity ratio (times)*5	2.0	1.8	1.6	1.2	<b>0.9</b>	—
<b>Per Share Data</b>						
					Yen	U.S. dollars*1
Net income	¥ 9.46	¥ 21.14	¥ 16.52	¥ 36.90	<b>¥ 27.41</b>	<b>\$0.27</b>
Net assets	250.28	217.40	228.91	272.29	<b>317.96</b>	<b>3.12</b>
Cash dividends	1.50	4.00	4.00	5.00	<b>7.00</b>	<b>0.07</b>
<b>Others</b>						
					Headcount	
Employees	23,524	24,562	24,973	24,956	<b>25,524</b>	—
Japan	18,692	18,002	17,933	18,271	<b>18,022</b>	—
Overseas	4,832	6,560	7,040	6,685	<b>7,502</b>	—

\*1 The U.S. dollar amounts represent the arithmetic results of translating yen into dollars at ¥102 = U.S. \$1, the approximate exchange rate at March 31, 2014.

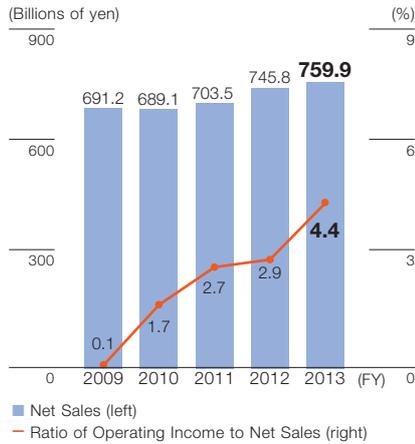
\*2 Plant and equipment investment is the total of investment in tangible fixed assets, including acquisition amounts for lease contracts.

\*3 Depreciation and amortization expense is the total of the depreciation of tangible fixed assets and amortization of intangible assets.

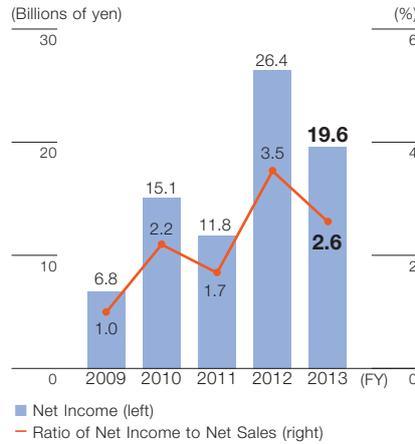
\*4 Net debt-equity ratio: Net interest-bearing debt (interest-bearing debt – cash and cash equivalents) / Net assets

\*5 Debt-equity ratio: Interest-bearing debt / Net assets

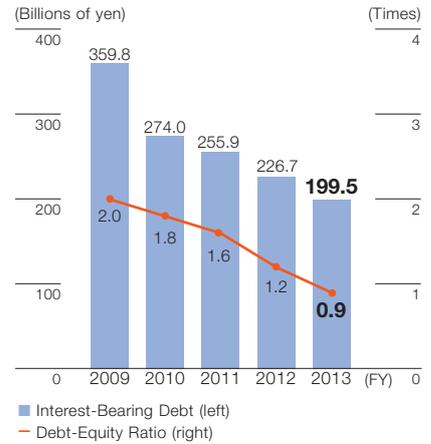
### Net Sales / Ratio of Operating Income to Net Sales



### Net Income / Ratio of Net Income to Net Sales



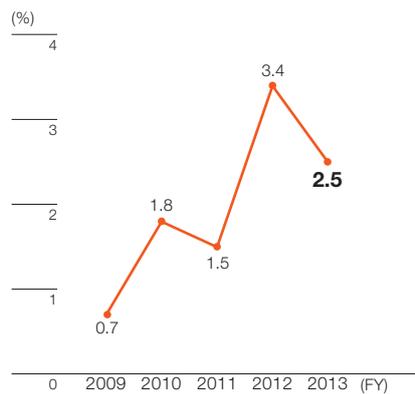
### Interest-Bearing Debt / Debt-Equity Ratio



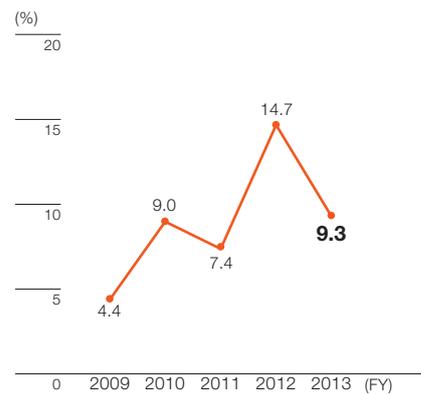
### Total Net Assets Ratio



### ROA



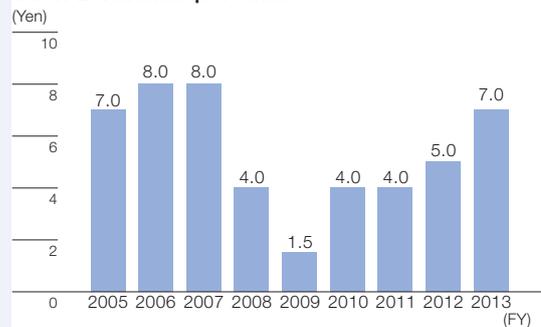
### ROE



## Dividend Policy

Fuji Electric's basic policy is to pay a stable, continuous dividend over the medium- to long-term. We will determine the dividend giving due consideration to our consolidated operating results, research and development and capital expenditure plans, and the economic environment going forward.

### Cash Dividends per Share



# Review of Operations—

## Fiscal 2013 Performance and Priority Measures for Fiscal 2014

In the fiscal year ended March 31, 2014, Fuji Electric's operating environment saw strong demand in areas related to renewable energy and energy saving in the domestic market and power electronics and semiconductors in the overseas market. In response to these conditions, Fuji Electric established foundations for growth to facilitate future business expansion and promoted business management with a strong focus on earnings in order to further strengthen profitability. Net sales rose ¥14.1 billion year on year to ¥759.9 billion. Operating income improved ¥11.1 billion year on year to ¥33.1 billion. This reflected improved profitability stemming from the rigorous reduction of costs and expenses as well as a significant contribution from the vending machine business and the power semiconductors and drive businesses, which underwent business restructuring during fiscal 2012.

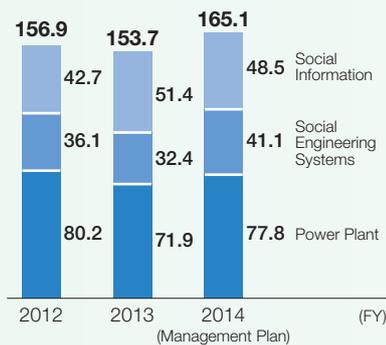
Positioning fiscal 2014 as a year of aggressive management expansion, we will work to further enhance profitability, while at the same time moving forward with efforts to expand the Industrial Infrastructure and Power Electronics businesses and reinforce our base of overseas operations.

Our plan for fiscal 2014 is to achieve net sales of ¥780.0 billion, up ¥20.1 billion year on year, and operating income of ¥38.0 billion, up ¥4.9 billion year on year.

### Power and Social Infrastructure

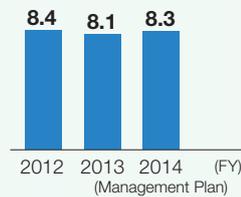
#### Net Sales

(Billions of yen)



#### Operating Income

(Billions of yen)



#### Fiscal 2013 Performance

Sales in the power plant business were down year on year due to a fall back from large-scale orders for thermal power generation facilities recorded in the previous fiscal year, which offset rises in orders for hydropower generation facilities and solar power generation systems.

Sales in the social engineering systems business were down due to lower demand for watt-hour meters ahead of the switch to smart meters.

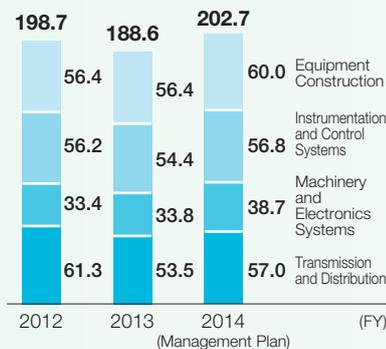
Sales in the social information business were up following a rise in large-scale orders and a demand rush in light of the upcoming end of support for Windows XP™.

Overall, the segment saw operating income worsen as lower net sales counteracted cost reductions.

### Industrial Infrastructure

#### Net Sales

(Billions of yen)



#### Operating Income

(Billions of yen)



#### Fiscal 2013 Performance

Sales in the transmission and distribution business were down year on year, reflecting the absence of the previous fiscal year's large-scale overseas orders.

Sales in the machinery and electronics systems business increased due to a rise in orders for energy-saving equipment from Japanese manufacturers.

Sales in the instrumentation and control systems business were down as a result of lower demand for radiation measurement equipment.

Sales in the equipment construction business were relatively unchanged from the previous fiscal year.

In the business segment overall, operating income worsened year on year because lower net sales counteracted cost reductions.

	Net Sales				Operating Income / Loss			
	(Billions of yen)				(Billions of yen)			
	Fiscal 2012	Fiscal 2013	Fiscal 2014 (Management Plan*)	Fiscal 2013-14 Increase / Decrease	Fiscal 2012	Fiscal 2013	Fiscal 2014 (Management Plan*)	Fiscal 2013-14 Increase / Decrease
Power and Social Infrastructure	156.9	153.7	165.1	+11.5	8.4	8.1	8.3	+0.2
Industrial Infrastructure	198.7	188.6	202.7	+14.1	11.0	9.2	11.6	+2.3
Power Electronics	148.4	165.5	179.7	+14.2	1.2	5.4	8.3	+2.9
Electronic Devices	113.6	123.9	118.4	-5.4	-1.4	6.3	7.6	+1.3
Food and Beverage Distribution	112.1	120.1	118.6	-1.5	6.4	8.0	7.1	-0.9
Others	60.6	60.0	57.1	-2.9	1.6	1.9	1.7	-0.2
Elimination and Corporate	-44.5	-51.8	-61.6	-9.8	-5.3	-5.9	-6.6	-0.7
<b>Total</b>	<b>745.8</b>	<b>759.9</b>	<b>780.0</b>	<b>+20.1</b>	<b>22.0</b>	<b>33.1</b>	<b>38.0</b>	<b>+4.9</b>

\* As of April 24, 2014

### Priority Measures for Fiscal 2014

#### Continue Capturing Orders for Solar Power Generation Systems and Expand Orders of Thermal / Geothermal Power Generation Facilities and Smart Meters

In the power plant business, we will work to continue capturing orders for solar power generation systems in line with anticipated strong demand in Japan. We will also strengthen our efforts to increase orders for thermal and geothermal power generation facilities, mainly in Asia and the domestic market where demand is expected to grow. In other initiatives, we will aim to grow orders for fuel cells.

In the social engineering systems business, we will bolster our production capacity for smart meters and take steps to reduce costs and increase orders. We will also advance initiatives aiming to commercialize smart communities.



Construction of mega solar power generation is increasing, spurred by the feed-in tariff scheme for renewable energy, resulting in higher orders for solar power generation systems.

### Priority Measures for Fiscal 2014

#### Capture Energy-Saving and Replacement Demands and Strengthen Business in Asia

In the transmission and distribution business, we will bolster our manufacturing structure centered on Fuji Tusco Co., Ltd. and the new factory in Thailand, while working to strengthen local engineering systems as we work to expand our business in Asia.

In the machinery and electronics systems business, we will focus on the automotive and Internet data center (IDC) businesses where investment is expected, while making efforts to capture replacement demand in the steel field, in which we have a strong replacement track record.

In the instrumentation and control systems business, we will step up product development and launch, while strengthening our efforts to capture replacement demand and expand overseas business.

In the equipment construction business, we will work to enlarge our presence in the creation energy field, centered on solar power generation systems, and grow our overseas business.



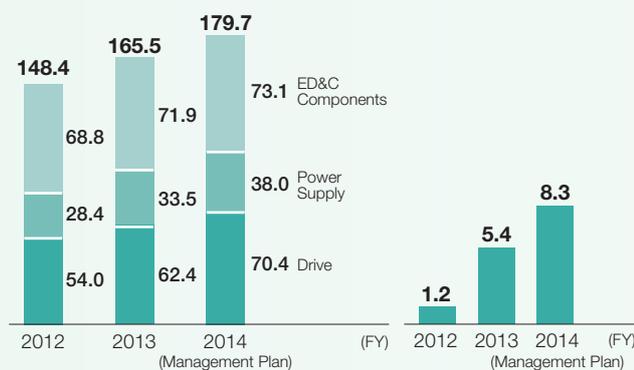
In October 2013, we launched Fuji Tusco Co., Ltd. with capital participation from a leading Thai transformer manufacturer.

Transformer

## Power Electronics

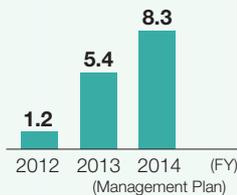
### Net Sales

(Billions of yen)



### Operating Income

(Billions of yen)



### Fiscal 2013 Performance

In the drive business, net sales improved year on year thanks to higher demand for inverters and servo systems in Japan and overseas and the sales contributions from large overseas orders for electric equipment for railcars. Likewise, operating income also showed a year-on-year improvement due to higher sales and the benefits of the business restructuring conducted in the previous fiscal year.

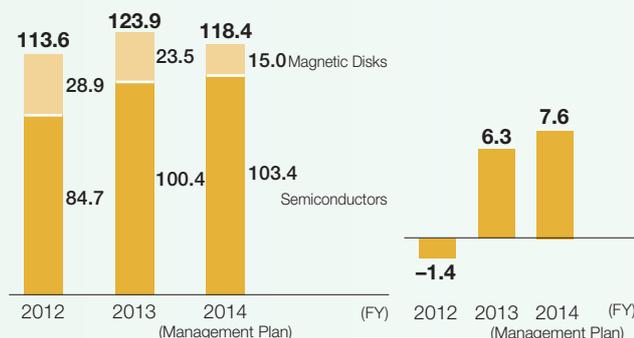
In the power supply business, net sales and operating income improved year on year as a result of increased demand for power conditioners for mega solar power generation and power supply equipment for data centers and other products.

In the ED&C components business, net sales and operating income improved year on year due to increased demand in the renewable energy field and recovery in domestic demand in the machine tools and semiconductor field.

## Electronic Devices

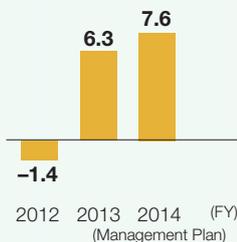
### Net Sales

(Billions of yen)



### Operating Income

(Billions of yen)



### Fiscal 2013 Performance

In the semiconductors business, net sales were up year on year due to strong demand in the automotive field, which continued from the previous fiscal year, as well as a recovery in demand for inverters, servo systems, and other industrial machinery in the industrial field. As a result of higher earnings and the benefits of the business restructuring conducted in relation to power semiconductors in the previous fiscal year, the business was able to realize substantially improved operating income.

In the magnetic disks business, net sales and operating income declined due to lower demand from customers.

## Food and Beverage Distribution

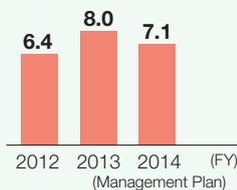
### Net Sales

(Billions of yen)



### Operating Income

(Billions of yen)



### Fiscal 2013 Performance

In the vending machines business, net sales were up year on year as a result of steady replacement demand for energy-saving, environmentally friendly vending machines coupled with solid demand for coffee machines for convenience stores. Operating income improved following higher revenues and lower costs.

The store distribution business recorded a year-on-year increase in net sales due to higher orders for construction and renovation, mainly of convenience stores, but operating income deteriorated as a result of the impacts of higher upfront investments for the expansion of new businesses.

### Priority Measures for Fiscal 2014

#### Business Expansion Centered on New Product Launches and the New Factory in Thailand

In the drive and power supply businesses, we will accelerate development and market launch for the global markets in mainstay products, including inverters, uninterruptible power supply systems (UPSs), and power conditioners. At the same time, we will enhance price competitiveness by expanding production at the new factory in Thailand. Furthermore, the business in China will be expanded through the joint-venture companies created between Shanghai Electric Group Co., Ltd. and the Company.

In the ED&C components business, we will concentrate on the new energy field in Japan while striving to enhance product line-ups in Asia and China.



In December 2013, the new factory in Thailand started production of inverters, UPSs, and other products as the Company's core production base for products for Asia, Europe, and the U.S.



In February 2014, the Company established a joint venture for sales and production of medium-voltage inverters with Shanghai Electric Group Co., Ltd., which has a powerful sales network in China.

### Priority Measures for Fiscal 2014

#### Launch New Power Semiconductor Products and Accelerate Development of the Next-Generation of Semiconductors

In the semiconductors business, we will pursue higher sales by launching new products and strengthening local design through design centers established in the previous fiscal year in China, Taiwan, and Europe. We will also promote cost reduction activities by expanding back-end processing overseas. Furthermore, we will also accelerate the development of next-generation power semiconductors to further future business expansion.



In China (Shenzhen), the Company is expanding its production system for industrial power semiconductor products for the Chinese market.



In October 2013, a new production line established at the Matsumoto Factory started production of SiC power semiconductors.

### Priority Measures for Fiscal 2014

#### Strengthen Business into Growth Fields such as Overseas and Store Distribution

In the vending machines business, we will grow the business by capturing domestic renewal demand for energy-saving, environmentally friendly vending machines. In addition, we will expand the business in China and other Asian markets where demand is expected to grow by increasing production in China, starting production in the new factory in Thailand, and establishing local sales companies among other initiatives.

In the store distribution business, we will work to grow demand for store equipment, mainly for convenience stores, and expand new businesses. We will also promote the distribution systems business by making use of refrigeration technologies, including the mobile cold storage container D-BOX, and business targeting crop production facilities.



Sales of the newly launched energy-saving, environmentally friendly vending machines and coffee machines for convenience stores have risen due to strong response from customers.

# Review of Operations — Overseas Operations

## Fiscal 2013 Performance

In the market environment surrounding the Company, overseas markets showed weak activity overall, but there was a recovery trend supported by the gradual recovery of major developed nations, such as the U.S. and nations in Europe.

Against this backdrop, sales of power semiconductors and power electronics increased on rising demand in China, Europe, and the Americas. In Asia, meanwhile, sales declined on a decrease in large-scale orders for power generation facilities and transformer equipment, and a decline in demand for magnetic disks.

In fiscal 2013, we worked to establish our base in Asia and China. Specifically, in Asia we built a new factory in Thailand, and made a capital investment in a Thai transformer manufacturer (Tusco Trafo Co., Ltd.). We also established sales bases in South Korea and Vietnam, and representative offices in Myanmar and Cambodia. In China, we established joint ventures in the area of medium-voltage inverters with state-owned Shanghai Electric Group Co., Ltd., and built a new factory building for power semiconductor back-end processing at Fuji Electric (Shenzhen) Co., Ltd.

## Priority Measures for Fiscal 2014

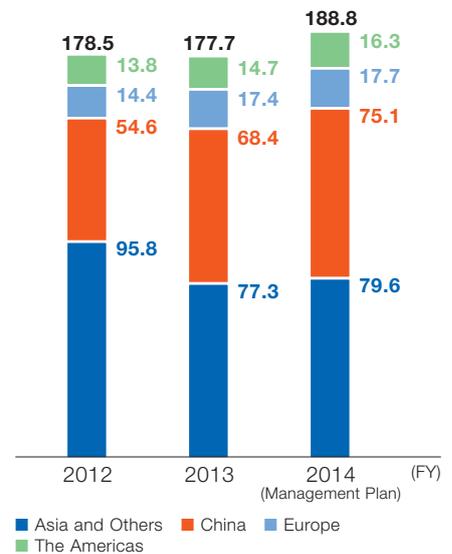
### Enhance Sales Mainly in Asia and China

In fiscal 2014, we will steadily bring our initiatives from fiscal 2013 to fruition, and reinforce the base of our overseas operations through establishing vending machine sales and marketing subsidiaries in China and Asia and making progress on new M&As.

In Asia, we will expand sales in Power and Social Infrastructure, Industrial Infrastructure, and Power Electronics. In China, we will increase our sales of vending machines, as well as Power Electronics and power semiconductors, for which continuing strong demand is expected.

## Sales Outside Japan

(Billions of yen)



## Initiatives in Asia

### New Factory in Thailand to Serve as a Core Production Base for Asia

In December 2013, we completed construction of a new factory in Thailand (Fuji Electric Manufacturing (Thailand) Co., Ltd.) and commenced production of inverters, uninterruptible power supply systems, and other items.

The new factory in Thailand is positioned to serve as our core production site for products for Asia, Europe, and the U.S. Looking ahead, we plan to grow the business even further by extending the scope of production items such as vending machines and gas insulated switchgears.



Fuji Electric Manufacturing (Thailand) Co., Ltd.

Uninterruptible power supply system

### Capital Investment in Thai Transformer Manufacturer

In October 2013, we made a capital investment in Tusco Trafo Co., Ltd. (hereinafter referred to as Tusco) and established Fuji Tusco Co., Ltd.

Tusco is a leading local transformer manufacturer with a good track record in supplying transformers to many governmental electric power distribution companies and private companies in Thailand, as well as in sales covering a wide area including Southeast Asia and Africa. We plan to make use of Tusco's resources to boost our product lineup and expand our sales and service networks.

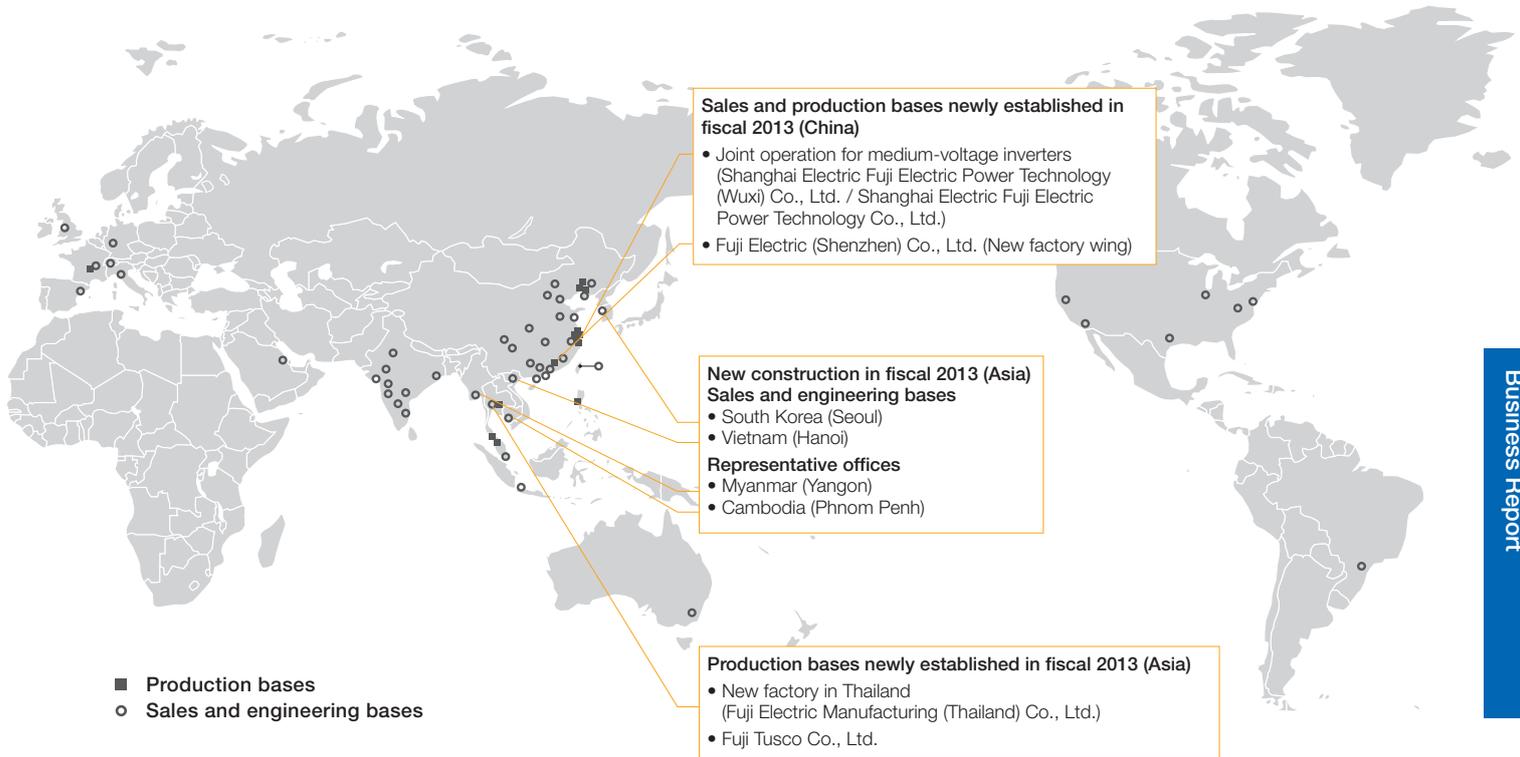
#### New Company Information

New company name	Fuji Tusco Co., Ltd.
Business areas	Manufacture, sales, maintenance, and services for transformers, power distribution boards, and others
Date of capital investment	October 2013
Equity stake	67.7%



Transformer

## Production Bases and Sales and Engineering Network (As of March 31, 2014)



### Major Initiatives in China

#### Established Joint Venture for Medium-Voltage Inverters with Shanghai Electric, China's Largest Medium-Voltage Motor Manufacturer

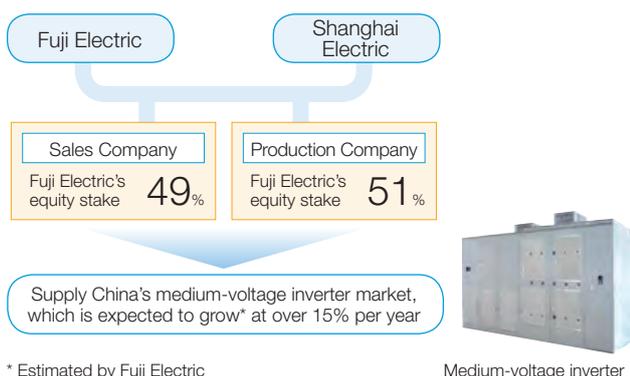
In February 2014, we established two joint ventures with China's state-owned Shanghai Electric Group Co., Ltd. (hereinafter referred to as Shanghai Electric) to carry out sales and production of medium-voltage inverters in China.

Shanghai Electric is a leading industrial electrical equipment manufacturer that has a nationwide sales network and the highest market share in China for medium-voltage motors, which are an application for medium-voltage inverters. We aim to grow our business in China by capturing synergies between Fuji Electric's power electronics and control technologies and Shanghai Electric's machine technologies and sales capabilities based on its strong brand.

#### Strengthened Production Capacity for Power Semiconductor Back-End Processing Capability (New Factory Building)

In June 2013, the construction of new factory building for back-end processing production line was completed at Fuji Electric (Shenzhen) Co., Ltd. in order to strengthen production capacity for power semiconductors.

At the same time, we established design centers to swiftly develop products specified to local requirements in order to bolster our local design structure. By strengthening an integrated structure covering everything from development to sales, we will promote local production for local consumption and ultimately increase our sales in China.



\* Estimated by Fuji Electric



Fuji Electric (Shenzhen) Co., Ltd.



Back-end processing production line

# Review of Operations —

## Capital Expenditures and R&D Expenditures

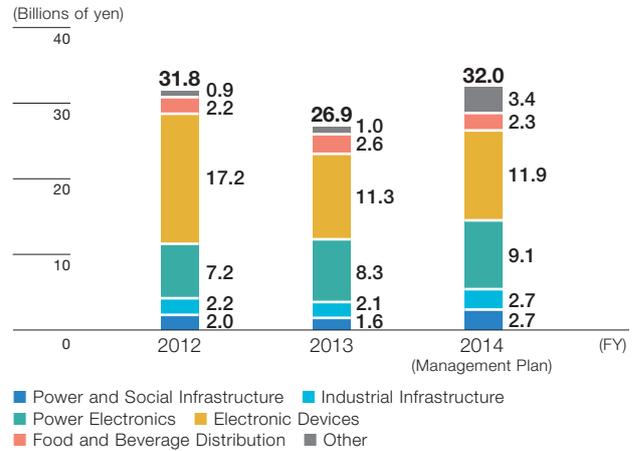
### Plant and Equipment Investment

#### Structural Organization of Bases in Asia and Enhancement of New Product Development and Production Capabilities

In fiscal 2013, we focused on the power electronics and industrial infrastructure fields, where sales growth was expected, building a new factory in Thailand to serve as a core production site for products for Asia, Europe, and the U.S., and introduced production facilities for products such as inverters and uninterruptible power supply systems. We also proceeded to automate our facilities for manufacturing smart meters to prepare for mass production. In addition, we established a 6-inch SiC mass production line for next-generation power semiconductor devices.

Looking ahead, at the new factory in Thailand we will expand the production capacity for power electronics. We will also expand our business areas to include fields such as industrial infrastructure and food and beverage distribution, and introduce production facilities for gas-insulated switchgear and vending machines. In doing so, we will strengthen it as a core production site. We will also respond to increasing orders for smart meters by accelerating investment in

#### Amount of Plant and Equipment Investment



automated facilities. Finally, we will introduce facilities to develop next-generation power semiconductors, and build new research and development buildings to enhance our development capabilities for creating new products.

### R&D Expenditures

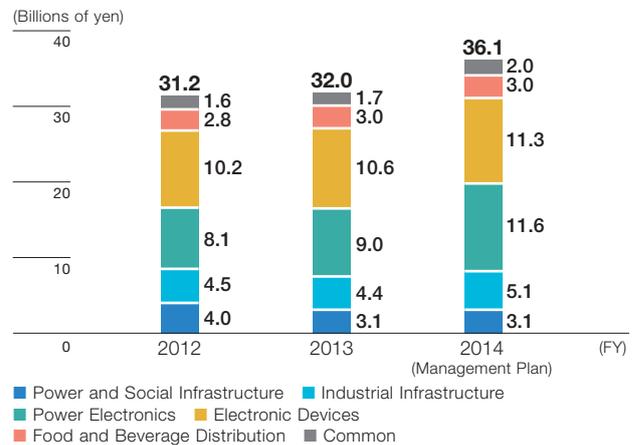
#### Strengthen Core Technologies in all Aspects and Accelerate Development of New Products

Fuji Electric is bolstering its core technologies, such as power semiconductors and power electronics, and developing distinctive components and systems. In addition, we are also working to develop new products that generate Company-wide synergies between thermal, machinery and, control systems.

In fiscal 2013, we continued our development of next generation power semiconductors by SiC (silicon carbide) that will reduce energy use in a wide range of industrial sectors. Moreover, to accelerate the development of power electronics equipment that applies these SiC power semiconductors, such as power conditioners and uninterruptible power supply systems, we concentrated our R&D expenditure on electronic devices and power electronics.

Looking ahead, Fuji Electric will work to expand its global operations by speeding up product development through open innovation with research institutions and universities, while also continuing to promote the product development in line with local needs. Specifically, we will promote initiatives such as our development of SiC power semiconductors with the National Institute of Advanced Industrial Science and Technology\* and the establishment of the Zhejiang University—Fuji Electric Cooperation Center in China. We will also continue construction of

#### R&D Expenditures



Note: Figures for research and development expenses are allocated by research theme and therefore differ from those in the Consolidated Financial Report.

research and development buildings in our three main sites in Japan (the Tokyo Factory, the Matsumoto Factory, and the Fukiage Factory) with the goal of enhancing our research and development structure.

\* An independent administrative institution

# Research and Development

Combining its core technologies in power semiconductors and power electronics with instrumentation and control systems, Fuji Electric is focusing R&D on products and systems that effectively and stably provide and use electricity and thermal energy.



## R&D Policies

- Expand and strengthen core technologies of power semiconductors and power electronics
- Accelerate new product development through technology synergies between thermal, machinery, and control systems
- Promote open innovation

## Major Initiatives in Fiscal 2013

### Power and Social Infrastructure

- We developed smart meters for electric power companies and will continue to enhance our lineup of products that meet our customers' needs.



### Industrial Infrastructure

- We developed the MICREX-VieW XX (double X), a small- and medium-scale monitoring and control system which offers the newest monitoring, operating, and engineering capabilities to factory production lines and other facilities, while maintaining compatibility with existing systems.
- We developed the F-COOLNEO, an air conditioner which combines both indirect outside air cooling and a heat pump to offer significant energy savings. The F-COOLNEO was developed for data centers, as well as production facilities fields such as precision electronic equipment, food, and chemicals.



### Power Electronics

- We developed the DC1,000 V / 660 kW indoor-type power conditioner, a unit which is highly resistant to sea salt corrosion.
- For customers in Asia, China, and Europe, we expanded the lineup of the FRENIC-Ace series of high-performance, standard-type inverters, which can be customized according to customers' applications.



### Electronic Devices

- We developed the AT-NPC 3-level 12in1 IGBT modules, which significantly reduce the power loss and the sizes of power electronics components such as inverters and uninterruptible power supplies.
- For switching power supply controls, we developed the 2nd Generation LLC Current Resonant control ICs, which achieve lower standby power and provide enhanced protection functions.
- In the area of the next-generation power semiconductors by SiC, we are the first in the industry to establish production technology for a 6-inch SiC wafer line.



### Food and Beverage Distribution

- We developed the D-BOX, a mobile refrigerated storage container with a traceability function, capable of maintaining a constant temperature for five hours without the need for electricity.



### New Technology/Technological Foundation

- We worked with the University of Tokyo and JAMSTEC (Japan Agency for Marine-Earth Science and Technology) to jointly develop an aerosol\* particle combined analyzer which enables the identification of PM2.5 sources.

\* Microscopic liquid or solid particles that are suspended in a gas



Case Example

## Market Introduction of SiC Power Semiconductors and SiC Power Electronics Featuring SiC Power Semiconductors for Next-Generation Power Saving

### Potential of SiC Power Semiconductors

There is a demand for power semiconductors that can control large amounts of electricity precisely and efficiently in order to increase power conversion efficiency and realize high energy savings.

Compared to a conventional semiconductor material, SiC conducts electricity easily and suppresses electric power loss. Power semiconductor devices using SiC enable significant energy savings and enable the products they are used in to be smaller and lighter.

By advancing the commercialization of SiC power semiconductors and SiC power electronics, Fuji Electric is bolstering its initiatives in the medium-capacity market, including inverters, where we have focused our efforts, as well as the high-voltage and large-capacity markets, where renewable energy including solar power generation systems is expected to bring expansion.

### Markets for Application of SiC Power Electronics



### Creation of a Production Line for 6-Inch SiC Power Semiconductors

Constructing a production line for 6-inch SiC power semiconductors was considered a challenge. In October 2013, in order to drive down the cost of SiC power semiconductors and hasten the introduction of SiC power electronics into the market, Fuji Electric completed a 6-inch production line first in the industry, and also back-end process assembly and testing line.

Following this achievement, in May 2014, we announced the launch of a large-capacity power conditioner for mega solar power generation using SiC power semiconductors (sales scheduled to begin in August 2014).



Case Example

## Research to Analyze Atmospheric Pollutant PM2.5 and Other Fine Particles

### Voice A Message from the Development Partner



Associate Professor  
**Nobuyuki Takegawa,**  
(Then) Research Center for Advanced Science and Technology, the University of Tokyo  
(Currently) Professor at the Environment and Geochemistry Research Laboratory of the Graduate School of Science and Engineering, Tokyo Metropolitan University

PM2.5 are fine particles smaller than 2.5 micrometers in particle diameter, believed to significantly impact both health and climate change. In order to correctly understand these impacts and study solutions, it is first necessary to measure the fine particles in the atmosphere in real time. As such, the development of equipment to perform such an analysis became a pressing issue.

In response, we at the University of Tokyo launched a collaborative effort, joining forces with Fuji Electric, which possesses instrumentation technologies, and JAMSTEC (Japan Agency for Marine-Earth Science and Technology), which has its own unique measurement technologies. We were commissioned by the Japan Science and Technology to work on an advanced measurement device development program, and in fiscal 2008, we began joint research towards the development of such a device.

During the research process, the close industry-academia partnership-based development platform, in which engineers worked full-time at the university, played a major role in moving the program forward.

In particular, one of the keys to developing the analyzer was a particle trap for capturing particulate matter. In our discussions with the engineers, we discovered that we could utilize Fuji Electric's micro-machining technology, which we had not considered at the beginning. This led to a remarkable increase in the performance of the equipment. Making use of these various technology synergies, in March 2013, we succeeded in developing a combined aerosol particle analysis technology capable of analyzing the main components of PM2.5 in real time.

Going forward, the commercialization of analyzers applying this technology will allow us to shed light on the sources of PM2.5 and establish effective countermeasures for it. Furthermore, this technology will hopefully lead to an overall understanding of the impacts that the various fine particles suspended in the atmosphere have on the earth overall, as well as a general understanding of climate change.

# Intellectual Property

Fuji Electric, based on respect for both the intellectual property (IP) rights it owns as well as those owned by other companies, is working to implement IP strategies that are aligned with our business and R&D strategies. By advancing these initiatives, Fuji Electric will continue to strengthen and expand its business globally.

## IP Policies

- Comprehensively strengthen our patent portfolio\* by working from stages of business and R&D planning
- Investigate and respond to overseas IP systems and status
- Reinforce IP activities at overseas bases

\* A group of patents strategically acquired in relevant technical fields with the goal of securing leeway in business fields, avoiding litigation, and establishing a competitive advantage

Source: Nomura Research Institute, Ltd.

## Major Initiatives in Fiscal 2013

### IP Activities in Consideration of Business and R&D Resources

For key research themes and products, the IP divisions worked with the business group and the R&D group to strengthen the patent portfolio. Also, efforts were focused on filing patent applications, centered on businesses related to energy and power electronics.

Looking ahead, we will work to construct a patent portfolio providing an absolute advantage in our business operations. We will take steps to avoid operational risks relating to other companies' patents, and make aggressive use of patents through licensing, collaboration, and other means.

#### Main Fields for Patent Applications

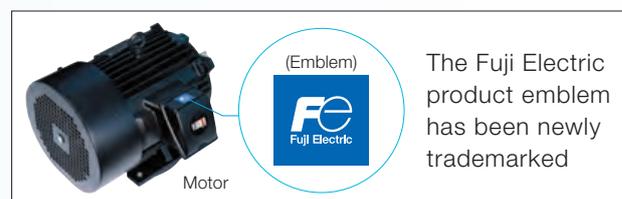
- Patents relating to increasing the efficiency and energy-saving of power electronics products
- Patents relating to semiconductors such as SiC-related technologies
- Patents relating to vending machines

### IP Activities Responding to Globalization

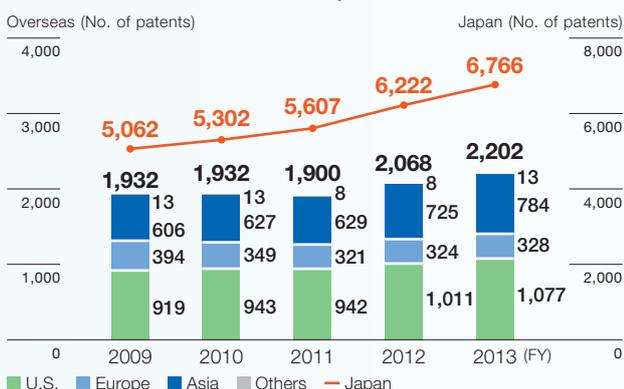
Fuji Electric is taking steps to strengthen its global IP activities and to reduce operational risks related to IP by conducting searches of overseas IP and continuing to implement measures against counterfeit products.

In fiscal 2013, our local IP division in China gathered IP information and implemented countermeasures against counterfeit products and technology leakage. Moreover, we are continuing to survey recent developments in the IP systems of Southeast Asia and India, where our business continues to grow. We have strengthened business relations with IP law firms in these regions.

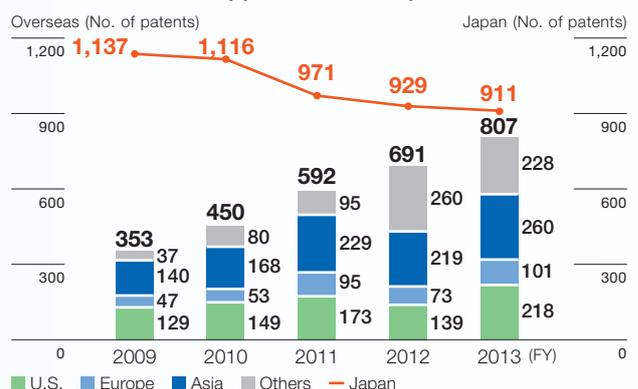
We have also worked to keep pace with the globalization of our business by increasing the number of overseas patent applications. We are steadily applying for trademarks overseas on our newly designed emblem.



#### Number of Patents Held in Japan and Overseas



#### Number of Patent Applications in Japan and Overseas



# Manufacturing

Based on our localization policies (local design, local production, and local consumption), Fuji Electric has adopted a manufacturing framework with three hubs, where production bases in Japan act as the mother factories for global manufacturing operations, with two other hubs in China and Asia. To further enhance our manufacturing capabilities, in addition to focusing on our on-site capabilities through supply chain innovation activities, we also work to strengthen our capabilities in terms of production technology and human resources, with the view to honing our competitiveness further.

## Three Pillars Supporting Manufacturing

### On-Site Capabilities

The ability to achieve higher productivity, lower costs and other goals by enhancing technical skills needed at production sites



### Production Technology

The ability to develop and apply manufacturing methods, production processes, and production equipment to achieve customer satisfaction

### Human Resource Development

The handing down of our accumulated technologies and skills that are necessary for innovation in manufacturing

## Major Initiatives in Fiscal 2013

### Strengthening Production Technology Capabilities

Fuji Electric is bolstering its production technology capabilities in order to ensure highly-competitive manufacturing. Core production engineers are concentrated at the Facility Technology Center in Saitama Prefecture to develop facility technologies and core fundamental technologies. In collaboration with factories, the achievements of their work are applied to actual manufacturing facilities and production process improvements.

Specifically, with the aim of automating production facilities, production lines, and testing and evaluation facilities, we have taken steps to enhance the facility technologies of manufacturing sites by converting tasks and concepts at these manufacturing sites into simple automated equipment. At the same time, we are using robot technology to develop automated production lines capable of handling a wide variety of products and varying quantities, enabling shorter lead times and higher productivity.

#### Assembly Automation (Azumino Factory, GE Fuji Meter Co., Ltd.)

In fiscal 2013, we worked on automating the assembly process, with the aim of expanding orders for smart meters. We are automating the printed circuit board test process by developing conveyors for the testing, soldering, and coating processes, which were formerly performed manually.



Automated printed circuit board inspection line

## Bolstering Human Resource Development

To strengthen manufacturing capabilities, which are fundamental to manufacturers, our factories in Japan are working as mother factories to amass technologies and expertise while nurturing production engineers and technicians who can succeed at overseas manufacturing bases. At overseas production bases, we are improving both operational quality and efficiency by developing technicians, upgrading quality management systems, and pursuing supply chain improvements, which are the roots of manufacturing.

### Manufacturing Training System

	Engineering	Technical
<b>Management</b>	Management training	
<b>Regular employees</b>	Practical training on core technologies Application Manufacturing technologies Management technologies	Supervisor training Assistant manager
	Basic Manufacturing technologies Management technologies	Supervisor Leader
<b>Young employees / new hires</b>	Basic technology training (IE*1, QC*2, VE) 2nd year	New technician training (1 year)
	Production engineers training for new employees*3	National Skills Competition (3 years)
	Production engineers training for experienced employees*3	

\*1 IE: industrial engineering  
\*2 QC: quality control

\*3 Newly established

### Production Engineers Training for New Employees

In fiscal 2013, we held group training lasting three months for new employees in the production technology division. The trainees spent the first two months learning fundamental knowledge such as core technologies and essential skills. Following this, the trainees split into teams and made an automated conveyor. They learned the series of facility construction processes, from planning, design, procurement, assembly, adjustments, and evaluation, which are needed to handle production technology.



Making an automated conveyor

### Winning a Prize at the National Skills Competition

At the 51st National Skills Competition held in November 2013, three employees from Fuji Electric F-Tech Co., Ltd. participated in the die-cutting category and won the silver and bronze medals. Fuji Electric will continue to strengthen its manufacturing capabilities by making sure that talented technicians grow to become central figures at manufacturing bases.



National Skills Competition

Voice

## A Message from an Employee



**Natee Nararatnkul**  
Senior Manager of  
Manufacturing  
Department  
Fuji Electric  
Manufacturing (Thailand)  
Co., Ltd.

### Launch of Asian Production Base

When launching the new production base in Thailand, we tried to minimize operation loss by formulating and executing a fine-tuned carry-in plan for materials and equipment, and by preparing facilities and a production system to handle a wide variety of products. More than anything else, we focused on developing personnel who will be passionate about manufacturing. The Suzuka Factory and other mother production bases took the lead role in educating, instructing, and certifying personnel with respect to important basic tasks for ensuring product quality. They conduct task training and work systematically to improve the frontlines, and pass along our manufacturing DNA to our future leaders. As an Asian product base, we will continue to grow for providing low-priced, high-quality products to our customers.



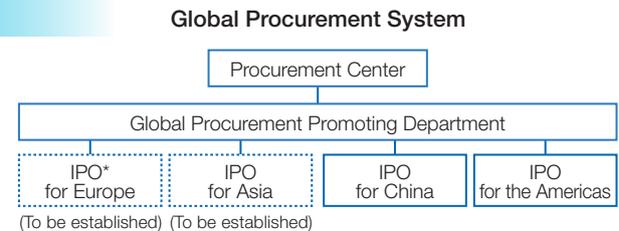
Production line of factory in Thailand

# Procurement

In order to increase earning power and reduce risks, Fuji Electric has built a global procurement system and strives to keep down the costs of the materials used in products as well as indirect materials. Also, in our procurement activities, we emphasize social responsibility in building partnerships with our suppliers.

## Procurement Policy

- Expand global procurement
- Reduce costs by promoting development purchasing activities
- Reduce all indirect material costs, including office supplies
- Promote CSR in procurement



\* International Procurement Office

A procurement base that discovers new leading suppliers in countries around the world and provides procurement services for Fuji Electric Group business sites.

## Major Initiatives in Fiscal 2013

### Expanding Global Procurement and Development Purchasing

With the aim of building an optimal procurement system on a global basis, Fuji Electric is working to expand its IPO function to Asia and Europe, following similar efforts in China and the United States.

In fiscal 2013, we put in place a development purchasing system that involves the procurement division from the development and design phase for new products. Furthermore, we cultivated new leading suppliers, and achieved the transition to local procurement in Thailand, where Fuji Electric is focused on increasing production in particular. We also increased the procurement of materials with specifications suited to each region, which helped to reduce costs.

Going forward, we will continue to use development purchasing to help lower costs and further strengthen each IPO function as we pursue optimal procurement on a global basis.



Members of the Procurement Division at Fuji Electric Manufacturing (Thailand) Co., Ltd.

### Promoting CSR in Procurement

Fuji Electric believes that it is important to aim to be a company with high social value by working with our suppliers to fulfill our corporate social responsibility (CSR). To this end, the procurement divisions carry out approaches aimed at preventing compliance violations or infringements on human rights (such as forced labor and child labor) throughout the entire supply chain.

Also, from the perspective of protecting the environment, we are proactively pursuing green procurement, whereby we procure materials with small environmental footprints from suppliers actively engaged in environmental protection.

In fiscal 2013, we enhanced our internal compliance with procurement-related laws and regulations. In Japan, we held

internal training sessions for the procurement division, as well as the sales, services, engineering and design divisions (a total of 1,372 people attended 41 sessions in all). Overseas, we established rules and standards to comply with the differing laws and regulations of each country.

We promoted understanding of CSR among our suppliers through procurement policy briefings and procurement seminars, which we hold at our business sites each year.

Going forward, we will continue to teach both employees and suppliers about CSR through training sessions and seminars, which we conduct globally. We will also expand the scope of the CSR Questionnaire for suppliers with whom we have large orders.

## Reduce Procurement Risk

As a part of our business continuity plan (BCP), we have formulated a procurement BCP which includes the following three aspects, 1) building a supplier damage information collection system, 2) securing multiple suppliers for key components; and 3) establishing alternate sites to carry out procurement operations.

In fiscal 2013, we built a supplier damage information collection system among procurement divisions in order to quickly comprehend the delivery status of procured materials in the event of a major disaster or other catastrophic event. Also, we are aiming to establish multiple suppliers for important components. When establishing multiple suppliers, we intend to select at least one overseas supplier in terms of reducing natural disaster risk and foreign currency risk. Furthermore, in order to receive the cooperation of suppliers of important components, we conducted a questionnaire of each supplier's business continuity plans and evaluated them.

Going forward, we will continue to enhance our procurement BCP by establishing sites that can take over procurement operations in the event of a disaster and achieving inventory flexibility across the Group, including suppliers.

\* Please refer to page 47 "Risk Management" for information on BCP initiatives.

## Conflict Minerals

Fuji Electric has agreed with the philosophy of the Japan Electronics and Information Technology Industries Association (JEITA) and has established a policy of not supporting acts that violate human rights through its suppliers. Based on this policy, we have worked to ban the use of minerals associated with the funding of armed insurgents, human trafficking, forced labor, child labor, abuse, war crimes, and other human rights violations. These minerals include tin, tantalum, tungsten, gold and its derivatives produced in the Democratic Republic of the Congo or areas of conflict in surrounding countries.

Based on the policies of the JEITA's Responsible Minerals Trade Working Group, in Fiscal 2013 Fuji Electric held training about human rights violations and conflict minerals for its procurement divisions, as well as the sales, services, technology, and design divisions at 12 sites in Japan (a total of 328 people attended the 12 training sessions).

Going forward, we will continue to work alongside our suppliers to fulfill our social responsibility by appropriately addressing the conflict minerals issue.

Voice

## A Message from a Supplier



**Takeshi Shinohara**  
Executive Officer, Sales Division  
**Akiko Yoshida**  
Sales Division, Sales Department 2  
DENKISEIKOSHA CO., LTD.

### CSR Training for Suppliers

DENKISEIKOSHA CO., LTD. is a manufacturer that provides peripheral devices for electric power supply equipment, mainly transformers and reactors.

A lot of emphasis is being placed on environmental regulations and other CSR initiatives these days. As part of our efforts to bolster our CSR program, we participate in the seminars that Fuji Electric holds twice a year at its Kobe Factory.

In addition to topics such as Fuji Electric's business plans and procurement policies, the seminars cover issues based on society's demands, including compliance, CSR, and BCP. At a seminar about conflict minerals, we learned that using minerals originating from conflict areas may indirectly support the human rights violations that occur in those areas. It was a great opportunity for us to identify and figure out the issues that our company should address going forward.

As we move ahead, we will aim to be a company that is trusted by society and that grows alongside our stakeholders, as we continue to provide excellent products and services. Furthermore, we will strive to comply with laws and regulations, protect the environment, and contribute to society as part of our corporate social responsibility.

# Feature 1: Contributing Solutions for Global Energy Issues

## 1 Stable Supply of Clean Energy and Efficient Energy Use

The environment surrounding energy is currently undergoing changes, both in Japan and throughout the world.

In Japan, following the introduction of the feed-in tariff fixed purchase price system aimed at popularizing and promoting renewable energy, mega solar power generation are now being built throughout the country, and the introduction of a large number of high-efficiency thermal power plants is being considered, with the aims of securing a stable supply of electricity and reducing environmental impact. The introduction of smart energy systems that use energy intelligently in order to utilize limited resources as efficiently as possible, is garnering a lot of attention.

Overseas, emerging countries are facing power shortages and must improve the quality of their electricity. In these countries, efforts are underway to build new power plants, as well as to bring facilities online that will stabilize electricity and help save energy.

Fuji Electric possesses a wealth of products and experience, starting with clean energy generation and smart projects that achieve effective energy use, and through our businesses we will continue to contribute to solving energy issues throughout the world.

### Fuji Electric's Clean Energy and Smart Conversion Businesses

#### Clean Energy

Helping Provide a Stable Supply of Electricity around the World with High-Efficiency, Low Environmental Impact, Highly-Reliable Power Plants

##### Thermal Power Generation Facilities

###### Special Features

- High efficiency power generation facilities such as ultra-supercritical pressure and GTCC power generation\* equipment

###### Track record

- Supplied over 366 generators to electricity companies and independent power producers (IPPs) (122 supplied to Japan)
  - Ultra supercritical pressure power generation equipment (Electric Power Development Co., Ltd. Isogo Thermal Power Plant)
  - GTCC power generation equipment (Okinawa Electric Power Company, Incorporated Yoshinoura Thermal Power Plant)

##### Fuel Cells

###### Special Features

- Highly efficient power generation equipment with low energy loss based on electro-chemical reaction

###### Track record

- Supplied fuel cell solutions for 48 customers' needs (41 in Japan and 5 in Germany)
  - Use of by-product gas from a steel refinery (hydrogen) (Kitakyushu Hydrogen Town)
  - Use of sewer gas (Yamagata Purification Center)
  - World's first demonstration trial for fire prevention using low-oxygen concentration air held in Germany

#### Renewable Energy

##### Geothermal Power Generation Facilities

[Case Example P. 29](#)

###### Special Features

- Anticorrosion technologies to protect facilities from corrosion and wear
- Remote maintenance support system
- Coverage of all sizes from large to small capacity systems

###### Track record

- Supplied 67 generators (5 in Japan), including the world's largest capacity system
- 40% share of the global market for the past 10 years

##### Hydropower generation equipment

###### Special Features

- Low-head hydropower generation technology
- Coverage of all sizes from large to small capacity systems

###### Track record

- 689 generators supplied to electric power companies (414 in Japan)

##### Solar / Wind Power Generation Systems

[Case Example P. 27](#)

###### Special Features

- Technical expertise and experience to undertake contracts for entire systems
- Highly efficient power conditioners for converting generated electricity to alternating current for efficient transmission
- Power system stabilizers for controlling the load on electrical systems

###### Track record

- Miyama Joint Power Station Miyama Takayanagi No. 1 / No. 2 power station (total 4 MW)
- Idemitsu Kosan Co., Ltd. Moji Power Plant (2.9 MW)
- Okinawa Electric Power Company, Incorporated Ogimi wind power plant (4 MW)
- Fuji Green Power Co., Ltd. Nishime wind power plant (1.9 MW)

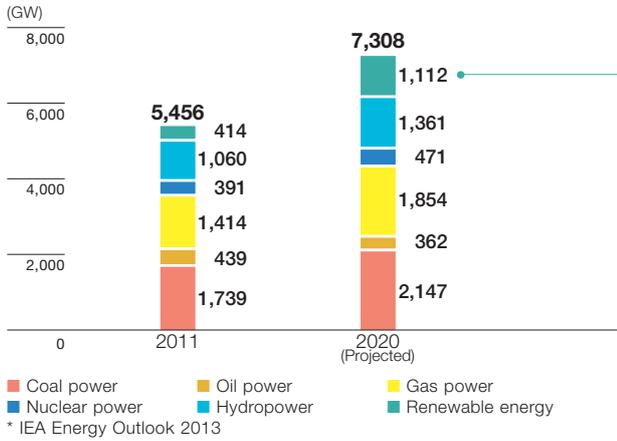
others

\* Gas turbine combined cycle power generation

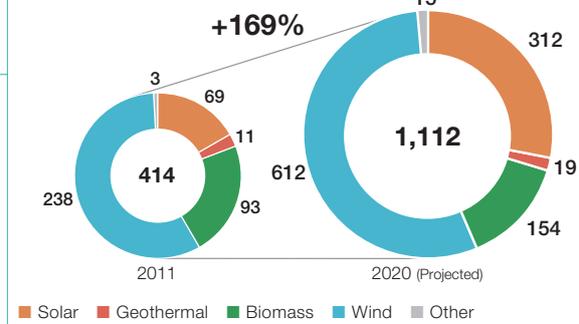


## Changes in the Energy Environment

### Global Power Generation Capacity



### Expand Introduction of Renewable Energy



## Adoption of Smart Energy Systems

Contributing to Efficient Energy Use by Offering Total Solutions, from the Energy Supply Side to the Demand Side

### Special Features

We offer a wide variety of products and technologies to provide total packages tailored to customers' needs. Our offerings include distributed power sources, energy management systems that enable precise energy control, power stabilization equipment, and energy-saving devices that reduce environmental impact.

#### Smart Community Micro Grid

Optimizing energy supply for countries, local governments, and communities

Case Example  
P. 28

#### Track record and case examples

- Smart communities (Kita Kyushu, Kamaishi, Aizuwakamatsu)
- Microgrids for remote islands (Kingdom of Tonga, six islands in Kyushu, and three islands in Okinawa)
- Microgrids for ports, and agricultural and fishing villages (Minamata)
- others



#### Smart Industrial Parks

Reduce amount of energy use and stabilize power supply for the industrial park

Case Example  
P. 30

#### Track record and case examples

- Indonesia (Surabaya Industrial Park, Suryacipta City of Industry)
- Thailand (Prachinburi Industrial Park)
- Malaysia (Iskandar Industrial Park)
- Saudi Arabia (Modon Industrial Park)
- others

#### Smart Factories, Stores, Buildings

Reducing the energy usage and environmental impact of factories and stores

#### Track record and case examples

- Fuji Electric Mie Factory and Yamanashi Factory
- AEON Mall Yahata Higashi
- Familymart (Kitakyushu)
- others



## Feature 1: Contributing Solutions for Global Energy Issues

### Initiatives in Japan

Japan has an energy self-sufficiency rate of 4%. Partly to increase this ratio, in 2012 Japanese government implemented a feed-in tariff fixed purchase price system aimed at popularizing and promoting renewable energy. Since then, a total of 1,110 mega solar power generation representing 2.1 million kW of power have come online, and there are plans to build another 7,700 projects, with a total of 35 million kW in power generating capacity.\* In addition, promoting the use of renewable energy and effective utilization of limited resources, the government and private-sector companies are working together on demonstration projects in order to create smart energy systems for communities and facilities alike.

Fuji Electric is helping to make energy cleaner and smarter by supporting the introduction of mega solar power generation and participating in smart community demonstration projects taking place in many areas.

\* Source: Ministry of Economy, Trade and Industry (As of March 31, 2014)

#### Case Example

Idemitsu Kosan Co., Ltd. Moji Power Plant

#### Clean Energy

### Supporting High Efficiency and Long-Term, Stable Operation in Mega Solar Power Generation

In addition to its core business areas including fuel oil and petrochemicals, Idemitsu Kosan Co., Ltd. is also focusing its efforts in the renewable energy sector, which has a low environmental impact. The introduction of the feed-in tariff fixed purchase price system presented an opportunity for the company to enter the solar power generation business, and its Moji Power Plant and Himeji Power Station are currently generating power. Efficient power generation and stable operation over the long time span of at least 20 years are important in the solar power generation business.

Fuji Electric was selected as the sole EPC\* contractor for the construction of the Moji Power Plant, which came online in November 2013, and completed the work under a tight deadline. With the construction complete, we are also providing ongoing services. Power conditioners manufactured by Fuji Electric are the heart of the mega solar power generation. Our power conditioners featuring industry-leading high efficiencies helped increase the overall power generation efficiency.

Moreover, in addition to our local service platform, we supplied a remote monitoring system to the customer's head office in Tokyo, allowing the company to check the power station's operating status as a part of our effort to support the long-term, stable operation of the solar power generation.

\* Contracting the full range of operations, from engineering to production and procurement of equipment, installation, and testing



Idemitsu Kosan Moji Power Plant



Power conditioners in an outdoor container at the Moji Power Plant

#### Voice

### A Message from a Customer

**Hideaki Mimaki**  
Deputy Manager of the Renewable and  
New Energy Department  
Idemitsu Kosan Co., Ltd.

After performing a careful analysis to make sure that we didn't lose hours of sunlight due to connecting buildings, Fuji Electric handled everything, from engineering to construction, in just six months. I took a tour of the power conditioner production line, and was impressed by the high quality. Going forward, I hope that Fuji Electric will provide ongoing service for many years and support the plant's stable operation.

## Case Example

## Kitakyushu Smart Community

## Adoption of Smart Energy Systems

## Optimizing Energy Supply and Demand across the Entire Community

Kitakyushu City in Fukuoka Prefecture is one of the four areas selected from throughout Japan by the Ministry of Economy, Trade and Industry for smart community pilot projects. As one of the companies managing the project, Fuji Electric introduced facilities starting in fiscal 2010, and started a variety of testing from fiscal 2012.

The defining feature of the smart community is the Cluster Energy Management System (CEMS). It optimally manages distributed power sources, including solar power generation, wind power generation, and electric power storage systems, and provides the total control needed to efficiently produce and use electricity.

We are introducing proprietary management systems, control instruments and smart meters as energy management systems (EMS) for electricity users in the community, including factories, hospitals, convenience stores, and condominium buildings. In addition to visualizing and reducing energy usage, we were the first in Japan to trial a demand

response system in which users link with a cluster energy management system (CEMS) to efficiently use the community's overall energy. One example is dynamic pricing, in which the cost of electricity changes according to the supply and demand predictions based on local weather forecasts. Furthermore, as emergency energy reserves to be used during natural disasters and other times of emergency, we are building an electricity storage system using Fuji Electric's fuel cells and other equipment.

As we await the completion of the trial at the end of fiscal 2014, we are working to commercialize the achievements and knowledge gained through the project.

In May 2014, the International Smart Grid Action Network (ISGAN), the smart grid-related implementation body of the International Energy Agency (IEA), gave the ISGAN AWARD 2014 to excellent performing projects around the world. The Kitakyushu Smart Community Project was the only project in Asia ranked in the Top 10.



Cluster Energy Management System (CEMS)

### Column A Smart Meter Essential for the Efficient Use of Energy

Smart meters are set to become key components in realizing effective energy use. Smart meters are equipped with communication functionality to allow the supply side (power companies, etc.) and the user side (commercial facilities, factories, homes, etc.) to share information about electricity use in real time.

In 2011, Fuji Electric and General Electric Company of the U.S. established a joint venture called GE Fuji Meter Co., Ltd. The company has built up a reputation for product quality by providing smart meters to the smart community pilot project in Kitakyushu City. GE Fuji Meter is working to reduce costs and boost its supply capacity, including building a new automated production line to respond to the increase in demand.



## Feature 1: Contributing Solutions for Global Energy Issues

# Initiatives in Indonesia and Other Parts of Asia

In Indonesia, demand for electricity continues to increase as the country's economy expands and its population grows. There are a number of energy-related challenges to be overcome, including power outages and voltage drops due to shortage of power generation capacity, insufficient excess capacity in transmission and distribution equipment, as well as an inadequate power grid. In response, the government of Indonesia has established a long-term policy of bolstering energy supply and diversifying energy sources, as well as working to stabilize the quality of electricity.

Fuji Electric is helping to improve the electric power situation in Indonesia, leveraging its track record as the leading manufacturer of geothermal power stations and the know-how in energy management that it has accumulated in Japan.

### Case Example

### Indonesia Geothermal Power Station

#### Clean Energy

## Supporting Energy Demand in Indonesia with Geothermal Power



Wayang Windu Geothermal Power Station (Indonesia)

The Indonesian government is promoting an energy diversification policy in response to the increase in demand for electric power accompanying the country's rapid economic growth as well as to protect the environment. As a part of this policy, the government has set a target of increasing the amount of geothermal power produced to 9,500 MW by the year 2025.

Currently, the total generating capacity of the geothermal power stations planned or installed in Indonesia is approximately 1,400 MW, and roughly one-half (662 MW) is supplied by Fuji Electric. In fiscal 2013, we received an order to build the Unit 5 (35 MW) at the Kamojang geothermal power station, and we are now in the process of manufacturing the facility with the aim of bringing it online in July 2015.

Due to the fact that corrosive geothermal steam is used in geothermal power generation, corrosion, wear, impurity deposits, and other unique issues must be dealt with. Fuji Electric has strong technological capabilities and engineering know-how in steam turbines accumulated over 50 years, as well as corrosion-resistant technologies based on its wealth of experience with geothermal power. These have enabled us to offer highly-reliable and long-lasting geothermal power facilities. Also, with an Operation Support Center capable of checking the operating status of geothermal power stations around the world, we are able to monitor plants' operating status, including steam volume and power generation capacity as well as predict the future status of equipment, make maintenance suggestions, and offer other types of support.

Going forward, we will continue our activities aimed at receiving orders for new geothermal power stations, and contribute to Indonesia's effort to diversify its energy mix to support its economy.

#### Fuji Electric — A Leading Geothermal Power Plant Manufacturer

Fuji Electric is one of the three Japanese manufacturers that account for approximately 70% of the world's geothermal power generating capacity. We have the top share of the global market, accounting for roughly 40% of the geothermal power delivered over the past 10 years.

#### Fuji Electric has Supplied 67 Geothermal Power Plants around the World



**Case Example** **Suryacipta City of Industry**

**Adoption of Smart Energy Systems**

**Stable Supply of Energy to an Industrial Park**

Poor power quality in electric power infrastructure, such as power outage and voltage dip, cause major damage to factories. Securing a stable supply and improving the quality of electric power are therefore priority issues for the development of industrial parks.

Fuji Electric and several other Japanese companies have been contracted to work on the smart community pilot project at an industrial park on the island of Java in Indonesia. The project is being jointly conducted by NEDO\* and Indonesia's Ministry of Energy and Mineral Resources. Preparations are underway for the start of the pilot project in June 2015.

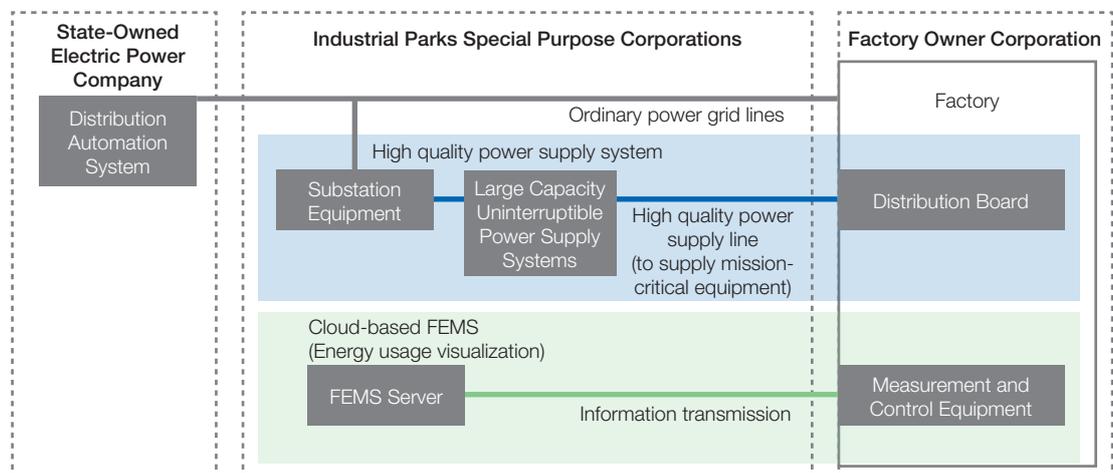
Fuji Electric is responsible for the distribution automation system, which will quickly and automatically restore electricity in the event of a power outage, the high-quality electricity supply system, which uses large capacity uninterruptible power supply systems to protect important equipment from any trouble such as power outages or

instantaneous voltage drops, and a cloud-computing based factory energy management system (FEMS), which visualizes factory energy usage, helping to save energy and reduce costs. We will leverage the technologies and knowledge that we have cultivated in Japan, including through the pilot project in Kitakyushu City, to contribute to the growth of Indonesia's economy and to the reduction of its carbon emissions.

Securing a stable supply of electric power is a common issue at industrial parks in emerging countries throughout Asia and the world. Through this pilot project, we will develop technologies and systems that will allow us to meet such needs in a broader context. Using these systems, we will propose ways to ensure stable supplies of electric power and save energy for industrial parks on a case-by-case basis, according to actual local conditions.

\* New Energy and Industrial Technology Development Organization

**Systems Managed by Fuji Electric**



Suryacipta City of Industry Entrance



Industrial park substation



Large capacity uninterruptible power supply system

## Feature 2: Our New Business in Food and Beverage Distribution

# 2

### Contributing to the Safety and Security of Food with Heating and Cooling Technologies

With the aging society and the falling birthrate, the environment surrounding Japanese agriculture is changing, and there is a growing awareness of food safety and security. As new needs emerge in the food and beverage distribution market, new services and business formats are also appearing in response.

Using its strengths in electric and cooling technologies, we are working to expand its business scope in food and beverage distribution from stores to production areas, food processing, storage and transportation, and yet further into the transportation and delivery sector which connects all of these areas. This is all part of our aim to provide safety and security, freshness, and flavor.

#### Food and Beverage Distribution Market

**Production areas**



Distribution

**Food processing**



Distribution

**Storage and transportation**



Distribution

**Stores**



#### Solutions provided by Fuji Electric

##### Crop Production Facilities

We are building plant factories to increase the reliability of production areas and boost work efficiency.



##### Energy Management

We make the energy used by food processing plants visible and provide energy savings.



##### Warehouses for refrigerated and frozen foods

We support distribution systems with our cooling technology and our experience and expertise in warehouse design and installation.



##### Distribution System

We build distribution systems including warehouse management and automated cargo sorting with our IT-integrated system controls.



##### Smart Stores

We create energy-saving stores leveraging our electric and cooling technologies. Examples include store EMS\* and energy-saving showcases.



\* Energy Management System

**Refrigerated storage container**

The D-BOX mobile refrigerated storage container enables refrigerated distribution management.



Case Example

Food and Beverage Distribution

New Business

## Safely and Reliably Delivering Fresh Food with Comprehensive Constant-Temperature Distribution Management

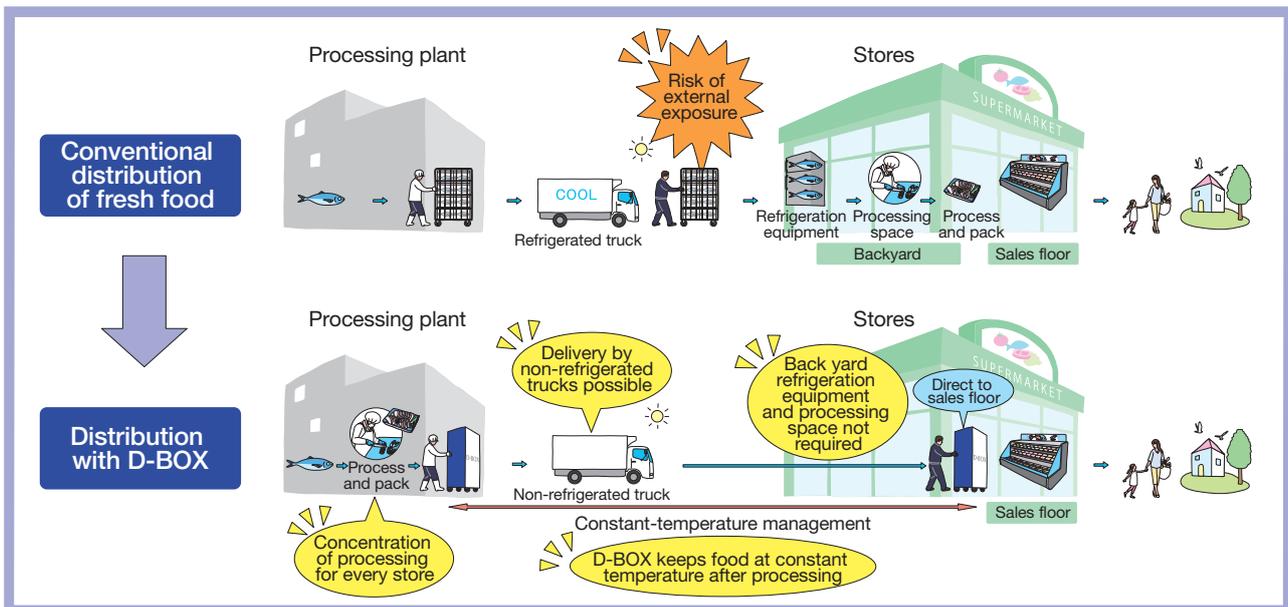
In order to maintain the quality of fresh foods such as meat, agricultural products and seafood, it is important to keep foods at a constant temperature throughout the food distribution process, from the production areas to the stores and ultimately to the sales areas.

The D-BOX, a mobile refrigerated storage container developed by Fuji Electric, uses a built-in refrigerator and the ultimate insulation capabilities to keep food at a constant temperature throughout the food distribution chain. D-BOX keeps foods fresh by minimizing the risk of contact with outside air, and features a system to track the temperature history inside the container to verify if the temperature has been controlled appropriately. This temperature history is centrally managed via cloud computing, allowing customers to use this service in their marketing strategies.

D-BOX enables fresh foods to be processed in bulk at processing plants before being transported directly to sales areas at a constant low temperature. This enables stores to save the equipment and personnel costs associated with preparation, as well as to increase the floor space for sales. With this constant temperature distribution management system, Fuji Electric will continue to contribute to people's lives by increasing the safety and reliability of fresh foods.



\* D-BOX. Three temperature settings include chilled (about 5°C), frozen (about -18°C), and room temperature



### A Message from a Product Planner



**Yoko Horiuchi**  
 Manager of the Global Food Promotion Department  
 Distribution System Division  
 Food and Beverage Distribution Business Group

D-BOX maintains temperatures correctly and includes a traceability function to track the temperature inside the container as well as to log the opening and closing of the container door. These innovations enable the D-BOX to contribute not only to enhanced food safety and security, but also to society in a number of other ways. These include reducing energy consumption by changing the food processing and distribution process, alleviating the shortage of truck drivers by consolidating delivery, and reducing food and material waste loss.

The D-BOX is a tool that will improve logistics in the food and beverage distribution sector, and I am confident that a wide range of customers in sectors including retail, wholesale, and logistics, will make good use of it.

# CSR Activities

## Environment

Efforts to protect the global environment are a key management issue for Fuji Electric, and with the establishment of our Basic Environmental Protection Policy, we continue to promote environmental management with the goal of contributing to global environmental protection through our business activities.

In fiscal 2012, we began the Smart Factory Initiative to optimize energy usage by coordinating electrical and thermal energy technologies with production planning. In fiscal 2013, we completed construction of systems at four model factories (Kawasaki, Tokyo, Yamanashi and Mie), verifying Smart Factory Initiative benefits and also deploying similar measures at other factories in Japan.



Solar power generation system introduced at a Smart Factory Initiative model factory (Mie Factory)

### Basic Environmental Protection Policy

1. Offering products and technologies that contribute to global environmental protection
2. Reduction of environmental burden throughout product life cycles
3. Reduction of environmental burden in business activities
4. Compliance with laws, regulations, and standards
5. Establishment of environment management systems and continuous improvements of the systems
6. Improvement of employees' environmental awareness and social contribution
7. Promotion of communication

(Revised in 2003)

## Environmental Vision 2020

Global warming, resource depletion, and other environmental issues are key challenges for the future of humanity.

To tackle these issues, Fuji Electric seeks to enable all employees to engage steadily in environmental efforts each day. To this end, we established Environmental Vision 2020 to guide our activities in keeping with the Basic Environmental Protection Policy.

This vision is centered around three themes of stopping global warming, creating a recycling-oriented society, and meeting our corporate social responsibilities. In addition to reducing the environmental load of our own production activities, we also seek to achieve a sustainable society by providing products and technologies that leverage our strengths in energy technologies.

Our main initiatives under the theme of stopping global warming are to reduce CO<sub>2</sub> emissions during production by 20% in fiscal 2020 compared with the fiscal 2006 level of

381,000 tons, while reducing society's CO<sub>2</sub> emissions by 17 million tons by expanding sales of energy-saving and energy-creating products.

Under the theme of creating a recycling-oriented society, our key measures with respect to production resources are to lower final disposal rates by reducing waste and recycling resources. For water resources, we are endeavoring to cut the use of water resource inputs per unit of production. We are particularly stepping up efforts to increase water reuse rates at production facilities that consume a lot of water and at overseas facilities where there are significant water supply risks. In this report, we present our main initiatives to stop global warming and to create a recycling-oriented society\*.

\* Unless otherwise specified, environmental activity targets and results in this report encompass domestic consolidated subsidiaries and overseas consolidated production subsidiaries.



# Fiscal 2013 Efforts to Stop Global Warming

## Reducing CO<sub>2</sub> during Production

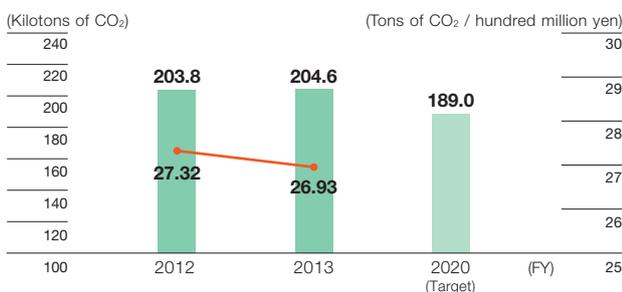
In Japan, we started activities in fiscal 2012 to conserve energy and curb energy costs. In fiscal 2013, we achieved an effective reduction in energy expenses of 11% by saving energy in facilities and equipment operations, upgrading to higher-efficiency facilities, and installing solar power generation systems.

In fiscal 2013, CO<sub>2</sub> emissions from production were 204,600 tons, and we achieved our fiscal 2013 target of 212,000 tons. Emissions increased slightly from the previous year, owing to higher production volumes; however, the

increase was offset by energy conservation efforts that enabled us to cut CO<sub>2</sub> emissions by around 7,500 tons.

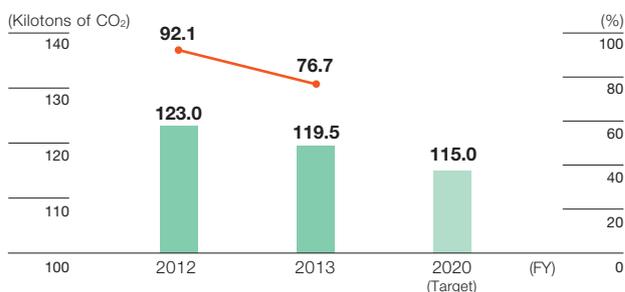
Overseas, we pushed ahead with such energy-saving activities as deploying solar power generation systems and advanced energy monitoring systems at our new factory in Thailand and other energy-saving activities at our factory in Shenzhen, China. As a result, our CO<sub>2</sub> emissions were 119,500 tons, far below the targeted 125,000 tons for fiscal 2013.

CO<sub>2</sub> Emissions and CO<sub>2</sub> Emissions per Unit of Sales in Japan



\* Emissions per unit of sales is calculated by dividing the CO<sub>2</sub> emissions amount by consolidated net sales.

Overseas CO<sub>2</sub> Emissions and CO<sub>2</sub> Emissions per Unit of Production



\* Emissions per Unit of Production is the amount of CO<sub>2</sub> emitted by production volume (presented taking the value for FY2006 to be 100).

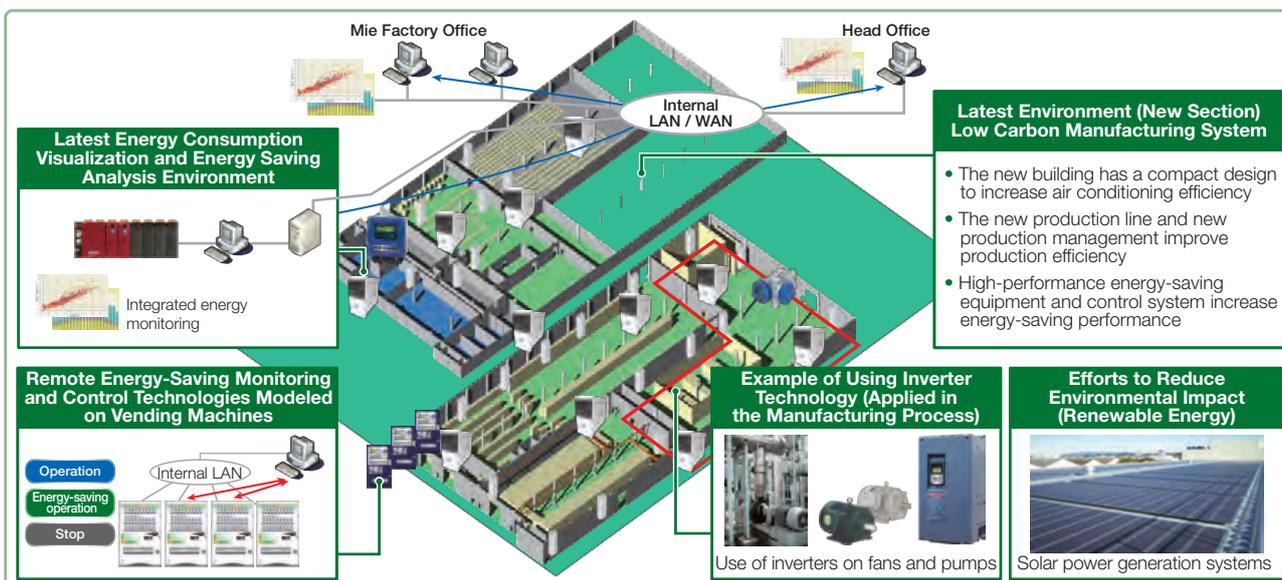
## Case Example Fuji Electric Mie Factory

### Conserving Energy through the Smart Factory Initiative

We are undertaking a Smart Factory Initiative at the Mie Factory, which is our core production site for vending machines. As well as attaining high efficiency in our equipment through the application of inverters, in fiscal 2013, we established the foundations of a smart factory by installing solar power generation systems, fuel cells, and systems to monitor overall plant energy usage. The energy monitoring systems integrate production management systems with

information and control the supply of energy to facilities according to changes in production conditions to minimize energy consumption.

We built a system to monitor the power consumption and operating statuses of around 30 vending machines within the plant and optimized energy-saving settings for the differing usage environments of each workplace as part of efforts to minimize electricity consumption.



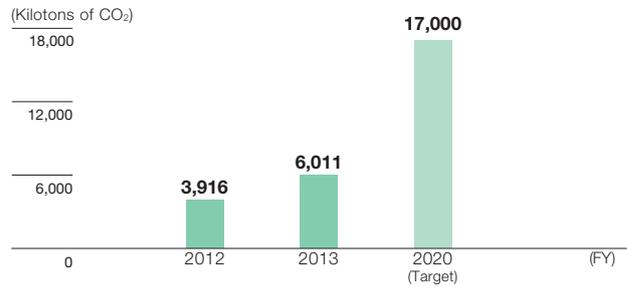
Main measures of the Smart Factory Initiative at the Mie Factory (Example of the new building)

## Reducing Society's CO<sub>2</sub> Emissions through Products

Fuji Electric aims to help reduce society's CO<sub>2</sub> emissions by innovating electrical and thermal energy technologies.

In fiscal 2013, the contribution to CO<sub>2</sub> emission reductions from products was up 2,095,000 tons from fiscal 2012 to 6,011,000 tons. This reflected expanded sales of power conditioners and solar power generation systems.

### Reduced CO<sub>2</sub> Emissions through Products



\* Amount of CO<sub>2</sub> reduction based on one year of operation of products shipped for each fiscal year after fiscal 2009.

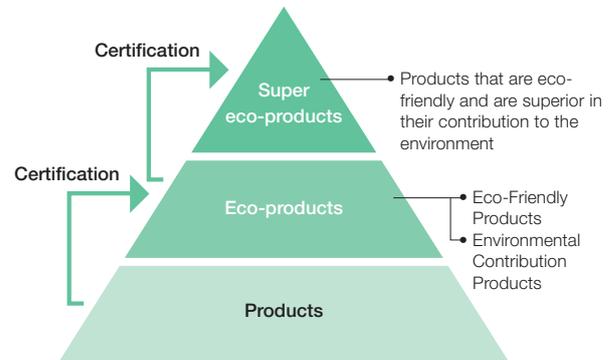
\* Calculated making reference to the quantification method of GHG emission reductions stipulated in the Electrical and Electronics Industries' "Action Plan for Commitment to a Low-Carbon Society."

### Eco-Product Certification System

Fuji Electric is developing eco-friendly products, which enhance energy efficiency and reduce the use of chemical substances, and environmental contribution products, which help reduce society's overall impact on the environment. We are continuing to promote the spread of these products.

In this initiative, Fuji Electric has established a common Fuji Electric Eco-Product Certification System. We evaluate the degree of product eco-friendliness on a Company-wide platform. Products meeting fixed criteria are certified as "eco-products," while those that are at the top of the industry for environmental benefit and contribution, and which are recognized outside the Company at the national level for environmental superiority are labeled "super eco-products."

In fiscal 2013, 30 offerings were certified as eco-products, while another 6 received certification as super eco-products. As a result, we now have 157 eco-products and 16 super eco-products.



**Eco-Friendly Products:** Products that have a reduced environmental impact over the entire product lifecycle. These products are superior to traditional products in at least four of six standard areas, including energy conservation, resource conservation, and recyclability.

**Environmental Contribution Products:** Products that contribute to environmental preservation during use. Products that contribute to the environment by utilizing natural energy or information and communication technology.

### Super Eco-Products

#### Energy-Efficient Vending Machines Equipped with Hybrid Heat Pumps

Environmentally friendly vending machines are becoming increasingly mainstream. One type is heat pump vending machines that harness heat produced when cooling beverages to efficiently and simultaneously cool and heat.

Fuji Electric's hybrid heat pump system employs an innovative heat-exchange technology to utilize even the heat in the outside air for heating. The system efficiently switches with optimal timing between using the heat generated within the vending machine from cooling beverages and using the heat from the outside air.

Our hybrid heat pump vending machines consume 49% less electricity annually than conventional models made in 2006.



## Fiscal 2013 Initiatives to Create a Recycling-Oriented Society

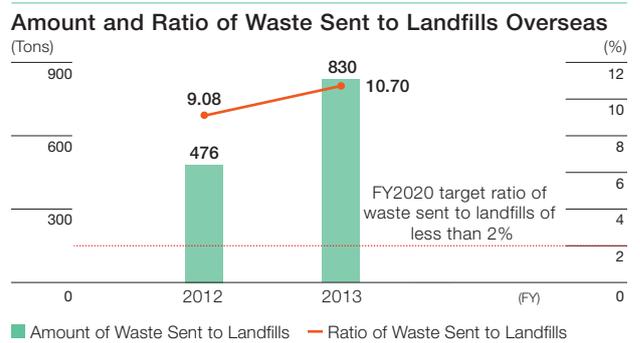
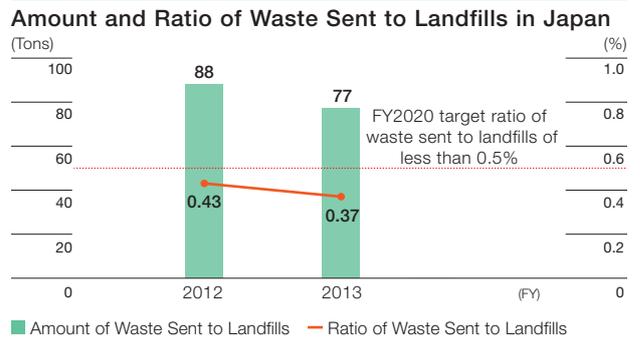
### Waste Reduction

In addition to reducing waste, Fuji Electric works to promote resource recycling, with a focus on attaining the goal of zero waste emissions — a ratio of waste sent to landfills to total waste of no more than 1%.

In Japan, waste recycling enabled Fuji Electric to achieve its goal of zero waste in fiscal 2004, and we have continued to meet our targets in the years since.

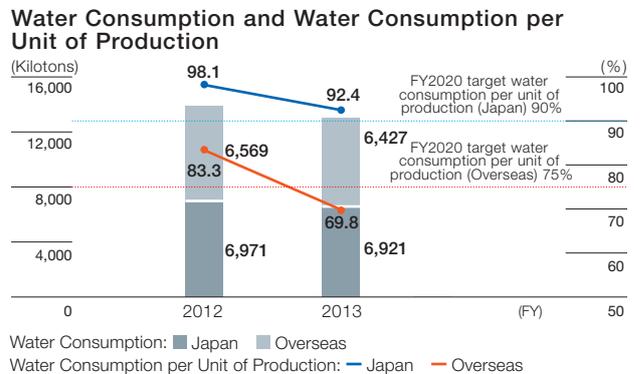
Furthermore, in fiscal 2013, we revised this target to “under 0.5%” and worked to strengthen our efforts in resource recycling. We achieved this target with a ratio of waste sent to landfills of 0.37%.

In addition, we have begun promoting zero emission activities at our overseas factories. In fiscal 2013, we added two overseas factories to the scope for these activities (Fuji Electric France S.A.S. and Dalian Fuji Bingshan Vending Machine Co., Ltd.), which increased both the amount and ratio of waste sent to landfill. Worldwide, waste treatment and disposal and resource recycling treatment infrastructure is far less advanced than in Japan, particularly in emerging countries. At its overseas operations, Fuji Electric is working to bring the ratio of waste sent to landfills down to 6% or less in fiscal 2014.



### Efficient Use of Water Resources

In view of the problem of global water resource depletion and in addition to its efforts to comply with wastewater quality requirements and reduce wastewater, Fuji Electric launched an initiative aimed at more efficient use of water resources. Using fiscal 2010 levels as a standard, this initiative aims to reduce both total water intake and base units of consumption at our domestic manufacturing sites by 1% each, with the goal of reducing those levels by 10% in fiscal 2020. In fiscal 2013, we set an overseas target of 25% reduction in water consumption per unit of production from fiscal 2011 levels by fiscal 2020.



\* Water consumption per unit of production (For Japan, presenting FY2010 level as 100; for overseas, presenting FY2011 level as 100).

### Case Example

#### Fuji Electric Tsugaru Semiconductor Co., Ltd.

### Initiatives to Reduce the Amount of Industrial Waste

Wastewater from semiconductor production is treated by using a wastewater treatment system to coagulate and detoxify sediments before discharging the water into a river. We dehydrate wastewater sludge from the coagulation-sedimentation process to recycle it into cement materials.

Fuji Electric Tsugaru Semiconductor Co., Ltd., which handles front-end processes for semiconductor products, has maintained zero emissions since fiscal 2000 by recycling wastes. The company has been reducing the actual volume of waste generated after noting that wastewater sludge accounted for 79% of generated waste.

The company reviewed its treatment methods in fiscal 2004 as part of its wastewater sludge reduction initiatives. It started to improve its treatment processes in fiscal 2011 and cut sludge by 59% in fiscal 2013 compared to fiscal 2010 levels.

These wastewater sludge reduction efforts have also enabled the company to decrease usage of chemicals needed in coagulation-sedimentation processes.



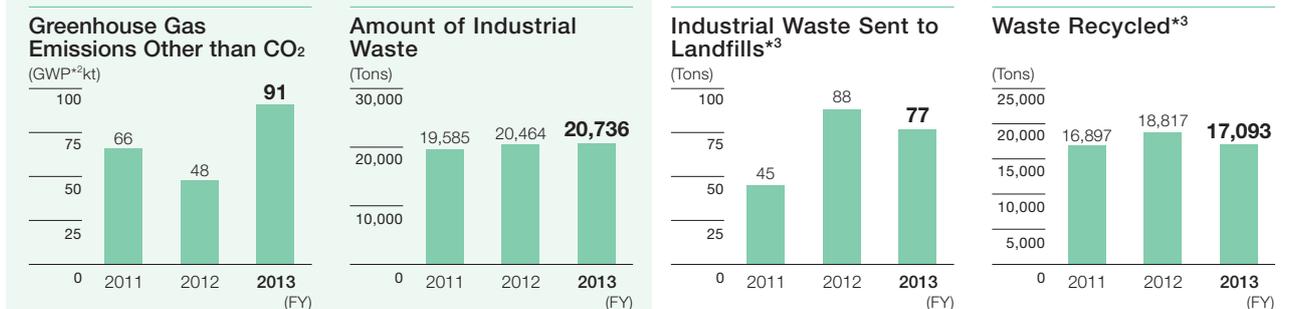
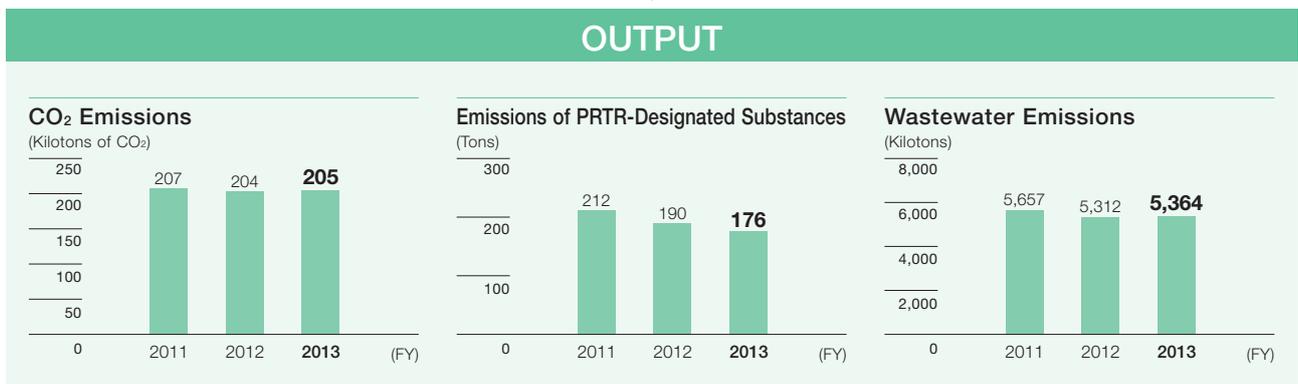
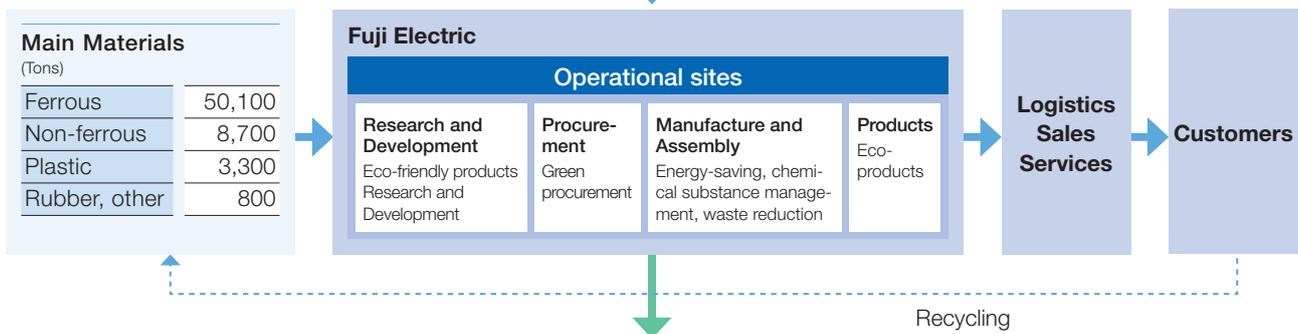
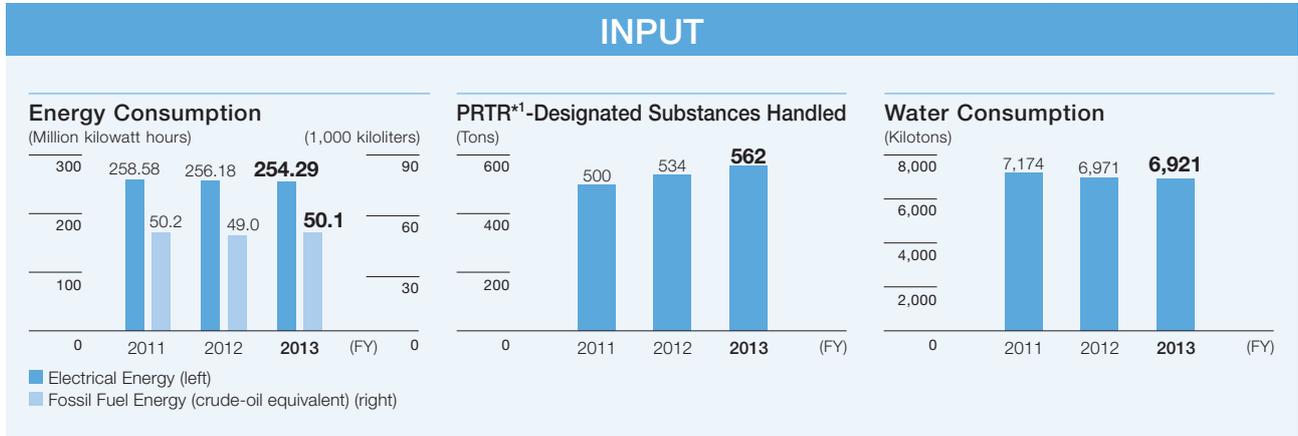
Kazuaki Kimura, General Affairs Department (Environmental Activities Secretariat) (right)  
Masato Honda, Facilities Department (left)

## Mapping the Interplay between Business Activities and Environmental Impact

Fuji Electric is constantly working toward more efficient use of resources and energy and the reduction of waste throughout all of its business activities. We are also

proactive in our efforts to be more environmentally conscious across the entire product and service lifecycle.

Scope: Production Bases in Japan



#### Emissions of Other Substances with Environmental Impact (Tons)

NO <sub>x</sub>	4.2	COD <sup>*4</sup>	3.1
SO <sub>x</sub>	0.4	Nitrogen	2.4
BOD <sup>*4</sup>	2.0	Phosphorus	0.2

\*1 Pollutant Release and Transfer Register Law

\*2 GWP: Global Warming Potential. A measure of the relative greenhouse effect caused by a gas, compared with the effect of CO<sub>2</sub>, which is assigned a GWP value of 1.

\*3 The amount of waste sent to landfills and the amount of waste recycled are internal figures from the amount of waste generated.

\*4 An index indicating the degree of water pollution

BOD: Biological Oxygen Demand  
COD: Chemical Oxygen Demand

## Human Resources

Fuji Electric recognizes that human resources are the prime driver of its competitive edge, and actively cultivates each of its people to fully harness their potential.

We have made diversity a top priority in our personnel strategy, aiming to incorporate an array of values and perspectives so we can strengthen our competitiveness and expand business globally. At the same time, we focus on creating work environments suited for globalization, where we respect human rights and prioritize health and safety.



A Role Model Seminar

## Human Resource Development

We educate and train our people extensively to cultivate professionalism so we can reinforce our global competitiveness and realize our corporate philosophy and management policies. As well as individual training, we also cultivate strong line leaders to leverage our collective organizational strengths and develop future managers from an early stage.

In fiscal 2013, we reviewed our general manager training, and rolled out a level-specific curriculum covering personal growth and team building to enhance management communication and decision-making skills.

### Major Initiatives in Fiscal 2013

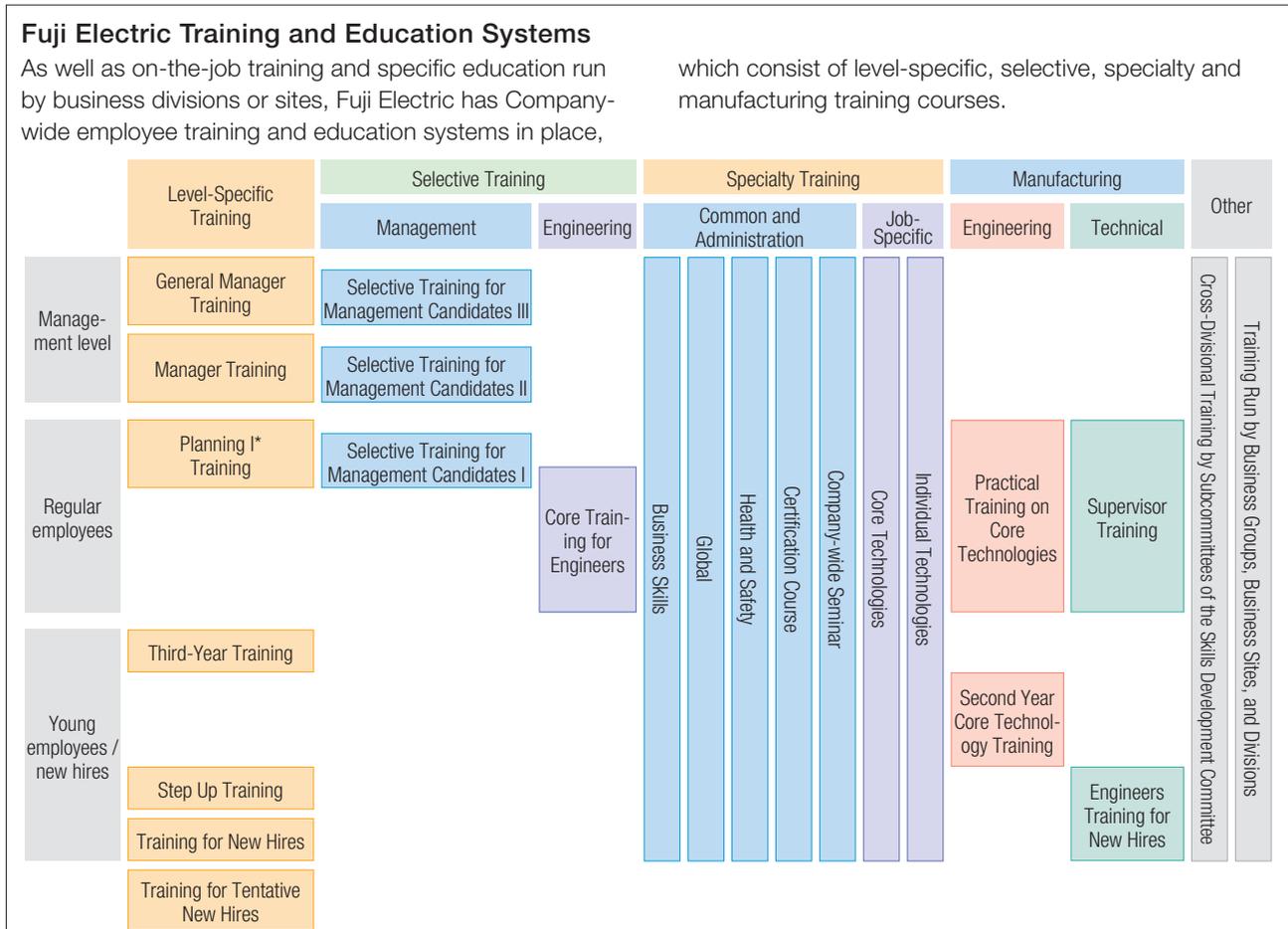
#### Level-Specific Training

After an employee completes their third year of service, or when they are elevated to a managerial or general manager position, we provide level-specific education to help them build strong teams.

#### Selective Training

We undertake selective training to identify individuals as prospective executives and divisional leaders from an early stage and continue cultivating them Company-wide.

In fiscal 2013, we conducted training to cultivate divisional and overseas business site managers. We plan to extend selective training courses to individuals in their 30s and actively cultivate management personnel to contribute to ongoing business development.



\* Planning I: Assistant manager level

## Enabling Women to Play Active Roles

Fuji Electric engages in diversity initiatives in keeping with its management policy, “maximize our strengths as a team, respecting employees’ diverse ambition.”

Particularly in Japan, one priority is to enable women to play active roles. As affirmative action, we actively hire women with science and engineering skills, provide career development support, and offer assistance for returning to work after childcare leave. We have also taken steps to reform our workplace culture by including awareness-raising in our level-specific training program.

### Female Employees and Managers

	FY2012	FY2013	FY2014
Employees	14,831	14,472	<b>14,418</b>
Number of female employees (full time)	1,743	1,745	<b>1,754</b>
Ratio of female employees	11.8%	12.1%	<b>12.2%</b>
Number of females in management positions*	33	40	<b>42</b>
Ratio of females in management positions*	1.4%	1.5%	<b>1.6%</b>

\* Management positions: Manager rank or higher.

\* Data collected from: Fuji Electric, Fuji Electric FA Components & Systems, Fuji Office & Life Service, Fuji Electric IT Center, Fuji Electric Finance and Accounting Support, Fuji Architects and Engineering, Fuji Electric Frontier.

\* For fiscal 2012, as of June; for fiscal 2013 onward, as of April

## Promoting Work-Life Balance

We are strengthening initiatives in Japan to help employees achieve work-life balance by creating working environments that are more conducive to diversity and that enable people to fulfill their potential. We have positioned work-style innovation and the enhancement of a support system to provide fulfillment in and outside of work as key concerns of management to ensure that people can focus on their jobs while at work and rest properly outside of work. Management and labor representatives deliberate on these issues, and we are endeavoring to enhance our programs and corporate culture.

## Promoting Employment of People with Disabilities

As of June 2014, employees with disabilities made up 2.15% of our workforce, exceeding Japan’s legally mandated ratio of 2.0%. This was in keeping with our commitment to cultivating and expanding work opportunities for people with disabilities as much as possible. We established Fuji Electric Frontier Co., Ltd. as a special-purpose subsidiary in Japan to expand employment opportunities for intellectually challenged individuals and others with disabilities.

### Major Initiatives in Fiscal 2013

Established nearly two decades ago, this subsidiary added 10 new people at eight business sites, raising the number of employees with disabilities to 100. In this subsidiary, we emphasize the independence of our employees as professionals and, while entrusting them to handle cleaning,

### Major Initiatives in Fiscal 2013

#### Recruiting Activities

Project for Recruiting Women with Science and Engineering Backgrounds	We organized a project with female employees with science and engineering backgrounds. Under this initiative, we conducted seminars featuring talks from working women to convey specifics about career development within our organization, as part of our activities to recruit new employees.
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#### Career Development Support

Management Skills Training	To further the ambitions of women seeking to become managers, we conduct training to address such issues as current and future careers and skills development.
Sister System	Under this system, female employees act as advisors to younger women and help them to balance their career and family commitments.
Role Model Seminars	We responded to a concern among some female workers that there were few senior colleagues with similar goals by instituting role model seminars to foster the career awareness of young employees.

#### Helping Employees Return to Work after Childcare Leave

Pair Work Training	We conduct training to help people balance work and family commitments and maximize performance within the Company by pairing returning employees and their managers to share their thinking about work and career aspirations.
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#### Reforming Workplace Culture

e-Learning	We conduct e-learning courses for regular employees to help them understand the importance of diversity.
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### Major Initiatives in Fiscal 2013

We undertook site-specific activities to improve the quality of work by taking stock of our operations and visualizing them, while conducting seminars and other events to raise employees’ awareness about the importance of work-life balance. We encouraged all employees to take five consecutive days of leave to help them refresh their minds and bodies, to promote a balanced approach to working, and to target workplace efficiency as a team.

We will bolster our leave programs to encourage men to play a greater role in childcare.

in-house mail services and other tasks, we are committed to cultivating their individual capabilities, including expanding their roles to manufacturing and other sites.

Employees with disabilities perform the same tasks as other colleagues at several locations. At Fukiage and Mie Factory, for example, they assemble vending machine or magnetic switch components. At the Kawasaki Factory, they polish turbine blades, perform die stamping operations, operate forklifts, and handle other work.

Fuji Electric Frontier conducts facility tours for the parents of disabled students and relevant organizations and accepts interns from special needs schools as part of a commitment to enhancing the social participation of as many people as possible.

## Respect for Human Rights

We are creating a framework for respecting human rights based on international standards as an essential step in our global business expansion.

### Major Initiatives in Fiscal 2013

In light of surveys that we conducted in fiscal 2012 on human rights at overseas business units, we formulated the Policy for Human Rights of the Employees to detail our policy on human rights under the Fuji Electric Code of Conduct. Additionally, we produced our Human Rights Protection Guidelines, which present specific check items about human rights and labor practices in

the above policy, and created an instruction book on global human rights standards.

We distribute the policy, guidelines, and instruction book at domestic and overseas business sites and establish a mechanism for the respect of human rights within the Company.

In our human rights awareness-raising activities, we educate employees about the links between corporate activities and the need to respect human rights in their level-specific training. In training for new managers, we have used case studies in group discussions to heighten sensitivity to human rights risks among the administrators on the frontlines of our organization.

## Health and Safety

Employee health and safety is a top management priority. In line with a basic philosophy of putting the health and safety of our workers before anything else, all employees work together to ensure effective health and safety activities.

### Major Initiatives in Fiscal 2013 Health and Safety Basic Policy

We formulated the Health and Safety Basic Policy in line with our Health and Safety Basic Philosophy, and have implemented it at all business sites in Japan and overseas. The Company-wide Health and Safety Promotion Committee adheres to the basic policy by reviewing accidents and disasters in the previous year and considering future issues. It also reviews the Company-wide Health and Safety Management Policy annually, educates in keeping with this, and conducts safety patrols and other initiatives.

#### Health and Safety Basic Philosophy

**Health and Safety of Workers takes precedence over everything else.**

#### Fuji Electric Health and Safety Basic Policy

1. Health and safety is one of the most important tasks of corporate management at Fuji Electric. High-quality health and safety activities are practiced to make the workplace safe and comfortable, eradicate industrial accidents and prevent mental and physical diseases.
2. Applicable laws and regulations, and autonomous standards established by the Company, individual business offices and departments shall be observed. Health and safety activities sticking to the basics shall be exercised at all times.
3. All individuals involved in the business of Fuji Electric shall participate in the voluntary health and safety activities as a team and enroot safety culture in the workplace in order to ensure their own health and safety.
4. Health and safety activities focusing on the employees' health and safety are pursued aggressively in all businesses we conduct. By publicizing these activities, we contribute to creation of a safer, securer and more comfortable society.

### Promoting Health and Safety at Overseas Business Sites

Health and safety are also important issues at overseas business sites as we globalize our operations. We are producing English- and Chinese-language versions of our Company-wide Health and Safety Management Policy, rules, standards, and other key documents. Our foreign business sites are putting in place health and safety administrative structures based on those of our domestic operations. Furthermore, in addition to complying with laws and ordinances in each country, we promote health and safety activities that fit with local cultures and customs.

In fiscal 2013, we enhanced the health and safety environment in various ways. For example, we had Company-wide safety unit officers instruct on safety at our factories in Malaysia and Thailand and we conducted safety patrols at a plant construction site in Thailand.



On-site Safety Patrol at a plant construction site in Thailand

### External Evaluation of Accident-Free Record

The Otawara Factory attained 25.5 million accident-free work-hours from 1979 through 2013. It received an Accident-Free Record Certificate, Class 5, the highest level, from the Ministry of Health, Labor and Welfare for this achievement. Having achieved this milestone, we will continue striving to prevent workplace accidents by ensuring that each individual employee is fully aware of safety issues.

## Contributing to Communities

Using the human resources and technology it has nurtured through its business activities, Fuji Electric works to ensure that as many of its employees as possible are active in communities around the world, with a basic policy of contributing to solutions to the issues those communities face.



Career education for junior high school students

### Key Themes and Main Activities in Fiscal 2013

- **Theme 1: Protecting the Natural Environment**
  - Restoring farmlands, restoring rural woodlands
  - Forestry conservation activities (planting, thinning), etc.
- **Theme 2: Promoting Youth Development**
  - Conducting science classes for school children of all levels
  - Practical science training for teachers
  - Environmental school
- **Theme 3: Supporting Reconstruction Efforts after the Great East Japan Earthquake**
  - Supporting Fukushima Prefecture by buying local produce

### Case Example

#### Promoting Youth Development-Environmental School

### Encouraging Children to Value the Environment

Since fiscal 2009, we have been working to restore abandoned agricultural land in the Akiyama district of Uenohara, Yamanashi Prefecture and revitalize the area. Employees and their families have collaborated with the governments of Uenohara and Yamanashi Prefecture and local farmers to practice traditional cultivation techniques. They have used local organic fertilizers from tree leaves, grass, and other materials to grow and harvest native species of millet, wheat, and other crops, as well as cultivating potatoes, pumpkins, and Chinese cabbages.

Since fiscal 2012, we have used this location to hold environmental classes for local elementary school students. The classes aim to show students that protecting agricultural land helps to safeguard against floods and maintain biodiversity. This is particularly important given that the aging of farmers and a shortage of agricultural labor are resulting

in an increase in abandoned farms. In fiscal 2013, 15 children took part in these classes, in which local university students and Fuji Electric employee volunteers assisted, restoring disused land and harvesting traditionally grown vegetables. We hope that such programs can lead the younger generations to understand the need to protect the environment and the importance of food.



Restoring abandoned agricultural land



Harvesting vegetables

### Case Example

#### Protecting the Natural Environment-Forest Conservation Activities

### Increasing Greenery

Fuji Electric Dalian Co., Ltd. in China is planting trees in the Jinzhou New District as part of its contributions to environmental conservation and the local community.

The company and its labor union have worked together to arrange this annual initiative for the past seven years, soliciting the involvement of local employees and their families, 85 of whom participated in fiscal 2013.

A total of 500 people have taken part over the years in planting around 3,000 seedlings, with vegetation now covering about 30 hectares. Fuji Electric Dalian will continue efforts to increase local greenery.



Fuji Electric Dalian tree planting activity



## ON-SITE REPORT

## Helping Reconstruction after the Great East Japan Earthquake Supporting Agriculture in Fukushima —Initiatives to purchase local produce

Even three years after the Great East Japan Earthquake and the ensuing accident at the Fukushima Daiichi Nuclear Power Plant, the reputation of products from Fukushima Prefecture continues to suffer. Fuji Electric started buying offerings from the prefecture and engaging in other efforts to provide ongoing local support in view of its deep business ties with the area.

### A Persistent Image Problem

Kazumasa Kikuchi of JA ZEN-NOH Fukushima says, “safety, security, and deliciousness are our top priorities.” His organization is a part of Japan Agricultural Cooperatives that domestically produces and sells agricultural and livestock offerings. JA ZEN-NOH Fukushima tests all items and ships them after ensuring that they exceed safety standards. JA ZEN-NOH Fukushima posts inspection results on its website and on the labels of shipped items in keeping with its commitment to disclosure. Meanwhile, the growers take steps to ensure that agricultural products do not pick up radioactive substances from the soil.

Still, the business climate for products from Fukushima remains adverse, with many retailers refusing to stock them, companies excluding them from bulk commercial usage plans, and prices plunging below those of comparable items in other prefectures. Mr. Kikuchi says that, “It’s very disappointing that most consumers haven’t heard about what we are doing.”



Hideaki Imada  
Earthquake Reconstruct Section  
JA ZEN-NOH (left)

Kazumasa Kikuchi  
General Manager,  
Agricultural Management Planning Division  
JA ZEN-NOH Fukushima (right)

### Keen to Convey Fukushima’s Commitment to Safety, Security, and Deliciousness

Mr. Kikuchi says, “I think that to get our message across it’s important for consumers to actually see and try products from Fukushima. So, we frequently make promotion activities in metropolitan Tokyo on the weekends.” These activities are among some 180 sales promotions that JA ZEN-NOH Fukushima conducts annually in consumer areas within and outside the prefecture.

Yasuko Yuda of the CSR Promoting Department of the President’s Office at Fuji Electric looked into having the company support such activities and began supporting purchases from Fukushima. She says that, “I wanted employees to have the opportunity to actually try produce from Fukushima to realize how good it is.”



Employee cafeteria lunch made with produce from Fukushima Prefecture

### Many Business Sites Supporting Purchases of Produce from Fukushima

In fiscal 2013, Fuji Electric started its support for purchasing produce from Fukushima while planning for factory festivals and other internal events. Ms. Yuda says that, “The number of business sites that agreed to undertake such efforts exceeded my expectations. They have been selling Fukushima produce at factory festivals and other events and buying food from the prefecture for in-house events and giveaways.”

As a result of this initiative, 15 business sites nationwide have supported purchasing of Fukushima produce.



Yasuko Yuda  
CSR Promoting Department  
President’s Office



Fresh fruit and vegetables from Fukushima proved extremely popular and sold out repeatedly

### The Joys of Encountering Products that Are Fresh, Delicious, and Unique

Hideaki Imada of JA ZEN-NOH notes the high interest of Fuji Electric employees in supporting recovery efforts, recalling that produce was quickly sold out as employees helped out with produce sales at a factory festival. Ms. Yuda notes the local community also enjoyed the event, recalling that local residents and wives of employees tried the peaches, tomatoes, asparagus, and other offerings and loved the taste and freshness. Many people had been very interested in some of the more unique fare from Fukushima, picking it up and asking salespeople to describe it to them.

### Continuing Activities to Support Fukushima

In fiscal 2013, employee cafeterias at six domestic business sites put food from Fukushima on their menus. Many employees said that they were only too pleased to support the prefecture and that they wanted more Fukushima sales fairs. Ms. Yuda commented, “I really sensed that people welcomed activities to support reconstruction.” Fuji Electric will continue to engage in initiatives to assist with reconstruction in quake-devastated areas.

# Management

## Corporate Governance

To realize its corporate mission, Fuji Electric is reinforcing its corporate governance by increasing management transparency and enhancing the oversight function.

### Corporate Governance Framework

Fuji Electric's corporate governance framework consists of a Board of Directors, which performs the functions of management supervision and making important decisions, and Audit & Supervisory Board Members and the Audit & Supervisory Board, which are in charge of the management audit function.

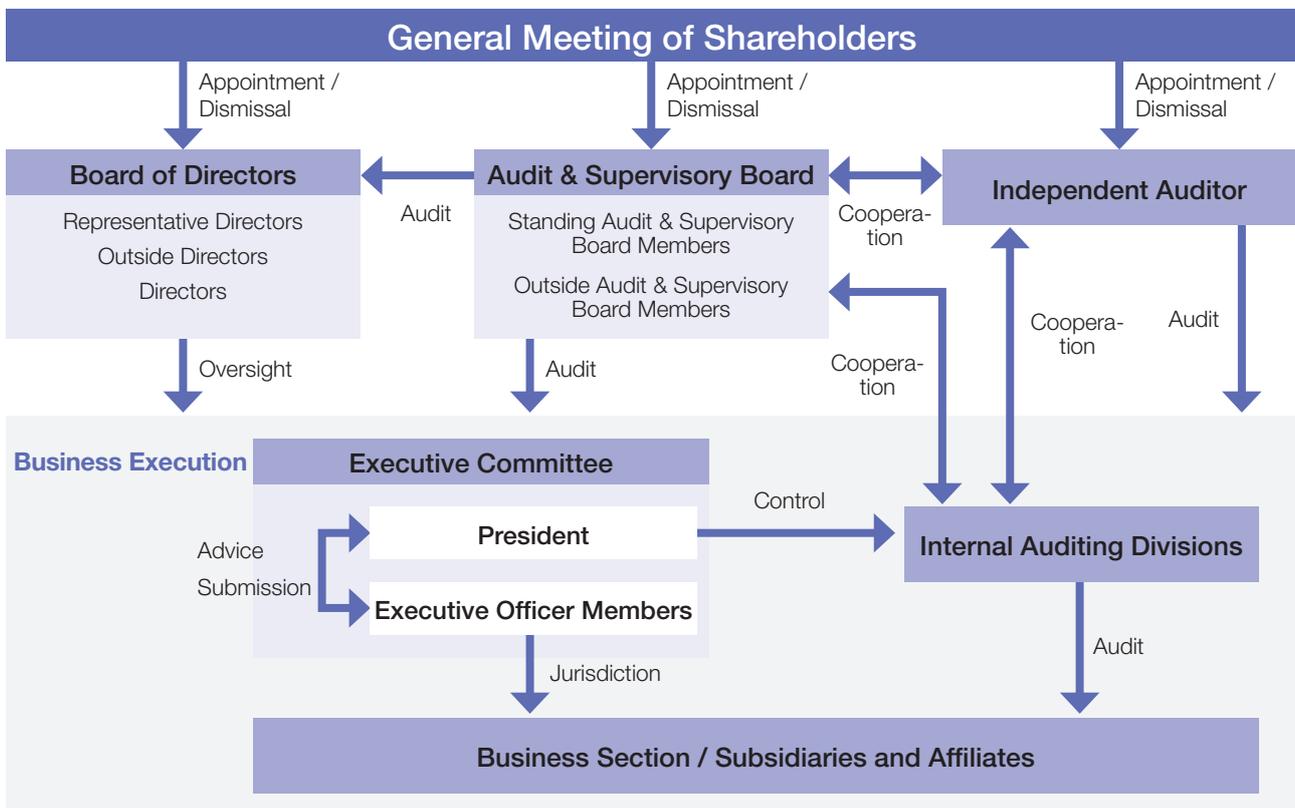
Comprising nine Directors (including three Outside Directors) and five Audit & Supervisory Board Members (of whom three are Outside Members) as of June 25, 2014, the governance framework is designed to reinforce the Company's management supervision and audit functions.

To this end, the system actively calls on outside officers, making them an essential part of the system.

Outside officers fulfill the role of providing management supervision and management audits from an objective perspective. At the same time, they provide useful advice and instructions across the entire spectrum of Fuji Electric's business, helping to ensure the appropriateness of management judgments.

Fuji Electric uses the executive officer system to strengthen business execution functions.

### Corporate Governance Framework



#### (1) Directors and Board of Directors

The Board of Directors conducts decision making and oversight of the management of Fuji Electric and the execution of its important business. Fuji Electric proactively appoints Outside Directors with a view to strengthening the management supervisory function from an objective perspective and maintaining the validity and propriety of business decisions.

#### (2) Audit & Supervisory Board Members and Audit & Supervisory Board

The Audit & Supervisory Board inspects Fuji Electric's management and business execution. In addition to our proactive appointment of Outside Audit & Supervisory Board Members, auditing functions are enhanced by having Standing Audit & Supervisory Board Members attend the Executive Committee.

#### (3) President, Executive Officers and Executive Committee

The President has ultimate responsibility for execution of business and makes decisions on matters of business execution other than those decided upon by the Board of Directors. The Executive Committee is composed of executive officers and functions as a consulting system for the President. It fulfills functions such as deliberation and recommendation of important matters, and reports to enable monitoring of the status of management. Each executive officer controls the execution of the business of which he is in charge.

## Outside Officers

### (1) Outside Directors

To ensure that Outside Directors augment Fuji Electric's management supervisory function and assure the adequacy and appropriateness of important decisions, the standards for outside officers are that they have the insights and experience necessary for making multifaceted management decisions, understand Fuji Electric's management, and are independent from the Company. Candidates for Outside Directors are selected after taking all these factors into due consideration. The Company's three Outside Directors are as follows.

- **Hiroaki Kurokawa**  
Mr. Kurokawa offers useful advice and opinions concerning the business management of Fuji Electric in general, based on his extensive experience and considerable insight as an experienced manager in the manufacturing sector for electronics and telecommunication equipment.
- **Motoyuki Suzuki**  
Mr. Suzuki offers useful advice and opinions concerning the business management of Fuji Electric in general, based on his professional standpoint and considerable insight in environmental engineering.
- **Mareto Sako**  
Mr. Sako offers useful advice and opinions concerning the business management of Fuji Electric in general, based on his extensive experience and considerable insight as a manager in financial institutions.

### (2) Outside Audit & Supervisory Board Members

Candidates for Outside Audit & Supervisory Board Members are chosen after taking into overall account such aspects as their ability to reinforce Fuji Electric's management audit function, whether they have the insights and experience necessary to make management judgments, their understanding of Fuji Electric's management, and their independence from the Company. The Company's three Outside Audit & Supervisory Board Members are as follows.

- **Takahiko Ito**  
Mr. Ito offers useful advice and opinions concerning the business management of Fuji Electric in general, based on his abundant expert knowledge as the Standing Auditor of a listed company and extensive experience and insight as an officer and member of upper management in the manufacturing industry.
- **Yoshiki Sato**  
Mr. Sato offers useful advice and opinions concerning the business management of Fuji Electric in general, based on his extensive experience and considerable insight as a manager in financial institutions.
- **Akiko Kimura**  
Ms. Kimura offers useful advice and opinions concerning the business management of Fuji Electric in general, based on her expert knowledge as an attorney.

\* Notification has been submitted that these outside officers are independent officers as required by financial instruments exchanges.

\* In fiscal 2013, the rates of attendance of outside officers at the Board of Directors meetings (which were held 13 times) and the Audit & Supervisory Board meetings (which were held 11 times) were 91% and 85%, respectively.

## Executive Remuneration

Fuji Electric has established a remuneration system and remuneration levels for Directors and Audit & Supervisory Board Members that are deemed appropriate for their respective duties and in accordance with the shareholders' mandate, giving due consideration to the aims of securing and maintaining competent personnel and providing incentives for the improvement of business performance.

### (1) Standing Directors

As Standing Directors are charged with the responsibility of improving consolidated operating performance for each fiscal year and realizing improvements in corporate value over the medium- to long-term, their remuneration is structured and managed in two categories: base remuneration and performance-linked remuneration.

#### • Base Remuneration

Base remuneration is a predetermined amount that is paid to executives according to their position. A portion of the base remuneration is contributed to the director shareholding association to share the economic interests of shareholders and as an incentive to make management aware of share value.

#### • Performance-Linked Remuneration

Performance-linked remuneration is paid only in instances in which dividends are paid to shareholders from retained earnings. The total amount of executive performance remuneration shall be within 1.0% of consolidated net income for the fiscal year prior to the date of payment in order to make the link with consolidated results for each fiscal year more transparent.

### (2) Outside Directors and Outside Audit & Supervisory Board Members

Remuneration for Outside Directors and Outside Audit & Supervisory Board Members is paid as a predetermined amount according to their rank, as Outside Directors and Outside Audit & Supervisory Board Members are charged with the duty of supervising or auditing the execution of duties across Fuji Electric. Outside Directors and Outside Audit & Supervisory Board Members may acquire stock in the Company at their own discretion.

### Total Amount of Remuneration Paid to Directors and Audit & Supervisory Board Members (Fiscal 2013)

	Number of Recipients	Amount of Payment (Millions of Yen)
Directors (of which, Outside Directors)	11 (4)	318 (22)
Audit & Supervisory Board Members (of which, Outside Members)	6 (3)	80 (22)

- Notes 1. The above payees include one Director and one Audit & Supervisory Board Member who retired at the conclusion of the 137th Ordinary General Meeting of Shareholders held on June 25, 2013.
2. At the time of creation of this annual report, the amount of performance-linked remuneration for fiscal 2013 had not been determined. It is therefore not included in the above amount paid to directors.
3. In addition to the above, ¥60 million was paid as performance-linked remuneration for fiscal 2012 to Standing Directors (six recipients).
4. In addition to the above payment, the Company paid ¥10 million to an employee who concurrently assumed the office of Director (one employee) as salary for the employee.

## Internal Control System

The Fuji Electric Board of Directors determines basic policies concerning the establishment of an internal control system as stipulated in the Company Act, and the Company discloses those policies. Fuji Electric's Company-wide internal control system is designed to respond promptly and accurately to the demands placed upon the Company by society, and improvements are continuously made to it.

## List of Officers

(As of July 1, 2014)

### Directors



**Michihiro Kitazawa**  
President and Chairman of the Board of Directors



**Yoshio Okuno**  
Representative Director



**Hiroaki Kurokawa**  
Outside Director  
Senior Executive Advisor,  
FUJITSU LIMITED



**Motoyuki Suzuki**  
Outside Director  
Emeritus Professor, The University of Tokyo; Visiting Professor, The Open University of Japan



**Mareto Sako**  
Outside Director  
Advisor, Nippon Tochi-Tatemono Co., Ltd.



**Michio Abe**  
Director



**Kenzo Sugai**  
Director



**Naoya Eguchi**  
Director



**Junichi Matsumoto**  
Director

### Auditors



**Toshio Shinozaki**  
Standing Auditor



**Toshihiko Ishihara**  
Standing Auditor



**Takahiko Ito**  
Outside Auditor  
Standing Auditor, Furukawa Electric Co., Ltd.



**Yoshiki Sato**  
Outside Auditor  
President and Representative Director, Asahi Mutual Life Insurance Company



**Akiko Kimura**  
Outside Auditor  
Advisor, Anderson Mori & Tomotsune

### Executive Officers

(As of April 1, 2014)

President	<b>Michihiro Kitazawa</b>	General Management
Executive Vice President	<b>Yoshio Okuno</b>	Assistant to the President; Corporate General Manager, Corporate Management Planning Headquarters; General Manager, Export Administration Office; In charge of compliance management and crisis management
Senior Managing Executive Officer	<b>Michio Abe</b>	Corporate General Manager, Production and Procurement Group
Managing Executive Officers	<b>Hidehiko Asahi</b>	Corporate General Manager, Food and Beverage Distribution Business Group
	<b>Kuniaki Yanagisawa</b>	Corporate General Manager, Electronic Devices Business Group
	<b>Kenzo Sugai</b>	Corporate General Manager, Sales Group
Executive Officers	<b>Fumio Ito</b>	President and Representative Director, Fuji Electric FA Components & Systems Co., Ltd.
	<b>Motofumi Matsumura</b>	General Manager, Corporate Strategy Office, Corporate Management Planning Headquarters
	<b>Naoya Eguchi</b>	Corporate General Manager, Corporate R&D Headquarters
	<b>Takashi Kusaka</b>	Corporate General Manager, Industrial Infrastructure Business Group
	<b>Junichi Matsumoto</b>	General Manager, Corporate Finance Office, Corporate Management Planning Headquarters
	<b>Takeshi Kadoshima</b>	General Manager, Human Resources and General Affairs Office
	<b>Junichi Arai</b>	General Manager, Corporate Planning Office, Corporate Management Planning Headquarters
	<b>Masatsugu Tomotaka</b>	Corporate General Manager, Power Electronics Business Group
<b>Masahiro Fujiwara</b>	Corporate General Manager, Power and Social Infrastructure Business Group	

\* Please refer to our website for each officer's brief history.

## Compliance

We employ thorough measures to ensure compliance with laws and corporate ethics and always act with a high degree of social conscience to achieve sustained corporate growth.

### Basic Compliance Policy

The Fuji Electric Code of Conduct states that we shall “Respect, value and conform with all applicable laws and regulations,” which has been incorporated into our basic policy. We have established the Fuji Electric Compliance

Regulations and the Fuji Electric Compliance Program, which bring together four aspects of domestic and overseas compliance (internal rules, oversight, monitoring, and education), based upon this policy, to achieve sustained growth.

### Compliance Promotion Structure

The Fuji Electric Compliance Promotion Committee, which is headed by the President and composed of the managers responsible for compliance, with outside experts (attorneys) as observers, has jurisdiction over compliance.

The committee meets twice each fiscal year to deliberate compliance planning and execution with the goal of achieving full compliance with laws and social norms globally.

#### Global Promotion of the Compliance Program

Fuji Electric is bolstering the compliance of its overseas operations.

In addition to globally consistent items that apply at all overseas sites, such as the prohibition of discriminatory acts and unfair dealings, including bribery and corruption, the Fuji Electric Compliance Program reflects the laws and regulations of each region where we conduct business. We practice compliance on this basis through the actions of all our subsidiaries in Japan and overseas.

#### Conducting Compliance Training

Fuji Electric has created a compliance training program for officers and employees of the Company and its subsidiaries that addresses matters they encounter in the course of their business activities. Compliance training has two main thrusts: level-specific and job-specific courses.

- **Level-Specific Training**

Level-specific training is tailored to executives, managers, and new employees of consolidated subsidiaries in Japan. Training lasts a half to one full day, with sessions focusing on the Fuji Electric compliance framework and the Fuji Electric Compliance Program.

In fiscal 2013, the training was attended by 24 newly appointed directors, 80 general managers, 145 managers, and 139 new employees.

- **Job-Specific Training**

Job-specific training is conducted that features items for consideration in practical business situations. In fiscal 2013, classroom-based training was conducted for a total of 1,108 sales and administrative unit personnel covering a variety of themes including the Antimonopoly Law. Furthermore, we also conducted e-learning programs for 2,297 employees at overseas subsidiaries for the first time.

#### Operation of Whistle-Blowing Systems in Japan and Overseas

To prevent infractions of laws, regulations and internal rules and ensure early detection, Fuji Electric has introduced the Business Ethics Helpline System. Under this system, employees in Japan and overseas can report violations or suspected violations of laws or Company rules to Fuji Electric's President via the department responsible for compliance or through an external lawyer.

We also operate a Partner Hotline, which handles notifications from business partners about Fuji Electric's materials procurement operations. Building more highly reliable trading relationships with our suppliers is part of fulfilling our social responsibility.



# Risk Management

We are redoubling our management of a broad range of risks.

## Basic Policy on Risk Management

Based on the Fuji Electric Risk Management Regulations, which were formulated in May 2006, the Company manages risk in a coordinated, systematic manner.

We will appropriately manage to counteract all risks that could affect the Company's management, while working to prevent risks from materializing (crisis situations) and

reduce losses. In doing so, we will maximize Fuji Electric's corporate value and minimize the impact on management in the event that risks materialize.

\* For details about risk, please refer to the Company's Annual Business Report under Business Risks

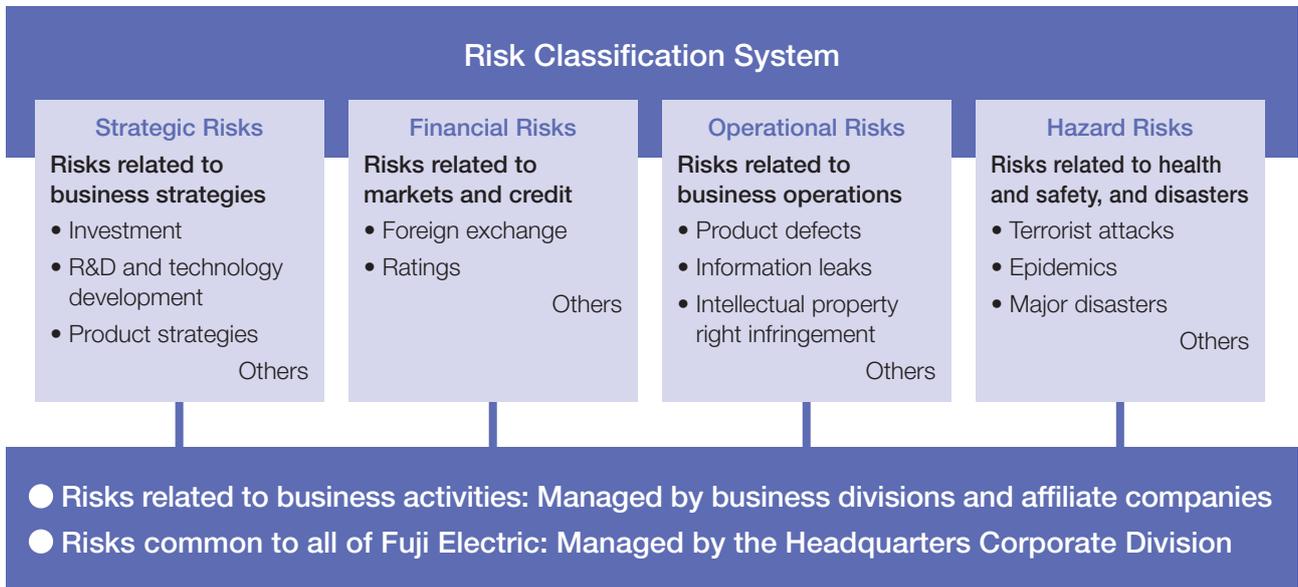
## Types of Risk and Risk Management System

Fuji Electric classifies risks into four categories: strategic, financial, operational, and hazard risks; and conducts risk management optimized for each category.

For risks that are common to the whole of Fuji Electric, such as financial and hazard risks, the Headquarters Corporate Division determines the policies for countermeasures, prepares appropriate manuals, disseminates the necessary information to manage the risks, conducts

education, and takes other measures.

The business divisions and affiliate companies are responsible for strategic and operational risks associated with business activities, such as delays in new product development and reduced cost competitiveness. When business plans are formulated for each fiscal year, the business risks are analyzed and factored in to the plans.



## Information Security Measures

### Development of Information Security Policy and Regulations

To protect personal and confidential information, Fuji Electric has formulated a policy and regulations, instituted training programs for employees, and implemented other measures.

Overseas, based on our information security policy and regulations, each company has also drafted security regulations for overseas bases, taking into account individual countries' laws and regulations. We stepped up our initiatives to educate employees about information security, distributing an information security handbook to all employees and ensuring that all employees are aware of the issues. We conducted overseas information security audits at 33 companies in fiscal 2013. Going forward, we will make ongoing improvements throughout Fuji Electric, including overseas bases.

### Third-party Certification Related to Information Security

Companies that handle customers' confidential and personal information, and who require a high level of information security management, acquire outside certification. As of April 1, 2014, six of our operations (at four companies) had acquired ISMS certification. Also, three companies—Fuji Electric Co., Ltd., Fuji Electric IT Center Co., Ltd., and Fuji Electric IT Solutions Co., Ltd. — have acquired Privacy Mark certification.



Privacy Mark (JIPDEC)

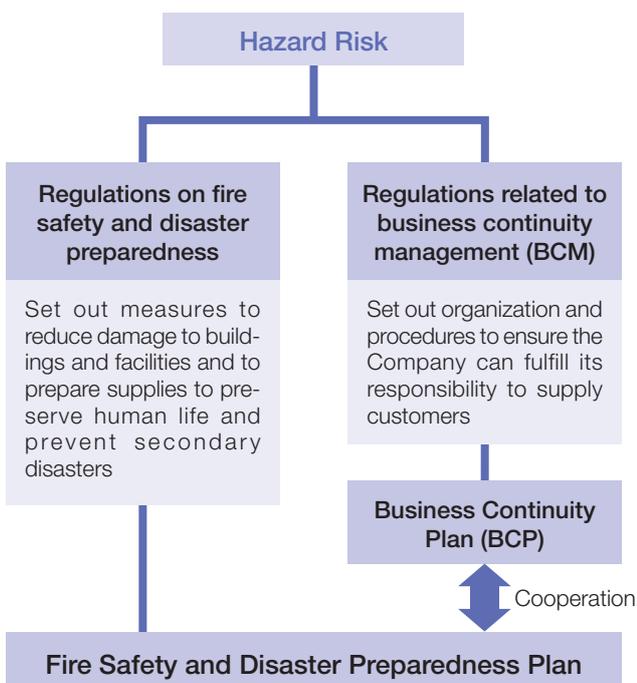
## Measures to Prevent Infringement of Intellectual Property Rights

As part of our intellectual property activities, we employ a system to monitor patents on a daily basis to ensure against the inadvertent infringement of third-party patents. To prevent infringement, we also conduct compliance program training.

With respect to our own patents, we actively acquire patent rights to protect our business. We also take measures against counterfeit products and other steps to reduce risks related to intellectual property.

\* Please see page 20 for further information about Fuji Electric's activities in intellectual property.

## Initiatives to Prepare for Large-Scale Disasters



### Fire Safety and Disaster Preparedness Initiatives

Learning lessons from the Great East Japan Earthquake, we have revised our disaster response rules and regulations and produced a Disaster Prevention and Procedural Manual. Based on this manual, we have created a disaster preparedness headquarters system. We have also put in place thorough measures to ensure that structures and facilities are earthquake resistant and renewed our cache of emergency stores at operational sites and affiliates.

At least once each year, we conduct training on preparedness for large-scale disasters at each operational site, including overseas bases.

### Business Continuity Initiatives

Fuji Electric aims to ensure that it can continue its operations even if an unexpected event such as a natural disaster or accident occurs. To this end, we are continuously working to improve our ability to respond to various risks and recover our operations, aiming to be able to continue providing a stable supply of high performance, high quality products and services required by our customers.

In fiscal 2013 we expanded the range of products covered by our business continuity plan (BCP). Looking ahead we will continuously improve our BCP by extending it to our subsidiaries, and by further expanding the range of products covered.

## Corporate Information

### Consolidated Subsidiaries and Equity-Method Affiliates (As of March 31, 2014)

Fuji Electric has a total of 48 consolidated subsidiaries (24 Japanese companies and 24 overseas companies). Also, Fuji Furukawa Engineering & Construction Co., Ltd. is listed in the Second Section of the Tokyo Stock Exchange.

In addition, five companies (Japan AE Power Systems Corporation, METAWATER Co., Ltd., METAWATER SERVICE Co., Ltd., FUJI FURMANITE Co., Ltd., and FUJI FURUKAWA E&C (THAILAND) Co., Ltd.) are equity-method affiliates.

#### Consolidated Subsidiaries (Domestic): 24

Fuji Electric FA Components & Systems Co., Ltd.

Fuji Furukawa Engineering & Construction Co., Ltd.

Fuji Electric Technica Co., Ltd.

Fuji Electric Finance and Accounting Support Co., Ltd.

Hoei Denki Co., Ltd.

Hokkaido Fuji Electric Co., Ltd.

Fuji Office & Life Service Co., Ltd.

Chichibu Fuji Co., Ltd.

Ibaraki Fuji Co., Ltd.

Hoei Plastics Co., Ltd.

Fuji IT Co., Ltd.

Shinshu Fuji Electric Co., Ltd.

Fuji Electric Power Semiconductor Co., Ltd.

Fuji Electric IT Center Co., Ltd.

Fuji Electric Chiba Tech. Co., Ltd.

Fuji Electric F-Tech Co., Ltd.

Hakko Electronics Co., Ltd.

Fuji Electric IT Solutions Co., Ltd.

Mie Fuji Co., Ltd.

Fuji Electric FA Service Co., Ltd.

GE Fuji Meter Co., Ltd.

FESTEC Co., Ltd.

Fuji Electric Tsugaru Semiconductor Co., Ltd.

Tottori Electric Manufacturing Co., Ltd.

#### Equity-method Affiliates (Domestic): 4

Japan AE Power Systems Corporation

METAWATER Co., Ltd.

METAWATER SERVICE Co., Ltd.

FUJI FURMANITE Co., Ltd.

#### Consolidated Subsidiaries (Overseas): 24

Fuji Electric Asia Pacific Pte. Ltd.

Fuji Electric Manufacturing (Thailand) Co., Ltd.

Fuji Electric Philippines, Inc.

Fuji Electric Semiconductor (Malaysia) Sdn. Bhd.

Fuji Electric (Malaysia) Sdn. Bhd.

Fuji Electric (China) Co., Ltd.

Shanghai Fuji Electric Switchgear Co., Ltd.

Shanghai Fuji Electric Transformer Co., Ltd.

Fuji Electric (Zhuhai) Co., Ltd.

Wuxi Fuji Electric FA Co., Ltd.

Fuji Electric (Changshu) Co., Ltd.

Fuji Electric (Shenzhen) Co., Ltd.

Fuji Electric Dalian Co., Ltd.

Fuji Electric Motor (Dalian) Co., Ltd.

Dalian Fuji Bingshan Vending Machine Co., Ltd.

Fuji Electric (Hangzhou) Software Co., Ltd.

Fuji Electric FA (Asia) Co., Ltd.

Fuji Electric Hong Kong Co., Limited

Hoei Hong Kong Co., Ltd.

Fuji Electric Taiwan Co., Ltd.

Fuji Electric Korea Co., Ltd.

Fuji Electric Corp. of America

Fuji Electric Europe GmbH

Fuji Electric France S.A.S.

#### Equity-method Affiliate (Overseas): 1

FUJI FURUKAWA E&C (THAILAND) Co., Ltd.

## Company Information

(As of March 31, 2014)

Company Name	FUJI ELECTRIC CO., LTD.
Established	August 29, 1923
Head Office	1-1, Tanabeshinden, Kawasaki-ku, Kawasaki-shi 210-9530, Japan
Head Office Business Address	Gate City Ohsaki, East Tower, 11-2, Osaki 1-chome, Shinagawa-ku, Tokyo 141-0032, Japan
Capital Stock	¥47.6 billion
Employees (consolidated)	25,524 (Domestic 18,022, Overseas 7,502)
Net Sales (consolidated)	¥759.9 billion (Year ended March 31, 2014)
Stock Code	6504

## Stock Information

(As of March 31, 2014)

Issued and Outstanding Shares	746,484,957
Number of Shareholders	45,980

### Major Shareholders

Shareholders' names	Number of shares (1000s)	Voting rights (%)
FUJITSU LIMITED	74,333	10.40
Japan Trustee Services Bank, Ltd. (Trust Account)	65,994	9.24
The Master Trust Bank of Japan, Ltd. (Trust Account)	38,672	5.41
Mizuho Bank, Ltd. (MHBK)	22,254	3.11
Asahi Mutual Life Insurance Company	19,776	2.77
FANUC CORPORATION	13,421	1.88
THE CHASE MANHATTAN BANK, N.A. LONDON SECS LENDING OMNIBUS ACCOUNT	12,611	1.77
FURUKAWA CO., LTD.	11,025	1.54
Furukawa Electric Co., Ltd.	10,820	1.51
Fuji Electric Employee Shareholding Association	8,639	1.21

Notes: 1. Treasury stock of 31,985,886 shares is excluded from the above list of top 10 shareholders.

2. The ratio of shareholding is calculated by deducting the number of treasury stocks from the total number of shares outstanding based on the provisions of the Finance for Enforcement of the Companies Act.

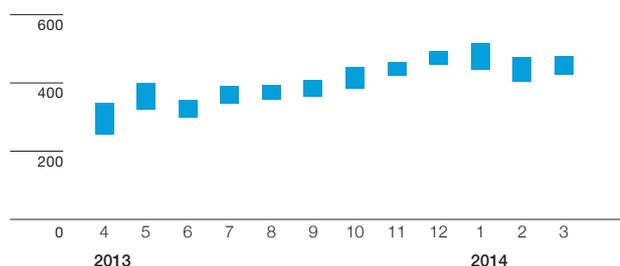
### Share Distribution by Shareholder Type

Type	Number of shareholders	Number of shares	Holding (%)
Financial institutions / securities firms	125	265,474,827	35.56
Other domestic corporations	537	129,318,788	17.32
Foreign corporations	421	197,264,070	26.43
Individuals and other	44,897	154,427,272	20.69
Total	45,980	746,484,957	100.00

Note: "Individuals and other" includes treasury stock.

### Share Price Fluctuations (Tokyo Stock Exchange)

(Yen)



## Guide to Fuji Electric's Communication Tools

We have combined the Annual Report, in which we report on the Company's management policies and financial data, and the CSR Report, in which we report on our environmental and social efforts, into a single yearly report that compiles a summary of our management activities.

This report is structured primarily around topics. For more details on IR information such as financial results, environmental (CSR) information, or technological developments, please refer to our website or the Fuji Electric Journal.

### Company Website

Our website offers all manner of information about Fuji Electric, including changes to our brand, the latest news, product information, and recruitment opportunities.



#### Investor Relations Website

The website features financial and operational information as well as shareholder information.

#### CSR Website

The CSR website reports in detail on Fuji Electric's CSR Philosophy and initiatives to protect employees and the environment and contribute to communities, among other information.

#### Research & Development Website

##### Fuji Electric Journal

The Fuji Electric Journal introduces technical papers written by employees and the latest technological developments.



## A New Brand Emblem for Fuji Electric Products

### Product Design Concept

- Silver color to reflect the product's advanced nature
- FE blue color to represent harmony between advanced nature and reliability
- Black color to instill a sense of reliability



An example of applying the emblem on our power conditioner

To raise its corporate value, Fuji Electric is stepping up its efforts in product design.

In fiscal 2013, we created a new corporate brand emblem for our products. The new emblem integrates a symbol and the company name. It will appear on all Fuji Electric products in the future.

Moreover, we will work to integrate product design that reflects our basic philosophy and corporate stance on product quality, and introduce it in stages starting from new and model-change products.

These efforts will increase global recognition of the Fuji Electric brand and increase our corporate value.

### Cautionary Statement with Respect to Forward-Looking Statements

Statements made in this report with respect to Fuji Electric's plans, strategies, and future performance are forward-looking statements based on management's assumptions and beliefs in light of the information currently available to it, and involve risks and uncertainties. Potential risks and uncertainties include: (1) sudden changes in general economic conditions in Fuji Electric's markets and changes in its operating environment such as those resulting from revisions to trade regulations; (2) exchange rates, particularly between the yen and the U.S. dollar and Asian and European currencies; (3) the ability of Fuji Electric and its subsidiaries to develop and introduce products that incorporate new technologies in a timely manner and to manufacture them in a cost-effective way; (4) the rapid pace of technological innovation, especially in the field of electronics; (5) sudden changes in the supply and demand balance in the markets Fuji Electric serves; (6) problems involving the intellectual property rights of Fuji Electric and other companies; (7) fluctuations in Japanese stock markets; and other risk factors. Accordingly, actual results could differ from those contained in any forward-looking statement.





**ECOLOGY**  
Fuji Electric

This mark symbolizes  
the commitment of Fuji Electric  
to environmental protection.

## External Evaluation

Fuji Electric has been selected as a component of the following socially responsible investment (SRI) indexes, as a company with outstanding CSR performance.



Selected as a leading company in disclosure of climate change information.



## Care for the Environment



**FE Fuji Electric**

Gate City Ohsaki, East Tower,  
11-2, Osaki 1-chome, Shinagawa-ku, Tokyo 141-0032, Japan  
Contacts: Public and Investor Relations Dept.  
TEL: +81-3-5435-7111 <http://www.fujielectric.com/>