

# FY2018 Medium-Term Management Plan **Renovation 2018**

We will provide an overview of the new FY2018 Medium-Term Management Plan, **Renovation 2018**, while reviewing the FY2015 Medium-Term Management Plan.

## Review of the FY2015 Medium-Term Management Plan

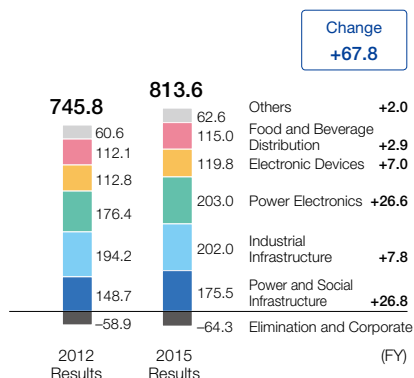
In fiscal 2015, net sales totaled ¥813.6 billion, an increase of ¥67.8 billion from fiscal 2012. Sales were up in all segments, with particularly strong growth seen in the Power and Social Infrastructure and Power Electronics segments. Overseas sales grew ¥37.3 billion from fiscal 2012, representing 27% of net sales at ¥215.8 billion. Main contributors to overseas sales included growth in sales of vending machines to the Chinese market and the benefits of M&A activities conducted in Asia. Striving to solidify our foundations for overseas expansion, we established three overseas factories to expand local

production and local consumption during the period of the FY2015 Medium-Term Management Plan. We also conducted eight M&A transactions, with a total amount of approximately ¥20.0 billion, thereby acquiring additional human resources and sales channels.

Operating income in fiscal 2015 rose ¥23.0 billion from fiscal 2012, amounting to ¥45.0 billion. This growth can be attributed to higher income in all segments, with the Electronic Devices and Power Electronics segments displaying the most substantial increases in income.

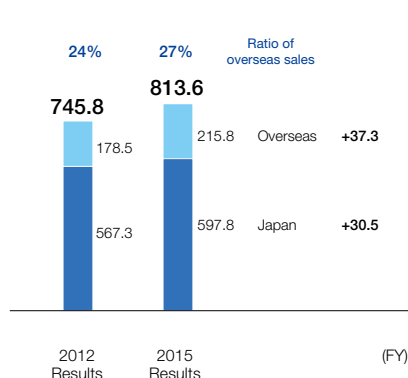
### Net Sales (By Segment)

(Billions of yen)



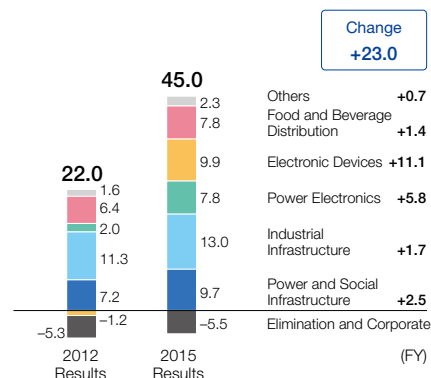
### Net Sales (Japan and Overseas)

(Billions of yen)




### Operating Income (By Segment)

(Billions of yen)







\* Figures for FY2015 Results reflect the organizational restructuring conducted in FY2016.

### Established Production Bases

- Asia
  - Thai Factory (power electronics, substation equipment, and vending machines) 
  - India Factory (inverters) 
- Americas
  - Virginia Factory (inverter boards, electrical equipment for railcars) 

### Conducted 8 M&A Investment Amount: Approx. ¥20.0 billion

- Asia
  - Fuji Tusco (transformers) 
  - Fuji SMBE (switchgear and controlgear) 
  - Fuji CAC (engineering)
  - Fuji GEMCO (engineering)
- China
  - Shanghai Electric Fuji Electric Power Technology (Wuxi) (medium-voltage inverters) 
- Americas
  - RTS (power plant service) 
  - Fuji SEMEC (electrical equipment for railcars)
- Europe
  - Fuji N:teelligence (fuel cells)

## Further Renovation of Fuji Electric Renovation 2018

### Priority Measures

#### Implement Growth Strategies

- Reform operating processes in social engineering systems, industrial infrastructure, and power electronics businesses
- Continue expansion of overseas operations through additional M&As
- Create high-value-added products that meet customer demand

#### Improve Profitability

- Re-energize “Pro-7 Activities”

The FY2018 Medium-Term Management Plan targets net sales of ¥900.0 billion in fiscal 2018, ¥86.4 billion higher than the figure posted in fiscal 2015. By segment, overall sales growth is expected to be driven by the Power and Social Infrastructure, Industrial Infrastructure, and Power Electronics segments, while all segments are forecast to enjoy higher sales. We, of course, plan to expand domestic sales, but we will pursue even larger increases overseas, aiming to raise the ratio of overseas sales to net sales to 30.0%.

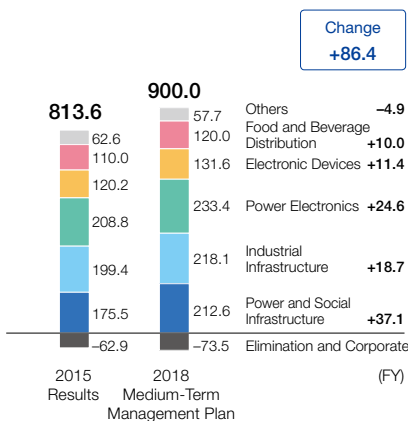
Fiscal 2018's operating income is forecast to be ¥54.0 billion, up ¥9.0 billion from fiscal 2015. The majority of this increase is set to come from growth in the Power Electronics segment, and we will thoroughly reinforce this segment's profit structure to achieve this growth. At the same time, we will re-energize our Pro-7 activities to boost earnings capacity in the pursuit of record-breaking profit attributable to owners of parent.

### Management Targets

(Billions of yen)	FY2015 Results	FY2018 Medium-Term Management Plan
Net Sales	813.6	900.0
Operating Income	45.0	54.0
Operating Margin	5.5%	6.0%
Profit Attributable Owners of Parent	30.6	34.0
Net Debt-Equity Ratio	0.7 times	0.6 times
Equity Ratio	27%	32%
ROA	4%	4%
ROE	12%	12%

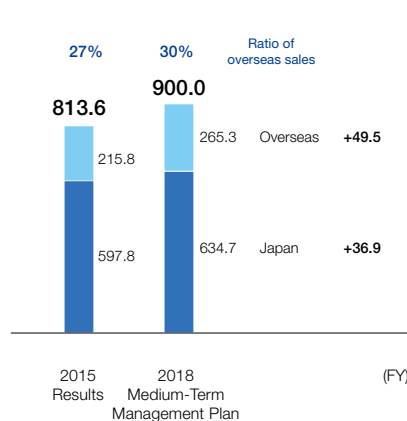
### Net Sales (By Segment)

(Billions of yen)



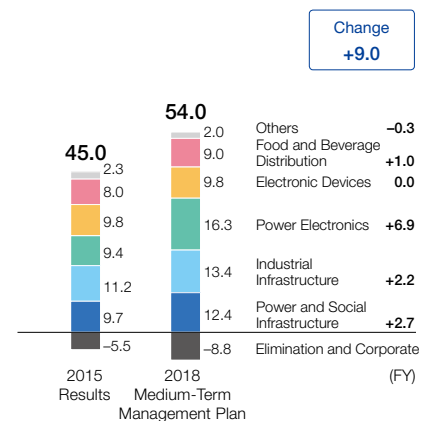
### Net Sales (Japan and Overseas)

(Billions of yen)



### Operating Income (By Segment)

(Billions of yen)



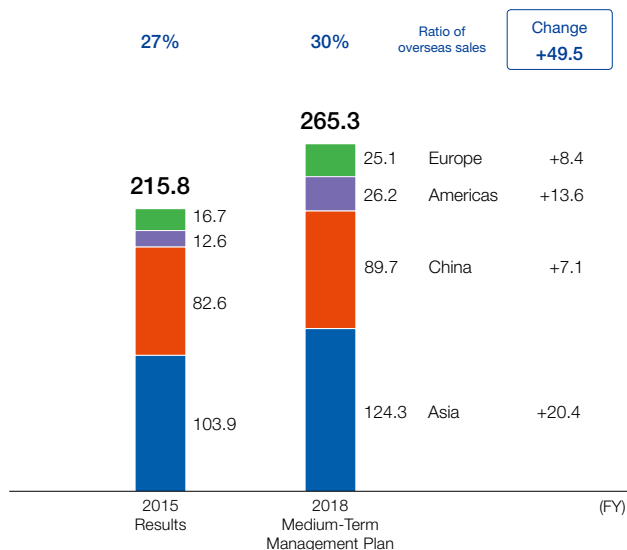
\* Figures for FY2015 Results reflect the organizational restructuring conducted in FY2016.

## Overseas Operations

Overseas net sales are projected to amount to ¥265.3 billion in fiscal 2018, rising ¥49.5 billion from fiscal 2015 largely due to higher sales in Asia and the Americas. This growth will be due in part to the benefits reaped from up-front investments conducted thus far, including M&A and collaborative activities. We will also carry out new measures for growing overseas

### Overseas Net Sales (By Area)

(Billions of yen)



operations. These measures will include expanding our business in Asia by establishing an APAC regional corporate strategy office, developing overseas production bases, and advancing additional M&A activities. Principal measures by region are described below.

#### Asia

- Establish APAC regional corporate strategy office in Singapore to oversee operations in the ASEAN region
- Expand systems business by utilizing bases acquired through M&A activities (Industrial Infrastructure, Power Electronics)
- Bolster vending machine product lineup and establish operator companies (Food and Beverage Distribution)

#### China

- Expand vending machine market and invest in production increases (Food and Beverage Distribution)
- Expand operations in motion, factory automation, and other new fields (Power Electronics)

#### The Americas

- Expand power plant after-sales businesses (Power and Social Infrastructure)
- Grow railcar business (Power Electronics)
- Develop uninterruptible power systems (UPSs) based on U.S. specifications for brisk data center market (Power Electronics)

#### Europe

- Expand fuel cell business (Power and Social Infrastructure)
- Promote sales of power semiconductors (Electronic Devices)
- Launch an inverter production base (Power Electronics)

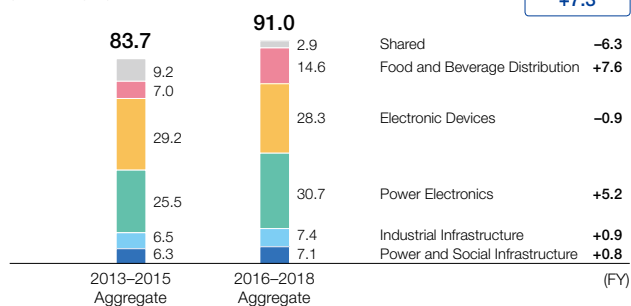
## Capital Investment

Under the FY2018 Medium-Term Management Plan, we will expand capital expenditures aimed at overseas production while enhancing manufacturing capabilities using the Internet of Things (IoT).\* In the Food and Beverage Distribution segment, we plan to build a new factory in China to support the brisk vending machine business in this country. Capital expenditures in the Power Electronics segment, meanwhile, will include those for bolstering production facilities at factories in the United States and Thailand as well as for establishing the Power Electronics Technical Center at the Suzuka Factory, which will enable us to heighten R&D capabilities by consolidating development divisions.

\* Internet of Things: Framework for fundamentally revolutionizing business and our daily lives by connecting various objects through networks and enabling them to achieve optimal, autonomous control of one another

### Capital Investment

(Billions of yen)



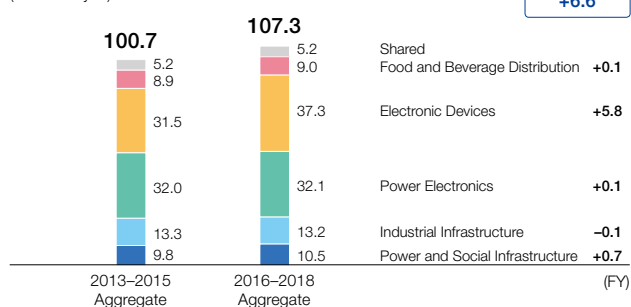
## Research and Development

R&D ventures will be focused on the Power Electronics segment as well as the Electronic Devices segment. In the Electronic Devices segment, in particular, we will accelerate the development of SiC devices and modules while developing automotive and railcar modules as a form of up-front investment in future growth.

Furthermore, we will develop differentiated equipment and platform technologies to create solutions for breeding customer value using IoT.

### Research and Development

(Billions of yen)



\* Figures for R&D expenditures above have been divided by segment based on theme and may therefore differ from the figures contained in the consolidated financial report for the fiscal year ended March 31, 2016.

# FY2018 Medium-Term Management Plan (By Segment)

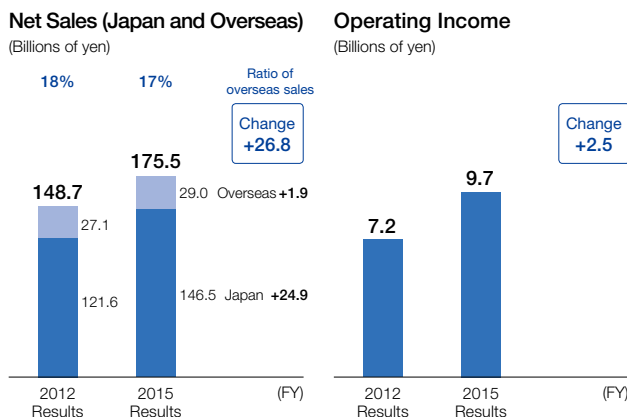
## Power and Social Infrastructure

### Review of the FY2015 Medium-Term Management Plan

In the Power and Social Infrastructure segment, fiscal 2015 net sales totaled ¥175.5 billion, up ¥26.8 billion from fiscal 2012, while operating income came to ¥9.7 billion, up ¥2.5 billion. These increases arose from higher sales of renewable energy centered on solar power generation systems and smart meters.

Over the three-year period ending with fiscal 2015, demand for thermal power generation plants rose in Japan due to the deregulation of the electricity retail market, and Fuji Electric was able to capture large-scale orders as a result. Also in Japan, we constructed mass production systems for larger quantities of smart meters due to their introduction by domestic companies. In addition, the Company participated in smart community verification projects both in Japan and overseas, accumulating electricity supply and demand management and electricity storage control know-how through this process. Overseas, we acquired a power plant after-sales business company

in the United States as well as a fuel cell sales and engineering company in Germany.



### Overview of the FY2018 Medium-Term Management Plan

The Power and Social Infrastructure segment will pursue ongoing order acquisition for thermal and geothermal power generation plants, expand after-sales businesses, redouble smart meter initiatives, and grow new businesses in consideration of electricity system reforms.

#### Thermal and Geothermal Power Generation Plant Sales and Orders Expansion

We aim to expand orders for thermal power generation plants in Japan, Asia, and the Near and Middle East while enhancing our competitiveness through development ventures for increasing the efficiency and compatible temperature range of steam turbines, a key piece of equipment. Growth in orders for geothermal power generation plants will be targeted in Asia, Africa, and Central and South America. At the same time, we will expand orders in Japan for binary geothermal power generation systems, which allow for generation to be conducted at low temperatures.

Furthermore, we will complete previously received large-scale orders for thermal power generation plants, in Japan and utilize Reliable Turbine Services LLC to grow after-sales businesses aimed at thermal and geothermal power plants abroad.

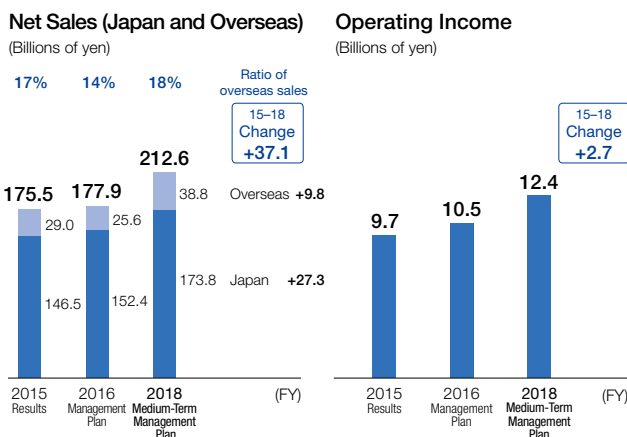
#### Expansion of Orders for Fuel Cells

Fuji N<sub>2</sub>telligence GmbH serves the German fuel cell market, which is expected to grow thanks to demand for fire prevention systems using low-oxygen exhaust air. We will thus leverage Fuji N<sub>2</sub>telligence to expand orders for fuel cells in this market. At the same time, new fuel cell models will be launched to explore the segment of the market for small- to medium-scale private-sector applications, such as those for hospitals and office buildings.

#### Smart Meter Earnings Grow and Expansion of New Businesses Targeting Power Producer and Suppliers

The number of smart meters installed throughout Japan is expected to increase going forward. To address this trend, the Company will augment smart meter production lines, improve productivity through automation, and cut costs in order to boost earnings.

At the same time, we will expand new businesses offering electricity supply and demand management services and electricity storage control systems for power producers and suppliers in the midst of electricity system reforms.



### TOPICS

#### Acquisition of Order for Japan's Largest Thermal Power Generation Plants

In October 2015, Fuji Electric received an order from Kobe Steel, Ltd., for ultra-supercritical pressure coal-fired thermal power generation plants, which will be compliant with environment footprint reduction criteria and is slated to be Japan's largest thermal power generation plant with two 650 MW units. This large-scale order is in addition to those received in fiscal 2014.

The deregulation of the domestic electricity retail market is anticipated to fuel continuous thermal power demand going forward, and we aim to take advantage of this trend to acquire orders.



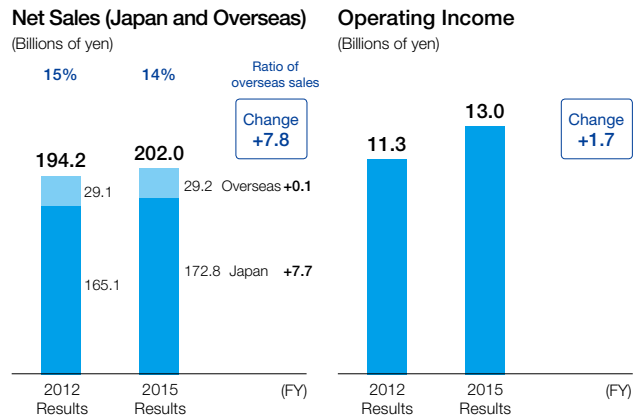
Steam turbine  
\* Photograph does not represent product ordered

## Industrial Infrastructure

### Review of the FY2015 Medium-Term Management Plan

Net sales in the Industrial Infrastructure segment in fiscal 2015 were ¥202.0 billion, rising ¥7.8 billion from fiscal 2012, and operating income was ¥13.0 billion, up ¥1.7 billion. In Japan, energy saving and replacement demand showed massive growth, and orders for solar power generation facilities, air-conditioning and electrical equipment, and other equipment construction increased. Overseas sales, however, were sluggish following economic slowdown in China and other Asian markets.

In the three years leading up to March 31, 2016, Fuji Electric took steps to strengthen the transmission and distribution business, including reorganizing domestic production bases, acquiring a Thai transformer manufacturer, and commencing substation equipment manufacturing at the Thailand Factory. We also acquired a Vietnamese engineering company to expand operations in Asia.



### Overview of the FY2018 Medium-Term Management Plan

Responding to changes in the industrial infrastructure market, the Industrial Infrastructure segment will address infrastructure investment and replacement demand on an ongoing basis and accelerate the localization of operations in Asia.

#### Expansion of Systems and Service Businesses Based Around IoT

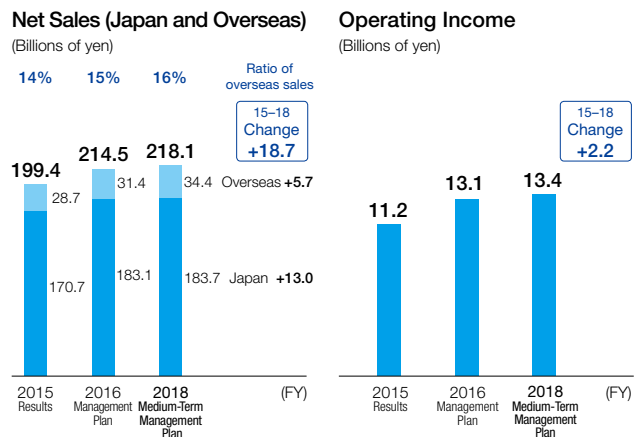
Looking ahead, we expect to see an increase in productivity efficiency improvements that entail introducing IoT and other manufacturing innovations. Based on this outlook, Fuji Electric will seek to seize hold of energy saving and replacement demand by providing high-value-added products and services that span infrastructure life cycles. These offerings will take advantage of sensors, measurement and control equipment, and other equipment delivered to customers and leverage the Company's track record in supplying services. To facilitate these efforts, we will proceed with the verification of IoT initiatives through the advanced introduction of these measures at Fuji Electric factories. We will also expand service businesses by utilizing plant equipment diagnoses to stimulate latent equipment replacement demand.

#### Development of New Businesses

Fuji Electric looks to develop new businesses, such as those related to data centers, distribution centers, and plant factories. To accomplish this objective, we will take advantage of our strength in providing one-stop service for all facilities requiring energy and environment optimization by offering design, procurement, construction, and maintenance services.

#### Expansion of Operations in Asia

Leveraging the manufacturing and engineering capabilities acquired through M&A activities, we will forge ahead with the creation of completely localized businesses in Asia. In particular, we will seek to expand our environment measure operations, which are centered on such cutting-edge equipment as analyzers for measuring PM2.5 particles.



\* Figures for FY2015 results reflect the organizational restructuring conducted in FY2016.

## TOPICS

### Data Center Orders and Sales Growth

In November 2015, we turned over the keys to a data center in Rokkasho Village, Aomori Prefecture. This data center fully exploits the cold Aomori climate by using a snow ice storage type cooling device. The use of such a system in air-conditioning equipment for data centers is a world first. Furthermore, by utilizing Fuji Electric's specialties in heating and cooling technologies, we are realizing energy savings with this system.

Drawing on our domestic data center track record, we plan to accelerate the expansion of our data center operations into Asia.



Data center using snow ice storage type cooling device

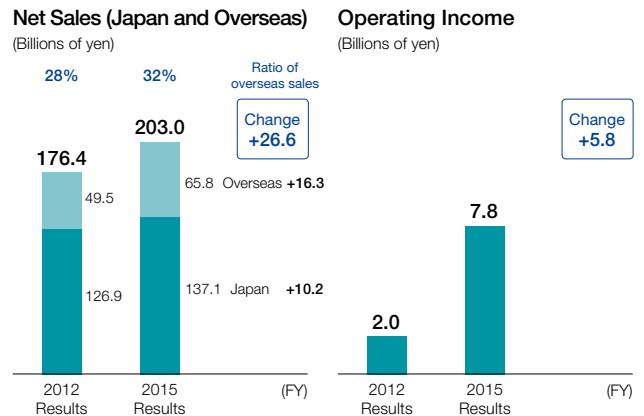
## Power Electronics

### Review of the FY2015 Medium-Term Management Plan

In fiscal 2015, net sales for the Power Electronics segment totaled ¥203.0 billion, up ¥26.6 billion in comparison with fiscal 2012 results, while operating income rose ¥5.8 billion, to ¥7.8 billion. Despite the increase in operating income, the operating margin was low. Domestic demand was strong for inverters, servos, ED&C components, and power conditioning sub-systems, and Fuji SMBE Pte. Ltd. and its subsidiaries, which were consolidated during the period of the plan, made contributions to performance with their switchgear and controlgear business.

The three-year period ended March 31, 2016, saw the start of production system refinements at domestic mother factories (Suzuka Factory and Kobe Factory) as well as visualization of earnings structure for businesses and product models. At the same time, we adopted policies promoting M&A activities, collaboration, and local production and consumption, based on which we reinforced global manufacturing systems. Furthermore, aiming to expand operations in Asia, we acquired a switchboard manufacturer in Singapore as well as an engineering company in India, gaining sales channels and engineering capabilities along with

these companies. As another accomplishment, we created a three-base production system consisting of bases in Japan, China, and Thailand with the commencement of power electronics production at the Thailand Factory. We also established a Chinese medium-voltage inverter manufacture and sales company.



### Overview of the FY2018 Medium-Term Management Plan

The Power Electronics segment will seek to grow operations on a global scale by reaping the benefits of M&A and collaborative activities conducted to date and expanding local production and local consumption.

#### Reinforcement of Profit Structure

The profit structure of the Power Electronics segment will be reinforced by rationalizing production operations through the reorganization and consolidation of models produced at domestic mother factories. Other measures to this effect will include integrating development functions and implementing extensive in-house manufacturing and standardization measures.

#### Expansion of Global Operations

The Asian market is expected to grow going forward, largely through infrastructure investment. In this market, we will call upon Fuji SMBE and Fuji Gemco Private Limited to grow service operations that combine switchgears and controlgears, controllers, and inverters. In addition, local production and local consumption will be expanded through the activities of the Thailand Factory and India Factory.

Meanwhile, in North America, we will expand our railway operations, where market growth is anticipated, while entering into the market for UPSs for data centers.

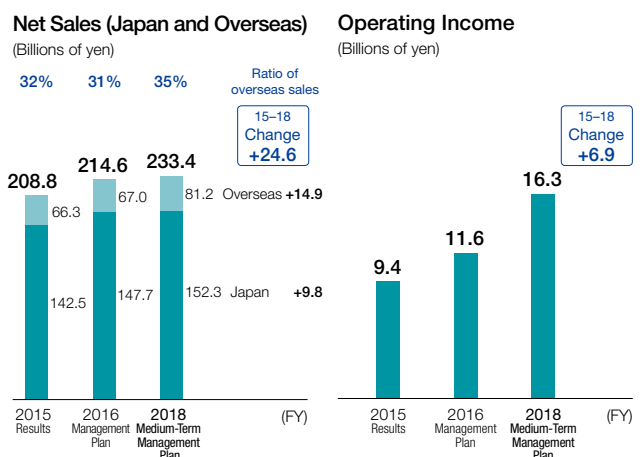
#### Quick Launch of New Products for Global Market

We will accelerate development of new products suited to overseas market as well as differentiated inverters, servos, electrical equipment for railcars, and UPSs equipped with next-generation power semiconductors (SiC and 7th-generation

IGBT modules), seeking to quickly launch these products on the global market.

#### Growth of Motion and FA Operations

Responding to automation needs, we will integrate controllers, servos, inverters, and other products to expand businesses in new fields, such as steel plants, assembly factories, transportation, and distribution centers.



\* Figures for FY2015 results reflect the organizational restructuring conducted in FY2016.

#### TOPICS

#### Establishment of Local Production and Consumption System in North America

In May 2015, a power electronics factory was established in the U.S. state of Virginia, and production of inverters and electrical equipment for railcars commenced thereafter.

In the future, we plan to broaden the range of products manufactured at this factory to include UPSs and other items in order to expand operations in North America.



Factory producing railcar electrical equipment in the United States



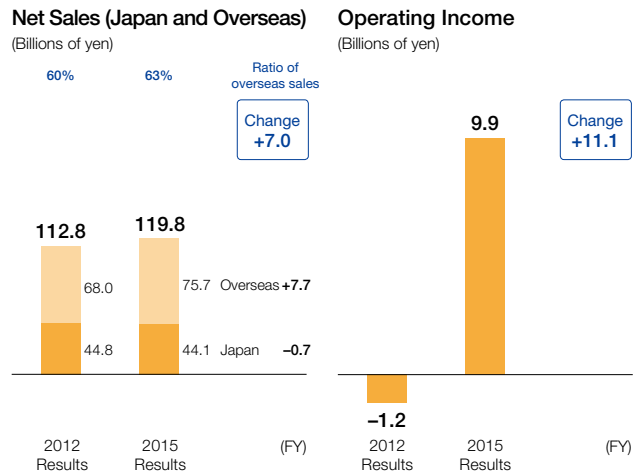
## Electronic Devices

### Review of the FY2015 Medium-Term Management Plan

The Electronic Devices segment posted net sales of ¥119.8 billion in fiscal 2015, up ¥7.0 billion from fiscal 2012, following growth in power semiconductor sales in the new energy field seen largely overseas. Operating income improved substantially to ¥9.9 billion, compared with operating loss of ¥1.2 billion in fiscal 2012, as a result of the benefits of business restructuring conducted in fiscal 2012 as well as of fixed cost reduction efforts.

The three years ending with fiscal 2015 were a period in which we enhanced systems for local design, local production, for local consumption to strengthen power semiconductor operations overseas. Specific initiatives in this regard included establishing overseas design centers and increasing overseas production at locations such as Malaysia, the Philippines, and China. In Japan, we commenced operation of an 8-inch wafer line at our Yamanashi Factory and advanced a shift toward larger diameter wafers. Also, production was expanded at Fuji Electric Tsugaru Semiconductor Co., Ltd., which was acquired in July 2012. Furthermore, we created an even more solid

management structure by integrating power semiconductor and magnetic disk subsidiaries in Malaysia.



### Overview of the FY2018 Medium-Term Management Plan

The Electronic Devices segment will grow sales focused on power semiconductors to the industrial and new energy fields and step up development of SiC modules and automobile-use products.

#### Acceleration of Power Semiconductor Product Development

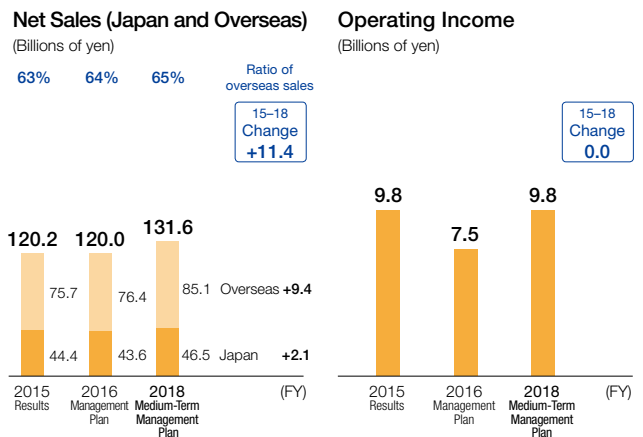
We will accelerate development of SiC modules for industrial, railway, and automobile applications and expand our series of 7th-generation IGBT modules. In addition, we will bolster development of automobile-use models targeting business growth in fiscal 2019 and beyond.

#### Sales Growth Focused on Industrial and New Energy Fields

In consideration of the rising demand for automation and energy saving, the Company will seek to grow sales in industrial fields by introducing 7th-generation IGBT modules. We will also target increased sales in the new energy field, in Europe and China specifically, by enhancing and utilizing overseas design centers.

#### Ongoing Cost Reduction Measures

While accelerating the shift toward local production and local consumption by expanding production in Malaysia, the Philippines, and China, we will advance ongoing cost reduction measures by augmenting design and manufacturing technology capabilities.



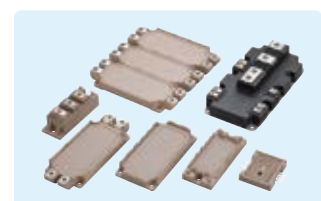
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### TOPICS

#### Launch of 7th-Generation IGBT Modules

August 2015 marked the launch of the 7th-generation IGBT modules developed by Fuji Electric to realize further energy savings and higher levels of reliability in general-purpose inverter, machine tool, new energy, and various other fields. By optimizing devices, these modules contribute to substantial reductions in power loss.

Fuji Electric is expanding its lineup of 7th-generation IGBT modules in the pursuit of higher sales.



7th-generation IGBT modules

## Food and Beverage Distribution

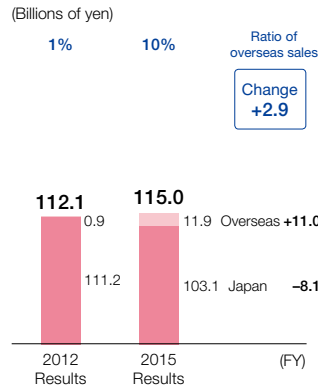
### Review of the FY2015 Medium-Term Management Plan

The Food and Beverage Distribution segment posted net sales of ¥115.0 billion in fiscal 2015, representing an increase of ¥2.9 billion from fiscal 2012, and operating income was ¥7.8 billion, an increase of ¥1.4 billion. While the domestic vending machine market shrunk, the impacts of this contraction were offset by growth in the Chinese vending machine market and expansion in operations targeting convenience stores.

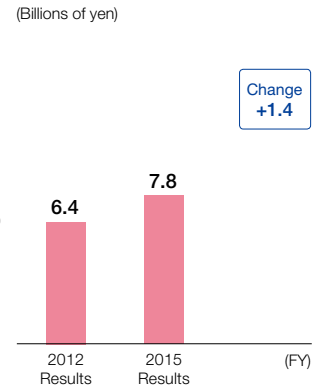
During the three-year period ending March 31, 2016, we doubled production capacity in the vending machine business to respond to growth in the Chinese market, creating a system capable of manufacturing 50,000 units per year. We also implemented structural reforms in this business by separating product and sales functions in China. In addition, production of vending machines for the global market was commenced at the Thailand Factory to prepare for our entry into the Asian market.

In the store distribution business, we introduced new products for convenience stores and expanded automatic change dispenser operations.

#### Net Sales (Japan and Overseas)



#### Operating Income



### Overview of the FY2018 Medium-Term Management Plan

The Food and Beverage Distribution segment will expand its vending machine business primarily in China while growing the store distribution business with a focus on products for domestic convenience stores.

#### Expansion of Vending Machine Business in China and Asia

Vending machine demand is expected to grow in China, supported by a firm beverage market as well as a rise in automated service needs resulting from soaring personnel costs. To cater to this demand and expand our vending machine business, we plan to double our production capacity in China, from 50,000 units a year on March 31, 2016, to 100,000 units a year. We will also reinforce development, sales, and service systems.

At the same time, we will construct business foundations in Asia by providing support for local beverage manufacturers in deploying vending machines and by establishing local operator companies.

#### Introduction of High-Value-Added Vending Machines

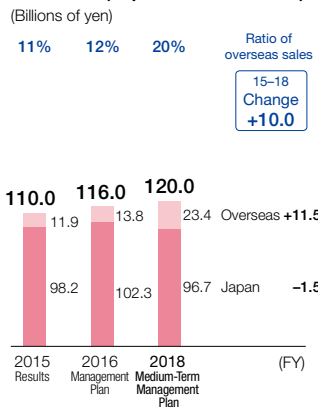
Fuji Electric intends to introduce high-value-added vending machines, such as those utilizing digital signage, into both the Japanese and Chinese markets.

#### Development of Store Distribution Business

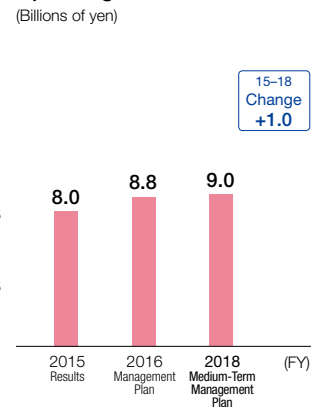
In developing the store distribution business, we will enhance our operating site and facility management systems and improve

customer service to allow for responses to more diverse customer needs. In addition, we will launch next-generation store products, particularly those for convenience stores. One such offering will be next-generation showcases that feature internalized cooling units, eliminating the need for pipes and external units.

#### Net Sales (Japan and Overseas)



#### Operating Income



\* Figures for FY2015 results reflect the organizational restructuring conducted in FY2016.

#### TOPICS

#### Chinese Vending Machine Business Expansion

China is witnessing growth in vending machine demand, and the number of vending machines Fuji Electric ships in this country is on the rise. In light of this trend, in fiscal 2015, we invested in an increase in production capacity at the Company's Dalian Factory, doubling this factory's capacity to 50,000 units per year.

Looking ahead, we anticipate that the introduction of advanced vending machines, such as those that are compatible with digital signage or smartphones, will be promoted in China. Taking a preemptive approach toward this upcoming market change, we will further strengthen our development and production systems to lead the Chinese market as the holder of the top share.



Vending machine production line (Dalian)