

Summary of Questions and Answers at a Briefing on SDK's 2018 Financial Results

10:00 - 11:30, Friday, February 15, 2019

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*All contents are based on the information available as of the date and time of the briefing.

[General]

Q. How is the sensitivity of your operating income to changes in exchange rates in 2019?

A. Appreciation of 1 yen in dollar-yen exchange rate will result in a decrease of 1 billion yen in our consolidated operating income. About 60 to 70 percent of this decrease comes from our graphite electrode business. Appreciation of 1 yen in euro-yen exchange rate will also result in a decrease of 1 billion yen in our consolidated operating income. Almost all of this decrease comes from our graphite electrode business.

Q. How is your policy on dividends? For 2019, you forecast that the total of dividends to be paid per share will be ¥130, namely, ¥50 for 1H and ¥80 for 2H. What is your intention behind this allocation?

A. Our basic policy is to continue to pay stable amount of annual dividend. In December 2018, we repurchased the Company's own stock. We will also consider whether we can repurchase our own stock in 2019. As for allocation of dividends between the first half and the second half of the year, we paid ¥20 per share as a midterm dividend for 2018. However, as for 2019, we plan to allocate more balanced amounts to midterm and year-end dividends.

Q. Extraordinary loss: Your performance forecast for 2019 includes extraordinary loss of ¥20 billion (net). Please explain a breakdown of it.

A. We will have structural reform in some businesses. In addition, we expect an increase in loss on retirement of fixed assets due to execution of investment to improve production facilities. For example, we will invest in improvement of production facilities in graphite electrode and basic chemicals businesses.

[Petrochemicals segment]

Q. You will not have periodic shutdown maintenance in 2019. Why do you expect a decrease in operating income?

A. Though the absence of periodic shutdown maintenance will improve operating income for ¥6 billion, we consider depreciation of naphtha inventory due to a fall in price and a decrease in spreads

between prices of naphtha and petrochemical products including ethylene. The demand for petrochemicals will remain strong, and we expect full-capacity operation of our plant throughout 2019.

[Chemicals segment]

(High-purity gases for electronics)

Q. As for the "Grow" segment of your business portfolio, how do you expect the growth of your high-purity gas business will be in the near future?

A. We expect that the increase in number of layers and fineness of line pitch in semiconductor chips will lead to the rise in consumption of high-purity gases faster than the growth in the numbers of silicon wafers consumed by the semiconductor industry. In the first half of 2019, the demand for high-purity gases will level off. However, we expect that the average growth rate of the demand for high-purity gases during the period of our new medium term business plan (2019-2021) will be about 15% per year.

[Electronics segment]

(SiC epitaxial wafers for power devices)

Q. As for the "Grow" segment of your business portfolio, you plan to treble the size of your SiC epitaxial wafer business by 2021. How are you going to achieve it?

A. We expect that the size of the market for SiC epitaxial wafers will be about ¥150 billion/year by 2025, excepting the demand for automotive use. We do not have any idea about how far the size of the market for SiC epi-wafer for automotive use will increase by 2025. However, we will aim to secure 30% share of the global SiC epi-wafer market. Recently, our annual sales of SiC epi-wafers doubled every year.

[Inorganics segment]

(Graphite electrodes)

Q. How much do you expect the average price of graphite electrodes and needle cork will be in 2019?

A. The average price of graphite electrodes in 2019 will be five times as high as that in 2017. The average price of needle cork in 2019 will be six times as

high as that in 2017. The duration of contracts for sales of graphite electrodes is half year. In Europe and US markets, the first term of contracts starts in January and ends in June. However, in Asian market, that starts in April and ends in September. Thus there is a regional difference in the starting dates of the terms of contracts.

Q. Operating income in the fourth quarter of 2018 decreased from that in the third quarter. Why?

A. The second terms of graphite electrode sales contracts start in July in European and US markets, which occupies majority of our shipment volumes. Therefore, there was not much change in average sales price in the fourth quarter of 2018, though there was a rise in sales prices in Japanese and Asian markets. Operating income in the fourth quarter of 2018 decreased because of a delay in shipment of graphite electrodes in the fourth quarter and an appreciation of needle cork inventory used in the fourth quarter. We recommend you to evaluate performance of our graphite electrode business semi-annually, not quarterly, because most of graphite electrode sales contracts have duration of half year.

Q. How will the shipment volumes of graphite electrodes be in 2019 compared to that in 2018?

A. Our shipment volumes will increase for nearly 10 thousand tons. However, the total shipment volumes will be slightly less than 250 thousand tons, which is our maximum annual production capacity. This increase in shipment volumes is to be brought by the capacity increase in our US subsidiary. However, we cannot operate our graphite electrode production facilities at full capacity due to capital investment to improve some production lines.

Q. Please tell us why the increase in Inorganics segment's operating income in your performance forecast for 2019 is less than that in the results for 2018?

A. The spread between average unit prices of graphite electrode and needle cork will expand in 2019. However, appreciation of the yen against the dollar and the euro and an appreciation of needle cork inventory to be delivered for production will reduce our operating income. We will continue to realize the effect of the business integration and reduce our production cost.

Q. How were the prices of graphite electrodes sold in the Asian market in the fourth quarter of 2018?

A. The average price of graphite electrodes shipped to our customers in Japan, South Korea and other Asian countries in the fourth quarter of 2018 was about five times as high as that in 2017.

*Performance forecast and other statements pertaining to the future as contained in this material are based on the information available as of the date and time of the briefing regarding risk factors that could affect our future performance. Actual results may differ materially from the forecast due to a variety of risk factors, including, but not limited to, the economic conditions, costs of naphtha and other raw materials, demand for our products including graphite electrodes, market conditions, foreign exchange rates, changes in laws and regulations, and lawsuits. As to the assumptions about the consolidated performance forecast including exchange rates and domestic naphtha price, please refer to the Consolidated Financial Statements for 2019 which were announced on February 14, 2019.