

2 November 2017

Key Questions and Answers at FY2018 Second Quarter Results Announcement

- Q: Your first half results exceeded the forecast. Why did you keep your full-year forecast unchanged?
- A: Considering overall factors such as one-off profit in the first half and differences in improvement speed among regions and businesses, we decided to leave our full-year forecast unchanged.
- Q: How much foreign exchange impact was included in "Cost savings and other" in the change analysis?
- A: As some currencies appreciated against the Japanese yen but others depreciated, the overall impact was not significant.
- Q: You said you aimed to achieve free cash flow of more than JPY10 billion at the start of this financial year. Has it been changed? Do you expect to accelerate your cash flow generation from next year and forward? What is your plan on capital expenditure?
- A: Our target remains unchanged. Our plan is to increase our free cash flow generation in accordance with the Medium-term Plan (MTP) going forward. We intend to keep our capital expenditure below the level of depreciation.
- Q: Please explain why the Automotive Glass business showed little quarter-on-quarter improvement. How much of improvement came from the VA shift (VA shift: higher ratio of value-added products in sales)?
- A: It is mainly due to seasonality, because the second quarter coincides with the summer closures of carmakers in Europe and the United States, and the business environment tends to improve in the second half. On the global average, about 50 percent of Automotive Glass business improvement is based on manufacturing improvement and the rest is due to the VA shift and sales mix improvement.
- Q: Your competitors are also developing press bending technologies for automotive glass. What is your competitive advantage?
- A: We believe our customers are choosing our products, recognizing our technology. Our strength is that we developed the technology in house and have a good track record for many years. We will continue to brush up it further.
- Q: It is said that more laminated glass is used for the side light of cars. Is there any regional difference?
- A: Laminated side light responds to acoustic and safety requirements. The usage is increasing globally but it is most adopted in Europe. Japan and China are following and the United States is still in an early stage. Going forward, we believe the demand will increase globally. Now there are big differences among vehicle manufacturers and their car models.



- Q: How is the progress of VA shift in the Architectural Glass and Technical Glass businesses? Do you think it is possible to achieve your goal of more than 50 percent of the VA sales ratio at the group level?
- A: In the Architectural Glass business, North America has the best business model. The VA products include solar glass and various coated glass. Various functionalities such as heat insulation and electric conductivity can be added to glass. Smart windows and high transmittance glass are also becoming more popular. If we continue to add these products, we believe we can achieve our goal.
- Q: What are the factors for significant profit improvement in the Technical Glass business?
- A: All of the sub business segments improved. As for the display business, cost reduction was the main factor but we managed to raise the sales price of some products. The demand for glass cord was brisk in China and other Asian countries. The battery separator market, including the idling stop & start systems (ISS) applications, remained strong. In addition, there was several hundreds of million yen profit from the sale of tangible fixed asset in the second quarter.
- Q: What is your expectation of Technical Glass' growth in the future?
- A: We expect the sales of glass cord for timing belts and battery separators will remain robust and grow.

As for the lens, our plan is to sustain the current business level as the printer market will peak out eventually. Therefore, we will focus on development of new products in this area. In the display business, we are facing tough competition in the mobile device applications, and we are developing new applications such as large instrumental panels for cars and digital signage. We believe the Technical Glass as a whole will grow.

- Q: Do you think glanova[™] have any chance of success in the automotive glass applications?
- A: glanova[™] is more cost competitive than other products. Bending is easier, which is necessary for automotive glass making. Our long-term experience in automotive glass manufacturing is an advantage as well.

The projections contained in this document are based on information currently available to us and certain assumptions that we consider to be reasonable. Hence the actual results may differ. The major factors that may affect the results are the economic environment in major markets (such as Europe, Japan, the U.S. and Asia), product supply/ demand shifts, and currency exchange fluctuations.