

Main Substance of the Question and Answer Session

Separator Business Briefing, held on April 25, 2024

Asahi Kasei Corporation

Participants

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Questions and Answers

Questioner 1: You have set a target of 160 billion yen in operating income and an operating margin of more than 20% for FY 2031. What is your current level of profitability and how do you intend to improve it? Also, what are your thoughts on the cost competitiveness?

Kudo: Since this project is planned as a joint venture with Honda Motor Co., Ltd. and we have several other customers, we believe that there is a high probability of achieving our goals.

Currently, the performance of this business is struggling and operating income is in a situation close to breaking even, but the primary reason for this is low operating rates. Although operating rates are recently increasing, there is still an impact of high-cost inventory from low-rate operation.

We expect operating income to improve significantly from FY 2025 onward. This is underpinned by the ongoing evaluation of our separators by multiple customers, including Honda, in anticipation of our expansion into North America. We have already received certification in some projects, and we expect the operating rate of the Japanese sites to increase steadily until 2027.

After 2027, we anticipate steady sales of separators produced at our North American plant. By that time, it will be important for the Japanese and Korean markets to have been established, ensuring sufficiently high operating rates at our Japanese sites.

Matsuyama: Regarding cost competitiveness, it is difficult to make a simple comparison based solely on each company's announcement, but we believe we are sufficiently competitive. Although the investment amount may appear somewhat large, this includes common elements for the second and third phases.

As for the first phase, the most important point is to start up the plant as planned and build a track record. In this investment, we expect to receive financial support from the federal government of Canada and the provincial government of Ontario, as well as support under the memorandum of understanding between Canada and Japan concerning battery supply chains. We have also received various other forms of support such as prompt approval processes and coordination with local construction contractors. We also plan to send employees from Japan.

Questioner 2: I would like to ask about profitability. As of FY 2031, do you expect ROIC for this investment to exceed your company's hurdle rate?

Horie: ROIC for the Hipore business is currently below 5%, but we assume it will be 15% in FY 2031, when sales are expected to reach 160 billion yen. We intend to achieve the capital efficiency expected by shareholders after accounting for various factors including subsidies. The operating margin is assumed to be more than 20%, and in fact, we are assuming a higher profitability.

Questioner 3: In the figure on the left side of page 11 of the presentation material, it appears that your company's actual investment portion is quite restrained within the approximate total investment of 180 billion yen. On the other hand, based on the amount of the capital increase of the sub-subsidiary announced yesterday, I had assumed that the direct investment portion by your company would be much larger. What is the relationship between the capital increase and this figure?

Also, which is expected to be larger, the investment from Honda or the financial support from the federal government of Canada, etc.? Is the effect of this support a major reason for the projected high operating margin of more than 20%?

Horie: First, Asahi Kasei Battery Separator Corporation, a dedicated company for separator business in Japan, will receive 28 billion yen in capital from the Development Bank of Japan (DBJ) through the issuance of preferred shares. We announced yesterday that E-Materials Canada Corporation (EMC), a Canadian separator manufacturing company, would increase its capital by 112.4 billion yen, resulting in capital equivalent to 120.8 billion yen. This capital increase will be funded by the investment from DBJ and by ourselves. In the future, when EMC becomes a joint venture with Honda, Honda will make additional investments in EMC apart from this capital increase.

In addition, there will be financial support from the federal government of Canada and provincial government of Ontario, etc. As a result, we expect our direct investment to be less than half of the approximate total investment of 180 billion yen.

Matsuyama: The amounts of Honda's investment and financial support, etc. from the governments are currently under discussion. We plan to make EMC a joint venture with Honda, but Asahi Kasei will hold the majority. As for the financial support, in addition to subsidies from the federal government of Canada and the provincial government of Ontario, there is a possibility that tax credits will be applied to some of the capital investment due to the new tax credit system in Canada.

Kudo: I think that the credibility of our performance forecast will be the issue, but we have received inquiries from many customers regarding our expansion into North America. We are considering various forms including long-term contracts and capacity rights agreements, and the joint venture with Honda is one of them. Although there are various risks, we expect ROIC of 15% in FY 2031, based on a strict price and market outlook.

The biggest challenge is to launch the plant as planned in 2027. If this is delayed, ROIC and IRR will be worsened accordingly.

Questioner 4: I understand that you plan to restrain your investment amount, but can you produce and sell the products for sure even if the external environment changes? You mentioned long-term capacity rights agreements, but do you have any arrangements for sales with your customers?

Also, you explained that the production speed is approximately twice that of the industry standard, but are some of your competitors achieving the same level of production speed as you? Please tell us about Asahi Kasei's superiority.

In addition, even if you can expect steady sales for the production in North America, is there any risk that the operating rate of the Japanese sites will be low if the supply-demand balance for separators worsens?

Matsuyama: Regarding sales, we are basically considering long-term contracts and capacity rights agreements, and there are some projects for which we have already been shipping from Japan in anticipation of supply after the North American site begins operations. For customers who want to produce batteries in North America, it is valuable for us to be the first wet-process separator manufacturer to enter into North America, and we would like you to understand that highly assured arrangements are underway.

The North American LIB separator market is estimated to be about 5 billion square meters per year around 2030, and even a conservative estimate is about 3 billion square meters per year. The production capacity of our first-phase investment is approximately 700 million square meters per year as coated film, and considering the advantage of production in North America, we believe that this volume can be sold out for sure. We have also received strong inquiries from customers other than those with whom we are already in dialogue, and we expect a high operating rate.

We consider our production speed to be superior to that of our competitors. We have achieved high production speeds for both base film manufacturing and coating, and we believe that we are always ahead of our competitors, even as their technologies are improving.

Regarding the operation of the Japanese sites, it is expected that shipments from Japan to North America will be made in 2025-2026, prior to the start of operations at the North American site, but after that, supply will be made to meet the demand that is rising in Japan, South Korea, and other countries.

Questioner 5: The figure on the left side of page 14 of the presentation material shows a significant increase in the sales volume of Hipore toward 2025. Is this due to an increase in sales to North America, or does it include consumer electronics applications and sales to Europe, etc.?

Also, with the long-term contracts and capacity rights agreements that you explained, will supply volume and prices be guaranteed even if demand drops? Demand will certainly grow in the long term, but there is a risk of large fluctuations in demand in the coming years. How will you manage the risk?

Matsuyama: Increase in sales volume through 2025 will be mainly to North America. Regarding risk management, in recent years, especially since the announcement of the U.S. Inflation Reduction Act (IRA), the LIB industry has seen an increase in future-oriented dialogue among automakers, battery manufacturers, and materials suppliers, and there is a movement across the industry toward establishment of the LIB market. In our expansion into North America, we have been able to proceed with agreements with our customers, including long-term contracts, while taking into account the risks of both parties.

Kudo: Regarding the first-phase investment, we believe that we can sufficiently utilize the production capacity and sell out even if the North American market grows only to 3 billion square meters per year around 2030. On the other hand, when the second and third phases of investment are implemented in the future, a buffer will be needed for customer needs in order to maintain high operating rates. For this purpose, we believe that not only vertical collaboration but also horizontal collaboration will be necessary to establish relationships where capacity is mutually shared between competing companies. Although there are issues regarding horizontal collaboration, such as antitrust laws, we are closely examining the best way to ensure high operating rates, including such strategic initiatives.

Question 6: By receiving investment from Honda, will there be any restrictions on supplying separators to other automakers? Also, are there any possibilities of accepting investments from other automakers in the second and third phases of investment?

Kudo: There are no particular restrictions on supplying our separators to other automakers. While steadily supplying to Honda, we will also provide our separators to other customers.

As for the second and third phases, it will depend on the configuration, but the Canadian separator manufacturing company is planned to be a joint venture with Honda, and we think it is unlikely that other automakers will participate in it. If it's in a different form, such as a capacity rights agreement, it would be quite conceivable.

Questioner 7: The prices assumed in the earnings outlook on page 13 of the presentation material seem quite high compared to the current prices in the Chinese market, etc., given the assumptions for production capacity and exchange rates. Are the prices agreed to some extent through long-term contracts, etc., and are the risks due to fluctuations in the market and competitive environment

hedged? Or do you think that you can differentiate your products by their performance? And how much of the 180 billion yen investment is subject to amortization?

Kudo: Regarding prices, we are in discussions with customers for long-term contract conditions, taking into account the risk of fluctuations in market conditions and other factors. Prices of Chinese manufacturers have been achieved in part because of the support provided by Chinese government. Although there is a possibility that Chinese competitors will enter the North American market in the future, we will build relationships with our customers where price is not the only important factor, by providing separators that contribute to improving the service life and reliability of automotive batteries, and working together to increase the asset value of batteries and electric vehicles. We believe that enhancing the value of batteries is essential for the spread of electric vehicles, and we have been engaged in the development of separator technologies that will contribute to this objective. We believe that contributing to the enhancement of battery value through our separators serves as a form of risk hedging in a sense.

Horie: Most of the 180 billion yen investment is subject to amortization, except for a portion of the financial support from the federal government of Canada and provincial government of Ontario, and profitability calculations are based on that assumption.

Questioner 8: You explained that the biggest challenge is to launch the first-phase plant as planned. Are there any concerns about the coating lines in the construction of the integrated plant? Or are there any problems in terms of employment or environmental compliance?

Matsuyama: We have no major concerns about the operation of the production line itself, as we have a track record. On the other hand, since we are starting up a new plant in a new location with new personnel, etc., we can anticipate various risks of delays, such as government approval and construction arrangements. We have received a great deal of support from the provincial government of Ontario, including approvals, and we have selected a construction company with a strong local network to hedge the risk.

There is also a risk in terms of whether the yield rate in the initial stage of operation will be the same level as that of the Japanese sites. With this in mind, we are considering a start-up structure for the North American plant and will take advantage of government subsidies for initiatives such as providing training for Canadian employees in Japan.

Questioner 8: By integrated plant, do you mean that all processes from base film manufacturing to coating are carried out on a single connected line?

Matsuyama: It means to have the entire process of base film manufacturing, coating, and slitting in the same building on the site. We are currently discussing the several patterns whether to operate them as a single line or separate the base film manufacturing and coating processes.

<p>Note: The forecasts and estimates mentioned in this document are dependent on a variety of assumptions and economic conditions. Plans and figures depicting the future do not imply a guarantee of actual outcomes.</p>
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