

Investors' Meeting for Current Priority Management Issues and Business Strategy  
Q&A Summary

Date and time: Friday, June 2, 10:00 to 11:30 a.m.  
Presenter: Masakazu Tokura, President

Entire Company

**Q. I would like your comments on the business portfolio on slide 11. My sense is that the Energy & Functional Materials Sector and the IT-related Chemicals Sector have been subject to frequent impairments, but do you have a plan that would improve the probability that new investments will succeed?**

A. In the Petrochemicals & Plastics Sector, what is most important for us is to maintain full production capacity at our plants in Singapore and Rabigh. We will undertake small-scale investments to raise the added value of our products, but we do not envision any major investments. The sector's profits in fiscal 2015-2016 were the highest in ten years, but we would like to continue to maintain an ROI of 7% in the future.

In the Pharmaceuticals Sector, as development of a candidate compound requires a long period of time, we would like to do M&A or licensing deals if there are good opportunities in order to prepare for the future. In this sector, the pattern is that investments are undertaken upfront, and later ROI improves.

In the Health & Crop Sciences Sector, because our profitability is high, our policy is to aim to expand the scale of our business. If there are attractive M&A opportunities, we want to be aggressive in undertaking acquisitions. Even now we are considering several M&A deals.

Your comment regarding the Energy & Functional Materials Sector and the IT-related Chemicals Sector is painfully true. In fields in which technological shifts can be quite severe, we can say that we will compete based on our technology, but that entails a degree of risk. For businesses that did not work out well, while we want to reflect on our mistakes, we would also like to apply the technologies we developed for those businesses to other businesses. Regarding our organic synthesis technology for polymer OLEDs, we went through a very arduous struggle before reaching commercialization, but we have advanced the development of wonderful technology that no company can match, which is expected to be adopted by a major OLED display panel manufacturer. For new business areas, we will take an appropriate level of risk as we move forward.

**Q. For your fiscal 2017 forecast, you assume an exchange rate of 110 yen/dollar and a naphtha price of 37,000 yen/kl, but how will things change if the market diverges from these assumptions?**

A. In terms of the sensitivity of our earnings to exchange rate fluctuations, we had previously calculated that a one yen movement in the exchange rate against the dollar would have a 2.0 billion yen impact on our operating income. Because our overseas business has expanded, however, we now calculate that a one yen movement in the exchange rate against the dollar would have a 2.5 billion yen impact on our operating income. Breaking this out by sector, the IT-related Chemicals Sector and the Health & Crop Sciences Sector would each have an impact of 1.0 billion yen, with the remaining 0.5 billion yen divided among the other sectors.

With respect to our sensitivity to crude oil and naphtha prices, we expect that if crude oil prices decline by \$10/bbl, our operating income would increase by about 2.0 billion yen. Because the selling prices of methionine and some other products are not linked to the price of crude oil, a decline in the price of crude oil has a beneficial impact on our earnings. In addition, declines in the price of crude oil would also be expected to reduce fuel costs.

On the other hand, Petro Rabigh procures ethane gas at a fixed price, and if a decline in the price of crude oil reduces the prices of petrochemical products, the company's earnings structure is such that profits would deteriorate. On a consolidated basis including Petro Rabigh, if the price of crude oil declined by \$10/bbl, our equity in earnings of affiliates would decline by 3.5 billion yen. As a result, at the level of ordinary income, if the price of crude oil declined by \$10/bbl, we calculate that our ordinary income would decline by 1.5 billion yen. Our earnings structure is such that, at the level of ordinary income, our earnings are not very sensitive to fluctuations in the prices of crude oil and naphtha.

Our earnings forecast for fiscal 2017 assumes an exchange rate of 110 yen/dollar, but we expect future exchange rate movements will be impacted by such factors as future developments in "Trumponomics" and an increase in interest rates by the FRB. Regarding crude oil prices, OPEC has reached an agreement to reduce production, and while prices have held up, there has also been a rise in new sources of supply in the form of shale gas. It is difficult to get a read on trends, but we think \$50/bbl is an appropriate level. With resin, which uses ethane gas as a feedstock, supplied to Latin America and Asia, we are concerned that margins will decline on petrochemical products. For that reason, we made rather conservative assumptions regarding margins on our petrochemical products for fiscal 2017, but so far margins have not deteriorated to that extent.

**Q. Depending on various conditions, we understand that things may change, but are we correct in understanding that, while the business environment relating to methionine pricing may be somewhat severe, your projections for petrochemicals and petroleum refining are very conservative relative to the current market?**

A. For our selling prices for methionine, because we have assumed that prices will rise 10% in fiscal 2017 relative to fiscal 2016, if prices do not rise as much as we have assumed, there is a risk that our profits could deteriorate relative to our forecast. On the other hand, there is a possibility that sales of circularly polarizing film could exceed our projections, and, although we have assumed that profits for both PCS and TPC will significantly deteriorate, their current performance continues to be quite good, so there are also businesses that are performing better than we had projected.

**Q. I would like to ask about how you are viewing your business beyond the current three-year Corporate Business Plan, in fiscal 2019 and beyond, such as how you plan to cover a significant drop in earnings at Sumitomo Dainippon Pharma because of the Latuda patent cliff, what impact the operations of petrochemical plants using shale gas as feedstock will have on your petrochemical business in Japan and Singapore, and your earnings forecast for the Rabigh Phase II project.**

A. Sales of Latuda in fiscal 2016 exceeded \$1.2 billion. Because sales of drugs in the US typically decline to just 10-20% of pre-expiration levels after their patents expire, the impact of Latuda's patent cliff on our earnings is very significant. Starting from fiscal 2019, immediately after the patent expires, it would be ideal if increases in sales of other drugs could cover the decline in sales of Latuda, but because sales of new drugs now in the pipeline will not peak until 2021 or beyond, we will not be able to cover the patent cliff just with the increase in sales from the drugs I described earlier. Accordingly, Sumitomo Dainippon Pharma is considering taking other countermeasures, such as streamlining its operations or in-licensing new drugs. Sumitomo Dainippon Pharma is now in the process of formulating a new Mid-term Business Plan starting from fiscal 2018 that it will announce next year. We expect the plan will outline specific measures the company will take. The life sciences businesses of the Health & Crop Sciences Sector and Pharmaceuticals Sector are repositories of innovation, and these are definitely areas that we want to maintain and grow. We want to get through this difficult period through the overall support of the Sumitomo Chemical Group.

In the ICT field, the major trends are the generational shift in display technology from LCDs to OLEDs and the emergence of flexible displays. Because the added value of OLED components is much larger than with LCD components, we want to ride the trend of this generational shift and expand our OLED components business.

In the environment and energy field, in addition to expanding our business in separators, we also want to aggressively expand super engineering plastics for automotive applications. In addition, the business of CO2 separation membranes is another area with extremely bright potential. In agricultural chemicals, our blockbuster crop protection chemicals B2020 and A2020 have several compounds for which we can expect sales on a scale of several tens of billions of yen each. For B2020 alone, we have candidate compounds for which the expected sales multiplied by the probability of development success reaches a scale of about 100 billion yen. Accordingly, through our overall expansion in the field of specialty chemicals, we want to cover the impact of Latuda's patent cliff.

Since 2000, the peak year in margins for polyolefins in Asia was 2005, and

while current margins are somewhat low in comparison with peak levels, they are still relatively high on a historical basis. If petrochemical plants using shale gas as feedstock come into operation and their products flow into Asia, we expect margins will steadily decline.

In the Petrochemicals & Plastics Sector, almost ten years have passed since Petro Rabigh (the Rabigh project) began operations, and because both the soft and hard aspects of our systems are now in place, we would like to continuously achieve full capacity production levels. We expect our Singapore business to slow down because of a deterioration in margins, but by covering this slowdown through an improvement in profits from our Rabigh project, we would like to maintain current ROI levels in our Petrochemicals & Plastics Sector.

We would like to ride through fiscal 2019-2020, when our financial performance will be severely impacted by the Latuda patent cliff, and get back on an earnings growth trajectory in fiscal 2021 and beyond.

Specialty Company

**Q. Operating income for the IT-related Chemicals Sector in the fourth quarter of fiscal 2016 was just over 1.0 billion yen, but you are projecting a major rebound in operating income to 21.0 billion yen for the full year in fiscal 2017. I would like to ask about your outlook for your polarizing film and touchscreen panel businesses.**

A. The fourth quarter was a period in which there were some special factors, such as production adjustments on the part of customers, and these factors also impacted our profit. The first quarter of fiscal 2017 is progressing according to plan. In addition, in the second and third quarters and beyond, we expect to increase shipments of antireflective polarizing film, and we expect the financial performance of our IT-related Chemicals Sector to be very solid.

With respect to touchscreen panels, compared to the period when we started glass-type panels, our production capacity has increased by nearly four times, and in fiscal 2017 we plan to expand our production capacity of film-type panels by three times our current level. If we measure our capacity in terms of smartphone units, our production capacity for glass-type panels is nearly 300 million units, and our production capacity for film-type panels is expected to reach nearly 100 million units by the end of fiscal 2017. Our business in film-type panels is so strong that we need to further increase our production capacity.

On the other hand, regarding polarizing film, we are giving full support to the work toward the early launch of an upstream manufacturing process base being built in China by a joint venture with local firms, in order to deal with shifts of LCD panel production bases to China. At the same time, we will implement the optimization of a supply system globally, including shutdowns of some existing production lines with low productivity. In addition, we are also working to reduce costs, such as by expanding sales of polarizing film that uses materials produced internally. There was a time when our polarizing film business had difficulty in turning a profit, but now it is on its way to recovering.

We have made substantial progress in the development of polymer OLED light-emitting materials and we are accelerating efforts to go into mass production. Recently some electric appliance makers have been launching sales of OLED televisions, but they are all using display technology of small molecule organic LED light-emitting materials. To further increase the share of OLED televisions within a TV market that produces about 250 million units annually, we think it is essential to use polymer OLED light-emitting materials that are suitable for mass production. We are now in the final stages of a joint development of polymer OLED light-emitting

materials with a display manufacturer to begin mass production. The environment is becoming ripe for us to offer the advantages of our polymer OLED materials. For the mobile market, we have developed window film, flexible touchscreen panels, and coated-type polarizing film, as well as functionally integrated components that bring these items together, and these products have been evaluated very highly by major manufacturers. We expect there will continue to be many changes in the operating environment of our IT-related materials business, but we will continually look for opportunities to streamline our operations as we seek to grow in new business areas.

**Q. As the reorganization of major agrichemical manufacturers outside Japan continues, the scale of the gap between the major manufacturers and your agrichemical business is widening, so how does your company plan to compete in this changing competitive environment? Do you have any concerns about your competition with major agrichemical manufacturers becoming serious in the niche fields where your company is strong, such as biorationals and post-harvest?**

A. With the mergers between Dow and DuPont, and between Bayer and Monsanto, even more massive players are on the verge of emerging, but our company currently has no plans to follow their lead and merge with another company. Agricultural products can be split into the categories of agrichemicals, biorationals, and seeds (genetically modified organisms). The mergers of Dow and DuPont and Bayer and Monsanto can be seen as being done with the goal of strengthening their various product lines in agrichemicals and seeds, but we have no plans to enter the field of genetically modified organisms for row crops, such as wheat and soy, going forward. We will compete in agrichemicals and specialized biorationals. Living organisms will invariably develop resistance to agrichemicals with the passage of time. For this reason, we will develop new agrichemicals, and compete by not only selling them using our own global footprint, but also having major agrichemical manufacturers outside Japan incorporate them into their own pest control systems for sale. For this reason, our research and development capabilities are becoming extremely important. As you can see if you look at page 55 of the Investors' Handbook, while the scale of agrichemical revenue is as you pointed out, with regard to numbers of patents, even when comparing Sumitomo Chemical to major agrichemical manufacturers outside Japan, we do not fall short. Other Japanese agrichemical manufacturers, not just Sumitomo Chemical, excel in research and development, and in the most recent 10-20 years, the number of agrichemical products that have been developed by Japanese manufacturers makes up half of the global total. I would like Sumitomo Chemical to push ahead as an agrichemical manufacturer rooted in our research and development capabilities.

With regard to biorationals, the level of concern for the environment is increasing, with attention being focused on microbial materials, such as microbial pesticides, plant growth regulators, and mycorrhizal fungi. Major agrichemical manufacturers outside Japan have, of course, also felt the attractiveness of this field, and are moving in, but it will not be easy, as they must also split their management resources and devote them toward development in the main battlefield of chemical pesticides and seeds. We would like to make our position as the top manufacturer in this field even stronger.



**Q. In fiscal 2016, the supply and demand balance for methionine collapsed, leading to a difficult business environment, including falling prices, so what policies will your company be taking going forward?**

A. We have included a 10% recovery in the price of methionine compared to the previous year as an assumption in our business forecasts for fiscal 2017. Currently, signs of this turnaround in prices are still extremely faint. We are trying to improve prices while Evonik has already announced a 7% increase in prices and Novus has announced 8%. We expect this price rise will be reflected beginning in July.

We expect demand for methionine to continue to grow at a steady rate of 6-7% per year going forward, expanding to about 2 million tons per year by 2025. Sumitomo Chemical included a plan to complete a production expansion at our Ehime Works of 100,000 tons per year by the end of 2018 in our Corporate Business Plan, but the plan has been moved up, and we now expect to begin operations in the autumn of 2018. The industry's largest player, Evonik, has announced an increase of 150,000 tons per year in Singapore, while Novus announced an increase of 120,000 tons per year in the US, and Adisseo announced an increase of 50,000 tons per year in Europe. We will have to keep a close eye on the activities of each company with regard to whether their plants are being built and operated according to plan.

If one adds together the methionine production capacity for each company, one could get worried about an oversupply, but based on our past analysis, we expect that the actual production capacity of other companies will be less than the nominal production capacity. For this reason, we expect that the plants will continue to operate at a high capacity utilization rate for some time. Also considering the actual implementation of each company's planned production increases, I think it is certain that prices will recover.

Normally, amino acids are produced through fermentation, but methionine is produced through chemical synthesis. To produce methionine, methanol and sulfur are used to make methyl mercaptan, which is synthesized with acrolein to produce MMP, to which hydrocyanic acid and other inputs are added, producing methionine. The byproducts produced in the production of methionine are extremely hard to process, but submerged combustion can render them entirely harmless. In addition, not only is hydrocyanic acid, one of the raw materials, an extremely dangerous substance that requires strict management, but the intermediate stage of methyl mercaptan has an offensive smell, making handling difficult. Sumitomo Chemical has the advantage of producing methionine efficiently in a unified plant that not only manufactures the raw materials, intermediates, and final product, but also handles environmental management.

(END)

### Cautionary Statement

Statements made in this document with respect to Sumitomo Chemical's current plans, estimates, strategies, and beliefs that are not historical facts are forward-looking statements about the future performance of Sumitomo Chemical. These statements are based on management's assumptions and beliefs in light of the information currently available to it, and involve risks and uncertainties. The important factors that could cause actual results to differ materially from those discussed in the forward-looking statements include, but are not limited to, general economic conditions in Sumitomo Chemical's markets; demand for, and competitive pricing pressure on, Sumitomo Chemical's products in the marketplace; Sumitomo Chemical's ability to continue to win acceptance for its products in these highly competitive markets; and movements of currency exchange rates.