# Condensed Transcript of Q&A Session Regarding Business Strategy Meeting for the Fiscal Year Ending March 31, 2024

Date: May 30, 2023 (Tuesday) 9:10 – 12:10

# FY2023 Management Challenges

Q. What is the direction of internal discussions regarding the next medium-term management plan?

## A.

- The current medium-term management plan is a five-year plan. This decision was made in part out of consideration of the 100th anniversary of Fuji Electric's foundations, which we will celebrate in the fiscal year ending March 31, 2024. With regard to the next medium-term management plan, we look to formulate a vision for 2030, growth strategies, and financial and non-financial key performance indicators. These items will be compiled into the new plan, which will once again be a three-year plan, and we intend to announce this plan in 2024.
- Q. What measures will be taken on the part of management in order to generate business synergies, such as those proposed between the power generation and power electronics system businesses, in preparation for the next medium-term management plan?

# A.

- Vertically oriented organizations are taking a forecasting approach, starting from the fiscal year ending March 31, 2024. Meanwhile, a team comprised of members from business, corporate, and R&D divisions will collaborate and pursue synergies based on a back casting approach with the fiscal year ending March 31, 2031, as its starting point. In the future, we will need a leader to ensure there is a sense of consistency between the plans of various divisions. We therefore plan to assemble a team under the direct supervision of the president to guide the process of formulating the next medium-term management plan.
- Q. What are the Company's plans for reskilling human resources to prepare for future digital transformation and green transformation initiatives?

# A.

• In regard to digital transformation, we are utilizing the services of training firms and other external instructors to provide employees with education on digital technologies. Green transformation, meanwhile, is not something that Fuji Electric can promote on its own. For this reason, we are taking part in various partnerships and getting involved in the rule making processes of industry organizations as we train our people. Looking ahead, each individual employee will be assigned a specific role, and we will move forward with reskilling measures while sharing information with this regard.

Q. The growth strategy framework shown on slide 17 of the reference materials cites overseas power electronics businesses and synergies between the power generation and power electronics systems businesses as factors projected to contribute to improved profitability under the next medium-term management plan. It is my understanding that components are more profitable than systems. Is it really possible to boost overall earnings through systems?

#### A.

- The social solutions business as well as nuclear-power related equipment feature high profitability. Meanwhile, there is a need to carefully monitor market trends when it comes to renewable energy. Fortunately, users, particular those of semiconductor and data center products, are highly eco-conscious, and this eco-consciousness is expected to help us secure profitability. The main challenges we foresee will be faced overseas. It will be challenging to provide the functions, quality, and prices expected in each country, and we will thus need to assess profitability while setting clear intentions for each specific country.
- Q. What selection and concentration policies will be applied to business portfolios going forward?

# A.

- A the moment, there are no specific businesses in which we are examining possibility of withdrawal. However, it is entirely possible that such businesses might emerge during the process of reviewing our business portfolio. As all of Fuji Electric's businesses are related to digital transformation or green transformation, we aim to manage these businesses in a way that generates synergies going forward.
- As for mergers and acquisitions, there is a need to examine possible transactions targeting the acquisition of new sales channels or the enhancement of engineering capabilities, for the purpose of growing overseas operations. We will also need to consider transactions that supplement our technology portfolio, such as investments in start-up companies. Fuji Electric possesses a myriad of systems, including those for managing and reliably supplying energy. Accordingly, it is important for us to look at ways of reducing carbon footprints, which might involve partnering with companies that possess relevant technologies.
- Q. Fuji Electric has put forth the target of 9% for the consolidated operating margin. What are your thoughts regarding the profitability of the Food & Beverage Distribution and Power Generation segments, which both have operating margins of around 5%?

- Profitability in the Food & Beverage Distribution segment has been impacted by extraordinary factors, such as allowances for doubtful accounts recorded in previous fiscal years. If these extraordinary factors are excluded, we will see that this segment has been successfully improving its profitability.
- · As for the Power Generation, we aim to heighten profitability by reducing losses on projects through more rigorous project management. We thereby look to achieve higher levels of profitability under the next medium-term management plan.

# **Power Electronics Energy**

Q. One year has passed since the establishment of the Carbon Neutrality Promotion department, and inquiries are on the rise. What will Fuji Electric need to do in order to accommodate this demand?

#### A.

- There is a need to develop power conditioning systems for storage batteries that match the environment in which they will be installed at customer facilities. For example, we are seeing an increase in customers using such equipment in coastal areas. There is thus a need to develop and promote products that can withstand the environmental stresses present in such areas.
- Q. What are the factors behind the rise in the shares of businesses serving data centers?

## A.

- Data centers and other major customers are ramping up investments. Amid this trend, we are catering to the sensitive needs of customers in relation to ecofriendliness with products such as uninterruptible power supply systems (UPSs), substation equipment, molded-case transformers, and transformers using FR3 natural ester fluid. Through the swift deployment of such products, we continue to provide service that earns customer trust.
- There have been increases in new foreign company customers operating in Japan. Our UPSs have low operating costs and do not require a lot of space for installation. The stable increase in patronage by foreign companies is a result of customers choosing Fuji Electric in response to our advertisement of these benefits.
- Q. Profit margins in the power supply and facility systems business are approaching the double-digit level. Will this business be a driver behind profit improvements under the next medium-term management plan?

# A.

- The hurdle for improving profit margins will be higher going forward. Nevertheless, we intend to further increase the capacity of large-capacity UPSs while utilizing molded-case transformers, substation equipment, and cubicle-type gas-insulated switchgears as drivers for growing profits. In these undertakings, the extent to which we are able to provide proposals that match the environments at customer facilities will be critical, and the same can be said in the energy management business.
- Q. Why did the share of UPSs for data centers grow to 40%? What are the chances that this high share will be maintained going forward?

- Our UPSs are easy to combine with the power supply systems used for backing up data at data centers, and are thus matched to customer needs. This factor has contributed to growth in the share of these items. We aim to maintain this share growth through ongoing proposals of this nature.
- Q. What portion of the sales of the power supply and facility systems business are accounted for by maintenance services? How do the profit margins for maintenance

services compare to those for equipment sales?

## A.

- Maintenance services account for 10% to 15% of sales in the power supply and facility systems business.
- There are a number of different types of maintenance services, and it is therefore impossible to make an all-encompassing statement with regard. What I can say is that the margins for battery replacement services are high while the margins for everyday maintenance services are lower.
- Q. Given the rising demand for generative artificial intelligence and other such services, should we be hopeful for rises in demand for products for domestic data centers?

#### Α.

- It is possible that data centers will increasingly be built outside of urban centers in Japan in order to bolster the resilience of the country's digital infrastructure.
- Q. When you speak of delays as a result of changes in the priorities for global equipment, to what do you refer?

## A.

- For example, we prioritized the development of transformers using FR3 natural ester fluid above other products given the strong demand for these items from facilities like data centers. The development of cubicle-type gas-insulated switchgears and acquisition of overseas certification will be advanced in accordance with trends in market and customer needs.
- Q. I am correct to assume that new products will be integral to maintaining the current market share for the ED&C components business?

## A.

• We were able to grow the share of the ED&C components business by swiftly deploying products matched to customer needs after altering materials in response to procurement difficulties. This approach gave Fuji Electric an edge over the competition when it came to delivery turnaround. However, if we simply stay the current course, it is possible that customers will switch back the manufacturers that they used previously. We therefore aim to maintain our share by developing new products with an emphasis on prices.

## Power Electronics Industry

Q. Conditions in the power electronics component market appear to be a bit better than those in the ED&C component market. What are the reasons behind the growth of sales in the Power Electronics Industry segment?

## A.

• Our outlook for market conditions are based on the findings of meetings with customers. Reasons behind the growth of sales in the Power Electronics Industry segment, meanwhile, include our efforts to approach new customers using new

products. Fuji Electric offers a broad lineup of products, ranging from measuring instruments to inverters and servos. We are thus able to propose systems that combine these various products, which has enabled us to win customer favor and thereby grow sales.

Q. What is the likelihood that the automation systems business will achieve its sales target in the fiscal year ending March 31, 2024? To what extent does there remain outstanding orders from the fiscal year ended March 31, 2023, that Fuji Electric was unable to fill due to an inability to produce the needed products? Also, I suspect that performance in this business will be impacted by adjustments in relation to industrial parts sold to the Chinese market. Are they any concerns with this regard?

## A.

- We had issues procuring parts in the fiscal year ended March 31, 2023, and we thus found ourselves starting the fiscal year ending March 31, 2024, with an order backlog that is significantly larger than that from a year earlier. Fortunately, the procurement issues began to dissipate in the fourth quarter of the fiscal year ended March 31, 2023, and production levels are returning to normal. However, shortages of certain components are a daily occurrence, and we will need to adjust our daily operations accordingly.
- Conditions in the Chinese market will mirror those seen in the fiscal year ended March 31, 2023, namely sluggish conditions in the first half of the fiscal year followed by recovery in the second half.
- Q. Will sales of radiation-related equipment continue to grow until 2030?

## A.

- Sales of radiation-related equipment in the fiscal year ending March 31, 2025, are projected to be 20% higher than in the fiscal year ended March 31, 2022. There is a need to monitor future trends, but we anticipate that sales of radiation-related equipment will continue to show strong grow leading up to 2030. Overseas, specifically, we will target growth in sales of dosimeters as well as in sales of pressure transmitters and other nuclear power-related products.
- Q. What are the advantages and disadvantages of Fuji Furukawa Engineering & Construction Co., Ltd., being a subsidiary in the equipment construction business?

# A.

• Fuji Furukawa Engineering & Construction is a Group company, and we are coordinating with this company as we develop our business. This company has recently been advancing into new air conditioning-related fields, and collaboration is being pursued by developing the necessary products as we seek to generate synergies. There are no business disadvantages to Fuji Furukawa Engineering & Construction being a subsidiary.

# **Semiconductor**

Q. What is the projected growth rate for the automotive SiC module market over the fiscal years ending March 31, 2025 to 2027?

- The scale of the market for SiC devices is expected to grow by nearly 40% per year in the fiscal years ending March 31, 2025 to 2027. Customers have begun turning their attention to battery electric vehicles (BEVs), and Fuji Electric intends to bolster production capacity leading up to 2026 based on this trend.
- Q. What is the current scale of sales of SiC devices and the future outlook for these sales? Will the future start of mass production of SiC devices result in lower profitability?

#### A.

- Full-fledged sales of SiC devices is expected to commence in the fiscal year ending March 31, 2025, and we anticipate a scale of sales of tens of billions of yen in the fiscal year ended March 31, 2027. We are currently in the process of bolstering production capacity at the Tsugaru Factory with the goal of starting mass production in the fiscal year ending March 31, 2025.
- SiC devices are not likely to contribute to performance immediately after mass production is commenced. However, we expect to be able compensate for the initial costs of launching these devices through sales of silicon devices, and, as a result, we do not project that the operating margin of the Semiconductor segment will fall below 15%. SiC devices will begin contributing to earnings in conjunction to growth in sales volumes.
- Q. I understand that sales of new SiC modules for BEVs will begin in 2027. Will Fuji Electric be selling chip-based devices for BEVs over the period from 2024 to 2026?

# A.

- Given trends in efforts to solicit Fuji Electric's specifications to customers, we expect to be able start providing SiC modules in 2026 or 2027. Up until then, we will primarily be selling chips. We plan to gradually release products incorporating existing packages.
- Q. Has there been any increase in the number of automobile models employing SiC devices among existing customers?

#### Α

- The number of automobile models employing SiC devices among existing customers is rising in comparison to last year.
- Q. How feasible is the plan for expanding production capacity of SiC devices, which targets and increase of 50 times in production capacity over the levels from the fiscal year ended March 31, 2023, by the fiscal year ending March 31, 2027? Also, will the increase in production capacity of 50 times translate to an equivalent increase in sales of SiC devices of 50 times?

## A.

• Our plans for production capacity increases are based on the number of customers who have already adopted Fuji Electric's specifications as well as the customers being encouraged to use these specifications in 2025 or beyond. Sales are expected to increase in conjunction with production capacity.

Q. Why are capital investments in SiC devices being conducted ahead of investments in 12-inch silicon wafers?

#### Α.

- We are investing in SiC devices ahead of silicon devices as we project a shift from silicon devices to SiC devices.
- Q. Competitors are taking steps to reduce costs associated with 8-inch SiC wafers. What type of action is Fuji Electric taking it this regard? Also, what sort of challenges do you foresee in relation to the mass production of 8-inch SiC wafers and what timing do you envision for the start of mass production?

## A.

- We are moving ahead with research and development of 8-inch SiC wafers, and we will start advancing preparations for mass production in the future.
- The main challenge we foresee is the procurement of 8-inch wafers. We are working with wafer manufacturers in our efforts to tackle this challenge. Considering the need to prepare wafers, among other issues, we do not expect a market for 8-inch wafers to emerge until 2026 or 2027.
- Q. Competitors are moving toward in-house production for SiC wafers. Is there any concern that Fuji Electric may fall behind the competition given this trend?

## A.

- We are working together with manufacturers to procure SiC wafers, and we see no particular concerns with this regard.
- Q. The projection for capital investment in the fiscal year ending March 31, 2024, has been raised from the figure of \(\frac{\pma}{3}\)7.6 billion put forth when announcing the medium-term management plan to \(\frac{\pma}{4}\)48.0 billion. Was this a revision a response to growth in production volumes? What type of investments will be conducted to bolster production capacity leading up to the fiscal year ending March 31, 2027? Does the Company intend to utilize subsidy programs for such investments?

#### Α

- We plan to conduct capital investments ahead of schedule in the fiscal year ending March 31, 2024, to accommodate levels of demand that are surpassing our initial expectations.
- This will be a matter to be discussed as part of the process of formulating the next medium-term management plan, but we project capital investment figures in the hundreds of billions of yen over the three-year period ending with March 31, 2027.
- Fuji Electric is taking advantage of the subsidy programs for which it applies. We also intend to utilize any additional programs that the Company may be able to employ.
- Q. It appears that the rate of growth for 8-inch silicon wafer production capacity is slowing in comparison to previous years. Is this assessment correct?

## A.

- Fuji Electric has proceeded to boost production capacity of 8-inch silicon wafers for each of the past several years. However, customers have recently been transitioning from primarily using silicon IGBTs to utilizing SiC devices alongside these IGBTs. The resulting growth in SiC device production capacity has slowed the growth in silicon wafer production capacity.
- Q. Where are the new two customers for IGBTs for electrified vehicles located? Also, has the addition of these new customers diversified the overall distribution of Fuji Electric's customer base?

## A.

- The new two customers for IGBTs for electrified vehicles are both located in Japan.
- The addition of these two new customers further diversified our customer base, decreasing our dependence on specific customers.
- Q. A certain competitor has started shipping RC-IGBTs. How will this impact Fuji Electric's performance going forward?

#### A.

- This development has been incorporated into our forecast, and it is not anticipated to have any significant impact on performance.
- Q. At what level are IGBT inventories?

#### A.

• Inventories of automotive and industrial IGBTs are lacking among both the Company and customers. We are in the process of increasing inventories, but we do not expect to reach the required levels within the fiscal year ending March 31, 2024.

# Power Generation

Q. It was stated that enhanced project management could help raise the operating margin of the Power Generation segment above the current 5%. When will such improvements be seen?

- Over the past three to four years, we have continued to see difficult conditions centered on overseas projects due to factors including the COVID-19 pandemic and the impact on energy prices from Russia's invasion of Ukraine. However, the situation has been gradually improving. As far as project management, we have to admit that our internal risk prediction capabilities are lacking. We are in the process of enhancing these capabilities, and we hope to achieve an operating margin for the Power Generation segment that surpasses 5% under the next medium-term management plan.
- Q. Geothermal power generation projects are on the rise. Will the current speed of this growth continue going forward? Have there been any changes with regard to your assessments of the potential of this field?

## A.

- There are various geothermal power generation projects around the world. However, the amount of resource development and concrete projects is not consistent each year, and can vary quite a bit. Nevertheless, there is no change to our outlook that geothermal power demand will continue to grow on a global basis leading up to 2030.
- Q. Why is geothermal power generation not expected to show significant growth in Japan?

## A.

- We have heard from geothermal power development companies that the vast majority of geothermal power generation resources in Japan are located in national parks, and that it can therefore take a substantial amount of time to reach agreements with the community to develop these resources. Nevertheless, the number of geothermal power development projects is growing steadily.
- Geothermal power is not subject to fluctuations in output, making it easier to utilize. Conversely, the large investments required to develop geothermal power resources makes a number of projects unfeasible. Accordingly, we plan to be patient in waiting for viable opportunities.
- Q. What are the reasons behind the increase in small-scale geothermal projects, such as those with outputs of 15 MW, in Japan?

## A.

- Projects with output of less than 15 MW present significant benefits under the Japan's feed-in tariff system.
- Q. Am I correct in the understanding that investments in developing geothermal power systems take longer to recover than investments in hydropower, thermal power, and other power sources?

## A.

- We cannot offer an all-encompassing statement regarding the investment recovery periods for specific power sources. However, we can say that geothermal power projects require drilling, which raises the hurdle to developing resources and presents obstacles not found in wind power or solar power projects.
- Q. Projects involving renewable energy sources impacted by fluctuations in output often entail the use of electricity storage or stabilization technologies. What are Fuji Electric's strengths with this regard? When systems are provided in sets including storage batteries, from where will these batteries be procured?

- Our strengths include our ability to provide service finely tuned to specific customers and to accurately accommodate their specific needs. We will always value input from customers in our business.
- We procure storage batteries from external partners. The needs of customers can
  vary by project to project, and this approach allows us to offer the ideal response to
  the needs of a given project.

# Food & Beverage Distribution

Q. Why were extraordinary expenses excluded from the factors affected operating income in the Food & Beverage Distribution segment shown on slide 7 of the reference materials?

#### A.

- The Food & Beverage Distribution segment recorded more than ¥2.0 billion in extraordinary expenses in the fiscal year ended March 31, 2023. We have taken a conservative approach by incorporating essentially the same amount of the expenses into our forecast for the fiscal year ending March 31, 2024.
- Q. What are the reasons behind Fuji Electric's success in raising its prices for vending machines sold in Japan for three consecutive years?

## A.

- One factor behind our success in raising prices has been changes in the competitive climate. Other factors have included our transferring increases in material prices to selling prices and our deployment of high-value-added vending machines. Looking ahead, we plan to approach price negotiations with customers based on a comprehensive appraisal of factors including the value of our products in contributing to carbon neutrality and rises in personnel expenses, rather than merely adjusting selling prices to account for trends in material prices.
- Q. What trends are being seen in the vending machine business in China? Specifically, how have actual trends differed from your projections and what is the outlook for the future?

# A.

- Prior to 2015, we developed our vending machine business in China with a focus on major beverage manufacturers and on small to medium-sized vending machine business operators. However, the difficulty faced by small to medium-sized vending machine business operators in securing a profit translated to slower-than-anticipated growth in sales. Going forward, we intend to narrow the scope of our activities to focus on sales promotions of beverage vending machines primarily targeting beverage manufacturers. At the same time, we will pursue topline growth by deploying food vending machines targeting stores.
- Q. Why is Fuji Electric's market share for convenience store showcases growing? Can we expect further share growth in the future?

- We have achieved market share growth through the introduction of showcases with lower CO<sub>2</sub> emissions. This growth was seen not only in our shares of geographical markets, but also in our share of products supplied to existing large-scale customers, which climbed to nearly 50%.
- Fuji Electric has differentiated itself by going beyond sales of standalone showcases to propose total solutions encompassing everything from showcases to vending machine convenience stores and counter fixtures. We intend to target further share growth through this approach in the future.

Q. Do customers have high opinions of Fuji Electric's counter fixtures and automatic change dispensers?

## A.

- Customers need to reduce labor requirements, grow sales, and conserve energy. Fuji Electric's counter fixtures and automatic change dispensers help address these needs and have thus won praise from customers for their resulting ability to contribute to higher sales.
- Q. What progress has been made in raising prices in the store distribution business?

## A.

• We have not been able to raise prices in the store distribution business to the degree achieved in the domestic vending machine business. This outcome is due in part to the competitive climate. Nevertheless, we were able to raise prices in the second half of the fiscal year ended March 31, 2023, to reflect higher prices of showcase materials.