

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

Date and time: Tuesday, December 3, 2019, 15:00 to 16:30

Presenter: Keiichi Iwata, President

**Petrochemicals & Plastics**

Q. The position of your domestic operations in the Petrochemicals & Plastics Sector is unclear; while you are strengthening the foundations of this business, its growth is not expected. During phase I of the Rabigh project, the Chiba Works made efforts to secure stable operations as its mother plant; what do you think will be done for future development?

A. We recognize that the termination of the ethylene plant at the Chiba Works has greatly increased our domestic competitiveness. In addition, during the launch of Rabigh phaseII in particular, a large number of operators in Japan were dispatched to the site to provide support, enabling a one-off launch without failing the creditor's reliability test (CRT). We believe that we were able to demonstrate our technological capabilities to Saudi Arabia and Aramco. With regard to the domestic situation, our current domestic petrochemical business has limited capacity in domestic plants, so there is almost no trade with customers in commodity products. As long as the customers are located in Japan, or if they wish to expand from Japan to overseas and want us to supply domestic products to them, we will respond firmly. In terms of the pillar of the new business in the Petrochemicals & Plastics Sector, the carbon cycle I mentioned in the previous three initiatives is considered to be a new outlet. In the Rabigh phaseII construction period, development in this area was slightly delayed due to constraints on human resources. However, as Rabigh phaseII has now been launched, we will resolutely devote resources to research and development in the petrochemical business.

Q. When you have a certain prospect for such technologies, is there a possibility you will invest in the sophisticated technologies in Japan?

A. We are carrying out research and development in chemical recycling worldwide, but we have not developed any particular technologies yet. We have seeds that have potential, including those that we were trying to make available in time to be announced at today's briefing, or that we expect to see good results from in four to five years through our collaboration with academia. We consider that these may provide a new exit from the petrochemicals business in the form of a chemical recycling business.

- Q. Rabigh phase II has started commercial operations, and slide 11 shows sales estimates. What is the timing of the contribution to profits?  
Among the products of PRC phase II, there are some products, such as nylon and phenol, that will be launched for the first time, and I would like you to explain the timing of their contribution to profits and give an overview of contribution to profits over time when all products are fully operational.
- A. As you know, Petro Rabigh is a listed company, so we cannot discuss the earnings outlook. I am also looking forward to seeing what sort of overall strength the plant will have with Phase I and Phase II combined. The Rabigh project involves refining as well as petrochemical businesses, but refining margins fluctuate substantially each quarter. The quarterly profit trends show repeated surpluses and deficits because of fluctuations in oil refining margins. The Rabigh project's earnings depends on the extent to which the company can steadily generate profits from its petrochemical business while operating such refining operations. In light of this, I hope that it will make a profit contribution to Sumitomo Chemical as soon as possible.
- Q. I think the refining business can become more sophisticated in order to control margin fluctuations, but basically, since Phase II of this petrochemical business is finished, and the recovery of funds will be prioritized for the time being, is there no choice but to live with the fluctuations in oil refining margins? Should I take it that spending money to stabilize oil refining is not a high priority at this stage?
- A. That's right. The company doesn't have any specific ideas for increasing the profitability of its refining operations, nor will it be providing new funding for the Rabigh project at the present stage. We recognize that this is the time to generate returns.

Q. I understand that progress is not being made in restructuring the caprolactam business, because of shipments for Rabigh phase II's CRT and because profitability was up until recently. What do you plan to do to move forward?

Also, as a large number of naphtha crackers will soon come on line, particularly in China, is there any risk that the utilization rate in Singapore will decline?

A. Recently, the margin of caprolactam has fallen significantly, and the margin from benzene is currently around \$800/t. While the current situation is unlikely to continue, if margins improve to a level of \$1,000 to \$1,200/t, the important question will be how competitive our plant at Ehime Works is. Because we have outstanding technology, we are considering offering licensing. We would like to further consider this in the next few months, including the question of what sort of mother plant we should have if we do license.

In terms of the petrochemical business in Singapore, we have the advantage of good relationships with customers. For example, a considerable amount of U.S. shale-derived products have come into Southeast Asia, because they cannot enter China, but this has not deprived us of our market share. We are being affected by the decline in market prices due to the arrival of shale-derived products, but we are not particularly concerned about the volume of these products.

Q. With regard to MMA, did you consider not resuming operations in view of the market environment?

A. Even assuming current market conditions, or even if we factor in a certain decline from current market conditions, we expect profit to improve, so operations were resumed in November of this year.

## **Energy & Functional Materials**

Q. I would like to ask about the progress of studying capacity expansion and current status in the separator business. You explained that demand for LCPs for 5G is expected to expand, but over what sort of timeframe will you need to expand LCP production capacity, and what sort of volume is actually expected in 5G applications? PES appears to have a tough market outlook for automotive and aircraft applications, but what are your company's views?

A. Our separator business manufactures and coats base films at the Ohe Works, and coats base films at our Korean plant. All separators coated at the Korean factory are for U.S. automakers, and despite steady growth in sales volume, the pace is not as fast as initially anticipated. In addition, no progress has been made in discussions between a battery manufacturer, who is our customer, and U.S. automakers regarding expanding production capacity. We already have a building, so if we add coating machines, we will be able to increase our capacity in stages, so we will increase it in a way that meets our customers' plans to expand. And regarding base film, it is one of the investment projects under the current Corporate Business Plan to increase its production capacity; but it is difficult, unless R&D proceeds at a faster pace because of increasingly higher performance required for the technology.

With regard to LCP, while we strongly anticipate that demand for LCP will grow with 5G, it has not been decided at this point that LCP will be the plastic that forms the foundation for 5G. New types of polyimides and epoxy have emerged in the market, and manufacturers are trying to exploit the respective characteristics of these three types of plastic. Because the speed and timing of any expansion of production capacity will depend on which plastic is chosen, we have not made any decisions at this time, as the trends in technology are not clear.

With regard to PES, the situation of aircraft manufacturers is not so favorable, so there are some concerns. The biggest application for PES, however, is in membrane applications, such as dialysis membranes, and we are working to develop new applications and expand sales. Currently, a second plant has been constructed at the Chiba Works, in addition to the existing plant at the Ehime Works, and we intend to bring both plants at the Ehime Works and the Chiba Works to full operation as soon as possible.

- Q. Your company is working with ZEON for S-SBR sales and other areas, but what measures are you considering in the future for manufacturing? Also, in tire-related materials, resorcinol is performing very well, and are you thinking of its capacity expansion amid extremely tight global supply and demand?
- A. S-SBR is being restructured through a joint venture with ZEON. Currently, our companies conduct R&D together and develop synergy grades based on technologies that both parties bring together, which are then evaluated by customers. We are confident in these synergy grades, but because the evaluation of this rubber by customers takes time, we have yet to see results. We are proceeding on the assumption that our manufacturing operations will eventually be integrated, but for now we both have locations in both Japan and Singapore. Since both manufacturing lines in Japan are part of larger plants, it is impossible to cut them out and transfer them to the JV, so in practical terms, I think we have no choice but treat it as a form of outsourcing. Manufacturing in Singapore could be cut out and transferred to the JV, but we are currently in discussions about how to handle production once everything is integrated. As for expanding resorcinol production capacity, we have expanded production of resorcinol at the Oita Works in the past, and a considerable amount of investment would be required if we increased it: a 10,000-ton increase would cost about ¥20 billion. Therefore we think a simple capacity expansion would be pointless. However, if there are areas where production can be increased for an investment of around ¥10 billion, that would create possibilities. As the world's leading manufacturer of resorcinol, we are responsible for ensuring a stable supply of resorcinol. It is undesirable to have supply uncertainty, and we are looking for a place where we can increase production for around ¥10 billion. Because it will take about two years just to produce a process or a manufacturing package, we are preparing to increase production capacity as soon as the location has been decided.
- Q. I understand your company has raised the price of resorcinol slightly. You say that it's difficult to invest, but if customers really need the product, could you not ask for further price increases?
- A. Of course we are proposing price increases to customers, but this has been fairly difficult. Discussions are ongoing as to the range we can all work with.

- Q. In your separator business, I understand there is a possibility that the supply chain of the main customer may change in the future, so are you exerting greater effort to expand sales channels beyond the main customer than you have previously?
- A. Our separator business is unique in using an aramid coating, and its strength is its high safety. Compared to ceramic coating, the price is slightly higher; the key to our separator business is the extent to which there are customers around the world who prioritize safety, and our expansion plans and business development depend on that. We believe that the real strength of our separator business is the steady commercialization of base films. Therefore, we would like to further promote the development of base film technology and establish a strong base film technology unique to us. That would then enable us to expand our sales channels beyond the current supply chain.

### **IT-related Chemicals**

- Q. Currently, I think that the polymer OLED materials are for display panels in 5.5G devices, but I would like to ask how certain you are that you will see future growth in TV applications.
- A. Our OLED materials can be printed, and their strength is that they do not require large masks or vacuum deposition. Because this competitive advantage is even greater with large displays, we would like to expand into larger TVs, but manufacturers of large TVs have not yet reached the investment stage for technical and financial reasons. We are strongly convinced that there will be a future move toward the use of our polymer OLED materials for large-scale TVs as well, so we will continue development to improve the quality and performance of these materials.
- Q. I would like to ask why the IT-related Chemicals Sector's results for the current fiscal year are proceeding steadily, even in the tough business environment for display panels and after revising the exchange rate assumption to ¥105 to the U.S. dollar.
- A. The trends in the display materials market for about five years from 2018 will be the shift to OLED and the shift to flexible materials. We have been working to develop materials and improve productivity and yields in these two areas. While these market trends are taking longer to materialize than anticipated, the shift to OLED is steadily advancing. I think what is now supporting the earnings capability of this Sector is the fact that we got an early start in development efforts that aligned with the trends toward OLED displays and flexible displays.

## Health & Crop Sciences

Q. In the Health & Crop Sciences Sector, although methionine market conditions have remained sluggish, I would like to ask about the progress of the development of new crop protection chemicals. Among Japanese crop protection companies, your company has essentially the only herbicide that can compete globally, and we are very hopeful that your next product will generate revenue around the ¥100 billion level. Now I would like to ask for more details including the current situation: do you think the development is going smoothly at this point, though the development of herbicides costs a considerable amount of money? And as for sales channels, do you expect synergies from the acquisition of the channels of Nufarm's South American subsidiaries to be realized by the middle of the 2020s?

A. We have classified the development of crop protection products into two categories: B2020, to be launched before 2020, and A2020, to be launched in the next four to five years. As explained earlier, in B2020, we have high expectations for INDIFLIN™, a fungicide for Asian soybean rust. In addition, we have another good fungicide for septoria as well. We applied for approval of this product in Japan and the EU in 2018 and expect to launch them in 2021. There is also one other insecticide, and including that, we expect revenue for all B2020 products of ¥40-50 billion.

In the A2020 category, we have a herbicide, which we expect to be the largest revenue source in our history. In addition to crop protection chemicals, we also have plant-based and microorganism-based products, called biorationals. Although this is a niche field worldwide, we have the top market share in this field, and strengthening and expanding this area is another focus of our crop protection business.

Q. The herbicide of A2020 is a crop protection chemical, and I do not think there has ever been a crop protection chemical expected to generate sales of ¥100 billion. What reasons do you have for such high expectations?

A. Not only we but also our partner company evaluates this product extremely highly as a successor candidate to Roundup™, which is known for its global dominance as a herbicide now. We would like you to wait a little longer before raising your confidence too high, however.

Q. Regarding the initiatives for improving the profitability of methionine described on slide 18, the discontinued operation of the older plant has already been announced, but have the remaining measures been implemented? Should we take it that the effects of cost rationalization of several billion yen per year will be fully realized in the next fiscal year?

A. Several billions of yen encompasses a fairly large range, and I think the effect in the next fiscal year will be at the lower end of that range. The plant that discontinued production in September of this year had been in operation for 53 years since its launch.

We are also evaluating the optimizations of production operation for the other plants as well, to further strengthen cost competitiveness. Depending on the outcome of the optimization evaluation, if it is more competitive to halt another plant, we will consider that as well.

Q. Should we take it that, even if the current market continues, the methionine business will be profitable in the final year of the current Corporate Business Plan due to the effects of cost rationalization?

A. Current market conditions are historically very low, so I am not confident that we will be profitable in fiscal 2021 if the current situation continues. I think it is just common sense, however, that this slump in the market cannot continue for very long. We are proud of our competitiveness compared to other companies, and in this sense, we believe that there is a reasonable compromise.

Q. Should we take it that your belief is that the current market is bottoming out and will be recovering going forward, in general?

A. That is an accurate assessment of our position.

## Pharmaceuticals

- Q. You have explained that, although Sumitomo Dainippon Pharma is significantly below its fiscal 2021 planned target for core operating income of ¥94.0 billion, due to its alliance with Roivant, core operating income of ¥100.0 billion or more may be possible in the future. I would like to ask how you envision reaching a core operating income of ¥100 billion, despite the patent cliff.
- A. Since Sumitomo Dainippon Pharma is a listed company, I will couch my explanation in general terms. First, sales of drugs acquired from Roivant (RELGORIX and VIVEGLON) are expected to begin in fiscal 2020, but R&D and SG&A expenses will be high in fiscal 2020-21. From fiscal 2022-23, we expect revenues to increase and SG&A expenses to fall, leading to profitability. At the same time, with regard to the performance of existing Sumitomo Dainippon Pharma products, after the significant decline in LATUDA®'s sales revenue in fiscal 2023, revenue from further products under development, such as napabucasin, will gradually increase. Putting these two factors together, Roivant's R&D and SG&A expenses will be significant and core operating income will decline in fiscal 2021. It will recover in fiscal 2022, but will again decline in fiscal 2023 due to a decline in sales of LATUDA®. Then, core operating income will increase, as sales revenue from Roivant's products makes a greater contribution. This is the overall picture.
- Q. You explained the parent-subsidary listing with Sumitomo Dainippon Pharma; is it basically going to be maintained without changing the current shareholding ratio? In addition, your company has a large number of listed subsidiaries and affiliates beyond Sumitomo Dainippon Pharma, some larger and some smaller, and do you have any intention to make them wholly owned subsidiaries or sell them?
- A. Currently, we have not undertaken any concrete discussions of purchasing or selling shares in listed subsidiaries, including Sumitomo Dainippon Pharma. However, as this is always an option, so we will continue to comprehensively consider both synergy effects and the financing side.

## Other

Q. Eight months have passed since the new management structure was launched with the appointment of a new president. You spoke earlier about three pieces of good news and three initiatives, but what are the biggest challenges in steering the company amid dramatic changes in the business environment? In addition, during the past eight months, there have been a number of significant events, including news reports about the potential sale of a semiconductor materials company, and your acquisition of Nufarm's South American subsidiary. I would like to ask what kind of decisions have been made on each occasion, and what unique characteristics you have seen in managing the company with this new team.

A. I have implemented a variety of initiatives over the past eight months, but I was also a member of the Board of Directors last year, so from the viewpoint of management continuity, the system has not changed completely from what it was. Amid a variety of pressing issues, the acquisition of Nufarm's South American subsidiaries and our strategic alliance with Roivant, for example, were not even on the horizon last year, but we have been working diligently on each and every one of these new opportunities. As for the sale of the semiconductor materials company, which is currently a topic of interest, we will refrain from commenting, since the final decision has not yet been made, but we were of course interested in it and have considered it.

Q. You are issuing hybrid bonds as non-dilutive financing. Do you raise hybrid bonds in order to respond financially flexibly to the recovery risk of investments, such as unseasonable weather in South America and fluctuations in Petro Rabigh's oil refining margin? Am I correct in saying that call options will be exercised based on economic rationality at the time?

A. Hybrid bonds can be redeemed voluntarily in five and in ten years, but we intend to follow standard business practices, including converting them to similar long-term bonds at the time of redemption. We have also made a plan whereby we can consolidate all of our investments for repayment, including the South American business and Rabigh phase II.