

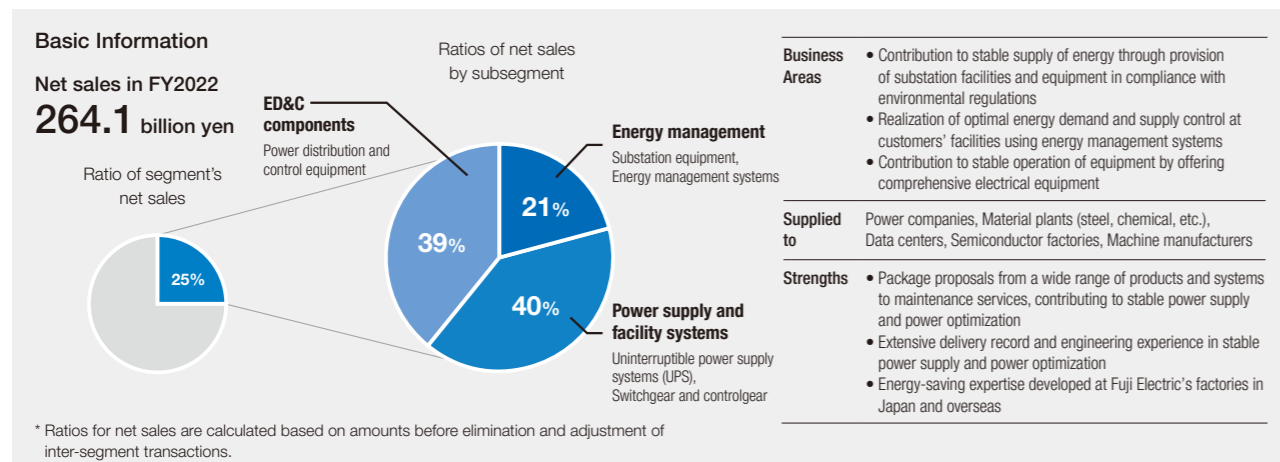
# Overview of Segments

## Power Electronics Energy



**We will work to expand our business by promoting the development of competitive products, enhancing engineering services, and strengthening carbon neutrality-related proposals.**

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



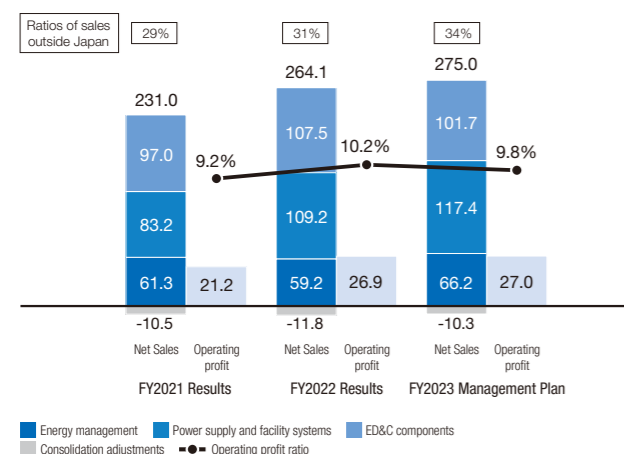
## Market Trends and Business Opportunities

In an aim to achieve a decarbonized society, demands related to stable supply and optimization of energy are expanding rapidly on a global scale.

Subsegments	Market Trends and Business Opportunities
Energy management	Due to continuing increase in demand to replace aging equipment in the substation business, and also backed by the government's next-generation energy policy subsidy programs, there is an expanding demand for carbon neutrality-related equipment, including power conditioning systems for solar and wind power generation and storage systems.
Power supply and facility systems	We see continued expansion in capital investments by data center (IDC) operators driven by digitalization and the use of 5G. In addition, with expanding investments in new installations and expansions of factories in the cutting-edge semiconductor field, demand for comprehensive electrical equipment business is increasing on an ongoing basis.
ED&C components	While we anticipate decrease in production and demand of machine manufacturers and sluggish demand due to slowdown of the Chinese market, we expect the market to continue making a mild recovery driven by recovering investment in electrified vehicles (EVs) and demand for 5G.

## Fiscal 2022 Results and Fiscal 2023 Plan

### Business Performance Trends (Billions of yen)



In fiscal 2022, operating profit ratio rose to 10.2% thanks to expanded demand for power supply and facility systems from projects for data centers and semiconductor manufacturers in both Japan and overseas, increased demand for ED&C components from machine manufacturers mainly in Japan, and benefits of business restructuring including fixed cost reductions to date.

In fiscal 2023, despite the anticipated decrease in demand for ED&C components, we forecast net sales of ¥275.0 billion, up ¥10.9 billion year on year, and operating profit of ¥27.0 billion remaining at the same level as the previous fiscal year, with an operating profit ratio of 9.8%, driven by continued expansion of the comprehensive electrical equipment business.

## Priority Measures

### Expanding and enhancing carbon neutrality-related businesses

In the carbon neutrality business, for which we expect to see market growth over the medium to long term, we are seeing increase in inquiries for the introduction of grid storage batteries to maintain energy supply and demand balance, and introduction of renewable energy by consumers for self-consumption. We will strengthen our activities to win orders in the new markets by combining the know-hows gained through our own carbon neutrality initiatives with our core products such as energy management systems and power stabilization systems.

### Launch of new global products in the substation business

In the substation business, we plan to increase sales mainly in overseas markets through new development and market launch of differentiated products.

For data centers and chemical plants where disaster prevention and environmental regulations are required, we will launch new products such as natural ester filled global transformers, and gas insulated switchgear (GIS) that is downsized substation equipment designed to minimize the generation of greenhouse gases.

### Expanding comprehensive electrical equipment business for data centers

Our comprehensive electrical equipment business is receiving high praise for contribution in shortening the customer's construction period and reducing equipment management personnel. Based on our track record in Japan, we are developing one-stop consultation venues and cultivating local

service personnel overseas, and strengthening our service system to respond to the increased sales volume for data centers and semiconductor factories, thereby expanding our business mainly in South Korea and Southeast Asia.

The data center market is in need for greater capacity. Our 7500WX Series large-capacity UPS combines one of the industry's smallest footprints and highest power conversion efficiency rating, allowing highly efficient energy saving within the limited server installation space. In fiscal 2023, we will release a new, increased capacity line of 2400 kVA to meet the needs for larger capacity.

### Launching of new ED&C components products

As for our magnetic switches, our core product, we will offer new products that will address such market needs as increased compactness, reliability, and increased ease of wiring, as well as contribute to carbon neutrality through efforts including energy saving and the use of renewable materials.

Furthermore, we will strengthen our activities focused on encouraging customers to use Fuji Electric's specifications for semiconductor manufacturing equipment, machine tools, and data centers.

## Comprehensive Electrical Equipment Business

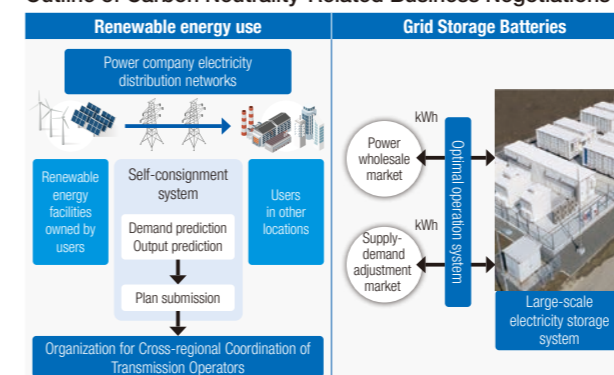
### [Business Overview]

#### Stable supply of energy

Package proposals from system design to installation and maintenance services

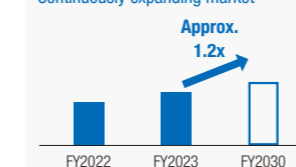


## Outline of Carbon Neutrality-Related Business Negotiations



- Rising adoption of self-use solar power systems by users with aim of achieving carbon neutrality
- Widespread introduction of renewable energy generation systems driving introduction of grid storage batteries for maintaining supply-demand balance
- Rapid growth stimulated by subsidy programs

Market outlook: Continuously expanding market

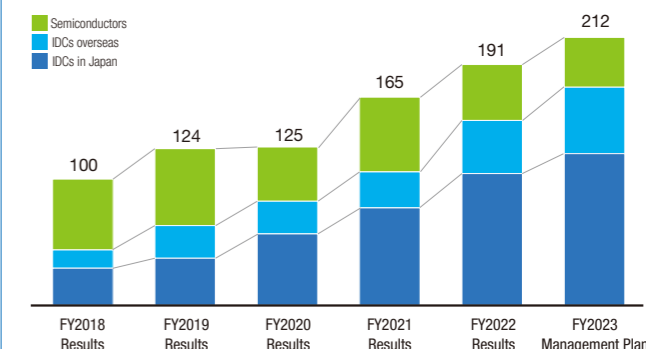


Market outlook: Continuously expanding market



\* Market outlook based on our forecast

## Trends in Sales for IDC & Semiconductor factories



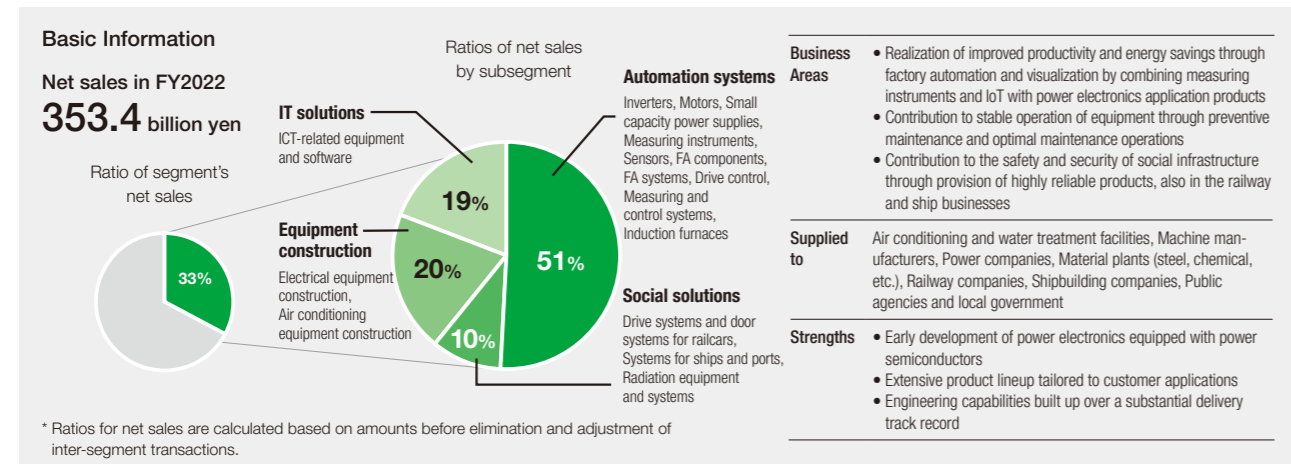
\* Growth rates are calculated based on figures in FY2018 as 100

## Power Electronics Industry



**We will strengthen our business constitution by promoting local design, local production, and local consumption, and work to expand our overseas businesses by launching new global products and furthering collaboration.**

**Hiroshi Tetsutani**  
 Managing Executive Officer  
 Corporate General Manager, Power Electronics Industry Business Group



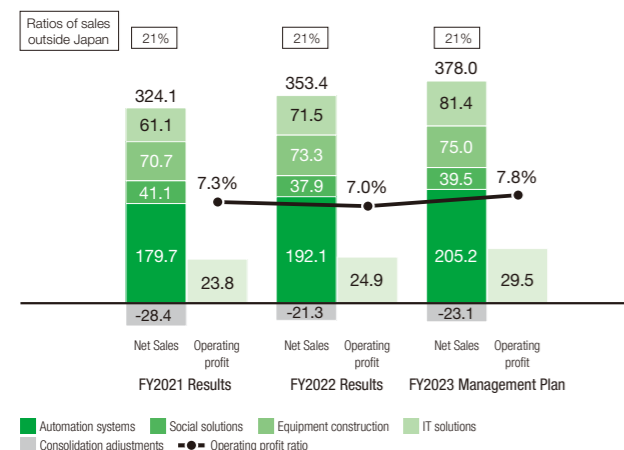
## Market Trends and Business Opportunities

In an aim to achieve a decarbonized society, we expect that efforts such as automation and digital transformation (DX) will accelerate globally, and demands for energy saving and productivity improvement will continue to expand.

Subsegments	Market Trends and Business Opportunities
Automation systems (Factory automation/process automation)	Energy saving and automation-related demand is expected to remain strong, and it is predicted that Japanese market conditions will generally upturn and overseas market conditions will see signs of recovery, except for China.
Social solutions	As countries move toward electrification of ships and decarbonization at ports, the market for environmentally friendly products is growing.
Equipment construction	We anticipate gradual growth in capital investments and public investments.
IT solutions	Digital demand, such as DX and green transformation (GX) is expected to increase in academic, private, and public sectors.

## Fiscal 2022 Results and Fiscal 2023 Plan

Business Performance Trends (Billions of yen)



In fiscal 2022, demand, mainly for automation systems and IT solutions grew, leading to increase in sales and profit. Operating profit ratio fell slightly due to impacts of soaring material prices and material procurement difficulties mostly in the automation systems business.

In fiscal 2023, we forecast net sales of ¥378.0 billion, up ¥24.6 billion year on year, and operating profit of ¥29.5 billion, up ¥4.6 billion, with an operating profit ratio of 7.8%, driven by such factors as high level of order backlog in the automation systems business and increase in demand, also in the IT solutions business.

## Priority Measures

**Strengthening the automation systems business constitution and expanding overseas operations**

● **Enhancing profitability of component products**

To enhance profitability and strengthen competitiveness of our component products, we are strengthening our system of "local design, local production, and local consumption" for components at the global level. While we have been expanding production models, mainly of low-voltage inverters in India and Europe, in fiscal 2023, we will establish production systems in the Americas, and increase the rates of local production and local consumption through a global structure encompassing six areas of the world (Japan, China, Southeast Asia, India, Europe, and the Americas) toward fiscal 2026.

By applying the platforms to standardize the main components of our products, we will work towards improving profitability by increasing productivity, reducing procurement and production costs, and reducing material inventories. As for low-voltage inverters, our core component products, we will be developing new compact models in addition to the high functionality standard model platforms to increase the application rates, and to establish a strong business constitution by producing these products globally.

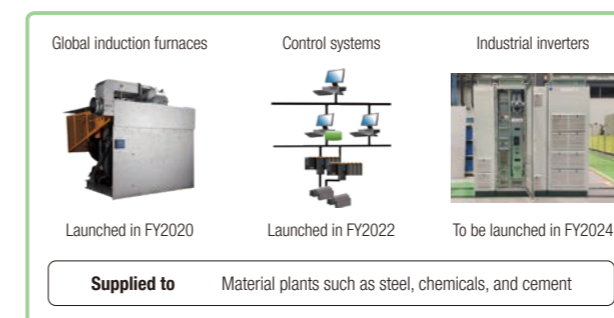
**Rates of Local Production & Local Consumption of Low-Voltage Inverters by Region**

Region	FY2023 Plans	FY2026 Targets
China and the rest of Asia	90%	90%
India	40%	65%
Europe	40%	65%
Americas	0%	45%

● **Expanding overseas businesses by promoting collaboration and global products**

In the factory automation business, we will work to increase sales by engaging in negotiations in China for systems combining low-voltage inverters, controllers (PLCs), and programmable operator interfaces (HMIs) for equipment to manufacture lithium-ion batteries and semiconductors, and expanding our sales channels through collaborations in Europe, the Americas, and India.

**Global Products for Process Automation Business**

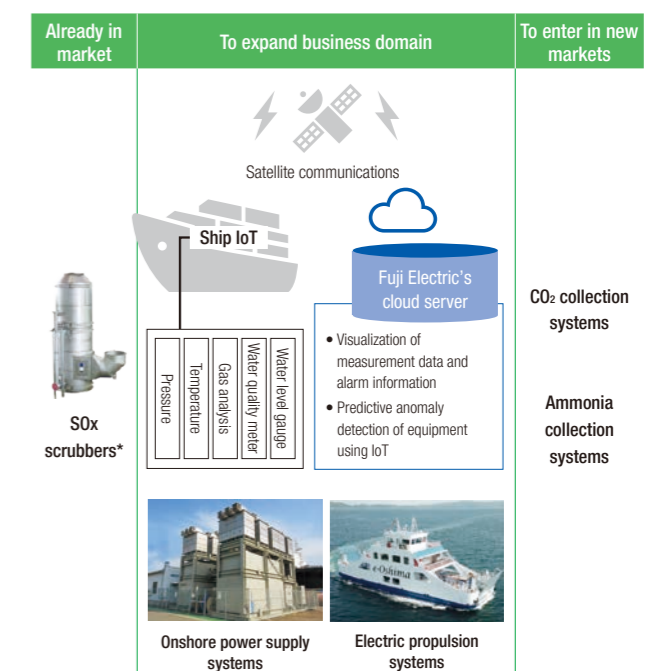


In the process automation business, we will cultivate the local staff and further strengthen our service system to empower the local teams to take lead in expanding the sales of global products, including global induction furnaces and control systems. We will work to expand our business with high value-added products such as soft sensors that enable estimation of data related to product quality at semiconductor factories and other facilities.

**Launch of differentiated products for ships and ports**

Fuji Electric has the technologies and know-how to provide comprehensive solutions, from the creation, distribution, and storage of energy at ports, and electrification of and supply of electricity for cranes and ships, toward promotion of carbon neutrality in the ship and port business. In the current fiscal year, we will expand the ship and port business by focusing our efforts in the development of electric propulsion systems for ships, ship IoT systems, which will allow automatic data collection and predictive anomaly detection of equipment, and onshore power supply systems. In the future, we are also planning to enter into new fields such as collection systems for CO<sub>2</sub> and ammonia.

**Differentiated Products for Ships and Ports**



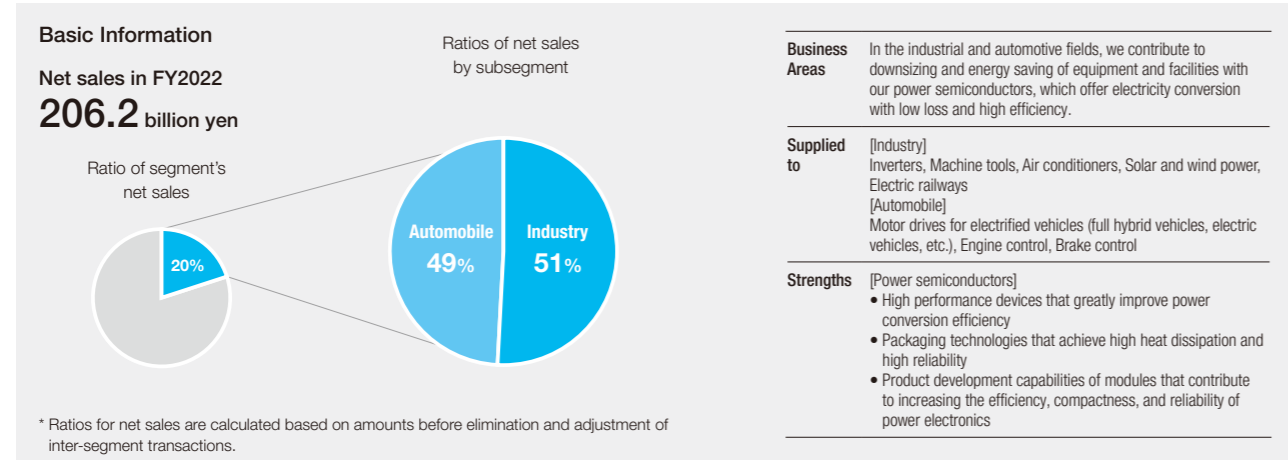
\* Exhaust gas cleaning systems for ships

## Semiconductors



**In response to growing demand for power semiconductors for electrified vehicles, we will continue to invest aggressively and steadily increase production capacity to expand sales and profit.**

**Toru Hosen**  
Senior Managing Executive Officer  
Corporate General Manager, Semiconductors Business Group



## Market Trends and Business Opportunities

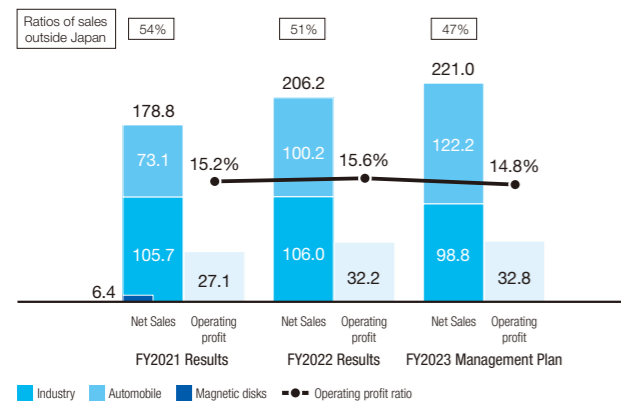
Power semiconductors help save energy thanks to their high levels of conversion efficiency and power control. Demand for these devices is rising globally, driven by environmental action aimed at decarbonization and increasing investment in automation in the manufacturing industry.

Subsegments	Market Trends and Business Opportunities
Industry	Due to growing demand for energy saving and automation, demand for factory automation equipment, such as inverters and machine tools, continues to grow, and demand for applications for renewable energy, including solar and wind, has been expanding at an average annual growth rate of 19%* from fiscal 2021 to 2023.
Automobile	Production of full hybrid and electric vehicles (EVs), which are Fuji Electric's targets, is forecasted to grow at an average annual rate of 44%* from fiscal 2021 to 2023, and the growth rate of sales from IGBTs for electrified vehicles (xEVs) is expected to exceed that of production.

\* Fuji Electric forecast based on research firm forecasts

## Fiscal 2022 Results and Fiscal 2023 Plan

**Business Performance Trends** (Billions of yen)



In fiscal 2022, the business was impacted by our exit from the magnetic disk operation, cost increase to expand the production capacity of power semiconductors, and soaring material prices and energy prices. However, thanks to increase in demand for power semiconductors for electrified vehicles and industry applications, as well as impacts of foreign exchange, we achieved net sales of ¥206.2 billion, up ¥27.4 billion year on year, operating profit of ¥32.2 billion, up ¥5.1 billion, and operating profit ratio of 15.6%, up 0.4%.

In fiscal 2023, despite the anticipated increase in fixed costs and adverse foreign exchange impacts, we forecast net sales of ¥221.0 billion, up ¥14.8 billion year on year, and operating profit of ¥32.8 billion, up ¥0.6 billion, with an operating profit ratio of 14.8%, driven by increase in sales in the growing xEVs market.

## Priority Measures

### Growing sales of power semiconductors in the xEV market

Power semiconductors contribute to reducing power loss and improving driving distance, which are major issues for xEVs, and as demand grows rapidly, there is a need for ever higher efficiency.

We are continuing to develop products to meet customers' requirement specifications, including silicon (Si) RC-IGBT\* products, which we developed independently ahead of our competitors, and silicon carbide (SiC) products, which can significantly reduce power loss compared to Si products. By increasing the number of manufacturers and models adopting our modules in Japan and abroad, we will work to expand sales beyond the increase of xEV production.

We are also planning to expand our lineup of module products, and promote the development of compact and thin package lineup for light and compact vehicles and new SiC products for EVs.

\* RC-IGBT integrates two types of semiconductors having different functions (IGBT and freewheeling diode), laid out alternately in a linear arrangement on a single chip. This chip structure allows significant reduction of power loss and miniaturization compared with conventional products in which two chips are placed separately.

### Expanding sales of IGBT modules for renewable energy applications

We are expanding our product lineup of 7th-generation IGBT modules, which feature high heat dissipation and high reliability, and increasing sales of products for the renewable energy in the industrial field.

In the renewable energy field, there is an increasing demand for higher voltage, higher output, higher efficiency products that can contribute to downsizing, system cost reduction, and longer life. We are developing the 8th-generation IGBT modules that offer an output of 10-20% greater compared to the 7th-generation, as well as large capacity modules equipped with next-generation SiC.

Going forward, we will continue to capture the strong demand in these markets to boost sales.

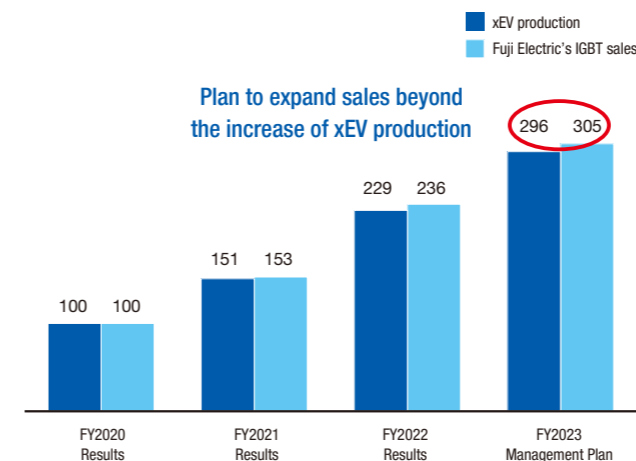
### Aggressive investments to increase production capacity for Si and SiC

In order to respond to strong demand for power semiconductors, we anticipate that our cumulative plant and equipment investment for the five years up to fiscal 2023 will increase from ¥120 billion in our initial plan to over ¥200 billion.

For the manufacturing process (front-end process) of power semiconductor chips, we are accelerating investments to increase the production capacity for 8-inch Si wafers and plan to increase production capacity in fiscal 2023 by about 2.8 times the level of fiscal 2019. For SiC products, we are preparing for the full-scale launch of mass production of 6-inch wafers in fiscal 2024, and also pursuing the development of technologies for mass production of 8-inch wafers.

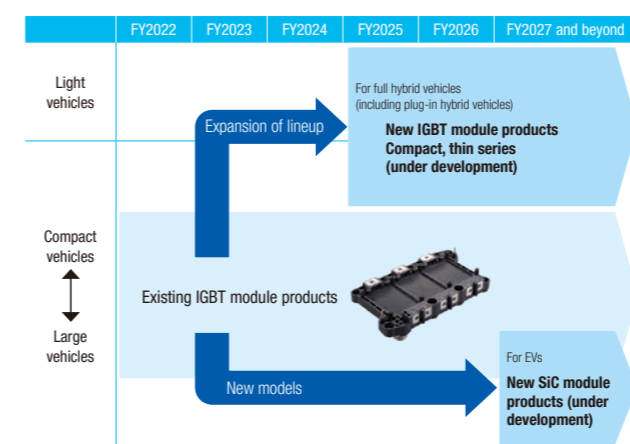
We are also continuing investments for the assembly process to increase the production capacity for automotive and industrial products.

### xEV\*1 Production Trend & Fuji Electric's IGBT Sales Plan

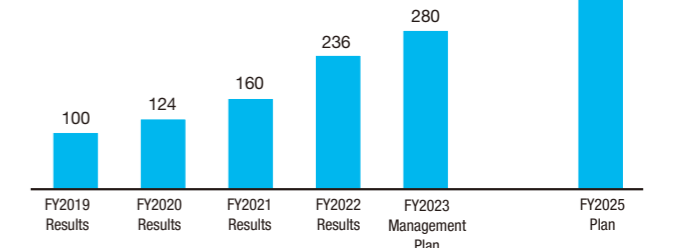


\*1 xEV: the total of full hybrid vehicles and electric vehicles (IGBT-equipped models)  
\* Figures are indicated as indices based on FY2020 results as 100

### Plans to Expand Lineup of Power Semiconductor Modules for xEVs

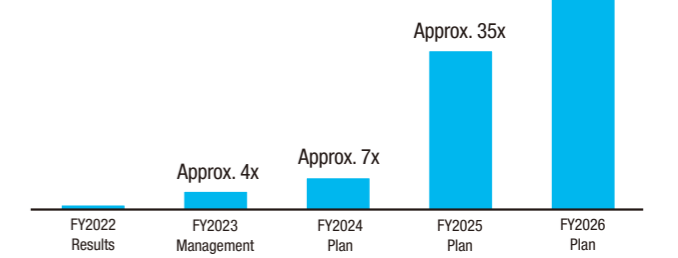


### 8-Inch Si Wafer Production Capacity (Front-End Process)



\* For production capacity (year-end comparison), FY2019 (benchmark year) is assigned 100 for comparison purposes.

### 6-inch SiC Wafer Production Capacity (Front-End Process)



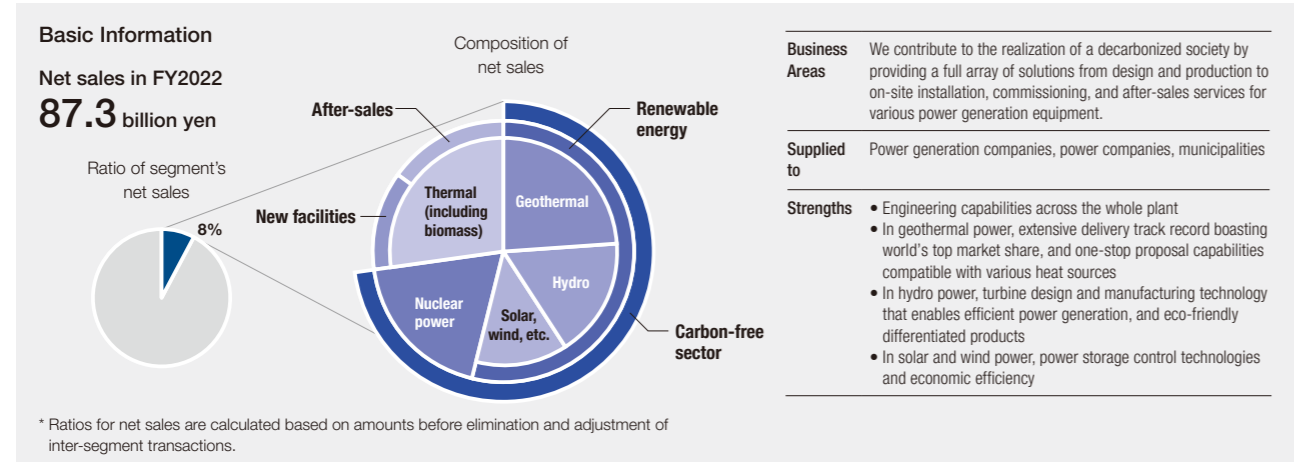
\* Figures are indicated as multiples of production capacity as of end of FY2022 (comparison of capacity at end of each fiscal year)

## Power Generation



**We will expand our renewable energy, after-sales, and nuclear power-related businesses, and increase profitability.**

**Tadao Horie**  
Executive Officer  
Corporate General Manager, Power Generation Business Group



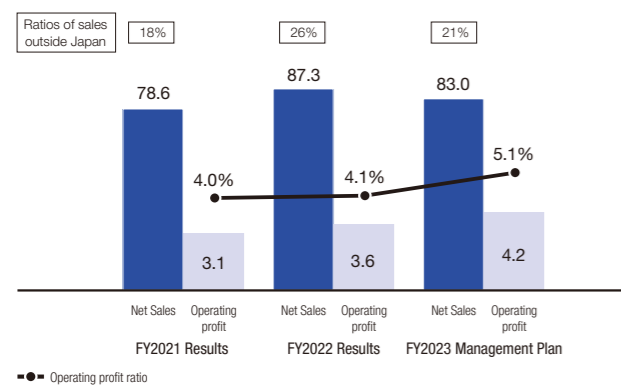
## Market Trends and Business Opportunities

As an initiative to resolve climate change issues, decarbonization is accelerating in the energy markets, and business opportunities in the renewable energy and nuclear power-related field are increasing.

Products	Market Trends and Business Opportunities
Geothermal power	As investigation and development of new heat sources are in progress on a global level, low-capacity projects, in particular, are starting to materialize in Japan.
Hydro power	As demand for replacing aged power generation facilities and increasing output continues, pumped-storage hydropower generation is seen in a new light for its marginal supply capability, regulating power, and absorbability of renewable energy, and we expect to see demand to upgrade existing power plants for effective utilization.
Solar power and wind power	As part of the initiatives towards carbon neutrality, more companies are replacing the energy they consume in their business activities with renewable energy, and demand for self-consumption power generation equipment is expanding.
Nuclear power-related field	The "Basic Policy for the Realization of Green Transformation (GX)," which was confirmed by the Japanese Cabinet in February 2023, advocates the utilization of nuclear power as a decarbonized power source. This policy will contribute to improving the energy self-sufficiency rate, and we are expecting increasing demand for decommissioning of facilities as well as waste treatment from the restart of power stations.
After-sales	There is a rising need for increased reliability of equipment in light of the tight electricity supply-demand balance in Japan, and expected demand for renewal and upgrade of geothermal power generation equipment overseas.

## Fiscal 2022 Results and Fiscal 2023 Plan

### Business Performance Trends (Billions of yen)



In fiscal 2022, we achieved increase in sales and profit thanks to large-scale geothermal power generation projects, and achieved net sales of ¥87.3 billion, up ¥8.8 billion year on year, operating profit of ¥3.6 billion, up ¥0.4 billion, and operating profit ratio of 4.1%, up 0.1%.

In fiscal 2023, despite decrease in profit year on year due to decrease in large-scale projects in the previous fiscal year, we expect to achieve increase in sales by streamlining our operations and due to differences between projects, forecasting net sales of ¥83.0 billion, down ¥4.3 billion year on year, and operating profit of ¥4.2 billion, up ¥0.6 billion, with an operating profit ratio of 5.1%.

## Priority Measures

In response to the accelerating tide of decarbonization, we are focusing on renewable energy, carbon-free sector of nuclear power, and maintenance and upgrade of existing power generation equipment, and promoting the expansion of the after-sales business to deliver increased efficiency.

### Expanding orders for renewable energy

#### ● Geothermal power

By handling both the flash method, which is suitable for high-temperature heat sources, and binary method, which can generate power from low-temperature heat sources, we are maintaining top market share globally with our strength of one-stop proposal capabilities in responding to diverse customer needs. Going forward, we will enhance our activities to win orders in and outside Japan including the Pacific-rim and Africa, where energy development is in progress. For ongoing projects, we will maximize profit by establishing the optimum supply chain for each region and strictly managing cost fluctuation and other risks.

#### ● Hydro power

In addition to responding to S&B\* demand of existing power plants in Japan, we will address the need for modernization of pumped-storage hydropower generation and contribute to making the sector a main power source of renewable energy. With the strong demand for hydro power generation, our order backlog has grown around 3.4 times over the last five years. We will work to establish systems to ensure steady performance of projects.

\* S&B (Scrap and Build): Achieving efficiency by scrapping or eliminating obsolete and inefficient facilities and replacing them with new ones

#### ● Solar and wind power

In Japan, more companies and municipalities are implementing self-consumption power generation equipment and constructing regional microgrids. We will work to increase successful orders by making optimal proposals based on customer needs, by combining our strengths including power stabilization technology utilizing storage batteries, and know-how on cooperative operation with existing power generation equipment that we have accumulated at our factories.

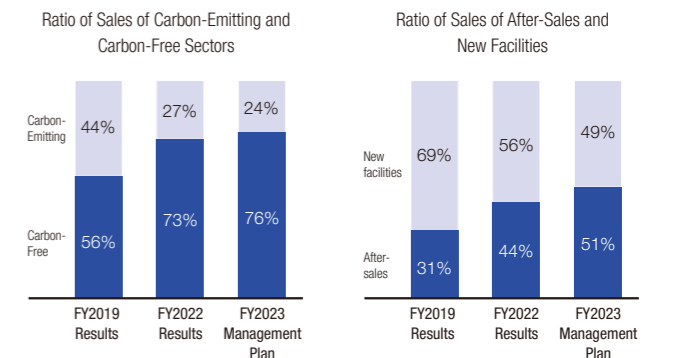
### Expanding our nuclear power-related equipment business

By leveraging the extensive experience we have accumulated since the construction of Japan's first nuclear power plant, and our three core technologies of remote handling of nuclear fuel and waste, radioactive waste treatment, and nuclear reactor engineering, we will work to increase successful orders, including fuel extraction and other decommissioning at Monju, as well as radioactive waste treatment upon restart of power stations. We will also work aggressively with partners on innovative next-generation reactor projects to enhance the safety of nuclear power generation.

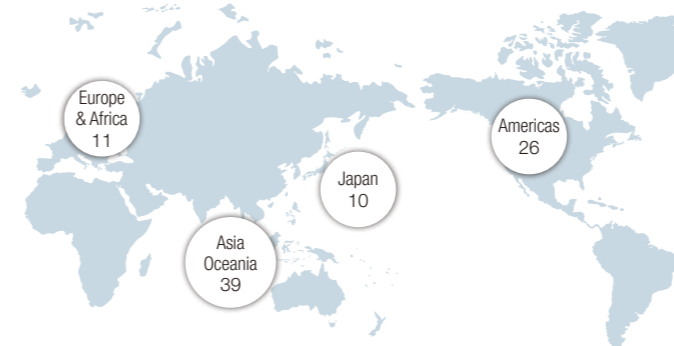
### Expanding our after-sales business

In Japan, we will further expand orders through solutions to minimize risks upon stopping of existing thermal power plants, and contribute to improving output adjustment capability when combining thermal power with renewable energy. Overseas, we will strengthen our proposals for maintenance, upgrades and output capacity increase based on our strong delivery track record of geothermal power generation equipment.

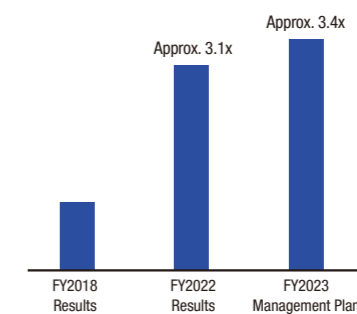
### Growth of Percentage of Sales of Carbon-Free Sector and After-Sales Services



### Deliveries of Geothermal Power Generation Equipment (As of Sep. 2022)



### Hydro Power Order Backlog



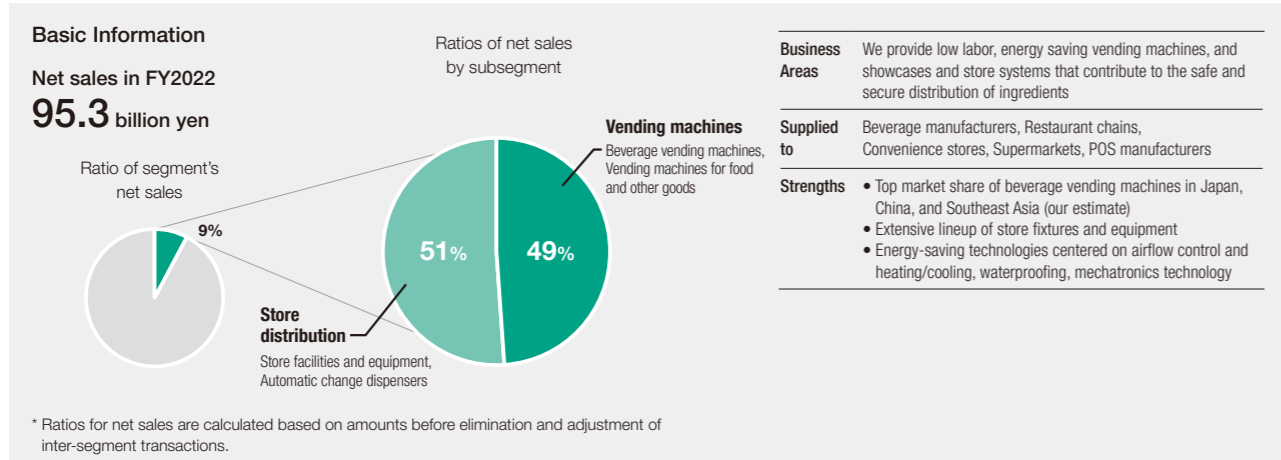
\* Figures are indicated as multiples of order backlog as of FY2018

## Food and Beverage Distribution



**We will enhance profitability by introducing high-value-added products to the market and promoting cost reduction and streamlining in order to explore new areas.**

**Keiichi Asano**  
Executive Officer  
Corporate General Manager, Food and Beverage Distribution Business Group

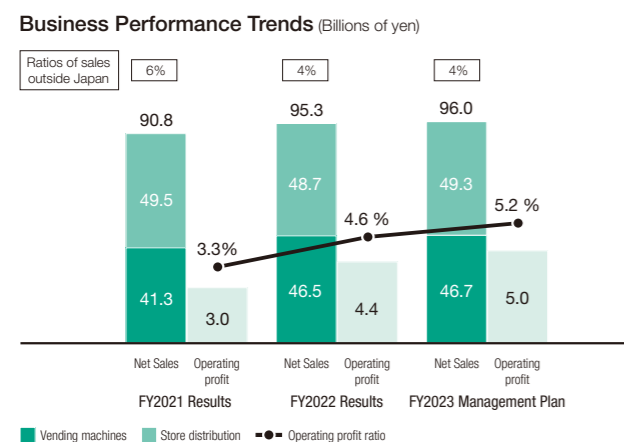


## Market Trends and Business Opportunities

As the COVID-19 situation is improving, the food and beverage distribution market continues to recover and we anticipate the market conditions to be almost the same level as the previous fiscal year. New business opportunities are arising as needs are diversifying to include energy saving, labor saving, and contract-free, non-face-to-face interactions.

Subsegments	Market Trends and Business Opportunities
Vending machines	In Japan, we expect investments for vending machines to be at the same level as the previous year as there is a continuing demand for IoT services to achieve energy saving and streamlining of operations, and growing needs of customers newly adopting vending machines resulted from growing sales demand for frozen and other foods. Overseas, market conditions are recovering with increasing replacement demand in China and diversification of customer needs for energy saving and eco-friendliness.
Store distribution	Along with an increase in demand for store renovations to meet energy-saving requirements, particularly in convenience stores, needs are diversifying to include labor saving, food loss reduction, contact-free, non-face-to-face interactions, and satellite locations.

## Fiscal 2022 Results and Fiscal 2023 Plan



In fiscal 2022, despite deterioration in profit as a result of allocating allowance for doubtful accounts for our Chinese subsidiary, we achieved increase in sales and profit thanks to factors including increase in investment in vending machines mainly by Japanese beverage manufacturers, more high-value-added products, and promotion of cost reduction in the vending machine and store distribution businesses.

In fiscal 2023, we forecast net sales of ¥96.0 billion, up ¥0.7 billion year on year, and operating profit of ¥5.0 billion year, up ¥0.6 billion, with an operating profit ratio of 5.2%, driven mainly by further deployment and expansion of high-value-added products in both vending machine and store distribution businesses.

## Priority Measures

### Deploying high-value-added products and promoting price strategy in the vending machine business

In the vending machine business in Japan, we will offer high-value-added vending machines that meet such needs as energy saving and digital transformation (DX) and enhance the value we provide to our customers.

For beverage manufacturers, we will offer DX-related products including sustainable vending machines, which reduce energy consumption by maximum 20% compared to our conventional models (85% reduction from 2001), a dynamic pricing function, which offers the flexibility to change the price of products depending on demand trends, and vending machine IoT services for beverage manufacturers and vending machine operators to improve the efficiency of product replenishment operations.

For customers who are considering new adoption of vending machines to respond to needs such as contact-free, non-face-to-face, and 24-hour sales, we will launch upgraded frozen food vending machines as fiscal 2023 models.

To enhance profitability, in addition to passing on increased material prices, we will implement a pricing strategy for high-value-added products. We will also reduce costs by creating platforms, as well as promote service reform, operational streamlining, and other rationalization.

For overseas markets, we will promote a selective and

focused sales strategy for customers with strong purchasing power. We will offer differentiated products that meet the needs, for example, beverage vending machines with energy saving functions in China, and food vending machines with conveyance functions in Asia.

### Proposing solutions that meet diversifying needs

In the store distribution business, we will continue to propose total solutions to meet needs such as energy saving and labor saving.

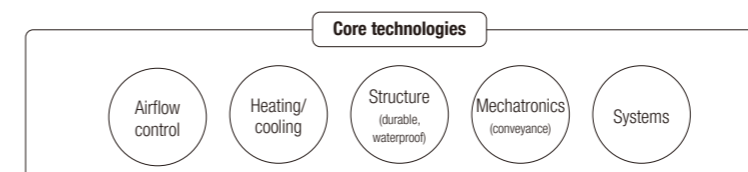
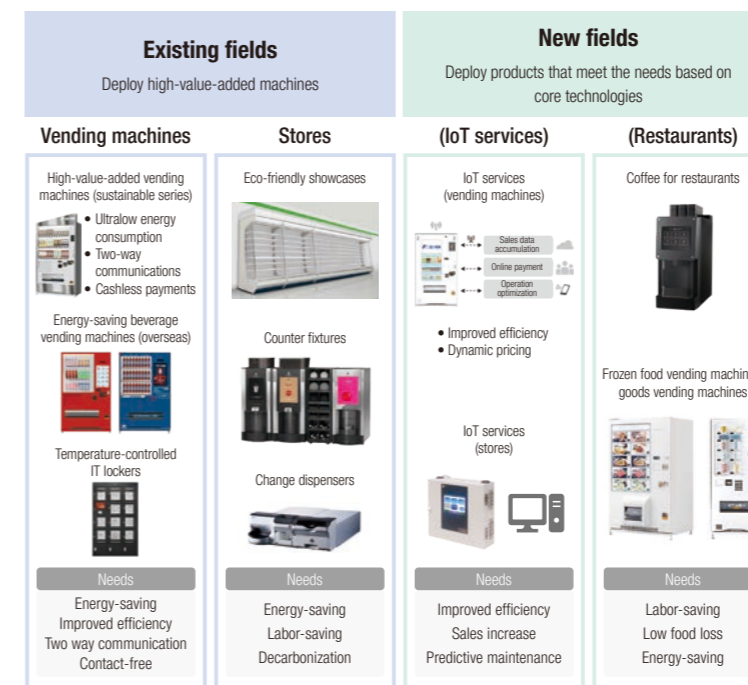
For convenience stores, we will offer differentiated functions and launch high-value-added products, including eco-friendly showcases, store IoT services, and new counter fixtures.

We are also introducing new coffee machine models for restaurant chains to expand sales.

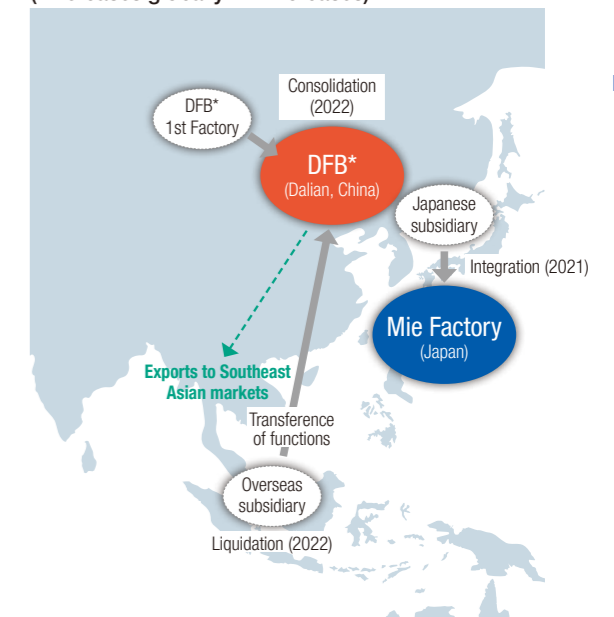
### Enhancing business constitution through reorganization of the manufacturing system

We have reorganized our manufacturing system to better match the business scale, and consolidated the bases into two global locations in Japan and in China (Dalian). We will continue to pursue total cost reductions including cost reduction, improvement of operational efficiency, and improvement of productivity, in order to further enhance our business constitution.

### Deployment of High-Value-Added Products and Development of New Areas



### Reorganization of Manufacturing System (Five bases globally → Two bases)



\* DFB: Dalian Fuji Bingshan Vending Machine Co., Ltd.