

EBARA IR Day 2024 Q&A
<Summary of EBARA IR Day 2024 Q&A held on October 9, 2024>

Session 1: Energy Company Business Overview and Initiatives for a Decarbonized Society

Respondents:

Takanobu Miyaki (Miyaki)

Executive Officer, President of Energy Company

Questioner 1: I would like to ask two questions.

First, I would like to ask about the composition of revenue by end market. I think page 12 is easy to understand, as you have listed the end markets. Would it be possible to break down roughly into downstream, petroleum refining, electricity, petrochemicals, LNG, and new energy, and explain composition of revenue? It is helpful that you specifically wrote 15% for LNG, but I would like to know the rest as well.

Miyaki: First, let us start with the “INTRODUCTION” area on the left side of the graph that includes SAF and others I mentioned earlier. I can say there are an insignificant portion of the Energy Company’s revenue plan of JPY200 billion this year.

LNG accounts for about 15% of the total, and although it is a rough estimate, the rest of the total consists of the other areas. The largest portion is for petrochemicals in the middle, especially ethylene and olefins. In this area, compressors, turbines, and pumps account for a sizable portion, especially when service and support (S&S) is included.

Regarding electricity, especially in China, the supply of electricity has not yet reached demand, making it a significant portion of the total.

As for petroleum refining, while new demand is limited due to market contraction, there are efforts to maintain and upgrade existing oil refineries, such as through maintenance or energy-saving measures, and so S&S maintains a significant presence.

I apologize for not being able to provide specific figures, but the remaining 85% is comprised of

these areas. The largest segments are petrochemicals, mainly ethylene, followed by electricity, with us maintaining significant S&S presence in petroleum refining.

Questioner 1: For my second question, I would like to ask about your outlook and approach to the profitability of the energy business as a whole.

The current medium-term plan calls for 12% operating profit ratio or more in FY2025, and you commented earlier that you expect to achieve this figure. You have already reached 13.3% in 2023 and have been optimizing your service system last year and this year and will probably see results in the next fiscal year. Considering these factors, if you have any insights on whether there is a chance to exceed the 13.3% operating profit ratio achieved in 2023, please share them. I would also like to hear about the effects and timing of the S&S system optimization.

Miyaki: We are indeed working on optimizing our S&S system and improving profitability in our existing business areas as a whole, but to be honest, I am not sure if the results of our efforts will be seen from 2025.

Of course, I believe we are already seeing some results, but I think that the full return on our efforts will be seen in the period of the next medium-term management plan.

In 2023, we anticipated that the special demand for S&S following the COVID-19 pandemic would decline, but it actually continued. While the profitability of new products improved, the significant impact came from the high proportion of more profitable S&S orders, which we have already disclosed, but it was exceptionally high in 2023. This proportion is expected to decrease slightly, so the operating profit margin target for this year is set at 10%.

For 2025, we will continue to improve the profitability of both new products and existing S&S. However, since market demand for S&S is a major factor, it is still uncertain how the next year will turn out. Currently, we are aiming to achieve an operating profit margin of over 12%.

Questioner 2: My first question is about progress on the optimization of global sites.

On page nine, it says that you are in the process of opening and closing bases. I understand that you have given us a recent update, but I would like to know how far along the process is

compared to your plan, what number you are at currently, etc. If you could, please share your current thinking regarding this.

Miyaki: First of all, I believe that we have achieved much of the optimization that was planned in the medium-term management plan for this year. For example, in Abu Dhabi and Saudi Arabia, there were some areas where we really had to go a bit faster because of licensing issues, but as far as initiatives are concerned, we have basically been able to proceed in line with the plan we made for E-Plan 2025.

As to your question regarding if we are near completion or not, the first thing we consider is our customer's movements. In that sense, there is probably no end to optimization, but we are particularly watching movements in Europe and the US.

The US is now an exporter of oil and LNG, which is a significant change from five or ten years ago. Thirty years ago, when petrochemicals and oil and gas were developing, Europe and the United States were the main centers, and our S&S bases were also concentrated in those regions. Currently, the focus has shifted to Asia, the Middle East, and India, leading to the integration of service bases, and establishment of new ones.

As customer activity increasingly trends toward Asia and the Middle East, we plan to adjust our next medium-term management plan and beyond by observing actual demand and customer movements. We will expand where necessary and integrate where appropriate. Rather than having a definitive end, we understand this as a highly dynamic process.

Questioner 2: I believe that you have factored costs into your plans for consolidation, etc. to a certain degree, should we consider the peak to have passed? Or should we assume this same level of spending to continue for the next few years? Please share your current thoughts.

Miyaki: As shown in the materials, we have recorded the expense of closing the bases in Canada and Guatemala. Going forward, as I explained earlier, if further reorganization of the bases is necessary, for example, then there will be a certain amount of cost involved in integrating the service centers.

We cannot say for sure what will happen next year or the year after, as we are still looking at the situation of our customers, but we think that expenses will be incurred in accordance with the dynamism I mentioned earlier.

Questioner 2: Secondly, I would like to confirm whether the current organizational structure is appropriate for Ebara's product development and market expansion efforts across various industries.

Given that there are certain common technologies and components, is it reasonable to assume that these can be adapted for diverse products such as ammonia, SAF, and hydrogen? Or should we expect that there are still parts that need to be developed separately, which would incur initial costs?

With the recent organizational changes, has this process become more efficient, or is it relatively straightforward because of the commonalities? I would like to understand whether Ebara's involvement in various industries such as hydrogen, LNG, fertilizers, and petroleum refining will create synergies.

Miyaki: First, regarding our organizational transition to segments based on target markets, we have found more efficient sales success than before the transition, when our segments were divided by product and compressors/turbines and pumps were operating separately.

Before our transition, for example, even though customers for cryogenic pumps and compressors and turbines are the same, they would have to deal with two different business segments within Ebara to make orders. By combining these businesses customer satisfaction regarding new products and S&S has increased.

In the integration of custom pumps, we believe that we have achieved more efficient responses not only in the sales of new products but also in S&S, based on customer feedback. Our core is turbo machinery, rotating machinery, and materials, and we are now able to provide comprehensive services to Energy Company customers efficiently in a way that creates more synergies.

From a broader perspective, this is also something being discussed internally, the introduction of the CxO system creates centrifugal forces in our businesses facing our target markets. Roles like the CTO can standardize technical aspects, IT, HR, and finance, leveraging the centripetal force of the CxO system while maintaining customer focus. Especially in terms of technology, we have a system in place to develop Ebara's core together. Of course, the current system is not permanent and will need to adapt to customer changes, but I believe it creates significant

synergies and new value.

Questioner 3: I have two questions.

Can you share some insight as to why the bases in Canada and Guatemala were closed for being unprofitable? Is there any chance the sites currently being expanded upon now could meet the same fate?

Miyaki: The answer is quite simple. Unprofitable bases are where customer demand has disappeared.

In the past, Canada and places like Chicago and Philadelphia in the US were major areas for petrochemicals. However, production has shifted to the Gulf region and with the rise of shale gas, these areas are no longer the centers of petrochemicals or oil and gas, leading to the closure of customer plants.

For Guatemala, it was also in response to the disappearance of customer demand.

Questioner 3: My second question is whether there has been any change in the market share of the energy business as a whole due to the various measures and initiatives you have undertaken. If it is easier to understand the change in market share if we look at S&S alone, I would ask that you to expand on that and go in depth regarding changes over the past three years.

Miyaki: I do not think our market share has changed dramatically positively or negatively based on any specific initiatives we have taken.

Of course, by handling both compressors and turbines and pumps, we have improved our S&S accessibility to our customers, and we have been able to receive many more projects and opportunities. However, we are not yet able to confirm how the market share has changed based on that.

Session 2: Energy Company Business Overview and Initiatives for a Decarbonized Society

Respondents:

Teruaki Tsukamoto (Tsukamoto)

Division Executive, CP Hydrogen strategic business unit

Questioner 1: I have two questions.

First, could you tell us about Ebara's presence in the hydrogen business overseas and the status of building relationships with customers, particularly in China and Europe? On page 3 of the materials, it was mentioned that the market is expected to grow in the future. To what extent are you getting customer inquiries or are involved in negotiations?

Tsukamoto: As I mentioned earlier, Europe is an area where the market is developing rapidly and becoming more active. While this is driving the market, the construction of supply chains for future imports is also progressing significantly behind the scenes.

We have visited Europe many times. Several corporate alliances, consisting of groups connecting specific countries, are building schemes from "make" to "transport" and "use." We are making concrete approaches to these customers with our world-first hydrogen pumps, compressors, and blowers, as these technologies are essential for constructing the supply chain. While I cannot disclose the names of the companies involved, I believe that the negotiations are likely to result in actual deals.

On the other hand, China, of course, is a region expected to grow significantly, but currently, there are few projects using liquid hydrogen. The main focus now is on using hydrogen derived from industrial gases. However, we expect rapid growth over the next few years and are closely monitoring the situation. We plan to make solid approaches from next year onward.

Questioner 1: My second question is about the profitability and added value of the hydrogen business.

During the 2022 IR Day, it was mentioned that the goal is to ensure the profitability of the entire energy business. Could you provide an outlook on profitability, considering that initial development costs will likely be incurred, for 2025, 2030, and 2040?

Tsukamoto: Thank you very much. As you pointed out, we are now moving forward with the expectation of market and business growth in 2030, 2040, and 2050. We will focus on building Ebara's brand power rather than on immediate profitability.

However, even so, we would like to add value in new areas and provide such services. For example, for profitability, we need to think carefully about what value our customers will find in our products and solutions. We are building a business model and providing products that are even more profitable than the current existing businesses.

As for when that will be, we aim to achieve a sales and business scale exceeding JPY30 billion by the year 2030. By then, we aim to recover our investments and become self-sustaining.

Questioner 1: Just to confirm page 10 of the materials, if you secure sales of over JPY30 billion in 2030, can we expect higher profitability than existing businesses?

Tsukamoto: Rather than just achieving the JPY30 billion yen target, we aim to provide highly profitable, value-added products. We intend to achieve an operating profit margin higher than our current level by 2030.

Questioner 2: My first question is somewhat related to the previous one. On page 17 of the materials, the hydrogen business revenue target is set at over JPY30 billion and JPY200 billion. Two years ago, during the IR day, there were no specific product categories.

This time, you have categorized liquid hydrogen pumps and liquid hydrogen plunger pumps separately. Is this representative of some sort of change from two years ago?

Also, regarding profitability, I understand that Ebara's business generally has high profitability in S&S, which drives segment profit margins. While it is unclear how much S&S business there will be in 2030, can we expect high profitability from 2030 onwards? It also depends on which segment bears the development costs. Could you elaborate on this?

Tsukamoto: Regarding the first question, there have been some minor changes, but the overall outlook has not changed significantly from two years ago. We did not specify this clearly last time, but we have made investments for performance testing, so we shared a bit more this time.

Regarding S&S profitability in 2030, many global projects are aiming to start operations in 2029, 2030, or 2031. It takes two years for construction and another two years for manufacturing, so we see this as the right time to execute these plans.

To answer directly, we expect S&S profitability to start from 2030.

Questioner 2: My second question is about Ebara's business environment. Which regions do you see as promising, and who are competitors?

As discussed in this presentation, in the "transport" phase of hydrogen, there are cases where it is transported as liquid hydrogen, and if it can be refined within the region, it might be more rational to transport via pipelines. I understand that unnecessary conversion should be avoided to maintain energy efficiency.

From this perspective, should Ebara focus on business opportunities in regions like Japan and Europe, where importing liquid hydrogen is more relevant, rather than regions where hydrogen is transported via pipelines?

Given that emerging business opportunities will naturally attract other companies, who are the potential competitors?

Tsukamoto: Regarding your first question, the most promising regions, I think they are changing rapidly, but currently, Europe, Australia (as a manufacturing country), and the United States are particularly promising. From the perspective of liquid hydrogen, South Korea, like Japan, is an LNG importing country and is quite active in this field.

In any case, we would like to tie up with companies that are capable of executing specific projects, so we see Europe, the US, and Australia as promising regions.

Competitors vary by product. For example, the centrifugal liquid hydrogen pump (shown in the top left photo on page 4 of the materials) is a high-capacity, high-pressure pump that Ebara is leading in developing. We believe no competitors have reached the level of Ebara's product development and reliability.

However, several companies are likely to follow. While I can't name specific companies here, we believe there are one or two in Japan I can think of, as well as others.

There are already two or three overseas competitors for reciprocating plunger pumps, however customers are still not fully satisfied with their products due to various technical problems and S&S issues. So, there is still a chance for Ebara.

Regarding the last question about efficient regional transport and the opportunities for liquid hydrogen import/export, some regions will proceed with pipeline supply where feasible. Ebara Group also has compressors, so we consider regions with pipeline construction as part of our business domain.

However, the reality is that building a comprehensive pipeline system is not something that can be done in ten or even 20 years. To do this, hydrogen needs to be converted into a low-capacity liquid so that it can flow into a certain hub, to be used at that hub. We expect markets with both pipelines and liquid hydrogen to emerge, and we intend to follow these developments closely.

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