

Innovating Energy Technology

Fuji Electric Report

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#### Regarding the Fuji Electric Report

#### **Editorial Policy**

Fuji Electric Report is an important communication tool that is prepared and published for the purpose of facilitating understanding of the Company's corporate activities among its shareholders, investors, and various other stakeholders.

Fuji Electric places great importance on clear communication of its initiatives to create medium- to long-term value and key issues on the environment, society, and governance.

#### **Covered Organizations**

In this report, Fuji Electric collectively refers to Fuji Electric Co., Ltd. and its consolidated subsidiaries in Japan and overseas.

#### Information Disclosure Venues

Fuji Electric Report includes highlights of financial information as well as non-financial information pertaining to social and environmental and governance issues. More detailed financial information can be found in the Company's financial results summaries and securities reports (Japanese only) on its investor relations website. Additional nonfinancial information is available in the form of detailed explanations of Fuji Electric's social and environmental initiatives and governance on the Company's corporate website.





#### About the Front Cover

Fuji Electric aims to contribute to achieving the SDGs through its energy and environment businesses. The front cover of this report reflects Fuji Electric's attitude towards achieving the SDGs through its four businesses working together as one.



# **Corporate Information**

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#### Disclaimer Regarding Forward-Looking Statements

Statements made in this report regarding estimates or projections are forward-looking statements based on the Company's judgments and assumptions in light of currently available information. Actual results may differ materially from those projected as a result of uncertainties inherent in such judgments and assumptions as well as changes in business operations or other internal or external conditions. Accordingly, the Company gives no guarantee regarding the reliability of any information contained in these forward-looking statements. Investors are encouraged to also reference documents submitted by the Company in accordance with the Financial Instruments and Exchange Act of Japan and other disclosure materials.

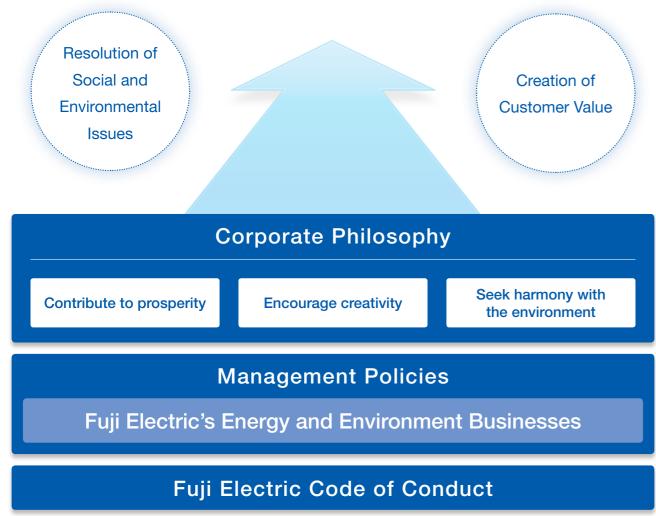
# **Corporate Philosophy and Management Policies**

Fuji Electric's corporate philosophy hinges on a mission to contribute to prosperity, encourage creativity, and seek harmony with the environment, while the Company's management policies are centered on the notion of contributing to society through its energy and environment businesses.

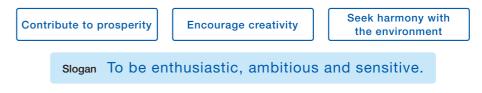
By putting this corporate philosophy and management policies into practice based on its Corporate Code of Conduct, which sets forth guidelines for the conduct of employees, Fuji Electric and its employees, together with customers and business partners, will aim to resolve social and environmental issues, create customer value, achieve the SDGs, and contribute to the creation of a responsible and sustainable society.



# The Creation of a Responsible and Sustainable Society



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



# **Management Policies**

- 1. Through our innovation in energy and environment technology, we contribute to
- the creation of a responsible and sustainable society.
- 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**

In order to practice our corporate philosophy to fulfill social responsibility and act with high ethical standards while understanding and complying with relevant laws, regulations, international rules, and the spirit of such regulations and rules, both domestically and abroad, Fuji Electric and its employees have defined this code as a foundation for decision-making and behavior.

- 1 Respect and value all people
- 2 Respect and value our customers
- 3 Respect and value our business partners
- 4 Respect and value our shareholders and investors
- S Respect and value the global environment

# **Brand Statement**

# **Innovating** Energy Technology

Brand Promise

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

# **Corporate Philosophy**

- 6 Respect and value interaction with society
- Make global compliance a top priority 1 Thorough compliance 7 Thorough risk management
- 8 Top management will thoroughly practice this standard

- and sustainable society.

# Fuji Electric's Energy and Environment Businesses

Numerous changes are taking place in the environment that envelops Fuji Electric, including global warming, the frequent occurrence of natural disasters, problems surrounding resources and energy, and aging industrial and social infrastructure.

We will ceaselessly pursue synergies between our core power semiconductor and power electronics technologies and combine high-quality equipment employing key devices with our engineering services, optimal control technologies, and IoT know-how honed thus far. In this way, we aim to help solve issues for customers in industrial and social infrastructure fields, address social and environmental problems, and contribute to the achievement of a sustainable society.



Internet of Things (IoT): A new framework for fundamentally revolutionizing business and lifestyles by connecting various objects to networks and enabling them to achieve optimal, autonomous control of one another.

Demographic



Global warming

and frequent

occurrence of

natural disasters

(0)

Social and

Problems

Environmental

Priority SDGs

# Value Creation at Fuji Electric

Ever since our establishment in 1923, Fuji Electric has been an innovator of electric and thermal energy technologies. By capitalizing on the technology with which we can wield control—i.e., creating, measuring (sensing technologies), controlling (control technologies), converting (power electronics technologies), and optimizing electricity—we contribute to clean energy, stable supply of energy, automation, and energy

saving. Going forward, we will continue to address the energy and environmental issues of our customers by leveraging the technological and engineering capabilities we have honed thus far together with our extensive track record of deliveries to a broad range of customers.

Clean energy

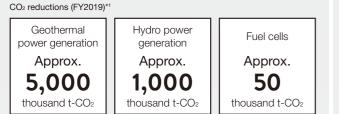


Muara Laboh Geothermal Power Plant in Indonesia Power generation capacity equivalent to the power usage of 420,000 households on the Indonesian island of Sumatra (Source: Sumitomo Corporation website)

# Stable energy supply



Highly efficient and compact.



Boasting the leading global share\*<sup>2</sup> in geothermal power generation, an extensive domestic delivery track record in hydro power generation and solar power generation systems, and the first-ever commercialized fuel cells for industrial application, we deliver a whole host of clean energy sources and contribute to the local production and local consumption of energy from distributed power sources. We also have the equipment and systems capable of achieving optimum operation of renewable energy, and we contribute to the effective utilization of energy by harnessing the power supply/demand prediction technology and know-how cultivated through numerous demonstration projects.

Key delivery track record	<ul> <li>Geothermal power generation: 85 units (approx. 3.2 GW)</li> <li>Hydro power generation: 444 units (approx. 5.2 GW)</li> <li>Fuel cells: 99 units</li> </ul>
Key demonstration projects	<ul> <li>Microgrid system for isolated islands (six islands in Kagoshima Prefecture; three islands in Okinawa Prefecture)</li> <li>Industrial parks (India, Indonesia)</li> <li>Kitakyushu, Fukuoka Prefecture</li> <li>Soma IHI Green Energy Center (Soma, Fukushima Prefecture)</li> </ul>



We contribute to the stable supply of energy for customers in various industries mainly with uninterruptible power systems (UPSs) for data centers, large-capacity rectifier transformers (top global share) for non-ferrous metals, and substation equipment for steel, chemicals, electrical machinery, precision equipment, and railway industries. We also contribute to the prevention of global warming by providing environmentally friendly cubicle-type gas-insulated switchgear (C-GIS) products that help reduce greenhouse gas (GHG) emissions without the use of SF<sub>6</sub> gas.

Key delivery track	Substation equipment: Transformers: 2,450 units or more;
record	Switchgear: 11,000 units or more
	<ul> <li>Large-capacity rectifier transformers: Approx. 27.5 GW</li> </ul>

# Automation



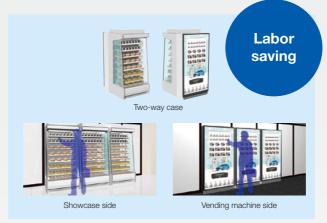
We delivered an assembly process data collection system to the variable compression ratio engine (VC-Turbo) production line of Nissan Motor Co., Ltd. Data from each process

The OnePackEdge assembly process data collection system contributes to productivity improvements through cause analysis for problems with their production equipment and generation of defects.

is collected automatically



This system is capable of achieving a production line that never stops through cause analysis for problems with their production equipment and generation of defects. We help customers make quality and productivity improvements in automated production lines by providing a single package for collecting and analyzing various data, such as temperature, pressure, vibration, operation, and quality information.



Convenience stores are currently struggling to secure enough manpower. We contribute to labor saving by offering two-way cases that function as a showcase when the store is open and as a vending machine after hours, as well as automatic change dispensers for selfcheckout registers.

\*1 CO<sub>2</sub> reductions (FY2019) are based on 12 months of operation for products delivered between FY2009 and FY2019 \*2 Since 2000

# **Energy saving**

We delivered main power converters equipped with a next-generation power semiconductor (SiC) for Central Japan Railway Company's latest highspeed rail model, thus lightening the weight of the railcars.

Compared with Si, SiC power semiconductor modules contribute to a 30% reduction in CO<sub>2</sub> emissions caused by power loss. CO2 reductions (FY2019)\*1

reductions





Power semiconductors efficiently control electricity. They are mounted inside power electronics systems, such as inverters that control motor rotation, thereby contributing to energy saving in industrial equipment and factories. In the power semiconductors industry, Fuji Electric ranks third in terms of the global share of IGBT modules for industrial

# President's Message



# Establish Foundations for Sustainable Growth

martyan

Michihiro Kitazawa President and Chairman of the Board of Directors

### Fuji Electric's Reason for Existence in Society

First of all, I express my heartfelt sympathy to those afflicted by the COVID-19 pandemic. I would also like to specially acknowledge the healthcare professionals and everyone else working so hard to keep us safe.

The business environment that envelops the Company has grown increasingly complex of late and the world faces a whole host of uncertainties stemming from not only climate change, urbanization, and demographic changes driven by aging populations, but also geopolitical risks such as trade disputes, and the impacts caused by COVID-19. Above all, the global reach of the pandemic has brought the international movement of people and goods to a standstill, disrupted supply chains, and affected societies and economies on an unprecedented scale. Central to our management policy is the notion of contributing to the achievement of a sustainable society through our energy and environment businesses, which reflects Fuji Electric's corporate philosophy of "contribute to prosperity," "encourage creativity," and "seek harmony with the environment." This is certainly in line with the international community's aspirations for integrated improvements in economies, societies, and the environment, and also represents a universal vision even in a post-coronavirus world or in an age in which we will be forced to coexist with COVID-19. Fuji Electric will promote the SDGs in all of its business activities, work on finding solutions to global warming and other social and environmental issues with a special focus on supply chains, and contribute to the creation of a responsible and sustainable society.

## FY2019 Sales and Income Down, but Still Investing in Future Growth

In fiscal 2019 we kicked off our Medium-Term Management Plan—Reiwa Prosperity 2023—which calls for net sales of ¥1.0 trillion and an operating margin of 8% or more by fiscal 2023, the final year of the plan. The plan incorporates our aim to achieve prosperity with society through our energy and environment businesses. We have also positioned the power electronics systems and power semiconductor businesses as growth drivers through fiscal 2023.

Looking at fiscal 2019 consolidated results, both sales and income declined sharply owing mainly to the lingering impact of US-China trade friction since last year, as well as the effects of travel restrictions and temporary factory closures in response to the spread of the COVID-19 pandemic. Net sales decreased ¥14.3 billion year on year to ¥900.6 billion, operating income fell ¥17.5 billion to ¥42.5 billion, and net income attributable to owners of parent shrank ¥11.5 billion to ¥28.8 billion. However, despite the tough operating environment, we continued to invest in future growth; in our focus region of Southeast Asia, we laid the foundations for business growth by erecting a third building at our factory in Thailand for manufacturing switchgear and control gear systems, while in India we acquired a leading power supply manufacturer. We also invested in the expansion of production

#### FY2023 Medium-Term Management Plan Key Issues

Establish Foundations for Sustainable Growth					
Promote Growth Strategies		Further	Improve Profitability		
<ul> <li>Concentrate resources on growth fields (power electronics systems and power semiconductors)</li> <li>Expand overseas businesses</li> </ul>		<ul> <li>Augmen capabilit</li> </ul>	t global manufacturing iies		
Ongoing Reinf	Ongoing Reinforcement of Operating Foundations				
Environment	Human R	esources	Governance		
Evolution of Companywide Pro-7 Activities					

### FY2020: Establishing New Foundations toward Our Medium-Term Management Plan Targets

Even though we faced difficulties in the first fiscal year of the Medium-Term Management Plan, at this juncture I do not intend to revise our fiscal 2023 management targets of ¥1.0 trillion in net sales and operating margin of at least 8%. This is because I firmly believe that our energy and environment businesses possess the technology and products that will be sought after globally in the medium to long term. As demand grows for clean energy, stable energy supply, and energy conservation for the purpose of realizing a low-carbon society, more business opportunities are emerging through which we can harness our strengths in power semiconductor technology and power electronics technology. Given the problems surrounding labor shortages in Japan, and now measures aimed at stopping

capacity for power semiconductors for electrified vehicles (xEVs). As was the case previous year, we decided to pay a dividend of ¥80 to shareholders and the same level of bonuses to employees. The decision to keep shareholder returns and employee bonuses unchanged owes to nothing more nor less than stronger profitability and steady improvements in our financial position ever since operating income slipped into the red in the aftermath of the global financial crisis. This has been achieved mainly thanks to business restructuring, including the abolishment of the holding company system and integration of business management, clarification of business domains, and the realignment of production bases, as well as a strict adherence to local production for local consumption, the strengthening of manufacturing capabilities, and a change in mindset among employees. What is disappointing, however, is the occurrence of some product defects. Product quality is the basic premise for earning the trust and confidence of our customers and we will adopt thorough measures to prevent the recurrence of such issues.

(Billions of yen)	FY2018 Results	FY2019 Results	FY2023 Medium-Term Management Plan (Target)
Net Sales	914.9	900.6	1,000.0
Operating Income	60.0	42.5	80.0
Operating Margin	6.6%	4.7%	8.0%
Net Income Attributable to Owners of Parent	40.3	28.8	55.0

#### **Financial Indicators**

Net Debt-to-Equity Ratio*	0.4 times	0.4 times	0.1 times
Equity Ratio	37%	37%	50%
ROA (Return on Assets)	4%	3%	5%
ROE (Return on Equity)	12%	8%	11%
Dividend Payout Ratio	28%	40%	30%

\*1 Net interest-bearing debt / Shareholders' equity

\*2 Assumed exchange rates for fiscal 2023: ¥105 to the U.S. dollar; ¥123 to the Euro; ¥16 to the RMB

the spread of COVID-19 infections, we expect to see greater demand up ahead for labor savings through automation, remote monitoring, and non-contact services.

This fiscal year is positioned as the year to establish new foundations geared toward achieving the targets in the FY2023 Medium-Term Management Plan. We will devote managerial resources to the core growth areas of power electronics systems and power semiconductors, and also continue to work on strengthening our manufacturing capabilities with the goal of further boosting profitability.

Our financial policy for the time being is to secure plenty of liquidity on hand in preparation for emergency situations. Over the medium term, we will allocate the cash to growth investments

aimed at business expansion, while for shareholder returns we will continue to emphasize stable and continuous dividend payments. As for capital efficiency, in addition to boosting profits and reducing working capital, we will continue to take steps toward the qualitative improvement of ROE with a view to effectively utilizing cross-shareholdings.

Due to the impact of COVID-19, it is currently very difficult to predict future trend in capital investment and production by our customers, so we have decided to postpone our fiscal 2020 earnings forecasts for now. That said, we will make preparations to announce our full-year forecasts when we disclose interim results.

# Aggressively investing in power semiconductors for xEVs

Leveraging our world-class technological know-how and reliability, we will continue to make aggressive investments in the power semiconductors business in light of the growth opportunities in the ongoing shift to electrified vehicles and the expanding uptake of renewable energy. In particular, as we expect to see stronger demand for electrified vehicles over the medium to long term as countries around the world enforce more stringent environmental regulations, and considering that our reverse-conducting IGBT (RC-IGBT) has been favorably received by customers for being smaller and more reliable than competitor products, we will look to ramp up our production capacity all the while gauging xEV market trends and keeping a close eye on the diversification of investment risks.

### Business expansion of Power Electronics Systems outside Japan

In the power electronics systems business, which boasts a client base spanning a broad range of industries, we are working to strengthen the systems business by combining competitive components with engineering services, optimal control technologies, and IoT. The key lies in how we can expand this business in markets outside Japan where there is strong growth potential. Infrastructure development for business expansion has steadily emerged in India and Southeast Asia, where demand for stable power supply and energy savings is expected to increase as social and industrial infrastructure comes onstream. Having realigned and expanded our manufacturing, sales, and service centers in India, and reinforced our manufacturing and engineering structure for plant systems in Southeast Asia, we will make every effort to globally expand the systems business in the future.

### Digital transformation of manufacturing; human resource development aimed at greater autonomy of production bases outside Japan

Since taking office as President, I have continued to stress the importance of manufacturing capabilities—our origins as a manufacturer and the source of profits. I have consistently communicated this matter to employees and taken steps to bolster our capabilities. Alongside in-house manufacturing and standardization that we have pursued thus far, we have managed to improve productivity by automating tasks that require a high level of skill, hard work, and testing and inspection processes. Furthermore, with the goal of achieving groundbreaking productivity enhancements, we are addressing the digital transformation of manufacturing using IoT and promoting cooperation between processes and between production sites by visualizing and sharing information on designs, purchasing, manufacturing, and testing. We will also spare no efforts in improving the quality of development and testing by digitizing our quality records.

As we expand our overseas operations over the medium to long term, we will further drive home our policy of local production for local consumption and help boost the autonomy and competitiveness of our overseas production bases by transferring Japan's manufacturing capabilities and technologies and continuously nurturing local leaders.

### Advancing Fuji Electric Environmental Vision 2050

Being able to contribute to a reduction in CO<sub>2</sub> emissions in society through our mainstay energy and environment businesses is Fuji Electric's biggest strength. Business negotiations are also picking up thanks to an increase in enquiries from customers actively pushing ahead with global warming countermeasures. Guided by our Environmental Vision 2050, we aim to lower CO<sub>2</sub> emissions generated by production activities and in society overall with the use of certain products, and advocate the effective utilization of resources by reducing, reusing, and recycling products and materials. Across supply chains, we seek to realize a low-carbon and recycling-oriented society. Also, in June this year we expressed our support of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and we intend to further enhance our disclosure of information concerning the environment and bolster our ability to cope with climate change risks.

# Respecting human rights and promoting the activities of diverse human resources

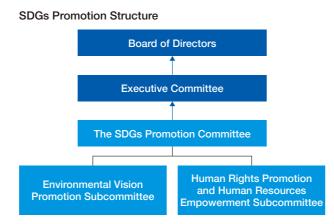
Based on the thinking that people are the source of a company's competitiveness, "respect and value all people" is stated in our Corporate Code of Conduct and we promote respect for human rights and the active participation of diverse human resources. The issue of human rights in supply chains is also indispensable to our global business expansion. We endeavor to have our subsidiaries and business partners in Japan and overseas understand our policy on human rights, and we also undertake human rights due diligence.

In addition, empowering senior and female employees is growing increasingly important. We have put in place systems and support structures to facilitate this, so in terms of implementation, we will do everything we can going forward to ensure that our diverse pool of employees find their work meaningful. We intend to

# Promoting the SDGs as a Company-Wide Activity

Undertaking activities that contribute to the achievement of the SDGs and sustainable growth overall is something we choose to do on a Company-wide basis. Thus, we seek to enhance long-term corporate value from two perspectives: creating business opportunities and minimizing management risks.

In April of this year we formed the SDGs Promotion Committee for the purpose of discussing, deciding, and evaluating the measures related to the promotion of the SDGs at a management level. The Committee will discuss key issues and evaluate measures from the perspective of the SDGs. For the near term, it will tackle initiatives concerning the environment, human rights, encouragement of employees' success, and workstyle reforms across the entire supply chain.



# Pursuing Prosperity by Being Enthusiastic, Ambitious, and Sensitive

In 2012, with the objective of improving profitability, we launched our Companywide Pro-7 Activities. The program aims to boost work efficiency and quality by having employees form teams and review the way they work from the ground up with the ultimate goal of achieving Prosperity (prosperity as a company, returns to shareholders, the happiness of employees). These activities have permeated all corners of frontline operations, including indirect departments, and changed employee mindsets. In fact, our Pro-7 Activities are now well entrenched in our business operations.

At the root of our employees' behavior and mindset is our corporate slogan: To be enthusiastic, ambitious and sensitive. By "enthusiastic," we mean the desire to contribute to society by creating new technologies and products; being "ambitious" means setting lofty goals and working hard to achieve them, no matter what the challenges; and being "sensitive" means we must be thankful for and care about our customers, colleagues, and engage in a style of management that lets employees in their 70s lead an active working life and guarantees that female employees in management positions can participate in decision making whilst balancing their work and life duties. Furthermore, the adoption of teleworking we started as a measure to stop the spread of COVID-19 has been well underway and we consider this development to be an opportunity through which we can promote a work-life balance backed by workstyle reforms geared toward employee safety, health, and greater productivity. At the same time, we run an employee awareness survey every year so that our Executive Officers, who also serve as General Managers, stay well informed of any issues and can implement measures accordingly from a Company-wide perspective in an effort to create more friendly workplace environments.

# Improving the effectiveness of governance so as to achieve sustainable growth

Management risks have continued to diversify in recent times and the pace of this change is accelerating. As such, the practice of risk management is growing increasingly important. More so than ever before, we must counteract management risks with a multifaceted approach and swift action. This is why we are taking steps to further strengthen our business continuity capabilities, including how we respond to large-scale disasters or the spread of an infectious disease. Also, in July last year we established a Nomination and Remuneration Committee. This Committee comprising a majority of Outside Directors, one of which serves as Chairman—enhances transparency and objectivity surrounding mainly the appointment, dismissal, and the remuneration of Directors and Audit & Supervisory Board Members and strives to improve the effectiveness of corporate governance overall as we seek to achieve sustainable growth.

families. This sensitivity is the very DNA of Fuji Electric handed down over successive generations and is manifested in our unshakable values. I have continued to convey to employees in various settings my intention of attaching considerable importance to this DNA. I also believe that our operating foundation will be further strengthened by the evolution of Pro-7 Activities made by one team of all employees that share our corporate slogan.

Fuji Electric will celebrate its 100th anniversary in 2023. So that we remain a corporation capable of developing sustainably in the future, our team of diverse employees will leverage their comprehensive capabilities and further refine the Company's technological prowess in the fields of energy and the environment. In this way, we will continue to contribute to the creation of a responsible and sustainable society.

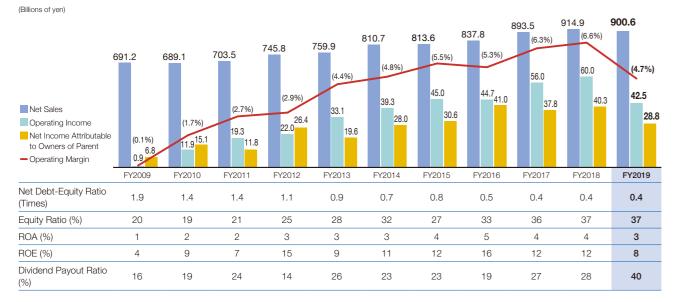
I look forward to the continued understanding and support of our shareholders, investors, and other stakeholders.

# **Progress of Management Reforms**

Following the global financial crisis in 2008, Fuji Electric initiated business restructuring to enable generation of profits even without growth in sales. Since then, we have taken steps to implement management reforms aimed at achieving targets set in our medium-term management plans, in order to deliver growth and further improve our profitability.

Main initiatives	2010–2012 Strengthen a profitable structure through business restructuring	2013–2015 Promote growth strategies Proactive management	2016–2018 Further renovation of Fuji Electric	2019– Establish foundations for sustainable growth
Reinforcing operating foundations	<ul> <li>Integrated business operational management by abolishing the holding company system</li> <li>Expedited management decision-making (reduced executive officers from 53 to18)</li> <li>Revised our management policies</li> </ul>		Partial cancellation of cross-shareholdings	<ul> <li>Established Nomination and Remuneration Committee</li> <li>Formulated Environmental Vision 2050</li> </ul>
Promoting	Clarified business domains as energy and environment businesses	<ul> <li>Overseas business expansion</li> <li>Promoted M&amp;As and collaborations to s regions, two in China, two in the United</li> </ul>	secure human resources and sales channe I States, and one in Europe)	els (six companies in Asia and other
growth strategies		<ul> <li>Strengthened our businesses in power electronics systems and power semiconductors and maximized synergies</li> <li>Stepped up research and development</li> </ul>	Strengthened our power     electronics systems business     Reorganized social engineering     systems, industrial infrastructure, and     power electronics businesses	Actively invested in power semiconductor business
	Implemented business     restructuring     Reorganized production bases     (magnetic disks and vending     machines)		Strengthened a profitable structure     Strengthened mother factories in Japan (Suzuka, Kobe)     Reorganized production model lineup	
	Reduced costs through global procurement and centralized purchasing	Promoted local production for local consumption     Established production bases (Thailand, India, and United States)		-
Improving profitability	<ul> <li>Reduced inventories through supply chain reforms</li> </ul>			
promability	<ul> <li>Reinforced manufacturing capabilities</li> </ul>			
	<ul> <li>Consolidated production and engineering departments and strengthened human resource development</li> </ul>	Improved value-added productivity through in-house production, automation, and standardization		
		• Promoted companywide Pro-7 Activ	vities to improve profitability	
		<ul> <li>Improved operational efficiency by reviewing all costs from the ground up</li> </ul>	<ul> <li>Improved business efficiency and quality through inventory</li> </ul>	<ul> <li>Improved productivity through increased introduction of RPA</li> </ul>

#### Business Performance Trends



reassessments across all businesses

Promoted workstyle reforms

# FY2023 Medium-Term Management Plan "Reiwa Prosperity 2023"

Under our Medium-Term Management Plan for Fiscal 2023, we aim to establish a foundation for sustainable growth with net sales of ¥1 trillion and an operating margin of 8% or more. As for financial indicators, we will emphasize a balance between growth potential, profitability, efficiency, and financial soundness in order to further improve capital efficiency.

#### **Promote Growth Strategies**

#### Focus on our businesses in power electronics systems and power semiconductors

From fiscal 2019 to 2023, we plan to allocate about 90% of plant and equipment investments of ¥220 billion and about 80% of R&D expenditures of ¥200 billion to expand our businesses in power electronics systems and power semiconductors.

[Plant and equipment investment] We will make investments to expand the system business of our power electronics systems while reinforcing production facilities for power semiconductors aimed at increasing sales of those for electrified vehicles.

[Research and development] In addition to stepping up incubation development, we will deploy our strength in the mobility field where we can utilize synergy between the power electronics systems and the power semiconductors, and competitive components to develop global products, such as FA systems, IoT solutions, transformers, and switches. We will also develop next-generation power semiconductors for electrified vehicles.

#### Expand overseas businesses

Amid growing demand for electricity, energy savings and automation for industrial and social infrastructure, as well as the spread of renewable energy, we will raise the overseas sales ratio from 25% in fiscal 2018 to 35% in fiscal 2023 by increasing sales mainly in Southeast Asia, India, and China.

#### **Further Improve Profitability**

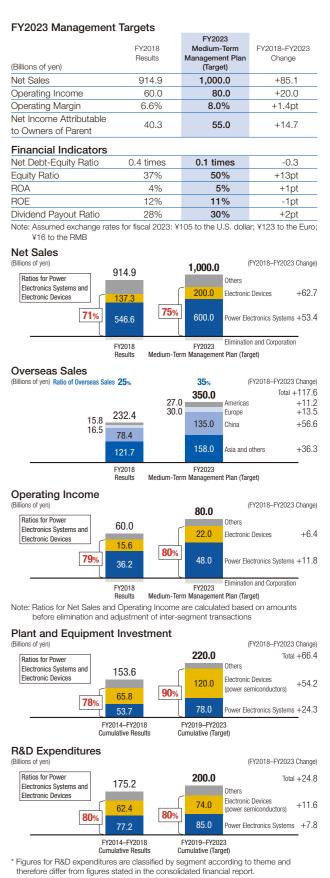
#### ✓ Reinforce global manufacturing capabilities

We will work to strengthen our global manufacturing capabilities with an emphasis on local production for local consumption. At the same time, we will step up development of local leaders at our overseas production bases and promote their autonomy. We will also deploy IoT technologies to advance digital reforms of our manufacturing and achieve innovative productivity improvements by promoting collaboration across processes and bases through visualization and sharing of information on design, purchasing, manufacturing, and testing.

#### **Ongoing Reinforcement of Operating Foundations**

Targeting sustainable growth, we will continue reinforcing our operating foundations with a focus on the environment, human resources, and governance. In addition, we will revitalize our companywide Pro-7 Activities and promote workstyle reforms aimed at improving work efficiency, work quality, and productivity.

\* For more details, please refer to Environment (page 31), Human Resources (page 37), and Corporate Governance (page 41).



# **Fiscal 2019 Review of Operations**

In fiscal 2019, ended March 31, 2020, Fuji Electric posted year-on-year declines in consolidated net sales and operating income amid curtailment of economic activities stemming from the spread of COVID-19, as well as slowdown in markets outside Japan, centered on China, due to the trade friction between the United States and China. Nevertheless, we continued actively investing in production facilities for our power electronics systems and power semiconductors and in R&D aimed at expanding our business.

### Fiscal 2019 Performance

For the year, consolidated net sales amounted to ¥900.6 billion, down by ¥14.3 billion year on year. Factors in the decline included delays in deliveries and curtailment of plant and equipment investments stemming from restrictions placed on business activities to combat the spread of COVID-19, as well as the absence of large-scale orders recorded in the previous fiscal year and the impact of the trade friction between the United States and China. However, we benefited from strong demand in Japan to upgrade or replace aging equipment.

Despite the efforts to reduce costs, earnings were affected by lower sales and production volumes for major components\*, as well as foreign exchange factors, upfront investments, and increased costs related to product defects. As a result, operating income declined by ¥17.5 billion, to ¥42.5 billion. Sales in substation equipment, switchgears and controlgears in the power electronics systems for energy, and plant system projects such as power plants increased, but demand for major components declined.

\* Major components: ED&C components (Power Electronics Systems Energy); lowvoltage inverters, rotating machines, FA components, measuring instruments (Power Electronics Systems Industry); semiconductors (Electronic Devices); and vending machines (Food and Beverage Distribution).

<Reasons for decrease in sales of major components> From the first guarter through the third guarter of fiscal 2019, economic slowdown in China due to the trade friction between the United States and China led to ongoing investment restraint. Meanwhile, demand for machine tools and industrial equipment declined in Japan and overseas, and sales of ED&C components and low-voltage inverters also decreased. In addition, worsening the Chinese economy caused closure of factories, and demand for new vending machines decreased because the vending machines which had been installed in closed factories are reused. From the fourth quarter, demand for machine tools and industrial equipment declined in Japan and overseas due to the spread of COVID-19, while ED&C components, low-voltage inverters, FA components, and the like were also down. In addition, sales of vending machines for the Japanese and Chinese markets declined, as did sales of semiconductors for the Chinese market.

### Sales outside Japan

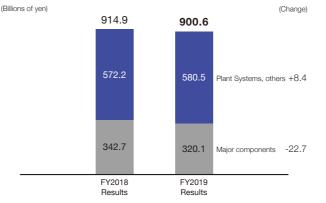
Sales outside Japan declined by ¥11.5 billion year on year, to ¥220.9 billion. This was due to falling demand in China for major components, such as vending machines, semiconductors, and low-voltage inverters. By contrast, we enjoyed an increase in sales elsewhere in Asia thanks to large-scale projects for switchgears and controlgears, as well as higher sales in the industrial semiconductor sector in Europe. The overseas sales ratio was 25%, unchanged from the previous year.

(Billions of yen)	FY2018 Results	FY2019 Results	Change
Net Sales	914.9	900.6	-14.3
Operating Income	60.0	42.5	-17.5
Operating Margin	6.6%	4.7%	-1.8%
Net Income Attributable to Owners of Parent	40.3	28.8	-11.5

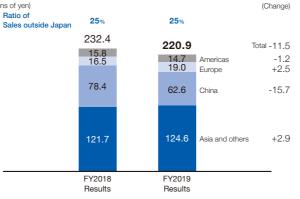
#### **Financial Indicators**

Net Debt-Equity Ratio	0.4 times	0.4 times	+0.1 times
Equity Ratio	37%	37%	-0%
ROA	4%	3%	-1%
ROE	12%	8%	-4%

#### Sales by Major Components and Plant Systems



#### Sales Outside Japan (Billions of ven)



# Plant and Equipment Investment

Approximately 90% of total plant and equipment investment was allocated to our businesses in power electronics systems and electronic devices, such as expanding production capacity and streamlining production lines. During the year, in the Power Electronics Systems segment, we completed the third facility at the Thai Factory for the manufacture of switchgear and controlgear systems. We also started construction of an engineering facility at the Chiba Factory to strengthen energy-related products. In addition, we invested to streamline production lines at the Suzuka Factory and Tokyo Factory in order to expand in-house production and strengthen the competitiveness of our inverters and measuring instruments. In the Electronic Devices segment, we increased the capacity of the 8-inch chip production line (front-end process) at our Yamanashi Factory in order to expand our power semiconductor business for electrified vehicles. In back-end processes, at our bases in Japan and overseas, we invested to increase production of large-capacity IGBT modules for automotive pressure sensors and power converters.

# **Research and Development**

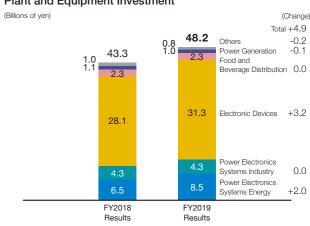
Seeking to advance product development and strengthen global competitiveness, we allocated around 80% of R&D expenditures to power electronics systems and electronic devices.

In the Power Electronics Systems segment, we developed some of the world's most compact substation equipment, which enables significant cost reductions. Other developments included an uninterruptible power system for large data centers, an induction furnace that delivers energy savings in the casting process, and an exhaust gas cleaning system for large ships. We also developed SignAiEdge, on-site diagnostic equipment that utilizes IoT to visualize problems at production sites, as well as analytics and AI (MSPC\*) technology to contribute to productivity improvements.

In the Electronic Devices segment, we focused on developing power semiconductors for electrified vehicles. Fiscal 2019 developments include RC-IGBTs that reduce power loss compared with conventional devices to achieve smaller, lighter, and more efficient electrified vehicles. \* Abbreviation for "multivariate statistical process control

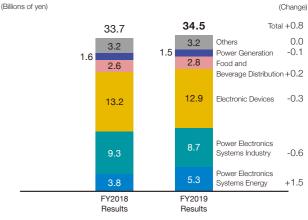
# Fiscal 2020 Outlook

The Company has chosen not to release consolidated performance forecasts the fiscal year ending March 31, 2021, as it is currently difficult to project future trends in capital investment and production by customers amid restrained economic activity in Japan and other countries stemming



### Plant and Equipment Investment

**R&D** Expenditures



Note: Figures for B&D expenditures are allocated by research theme and therefore differ from those in the consolidated financial report

from the global COVID-19 pandemic. We will disclose our forecasts promptly when we are able to estimate the impacts of this situation on economic activities with a sufficient degree of accuracy.

# Power Electronics Systems Energy / Industry

# Medium-Term Management Plan Policy

In these segments, our aim is to create competitive components and reinforce our system business by bringing together our engineering services, optimal control technologies, and IoT. At the same time, we will utilize local partners and sales channels developed through M&A to expand our overseas business. We will also promote standardization and packaging of software and hardware for the social and industrial infrastructure fields and attract increased orders for our comprehensive electrical equipment business. In the transportation field, we will work to accelerate development of products that differentiate us from other companies.



# Overseas Business Expansion (Fiscal 2019 and 2020)

In Southeast Asia and India, we are expanding orders by utilizing our sales channels developed through M&A and engineering capabilities. By establishing a system factory and integrating local subsidiaries, we will expand our local design capabilities in addition to local production for local consumption to build an integrated manufacturing system. In China, we will deploy the sales channels of local partners

# Southeast Asia

In 2019, we established a new switchgear and controlgear system factory and engineering center at Fuji Electric Manufacturing (Thailand) Co., Ltd. (FMT), which will serve as our core production site in Asia. By reinforcing our local engineering and manufacturing systems, we will build a system business that contributes to electric power supply stability and energy savings for data centers and the electricity and materials fields.

### India

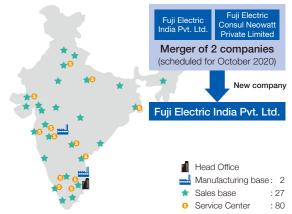
Fuji Electric Consul Neowatt Private Limited (FCN), which became a consolidated subsidiary in 2019, and Fuji Electric India Private Limited will join forces to facilitate reorganization and expansion of our manufacturing, sales, and service bases in India. We will leverage the sales channels- and product-related strengths of both companies to grow our business and strengthen our service system, while also expanding localization of design and procurement to enhance product competitiveness.

### China

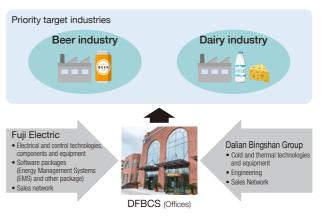
In fiscal 2019, Dalian Fuji Bingshan Control Systems Co., Ltd. (DFBCS)—a joint venture with the Dalian Bingshan Group, a major Chinese refrigeration and air conditioning equipment manufacturer—introduced energy management systems (EMSs) to the Dalian Bingshan Group and our Wuxi Factory. Positioning this factory as our "model factory" in the Chinese market, we will focus on the beer and dairy industries as our top-priority targets. Here, we will demonstrate to customers the energy-saving benefits of EMSs and give concrete examples, while proposing various solution to facilitate EMS adoption and thus expand our system business. to provide drive control and monitoring control systems, as well as energy management systems, to material and beverage factories, allowing them to save energy by improving productivity and optimizing energy usage. In North America, we will collaborate with Fuji SEMEC Inc. to further strengthen our manufacturing and engineering systems and expand our rolling stock business.



Strengthening the Business Structure in India (Reorganizing and Expanding Bases)



System Proposal Centered on an EMS in Collaboration with Local Partners



# **Power Electronics Systems Energy**

We will use our integrated proposal capabilities and abundant engineering experience, cultivated in Japan, to expand our overseas businesses in transmission and distribution systems and comprehensive electrical equipment.



Operating Margi

8.3%

19.5

FY2023

Medium-Term

Management Plan

31.0

25.7

FY2019 - 2023

Cumulative Target

FY2019

**Operating Income** 

5.7%

12.3

FY2019

Billions of ven)

7.5%

16.8

FY2018

Results

(Billions of ven)

**R&D** Expenditures

28.8

FY2014 - 2018

Cumulative Results

Masashi Kawano Executive Officer Corporate General Manager, Power Electronics Systems Energy Business Group

218.0

FY2019

Plant and Equipment Investment

49.0

40

FY2019 - 2023

Cumulative Target

Y2019

235.0

FY2023

Medium-Term

Management Plan

(Target)

Net Sales

(Billions of ven)

224.1

FY2018

Results

(Billions of ven)

30.3

FY2014 - 2018

Cumulative Results



- Energy management Power distribution, Smart meters, Industrial substation, Railway substations, Industrial power supplies
- Power supply and facility systems Data centers, Uninterruptible power systems (UPS), Electrical facilities, Switchgears and control gears
- ED&C components Power distribution and control equipment

#### Supplied to

Power companies, Material plants (steel, chemical, etc.), Data centers, Machine manufacturers

#### Strengths

- Package proposals from a wide range of products and systems, to maintenance services, contributing to stable power supply and power optimization
- Extensive delivery record and engineering experience in stable power supply and power optimization
- Energy-saving expertise developed at Fuji Electric's factories in Japan and overseas

# Medium-Term Management Plan Policy

We will introduce globally competitive products, such as substation equipment, power supply equipment, and switchgears and controlgears, to strengthen our manufacturing and engineering systems. At the same time, we will deploy our integrated proposal capabilities, cultivated in Japan, to expand our overseas businesses in transmission and distribution systems and comprehensive electrical equipment.

# Awareness of Market Needs and Business Opportunities

In Southeast Asia, India, and the Middle East, which are enjoying strong economic growth, demand continues to grow for electric power and investments in social and industrial infrastructure, such as substations and data centers. Accordingly, demand has remained firm for substation equipment, switchgears and controlgears, etc. for power companies, factories, and buildings requiring stable power supply.

In Japan, we look forward to ongoing steady investments—to replace aging facilities, including substation equipment delivered to material plants and railway companies in the 1970s and 1980s—aimed at preventing accidents and improving efficiency.

Meanwhile, the need to save energy and reduce CO<sub>2</sub> emissions has led to increased demand for visualization and optimization of factory-wide energy usage, from the perspective of growing environmental awareness and efforts to lower energy costs. In addition to introducing products with high power conversion efficiency, customers will have more opportunities to use energy management systems (EMSs) to achieve optimal energy supply and demand control.

## Major Initiatives in Fiscal 2019–2020

#### Strengthening our plant system business

Amid growing demand for switchgears and controlgears and substation equipment for data centers and railways, we are working to rebuild our development and production system to improve profitability.

In fiscal 2019, we started building an engineering center within the Chiba Factory, our mother factory for substation equipment. The new center will bring together the development, design, and engineering functions, which were previously dispersed over multiple locations. In fiscal 2020, we will consolidate our standardized switchgear and controlgear design and evaluation functions at the Tokyo Factory, and start construction of a dedicated systems building aimed at improving productivity. In addition to integrating functions to facilitate standardization of products and systems, we will work to improve our testing capabilities. Utilizing testing equipment that can simulate local environments enables us to achieve greater product quality perfection at the time of shipment, which reduces the need for onsite reworking and shortens testing times.

Through these efforts, we will accelerate the development of new competitive products, while further expanding standardization and streamlining production and testing processes, resulting in lower costs and shorter delivery times.

# Close Up!

### Contributing to development of global transformers and stable power supply

In Southeast Asia, India, and the Middle East, where power demand is strong, construction of power plants and substations continues unabated.

Transformers, switchgears, and other substation equipment play an important role in power plants and substations and thus need to be highly reliable. However, substations are often constructed in urban areas where land acquisition is difficult, leading to calls to build "smaller and lighter" facilities.



Global transformer

# Expanding our comprehensive electrical equipment business

The proliferation of 5G and IoT technologies has buoyed demand from large-scale data centers and semiconductor factories, boosting orders in our comprehensive electrical equipment business.

In fiscal 2019, we developed and launched a series of large-capacity uninterruptible power systems (UPSs) to address the increasing size of data centers. The new units have capacities ranging from 330 kVA to 1,000 kVA, making it possible to build large-scale systems with maximum capacity of 8,000 kVA by operating the devices in parallel.

In addition to our wide product lineup, we can handle integrated projects covering everything from facility design to equipment procurement and construction. This enables us to swiftly construct data centers and make them energy efficient. For this reason, we are receiving more and more orders each year from foreign-affiliated companies that are expanding globally.

In fiscal 2020, we will take advantage of our strong domestic track record to broaden our comprehensive electric equipment business across Southeast Asia.

We have developed a global transformer that is among the most compact in the world and has achieved significant cost reduction. We will make these transformers locally at our production base in Thailand. Going forward, we will develop and commercialize competitive global products, such as transformers, and switchgears and controlgears. In this way, we will contribute to the stable supply of electricity and the

stable operation of equipment in overseas markets,



Fuji Tusco Co., Ltd. (production base in Thailand)

# **Power Electronics Systems Industry**

We will accelerate overseas business expansion by further promoting partnership strategies, mainly in Southeast Asia and India, while strengthening local production, consumption, and design systems.



Operating Margin

7.8%

28.5

FY2023

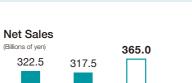
Medium-Term

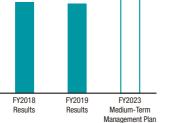
Management Plan

(Target)

Executive Officer Corporate General Manager Power Electronics Systems Industry Business Group



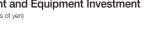


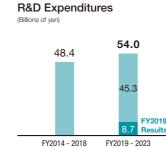




Plant and Equipment Investment (Billions of ven)







**Operating Income** 

5.2%

16.5

FY2019

Results

(Billions of ven)

6.0%

19.4

FY2019 - 2023 Cumulative Results Cumulative Target

# Medium-Term Management Plan Policy

We will leverage our automation business—which combines IoT with drive equipment, measuring instruments, and control equipment-to promote partnership strategies aimed at expanding our systems business. At the same time, we will broaden our business in ships and railways by utilizing unique products that differentiate us from other companies.

# Awareness of Market Needs and Business Opportunities

In Japan, the industrial field is witnessing a wave of production reform initiatives aimed at addressing labor shortages and increasing competitiveness. To combat COVID-19 and meet the need for workstyle reforms, meanwhile, we expect companies to increasingly adopt automation, labor saving, and remote control technologies at their manufacturing sites. In the materials field, companies in some industries are reorganizing their production bases. Nevertheless, we anticipate that investments in renewal of aging production equipment and in energy savings will remain steady.

In Southeast Asia and India, marked by strong economic growth, we expect an increase in demand to stabilize power supplies, improve energy-efficiency of facilities, and automate production lines. We also look forward to new capital investments and equipment renewal demand in various materials fields, including steel and cement. Meanwhile, companies in China are investing in energy savings to protect the environment while working to address labor shortages and taking steps to stop COVID-19. Against this backdrop, we expect investments in automation and labor-saving to remain solid going forward.

# Major Initiatives in Fiscal 2019–2020

### Promote partnership strategies to expand overseas business

In Southeast Asia, we are leveraging the engineering capabilities and sales channels of Fuji CAC Joint Stock Company in Vietnam to increase sales of monitoring and control systems for production equipment at cement plants. In fiscal 2020, we will emphasize development of standardized software and hardware packages to improve cost competitiveness and further increase orders.

In India, Fuji Electric Consul Neowatt Private Limited (FCN) and Fuji Electric India Private Ltd. will join forces to build an integrated manufacturing system covering design, production, and testing of inverters, UPSs, power conditioning systems (PCSs), and other components.

By combining the sales channels of FCN with the engineering capabilities and sales channels of Fuji Gemco Private Limited, we will work to expand our systems business in the renewable energy and food and beverage fields, in addition to the materials field,

# Close Up!

# Contributing to energy savings at Indian steel plant

In India, the third-largest emitter of CO<sub>2</sub> in the world, there is a campaign to improve energy efficiency of plants in nine industries that consume a lot of energy, including thermal power generation, steel, and cement, in order to meet that nation's greenhouse gas reduction targets.

Steel plants use large amounts of energy from multiple sources, such as electricity, gas, and steam, in the production process. In order to save energy, it is necessary to optimally combine and control each type of energy.

Using our own optimization technology, cultivated through our achievements in Japan, as well as past operational data and production and operational plans, we provided an energy management system (EMS) to a major Indian steel plant and started field tests. Our aim is to help predict and optimally

**Business Areas** 

Automation systems

FA components (servo and controller).

Air conditioning and water treatment facilities,

Railway companies, Shipbuilding companies,

Measuring instruments and sensors,

FA systems, Drive control systems,

Measuring and control systems

Electrical equipment for railcars.

Radiation monitoring systems

Material plants (steel, chemical, etc.).

Public agencies and local government

• Early development of power electronics equipped with power

· Extensive product lineup tailored to

· Engineering capabilities built up over

a substantial delivery track record

• Equipment construction

Machine manufacturers.

semiconductors

customer applications

Inverters, Motors,

Social solutions

IT Solutions

Supplied to

Strengths

### Expansion of the systems business leveraging IoT

In the industrial field in Japan, we are increasing efforts to improve operations and productivity. Here, we use IoT to visualize equipment operational status and predict and analyze equipment failure, with the aims of raising competitiveness and preventing equipment stoppages.

In fiscal 2018, we launched OnePackEdge, a data collection system that bundles all types of production floor data to support factor analysis of equipment abnormalities and defects. In fiscal 2019, we developed and launched SignAiEdge, a field-based diagnostic device that detects and analyzes signs of equipment abnormalities. It is the first in the industry to incorporate batch-process MSPC\* technology.

In fiscal 2020, we will introduce these IoT products into our own production lines to help improve profitability, and we will use know-how acquired through this process to facilitate horizontal rollouts to our customers. Meanwhile. we will work to increase orders for IoT products by combining them with a remote equipment monitoring service, which is expected to attract demand as a measure to prevent the spread of COVID-19.

\* Abbreviation for "multivariate statistical process control"

deploy energy usage across all of the plant's production equipment.

Utilizing the results of the field tests, we will promote rollouts to other Indian steel plants and step up proposals in other Asian regions to help reduce CO<sub>2</sub> emissions through energy savings.



Monitoring and control room (steel plant in India)

# **Electronic Devices**

We aim to expand our business by expediting efforts to increase our production capacity for power semiconductors for electrified vehicles.



ating Margi

11.0%

22.0

FY2023

Medium-Term

Management Plan

(Target)

74.0

61.1

**Operating Income** 

7.1%

9.7

FY2019

Results

ions of ven)

11.4%

15.6

FY2018

Results

(Billions of ven)

**R&D** Expenditures

Toru Housen Managing Executive Officer Corporate General Manager, Electronic Devices Business Group

200.0

FY2023

Medium-Term

Management Plan

(Target)



Net Sales

(Billions of ven)

137.3

FY2018

#### **Business** Areas

- Power semiconductors
- Industrial field, Automotive field
- Magnetic disks

#### Supplied to

- Power semiconductors Industry: Inverters, Machine tools, Air conditioners, Solar and wind power, Electric railways Automobile: Motor drives for electrified vehicles (EVs, HEVs, etc.),
- Engine control, Brake control • Magnetic disks HDD (Data center, PCs)

#### Strengths

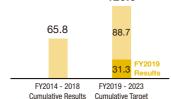
Power semiconductors

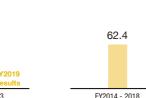
- Proprietary devices that greatly improve power conversion efficiency
- Packaging technologies that achieve high levels of heat dissipation and reliability
- Product development capabilities of IGBT modules that contribute to increasing the efficiency, miniaturization, and reliability of power electronics

Plant and Equipment Investment (Billions of yen) 120.0

137.4

FY2019





FY2014 - 2018 FY2019 - 2023 Cumulative Results Cumulative Target

# Medium-Term Management Plan Policy

Against the backdrop of steady global demand for electrified vehicles (xEVs) and proliferation of renewable energy, we will focus on automobiles (xEVs) and power semiconductors for industrial use. To this end, we will invest aggressively to increase production capacity and boost sales and profits.

# Awareness of Market Needs and Business Opportunities

Power semiconductors help save energy thanks to their high levels of conversion efficiency and power control. Demand for these devices in various fields and applications is rising due to various factors. These include increases in energy consumption due to economic growth and technological progress, growing investments in automation in the manufacturing sector, and environmental regulations aimed at preventing global warming.

In the automotive field, the shift from gasoline-powered vehicles to xEVs is gaining momentum in various

countries around the world, and demand for power semiconductors is expected to grow, including for inverters used to drive xEV motors.

In the industrial field, there is an ongoing shift to renewable energy sources, such as wind and solar, due to rising demand for clean energy. We also expect companies to continue investing in automation to solve labor shortages and improve productivity, and the demand for machine tools and robots will increase as a result.

# Major Initiatives in Fiscal 2019–2020

# Expanding sales of power semiconductors for xEVs

In fiscal 2019, we started mass production of 4th-generation direct liquid cooling modules that feature lower losses and higher cooling performance than before. We posted a significant year-on-year increase in sales of automotive products, which accounted for 35% of total power semiconductor sales, up from 29% in fiscal 2018.

In 2020, global production of automobiles, especially gasoline-powered vehicles, will remain on a downtrend due to shutdowns of overseas factories stemming from the COVID-19 pandemic. Nevertheless, we expect demand for xEVs to grow in the medium and long terms as environmental regulations tighten.

Our aim is to expand sales of power semiconductors for xEVs by consistently providing high-quality products.



# Close Up!

# Helping xEVs reduce the environmental impact and improve driving distance

In the xEV field, the focus is on reducing environmental impact and improving driving distance, which requires components that are smaller, lighter, and more efficient than ever before.

To address these requirements, in fiscal 2019 we started mass production of a 4th-generation direct liquid cooling module featuring improved heat dissipation performance compared with conventional products. This module, which is fitted with RC-IGBTs\* for better compactness and lower losses, is for use in motor drive inverters that are indispensable for xEVs.

\*RC-IGBT: Acronym for "reverse conducting insulated gate bipolar transistor." An RC-IGBT arranges two types of semiconductors with differing functions—IGBTs and freewheeling diodes (FWDs)—alternately in a straight line on a single chip. This permits much greater miniaturization compared with arranging the IGBTs and FWDs on two separate chips.

#### Accelerating increases in production capacity

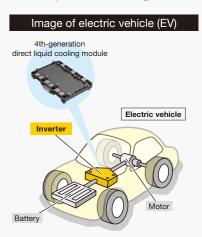
To address rapidly increasing demand for power semiconductors for xEVs, we are investing actively to boost production of 8-inch wafer production equipment. In fiscal 2020, we will continue investing to raise production while strengthening the assembly process capacity of our production bases in Japan and overseas.

## Expanding sales of large-capacity IGBT modules for the renewable energy and electric railway markets

In fiscal 2019, we launched sales of 7th-generation IGBT modules (large-capacity series) equipped with 7th-generation IGBT chips that reduce losses by around 30% compared with existing chips. We are selling these modules, which boast high levels of heat dissipation and reliability, mainly to the renewable energy and electric railway markets.

In these markets, devices are increasing in capacity and decreasing in size while generating lower losses. Emphasizing the features of our products, we have expanded sales to manufacturers of wind and solar power generation equipment.

In fiscal 2020, we will continue increasing sales to the robust renewable energy market, while capturing new orders from the electric railway market with the aim of further increasing our market share in the industrial field.



# Food and Beverage Distribution

In response to a growing need for better hygiene through nonface-to-face and contactless interaction, as well as labor savings, we will swiftly offer new products that make full use of automation and heating and cooling technologies.

Net Sales

(Billions of ven)

(Billions of ven)



Operating Margin

7.1%

8.5

FY2023

Medium-Term

Management Plan

30.0

6.5

23.6

Management Plan

(Target)

Managing Executive Officer Corporate General Manager Food and Beverage Distribution Business Group





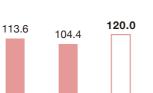
- Vending machines Beverage vending machines, Vending machines for food and other goods
- Store distribution Store fixtures and equipment, automatic change dispensers

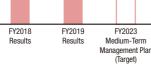
#### Supplied to

Beverage manufacturers, Vending machine operators. Convenience stores, Supermarkets, POS manufacturers

#### Strengths

- Top share of the vending machine market in Japan. China and Southeast Asia
- · Heating and cooling technologies that efficiently heat and cool products
- Automation technologies built up through vending machines that contribute to labor saving





# Japan and Overseas Sales





**Operating Income** 

3.7%

3.8

FY2019

Overseas Sales by Region

China Southeast Asia and other

Billions of ven

5.1%

5.8

FY2018

Results



We will reinforce our sensing technology and communications and information coordination technology, centered on vending machines and store equipment. Our aim is to transition into a system

business that supports customer needs, such as labor saving. Outside Japan, we will strengthen our vending machine business in China and Southeast Asia and build a optimal global production system.

# Awareness of Market Needs and Business Opportunities

In Japan, against the backdrop of labor shortages due to a declining working population and measures to prevent global warming, we are promoting advances in labor saving and energy efficiency for our customers-beverage manufacturers, convenience stores, and supermarkets.

Overseas, we expect demand for vending machines to grow, even in our priority Chinese market, due to increasing need for automation of the beverage and commodity sales process. Meanwhile, the vending machine market in Southeast Asia is expanding rapidly, especially in Thailand, triggered by the entry of major beverage manufacturers.

In addition, there is a growing need for non-face-to-face, contactless products and services in Japan and overseas as a countermeasure against COVID-19.

# Major Initiatives in Fiscal 2019–2020

### Offering new vending machines that meet social needs

In fiscal 2019, we made proposals for high-value-added machines in Japan, but the postponement of the Olympic Games and the COVID-19 pandemic led to a decline in demand.

The needs of consumers and customers are changing drastically in the "With Corona" era. With this in mind, in fiscal 2020 we will deploy antibacterial materials and make our products and services more contactless, thereby offering new models that consumers can use with peace of mind and systems that improve the efficiency of our customers' vending machine operations.

### Creating vending machine markets and expanding sales in China and Southeast Asia

Fiscal 2019 saw a decline in demand in the Chinese market due to economic downturn triggered by U.S.-China trade friction. In Southeast Asia, by contrast, we boosted sales by capturing demand for vending machines on the back of rising consumer income and labor costs.

# Close Up!

# Using AI to enhance vending machine operational efficiency

Due to serious labor shortages, beverage manufacturers and vending machine operators in Japan are faced with an urgent need to improve the efficiency of product replenishment operations and other processes. In response, we have developed various systems that use AI to address the requirements of vending machine operators, including product demand forecasts, remote setting of vending machines, sales plans, and delivery route settings. We are currently making proposals to our customers, encouraging them to apply the new systems to our vending machines, which account for the majority of the market. By reducing losses of sales opportunities and shipping costs due to products being sold out, we will streamline the vending machine operations of our customers and help improve their profitability.

# Contributing to maintaining healthy in-store environments and energy saving in air conditioning by preventing outside air influx

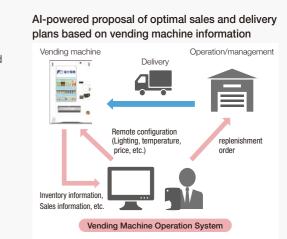
We have developed a system for controlling air pressure inside stores. This system uses sensors to control the balance of air intake and exhaust by ventilation fans and other equipment to prevent influxes of outside air when automatic doors are opened and closed. Furthermore, the system achieves a 10% reduction in energy consumption by lowering the burden placed on air conditioners while also cutting particle matter influx by 30%, thereby decreasing the amount of cleaning work needing to be done by employees. It has earned great praise from customers for its contribution to labor and energy savings in stores.

In fiscal 2020, we will step up collaborations with major beverage manufacturers in each country while introducing new models to meet diversifying customer needs and demand for contactless solutions in the "With Corona" era.

### Offering new products that meet store needs for sales growth and labor-saving

In fiscal 2019, we proposed and advanced various new products, including counter fixtures that contribute to increased store sales and systems that help save energy and labor.

In Japan, there is a growing need among store operators to save labor and shorten business hours. In fiscal 2020, therefore, we will utilize our automation technology to develop new products and contribute to the convenience of consumers and the profitability of our customers. These include two-way case, which functions as a showcase in the daytime and a vending machine at night, as well as a positive pressure control system that maintains healthy store environments by controlling the air supply and exhaust and enhances the energy efficiency of air conditioning.





# **Power Generation**

To address changing market conditions, we will focus on renewable energy and distributed power sources while expediting the transformation of our business portfolio to strengthen our after-sales business and enhance profitability.



Tadao Horie Corporate General Manager, Power Generation Business Group

Executive Officer

#### **Business Areas**

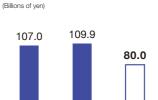
- Renewable and new energy Geothermal power, Hydro power, Solar power, Wind power, Fuel cells
- Thermal Power
- Nuclear power-related equipment

#### Supplied to

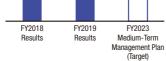
Japanese and overseas power generation companies

#### Strengths

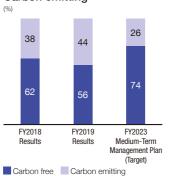
- Engineering capabilities across the whole plant
- One-stop proposal capabilities in geothermal power, and industry leading delivery track record
- · Extensive delivery track record in hydro power
- · Power storage control technologies and economic efficiency in solar and wind power



Net Sales



Sales Ratio by Carbon free / Carbon emitting

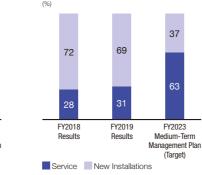




Sales Ratio by Service / New Installations

**Operating Income** 

(Billions of ven)



# Medium-Term Management Plan Policy

Responding to changes in the market environment as the world moves toward decarbonization, we will focus on renewable energy and distributed power sources to transform our business portfolio. At the same time, we

will capture replacement demand for power generation equipment while expanding our after-sales business and improving profitability.

# Awareness of Market Needs and Business Opportunities

Since the enactment of the Paris Agreement, an international framework for addressing climate change, moves toward decarbonization have gathered pace worldwide, and the market for renewable energy sources, which do not emit greenhouse gases, is growing as a result.

In addition to rising demand for mega solar power in Southeast Asia, demand is growing for solar as a smallscale distributed power source. Demand for geothermal power generation is also increasing on the back of

economic growth in Southeast Asia and Africa, which have abundant geothermal resources. In Japan, meanwhile, aging hydro power generation facilities are being replaced and upgraded to enhance generation efficiency, reflecting expectations that hydro power generation can help reduce environmental impact and risk.

In the maintenance and renewal of power generation equipment, the need to enhance capacity utilization ratio and operability is growing.

### Major Initiatives in Fiscal 2019–2020

### Expanding orders for renewable energy Solar and wind power

For solar and wind power generation, using storage batteries and further combining them with our power conditioning systems and controllers, we are forging ahead with solution-driven proposals that contribute to power system stabilization and peak shifts.

In fiscal 2019, in collaboration with an overseas subsidiary, we received an order for our first overseas solar project, and we also received two orders in Japan.

In fiscal 2020, we will continue working to increase orders to meet growing demand for renewable energy in Japan and overseas.

#### Geothermal power

In geothermal power generation, where we have a leading market share\*1, we are proceeding with construction of a facility in Kenya, our first geothermal project in Africa.

In fiscal 2019, we received an order from the Onikobe Geothermal Power Plant in Japan and an order for a new project in Kenya, as we did in the previous year.

In fiscal 2020, we will aim to expand business opportunities by adding a small-capacity-generation package to our lineup for Japan to support a wide range of geothermal resources. Overseas, we will continue focusing on Southeast Asian and African regions as priority targets and accelerate marketing activities in countries with

# Close Up!

# Expanding orders for solar power generation facilities with storage batteries

In Southeast Asia, a major challenge is to develop infrastructure in areas that are not serviced by electricity due to weak power grids. This has prompted numerous plans to utilize solar power generation as a distributed power source. Solar power become increasingly cost competitive because it is inexpensive to operate. However, using solar as the primary power source requires installation of storage batteries that can supply electricity at night when solar cannot generate power. To ensure stable power supply, there is growing demand to use storage batteries for optimal control.

By combining storage batteries with our power conditioning systems, we have amassed strengths in power control optimization. Moreover, we have a solid track record in the production of power generation equipment. These include equipment for the Suzuran Kushiro-cho Solar Power Plant, one of Japan's largest solar power stations with storage batteries.

geothermal resources all over the world.

#### Hydro power

Recent years have seen growth in demand for hydro power generation as a low-cost, stable power source in Japan, and scrap-and-build\*<sup>2</sup> projects for aging equipment are increasing as a result.

To address this demand, we will continue strengthening our frontline response capabilities. At the same time, we will strive to increase orders by making full use of our distinct and differentiated product lineup, including our hybrid servo system<sup>\*3</sup>, which won a New Energy Award in 2019.

#### Expanding our after-sales business

In maintenance and replacement services, we will continue promoting onshore and onsite projects that bring together all functions in each customer's region, from sales to procurement, installation, and after-sales service.

In fiscal 2019, we enhanced our maintenance service proposals and achieved a year-on-year sales increase of around 10%.

In fiscal 2020, we will expand our after-sales business by strengthening our local networks, centered on our bases in the Middle East, the Philippines, Vietnam, and Indonesia,

- \*1 Based on actual figures for the past 20 years (Fuji Electric research) \*2 Entails disposal or decommissioning of aging and inefficient equipment and replacing it with new equipment to achieve better efficiency
- \*3 A turbine operation mechanism in a hydro power generation facility

Deploying our abundant know-how and track record, we collaborated with overseas subsidiary Fuji Electric (Thailand) Co., Ltd. to win two EPC\* contracts for our first overseas solar power generation projects. With this achievement as a foothold, we will continue aggressively expanding sales in Southeast Asia to foster the proliferation of renewable energy.

\* Abbreviation for "engineering, procurement, and construction," EPC contracts cover everything from design to construction, installation, and test operation



Suzuran Kushiro-cho Solar Power Plant (Hokkaido, Japan)

# Measures to Reinforce the Operating Foundations

We are reinforcing our operating foundations from the perspectives of the environment, society, and governance to improve our corporate value over the long term.

## Fuji Electric Corporate Activities and SDGs/CSR

Fuji Electric's corporate philosophy is to "contribute to prosperity," "encourage creativity," and "seek harmony with the environment," and the Company bases its management policies on contributing to the creation of a sustainable society through its energy and environment businesses. This is in line with the international community's efforts to integrate economic, social, and environmental improvements to achieve the SDGs. Our corporate social responsibility is to take corporate action to contribute to achieving the SDGs and to put our Corporate Code of Conduct into practice, there by promoting initiatives for material issues from the perspectives of the environment, society, and governance (see the next page).



SDGs to be Addressed through

Fuji Electric's Companywide Activities

Priority SDGs to be Addressed through Energy and

Environment Businesses

4 COUNTY 4 COUNTY 5 COUN

# Promoting the SDGs

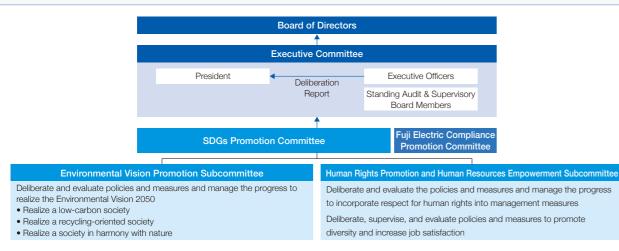
In June 2019, we announced nine SDG targets that we will focus on in all of our corporate activities to contribute to achieving the SDGs. We followed this in April 2020 by establishing the new SDGs Promotion Committee for deliberating, deciding, and evaluating the promotion of the SDGs at the management level.

We identify from an SDG perspective the key issues along with the business risks and opportunities for our company, incorporate them into our strategies, and evaluate our efforts to implement them. Our environmental efforts are focused on fulfilling our Environmental Vision 2050, which is mainly focused on realizing a low-carbon society; and our social efforts prioritize the promotion of human rights and human resources development. We have set up subcommittees dedicated to each topic that will deliberate our policies and strategies, supervise, and evaluate our efforts.

The committee's discussion content is reported to and deliberated by the Executive Committee and the Board of Directors.

#### SDGs Promotion Committee Roles and Material Issues

Committee Members	Executive officers of the business, sales, and corporate divisions
Roles	1. Identify the company's material issues, business opportunities and risks from an SDG perspective
	2. Incorporate the material issues into strategies, implement and evaluate the strategies (PDCA management)
<ul> <li>Material Issues</li> </ul>	1. Promote the Environmental Vision 2050
	2. Promote human rights and human resources development



# Initiatives to Address the Main Environmental, Social and Governance Issues

To enhance our long-term corporate value, we are reinforcing our operating foundations and supply chain by identifying material issues to be addressed in the practice of our Corporate Code of Conduct from the perspectives of the environment, society, and governance.

#### Material issues

Environment: Address global warming through all of our corporate activities guided by the Environmental Vision 2050

Field	Code of Conduct	Key Issues	Major Initiatives	Relevant SDGs	Relevant Pages
Environment	Respect and value <b>the global</b> environment	Realization of a low- carbon society	<ul> <li>Reduce society's CO<sup>2</sup> emissions through provision of energy-saving products</li> <li>Reduce greenhouse gas emissions during production</li> </ul>	7         #108684E AM         9         #05577, 14000000           ••••••••••••••••••••••••••••••••••••	Environment P31
nent		Creation of a recycling- oriented society	Promote 3Rs (reduce, reuse, recycle) in relation to products and production activities	12 cosparedon Ale Peddoction	
		Human rights	Implement human rights due diligence		
		Safe and healthy workplaces	<ul> <li>Improve occupational health and safety awareness among employees</li> <li>Health and safety audits to eliminate occupational accidents</li> <li>Ensuring employee health and mental health care</li> </ul>		Human Resources P37 Website (Refer to the following website)
	Respect and value all <b>people</b>	Activities of diverse human resources	<ul> <li>Expand areas in which female employees make contributions</li> <li>Utilize employees over 60</li> <li>Broaden scope of duties performed by differently abled employees</li> </ul>	4 tocats <b>1</b> tocats <b>8</b> tocats and to tocats of tocats <b>8</b> tocats of tocats <b>1</b> tocat	
Society		Work-life balance	<ul> <li>Advance workstyle reform</li> <li>Offer work-life balance support and foster conducive workplace environments</li> </ul>		
siety		Human resources development	<ul> <li>Enhance development of future management candidates</li> <li>Strengthen global human resources development</li> </ul>		
	Respect and value our <b>customers</b>	Improvement of customer satisfaction	<ul> <li>Improve product and service quality</li> <li>Enhance customer support and service systems</li> </ul>	12 RESPONSEL	Website (Refer to the following website)
	Respect and value our <b>business</b> <b>partners</b>	Value chains for supporting a sustainable society	<ul> <li>Practice fair and impartial procurement</li> <li>Fulfill social responsibilities together with business partners</li> </ul>		Supply Chain P60
	Respect and value interaction with society	Community outreach	<ul> <li>Contribute to communities through activities for protecting the natural environment and promoting youth development</li> <li>Engage in community outreach at major sites of overseas operations</li> </ul>	4 BUCIDS 13 CUNIT 13 CUNIT CONT 13 CUNIT CONT 13 CUNIT	Social Outreach (Local Communities) P62
Governance	Make <b>global</b> compliance a top priority	Effective compliance program implementation	<ul> <li>Establish, revise, and abolish internal rules and conduct oversight, audit, and education based on the Fuji Electric Compliance Program</li> <li>Cultivate mindset of strict compliance among employees</li> </ul>	11 automotive accomments 1166 Provid preter Automotive	Compliance P53
		Risk management	<ul> <li>Reinforce business continuity capabilities</li> <li>Strengthen data security</li> </ul>		Risk management P55
	Top management will thoroughly practice this Code of Conduct	Improvement of management transparency and oversight function	Reinforce corporate governance framework		Corporate Governanc P41
	Respect and value our shareholders and investors	Constructive shareholder and Investor engagement	<ul> <li>Conduct timely, fair, and impartial information disclosure</li> <li>Enhance shareholder and investor engagement activities</li> </ul>	12 REPORTED REPRODUCTION	Corporate Governanc P48

Society: Promote respect for human rights and activities of diverse human resources and reform our workstyles
 Governance: Ensure global compliance and further strengthen risk management in response to increasing variety of management risks

# Environment

We will use the energy and environment technology we have cultivated to help address environmental issues across the supply chain.



Senior Managing Executive Officer Corporate General Manager, Production & Procurement Group

The expanding efforts of the international community to fulfill the SDGs is making it increasingly important to engage in environmental activities such as mitigating global warming, efficiently using natural resources, and preserving biodiversity.

Based on these social movements, in June 2019 Fuji Electric created the Environmental Vision 2050 to clarify the direction of environmental activities that we should work for the long term.

We will use our full array of energy and environment technology to create a supply chain fully dedicated to achieving the goals to realize a low-carbon society, a recycling-oriented society, and a society in harmony with nature.

In fiscal 2019, we successfully achieved each of our primary environmental targets for reducing greenhouse gas emissions, promoting the 3Rs (reduce, reuse, and recycle), and reducing the impact on ecosystems.

For fiscal 2020, we created the Environmental Vision Promotion Subcommittee under the newly established the SDGs Promotion Committee and a framework enabling steady advancement toward the Environmental Vision 2050. In addition, in June we declared our support for the Task Force on Climate-related Financial Disclosures (TFCD).

Fuji Electric will continue the global development of its energy and environment businesses to contribute to addressing environmental issues and help realize a sustainable society.

### Basic Environmental Protection Policy

Michio Abe

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

### Fuji Electric's Environmental Vision 2050

We aim to achieve a "Low-Carbon Society," "Recycling-Oriented Society," and "Society in Harmony with Nature" by expanding use of Fuji Electric's innovative clean energy technology and energy-saving products.

#### Realize a Low-Carbon Society

Target a reduction of 80% or more in greenhouse gas emissions across the supply chain

#### Realize a Recycling-**Oriented Society**

Promote green supply chains and 3R\* activities to reduce environmental impact to zero

#### Harmony with Nature Aim for zero influence on the ecosystem by corporate

Realize a Society in

activities contributing to biodiversity

#### Fiscal 2030 Target

### Reducing Environmental Burde

Creating Environmental Value

 Reduce greenhouse gas emissions during production by 31% (Greenhouse gas emissions' base year: Fiscal 2013) \* Reduce reuse recycle

• Reduce 50 million tons of CO2 emissions through products annually

#### Environmental promotion system

The Environmental Vision Promotion Subcommittee submits the environmental activities it deems as priorities to the SDGs Promotion Committee, which examines the issues and reports to the Executive Committee, which further deliberates the issues and reports to the Board of Directors.

The Environmental Manufacturing Working Group, composed of environmental managers from the operating sites, promotes initiatives aimed at fulfilling the Environmental Vision 2050. The members incorporate the environmental goals and initiatives into their individual divisions and are responsible for managing and fully carrying out the initiatives.

We have also established individual projects to focus the full force of our abilities into our initiatives for the environmental issues identified as important. The TCFD Study Project, Green Supply Chain Construction Project,

#### Supply Chain Initiatives for Environmental Vision 2050

	(Upstream)	Supply Chain	(Downstream)		
	Business Partners	Fuji Electric	Customers		
	Raw Materials and Products Mining, manufacturing, disposal, transport, etc.	During Production           1. CO <sub>2</sub> from fuel burning and other greenhouse gases           2. Power plant CO <sub>2</sub> emissions due to our electricity usage	Product Usage Disposal, transport, etc.		
		Fuji Electric's Environmental Vision 205	0		
	Target a reduction of 80% or more in greenhouse gas emissions across the supply chain				
N-	Fiscal 2030 Target				
rbon ciety		Reduce greenhouse gas emissions during production	Reduce 50 million tons of CO2 emissions through		
oloty		by <b>31%</b>	products annually		
			Clean energy, energy-saving products		
cycling- ented ciety	Green procurement	Eco-friendly products (Product 3R) Waste reduction, water recycling during production			
ciety in mony	Cooperation with business partners	Reduction of environmentally hazardous chemical substances	Eco-friendly products		
h Nature		Environmental preservation activities			

# Close Up!

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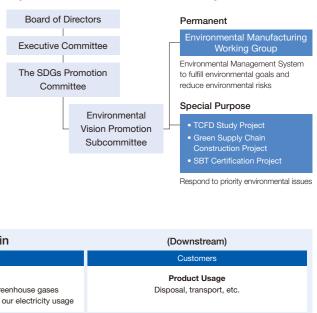
# Declaration of support for the TCFD

Fuji Electric has declared its support to the Task Force on Climate-related Financial Disclosures (TCFD), an international framework for analyzing and disclosing the financial impact of climate change.

As we pursue the Environmental Vision 2050, the Company will analyze the risks and opportunities that climate change brings to its business and value chain along with the financial impact that accompanies them. The information will be actively disclosed and incorporated into our management strategies.



and Science-based Target (SBT) Certification Project each have teams with members from throughout our organization to create policies and strategic plans. Fuji Electric is continuously taking various approaches to resolve environmental issues.



#### Fuji Electric Environmental Promotion System

# Selection to the CDP A List

In fiscal 2019, the CDP\* certified Fuji Electric as an "A List Company" with excellent climate change initiatives and information disclosure. Fuji Electric was one of 38 Japanese companies on the A List.

\* The CDP is an international NGO engaged in environmental activities, such as related to climate change. The CDP collects, analyzes, and evaluates information on environmental activities conducted by major companies and disclose the results to institutional investors.



### Realize a Low-Carbon Society

### Reduction of society's CO<sub>2</sub> emissions through products

Our total CO<sub>2</sub> emissions from our product operations declines when customers use our clean energy and energy-saving products. This is part of the goal in our Environmental Vision 2050 to "contribute to reducing society's CO<sub>2</sub> emission volume through our products." We calculate the contributions to CO<sub>2</sub> emissions reductions made over a full year of operation by all products shipped since fiscal 2009 (products within their average life spans).

In fiscal 2019, we achieved our goals by supplying the

#### Fiscal 2019 Result for the Year

market for clean energy (geothermal power generation,
solar power generation, biomass power generation) and
energy-saving products (general-purpose inverters, power
semiconductors).

The contribution from our leading products, or power electronics systems and electronic device products is 62%, which is relatively low compared to their sales composition ratios. And we are working to increase their contribution to reducing CO<sub>2</sub> emissions. In fiscal 2020, we aim to increase the contribution by mainly expanding sales of low-loss insulated-gate bipolar transistor (IGBT) modules.

Environmental Vision 2050	FY2019 Target	FY2019 Result	FY2020 Target
(FY2030 Target) Contribute to reducing society's CO <sub>2</sub> emission volume by 50 million tons annually through our products	32.10 million tons annually	This year's target achieved 36.51 million tons annually (Exceeded the target by 14%)	34.00 million tons annually

#### Calculation of CO<sub>2</sub> Emissions Reduction Contribution

CO2 Emissions Reduction Contribution = CO2 reduction effect when product is in use x number of units being used in the market for the fiscal year

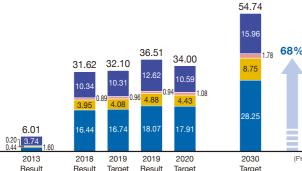
The CO<sub>2</sub> emissions reduction effect when a product is in use is:

• Clean energy: Average CO<sub>2</sub> emission volume during thermal power generation minus CO<sub>2</sub> emission volume when the product was introduced

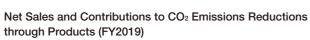
• Energy-saving products: CO<sub>2</sub> emission volume prior to introducing the product minus after introducing the product \* Calculated based on the Ministry of Economy, Trade and Industry Guideline for Quantifying Greenhouse Gas Emissions Reduction Contribution (stock-based)

#### Contributions to CO<sub>2</sub> Emissions Reductions through Products (Million tons)





Power Electronics Systems Electronic Devices Food and Beverage Distribution Power Generation



Electronic Devices Power semiconductors

Power Electronics Systems General-purpose inverters

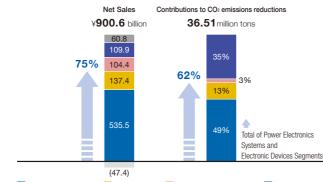
Food and Beverage Distribution Vending machines

Power Generation Geothermal and hydro power

Main Contributing Products

and top runner motors

generation



Power Electronics Systems Electronic Devices Food and Beverage Distribution Power Generation Other Elimination

# Close Up!

### Solar power with storage batteries reduces CO<sub>2</sub> emissions by approximately 60,000 tons

Fuji Electric delivered power generation equipment with storage batteries to the Suzuran Kushiro-cho Solar Power Plant, which began commercial operation in February 2020. Incorporating storage batteries to a mega solar operation provides output fluctuation control and ensures a stable supply of clean energy. The power plant reduces annual CO<sub>2</sub> emissions by 59,864 tons<sup>\*1</sup> and provides electricity that is equivalent to the annual consumption of approximately 21,300 households\*2.

\*1. Calculation of CO<sub>2</sub> emissions reduction: Annual power generation x CO<sub>2</sub> emission factor

Output 92 MW, CO<sub>2</sub> emission factor: 0.619 kg-CO<sub>2</sub>/kWh (weighted average of thermal power generation) \*2. From the website of Tokyu Land Corporation



Suzuran Kushiro-cho Solar Power Plant (Hokkaido, Japan)

### Reduction of greenhouse gas emissions during production

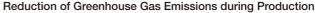
We manage and seek to reduce the CO<sub>2</sub> and other greenhouse gases (GHG) generated during the production process at our factories. We set annual target values designed to lead us to achieve the 2030 targets in the

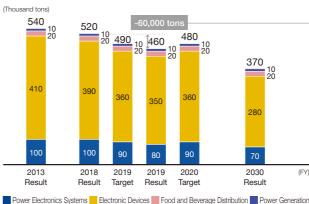
#### Fiscal 2019 Result for the Year

Environmental Vision 2050	FY2019 Target	
(FY2030 Target) GHG Emissions During Production Reduce by 31% (from fiscal 2013)	488,000 tons/year	This 456 (dow (dow

\* Power coefficient

Japan: 0.463 kg-CO2e/kWh Overseas: IEA emission factors (latest average power coefficient for each country)





# Close Up!

# Addition of solar power generation equipment at the Thailand factory cuts CO<sub>2</sub> emissions by 22%

Fuji Electric Manufacturing (Thailand) Co., Ltd. added a solar power generation facility with capacity of approximately 900 kW to the switchgear and control-gear system factory established in 2019, raising the factories total power generation capacity to 1,400 kW. Solar power now comprises approximately 36% of the electricity the company uses, which reduced its CO<sub>2</sub> emissions by 22% from the previous year.

# Fukiage Factory Saving energy using our ZEBLA software

Our efforts to save energy include actively using our own products. The Fukiage Factory, which mainly produces magnetic switches and molded-case circuit breakers, began using the ZEBLA power prediction system to reduce its energy consumption in fiscal 2015. In fiscal 2019, the system helped the factory lower its energy consumption by 9.1% and CO<sub>2</sub> emissions by 22.4% from fiscal 2013. The ZEBLA system saves energy by predicting the amount of electricity that will be needed during peak consumption and other periods. Automating the calculations for predicting power volume needs enables energy saving in real time. The Energy Conservation Center, Japan (ECCJ) awarded the Fukiage Factory the Chairman Prize of ECCJ at the Fiscal 2019 Energy Conservation Grand Prize for The ZEBLA power prediction Excellent Energy Conservation Equipment in recognition of its energy conservation efforts. system

Environmental Vision 2050. In fiscal 2019, we prioritized investing in energy-saving production equipment and achieved our targets for the year. We are aiming to achieve our fiscal 2020 targets by investing further in abatement apparatus to reduce GHG emissions from the manufacturing lines of our semiconductor factories.

is year's target achieved 6.000 tons/vear own 12% from the previous year) own 15% from the base year)

479,000 tons/year

FY2020 Target

	Environmental activities -40,000 tons (year on year)
	Main Measures
	<ul> <li>Energy saving measures (7,000 tons)</li> </ul>
	<ul> <li>Increased purchase of renewable electricity (1,000 tons)</li> </ul>
	[Wuxi and Shenzhen factories]
	<ul> <li>Increased private power generation of renewable energy (1,000 tons)</li> </ul>
	[Addition of solar power equipment at the Thailand factory]
	GHG offsetting (20,000 tons)
	[Elimination of solvents at the Tsugaru and Changshu factories
	<ul> <li>Power coefficient reduction effect (8,000 tons)</li> </ul>
	Figures in parentheses are the volume of the reduction in greenhouse gases
_	Effect of reduced production -20,000 tons (year on year)



Fuji Electric Manufacturing (Thailand) Co., Ltd.



### Realization of a Recycling-Oriented Society

We aim to realize the 3Rs across the supply chain from product development to procurement, use, and final product disposal.

The indicators we use to measure our progress are the reduction of the amount of waste sent to landfills and water consumption. These indicators we use to evaluate our performance encourage us reuse the surplus materials and water generated in our production processes. And we evaluate the achievement based on the annual targets.

We continued minimizing the amount of waste sent to landfills in fiscal 2019 and lowered the ratio of waste sent to landfills in Japan and overseas to 1.1%. We vastly exceeded our targets due to progress reusing waste

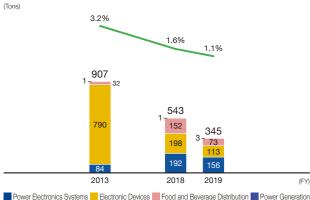
#### Fiscal 2019 Result for the Year

plastic in Japan and steady progress improving our final disposal processes overseas.

Our main issue at present is the lack of progress in working with our business partners and customers to apply the 3Rs. Our first step will be to strengthen the cooperative efforts with our business partners aimed at creating sustainable resource recycling. In fiscal 2020, we created the Green Supply Chain Construction Project in which our procurement and environmental departments will work together to promote environmental preservation efforts for our business partners. We are also continuing efforts to reduce the amount of waste sent to final landfills overseas with the aim of further lowering the final disposal rate.

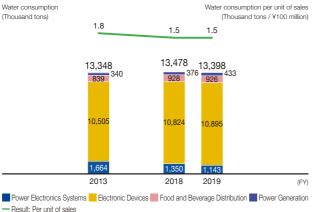
Environmental Vision 2050	FY2019 Target	FY2019 Result	Major Measures
(FY2030 Target) Ratio of waste sent to landfills Under 1.0%	Ratio of waste sent to landfills Under 2.1%	This year's target achieved Amount of waste sent to landfills 345 tons Ratio of waste sent to landfills 1.1%	<ul> <li>Promote recycling of waste plastic (for producing cement) (Mie Factory, Food and Beverage Distribution)</li> <li>Promote reuse of semiconductor packaging materials (Fuji Electric Power Semiconductor Co., Ltd., Electronic Devices)</li> </ul>
(FY2030 Target) Water consumption per unit of sales 1,800 tons / ¥100 million	Per unit of sales 1,800 tons / ¥100 million	This year's target achieved Consumption 13,398,000 tons Per unit of sales 1,500 tons / ¥100 million	<ul> <li>Countermeasures for filter membrane blockage in water recycling equipment (Matsumoto Factory, Electronic Devices)</li> <li>Promote water conservation (Fuji Electric (Malaysia) Sdn. Bhd., Electronic Devices)</li> </ul>

#### Amount and Ratio of Waste Sent to Landfills



- Result: Ratio of waste sent to landfills





Close Up!

## Lower final waste disposal volume by 18 tons by reusing semiconductor packaging materials

The Hokuriku Factory of Fuji Electric Power Semiconductor Co., Ltd., which assembles power semiconductor packages, is reusing materials (sticks) for storing and safekeeping electrical module semiconductors. In fiscal 2019, it collected, cleaned, and reused approximately 140,000 used sticks that would previously have been disposed of, which is equivalent to roughly 18 tons of plastic disposal. Prior to implementing the recycling program, it conducted a thorough investigation about the viability of reusing the sticks and verified that there would be no adverse effect on our products.

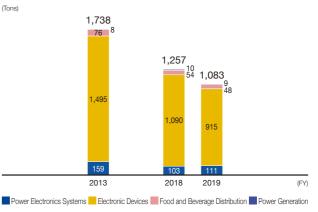
### Realizing a Society in Harmony with Nature

We design and manufacture our products to have no adverse impact on ecosystems so our customers can use our products with peace of mind. We set indicators for reducing the use of chemical substances (VOCs: Volatile Organic Compounds) that lead to environmental degradation and incorporate the targets into our annual goals and evaluate the result.

#### Fiscal 2019 Result for the Year

Environmental Vision 2050	FY2019 Target	FY2019 Result	Major Measures
Volatile organic compounds (VOCs) Discharge volume Under 1,694 tons	Under 1,704 tons	This year's target achieved 1,803 tons	Reduction of solvent paint usage     (Mie Factory, Food and Beverage Distribution)

Volatile Organic Compounds (VOCs) Discharge Volume



Close Up!

# Advance examination of regulated substance content

We acquire materials with low environmental impact from our business partners in accordance with Green Procurement Guidelines and manage them.

With the increase from six to ten of the regulated substances subject to the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)\* in fiscal 2019, the Suzuka Factory, which manufactures inverters, surveyed 381 of its business partners regarding the inclusion of regulated substances. The survey confirmed that none of the 381 companies use regulated substances. \* RoHS regulated substances: Specific hazardous substances with restrictions for use in electrical and electronic equipment

### Contribution to SOx removal from ship exhaust gas

Sulfur oxide (SOx) is an environmental pollutant present in ship fuel that is considered to be a cause of acid rain.

The SOx scrubber we launched in fiscal 2018 contributes to preventing air pollution by over 98% of the sulfur oxides contained in ship exhaust gas. We had delivered over 40 of the SOx scrubbers as of July 2020 and are currently expanding our lineup of products designed for large vessels.

All our operating bases also conduct environmental preservation activities catered to specific local biodiversity preservation needs. Preservation activities in fiscal 2019 include planting mangroves (Fuji Electric (Malaysia) Sdn. Bhd.). In fiscal 2020, we will promote the CSR Procurement Guidelines to raise the awareness of our suppliers about reducing the environmental impact of business operations



# Human Resources

We are actively investing in our human resources to achieve the targets of the Medium-Term Management Plan and to establish our foundations for sustainable growth.

> Takeshi Kadoshima Managing Executive Officer General Manager, Human Resources and General Affairs Office



One of Fuji Electric's management policies states that we will "maximize our strengths as a team, respecting employees' diverse ambition," and respecting human rights, ensuring occupational health and safety, and protecting employee health are fundamental for everything. We are proactively working on initiatives that include promoting active employee participation, cultivating our human resources, and properly deploying our personnel for medium- and long-term development of our business.

We believe it is important that our human resource measures encompass a broad range of issues inside and outside the Company and that they are implemented in a timely manner reflecting the responses in our annual employee awareness surveys.

We responded to the changing composition of the labor force and need for stronger manufacturing capabilities by revising how we handle employees with special skills and who are aged 60 or over, so that employees with strong performance could be better rewarded. Furthermore, to promote the active participation of diverse human resources, particularly female employees, we are continuously seeking to acquire individuals with science and engineering backgrounds and providing training for career advancement.

In addition, we are implementing workstyle reforms to improve their work efficiency by creating work systems and environments that will give employees greater flexibility to make the best use of time and location. At the same time, we are proactively developing future management candidates essential for sustainable business growth and the global human resources in Japan and overseas that strengthen our business worldwide.

These efforts are aimed at enhancing and activating our human resources as part of our "ongoing reinforcement of operating foundations" for our sustainable growth.

# Promoting Active Participation of Diverse Human Resources

The Fuji Electric Code of Conduct declares that we "respect and value all people," and we are implementing measures and constructing employee treatment systems to support employment and success of diverse human resources.

# Revising the treatment system for employees over 60 and highly skilled employees

In order to promote active employee participation, we revised our system for handling employees, of which measures were geared to employees aged 60 and over and highly skilled employees.

Japan's declining birthrate and aging labor force composition are making it increasingly important to retain older employees with advanced skills and experience. We have introduced the Senior Task System in which management-level employees aged 60 and over receive treatment matched to the value of their work. The aim is to boost motivation of individuals who continuously show significant performance by paying as high compensation as when they were under age 60. We have also outlined the "Employment Guidelines for Employees over 65" to create an environment where employees with advanced skills and expertise can continue to play an active role in the Company up to age 75.

We have also introduced the Manufacturing Meister System to highly evaluate and treat technicians with specialized expertise and skills who are excellent at improvement and streamlining. While providing clear examples of consummate technicians, the program provides bonus payments to the designated Manufacturing Meisters with the aim of boosting employee motivation and strengthening the manufacturing capabilities of the entire factory. We are also creating a training system for ambitious technicians to acquire the skills needed for high-level improvement and streamlining capabilities.

#### **Review of Employee Treatment System**

Employeee	Senior task system	Treated according to job content after age 60
Employees over 60	Employment guidelines after age 65	Create environment for hiring skilled and knowledgeable employees up to the age of 75
Skilled employees	Manufacturing Meister System	Develop highly skilled employees with the capabilities to improve and streamline work

#### Promoting the advancement of women

Among our diversity initiatives, we are especially focused on strengthening our efforts to promote the active participation of women in the workplace. In a society with a declining birthrate, aging population, and diversifying values, demonstrating our comprehensive strength as a company is essential to generating sustainable growth, and further boosting the contributions by female employees are critical.

We are promoting women's active participation by stepping up our hiring of women and actively providing training to increase the number of female employees in supervisory positions. We set a target for 20% of our hires to be women. To achieve this, we created a project team of female employees with science and engineering backgrounds to actively recruit female university students, and ultimately women accounted for 22% of our new hires in April 2020.

Initiatives to increase the number of female employees in supervisory positions include annual supervisor interviews with junior staff to identify employees with strong career ambitions. The employees are registered as eligible to participate in the Company's priority career development program, under which detailed career development plans are created for accumulating on-the-job experience and receiving selective training to further their advancement to higher positions in the Company.

## Workstyle Reforms

We seek to provide a balanced approach to workstyles through the Companywide Pro-7 Activities aimed at enhancing work efficiency and quality to improve productivity and by embracing a perspective on work-life balance characterized by "focusing on one's job while at work and resting properly outside of work."

In fiscal 2019, following the government's law amendments in April for mandatory annual paid leave and an upper limit on overtime work hours, we intensified efforts to reduce overtime work and to encourage employees to use vacation time, both of which had been promoted under companywide policies.

Measures to reduce overtime work include creating visualized tracking of actual work hours and improving productivity at worksites with challenges and issues by practicing selfmonitoring of their work and reviewing the way they work. We are also strengthening the management support function of the companywide time management system and setting no overtime days. In addition, we are providing training, posters, and broadcasting to help managers become more aware about time

#### Paid Vacation Days Acquired Annually and Overtime Work Hours

(FY)	2018	2019
Average overtime work hours	24.04	23.83
Average number of days of paid vacation days acquired annually	14.5	16.5

#### Major Initiatives

<ul> <li>Active recruitment of female science and engineering students through the female employee science and engineering project team</li> </ul>
✓ Systematic development of female managers
✓ Implement mentor system for junior and senior female employees
<ul> <li>Implement career continuity support system (registration system for requesting reemployment, overseas transfer/leave system for spouses)</li> </ul>

#### Female Employees and Managers

(FY)	2018	2019	2020	2023 (Target)
Ratio of females hired*1	20%	21%	22%	20%
Ratio of female managers*2	1.9%	2.3%	2.5%	3.0%
No. of female employees in supervisory positions*3	225	249	268	400

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, and Fuji Electric Frontier

Data for females hired collected from Fuji Electric and Fuji Electric FA Components & Systems

\*1 Graduates from universities or technical colleges

\*2 Managerial positions or above

\*3 Assistant manager or above

management of their subordinates. These activities are raising awareness among all employees and encouraging them to revise their work practices while also ensuring compliance with the laws. In addition to recommending they take five consecutive days off as in the past, our initiatives to encourage employees to use vacation time include a system strongly supporting the planned use of paid leave. These efforts have increased the average number of annual paid leave days being taken by employees.

In addition, in fiscal 2017 we introduced the Location Flexible work systems enabling employees to work in satellite or home offices with the aim of providing flexibility so employees can maintain balanced and efficient workstyles. We also have a flextime system, and at the headquarters are testing a "sliding work hours" system allowing employees to set multiple start and finish times in advance and shift the times they arrive and leave work.

This flexibility proved advantageous during the COVID-19 pandemic, and we will continue to develop other systems to support the new workstyles of our employees.

# Use of the Flexible Location Work System (Total Number of Users)

(FY)	2018	2019
Home office	1,940	2,893
Satellite office	457	314

Data collected from Fuji Electric, Fuji Electric FA Components & Systems, Fuji Electric Finance and Accounting Support, Fuji Office & Life Service, Fuji Electric IT Center, Fuji Architects and Engineering, Fuji Electric Frontier, and Fuji Electric F-Tech

### Recognizing the Status of Employee Awareness and Responding to Issues

We conduct annual employee awareness surveys to remain in touch with employee perspectives and perform fixed-point observation on employee views on company and workplace satisfaction, senior management, work motivation, and trust for superiors. The survey results are reported to the Executive Committee, and the analysis results for each organization are delivered to the senior manager of each department and representatives of subsidiaries, who implement improvement measures.

The results of the employee awareness survey in fiscal 2018 indicated a need to strengthen the line management carried out by middle managers (manager rank).

Using these results, in fiscal 2019, we constructed a mechanism for superiors and subordinates to share their medium-term career objectives and created a visualization scheme at the workplace for a year-by-year goal management system to monitor progress and apply a PDCA cycle of setting a target, performing the job, assessment, and setting a new target for the next fiscal year. We also set up a system to raise the level of middle management

### **Development of Human Resources**

The Fuji Electric Code of Conduct declares our commitment to strengthening our human resource development to support the growth of each employee and realize the full potential of teams, enhance the ability of employees to fulfill their potential, and increase investment in education to cultivate a workforce of individuals that are highly professional, demonstrate strong leadership, and capable of working anywhere in the world.

#### Fostering next-generation management

We are also taking active measures to foster future management candidates who will lead our sustainable growth. Our human resource development focuses on carefully selected young employees, effective on-the-job training, and participation in selective training. We carefully select talented young employees from the three levels of general manager, manager, and assistant manager and register them as management candidates. From early in their careers, these registered individuals are systematically trained through a job rotation plan designed for them to accumulate the required experience in multiple businesses and job categories



through a training system for line managers to refresh their understanding of the line manager's role and necessary skills and expertise through group training sessions and e-learning repeated once every two years.



as well as overseas businesses. We also have them participate in training both inside and outside the company in a program designed to provide experience and nurture skills that are difficult to acquire through on-the-job training, such as learning management skills by experiencing different management styles and by working in teams with other training participants to formulate business proposals. A total of 531 people have been trained since fiscal 2017, and about 30% of the registered employees are currently participating in the next stage of management development.

#### Global human resources

We develop global human resources by sending employees out of their home countries of Japan or elsewhere and develop the ability to create new value by working with local employees and teams through both work and life experience.

Our development of global human resources is primarily promoted through three initiatives: systematically assigning talented employees from Japan to other countries, assigning talented employees from overseas bases to Japan, and strengthening the communication skills of employees in Japan.

The assignment of talented human resources in Japan is performed by registering talented employees with global potential as candidates for overseas assignments and providing them with systematic training, which creates a resource pool for global personnel. The assignment of talented overseas employees to Japan includes selecting about 20 individuals each year with promise to become local leaders and training them at the primary business site in their country to acquire product knowledge and technical skills. Our programs to strengthen the communication skills of employees in Japan include language training for about 500 people annually centered on employees who interact with overseas bases and focusing on establishing strong communication skills.

# Close Up!

### Human rights due diligence measures

We conduct human rights due diligence in our relationships within all corporate activities to recognize, prevent, and deal with adverse human rights harm based on the United Nations Guiding Principles on Business and Human Rights. In fiscal 2019, we formulated the Guidelines for Respect

of Human Rights of Employees for all domestic and overseas consolidated companies with the aim of making all employees aware of our Policy for Human Rights of the Employees, which is based on international standards for human rights. The guidelines, which clarify specific actions to take, were formulated in reference to materials including the Guidelines for Responsible Business Conduct created

#### Activities

Employees	<ul> <li>Establish and roll out</li> <li>Checks by way of sel and subsidiaries</li> <li>Implement improvem</li> </ul>
Supply Chain (for business partners)	<ul> <li>Establish and roll out</li> <li>Conduct CSR survey</li> <li>Feedback survey rest</li> </ul>

### Succeeding in the Southeast Asia and India markets with our human resources

Once we have a full understanding of the customer's equipment and production processes, which is critical in the industrial plant business, we have accelerated localization of sales staff who grasp the customers' issues and propose systems that meet their budgets and needs, as well as human resources with the systems engineering capabilities to set up, design, install, start up, and maintain the systems on site.

We strengthened our plant sales capabilities in November 2019 by appointing a plant sales chief to oversee the sales activities of our sales companies in Southeast Asia. The new post serves as the center point for representatives from our seven companies in Southeast Asia\* and enhances information sharing among the bases while improving our ability to train and strengthen our local sales staff with on-the-job training.

We are also strengthening our engineering capabilities by bringing engineers from Fuji CAC Joint Stock Company of Vietnam to the Tokyo Factory to deepen their familiarity with our systems, products, and all of our plants by having them by the Japan Electronics and Information Technology Industries Association (JEITA). In fiscal 2020, we plan to develop guidelines for all operating sites and subsidiaries in Japan and overseas and create self-inspection checklists based on the guidelines. The results of the checks will be reported back to the operating sites and subsidiaries so they can take steps to make any necessary improvements.

We have also established the Fuji Electric CSR Procurement Guidelines for human rights due diligence initiatives in our supply chain and are conducting selfassessment CSR surveys at our major business partners. \* Please refer to page 60 for details about our supply chain initiatives

ut the Guidelines for Respecting Employee Human Rights elf-check sheets for domestic and overseas offices

ments based on results of checks

ut the Fuji Electric CSR Procurement Guidelines

eys (self-assessment)

sults to business partners

contribute to engineering at our customers' plants. We are also increasing our support system for our overseas bases by actively dispatching Japanese engineers to support and educate engineers at overseas sites. Since 2016, we have been assigning engineers to full-time positions at overseas bases, mainly in Southeast Asia and India, such as Fuji Gemco Private Limited, Fuji Electric India Private Limited. and Fuji CAC Joint Stock Company.

\* Fuji Electric Asia Pacific Pte. Ltd., Fuji Electric (Thailand) Co., Ltd., Fuji Electric Vietnam Co., Ltd., PT Fuji Electric Indonesia, Fuji CAC Joint Stock Company, Fuji Electric Sales Malaysia Sdn. Bhd., Fuji Electric Sales Philippines Inc.



Fuji CAC sales staff and engineers participating in product study sessions for industrial plants

# **Corporate Governance**

As we work towards realizing our corporate philosophy, we are currently strengthening our corporate governance in an effort to enhance management transparency and oversight functions.

### **Basic Policies**

In strengthening our corporate governance, our basic policies are to protect shareholder rights and ensure their equal treatment, cooperate appropriately with non-shareholder

stakeholders, ensure proper information disclosure and transparency, execute the duties of the Board of Directors, and engage in dialogue with shareholders.

(see page 43) comprising a majority of Outside Officers as an

execution, we have introduced an executive officer system in an effort to clearly define the responsibilities of each business

Also, in order to clarify the roles of management and

and streamline business execution. We are endeavoring

to build an effective corporate governance framework with

the use of the Executive Committee, which discusses and

reports on important matters related to management as an

advisory body to the president and chairman of the Board of

Directors, as well as other committees tasked with planning

and promoting key business strategy issues and key external

\*Committees

Key issues for Fuji Electric from

• Fuji Electric Compliance Promotion Committee

an SDGs perspective

Legal compliance and

SDGs Promotion Committee

other key external issues

• Health & Safety Committee

Key business strategy issues

 Production Technology Committee Technology Development Committee International Standardization Committee

Skills Development Committee

advisory body to the Board of Directors.

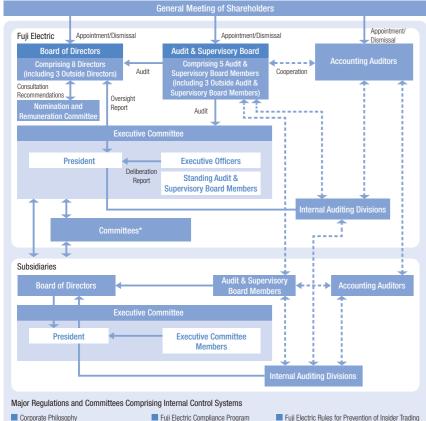
issues, such as legal compliance.

# **Corporate Governance Framework**

Fuji Electric's corporate governance framework consists of the Board of Directors, which performs the functions of management supervision and making important decisions, and the Audit & Supervisory Board, which is in charge of the management audit function. As a company employing the corporate auditor system, Fuji Electric's Audit & Supervisory Board suitably undertakes audits of the Company's Directors and Executive Officers and guarantees objectivity and neutrality.

The Company actively appoints Outside Officers that satisfy the requirements for Independent Directors / Audit & Supervisory Board Members, endeavors to strengthen management supervisory and auditing functions, and has established the Nomination and Remuneration Committee

#### **Corporate Governance Framework**



Corporate Philosophy Fuii Electric Code of Conduct Fui Electric Job Authority Rules Fuii Electric Risk Management Rules

Fuji Electric Compliance Promotion Committee

Fuji Electric Rules for Prevention of Insider Trading Business Ethics Whistle-Blowing System Fuji Electric Group Contingency Plan for Emergency Situations Auditor Liaison Committe

### List of Officers (As of October 1, 2020)

#### Directors





President and Chairman of the Board of Directors Michihiro Kitazawa

Elected Corporate Director Kenzo Sugai



Director Michio Abe

Masatsugu Tomotaka

#### Audit & Supervisory Board Members





Standing Audit & Supervisory Board Member Chairman of the Audit & Supervisory Board Yoshio Okuno

Standing Audit & Supervisory Board Member Junichi Matsumoto

Outside Audit & Co., Ltd.

**Executive Officers** 

Position	Name	Division
President and Chairman of the Board of Directors	Michihiro Kitazawa	General Management
Executive Vice President and Elected Corporate Director	Kenzo Sugai	Assistant to the President, Corporate General Manager, Sales Group
Senior Managing Executive Officer	Michio Abe	Corporate General Manager, Production & Procurement Group, In charge of Power Generation Business
Senior Managing Executive Officer	Masatsugu Tomotaka	In charge of Power Electronics Systems Energy Business, In charge of Power Electronics Systems Industry Business
Senior Managing Executive Officer	Junichi Arai	Corporate General Manager, Corporate Management Planning Headquarters, General Manager, Export Administration Office, In charge of compliance management and crisis management
Managing Executive Officer	Toru Housen	Corporate General Manager, Electronic Devices Business Group
Managing Executive Officer	Takeshi Kadoshima	General Manager, Human Resources and General Affairs Office
Managing Executive Officer	Yasuhiro Takahashi	Corporate General Manager, Food & Beverage Distribution Business Group
Managing Executive Officer	Shiro Kondo	Corporate General Manager, Corporate R&D Headquarters
Executive Officer	Kenji Goto	Deputy Corporate General Manager, Power Electronics Systems Energy Business Group
Executive Officer	Masahiro Morimoto	President and Representative Director, Fuji Electric FA Components & Systems Co., Ltd.
Executive Officer	Tadao Horie	Corporate General Manager, Power Generation Business Group
Executive Officer	Masashi Kawano	Corporate General Manager, Power Electronics Systems Energy Business Group
Executive Officer	Hiroshi Tetsutani	Corporate General Manager, Power Electronics Systems Industry Business Group
Executive Officer	Yoshitada Miyoshi	General Manager, President's Office, In charge of SDGs Promotion, In charge of Public and Investor Relations
Executive Officer	Masato Miyake	General Manager, Legal Office, Corporate Management Planning Headquarters
Executive Officer	Keiichi Asano	Deputy Corporate General Manager, Food & Beverage Distribution Business Group



Toshihito Tamba Director, Tokyo Century Corporation

Outside Director

Directo

Junichi Arai



Outside Directo Naoomi Tachikawa



Outside Director Yoshitsugu Hayashi Professor and Director, Center for Sustainable Development and Global Smart Cities Chubu University





Supervisory Board Member Tetsuo Hiramatsu President, Chuo-Nittochi Group

President & Representative Director Chuo-Nittochi Group Co., Ltd. President & Representative Director NIPPON TOCHI-TATEMONO Co., Ltd.



Outside Audit & Supervisory Board Member Hirohiko Takaoka



Outside Audit & Supervisory Board Member Yuko Katsuta Partner, Natori Law Office

# Nomination and Remuneration Committee

Established in fiscal 2019, the Nomination and Remuneration Committee enhances the Company's corporate governance by reinforcing the fairness, transparency, and objectivity of procedures concerning the nomination and remuneration of Directors and Audit & Supervisory Board Members. The committee comprises at least three Directors as members, the majority of which are elected from among the Company's Outside Directors. The chairperson is elected from among the Outside Directors that sit on the committee as members.

The committee deliberates on the following matters and reports its findings to the Board of Directors.

- (1) Policy on the composition of the Board of Directors
- (2) Policies and criteria regarding the appointment or dismissal of Directors, the President and Chairman of the Board of Directors, and Audit & Supervisory Board Members
- (3) Appointment or dismissal of Directors, the President and Chairman of the Board of Directors, and Audit & Supervisory Board Members

(4) Matters regarding the formulation and implementation of

# Appointment of Directors and Audit & Supervisory Board Members

Fuji Electric's policy on nominating candidates for Directors and Audit & Supervisory Board Members is to decide on candidates by taking into account such factors as the overall balance of qualifications and experience on the Board of Directors, and other viewpoints like diversity. Directors are appointed for a single-year term so that their management responsibilities for each fiscal year can be clearly defined. This also creates a management structure capable of responding to changes in the operating environment.

Persons with the qualifications, experience, and other attributes required to execute the Company's management policies are appointed as Standing Directors.

Persons equipped with the insight and experience required to make multilateral business decisions who also have an

# Independence Criteria for Outside Officers

The Company judges the applicable candidate to be fully independent from the Company when he/she does not fall under any of the conditions listed below in addition to criteria of independence stipulated by domestic financial exchanges including the Tokyo Stock Exchange.

(1) Major shareholder

A major shareholder of the Company (who owns 10% or more of the voting rights) or its executor of business.(2) Major business partner

A business partner (consultants such as lawyers, certified public accountants, and tax accountants, as well as consulting firms such as law firms, audit firms, and tax firms) or a person executing its business whose transactions with the Company exceed 2% of the annual consolidated net sales of the Company or the other entity in the past three fiscal years.

a succession plan for the President and Chairman of the Board of Directors

- (5) Policies and criteria regarding the remuneration of Directors and Audit & Supervisory Board Members
- (6) Details of remuneration for Directors and Audit & Supervisory Board Members

In fiscal 2019, the committee had five members, three of which were Outside Directors. During the period July 2019 through July 2020, the committee convened on three occasions to deliberate matters and report the results to the Board of Directors.

#### Nomination and Remuneration Committee

The committee Chairman Outside Director Toshihito Tamba Committee members Outside Directors Naoomi Tachikawa, Yoshitsugu Hayashi Standing Directors Michihiro Kitazawa, Kenzo Sugai

understanding of Fuji Electric's management are appointed as Outside Directors. For instance, managers of listed companies or experts in academic fields closely related to Fuji Electric's business domains.

Persons familiar with the Company's operations in general who also possess expert knowledge and experience are appointed as Standing Audit & Supervisory Board Members.

Persons equipped with the expert knowledge and experience required to undertake audits who also have an understanding of Fuji Electric's management are appointed as Outside Audit & Supervisory Board Members. For instance, corporate managers, persons with experience as a standing auditor of a listed company, or legal experts.

#### (3) Major lender, etc.

A financial institution, other major creditor, or a person executing the business of these institutions that is indispensable for the Company's funding and on which the Company depends to the extent that it is irreplaceable. (4) Accounting Auditor

A certified public accountant who belongs to an auditing firm that serves as the Accounting Auditor of the Company or employee, etc. of such auditing firm.

(5) Donee

A person executing the business of an organization which receives a donation exceeding 10 million year per year that is greater than 2% of its annual income from the Company for the past three fiscal years.

# Training Policy for Directors and Audit & Supervisory Board Members

Before taking office, Standing Officers undergo compliance training, which also encompasses legal and taxation matters. They are also provided opportunities after taking office to acquire necessary knowledge on an ongoing basis.

Before taking office, Outside Officers are briefed on the state of the Company and the roles they are expected to perform. After taking office, they have the chance to deepen their understanding of the Company's business by attending internal technology presentations and inspecting production sites.

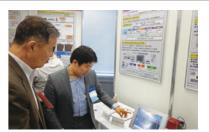
## Activities of Outside Officers in Fiscal 2019

#### **Outside Directors**

Name	Status of Attendance at Board of Directors Meetings (Meetings Attended/Meetings Held)	
Toshihito Tamba	13/13	Mr. Tamba offered of at the Board of Dire professional standp • Formulation of a t • Methods of evalu
Naoomi Tachikawa	13/13	Mr. Tachikawa offer at the Board of Dire professional standp • Managing progree • Situation concern
Yoshitsugu Hayashi	13/13	Mr. Hayashi offered at the Board of Dire professional standp • Appropriate ways • Initiatives aimed a

#### **Outside Audit & Supervisory Board Members**

Status of Attendance at Board of Directors Meetings Status of Attendance at Audit & Supervisory Board Meetings	
(Meetings Attended/Meetings Held)	
11/13 9/9	Mr. Sato confirmed Directors concernir based on his exten institutions. At mee opinions on the leg
13/13 9/9	Ms. Kimura confirm Directors concernir based on her exper Board, she confirm business activities of
12/13 9/9	Mr. Hiramatsu conf of Directors concer based on his exten institutions. At mee opinions on the leg
	11/13 9/9 13/13 9/9 12/13



Outside Director Tachikawa explaining the product at the internal technology presentations

#### Main Activities

opinions as necessary on all areas of Fuji Electric's management rectors meetings, including on the following matters, based on his lpoint and considerable insight as a manager of listed companies. business plan taking into account changes in the market environment uating the effectiveness of the Board of Directors

ered opinions as necessary on all areas of Fuji Electric's management rectors meetings, including on the following matters, based on his lpoint and considerable insight as a manager of listed companies. ess of management plans

rning management of fixed costs

d opinions as necessary on all areas of Fuji Electric's management rectors meetings, including on the following matters, based on his lpoint and considerable insight as an environmental engineer. rs to carry out research and development at reducing Fuji Electric's environmental footprint

at reducing Fuji Electric's environmental footprint

#### Main Activities

d and offered opinions as necessary at meetings of the Board of ing agenda items and the status of Fuji Electric's business activities nsive experience and considerable insight as a manager at financial etings of the Audit & Supervisory Board, he confirmed and offered gal compliance of the overall business activities of Fuji Electric.

med and offered opinions as necessary at meetings of the Board of ing agenda items and the status of Fuji Electric's business activities ert knowledge as an attorney. At meetings of the Audit & Supervisory ned and offered opinions on the legal compliance of the overall of Fuji Electric.

firmed and offered opinions as necessary at meetings of the Board erning agenda items and the status of Fuji Electric's business activities nsive experience and considerable insight as a manager at financial etings of the Audit & Supervisory Board, he confirmed and offered gal compliance of the overall business activities of Fuji Electric.

# **Executive Remuneration**

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

We routinely verify that the system and levels are appropriate or whether they need reviewing in light of changes in the operating environment or objective external data.

Officer remuneration comprises mainly performance-linked remuneration and remuneration other than performance-linked remuneration, but there is no policy in place for determining payment ratios. As for indicators pertaining to performancelinked remuneration, the amount of performance-linked remuneration is determined mainly in line with the consolidated ratio of operating income to net sales—a key target in the Medium-Term Management Plan—and in light of consolidated Company earnings (operating income, net income, dividends, etc.) the previous fiscal year.

Note that the operating margin in fiscal 2019 was 4.7%, short of the 6.7% target called for in our management plan.

# Authority for determining officer remuneration amounts and calculation methods

The Nomination and Remuneration Committee receives and discusses inquiries from, and reports back to, the Board of Directors with regard to mainly policies and criteria concerning remuneration of Directors and Audit & Supervisory Board Members.

While the Board of Directors discusses the details of the committee's report, the actual decision on remuneration amounts is left to the discretion of President and Chairman of the Board of Directors, but within the limit resolved at the General Meeting of Shareholders and with reference to the details of the committee's report.

#### **Classification-Based Remuneration System**

Classification	Remuneration System
	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.
Standing Directors	Performance-Linked Remuneration Performance-linked remuneration is paid only in instances in which dividends are paid to all 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 clearly.
Standing Audit & Supervisory Board Members Outside Director and Outside Audit & Supervisory Board Members	A predetermined amount is paid as base remuneration and stock in the Company may be acquired at their own discretion.

#### Remuneration Amounts by Classification (Fiscal 2019)

•				
	Total Remuneration	Remuneration by Type (Millions of Yen)		
Classification	(Millions of Yen) Base Remuneration		Performance-Linked Remuneration	Number of Recipients
Standing Directors	348	240	108	5
Standing Audit & Supervisory Board Members	58	58	—	2
Outside Directors and Outside Audit & Supervisory Board Members	50	50	_	6

#### Amount of Contributions to Officer Shareholding Association and Shares of the Company Acquired (Fiscal 2019)

Classification	Amount of Contributions to the Director Shareholding Association (Millions of Yen)	Shares of the Company Acquired (Hundreds of Shares)
Directors	20	61
Audit & Supervisory Board Members	3	10

## Evaluation of Effectiveness of the Board of Directors

The evaluation of the effectiveness of the Board of Directors was conducted with the use of a third-party survey for the first time in fiscal 2019 in order to verify whether the Board of Directors is properly fulfilling its expected roles and functions and to facilitate further improvements thereof. The results of the survey was reported to the Board of Directors and issues that require improvement going forward were shared with everyone.

Scope of evaluation	Fiscal 2019 Board of Directors (13 meetings in total)
Subjects	All Directors and Audit & Supervisory (13 people in total)
Evaluation method	Anonymous survey conducted by a th
Evaluation period	January to February 2020
Main question categories	<ol> <li>Board of Directors make-up, admi</li> <li>Support structure and training for 1</li> <li>Dialogue with shareholders</li> <li>Initiatives implemented by Director</li> </ol>
Evaluation process	<ul><li>(1) Subjects answer a survey conduct</li><li>(2) The third party identifies issues bat</li><li>(3) Board of Directors analyzes, discu</li></ul>
Summary of evaluation results	The administration of the Board of E assessments, thereby assuring the
Issues to address	In light of the opinions in the survey of such as the Medium-Term Managem need for reports on dialogue with ins in order to further improve the Board

Based on the results of this effectiveness evaluation, the Board of Directors will continue to work on enhancing its role by properly examining the issues that have been shared and addressing each one in turn according to a clearly defined schedule.

Board Members

third party

ninistration, discussions, and monitoring functions r Directors and Audit & Supervisory Board Members

rs and Audit & Supervisory Board Members themselves

cted by a third party ased on a results report and advice usses, and assesses the findings

Directors and its discussions earned mostly positive e overall effectiveness of the Board of Directors.

r calling for more in-depth discussions about longer-term topics, ment Plan, ESG issues, and workstyle reforms, as well as the astitutional investors, it was recognized that challenges lie ahead rd's functions and invigorate discussions.

# Internal Control System

With the aim of complying with laws and regulations, managing the risk of loss, and securing the efficiency of the execution of duties, the Fuji Electric Board of Directors determines basic policies concerning the establishment of an internal control system as stipulated in the Companies Act of Japan, and the Company discloses those policies. Fuji Electric discloses information on the implementation of its internal control system, thereby taking steps to respond promptly and accurately to the demands placed upon the Company by society. Such information includes descriptions of provisions for ensuring that Directors and employees perform their duties in a manner that is compliant with laws and the articles of incorporation.

# Main Systems Based on the Internal Control System Compliance system

#### (Please refer to page 53 for details.)

Based on systems for ensuring that Directors and employees perform their duties in a manner that is compliant with laws and the articles of incorporation, Fuji Electric has established and promotes a compliance system in order to secure the transparency and soundness of business execution.

### Risk management system (Please refer to page 55 for details.)

Based on regulations and other systems pertaining to managing the risk of loss, Fuji Electric has developed an appropriate risk management system in order to manage business risks in a coordinated, systematic manner. In regard to specific cross-sectional risks, the Company determines departments to put in charge of each risk, thereby establishing a risk management system.

#### Preventing reoccurrence of fictitious transactions

On January 30, 2020, we released the Statement Regarding Allegations of Fictitious Transactions Against Subsidiary. So that such an incident never happens again, we amended the Group's internal regulations to clearly stipulate that employees must not undertake transactions that cannot be confirmed as real. The subsidiary in question is currently adopting measures aimed at preventing a reoccurrence mainly by rebuilding its risk management framework for workflow of ordering and accepting goods, including checking and examining sales channels, its own role, and the existence of transactions. It is also implementing exhaustive risk awareness training for sales divisions.

### Audits by the Audit & Supervisory Board Members and Internal Audits

#### Audits by the Audit & Supervisory Board Members

Audit & Supervisory Board Members conduct audits in accordance with the audit policies and duties assigned and in compliance with the standards for audits established by the Audit & Supervisory Board. They report the details and results of their audits to the Audit & Supervisory Board.

In fiscal 2019, the Audit & Supervisory Board convened nine times in total. Every meeting was attended by all of the Company's Audit & Supervisory Board Members.

During the meetings, the Audit & Supervisory Board mainly reviewed audit policies and plans, the appropriateness of auditing methods and results of the Accounting Auditors, and undertook an assessment of the Accounting Auditors. It also reported on and reviewed important matters that the Standing

#### Internal audits

Every second year, the internal auditing divisions perform the following audits on Fuji Electric's business divisions and subsidiaries in accordance with internal auditing standards and annual audit plans. Audit & Supervisory Board Members communicated to the Outside Audit & Supervisory Board Members.

#### Main tasks

- Attending and offering opinions at meetings of the Board of Directors, the Executive Committee, the Compliance Promotion Committee, and other important committees
- Reviewing documents pertaining to important resolutions Receiving explanations on the status of operational
- execution from Directors and internal auditing divisions
  Investigating the status of operations and assets at Fuji Electric, consolidated subsidiaries in Japan and overseas, and companies undertaking M&As

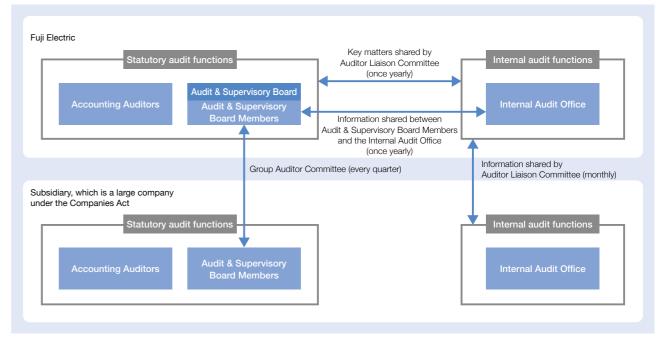
A total of 44 bases were audited in fiscal 2019. No risks or inadequacies with the potential to seriously affect management were discovered.

Type of Audit	Main Tasks
Organizational management	Evaluating the appropriateness of management and administration (development of regulations, approval procedures, performance management, etc.)
Risk management	Evaluating the effectiveness of risk management systems and risk response
Compliance	Checking for compliance with laws and regulations based on the Fuji Electric Compliance Program and confirming legal compliance
Business execution	Evaluating the appropriateness, efficiency, and effectiveness of business execution (booking of sales and purchases, investments, cash flow, etc.)
Accounting	Evaluating the appropriateness of cost accounting and the soundness of assets and liabilities

### Strengthening collaboration between audit functions

We ensure the effectiveness of Fuji Electric's audit functions by reinforcing collaboration between statutory audit functions (Audit & Supervisory Board Members, Accounting Auditors) and internal audit functions (Internal Audit Office).

#### Main Initiatives for Strengthening Collaboration



### **Dialogue with Shareholders and Investors**

#### **Basic policies**

We disclose information in accordance with various laws and regulations so that we might earn the trust of our shareholders and investors and ensure they have a proper understanding of the Company. We also strive to disclose corporate information thought to have a significant impact on investment decisions in a timely, fair, and equitable manner, even if we are not required to do so by law.

We emphasize dialogue with shareholders and investors in our investor relations activities, and we are dedicated to enhancing reciprocal communication in these activities.

#### Major initiatives in fiscal 2019

- Financial results briefings (quarterly)
- Management plan briefing
- FY2023 Medium-Term Management Plan briefing
- ESG Explanatory Forum
- Factory tours for shareholders (three plants)

We will continue to strengthen this cooperation going forward, with a particular focus on project management for large-scale projects, compliance audits, and audits at overseas subsidiaries.

#### Opinions of analysts and institutional investors

We actively engage in dialogue with analysts and institutional investors and the information shared at briefings and the principal feedback and requests we receive during private meetings are always reported to the executive officers and Board of Directors. The main requests received from analysts and institutional investors in fiscal 2019 are as follows.

#### General management and business

- Disclosure of KPIs that demonstrate productivity improvement
- Disclosure of rationale for holding cross-shareholdings
- More opportunities to engage in dialogue with top management
- Disclosure of information about the progress of the measures of the Medium-Term Management Plan for the power electronics systems business
- Disclosure of information about the progress of measures for the power semiconductor business

#### ESG

- Clarification of key issues (materiality)
- Expectations for CO2 reductions in the supply chain
- Ongoing disclosure of information from employee awareness surveys

# **Working toward Highly Effective Governance**

The evaluation of the effectiveness of the Board of Directors was conducted with a third-party survey for the first time in fiscal 2019 in order to verify whether the Board is functioning properly and sufficiently and to further improve its functions.

Centering on the topic of realizing highly effective governance, this round-table discussion sought to elicit the opinions of Fuji Electric's Outside Officers—all of whom hail from different backgrounds— regarding issues concerning the administration and discussions of the Board of Directors, as well as their expectations for the Company going forward.



Outside Director (appointed June 2016) Director, Tokyo Century Corporation  
 Iachikawa
 Hayashi

 Outside Director
 Outside Director

 (appointed June 2016)
 (appointed June 2017)

 Professor and Director, Center for Sustainable
 Development and

 Outside Audit & Supervisory
 Director

 Board Member
 Senior Ma

 (appointed June 2016)
 Executive

 Representative Director and
 Corporate

 President, Chuo-Nittochi
 Manager,

 Group Co., Ltd.
 Corporate

 President, Nippon Tochi Planning

Tatemono Co., Ltd.

Director Senior Managing Executive Officer Corporate General Manager, Corporate Management Planning Headquarters

# Administration and Discussions of the Board of Directors

#### Key points

- Sufficient time is allotted for an appropriate number of agenda items allowing lively discussions
- Agenda items are mostly performance reports and resolution matters; not enough discussion about medium- to long-term issues and ESG topics

Global Smart Cities

Chubu University

#### Arai

This was the first time we had a third-party organization conduct the survey and as a result of their objective analysis and assessment, a number of issues were identified. I'd first like to hear everyone's opinions on the operation of our Board of Directors meetings and the discussions that take place.

#### Tamba

The survey identified issues that we had failed to pick up on ourselves, so in that sense, I think it worked really well. Compared to other companies, our Board of Directors engages in extremely lively debate. That said, at present we mostly discuss performance results and resolution items and there seems not enough discussion about medium- to long-term issues.

#### Tachikawa

I applaud the point that sufficient time is allotted to fully discuss matters in detail. Board meetings at other companies sometimes have too many agenda items, and on some occasions, there isn't enough time to get through them all. While agenda item criteria probably plays a part in this, I believe there is a correlation between fewer agenda items and more in-depth discussions.

#### Hayashi

It's really great that the atmosphere of Board meetings is conducive to free speech. Audit & Supervisory Board Members often point out issues and express their views, which the Company's Directors always listen intently to and make an effort to take on board. As for agenda items, however, non-financial information from an ESG perspective needs to be discussed more, in addition to financial matters.

# Topics that Aim to Further Invigorate the Board of Directors

#### Key points

- Board involvement in the formulation of long-term vision and medium-term management plans at an early stage
- Enhancement of opportunities to discuss medium- to long-term issues with corporate general managers
- Discussions about environmental and social contributions through corporate activities

#### Arai

We will do our best to send out meeting materials as early as possible and also make every effort to enhance their content, for example, by including explanations of the main points discussed up until submission to the Board. Also, Directors Tamba and Hayashi expressed their views just now about the agenda items, but in the survey too, the same thing was pointed out that there isn't enough discussion about medium- to long-term issues and ESG topics. Exactly what kind of items do you think the Board needs to discuss more of?

#### Hiramatsu

It's understandable that we receive the materials for Board meetings at the very last minute, but I think the content of materials can be more resourceful. An improvement measure I hope to see implemented up ahead is the

accurate relaying of information about what was discussed at internal committee meetings or by the Executive Committee. This would complement the reasons behind discussion items and reports and facilitate more constructive dialogue.



and medium-term management plans at an early stage long-term issues with corporate general managers ions through corporate activities

#### Tamba



I'd certainly like to see us, Outside Officers, play a part in the discussions regarding the next medium-term management plan when it is being formulated, either from the phase 1 or phase 2 stage. I'd also like us to discuss major propositions;

for example, how we view the Company in 10 years from now. Given that we are a manufacturer, we are unlikely to see the fruits of our efforts in one or two years. It is probably best if we adopt a backcasting approach to formulating our medium-term management plans by discussing what kind of company we want to be in the long term with a view to 10 or 20 years into the future. This is easier said than done, but I hope this point of view can at least be given some consideration.

#### Tachikawa

I feel the same way about discussions concerning medium-term management plans. The meetings of the Board of Directors need reports and discussions about the concept of the Medium-Term Management Plan and how the Company can



go about realizing its corporate philosophy. For initiatives pertaining to the SDGs and the environment, we do receive reports from a fairly long-term perspective and have the opportunity to discuss them, but I think it would be nice if we could discuss the business side of matters a bit more.

#### Hayashi

As for how we contribute overall to ESG issues, particularly the environment and society, we can enhance the Company's corporate value going forward by further ramping up our initiatives. For example, in the same way we report net sales and profits, we should visualize and share the positive and negative contributions each business group has on the global community in terms of greenhouse gas emissions generated by our production



processes when raw materials and energy sources are used, as well as the reduction in CO<sub>2</sub> emissions when our products are used. I also believe our economic contributions to regional communities and the nation overall through employment, for example, is just as important as the environmental point of view. It would be good if the Board of Directors could report on, and discuss, these initiatives. So far, I have been fortunate enough to visit each of the Company's factories and during those visits I was really impressed by how teams were able to liberally give shape to numerous ideas that could nearly be considered inventions. I sense that this kind of corporate culture is well entrenched, so it would be wonderful if it could be aptly harnessed and taken up for discussion in all of the Company's workplaces.

#### Hiramatsu

The main duties of an outside officer are probably the monitoring of risk governance and the offering of advice from a medium- to long-term perspective. Last year we heard from each corporate general manager about the policies in the Medium-Term Management Plan after it was formulated, but going forward, I hope that we can get the opportunity to discuss medium- to long-term issues at a more suitable and appropriate time, which will help to deepen our understanding. I myself, as an Audit & Supervisory Board Member, make a habit of monitoring risk when participating in Board of Directors meetings, but I think it has become increasingly important that we bolster the Company's business continuity capabilities across entire supply chains so that we can respond to disasters on an unprecedented scale, as well as the COVID-19 pandemic. Reports and discussions about the Company's situation do take place at Board meetings, but up ahead, leveraging opinions and knowledge from outside the Company would likely prove useful.

policies, enriching the lives of people worldwide through our energy and environment businesses is after all the most important thing, so I'd like to see an even faster pace of global expansion in these businesses.

Fuji Electric's biggest strength lies in its human resources. I'd like to see the Company harness this advantage, embrace more challenges, take risks, and set its sights on the much larger dream of enriching the lives of people around the world and achieving a responsible and sustainable society. I certainly believe the Company has the prowess to make this happen.

#### Tachikawa

# Delve deeper into energy and environment technology

The Company's very business contributes to energy and the environment and a track record of nearly 100 years in this field is a hallmark of its strength. I believe the future will open up for Fuji Electric if it is even more devoted to this field going forward. In order to further advance globalization, I'd like to see the Company plumb the depths of energy and environment technology and assume a leading role in this domain.

#### Hayashi

### Strengthen risk response capabilities Hire talented global personnel

Fuji Electric's strength is its ability to roll out various products in multiple regions around the world. Nevertheless, the Company is susceptible to numerous global risks of not only a political and economic nature, but

# Expectations for Fuji Electric in Pursuing Sustainable Growth

#### Arai

With the aim of achieving growth for the Company as well as solving social and environmental issues, Fuji Electric continues to implement initiatives aimed at realizing sustainable growth. So finally, what are your future expectations for the Company?

#### Tamba

### The Company's management approach is clear; further accelerate globalization Fuji Electric's biggest strength is its human capital

The Company has been commended for its extremely proactive efforts, including employee training, to address the SDGs, ESG, and especially the environment. I hope this approach will be taken to the next level. As for my expectations, while it is clearly spelled out in the Company's corporate philosophy and management



issues such as climate change. The key challenges for the Company up ahead will therefore be further strengthening its risk response capabilities, and also further utilizing IT and adapting to digitalization in a post-coronavirus world or in an age in which we have to coexist with coronavirus. And in order to become a truly global company, we need to hire a first-rate international workforce.

#### Hiramatsu

# Continue to be a company that places value on manufacturing

# Employees need to keep in mind that Fuji Electric is engaged in a dream-inspiring business

I want Fuji Electric to be a company that has manufacturing at its core. Over the course of its long history, the Company has brought forth numerous products and businesses and the spirit of placing utmost importance on manufacturing has been passed down unbroken. The global environment is one of the biggest issues the international community currently faces and Fuji Electric can help solve problems through its business of pursuing the efficient use of electricity. I hope all employees keep in mind that they are engaged in a dream-inspiring business and continue to place value on manufacturing.

#### Arai

Thank you everyone for your valuable comments and opinions today. We will take your comments on board in an effort to further invigorate the Board of Directors. We will also continue to accelerate the pace of our initiatives toward achieving sustainable growth.

> Measures for preventing the spread of COVID-19 were enforced during this round-table discussion. Director Hayashi, therefore, participated via a video conference call.

# Compliance

Fuji Electric employs thorough measures to ensure compliance with laws and corporate ethics and always acts with the highest ethical standards to achieve sustained corporate growth.

### **Basic Policies**

Fuji Electric has a basic policy that gives top priority to global compliance. Based on this policy, we established the Fuji Electric Compliance Regulations, which is a concrete guideline for compliance. We also promote compliance through the Fuji Electric Compliance Program and the Fuji Electric Business Ethics Whistle-Blowing Systems.

## **Compliance Promotion System**

We established the Fuji Electric Compliance Promotion Committee to ensure full compliance with laws and social norms globally. The Committee is headed by the Chairman of the Board of Directors and consists of the managers (corporate general managers and general managers) responsible for regulating laws and acts, with Standing Audit & Supervisory Board Members and outside experts (attorneys) as observers. It meets twice each fiscal year

to deliberate on compliance execution and planning and reports the results of these deliberations, including matters related to preventing corruption, to the Board of Directors. In the event of a compliance infraction, the Committee has a system in place to take any necessary measures after deliberating on fact-finding investigations, corrective actions, recurrence prevention measures, internal punishments, and internal and external disclosures.



# Status of Compliance Promotion

### Fuji Electric Compliance Program

Fuji Electric established and implements the Fuji Electric Compliance Program bringing together five aspects (see numbers 1 to 5 below) of domestic and overseas laws (including those related to anti-corruption, fair competition, labor, human rights, product safety, the environment, taxation, accounting, information security, and export management) for the Company and other Group companies in Japan and overseas including new ones, without delay. And the Fuji Electric Compliance Promotion Committee continuously reviews the program and makes revisions.

- 1. Establishment, revision, abolition, and dissemination of internal rules
- 2. Constant monitoring of status of compliance with laws and internal rules
- 3. Auditing of status of compliance with respect to 1. and 2.

Compliance education regarding laws and internal rules
 Acquisition of external certifications\*

\* As part of our efforts to verify and review the effectiveness of our compliance program, we started initiatives to acquire certifications in fiscal 2019.

#### Compliance education

We promote wide-ranging compliance education and instruction through level-specific and job-specific group training and e-learning programs, as well as displaying posters internally and distributing pamphlets.

#### Examples of Training Conducted in Fiscal 2019

Participants		Details
	Newly appointed executives	Important laws and regulations, such as anti-corruption
Level- specific training	Newly appointed managers	Points to consider when performing duties
	New employees	Overview of compliance and important laws and regulations
Job- specific training	Sales and administrative department employees	Compliance framework and important laws and regulations

# Fuji Electric Business Ethics Whistle-Blowing Systems

To prevent infractions of laws and regulations and ensure early detection, we have introduced and are operating the Fuji Electric Business Ethics Whistle-Blowing Systems. Under these systems, internal and external parties can report real or suspected violations of laws, regulations, or internal rules including matters related to bribery and corruption to the president of Fuji Electric via contact points (anonymous reporting is also possible).

### **Business ethics helpline**

The Business Ethics Helpline handles notifications from our employees in Japan and overseas (including dispatch employees). It is promoted among employees at all compliance training sessions and through postings on the Company's intranet and internal bulletin boards. In addition, we made a special feature article on it in the company magazine in fiscal 2019.

### **Partner hotline**

The Partner Hotline handles notifications from our suppliers about Fuji Electric's materials procurement operations. We spread awareness of the system among business partners through postings on the Company's website and at explanatory forums.

We also work meticulously to protect whistle-blowers by keeping their personal information confidential and

### **Results of Compliance Promotion**

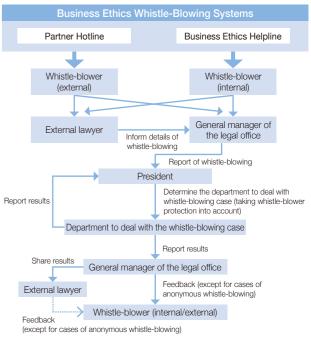
#### Initiatives related to anti-corruption

The Fuji Electric Code of Conduct and a directive on the prevention of corruption established a rule that no employee is to offer or receive bribes to or from public- or private-sector officials in any country or region. Prevention of corruption is reinforced through thorough daily monitoring, auditing, and training. For officers and employees involved in corruption, our policy is to consider disciplinary action based on our work rules and take strict measures accordingly. In fiscal 2019, however, there were no incidents of officers or employees violating anticorruption rules, and no fines, surcharges, or settlements related to corruption were incurred.

#### Violations of laws and regulations

In fiscal 2019, there were no compliance infractions with the potential to seriously impact management or serious problems related to anti-corruption and competition prohibiting disadvantageous treatment and retaliatory or discriminatory acts on the grounds of whistle-blowing. In addition, we take all necessary steps to resolve issues raised by whistle-blowers, including fact-finding investigations, corrective actions, and recurrence prevention measures.

In fiscal 2019, there were 25 reports made to the whistle-blowing systems.



#### Framework of the Business Ethics Whistle-Blowing Systems

#### Initiatives related to competition laws

Through our Antimonopoly Act Compliance Manual, the Foreign Competition Law Compliance Manual, and other regulations, we are enhancing measures to prevent the violation of competition laws. We also perform daily monitoring by confirming quotations and estimates via an extensive bidding information management system and extensive record-keeping. In addition, our auditing divisions perform audits in accordance with auditing guidelines, and we conduct extensive level-specific and job-specific training.

laws that warranted disclosure, including notifications received through the Fuji Electric Business Ethics Whistle-Blowing Systems.

# **Risk Management**

Fuji Electric is strengthening its risk management to maximize corporate value and minimize the potential impact of risks.

### **Basic Policies**

Based on the Fuji Electric Risk Management Rules, the Company manages risk in a coordinated, systematic manner. We practice appropriate management and counter various risks that could affect the Company's management in order to prevent risks from materializing (crisis situations), thereby minimizing the impact on management in the event that risks materialize.

# **Risk Management System and Process**

### Risk management system

Fuji Electric's business divisions and affiliated companies are responsible for managing risk related to their business activities as a part of their business duty, developing appropriate risk management systems, and implementing risk countermeasures.

Additionally, significant risks, such as those related to business plans and large-scale investments, are reported at the Executive Committee as appropriate to facilitate the sharing of information.

The internal auditing divisions conduct regular audits to confirm whether or not risk management is being properly performed at each business division and affiliated company.

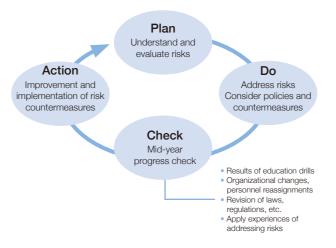
### **Risk management process**

When annual budgets are formulated, business divisions and affiliated companies understand and evaluate risks related to their business activities. Policies and countermeasures in response to risks (aversion, mitigation, relocation, retention, and so forth) are considered based on their impact on management and frequency of occurrence, and each division and affiliated company appoints a person in charge of policy and countermeasure execution.

We also conduct mid-year progress checks at the end of the second quarter of each fiscal year to improve and effectively implement risk countermeasures.



#### Annual Risk Management Process



### Major Risks

Fuji Electric prepares Risk Management Sheets for each business division and affiliated company to help them address risks.

Risk Item	Risk Details
Management Strategies Business Strategies Business	<ul> <li>Fuji Electric concentrates management resources on businesses earmarked for growth while making appropriate plant and equipment and R&amp;D investments. However, the semiconductor field requires large amounts of money and is characterized by short product cycles, major fluctuations in product supply and demand levels, and intense competition. In some cases, therefore, there is a risk that we may be unable to recover our investment.</li> <li>There is a risk that stricter enforcement of the Paris</li> </ul>
Environment	Agreement and other environmental regulations, as well as assessments by ESG evaluation institutions, may lead to stronger criticism of Fuji Electric's coal-fired power generation business and affecting the reputation of Fuji Electric itself.
Corporate Governance	• An unprecedented event may lead to deficiencies in our internal control and audit functions, resulting in the risk of corporate governance breakdown and consequent business disruption.
Business Reorga- nizations, Alliances, and Withdrawals	• We actively engage in collaborations with third parties in order to strengthen our competitiveness. Due to differences in systems and cultures, however, there is a risk that we may be unable to achieve the desired outcomes of such collaborations.
Orders, Marketing, and Sales Promotion	<ul> <li>In our overseas business, we face the risk of deteriorating market conditions in each country—including private plant and equipment investments and public expenditures—as well as sudden changes in supply and demand of products, intensifying competition, and the resultant significant falls in prices.</li> <li>After receipt of orders for large-scale plant projects, any number of events including unanticipated specification changes, process delays, and natural disasters could lead to risk of deterioration in profitability.</li> </ul>
Development and Design Engineering	• Due to rapid technological advances, there is a risk that we may lose our advantage over other companies, and product development may not proceed as planned, making it impossible to launch a new product at the right time.
Procurement	<ul> <li>Depreciation of the yen may lead to rising raw material and component prices, while sharp increases in demand in emerging countries may cause circumstances to change, resulting in a tighter supply and demand balance for raw materials and components and the risk of significant increases in their prices.</li> </ul>

Currently, the major risks that may affect Fuji Electric's business performance and financial position are described below.

#### Initiatives to Address Major Risks

- For semiconductor-related plant and equipment investments, we make decisions based on negotiations with customers regarding physical quantities and pricing.
- For R&D investments, we emphasize consistency with our business strategies and contribution to our businesses.
   Based on our roadmap, we pursue R&D on fundamental and advanced technologies that support Fuji Electric's future.
   Here, management engages in regular deliberations about key development themes and constantly reviews the roadmap according to market changes.
- Fuji Electric considers protection of the global environment to be an important management priority and announced its support for the recommendations of the Task Force on Climate-
- related Financial Disclosures (TCFD). In addition, we created our Environmental Vision 2050. In these and other ways, we continuously convey our commitment to realizing a sustainable society through our energy and environment businesses.
- We are working to strengthen corporate governance by improving management transparency and auditing functions during normal times.
- We share our corporate philosophy, management policies, code of conduct, business plans, business strategies, and so on to facilitate integration of our business strategies, technologies, products, and personnel. Through the Executive Committee and other meetings, we strive to maintain close communication with partners and build good relationships with them.
- We have sales offices in various world markets to better understand customer trends and centrally manage the information we collect for analysis and consider countermeasures and otherwise strive not to miss business opportunities. We also work to reduce costs and expenses in order to minimize the impact of Japanese and overseas market trends on our business performance.
- In every large-scale plant project, we work to secure appropriate profits by improving the accuracy of our quotations at the time of order receipt and strengthening project management afterwards.
- We have established an R&D system to accelerate research and development, and we constantly monitor market and customer needs and the latest technological trends. At the same time, we conduct R&D aimed at creating competitive components and systems, centered on power electronics and power semiconductor technologies, while also focusing on R&D to develop solutions that generate customer value through combinations of fundamental technologies.
  - We deploy various means, including product swaps, to reduce the risk of rising raw material prices.

Risk Item	Risk Details	Initiatives to Address Major Risks
Production & Manufacturing Shipping & Distribution Installation & Delivery Services	<ul> <li>An unprecedented event could result in increased/ decreased demand and other changes in physical quantity flows, leading to the risk of delayed responses and inventory shortages/surpluses.</li> <li>An unprecedented event could result in restrictions on human and commodity movements and disruptions to our distribution network. This could prevent our supply chain from functioning and lead to risk of delays in deliveries.</li> </ul>	<ul> <li>We keep track of the latest physical quantity flows by sharing information between our sales and business departments at the Executive Committee. We have also built an optimal production management system that can respond to changes in physical quantity flows by improving productivity and promoting local production for local consumption.</li> <li>Through reforms of our supply chain, we work to promote "completely localized" manufacturing via local production for local consumption while also emphasizing global procurement.</li> </ul>
Quality Assurance	<ul> <li>There is a risk that an unprecedented event could cause quality-related problems to arise.</li> <li>In addition, we have received reports of a defect in some of our power semiconductors used in specific fields. We are currently examining the degree of potential risk and will make appropriate disclosures if we identify any significant impact on our business performance and financial position.</li> </ul>	• We have established a quality control system for the products we manufacture and sell, and we strive to ensure high quality standards while making appropriate insurance arrangements.
Human Resources and Labor	<ul> <li>There is a risk that we may be unable to attract and train the human resources required for Fuji Electric's business activities.</li> </ul>	• We focus on cultivating professional human resources who will help strengthen our global competitiveness. We also actively conduct employee education and training and are expanding mid-career recruitment and other measures to attract exceptional human resources.
Finance and Accounting	<ul> <li>There is a risk that an unexpected increase in interest rates could raise the interest rate burden on our interest-bearing debt.</li> <li>There is a risk that restrictions on economic activities and economic downturn could cause business partners' cash flows to deteriorate and prevent us from recovering debts.</li> </ul>	<ul> <li>To minimize fund-raising costs, we constantly examine the optimal mix of corporate bonds, commercial paper, and short-term and long-term borrowings, in order to ensure flexible and stable financing arrangements.</li> <li>We work to strengthen credit management, including by monitoring long-overdue receivables and the financial status of business partners, in order to enhance our collection of trade receivables.</li> </ul>
Legal Affairs and Ethics	<ul> <li>Fuji Electric's social credibility, business performance, and financial position could be affected if violations of laws and regulations occur.</li> <li>There is a risk that lawsuits and other legal proceedings could result in orders to pay unexpectedly large amounts of damages.</li> <li>Due to the speed of technological innovation and the global expansion of our business activities, there is a risk of intellectual property disputes arising.</li> </ul>	<ul> <li>The Fuji Electric Compliance Promotion Committee spearheads efforts to ensure rigorous compliance with laws and regulations. We also have a compliance program that clearly identifies roles and responsibilities covering each aspect of legal regulations—namely, internal rules, monitoring, auditing, and education—and our compliance structure that includes whistle-blowing systems.</li> <li>In preparation for lawsuits and other legal disputes, we have formed an appropriate task force aimed at building a system to ensure that necessary procedures (fact-finding investigations, corrective actions, recurrence prevention measures, internal punishments, and disclosures) are conducted promptly.</li> <li>We strive to effectively protect intellectual property rights and develop products and technologies respecting the rights of other companies.</li> </ul>
Political and Socioeconomic Trends	<ul> <li>There is a risk of changes in exchange rates, especially the yen against the U.S. dollar.</li> <li>Any of the following events in foreign countries may have an impact on our business performance and financial position:</li> <li>Unexpected enactment of laws/regulations and changes in tax systems with adverse effects</li> <li>Disadvantageous political situations</li> <li>Social turmoil due to social upheaval, terrorism, war, and the like</li> </ul>	<ul> <li>We engage in currency exchange contracts, based on certain criteria, to minimize the impact of the risk of foreign exchange fluctuations on our business performance.</li> <li>We always closely monitor the latest information on geopolitical risks, and we are diversifying our production and sales bases in preparation for unexpected risks.</li> </ul>

Risk Item	Risk Details	Initiatives to Address Major Risks				
Trends of Shareholders and Other Investors	• There is a risk that the intentions of stockholders and other investors may differ from those of the Company's management, which could result in a vote against the election of officers. There is also a risk that a shareholder proposal against management could cause disruption of our operations.	• We attach great importance to disclosure of financial information, active disclosure of non-financial information, and communication with shareholders and institutional investors. We also strive to foster understanding of our management through sincere and accurate disclosure of information according to our Disclosure Policy.				
Natural Disasters and Accidents	<ul> <li>There is a risk that certain events, such as large-scale disasters or accidents at our business sites, could cause damage of production equipment, interruption of operations, and delays in product shipments.</li> </ul>	<ul> <li>We are committed to fulfilling our responsibilities to customers and society by continuously supplying products and services in the event of disaster or accident. To this end, we established a dedicated crisis management team to spearhead fire safety and disaster-preparedness initiatives, formulate a business continuity plan (BCP), and adopt necessary insurance arrangements in order to "strengthen our business continuity capabilities."</li> </ul>				
External Attacks	<ul> <li>There is a risk that certain events, including system malfunction and information leakage due to external attacks (such as cyber-terrorism), could result in loss of social trust.</li> </ul>	<ul> <li>To address increasingly diversified and sophisticated cyber-security threats, we have established a computer security incident response team and a security operation center (CSIRT/SOC), through which we monitor and control any attacks. We also take ongoing steps to respond more effectively to the continuous emergence of new threats. For example, we are stepping up defense, reinforcing our detection systems, and providing cyber training.</li> </ul>				
Individual Event (Impact of COVID-19)	There is a risk that COVID-19 infections may occur in the workplace (of the Company, customer, or business partner), which could force us to suspend production, sales, and various other business activities.	• We have established the "Contingency Plan" to implement in times of emergency resulting from various risks that may affect our operations. Based on this Plan, we set up the "New Coronavirus Infection Prevention and Business Continuity Promotion Countermeasures Headquarters," chaired by the president, to address the COVID-19 pandemic. The stated policy of the new entity is to "take prompt and appropriate measures with top priority on respecting human life, preventing the spread of infections, and minimizing damage." Under this policy, we are gathering and collating information related to COVID-19 and taking measures to prevent the spread of infections (for example, enforcing rules, such as disinfecting hands and fingers; avoiding confined spaces, large gatherings, and close interactions; and adopting teleworking and staggered work hours), while also emphasizing business continuity.				

# Close Up!

# **Responding to COVID-19**

To deal with the COVID-19 crisis, we set up a response headquarters, headed by President Kitazawa, based on the Fuji Electric Risk Management Rules. The mission of the new entity is to simultaneously "prevent employee infections and the spread thereof" and "promote business continuity." It collects and collates internal and external information related to COVID-19, determines measures to prevent infections and procedures to prevent the spread of the disease if an employee gets infected, and rigorously implements disease-prevention measures at Group companies in Japan and overseas. Employee infections have been confirmed at some of

our bases in Japan and overseas. To minimize infections and fulfill our social responsibilities, we are rigorously implementing infection prevention measures targeting all employees to ensure safety and security of themselves and their families. We are also increasing work flexibility by expanding teleworking and other systems. We remain committed to achieving business continuity while preventing the spread of infections.

Given the ongoing unpredictability of the pandemic, we will need to continue working together, united as a group.

We will disclose information on our efforts related to COVID-19 on our corporate website as appropriate.

### Strengthening Our Business Continuity Capabilities

In order to uphold its social responsibilities as a company, Fuji Electric aims to continue core operations even if natural disasters, accidents, and other unexpected events occur by providing a stable supply of high-performance, highquality products and services required by its customers.

In addition to fire safety and disaster-preparedness initiatives, we have formulated a business continuity plan (BCP\*) at the head office, which acts as a command center during disasters, and at factories that house a large number of key management resources, as well as at branches that serve as contact points with customers.

We have also established Companywide BCPs for our procurement sections, which manage our supply chain, and for IT sections, which manage our information systems.

In fiscal 2019, we once again worked to strengthen our disaster response capabilities. For example, we conducted simulation training assuming a large-scale earthquake for business divisions, managers of each base, and business continuity promotion staff, and safety confirmation training for all employees. Going forward, we will continue enhancing our BCP to strengthen our business continuity capabilities. \* Business continuity plan



Fuji Electric received Resilience certification under the program established by the Cabinet Secretariat's National Resilience Promotion Office in recognition of active efforts to ensure business continuity.

#### Fire safety and disaster-preparedness initiatives

Based on the Disaster Prevention and Procedural Manual, all of Fuji Electric's bases have developed disaster-response systems and put in place comprehensive measures to ensure that structures and facilities are earthquake resistant. They also stockpile emergency goods, conduct regular drills, and take other preventive measures.

#### Procurement BCP

By identifying, assessing, and addressing supply chain risks that could affect our business continuity, we aim to build a stable production system over the medium and long terms.

In fiscal 2019, we officially introduced our BCP system. This has enabled us to automatically identify primary business partners in Japan (more than 4,000 companies) who are located in areas prone to natural disasters, such as earthquakes and typhoons, and quickly grasp the potential impact of a disaster on their safety and production operations.

In fiscal 2020, we will conduct natural disaster risk diagnoses of business partners who produce important parts and components based on their location, and assign them one of five risk rankings. We will then gradually adopt a multi-sourcing policy for procurement of highly important items. Due to the COVID-19 pandemic, meanwhile, we had time to grasp its impact on parts procurement in our supply chain, which has been expanding worldwide. Based on this, we started strengthening our BCP system in Japan. By inputting information on both primary and secondary business partners into our BCP system, we aim to speed up information gathering in times of emergency.

#### IT risk reduction

In fiscal 2019, we added cyber attacks as a new risk to be addressed in our ongoing IT-BCM\* initiative, which is designed to help restart and restore information systems necessary for business and operation continuity within the required time in preparation for disasters and accidents.

To address increasingly diversified and sophisticated cyber security threats, we have established a computer security incident response team and a security operation center (CSIRT/SOC), through which we monitor and control any attacks.

We also take ongoing steps to respond more effectively to the continuous emergence of new threats. In addition to minimizing damage to information systems, for example, we are stepping up defenses to ensure early recovery, reinforcing our detection systems, and providing cyber training. \* Business continuity management

#### Implementation of security measures

To protect confidential and personal information properly, Fuji Electric has formulated and is implementing a policy and regulations related to information security with consideration for the laws of relevant countries. We have also established information management systems in each Group company and instituted various safety protocols, including operational site access and information access management systems. Meanwhile, we endeavor to prevent information leaks while maintaining and strengthening information security by instituting annual training programs for employees and conducting inspections and improvements through effective management and audits of workplaces.

Group companies that handle customers' confidential and personal information and require high-level information security management have acquired external certification. As of April 1, 2020, a total of five departments at three Group companies have acquired information security management system (ISMS) certification. In addition, Fuji Electric Co., Ltd. and four subsidiaries have acquired Privacy Mark certification.

# Supply Chain

We believe it is important to instill corporate social responsibility (CSR) throughout the supply chain, and we are promoting efforts to prevent compliance violations and human rights violations, such as forced labor and child labor.

### Sustainable Procurement Activities

In fiscal 2019, we asked 500 major business partners in Japan to cooperate in a CSR survey and provided feedback based on the results. We also created the Fuji Electric CSR Procurement Guidelines for specific items pertinent to our company, based on the Responsible Business Alliance (RBA\*) Code of Conduct, which is regarded as the international CSR guidelines and the

#### Fuji Electric CSR Procurement Guidelines

1. Human Rights and Labor	4. Fair Trade and Ethics
2. Health and Safety	5. Quality and Safety
3. Environment	6. Information Security

Further information is available at our website. https://www.fujielectric.com/company/procurement/csr\_procurement.html

# Close Up!

#### Environmental activities with our business partners

We are working with our business partners to strengthen our activities aimed at realizing a sustainable society throughout the supply chain. In fiscal 2019, the Matsumoto Factory, which produces semiconductors in the Electronic Device Segment, supported environmental protection activities of its main business partners. The factory began by reviewing the status of the environmental management (ISO certification, guideline compliance)

### Promoting RBA at Fuji Electric (Malaysia) Sdn. Bhd.

In the Electronic Device Segment, Fuji Electric (Malaysia) Sdn. Bhd., which produces semiconductors and magnetic disks, underwent an on-site audit of RBA at the request of customers in fiscal 2019. It obtained RBA certification in 2013 and has maintained the certification through external audits every two years.

After the first year's audit indicated that Fuji Electric (Malaysia) had not met the criteria for prescribed work hours and evacuation drills, it mobilized its employees to raise awareness through education. It followed up by creating an annual internal audit

industrial standard, and the Guidelines for Responsible Business Conduct of the Japan Electronics and Information Technology Industries Association (JEITA).

We will follow these guidelines as we work with our business partners to build a responsible supply chain in Japan and worldwide.

- 7. Business Continuity Plan
- 8. Establishment of Management Systems
- 9. Social Contribution

- at the partners, and where it was deemed necessary the factory (1) helped partners acquire ISO certification and (2) conducted environmental risk surveys.
- In fiscal 2019, on-site audits at two business partners confirmed that the environmental management at both was in good status. In fiscal 2020, we plan to conduct on-site audits at business partners for which environmental risks are a concern.

system and conducting thorough in-house training to maintain the positive results of its RBA audits. We plan to apply the measures taken at Fuji Electric (Malaysia) to other factories in Asia.



Fuji Electric (Malaysia) Sdn. Bhd.

# Fair and Equitable Procurement Practices

Fuji Electric bases its procurement activities on action guidelines for "fair and equitable transactions" and seeks business partners in Japan and worldwide, which are committed to sustainable procurement activities, as well as quality, pricing, deliveries, and services. We strive to build better partnerships, deepen mutual understanding, and maintain and improve cooperative relationships with all our business partners through free, fair, and equitable competition. The Fuji Electric CSR Procurement Guidelines outlines the high ethical standards for our trading activities not just for legal compliance but also in the areas of anti-corruption and respect for intellectual property. The divisions responsible for procurement at the head office and other operating sites in Japan provide staff training to support full legal compliance. The procurement departments of overseas affiliate companies formulate rules and standards that comply with the laws and regulations of their respective country.

# Employee Training

In fiscal 2019, we held 54 sessions nationwide on the Subcontract Act, internal control system, and procurement CSR, and provided education to more than 1,400 employees, an increase of 40% from the previous year. We also deepened understanding by introducing our first e-learning course on the Subcontract Act, with over 10,000 employees taking the course. In addition, we created the Legal Compliance Working Group to foster a corps of experts on compliance through participation in class lectures and exercises in practical application.

The China and Asia International Procurement Offices\* conducted training sessions on internal control system through operation checking at seven sites in China and six sites in greater Asia.

\* International Procurement Offices (IPOs) locate new first-rate suppliers in their countries and serve as procurement service bases for the company's overseas business sites.



Asia IPO / Internal control system training



The Legal Compliance Working Group

# Social Outreach

We are using our human resources and technologies developed through our business to build stronger relationships and foster ties between our operational sites and local communities, aiming to contribute to the resolution of global social and environmental issues. We will contribute to developing and revitalizing local regions through activities including promotion of youth development and environment preservation.

## **Promotion of Youth Development**

Employees from our operational sites in Japan serve as instructors of science classes for elementary and junior high school students to share the wonders of science and the importance of manufacturing.

Overseas, we are actively helping to develop professional engineers through programs including

### Major initiatives in fiscal 2019

- · Science classes for elementary school and junior high school students (learning about how power is generated and electricity conversion using experiment kits)
- · Work experience for junior and senior high school students
- Technical training for vocational school instructors (Cambodia) · Donated Fuji Electric laboratory equipment for science and technology universities (Vietnam)

## **Environmental Preservation**

We participate in various activities to preserve biodiversity, such as planting mangroves and cleaning beaches, with the aim of helping expand habitats of living organisms and protecting the natural environment.

### Major initiatives in fiscal 2019

- Mangrove planting (Fuji Electric (Malaysia) Sdn. Bhd.)
- Beach cleaning (Fuji Electric (China) Co., Ltd., Fuji Electric Taiwan Co., Ltd., and others) · Biodiversity conservation initiatives using the Musashino no Mori green space on factory site (Tokyo Factory)
- Environmental conservation with forest thinning in collaboration with NPOs (Chubu Area Operation)

# Communication with Local Communities

We communicate with the local neighborhoods of our operational sites and with employees and their families through factory festivals and other events as well as community activities, such as local cleanup campaigns.

# Supporting Disaster Recovery and Reconstruction Efforts

Fuji Electric provides reconstruction support to areas impacted by natural disasters in Japan and overseas. We provided monetary donations to help accelerate recovery efforts and aid victims from typhoons and torrential rains.

donating Fuji Electric laboratory equipment to science and technology universities in Southeast Asia, where economic development is rapidly progressing. We also invite instructors from overseas vocational training schools to Japan to learn equipment operation and maintenance methods and effecting instruction techniques on site.

Science class learning how power is generated (Suzuka Factory)

Our environmental conservation activities include planting, thinning, and clearing forests, which help absorb carbon dioxide and thereby prevent global warming.

Mangrove planting (Fuji Electric (Malaysia) Sdn. Bhd.)

Overseas, we communicate with local communities in various ways, including visiting child welfare facilities and supporting education by providing stationery and learning supplies.

We also donated Fuji Electric emergency generators to the local government in Chiba Prefecture, which was severely damaged by the typhoon.

# **Consolidated Financial and Non-Financial Highlights**

## **Financial Highlights**

									Millions of yen	Thousands U.S. dollar
Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019
Operating Results										
Net sales	703,534	745,781	759,911	810,678	813,550	837,765	893,451	914,915	900,604	8,338,926
Japan	525,096	567,314	582,223	605,763	597,757	632,723	674,744	682,503	679,719	6,293,695
Overseas	178,437	178,466	177,688	204,915	215,793	205,042	218,707	232,412	220,885	2,045,231
Operating income	19,252	21,992	33,136	39,316	45,006	44,709	55,962	59,972	42,515	393,658
Net income attributable to owners of parent	11,801	26,368	19,582	27,978	30,644	40,978	37,763	40,267	28,793	266,606
R&D and Capital Investment										
R&D expenditures	32,247	31,160	32,029	35,023	35,949	34,910	35,620	33,669	34,457	319,047
Plant and equipment investment*2	24,989	31,771	26,916	29,041	27,650	27,149	26,465	43,338	48,208	446,377
Depreciation and amortization*3	29,755	31,054	30,849	33,615	29,723	29,445	30,151	30,906	32,319	299,256
Cash Flows										
Cash flows from operating activities	28,314	55,342	53,651	51,459	48,450	58,185	53,146	54,949	46,087	426,737
Cash flows from investing activities	(13,489)	(24,286)	(9,649)	(22,750)	(19,410)	9,748	(14,550)	(21,448)	(27,621)	(255,752)
Free cash flow	14,825	31,055	44,002	28,708	29,040	67,934	38,596	33,501	18,466	170,984
Cash flows from financing activities	(32,592)	(56,827)	(50,569)	(33,828)	(31,566)	(56,083)	(46,887)	(38,174)	16,917	156,646
Financial Position										
Total assets*4	792,848	765,563	810,774	904,522	845,378	886,663	914,744	952,659	996,827	9,229,885
Total net assets	183,217	215,672	251,225	319,636	260,980	323,863	366,546	392,061	406,002	3,759,282
Shareholders' equity	163,576	194,572	227,181	290,339	230,399	291,215	330,635	352,921	365,619	3,385,368
Net interest-bearing debt	225,227	217,417	200,340	194,579	189,374	141,578	130,177	124,850	153,617	1,422,387
Interest-bearing debt	289,489	257,105	233,753	226,474	220,213	183,465	163,507	153,985	217,364	2,012,630
Financial Indicators										
Ratio of operating income to net sales (%)	2.7	2.9	4.4	4.8	5.5	5.3	6.3	6.6	4.7	_
ROE (Return on equity) (%)	7.4	14.7	9.3	10.8	11.8	15.7	12.1	11.8	8.0	_
ROA (Return on assets) (%)*4	1.5	3.4	2.5	3.3	3.5	4.7	4.2	4.3	3.0	_
Equity ratio (%)*4	20.6	25.4	28.0	32.1	27.3	32.8	36.1	37.0	36.7	_
Net debt-equity ratio (times)*5	1.4	1.1	0.9	0.7	0.8	0.5	0.4	0.4	0.4	_
Debt-equity ratio (times)*6	1.8	1.3	1.0	0.8	1.0	0.6	0.5	0.4	0.6	_
Per Share Data*7									Yen	U.S. dollar
Net income	82.58	184.50	137.03	195.80	214.48	286.82	264.34	281.89	201.57	1.866
Net assets	1,144.54	1,361.46	1,589.79	2,031.97	1,612.59	2,038.40	2,314.50	2,470.65	2,559.60	23.700
Cash dividends	20.00	25.00	35.00	45.00	50.00	55.00	70.00	80.00	80.00	0.741
Dividend payout ratio (%)	24.2	13.6	25.5	23.0	23.3	19.2	26.5	28.4	39.7	_

### **Non-Financial Highlights**

_										
Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019
Employees (Headcount)	24,973	24,956	25,524	25,740	26,508	26,503	27,009	27,416	27,960	—
Japan	17,933	18,271	18,022	17,814	17,635	17,716	17,704	17,647	17,681	—
Overseas	7,040	6,685	7,502	7,926	8,873	8,787	9,305	9,769	10,279	—
Total greenhouse gas emissions from production activities (10,000 t-CO2)	54.0	50.2	53.6	53.8	51.9	46.7	48.4	52.1	45.6	_
Reductions in CO <sub>2</sub> emissions through	04.0	00.2	00.0	00.0	01.0	-0.1	-0	02.1	40.0	
products (10,000 t-CO <sub>2</sub> )*8	233	392	601	1,043	1,598	2,230	2,579	3,162	3,651	_
					,	,	,	, -	,	

\*1 The U.S. dollar amounts represent the arithmetic results of translating yen into dollars at ¥108 = U.S. \$1, the approximate exchange rate at March 31, 2020.

\*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 Effective April 1, 2018, the Company has adopted "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, revised on February 16, 2018). As such, major management indicators in consolidated accounting period as of March 31, 2018 have been adjusted to retroactively apply said accounting standards.

\*5 Net debt-equity ratio is the ratio of net interest-bearing debt (interest-bearing debt + lease obligations - cash and cash equivalents) to shareholders' equity.

Detailed financial information is available on our website. 

https://www.fujielectric.com/ir/library/financial\_results/contents\_05\_19.html

\*6 Debt-equity ratio is the ratio of interest-bearing debt to shareholders' equity.

that the stock consolidation took place on April 1, 2010. When the interim dividend of ¥8 per share for the fiscal year ended March 31, 2019, is recalculated to take into account the one-forfive reverse stock split, the dividend per share is ¥40. Therefore, the dividend per share for the fiscal year ended March 31, 2019, is equivalent to ¥80, including the interim dividend. As for annual dividend per share, the amounts of dividends paid before the reverse stock split are presented to reflect the impact of the reverse stock split retrospectively.

\*7 Effective October 1, 2018, the Company conducted a one-for-five common stock consolidation. Amounts for net income per share and net assets per share have been calculated assuming \*8 The contributions to CO<sub>2</sub> emission reductions refers to CO<sub>2</sub> emission reductions from products shipped in and after fiscal 2010 that were in operation for a year.

Calculated based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry of Economy, Trade and Industry's Guideline for Quantifying Green Based on the Ministry's Guideline for Quantifying Gr

# **Corporate Data**

## Company Information (As of March 31, 2020)

Company Name	FUJI ELECTRIC CO., LTD.
Established	August 29, 1923
Consolidated Subsidiary	73 (Japan 23, Overseas 50)
Equity method Affiliate	4
Head Office	1-1, Tanabeshinden, Kawasaki-ku, Kawasaki-shi, Kanagawa 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)	27,960 (Japan 17,681, Overseas 10,279)
Net Sales (Consolidated)	¥900.6 billion (Year ended March 31, 2020)
Stock Code	6504

# Stock Information (As of March 31, 2020)

Issued and Outstanding Shares	149,296,991
Number of Shareholders	36,028

#### **Major Shareholders**

Shareholders' names	Number of shares (1,000s)	Voting rights (%)
Japan Trustee Services Bank, Ltd. (Trust Account)	16,369	11.46
The Master Trust Bank of Japan, Ltd. (Trust Account)	15,546	10.88
FUJITSU LIMITED	4,066	2.85
Asahi Mutual Life Insurance Company	3,955	2.77
Japan Trustee Services Bank, Ltd. (Trust Account 7)	2,960	2.07
FANUC CORPORATION	2,684	1.88
Japan Trustee Services Bank, Ltd. (Trust Account 5)	2,457	1.72
Mizuho Bank, Ltd.	2,250	1.58
JP MORGAN CHASE BANK 385151	2,218	1.55
FURUKAWA CO., LTD.	2,205	1.54

Notes: 1. Treasury stock of 6,454,259 shares is excluded from the above list of top 10 shareholders.

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

#### Share Distribution by Shareholder Type

Туре	Number of shareholders	Number of shares	Holding (%)
Financial institutions / securities firms	148	70,744,791	47.39
Other corporations in Japan	451	14,066,492	9.42
Foreign corporations	609	41,025,745	27.48
Individuals and others	34,820	23,459,963	15.71
Total	36,028	149,296,991	100.00

Note: "Individuals and others" includes treasury stock

# History

Fuji Electric continues to evolve in step with the times and with society, with technology as our driving force.

#### Company

#### 1923

Fuji Electric Manufacturing Co., Ltd., established Established as a capital and technology alliance between Japan Furukawa Electric Co., Ltd., and German Siemens AG. The result was a company with characteristics inherited from industry in both countries

1925 Began operation of



the Kawasaki Factory Began operation of the Matsumoto Factory

1943 Began operation of the Fukiage and Toyoda factories

\$

1944 Began operation of the Mie Factory Company emblem, "FS" mark

#### 1961

1942

Began operation of the Chiba Factory

1968 Merged with Kawasaki Denki Seizo Co., Ltd., and commenced operations at the Kobe and Suzuka factories

#### 1973

Began operation of the Otawara Factory

#### 1984

Changed company name to Fuji Electric Co., Ltd.

1991 Began operation of the Yamanashi Factory

2002 Introduced Company



symbol mark 2003

Symbol mark

Changed company name to Fuji Electric Holdings Co., Ltd., owing to shift to pure holding company system

#### 2008

Fuji Electric FA Components & Systems Co., Ltd., merged operations with Schneider Electric Japan Ltd. (Power distribution and control equipment joint venture)

#### 2011

Changed company name to Fuji Electric Co., Ltd. 2014

Created new corporate brand emblem for products



Emblem

# Technology

#### 1924

1920~

- Began manufacturing electric motors 1925
- Began transformer production
- 1927
- Began electric fan production 1936
- Built first hydraulic turbine,
- 4,850 HP Francis Turbine
- 1937
- Began watt-hour meter production



Francis Turbi



Ultra-compact electromagnetic switch



The first vending machines



1954

1959

Began ultra-compact magnetic

- Began manufacturing silicon diodes
- 1969 Began production of vending machines 1971
- Began manufacturing hybrid ICs

#### 1976

- Began manufacturing
- general-purpose inverters



General-purpose inverters

### 1985

Released the programmable logic controller "MICREX-F Series"

#### 1987

~0861

2010~

Developed IGBT module

#### 1991

Began manufacturing 2.5-inch magnetic disks

#### 1996

- Won order for IGBT main conversion
- devices used in electric railways (The world's first large-capacity flat IGBT)

#### 1998

Delivered 100 kW phosphoric acid fuel cell

#### 2010

Developed next-generation SiC module power semiconductor

#### 2012

Developed inverter equipped with next-generation power semiconductor SiC-SBD, a first in Japan

#### 2014

Launched power electronics equipped with SiC power semiconductors

#### 2015

- Launched steam-generation heat pumps 2018
- Began manufacturing exhaust gas cleaning systems for ships





Inverters equipped with power semiconductor SiC-SBD





Power conditioning systems for high-capacity mega solar use

Exhaust gas cleaning systems for ships





### **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.



**2020** CONSTITUENT MSCI JAPAN ESG SELECT LEADERS INDEX

**2020** CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)

We have received the following awards and certification in recognition of our outstanding initiatives to promote diversity.





We have received the following certifications as a company exhibiting excellence in health and productivity management.





Based on the universal design (UD) concept, we have adopted fonts that are easy to read (and difficult to misread) by more and more people.



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