Power Electronics Systems (Energy Solutions / Industry Solutions)

In the Energy Solutions segment, Fuji Electric supports power infrastructure with its proven technologies to contribute to the stable supply, optimization, and stabilization of energy for customers. In the Industry Solutions segment, we combine power electronics with measuring instruments and IoT technologies to contribute to improved productivity and energy savings with factory automation and monitoring.

Power Electronics Systems Business Policy

Strengthen systems operations using competitive components, expand overseas businesses by leveraging systems

Priority Measures for Fiscal 2018
- Develop and introduce global products
- Promote standardization and bundling of system solutions
- Strengthen systems operations by utilizing overseas engineering companies partnered with or acquired through M&A activities
- Pursue local production and consumption in Asia

Review of Operations (By Segment)
Creation of Competitive Components
The systems that support the optimal operation of customers’ production facilities and plants require unique, competitive, and differentiated components. Fuji Electric’s factory automation business is focused on the development of servos, which need the most precise control technologies among FA components; sensors for monitoring temperature, vibration, and electricity; and programmable logic controllers (PLCs), a type of control device that regulates the operations of production lines and material plants to guarantee safety. In addition, we are accelerating the creation of global products based on international specifications to expand overseas operations.

Enhancement of Systems Using Competitive Components
The systems project track record, technologies, and expertise Fuji Electric has cultivated to date are being utilized to promote the standardization and bundling of hardware and software in an effort to step up development of high-value-added systems. Furthermore, we are backing these systems with engineering and other services.

Expansion of Overseas Businesses by Leveraging Systems
Fuji Electric is focusing on developing its transmission and distribution systems, process automation, and FA systems primarily in China and other parts of Asia. In these operations, we take advantage of overseas engineering companies acquired through M&A activities, namely Fuji Tusco Co., Ltd.; Fuji Gemco Private Limited; Fuji CAC Joint Stock Company; and Fuji SEMEC Inc. At Fuji Electric Manufacturing (Thailand) Co., Ltd., meanwhile, we have begun constructing switchgear and controlgear system factories (third factory scheduled to commence operation in 2019). These facilities are anticipated to help us cater to demand for the switchboards that control power at factories; this demand is rising in Asia, where factories and buildings are being constructed at a rapid pace. In addition to these undertakings, we are applying standardized and bundled systems to focus areas, such as steel, cement, and chemicals, to increase orders overseas, where systems often must be delivered on tight schedules.
Energy Solutions

Operating Environment
In Japan, demand is rising for solutions to stabilize power supplies and optimize the energy supply and demand in order to maintain reliable operations of equipment at factories and facilities. At the same time, the shortage in facility management personnel is stimulating demand for IoT to be utilized in all service areas, including after-sales services, in order to monitor and optimize operations while saving energy.

In rapidly growing Southeast Asia and other emerging countries, the acceleration of investment in social infrastructure and in production facilities is creating issues related to the stability and efficiency of power supplies that need to be addressed.

Review of Operations in Fiscal 2017
In the Energy Solutions segment, net sales were up year on year. Sales benefited from large-scale orders for substation equipment for the power and industrial fields overseas. In addition, this segment enjoyed increased demand from machine tool and other equipment manufacturers and from overseas in the ED&C components business.

Operating income in this segment increased due to higher sales in the ED&C components business as well as due to cost reductions.

Major Initiatives in Fiscal 2017

Expand of Orders Amid Substation Equipment Replacement Demand
In Japan, replacement demand is rising as existing facility and plants age. In fiscal 2017, Fuji Electric increased in orders for substation equipment centered on steel, chemical, and other material industries. This feat was accomplished by proposing renovations and replacements of customers' aged facilities.

Plant System Order Acquisition with a Focus on Energy Management Systems
In fiscal 2017, Fuji Electric bundled energy management systems, which optimize electricity and heat usage within factories, and combined heat and power supply equipment, such as cogeneration systems that up self-sufficiency in terms of energy, to provide comprehensive energy optimization packages. We also developed control software that was ideally suited to specific industries.

With focused on energy management systems, we sought to capture plant system orders by proposing combinations of substation and power supply equipment to customers.

Priority Measures for Fiscal 2018
Grow Comprehensive Factory and Facility Electrical Equipment Orders
In fiscal 2018, Fuji Electric will pursue growth in comprehensive electrical equipment orders. Focused on the five target fields of steel, semiconductors, buildings and facilities, assembly, and food, we will propose bundles that combine the substation, power supply, and air-conditioning equipment that underpin the stable supply and optimization of power at factories and facilities with energy management systems customized for specific industries. Furthermore, we will seek to expand our business through the provision of comprehensive energy solutions that encompass everything up to and including maintenance and other services.

Expand Transmission and Distribution Systems Business in Asia
We will reinforce our engineering systems and increase orders of engineering, procurement, and construction (EPC) projects in order to expand our transmission and distribution systems business in Asia. At the same time, the strengths of Fuji Tusco, which manufactures transformers, will be utilized to boost the competitiveness of our product lineup through the promotion of global products and to thereby facilitate the growth of completely local businesses. For replacement projects, we will coordinate with local distributors and trading companies to step up service proposal activities.

Review of Operations (By Segment)
Note: Figures for FY2016 and FY2017 reflect the organizational restructuring conducted in FY2018

Net Sales
(Billions of yen)

<table>
<thead>
<tr>
<th></th>
<th>2016 Results</th>
<th>2017 Results</th>
<th>2018 Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of overseas sales 25%</td>
<td>212.2</td>
<td>217.6</td>
<td>224.4</td>
</tr>
</tbody>
</table>

Operating Income
(Billions of yen)

<table>
<thead>
<tr>
<th></th>
<th>2016 Results</th>
<th>2017 Results</th>
<th>2018 Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 Results</td>
<td>13.7</td>
<td>14.0</td>
<td>16.4</td>
</tr>
</tbody>
</table>

Net Sales Composition Ratio
(Management Plan in FY2018)

- Energy Management
  - Power distribution, Smart meters, Industrial substation, Railway substation, Industrial power supplies
- Power Supply and Facility Systems
  - Data centers, UPS, Electrical facilities, Switchgears and Controlgear
- ED&C Components
  - Power distribution and control equipment

Operating Income Composition Ratio
(Management Plan in FY2018)

23% 25%
Industry Solutions

Operating Environment
Labor shortfalls and aging production facilities are stimulating increased demand for automation and labor saving in the domestic industrial field.
In China and other parts of Asia, a lack of production floor staff and the need to improve productivity are creating issues amid the continually robust capital expenditure demand centered on the semiconductor and automotive fields.

Review of Operations in Fiscal 2017

In the Industry Solutions segment, net sales increased year on year. Performance was driven by the factory automation business, which benefited from robust demand for the automation of production facilities in Japan and China, and the process automation business, which enjoyed brisk replacement demand in the Japanese market. Another proponent of performance was the IT solutions business, which saw increased demand for tablets in conjunction with the trend toward utilizing IT for education in schools.

Operating income in this segment grew together with net sales.

Major Initiatives in Fiscal 2017

Expansion of Factory Automation Orders
In fiscal 2017, we launched our ALPHA7 series of servo systems boasting industry-leading levels of control performance as well as the MICREX-SX Series SPH3000D motion controller. These products are applicable in a variety of fields, ranging from factory production facility and machine tools to packaging machinery, and we were thus able to expand orders of these products as an integrated motion control system. Orders were primarily centered on China and Japan.

Acquisition of Steel Plant Order in India
Fuji Gemco, a company in India acquired through M&A activities, received steel plant orders in fiscal 2017. We filled these orders by delivering a system that bundled software with our PLCs, motors, and inverters for use in steel rod and rolling lines. By shortening development periods to quickly deliver highly reliable systems, Fuji Electric will endeavor to meet the needs of customers requiring quick turnaround times.

Priority Measures for Fiscal 2018

Expand FA Systems
In fiscal 2018, Fuji Electric will undertake the development and supply of testing apparatuses and production line conveyance systems that help resolve customer issues by combining its components, such as inverters, servos, controllers, and sensors, with its control technologies and engineering capabilities.

To support these efforts, we will approach assembly processing industry end users in the automotive and semiconductor fields with the aim of growing FA system orders. At the same time, we will utilize the track record and expertise cultivated in Japan to expand our operations overseas.

Grow the Process Automation Business in Asia
We are stepping up engineering training at Fuji Gemco of India and Fuji CAC of Vietnam, both acquired through M&A activities, and other overseas engineering companies. We thereby aim to grow overseas operations targeting steel and cement plants and other system fields in which Fuji Electric specializes.

Business Areas

<table>
<thead>
<tr>
<th>Factory Automation</th>
<th>Social Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inverters, Motors, FA components (servo and controller), Measuring instruments and sensors, FA systems</td>
<td>Electrical equipment for railcars, Radiation monitoring systems</td>
</tr>
<tr>
<td>Process Automation</td>
<td>Equipment Construction</td>
</tr>
<tr>
<td>Drive control systems, Measuring and control systems</td>
<td>IT Solutions</td>
</tr>
</tbody>
</table>

**Net Sales Composition Ratio (Management Plan in FY2018)**

<table>
<thead>
<tr>
<th>Business Areas</th>
<th>2016 Result</th>
<th>2017 Result</th>
<th>2018 Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory Automation</td>
<td>16%</td>
<td>321.0</td>
<td>322.0</td>
</tr>
<tr>
<td>Social Solutions</td>
<td>16%</td>
<td>321.0</td>
<td>322.0</td>
</tr>
<tr>
<td>Process Automation</td>
<td>17%</td>
<td>321.0</td>
<td>322.0</td>
</tr>
</tbody>
</table>

**Operating Income Composition Ratio (Management Plan in FY2018)**

<table>
<thead>
<tr>
<th>Business Areas</th>
<th>2016 Result</th>
<th>2017 Result</th>
<th>2018 Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory Automation</td>
<td>34%</td>
<td>14.0</td>
<td>18.9</td>
</tr>
<tr>
<td>Social Solutions</td>
<td>29%</td>
<td>14.0</td>
<td>19.2</td>
</tr>
<tr>
<td>Process Automation</td>
<td>16%</td>
<td>14.0</td>
<td>17.0</td>
</tr>
</tbody>
</table>

Note: Figures for FY2016 and FY2017 reflect the organizational restructuring conducted in FY2018.
Intermediate waste treatment facilities, which primarily treat household garbage, employ a variety of facilities, including incinerators as well as the cranes and conveyors used to transport waste. It is important for these facilities to be able to maintain safe and stable operation while also reducing the impact on the environment from waste incineration. Fuji Electric supplied the system currently used by the Miyanojin Clean Center of Kurume City in Fukuoka Prefecture, which is able to efficiently incinerate massive quantities of waste. This system consists of a decentralized control system equipped with PLCs that achieve optimal control of conveyance speed, air intake, and combustion temperature based on measurements taken by measuring instruments as necessitated by the types of waste being treated. This system has been effective at realizing safe and stable operation and reduced environmental impact. Moreover, the system goes further to make contributions to a low-carbon, recycling-oriented society by generating electricity using the heat energy given off during the waste incineration process. Switchboards are used to distribute the generated electricity for use within the facility, with surplus power being sold. The end result is energy savings and subsequently a smaller environmental footprint.

A major strength of Fuji Electric is its ability to propose systems that combine electrical equipment, measuring instruments, and control equipment. Capitalizing on this strength, we are moving forward with system bundle proposals and order acquisition activities to contribute to the optimization of entire production lines and even entire facilities.
Electric vehicles (EVs) are expected to become increasingly more mainstream going forward. In China, the drive to adopt EVs is being supercharged by plans to introduce regulation on new energy vehicles (NEVs) in 2019. Furthermore, over half of the world’s lithium-ion batteries, which are indispensable to EVs, are produced in China. Fuji Electric is supplying major Chinese lithium-ion battery production equipment manufacturers with its motion control systems, which boast industry-leading control capabilities.

Lithium-ion batteries are comprised of coiled layers of film coated in materials that are able to store electricity. If these coils are not sufficiently tight, it can have a significant adverse impact on the lifespan and performance of the battery. For this reason, manufacturing these batteries requires sophisticated technological capabilities to control the strength and speed at which film is stretched.

Fuji Electric’s motion control systems contribute to improved product quality and productivity for customers with their ability to realize high-precision, high-speed motion control. When it comes to business negotiations related to systems, the competitiveness of proposals hinges on the ability to swiftly meet customers’ needs. In this regard, Fuji Electric’s in-house design and production of equipment is a huge advantage.

There are currently around 110,000 ships at sail around the world, and another 2,000 ships are built each year. Sulfur oxide (SOx), a pollutant contained in ship exhaust gas, is damaging to the environment and to people’s health. Seeking to reduce such damages, the International Maritime Organization plans to implement regulations on SOx, as well as particulate matter, another pollutant, in 2020. These regulations will call for a 95% reduction in fuel oil SOx content. Complying with these regulations will require ship operators to switch to costly low-sulfur fuels, resulting in a massive increase in running costs. Another approved option is to use ship exhaust gas cleaning systems, of which SOx scrubbers are a key component. The market for these systems is expected to grow rapidly as they represent a SOx reduction solution that enables ship operators to continue using the same fuel.

Fuji Electric has developed SOx scrubbers that employ a proprietary cyclone technology. We offer these scrubbers to domestic ship operators and have been moving forward with verification tests, leading to the acquisition of our first order in fiscal 2017.

Conventional SOx scrubbers utilize a technology in which seawaters is sprayed on exhaust gas to remove SOx by taking advantage of a chemical reaction between SOx and the alkalis in the seawater. As such, achieving large processing capacities required massive overhauls to ships, which was a significant obstacle to introduction. Fuji Electric’s cyclone SOx scrubbers have garnered attention across the industry for their compact size, which enables them to fit in the engine rooms of most ships. Another benefit of using Fuji Electric scrubbers is that they can be supplied in system bundles that contribute to energy savings. These bundles combine gas analyzers and other measuring instruments that monitor the status of SOx scrubbers in real-time as well as inverters for controlling seawater intake and other peripheral equipment. In the future, we hope to incorporate IoT technologies into our ship exhaust gas cleaning systems to help automatically monitor the operating status of systems to prevent malfunctions or otherwise add value through after sales businesses.
Review of Operations (By Segment)

Electronic Devices

Across the industrial and automotive fields, Fuji Electric contributes to high power conversion efficiency and energy savings by supplying power semiconductors, which are key devices in power electronics.

Operating Environment

A trend toward automation and labor saving is currently being seen in the industrial field centered on Japan and China, stimulating growth in demand for power semiconductors for motor control applications of machine tool and robots.

In the automotive field, Germany, the United Kingdom, and France have announced future bans on the sales of conventional fossil fuel vehicles. Meanwhile, China, the world’s largest automotive market, is advancing a national movement to promote EVs. These trends are accelerating the shift toward EVs, which is expected to drive rapid growth in demand for power semiconductors for automotive applications.

Review of Operations in Fiscal 2017

In the Electronic Devices segment, net sales were up year on year. Sales of semiconductors for machine tools and other areas of the industrial field showed substantial growth on the back of increased automation and labor-saving investment in the Chinese and Japanese markets. In addition, demand for semiconductors for automotive applications was firm.

Operating income rose due to the higher net sales and the benefits of favorable foreign exchange influences.

Major Initiatives in Fiscal 2017

Expansion of Domestic and Overseas Power Semiconductor Production Capacities

We bolstered our series of 7th-generation IGBT modules, which contribute to more compact equipment as well as to greater energy and space savings in comparison to previous offerings, while also expanding our 8-inch wafer production capacity and improving productivity. In addition, we boosted back-end processing capabilities overseas to address growth in inverter air conditioner unit demand in China. These efforts contributed to higher sales.

Development and Mass Production of Automotive Power Semiconductors

Fuji Electric developed an automotive IGBT module utilizing the Company’s direct liquid cooling technology and RC-IGBT chip technology and commenced mass production. These technologies help EVs drive for longer distances while making their motor drive units smaller. Moreover, they are top in their class in terms of output electric power density.

Priority Measures for Fiscal 2018

Invest in Production Capacity Increases for Expanding Power Semiconductor Operations

We plan to conduct aggressive investment in power semiconductor production equipment in preparation for the projected growth in industrial field demand and the full-fledged proliferation of EVs. In regard to front-end processes, we will invest in increasing 8-inch wafer production capacity. As for back-end processes, investment will be mainly directed toward production facilities for modules for industrial, automotive, and air conditioning applications. We will thereby seek to expand domestic and overseas production levels.

Accelerate Automotive Power Semiconductor Product Development

In its R&D, Fuji Electric is shifting development resources to automotive IGBT modules and investing in related development equipment with the aim of growing sales of these modules. In addition, we have commenced mass production of SiC trench gate MOSFETs* in the form of an all-SiC module and began employing this module in our power electronics products. When incorporated into an inverter, this module can contribute to power loss reductions of 78% in comparison to prior Fuji Electric Si devices.

* Metal-Oxide-Semiconductor Field-Effect Transistor

Net Sales

(Billions of yen)

Operating Income

(Billions of yen)

Ratio of overseas sales

Operating Income Composition Ratio (Management Plan in FY2018)

Net Sales Composition Ratio (Management Plan in FY2018)
Fuji Electric’s Power Semiconductors

Semiconductors primarily come in four varieties: microcomputers used to make calculations, memory used to record information, power semiconductors used to control electricity, and optical semiconductors are others.

Manufactured with sophisticated production and processing technologies, power semiconductors convert electricity between DC and AC power as well as the voltage and frequency of electricity to realize efficient use of power. These devices are incorporated into robots, machine tools, and other production equipment; data centers; facilities and power sources necessary to maintain stable supplies of renewable energy; railroad equipment; and EVs. In these applications, power semiconductors support industrial and social infrastructure as key devices in realizing energy savings through the control of electricity and its conversion.

Fuji Electric employs power semiconductors in many of its mainstay power electronics products, including inverters, servo motors, UPSs, and PCSs, to realize higher levels of efficiency while also making these products more compact. Moreover, it develops operations using these devices on a global scale.

One of Fuji Electric’s core strengths is that the Company possesses all of the technologies necessary for the development and production of power semiconductors, specifically power electronics technologies, microelectronics technologies, and packaging technologies. In addition, with front-end and back-end processing equipment at bases in Japan and overseas, we are able to perform all procedures related to the production of power semiconductors in-house. Furthermore, we are diversifying the locations of our production bases to promote local production and consumption while simultaneously planning for business continuity. Meanwhile, increased productivity is being pursued by bolstering 8-inch wafer production capacity. We are also developing SiC* power semiconductors that contribute to more compact and energy efficient devices in order to further boost the competitiveness of our products.

* SiC: Silicon Carbide

Strengths of Fuji Electric’s Power Semiconductors

Applications of Power Semiconductors

Applications of Automotive Semiconductors

- Wiper and power window control
  - Power MOSFETs
- Engine control
  - Pressure sensors
  - Power ICs
- Light control
  - Power MOSFETs
- Brake control
  - Power ICs

- EV / HEV motor control
  - IGBT modules
  - Intelligent power modules
- EV / HEV DC-DC converter
  - Power MOSFETs
- Steering control
  - Power MOSFETs
- Transmission control
  - Power ICs
Power and New Energy

With its sophisticated plant engineering capabilities, Fuji Electric meets the growing demand for electricity by providing various high-efficiency power generation systems that supply eco-friendly clean power.

Operating Environment

We are in the midst of a social movement to combat global warming, with efforts on this front predominantly focused on reducing and eventually eliminating carbon emissions. As power demand and the capacity of generation facilities grow in emerging countries and other parts of the world, the shift from large-scale power sources to distributed power sources is gaining speed. In Japan, which is highly dependent on fossil fuels procured from overseas, there is also a need to establish an ideal energy mix*1 for ensuring reliable supplies of electricity. In light of these trends, Fuji Electric anticipates growth in after-sales businesses in the thermal power field that entail encouraging customers to upgrade to more efficient systems and products along with increased introduction of geothermal power, hydro power, solar power, wind power, and other eco-friendly forms of renewable energy.

*1 Mix of power sources allowing for the balanced use of various power types for maximum benefits

Review of Operations in Fiscal 2017

In the Power and New Energy segment, net sales were up year on year because the benefits of large-scale orders for thermal power generation systems counteracted the impacts of the decline in large-scale orders for hydro power generation systems and solar power generation systems.

However, operating income declined as a result of lower revenues from hydro power generation systems and solar power generation systems and a less favorable sales mix.

Major Initiatives in Fiscal 2017

Expansion of Renewable Energy Orders

In the field of small- to medium-capacity generation systems, an area of expertise for Fuji Electric, we increased in sales for woody biomass power generation facilities and also delivered steam turbines and generators to customers such as Nakayama Nagoya Joint Power Generation of Aichi Prefecture.

In regard to geothermal power generation plants, we delivered Japan’s largest binary geothermal power generation plants to the Yamagawa Binary Power Station of Kyuden Mirai Energy Company, Incorporated, located in Ibusuki City, Kagoshima Prefecture. It is able to generate power from low-temperature heated water that previously could not be used for generation.

Review of Operations (By Segment)

Net Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>2016 Results</th>
<th>2017 Results</th>
<th>2018 Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of overseas sales (%)</td>
<td>22%</td>
<td>17%</td>
<td>20%</td>
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</tbody>
</table>

Operating Income

<table>
<thead>
<tr>
<th>Year</th>
<th>2016 Results</th>
<th>2017 Results</th>
<th>2018 Management Plan</th>
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</thead>
<tbody>
<tr>
<td>(%)</td>
<td>7.5</td>
<td>5.5</td>
<td>6.5</td>
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Net Sales Composition Ratio (Management Plan in FY2018)

<table>
<thead>
<tr>
<th>Year</th>
<th>2016 Results</th>
<th>2017 Results</th>
<th>2018 Management Plan</th>
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</thead>
<tbody>
<tr>
<td>Ratio (%)</td>
<td>11%</td>
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Operating Income Composition Ratio (Management Plan in FY2018)

<table>
<thead>
<tr>
<th>Year</th>
<th>2016 Results</th>
<th>2017 Results</th>
<th>2018 Management Plan</th>
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</thead>
<tbody>
<tr>
<td>Ratio (%)</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Business Areas

- Thermal power
- Renewable and new energy
- Biomass power generation plants
- Geothermal power generation plants
- Hydro power generation facilities
- Solar power generation systems
- Wind power generation systems
- Fuel cells
- Nuclear power-related equipment
- (fuel handling equipment and waste treatment equipment)

Priority Measures for Fiscal 2018

Pursue Further Growth in Renewable Energy Orders

Fuji Electric will pursue further growth in orders for geothermal power generation plants by utilizing its anti-corrosion and turbine production technologies and it seeks to explore new markets such as Africa, where increases in energy demand are anticipated.

We also look forward to increases in the introduction of wind power generation systems given the fact that the systems currently operating in Japan only account for a low 12%*2 of the approved generation capacity under the country’s feed-in-tariff system. Furthermore, we aim to acquire EPC contracts by addressing issues related to unreliable generation outputs with the strength of our electricity storage systems, which are equipped with Fuji Electric’s power semiconductor power conversion technologies.

*2 Based on figures released by the Agency for Natural Resources and Energy as of September 30, 2017

Expansion of After-Sales Businesses

We are expanding after-sales businesses in which we provide regular inspections as well as services for boosting generation efficiency and preventing malfunctions. In regard to thermal and geothermal power generation plants, specifically, we will construct networks for providing services that are custom-tailored to the needs of customers in priority regions such as Asia, the Americas, and the Middle East under the guidance of mother factories in Japan. At the same time, we will bolster our lineup of lifespan diagnosis services, IoT-powered remote technical services, and other services.
Food and Beverage Distribution

In the food and beverage distribution segment, Fuji Electric helps to ensure the safety and security of food and beverage products by combining its core heating and cooling technologies with mechatronic and IoT technologies to provide ideal products and solutions.

Operating Environment

In China and other parts of Asia, the rise in labor costs are driving a rapid trend toward the automation of beverage and other retail sales, which is contributing to the growth of the vending machine market. As a result, the Chinese market features demand for a wide range of vending machines, including can, PET bottle, cup, and food vending machines.

Turning to the domestic convenience store market, we anticipate increased investment in existing stores for the purposes of boosting sales, reducing labor requirements, and conserving energy. At the same time, the increasingly severe shortage of employees to operate stores is stimulating a rise in demand for operating solutions that can be used with fewer employees.

Review of Operations in Fiscal 2017

Net sales in the Food and Beverage Distribution segment increased year on year. Although the revision of customers’ plans caused performance in the Chinese market to remain around the same level as in the previous fiscal year in the vending machine business, this business was still able to prosper due to higher demand from customers in the Japanese market. The store distribution business enjoyed increased demand for products for convenience stores.

Operating income was up as the growth in domestic vending machine demand was able to counteract the downward pressure placed on income by a less favorable sales mix in the store distribution business.

Major Initiatives in Fiscal 2017

Overseas Expansion of Vending Machine Business

We bolstered our vending machine production system in China with the completion of our second factory in Dalian City, and we also undertook reinforcements to sales, service, and development systems. Moreover, we succeeded in strengthening overall business systems by supporting local beverage manufacturers in deploying vending machines and by providing operational assistance to local operator companies, which use vending machines as a venue to sell the items contained therein. In addition, a vending machine production and sales company in Indonesia was acquired with an eye to the further enhancement of operating foundations in Southeast Asia.

Priority Measures for Fiscal 2018

Grow Vending Machine Business in China

We will continue to form relationships with new customers in China, including beverage manufactures and operator companies, while introducing cup, food, and other vending machines into the Chinese market to respond to the diverse needs therein. We thereby aim to grow vending machine sales.

Creation of Southeast Asian Vending Machine Market

With the aim of creating a Southeast Asian vending machine market, we plan to step up efforts to research the needs of customers in Thailand and other countries while promoting proposals for replacing old vending machines with new models. We will also commence full-fledged operation of our Indonesia Factory, a new production base in Southeast Asia, to quickly cement operating foundations in this region.

Development of Labor-Saving Products for Next Generation Stores

Fuji Electric is committed to developing and proposing new products that address the labor-saving needs of convenience stores.