### **Q&A Summary**

Event Name: 2024 Medium-Term Business Plan Briefing

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Speaker: Seiji Izumisawa, Member of the Board, President, and CEO

Hisato Kozawa, Member of the Board, Executive Vice President, and CFO

### **Questioner 1**

**Q**: I would like to ask you about the strengthening of profitability in Aero Engines and Commercial Aviation, including the situation at the Nagasaki Plant.

**Izumizawa**: In the case of Aero Engines, the share of new engine parts handled by each company is determined among the participants in each program, but certain transactions in the sale of spare parts do not depend on the percentage of participation. Since productivity at our Nagasaki Plant is extremely high, we will increase our profitability by supplying parts manufactured there. MHI RJ Aviation, which is headquartered in Canada, is in charge of the maintenance, repair, and overhaul (MRO) business within Commercial Aviation, and we plan to boost profitability by expanding this business, which is recovering well from the COVID-19 pandemic.

Q: I would like to ask about your involvement in the next-generation aircraft project presented by the Japan Ministry of Economy, Trade and Industry (METI) at the Industrial Structure Council. At the FY2023 Financial Results Briefing held on May 8, 2024, you said that resources would be extremely tight due to the development of the Next-Generation Fighter Aircraft. What kind of support would you request from the government if the current schedule were to be followed? Could this program have a similar financial impact to that of SpaceJet?

**Izumizawa**: Regarding the next-generation aircraft that you mentioned, it is still in the concept phase, and a detailed plan has not yet been presented. Therefore, we are not in a position to speak about our potential involvement in it. As for the timing of the development of the Next-Generation Fighter Aircraft, I cannot answer in detail, because the detailed schedule has not yet been decided.

#### **Questioner 2**

**Q**: Within the three-year capital allocation plan, 650 billion yen is to be invested in growing core businesses and future growth areas. What is the breakdown for the investment going to Gas Turbine Combined Cycle (GTCC), Nuclear Power, Defense, and the future growth areas?

**Izumizawa**: I would like to refrain from answering about the amount of investment for individual businesses.

- **Q**: On the topic of Defense, the Defense Production Infrastructure Reinforcement Act went into effect on October 1, 2023, and there was talk about the government's providing support to suppliers. Will MHI provide support to your own suppliers?
- **Izumizawa**: We have been providing support to our suppliers such as by improving the predictability of orders and addressing production and management issues for some time, and we will continue to do so. We will work to ensure that the government's support initiatives are appropriately passed on to our partners.
- **Q**: On the topic of Nuclear Power, the Strategic Energy Plan presupposes the restart of all existing nuclear reactors in Japan. Does your 2024 Medium-Term Business Plan (MTBP) also presuppose the restart of all domestic reactors?
- **Izumizawa**: We assume that all of the Pressurized Water Reactors (PWRs) that we originally built, and which are not slated for decommissioning, will be restarted. We will also provide support for the restart of some Boiling Water Reactors (BWRs), and this is included to a certain extent in the 2024 MTBP based on the current outlook. As the Japanese government formulates its Seventh Strategic Energy Plan, they will revise their nuclear energy policy, and we will update our plans accordingly.

# **Questioner 3**

- **Q**: Regarding GTCC, you mentioned further expansion your global market share. Am I correct in understanding that you are aiming for a market share of around 50%?
- **Izumizawa**: We currently have a 33% share, but we have competitors, and we also have to balance market share in terms of new orders with our own production capacity. We expect the overall market size to increase, so we want to hold on to our top share and increase our share as much as possible.
- **Q**: Regarding the market environment, you have talked about demand for gas turbines being stimulated by coal to gas conversions in order to comply with CO2 emissions regulations, as well as the need for load-following power following the expansion of renewable energy. Does MHI believe that the demand for gas-fired thermal power will remain strong?
- **Izumizawa**: In the past, most people expected a decline in coal- and gas-fired thermal power, but I think the market's view has changed over the past year. The use of gas-fired thermal power systems has come to be a considered realistic solution, as it will take time and be difficult to immediately replace coal-fired thermal power with renewable energy such as solar and wind. Against this backdrop, demand for gas turbines is increasing. We are

also proposing fuel conversions to hydrogen in the future and a combination with carbon capture, and some customers are looking to our gas turbines in anticipation of these future developments. Our products are also highly evaluated for their reliability as load-following power, including peaking functionality.

**Q**: You mentioned that you export Nuclear Power components for existing and new plants outside Japan. What is your current outlook for this part of the business?

**Izumizawa**: Although we do not provide entire plants to the international market, we do export components such as steam generators (SGs) and pumps, and we will continue to do so. For example, we are partnered with a company in France, and if their orders grow, we expect orders for our equipment to increase as well.

#### **Questioner 4**

Q: You talked about investments in upgrades and functionality enhancements for your Nuclear Power manufacturing facilities. Could you provide some more details about this? If these investments are going to R&D or test facilities, then I would assume this is for fast reactor or advanced light water reactor development. What are your thoughts on investing in production facilities at this time?

**Izumizawa**: These investments in production facilities are for upgrades to aging facilities, efficiency improvements to production facilities, and new products. The facilities installed at the time of the Nuclear Renaissance are aging and need to be renewed. Examples of functionality enhancements that we are considering are the addition of control systems to conventional equipment. Moreover, capital investment for casks and other similar equipment is needed. Of course, we will also invest in R&D.

Q: Please tell us about the progress of the Advanced Light Water Reactor design work. Since the first announcement of SRZ-1200, my impression is that progress in the basic design work has remained at around 80%. How will design work advance during the 2024 MTBP?

**Izumizawa**: To the extent that is possible with no confirmed plant sites, design considerations are near completion. In the process of formulating the Seventh Strategic Energy Plan, if discussions about plant sites proceed, and specific items, such as when and where to build new plants, are decided, design work specific to each location, such as seismic resistance parameters, can move forward. Currently, we are conducting tests to confirm safety based on existing designs.

#### **Questioner 5**

**Q**: I would like to ask about your plans for increasing personnel in Nuclear Power.

**Izumizawa**: We need to increase personnel in our engineering and manufacturing organizations in a balanced way to cope with the increase in production expected in the future. We have been working to restart PWRs, and we have already secured a certain number of personnel in the process. Therefore, I think that we will be able to support new plant builds without a large increase in personnel. That said, we will need to increase the number of engineers working on high temperature gas-cooled reactors and fast reactors, as these technologies are in the design and development phases. We will respond to this by moving personnel within the Group and making new hires. The public's interest in nuclear energy is growing, and we hope that the number of young engineers who want to work in this area will increase.

Q: What is your view on the superiority of PWRs over BWRs?

**Izumizawa**: Power companies in Japan have chosen either PWR or BWR technology, and MHI is working to restart PWRs in accordance with the power companies' policies. When requested to, we also provide support to power companies using BWRs related to technologies common to both PWRs and BWRs. To summarize, the power companies each have chosen either PWR and BWR reactor technologies, and they are working to restart their plants now.

**Q**: What do you think is the appropriate mix for nuclear energy in the Seventh Strategic Energy Plan?

**Izumizawa**: The optimum energy mix will depend on electricity demand. I cannot answer this question, as this issue is currently being discussed as part of considerations on the next Strategic Energy Plan. Since Japan does not have a large amount of renewable energy resources, we believe that discussions are being held on how many nuclear power plants will be needed as a part of the optimum energy mix.

# **Questioner 6**

**Q**: I assume that there are many inquiries for large frame gas turbines for use as baseload power, and that you have a considerable share in these kinds of systems. On the other hand, I think that there must also be inquires small and mid-size gas turbines as load-following power. Please let us know about your efforts in the two areas of large frame and small to mid-size gas turbines.

**Izumizawa**: Large frame gas turbines are used not only as baseload power but also for load-following. Data centers, in particular, require a large amount of electricity, so both large frame and small to mid-size gas turbines may be considered. We are also pursuing hydrogen fuel conversion in small to mid-size gas turbine models, and we believe that the fact that we have a full lineup is a major factor leading customers to choose us.

**Q**: You have a stated goal of contributing to the realization of a Carbon Neutral world. Investment in hydrogen reduction is expected to increase in the steelmaking industries in Japan, Europe, and the United States. Could you tell us about MHI's efforts in this area?

**Izumizawa**: I think the decarbonization of steelmaking will spread in the future. Primetals Technologies, an MHI Group company, is planning a hydrogen reduction steelmaking pilot plant in Europe with one of our customers. Although it is unlikely that this technology will see immediate practical implementation, we will first validate the concept at the pilot plant, and then proceed with development aiming to eventually replace blast furnaces. Moreover, there is a possibility that hard-to-abate\* industries such as steelmaking and cement will introduce carbon capture ahead of the power generation industry, and we will contribute to these efforts as well.

\*Hard-to-abate: Difficult to decarbonize

### **Questioner 7**

**Q**: Regarding the strengthening of portfolio management, I would like to ask you about the positioning of the future growth areas, i.e., the Energy Transition and Smart Infrastructure, within your four reporting segments: Energy Systems, Plants & Infrastructure Systems, Logistics, Thermal & Drive Systems, and Aircraft, Defense & Space.

Izumizawa: In the Energy Transition area, there are customers with varying needs, such as for projects to link up- and down-stream portions of value chains, the combination of gas turbines and carbon capture, and hydrogen/ammonia production. In order to respond to these needs, we are concentrating our efforts under the banner of the Energy Transition, and not taking a separate approach for each segment. When a new business reaches commercialization, sales may be recorded in existing segments, but at this stage, we are thinking more about how best to approach potential customers. The same is true for Smart Infrastructure. In the case of material handling warehouses, our Logistics Systems business will be in charge, and in the case of cooling systems for data centers, HVAC will be the related business unit. In order to provide a one-stop solution for our customers, we have established an organizational structure across existing business units to lead these projects.

#### **Questioner 8**

**Q**: As of November last year, you were forecasting that Defense revenue would reach 1 trillion yen within the three-year period beginning in FY2024. Is there any change to the forecast within the 2024 MTBP? If the plan has not changed, I would like to know how the export business, i.e., business not for the Japan Ministry of Defense, is factored into the plan.

**Izumizawa**: Any change from the revenue figure shown in November last year will be due to an increase in orders received from supplementary budgets. Regarding the export of defense equipment, the government has a policy of providing equipment to allies and like-minded countries, and MHI will act in accordance with that policy.

**Q**: During the 2024 MTBP period, there will be a presidential election in the United States, and there is a possibility that energy policy there could change. How have you factored the potential impact from this into the plan?

**Izumizawa**: I will refrain from answering political questions such as those regarding the American presidential election, but the United States is a very important market, and we plan to continue to focus on the US.

# **Questioner 9**

Q: What is your approach to achieving a business profit margin of 8% or more in FY2026? I think the margins in Energy Systems and Commercial Aviation are already high. However, I would like to know specifically how the plan incorporates margin improvements, including through business portfolio restructuring, such as in Plants & Infrastructure Systems and/or Logistics, Thermal & Drive Systems.

Izumizawa: I think you would like to know if profit margins can increase even more. Energy Systems has had relatively strong profitability. For businesses that fall under the "(3) Enhance Business' Competitiveness" category on page 11 of the presentation materials, the situation, including profit margins, is different in each. As the world recovered from the COVID-19 pandemic, we pursued a number of initiatives during the 2021 MTBP. If we follow up on each of these initiatives, I think we can make more progress. Of course, some businesses, such as Steam Power, need to change their structure as they contract. However, in addition to expanding services, it is also possible to increase profit margins by expanding environmentally conscious products, such as products using natural refrigerants in HVAC, and environmental engineering solutions in Commercial Ships. Through these kinds of efforts, we hope to achieve our 8% business profit margin target. 8% is the company-wide target that includes a variety of growth investments, which we view as necessary. Some individual businesses have slightly higher targets.

#### **Questioner 10**

**Q**: What are your views on business structure optimization and shareholder returns? On page 12 of the presentation materials, cash in from "Asset Sales, Others" is 110 billion yen, which is less than in the previous MTBP. In the past, cash was generated by business divestments or the sale of unneeded assets, but during the current MTBP, the amount of cash from these areas has decreased considerably. I know that this is only the initial plan, but could you let us know your thoughts on this issue? We also see a

substantial increase in shareholder returns over the next three years in term of capital allocation using cash inflows. If we look at the dividend in FY2023 and the dividend forecast for FY2026, i.e., three years later, dividend growth appears smaller than profit growth, because you are using dividend on equity (DOE). Considering the background of the introduction of DOE and the perspective of the capital markets, there seems to be room for further increases to shareholder returns. What are your thoughts on this?

Izumizawa: During the 2021 MTBP, we sold many strategic shareholdings and underutilized assets that were no longer being used by our businesses. We expect to sell some assets during the 2024 MTBP, but not as much as during the 2021 MTBP. As for capital allocation, in addition to making growth investments, we continued to repay debt and improved financial stability during the 2021 MTBP. During the 2024 MTBP, we will use normalized operating cash flow for growth investments and shareholder returns. We will nearly double our return to shareholders from 150 billion yen to 280 billion yen over the next three years. Rather than keeping dividends low, and despite various sources of volatility, we have introduced DOE in order to realize a progressive and stable dividend, and thereby to properly return profit to shareholders.

# **Questioner 11**

Q: First, I would like to ask about strengthening profitability. Will each of the reporting segments, i.e., Energy Systems, Plants & Infrastructure Systems, Logistics, Thermal & Drive Systems, and Aircraft, Defense & Space, each have the same 8% business profit margin target? I think that there will be variations in profit amounts and margins among the businesses, but do you intend for all of the businesses to aim for 8% equally during the 2024 MTBP? You outlined several initiatives, but I think there would be differences among the strategic business units (SBUs) as to whether or not they would be able to reach the 8% target. As you run the business over the next three years, are you going to fine-tune or possibly revise the target? Please tell us about how you intend to strengthen profitability and how you will handle each segment.

Izumizawa: First of all, we will proceed with the intention of achieving more than an 8% business profit margin for the entire company, including growth investments. As you pointed out, there is considerable variation among SBUs. Some businesses have already achieved over 10%, and some have not yet reached that level. Some business have suboptimal operating environments right now but can expect improvement in the future. Others expect difficult market conditions to continue. Therefore, targets are not set uniformly at 8%, but are determined according to the situation in each business. We will follow up with each business's plan during each fiscal year of the MTBP. We aim to achieve a business profit margin of 8% by investing in the company as a whole. Of course, it will be necessary to fine-tune the plans. The target for each business, as well as the

- nature of the businesses themselves, need to evolve according to various circumstances. However, there is nothing concrete that I can share with you at this point in time.
- **Q**: Please tell me about revenue growth. You mentioned that revenue in GTCC, Nuclear Power, and Defense will increase by 1 trillion yen in total. For example, if GTCC and Defense each achieved 1 trillion yen in revenue during the final year of the 2024 MTBP, revenue in Defense and GTCC would increase by 500 billion yen and 250 billion yen, respectively. If the remaining 250 billion yen is to come from Nuclear Power, this seems like a large increase. What is the breakdown of the 1 trillion yen revenue increase? Will Nuclear Power revenue increase significantly beyond 300 billion yen?

**Izumizawa**: I would like to refrain from comparing individual businesses here. The increase expected in each business is different. We will talk about this topic at future business strategy briefings. Our company has many long-cycle businesses, and we have a rough idea that revenue will increase by 1 trillion yen over three years. Of course, the breakdown will change depending on our operating environment and the situation in each business. That said, but the order backlog has increased to 6 trillion yen, so I think we will be able to achieve this target.

Q: I would like to know your foreign exchange rate assumptions.

Izumizawa: Our exchange rate assumptions are 140 JPY/USD and 150 JPY/EUR.

# **Questioner 12**

Q: First, after listening to the explanation of capital allocation on page 12 of the presentation materials, I have the impression that it was very difficult to find growth stories. I would like to know how much of a return you earned during the 2021 MTBP as a result of spending 760 billion yen on growing core businesses, future growth areas, and competitiveness enhancements, as shown on the left side of the "Capital Allocation" bar graph on the right side of the page. What is the concept behind spending 1.2 trillion yen over the three years of the 2024 MTBP? What is interesting to me is that the ratio of dark blue (growing core businesses and future growth areas) to light blue (competitiveness enhancements) flips from the 2021 MTBP to the 2024 MTBP, and I think that is indicative of a change in the overall story. Could you explain a little more about that?

**Izumizawa**: First of all, regarding the dark blue bars, which are growing from 330 billion yen to 650 billion yen, we will consider including M&A in these investments as the Energy Transition and electrification areas enter the commercialization phase. These also include increased investment in manufacturing capacity and R&D in GTCC, Nuclear Power, and Defense. The total investment in both growing core businesses and future growth areas will increase from 330 billion yen to 650 billion yen. The ratio between these areas is changing, because we will mostly maintain previous investment levels in the businesses where we seek to enhance competitiveness with some minor increases, while

only increasing investments in areas where we can expect growth, i.e., growing core businesses and future growth areas. In terms of how much these investments will contribute to revenue, growing core businesses will increase by around 1 trillion yen, as I explained earlier. In future growth areas, we will sow the seeds of future growth during the 2024 MTBP. Even if there are returns in this area during the 2024 MTBP period, they will not be very large. I think revenues will be around 100 billion yen, and it will be hard to grow beyond that during this period. Particularly of note, the relationship between energy and carbon neutrality will take a little more time, because it will depend on public incentives and regulations, as well as market conditions. That said, I think the data center business has the potential to grow quite a lot.

**Q**: I believe that the main themes of the 2021 MTBP were the Energy Transition and New Mobility & Logistics. There has been relatively a lot said about the Energy Transition, but is the sense within the company that the return on investment in New Mobility & Logistics has been slightly lacking?

**Izumizawa**: During the 2021 MTBP, we invested in the data center business, including by acquiring a company. While we did invest in R&D and business development, and there was some investment in logistics, in the other areas, we did not invest as much and/or there were not as many investment opportunities as had originally been expected. As for Smart Infrastructure, the areas related to data centers and logistics are growing. Data centers in particular are growing more than initially expected.

**Q**: How much have you included in the 2024 MTBP for the development of the commercial aircraft program led by METI?

**Izumizawa**: Development of a commercial aircraft is not included in the 2024 MTBP. METI just released their plan, and it is not yet ready to be incorporated into our forecasts.

**Q**: The KPIs for FY2026 shown on page 31 of the presentation materials assume that total assets will stay at 6.3 trillion yen for three years. With revenue increasing by 1 trillion yen, it seems like it will be difficult to maintain total assets at the same level. Total assets have increased by about 1 trillion yen over the past three years, so let me know the ins and outs of the plan.

**Izumizawa**: In FY2023, inventories increased, but I do not think the current level is optimal. I think we can reduce total assets further. Based on the plan, essential assets will increase in accordance with future revenue levels. We will aim to keep total assets at this level as facilities expand.

**Kozawa**: As a side note, the 2024 MTBP assumes that the yen will be stronger than it is now. One of the reasons why total assets increased to 6.3 trillion yen at the end of FY2023 was the impact of the depreciation of the yen on asset values when converted

to yen. The appreciation of the yen alone is expected to reduce assets by hundreds of billions of yen. We also intend to keep assets at this level by increasing working capital turnover.

#### **Questioner 13**

**Q**: Is it correct to understand that the target of 1 trillion yen in revenue for new business areas in FY2030 has not changed from the 2021 MTBP? The total revenue targets as laid out in the 2021 MTBP were 300 billion yen for the Energy Transition, including CCUS, and 700 billion yen in other areas. Is this breakdown also unchanged? This time, I got the impression that the company is going to focus more on the data center business than during the 2021 MTBP. Tell us about the data center business and how big you expect it to be in FY2030.

Izumizawa: We have not changed our target of 1 trillion yen in new business revenue by FY2030. However, the breakdown changed in FY2023, and the total amount has not reached the level originally planned during the 2021 MTBP. In that sense, I think has been quite difficult to develop our nascent future growth areas. However, the potential for growth is increasing, and I think the challenge from now on will be how to win projects. Although it is difficult to forecast the market size for individual businesses, we see potential in the equipment and systems that make up data centers, such as power generation or energy management systems. We have secured sales and service networks in the United States. We will gather information through these networks and use it to expand our business. However, although we have various plans in place, we are not yet at the phase where we can say specifically how much revenue we can definitely expect from these opportunities. We will continue communicating information about these developments going forward.

#### **Questioner 14**

**Q**: During the 2021 MTBP, your ROE target was 12%, but the actual result in FY2023 was a little lower than this. The 2024 MTBP ROE target of over 12% may be a bit conservative. The presentation materials say that the cost of capital is 8%, but they omit ROIC and targets. How much discussion was involved in formulating this plan? ROIC is attracting attention as a management KPI, so I was a little disappointed not to see it.

**Kozawa**: We use ROIC internally for various assessments, including those of our business units. Rather than presenting various indicators such as ROE and ROIC, we would like to focus on ROE. If ROE and ROIC are provided together, there will be a discussion about which is which. Of course, I am aware that there are calls for the adoption of ROIC as a disclosed KPI. However, we have chosen ROE in order to maintain consistency with past disclosures.

#### **Questioner 15**

Q: The International Energy Agency (IEA) recently reported an estimate that the power consumption of data centers worldwide will be equivalent to Japan's total annual power consumption by 2026. I think there will be a significant impact on MHI's orders for GTCC and other products. What is the market size for data centers assumed by the increase in this business during the 2024 MTBP? I think that not only on-site power, but also GTCC and Nuclear Power will also be involved. What percentage of the total market size does MHI expect to win? If possible, please tell me the breakdown of this as well.

**Izumizawa**: A shortage of power for data centers is forecasted, and in the next few years, when the data centers are actually built, the big issue will be who will supply the power and whether it will be ready in time. It is not yet clear what kind of systems will be used and in what kind of configuration. However, gas turbines are definitely an option. LNG-fired gas turbines have a slight edge in that they have short lead times, can be quickly installed, and operate stably.

**Q**: There seems to be demand for nuclear energy. You could say that small modular reactors (SMRs) were developed for use cases just like data centers. What do you think?

**Izumizawa**: It is difficult to predict how long it will take to complete development of SMRs. One thing I can say is that in the case of Japan, the issue is how to establish seismic resistance standards, so I think that the introduction of SMRs into Japanese data centers will be later than expected. I think that SMRs will first be used in American data center market.

**Q**: Is ΣSynX (read "Sigma Syncs") like Hitachi's Lumada or Siemens' MindSphere? If so, how will you monetize it? I believe that ΣSynX was mentioned in the 2021 MTBP, but could you to give us some examples of its track record and results?

**Izumizawa**: We think ΣSynX is a bit different than Lumada or MindSphere, and it is all about combining hardware and software to provide better solutions. The next step is to optimize controls by combining control software with inventory management, in the case of logistics, and energy management, in the case of energy systems. The concept here is to combine software, including planning functions, with hardware to achieve something in the real world. We already have some achievements in this area, with the most notable being in Logistics Systems, where we have received several orders for ΣSynX platforms to connect various products.

**Q**: You have not disclosed order intake for FY2026. I would like to know if MHI can demonstrate your competitiveness and increase order intake. How much in orders are you expecting in FY2026?

**Izumizawa**: Since order intake will vary in each of the three fiscal years depending on the projects involved, we did not set a target for order intake this time, because we thought it would be difficult to understand if we only showed the figure for the last year in this MTBP period. In FY2023, order intake was very strong, and our extensive order backlog is also making the situation difficult to understand. We expect more orders during the 2024 MTBP than during the 2021 MTBP. We expect orders to reach 6 trillion yen, or close to 6 trillion yen. Orders vary according to the market conditions during each fiscal year, but I think the average order intake over the three years of the 2021 MTBP period was a little less than 4.5 trillion yen. I think this figure will probably exceed 5.5 trillion yen during the 2024 MTBP, so I expect the order intake will increase by about 1 trillion yen.

# Note regarding forward looking statements:

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