Minutes of Briefings on Operating Results for 3Q FY2021

(for analysts and institutional investors)

Corporate Communications & Investor Relations Div.

[Overall company]

Q: You have already achieved the full-year plan with net income of ¥129.0 billion, but do you expect any extraordinary losses (ie, other expenses), etc. in 4Q?

A: In this earnings forecast, we have only revised net sales and operating income, and have not made any changes to the outlook for other income and expenses and tax expenses. This is because we believe various accounting adjustments will be made in 4Q as part of full-year close. Up to 3Q, there were pluses such as from other income and expenses, etc. However, in addition to trends in forex rates and energy prices, 4Q tends to see intensive break down and removal and repair costs associated with capital investment. Since the amount of taxes and tax assets will be finalized in 4Q, the lines up to net income have not been revised significantly this time. It does not mean that a large negative is expected in any particular item.

Q: All segments are expected to remain flat from 3Q to 4Q. How do you interpret this?

A: In the Glass segment, we expect the situation for architectural glass to remain favorable, although we are concerned about the price of natural gas. On the other hand, automotive glass sales are expected to remain at the same level as the situation remains challenging. In the Electronics segment, we expect the cost of glass substrates for LCDs to increase slightly, but we expect the demand for electronic materials to grow since 4Q is the high-demand period. In Chemicals, Fluorochemicals/specialty and Life Science tend to generate the highest profits in 4Q, and chloralkali is also experiencing high prices. Therefore, we expect to remain flat in 3Q and 4Q, but it is safe to assume this is slightly conservative.

Q: What are the factors behind the expected increase in profit of ¥5.4 billion in strategic businesses from 3Q to 4Q?

A: Q4 is the most profitable period for both Electronics and Life Sciences, and both are expected to grow. We believe we can achieve ¥55 billion for the full year with certainty.

Q: You have exceeded the sales and operating income forecasts in the new medium-term management plan announced in February. Excluding the impact of the chemicals market, which businesses are making good progress?

A: The breakdown of the ¥160 billion in operating income for 2023 in the new mid-term management plan was ¥33 billion for Glass, ¥40 billion for Electronics, ¥85 billion for Chemicals, and ¥2 billion for Others. Each segment was close to its target. Despite the very poor earnings in automotive glass, the Glass segment is making a very respectable showing, with an operating income forecast of ¥30 billion for the current fiscal year. As for Electronics, the operating income forecast for the current fiscal year is ¥35 billion compared to ¥40 billion in the medium-term plan, so if we look at the period up to 2023, we should be able to generate more profit. In Chemicals, Life Science is growing faster

than expected, and chlor-alkali is now structurally less likely to see a rapid deterioration in spreads. On the whole, I feel we are on track to achieve our target of ¥160 billion in operating income, and that our capabilities are improving beyond our expectations.

Q: What is your outlook for earnings in 2022?

A: It's difficult to comment at the moment, but the chlor-alkali business was very good this year. While it would be overly optimistic to think this will continue next year, I do believe the spread will remain at a wider level than before. The focus will be on whether the decline in the chlor-alkali market can be covered by other areas. We believe we may be able to offset this certain extent due to factors such as the expected recovery in sales of automotive glass, steady growth in strategic businesses, and the elimination of the impact of the facility accident on LCD glass substrates. I think our true capabilities have improved, and we should be able to produce good numbers going forward.

Q: Are you hedging against soaring energy prices? How much and over what period of time are you hedging?

A: We are hedging our major energy sources, heavy oil and natural gas. According to the disclosed sensitivity, a US\$1/bbl rise in Dubai crude oil would have a ¥300 million negative impact on earnings without hedging. Both heavy oil and natural gas have different pricing schemes by region, making it difficult to hedge against all movements. European natural gas is hedged by a certain percentage.

Q: Are there any gains on crude oil hedging in this quarter's results?

A: Yes there are. Since the Company has been hedging for 1 to 1.5 years, gains on hedging are recorded in the current fiscal period.

Q: With energy prices spiking, how much of a cost increase do you anticipate next year versus 2021?

A: That's a difficult question. The price of natural gas, especially in Europe, has been at outlier levels. It will be difficult if the current market situation continues throughout the year. Our earnings tend to be impacted by natural gas prices in Europe and heavy oil prices in Asia. While the crude oil market does not look like it will fall, the natural gas market is difficult to read at the moment. When forecasting earnings for the next fiscal year, we want to consider the best estimates at the time.

Q: Is it possible to pass on energy prices for glass substrates for displays, caustic soda, etc. other than architectural glass?

A: We have basically been able to pass on costs in the prices of caustic soda and other products.

Q: Does the gain of ¥28 billion from the transfer of business mentioned in the *Financial Results* reflect the transfer of the North American architectural glass business?

A: Yes, that is correct. This is the transfer of the architectural glass business in North America.

[Glass]

Q: What is the progress of the price increases for architectural glass in Japan?

A: As we have already announced, we announced a large price increase, and we are basically asking our customers to understand and respond accordingly. We believe the effects will become apparent from next year.

Q: What is the status of cost increases and price pass-through for architectural glass in each region?

A: In Europe, supply/demand is tight, and rising energy prices are being reflected in prices. We have emphasized the impact of prices in Europe and South America, but prices are rising in all regions. The reason behind this is the rising cost of fuel and transportation. We expect supply/demand to tighten further in Japan. In light of this situation, we would like to pass on the cost increase to our prices.

Q: With regard to automotive glass, what is the impact of the reduction in automobile production due to the shortage of materials in the 3Q and what is the outlook for the future?

A: The impact was greater than we expected. We assumed the situation would gradually improve, but it was very damaging in Q3. We explained there was a sales impact of more than ¥10-¥13 billion in H1, but impact on 3Q was more than expected. We believe the situation will improve in 4Q but remain severe. A full-fledged recovery is expected to take until 2023.

[Electronics]

Q: Regarding your view of LCD glass substrates for the next fiscal year and beyond, will the business environment remain firm?

A: We expect the business to remain strong. In the previous fiscal year, there was a large increase in demand for PCs and other products due to the stay-at-home demand caused by COVID-19 pandemic, but there has been no major downturn in the current fiscal year. Demand is expected to remain firm in the next fiscal year as TV inch expansion continues.

Q: What are the volume and price forecasts for LCD glass substrates for 4Q and 1Q of the next fiscal year?

A: There may be some seasonality in the display business, but we don't think there will be any major concerns because the lion's share of the display business is not for PCs but for TVs.

Q: What is the year-on-year comparison of sales of EUV mask blanks in 3Q?

A: It is difficult to say by quarter. We explained sales for the full year are projected to be about 1.5 times higher than last year. It is growing at that level and the 3Q was also healthy. We are making good progress toward our target of ¥40 billion in 2025, and we are not worried.

Q: What is your perception of EUV mask blanks next year?

A: We are confident that we are finally entering a period of widespread use and that our shipments will grow significantly as our customers' utilization rates increase.

Q: What was the status in 3Q and what is the outlook for 4Q for EUV mask blanks, CMP slurries, and IR-cut filters, which are the main products of electronic materials?

A: It is difficult to explain quantitatively, but earnings growth is highest in 4Q for electronic materials operations. Sales and operating income have been increasing every quarter, but customer demand is high in the 4Q. This, combined with the growth in Life Science, should allow us to achieve our full-year target for strategic businesses.

Q: I heard the shortage of semiconductors is affecting the production of semiconductor manufacturing equipment, but what impact has there been on electronic materials operations?

A: Demand for semiconductor-related products itself is very robust. High-end products, in particular, are strong, with no major impact. On the other hand, automobiles and smartphones, which use semiconductors, have been affected. However, compared to the automotive glass business, there has been no particularly significant impact on electronic materials operations.

[Chemicals]

Q: What is the outlook for the chlor-alkali market? What is the background to the rising market prices for caustic soda and PVC resin?

A: Prices have been very high recently. Caustic soda is also known as the rice of industry, and demand for it has been increasing as the COVID-19 pandemic has eased and plant utilization has risen. As a result, supply/demand is tightening, and prices are rising. For now, there are no factors that could cause this situation to collapse any time soon.

Market prices for PVC resin were affected by cold snaps and hurricanes in North America and by electricity and coal shortages in China. With little inflow from outside the region into Southeast Asia and brisk demand from India, supply/demand in Southeast Asia is tight. Looking at the situation in the surrounding regions, the tightness doesn't look like it will ease. Structurally, it is unlikely that spreads will contract to their previous state, and we believe they will continue to be reasonably wide.

Q: How will China's stricter environmental regulations affect the supply/demand for caustic soda and PVC resin?

A: There are two methods of producing vinyl chloride: the acetylene carbide method and the ethylene method. The former accounts for a large percentage of production in China. The acetylene carbide method uses coal as both the raw material and the energy for power generation, making it difficult to increase production. We believe this situation will be positive for Southeast Asian market conditions for a long time.

Q: What is the status of the expansion of chlor-alkali production capacity?

A: We are expanding capacity of Poly Vinyl Chloride by 200,000 tons in Indonesia, which is expected to come on line early next year. After that, we plan to increase capacity in Thailand, but this will take more time

Q: Sales in Life Science have been flat for the past four quarters. Is this because you have reached the maximum production capacity, or are you unable to increase sales due to a shortage of materials?

A: The business is expanding steadily, but the impact of material shortages is not zero. We expect it to grow significantly in the next fiscal year and beyond. We also planning to expand its operations in Europe, which will lead to further growth.

Q: Regarding Life Science, what are the trends in contract sales for Novavax?

A: The progress is as Novavax has announced. I think it is going smoothly.

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