

## Summary of the Question and Answer Session

### Asahi Kasei Corporation Financial Results Briefing for Q2 Fiscal 2022, held on November 9, 2022

#### Participants:

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Questioner 1: With regard to Environmental Solutions, please explain the large decrease in operating income in Basic Materials from Q1 to Q2, including the impact of the inventory valuation differences. Also, operating income from businesses other than Basic Materials, such as separators, membrane solutions, and synthetic rubber & elastomers, have fallen further, and I think separators have had a significant impact. What are your medium-term plans for improvement?

Takahashi: In Basic Materials, shipments were relatively firm and terms of trade were favorable in FY 2021, but demand declined significantly in FY 2022, resulting in decreased shipments. There was a positive impact of inventory valuation differences in Q1, but not in Q2. That was also a major factor in the decline in operating income.

Onodera: In the separator business, shipments of LIB separators for automotive applications were sluggish, especially in Q1, due to supply chain disruptions caused by the semiconductor shortages and the Russia-Ukraine situation, etc., but this factor will improve in Q3 and Q4, and recovery is expected from H1 to H2. However, we will keep a careful eye on the situation of the shortages of semiconductors and materials for vehicles.

As for consumer electronics applications, we significantly increased shipments in H2 2020 and H1 2021, but according to our customers, there seems to be excess inventory buildups in the supply chain, especially in China, not only for separators but also for end products such as smartphones. However, the situation appears to be improving from H1 to H2, and we expect a recovery in the future.

We believe that the decline in shipments bottomed out in H1 2022, and expect an increase in H2 and through FY 2023, including increased adoption of our separators.

Questioner 1: It appears that the separator business is not making much profit. Do you think that is not because of falling prices due to increased competition, but because of lower shipments and capacity utilization? And once they are improved, will profitability return?

Onodera: That is our view. In H1 2022, the impact of the decline in shipments due to the factors I mentioned earlier was significant. In the market environment, all manufacturers are facing severe price demands, and we will respond to these demands with cost reductions.

Questioner 1: Critical Care seems to be improving slightly. I would like to know the recovery status of LifeVest wearable defibrillators and other defibrillators, as well as the quantitative scale of each of the various factors contributing to the year-on-year operating income decline. Also, what factors will be eliminated toward FY 2023 and what other factors, if any, will contribute to the increase in operating income?

Otsubo: As shown in the operating income increase/decrease chart on page 11 of the presentation material, in Critical Care, the sales volume factor was negative 3.9 billion yen and the “others” factor was negative 5.8 billion yen year-on-year.

The sales volume factor was mainly due to a decline in defibrillator shipments caused by difficulties in procuring parts. However, shipments have been improving each quarter from Q4 to Q1 and Q2, and we expect a steady recovery in H2 for a return to the growth trajectory.

On the graph of the same page, the three items were shown for Critical Care, which explain the “others” factor: the first is the previous year’s positive effect from a surge in demand for ventilators; the second is a negative impact from consolidation of Itamar Medical Ltd., such as goodwill; and the third is the previous year’s positive effect of the accounting treatment on the acquisition of Respicardia, Inc. These three factors had a total negative impact of about 10 billion yen. This was partially offset by positive factors such as foreign currency translation adjustment, reduction of SG&A expenses, and improvement of LifeVest’s reimbursement status, resulting in a negative 5.8 billion yen impact of “others” factor.

In H2, the impact of these factors will be much smaller, although there will still be some impact from the consolidation of Itamar. Operating income growth is expected to recover moving forward.

Questioner 2: With regard to the Health Care business category, operating income declined significantly from Q1 to Q2. Is this due to semi-annual seasonality associated with progress in clinical trials, etc.? Are there any other factors? Also, toward H2, I would like to ask about the impact of the expected launch of a competing product for Teribone osteoporosis drug, and the status of the pharmaceutical pipeline.

Sato: The sales of main pharmaceuticals are shown on page 35 of the presentation material. In H1 2022, as well as Teribone, sales of Kevzara treatment for rheumatoid arthritis and Plaquenil immunomodulator were firm. As for Teribone, the autoinjector performed well although the shipments did not grow as much as expected due to COVID-19 impact, and the conventional formulation was positively affected by the later-than-expected launch of a generic product.

To explain the H2 situation, sales of Plaquenil, which increased by 2.7 billion yen year-on-year in H1, is not expected to grow as much in H2 year-on-year, considering that the drug was launched in October 2021.

Although sales of Teribone are expected to decline from H1 to H2, we expect full-year sales to increase year-on-year. There are two kinds of formulation for Teribone; one is the autoinjector for self-injection and the other is the conventional formulation for weekly injections at clinics, and the autoinjector already accounts for more than 50% of total sales. Although a generic drug was launched against the conventional formulation, the impact on the overall Teribone brand is expected to be limited. We are also taking advantage of the strengths as a manufacturer of the brand-name drug through MR activities, e-promotions, etc., and at this point, the switching to the generic drug is within

the range we had expected.

A competing drug is expected to be listed on the NHI drug price list in the near future, but continuous treatment is important for osteoporosis, and we will continue to focus on expanding Teribone autoinjector, which is a twice-weekly injection and less burdensome for patients.

The pharmaceuticals business overall is expected to achieve its initial full-year forecasts for both net sales and operating income.

Questioner 2: Given you are forecasting the year-on-year increase in sales of Teribone for the full year, I guess you expect sales decline from H1 to H2 will only be about 2 billion yen. Does that mean, even after factoring in the impact of the generic drug, you still expect sales of Teribone to remain above 18 billion yen in H2, so it's not much of a concern?

Sato: That is correct. Although we will be affected by the generic drug and other factors in H2, we expect sales to increase year-on-year for the full year.

Questioner 2: I would like to ask about Homes. With regard to overseas operations, you said that the operating income of the North American business for the full year has been upward revised from the initial forecast. Is there any negative impact of rising interest rates? Also, is the downward revision in the order-built homes due to orders not reaching the plan? I believe that your approach for the domestic business was to emphasize profitability and sales. Am I correct in understanding that you are managing profitability well amid soaring material prices?

Kume: In the North American business, there are concerns about inflation and rising interest rates in the U.S. We expect a slight decrease in construction volume in H2 due to housing starts adjustments by our client builders from August onward. However, a year-on-year increase in operating income for the full year is forecast thanks to the high operating income level maintained in H1. We have operated in Arizona for some time, and recently acquired Focus companies which operate in Nevada. Both states have large population inflows from other states and a high population growth rate. Demand for residential construction will remain firm, due in part to businesses entering these areas. While continuing to monitor the current decline in housing starts, we believe this will be temporary and recover soon.

In domestic order-built homes, orders received in H1 declined about 7% year-on-year due to a lower-than-expected number of orders for unit homes, while orders for apartment buildings were strong. For H2, we expect a 2% increase year-on-year. Although soaring material prices have put pressure on operating income, we are working to offset this by further promoting cost reductions, productivity improvements, and more efficient construction, as well as by increasing larger and higher value-added units. The full-year operating income for domestic order-built homes is forecast slightly lower than the previous year, as the impact of the steep rise in steel and other material prices is now expected to be several billion yen more than initially projected.

As for real estate, we expect operating income growth from H1 to H2, as deliveries of condominium units are concentrated in H2 this year.

Questioner 2: Operating income in the real estate fell to 7.5 billion yen in H1, which is a large drop compared to sales. Is there any particular concern?

Kume: This is due to the extremely small number of condominium units delivered in H1 and the concentration of units of large condominiums to be delivered in Q4. For the full year, we expect operating income growth year-on-year.

Questioner 3: I would like to ask about the Health Care business category. Looking at page 35 of the presentation material, sales of Envarsus XR immunosuppressant were strong in H1 with a 31% increase year-on-year. Have the restrictions on MR activities due to COVID-19 impact now been eliminated? Please also provide more details on the background to the strong performance, such as trends in the number of kidney transplants and expansion of the market share, as well as your forecast

for the sales growth rate for the full year.

Otsubo: The sales growth rate of Envarsus XR in H1 was in line with our initial forecast. Slight slowdown in growth in Q2 compared to Q1 is due to shipment concentration in Q1, and is within our expectations for H1 as a whole. Growth slowed in FY 2021 due to restrictions on MR activities, etc. due to COVID-19, however, the number of kidney transplants has been steadily recovering from FY 2020 to FY 2021, and this trend is continuing in FY 2022. The restrictions from COVID-19 impact have now been largely eliminated. Market share expansion is also steady. The ratio of prescriptions to new kidney transplant patients is estimated to be around 30%, which is higher than initially expected at the time of acquisition. For the full year, we expect a sales increase of around 30% year-on-year, in line with our initial forecast.

Questioner 3: In the new MTP announced in April, there was an explanation that the “Exit” businesses would be downsized or sold to other companies as quickly as possible. Although the transfer of the pellicle business to Mitsui Chemicals, Inc. was announced in May, there does not appear to have been any particular progress since then. We understand that this is not an overnight process, but is there any progress including preparations or negotiations that have not been publicized? Or are there difficulties amidst significant changes in the external environment? Also, do you expect to be able to announce any progress by the end of FY 2022? Please tell us about the progress of the business portfolio transformation and your determination moving forward.

Horie: Our business portfolio transformation has two perspectives: one is the reform of Strategic Restructuring Businesses, which involves a strategic review of the “Exit” businesses, and the other is a Fundamental Business Structure Transformation.

Currently, the “Exit” businesses are progressing smoothly, including negotiations, etc. Although some will take more time for detailed arrangements than others, we are not in a situation of difficulty due to environment changes. We intend to bring about results as quickly as possible, and believe that some of them will be ready for announcement by the end of FY 2022.

As for the Fundamental Business Structure Transformation, although I cannot give you specific details, we have begun negotiations and are making steady progress with the initiatives set forth in the MTP. However, this will take some time.

Question 4: The quarterly performance is shown on pages 41-42 of the presentation material. Please elaborate on the trends in Mobility & Industrial from Q1 to Q2 and H2, including the status of automotive-related products such as engineering plastics and performance coating materials.

Yamaguchi: With regard to automotive-related products, the impact of the semiconductor shortages has been more prolonged than initially anticipated, and shipments have been lower than expected. The main automotive-related products include interior materials and engineering plastics. Interior materials have many European and U.S. customers, whose vehicle production bottomed out in 2021 and is gradually recovering in 2022. Engineering plastics and performance coating materials have many Japanese and Asian customers, whose performance was relatively firm in 2021, but is slowing down slightly in 2022, resulting in some difficulties in our businesses in H1.

We expect the semiconductor shortages to gradually be resolved over H2, but there are still shortages of older types of semiconductors, called legacy semiconductors. As vehicles cannot be built if even one part is missing, some estimate that the situation won't be solved until FY 2023 or so. The recovery will be gradual but not strong. In addition, demand is declining overall, including non-automotive related products, and there are some products for which it is difficult to improve terms of trade.

Questioner 4: I would like to ask about Environmental Solutions. You explained that the impact of inventory valuation difference was a negative factor from Q1 to Q2. Please tell us your thoughts for H2, as well as Q2 results and H2 assumptions for acrylonitrile (AN) price spread.

Takahashi: Operating income for Environmental Solutions was 2.4 billion yen in Q2, of which Basic Materials accounted for 1.2 billion yen. As explained earlier, there was a positive impact of inventory valuation difference in Q1, but that was eliminated. The business is also affected by declining demand from 2021 onward and other factors. Toward H2, we expect shipments to gradually recover, although the overall demand situation is still uncertain. The separator business is also expected to improve as explained earlier, but Environmental Solutions as a whole is expected to see a decrease in operating income due to worsening terms of trade and elimination of inventory valuation gain in Basic Materials.

As for AN price spread, Q2 price averages were \$1,628 per ton of AN, \$887 per ton of propylene, both down from Q1, for a spread of \$741 per ton, which was not a large deviation from our initial assumption of around \$750 per ton. The AN market prices fell sharply in October, bringing the spread down to around \$600 per ton. AN is assumed to be \$1,550 per ton in Q3 and \$1,600 per ton in Q4. Propylene is expected to be \$850 per ton in both Q3 and Q4, for a spread of \$700 per ton in Q3 and \$750 per ton in Q4. The spread is expected to narrow slightly from H1 to H2.

Questioner 4: Please also let us know the capacity utilization of AN, as well as the H1 results and H2 forecast for the shipments index of LIB separators.

Takahashi: AN capacity utilization was around 80% since the middle of Q2, but due to the significant impact of declining demand, it has dropped to around 70% at present. As demand is still uncertain, we expect to continue operating at this level for some time.

Onodera: The shipments index for LIB separators based on the volume in Q1 2013 as 100, the results for H1 2022 was 313. In H2, demand is expected to recover for both automotive and consumer electronics applications, and we forecast shipments to be increased by about 40% compared to H1. Sales of both wet-process and dry-process will grow. However, we continue to monitor the risk of a prolonged vehicle production reduction due to shortages of semiconductors, and a decline in demand for consumer electronics applications due to the global economic slowdown.

Questioner 5: With regard to Digital Solutions, operating income declined significantly from Q1 to Q2, and I think this may be due to the impact of the smartphone production cutback in China, etc. What is the status of electronic materials and electronic devices, respectively? Also, you expect an improvement in H2, but I believe that there is a tendency for operating income to decline in Q4 due to seasonality. What is the background to the recovery, including the progress of inventory adjustments, and what about the response? Please also let us know the status of alternative production of electronic devices?

Igarashi: Digital Solutions was relatively strong in Q1 due to the brisk semiconductor market, but the market slowed down slightly in Q2, especially in China, and smartphone-related demand in particular declined. The same trend was seen for electronic devices and electronic materials.

From H1 to H2, we expect a gradual recovery in smartphone-related demand in China and expect operating income growth.

Questioner 5: The semiconductor market was strong until Q1, but it has slowed down considerably. Given the current market conditions, it seems difficult to expect a recovery in H2. Are there any measures for improvement unique to your company or any response to the increase in orders?

Igarashi: We see the semiconductor market as a whole is deteriorating slightly from Q2 through H2. However, semiconductors have various applications, and we recognize that our electronic devices and materials have strengths in applications where the decline is less severe than the overall average. With these products, we hope to minimize the overall decline.

Questioner 5: With regard to LIB separators, you are expanding production capacity in Hyuga City, Miyazaki Prefecture, with a capital expenditure of approx. 30 billion yen, and you are also making capital investment in facilities in North Carolina in the U.S. The amount of investment is quite large,

but on the other hand, on the customer side, the specifications of batteries have shifted to the 5th or 6th generations, and I have the impression that the components and raw materials have also changed significantly. Are you going to proceed with the capacity increase according to the original plan? Also, the U.S. is moving to promote domestic production of batteries. Is there a plan to produce not only dry-process but also wet-process separators in the U.S. as part of your strategy?

Onodera: The major capital investment projects are shown on page 39 of the presentation material, where the capacity increase projects of LIB separators are included. In Japan, we are proceeding with two projects as scheduled, one is in Moriyama City, Shiga Prefecture, and the other is in Hyuga City, Miyazaki Prefecture, with completion planned for 2022 and H1 2023, respectively. For the project in North Carolina, the completion schedule was previously stated as FY 2022 or later, but has now been changed to FY 2024 or later. The project was announced in 2018 based on the assumption that demand for dry-process in batteries for energy storage systems would grow significantly, but changes in conditions have pushed back the sales growth.

As for the move in the U.S. toward domestic battery production, the Inflation Reduction Act was enacted on August 16, 2022, but the details are not yet clear. There can be various aspects to the impact of this act. Positive effects for us include that the U.S. electric vehicle market will expand due to subsidies, etc., and that vehicles employing battery components from foreign entities of concern will not be eligible for the subsidies. On the other hand, as the battery supply chain is being built in the U.S., we believe that various factors will emerge. We are currently considering business development in the U.S., taking into account the government policies, the long-term demand outlook based on the policies, and requests from our customers. We have a dry-process separator business base in the U.S. and are working to expand it, too.