

Key Points in the Q&A Session for the Fiscal Year Ending December 31, 2015 and  
Medium-term Business Plan EGP2018  
(February 4, 2016 (Thursday), Tokyo)

- Q1. Could you explain the fall in prices of substrate glass for liquid crystal displays (LCDs), especially the background to the slowdown in the price decline and the possibility of the trend continuing?
- A1. We believe that the decline in prices of substrate glass for LCDs was the smallest for the last five years. However, in the fourth quarter of fiscal 2015, the prices declined by more than we had anticipated. In the first quarter of fiscal 2016, we strongly hope to narrow the fall in prices over the previous fiscal year, though price negotiations with some customers are still continuing because they are pressing us to cut prices. We try to obtain our customers' understanding by explaining to them that we need to secure a reasonable profit margin for continuous CAPEX.
- Q2. According to the Company's consolidated earnings forecasts for fiscal 2016, operating income will remain flat compared with fiscal 2015. I have found the Company's forecast of operating income to be a little conservative, because sales of glass fibers are expected to increase; the productivity of substrate glass for LCDs is likely to improve; and energy costs are forecast to decrease, though there are negative factors, such as the increase in investment for development and repair expenses for the plant (EGKr) in South Korea. Could you explain the trend in profit by major products?
- A2. We expect that operating income in the display business will decrease a little from the previous fiscal year, but operating income in the glass fibers and the glass for electronic devices will increase from the previous fiscal year. When we formulated the budget for fiscal 2016, we thought that we could post slightly higher operating income than the announced forecast of 22.0 billion yen. However, since the display market deteriorated, we factored it into our forecast.
- Q3. In the Company's medium-term business plan ("EGP2018"), the Company aims to post operating income of 30.0 billion yen for fiscal 2018, up 8.0 billion yen from fiscal 2015. Could you explain the business-by-business operating income changes for fiscal 2018 compared with fiscal 2015?
- A3. We expect that operating income in the display business will remain flat or decrease slightly, as in the case of sales. We will strive to increase operating income mainly in other businesses.
- Q4. In the LCD substrate glass business, the first-phase construction for the Xiamen subsidiary is progressing. And there is also a possibility that the Company will implement the second-phase investment. Under such circumstances, doesn't the Company find it

relatively difficult to keep improving profitability through enhancement of productivity?

A4. We have found costs have been steadily decreasing. In fiscal 2015, we succeeded in slashing costs by around a double-digit percentage point over the previous fiscal year. We are confident that we will be able to lower costs in fiscal 2016 or later because our productivity is expected to rise further. However, since several production lines will be launched at the Xiamen subsidiary in the first quarter of fiscal 2016, we expect that we will temporarily face difficulties in absorbing the expenses incurred in connection with the launch. Although we announced the first and second-phase construction plans regarding the Xiamen project, only the first phase construction is currently in progress. We have not decided when we will begin the second phase construction yet, though we can launch it any time. Therefore, we have not included the second phase construction in our CAPEX plan for fiscal 2016.

Q5. In EGP2018, the Company does not mention anything on its return on equity (ROE). What is the Company's view on its ROE?

A5. Both R (Return) and E (Equity) are important for the Company. As I mentioned just before, the Company would like to maintain its shareholders' equity ratio at around 70%. We believe that in general, there is no right answer regarding the shareholders' equity ratio, since not only shareholders' equity but also other items, such as profitability, the ratio of net sales to CAPEX, the turnover ratio, and inventory methods, differ from company to company. We are confident that we can generate "R" (i.e. net income) of 20.0 to 25.0 billion yen if we achieve operating income of 30.0 billion yen. Instead of aiming to heighten the ROE, we would like to steadily raise Return on Sales (ROS).

Q6. Could you tell us the cost reduction the Company achieved by investing in South Korea and Xiamen, China? And how much cost reduction does the Company expect to accomplish in the future?

A6. We find it very difficult to explain it to you quantitatively. When looking at only the current fiscal year, we may find that production costs in Japan will become lower than those in South Korea and Xiamen, China, because the depreciation of facilities in Japan will continue considerably. In South Korea, repair expenses are likely to weigh on profitability in this fiscal year, but the repairs are scheduled to be over by the end of the year. After that, the contribution of the South Korean facilities in our cost reduction is likely to increase greatly. The production costs in Xiamen, China are higher than at other factories partly because of the launch costs, since their operations just started this fiscal year. However, Xiamen's facilities is expected to contribute to improving profitability in the latter half of this fiscal year.

Q7. Then, can I assume that even if prices of substrate glass for LCDs continue to decline at the current pace, the Company will be able to absorb the negative effect by cost reductions in the next fiscal year?

- A7. It will depend on the degree of the decline in prices, but we would like to maintain our profit margin by narrowing the decline in prices as much as possible while bringing down costs.
- Q8. I estimate that in the category of *Performance Materials and Others*, the profit margins of glass for pharmaceuticals and medical use, heat-resistant glass, and glass for building materials are lower than that of glass fibers. In the category of *Electronics and Information Technology*, the Company no longer produces glass for PDPs and only manufactures substrate glass for solar cells in float furnaces. I also estimate that this cuts into profit margins. Could you explain how the Company will shore up these low-profit-margin businesses to achieve the operating income ratio of 10%?
- A8. We plan to try a new process in manufacturing glass tubing for pharmaceuticals and medical use. If the process proves to be effective, we believe the profit margin of glass tubing for pharmaceuticals and medical use will increase substantially. Regarding glass substrate for solar cells, since we have already written down facilities, the business is at break-even. We expect that we can pull the business back into the black in the current fiscal year, because shipments are forecast to slightly increase from the previous fiscal year.
- Q9. According to EGP2018, the Company has earmarked 50.0 billion yen for strategic investment. Could you explain the details of the ordinary CAPEX and depreciation in the Company's forecast? I would like to know how expected cash flows will change under the Company's medium-term business plan.
- A9. Suppose we generate operating income of 20.0 to 30.0 billion yen, net income will amount to 60 to 70% of operating income. We also assume that depreciation will remain almost unchanged from the present level, around 35.0 billion yen. Therefore, cash flows from operating activities are expected to stay at the current level, around 45.0 to 50.0 billion yen. Under such conditions, we would like to achieve net sales of 300.0 billion yen without a huge CAPEX (solely on our account). Cash flows from investing activities, including improvement of manufacturing processes and facilities, may become equal to cash flows from operating activities or may not reach such a level. Consequently, free cash flows will be positive. We consider that we can secure 50.0 billion yen for strategic investment. However, everything will depend on operating results or depend on whether we can generate profit.
- Q10. In EGP2018, the Company says it will examine the possibility of flexible shareholder return measures. Can I assume that the Company will maintain its shareholders' equity at 70%, secure funds for CAPEX and strategic M&A and consider repurchasing own share if it has extra cash flows?
- A10. From the standpoint of cash flows, we should say "Yes." We would like to examine the possibility if we are in a situation where we find it desirable to implement a return of capital to shareholders.

Q11. In EGP2018, the Company aims to increase sales of glass fibers by 80% from fiscal 2015. Could you explain how the Company will be able to keep up a more than 20% annual sales growth over the coming three years? I also want to know the details of the market environment, market growth rate, and the Company's market share.

A11. In our Glass Fibers business, our mainstay product is chopped strands, made by bundling thousands of glass fibers together and chopping them into specified length, ex. 3 millimeters. Our customers combine chopped strands with plastics to increase the strength of plastics. The chopped strand market is small, accounting for around 20% of the entire glass fiber market. We enjoy a leading market share, more than 30%, in the chopped strand market. The products are mainly used in engineering plastics for automobile applications. We do not aim to raise our market share to 60 to 70%, but we think it is highly possible to increase our market share to 40%. To that end, we will fully operate our own facilities to meet customer demand. On the other hand, the remaining 80% of the glass fiber market consists of *long threads*, such as yarns and roving, used for fiber reinforced plastic (FRP) and long-fiber thermoplastic (LFTP). We have a marginal presence in this market, holding a few percent share. That means there is a good chance that we can expand our market share by developing and marketing new products or carrying out M&A. Even if we accomplish sales of 100 billion yen in these businesses, our market share will not reach even 20% in the world's glass fiber market. Thus, we believe there are plenty of opportunities for us to capture customers.

Q12. Could you explain the possible impact from the spread of OLED displays? Word is getting around that the Company's main customers will put resources into the development of OLED displays in the future. Some sources say that a greater amount of plastics will be used in OLED displays.

A12. We do not deny the possibility that the spread of OLED displays will change the market in many different ways. In the medium-and small-sized panel market, in particular, flexible displays will become widespread in three years' time, increasing demand for resin substrates. Although the use of OLED is likely to increase mainly in smaller-sized devices, we expect that the growth of LCD panel shipments due to the expansion of the LCD TV market will be greater than LCD panel shipments replaced by OLED. Therefore, basically, you do not need to think about the impact from the increase in the use of resin substrates associated with the growth of OLED displays. In addition, developments in the OLED TV set market also largely influence our display glass shipments. Currently, only a single panel manufacturer in South Korea produces OLED TV sets. We do not have any information on the activities of other companies. We do not think OLED TV sets will have a big impact on us at the moment, since the direction of technology, including the number of sheets of glass that need to be used, is not fixed yet.

Q13. Glass is said to have *unlimited possibility* as a material, but it may be hard to imagine that glass will boost operating results. I would like to know what kind of a change in consciousness the Company plans to bring about in order to not only respond to customer

needs, but also generate growth in new areas in the future.

A13. The number of overseas customers increased over the last 10 years. Since we are facing problems related to communication and the location of facilities, we need to step up our efforts to solve such problems. Moreover, in product development based on needs, we find it easier to have customers imagine a final product and promote development, while in product development based on seeds, we may have difficulty in having customers image a final product. We cannot make the prototype of a final product. However, if we can explain the various possibilities to customers by showing a prepared final product mock-up or a device and saying, "You can have this," we believe this would be more effective in persuading them. Our business units and R&D department are currently working on such an approach: *How to get customers to recognize seeds*. With a keen interest in time and costs and thinking about what kind of process we should prepare, we are determined to develop comprehensive capabilities to satisfy customers. We may be the world's No.1 company in material development or the number of patent applications; however, such things are far from convincing. We would like to promote technology and product development that allows us to make proposals that get our customers to imagine the details of a final product by viewing the entire product from above.

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