

IR Day for Analysts and Institutional Investors: December 2022
Q&A Summary

Date and Time: Thursday, December 8, 2022, 15:00-16:30

Presenters: Keiichi Iwata, President

Noriaki Takeshita, Senior Managing Executive Officer

Nobuaki Mito, Senior Managing Executive Officer

<Essential Chemicals & Plastics Sector>

Q. Petrochemicals have had low margins for an exceptionally long period of time. When do you anticipate that margins will recover? Also, regarding Petro Rabigh, there is a risk that the cost of natural gas, the raw material, will increase in the future. Please tell us about your outlook for the future and why you continue to hold an equity stake in this company.

A. We are doubtful that the demand for petrochemicals itself is shrinking, but we recognize that it is not growing as anticipated due to restrictions from China's zero COVID policy and other factors, and that the supply continues to increase, which has caused the current market conditions. As shown in slide 31, in regard to ethylene, there will be other companies starting up new plants in 2023 as well. We expect that the capacity utilization rate will reverse and improve if demand grows after 2024, but we do not know if we can expect the capacity utilization rate to be as high as it once was. Before that, with the current situation being completely below cash cost, there is a possibility of companies being eliminated due to low competitiveness, and we will have to survive that first, and then ride the next uptrend. As for Petro Rabigh, we anticipate it will be a cash cow, but petroleum refining has had a substantial impact, and it is very difficult to anticipate what will happen in the future. Currently, we believe that the number of petroleum refining plants in China is increasing and, in the Middle East, Kuwait has built a large plant, so production at the smaller ones will stop. Right now, the price of middle distillates is rising due to the energy crisis, and China is one of the disrupting factors. China has a tendency to secure and export so-called cheap Russian oil, and we cannot predict how much of an impact this will have, but we believe that the situation will eventually balance out. The balancing out may also come relatively soon, as there is a possibility that the carbon neutrality efforts may be slightly delayed due to the energy crisis. The price of natural gas supplied by Petro Rabigh has risen once and then remained unchanged, but we believe that, in the medium term, it will naturally go up. However, we believe that the price derived from shale gas in the US is probably the ceiling, and that it will continue to remain relatively competitive. As for continuing to hold on to our stake in Petro Rabigh, we think it will depend on whether continues to provide the returns we expect.

Q. With regard to chemical recycling, Sumitomo Chemical has collaborated with Sekisui Chemical to produce ethylene from waste-derived ethanol, and is also working with Japan Steel Works on recycling PMMA. As for other companies, they are making moves to incorporate leading European technologies, such as Mitsui Chemicals considering partnering with BASF, and Mitsubishi Chemical entering into a licensing agreement with Mura Technology. Does Sumitomo Chemical also intend to work with European and US companies such as these to further accelerate your technological innovation?

A. Cost-effectiveness would also be an issue, but if there is good technology, we would proactively consider it. At this point in time, we have no idea what kind of technology will become mainstream, so our general policy is to have as many possibilities at hand as possible. However, for example, the technology to convert plastic into oil requires use of a cracker, but we do not have crackers, so that technology would not be applicable to Sumitomo Chemical. Also, we adopted the ethanol-to-ethylene pilot plant from Axens in France, so in that sense, we have been incorporating leading European technologies when suitable, and we do not foresee any obstacle to us continuing to do so in the future.

<Health & Crop Science Sector>

Q. The agricultural chemicals business has benefitted from the rise in the generic market, and although there are concerns that it may peak out, the profit environment has been extremely favorable over the past two fiscal years. What do you think of this situation? Also, what is your view of the revenue environment for the next year and year after that? You have a large pipeline, so would it be a problem even if there was a drop in profit? There is concern about the methionine business, so please explain the revenue environment and other factors.

A. The environment surrounding agricultural chemicals materials is currently very solid. Brazil is driving the current strong market. Essentially, with the rise in commodity and grain prices, the Brazilian farming economy has been improving, and producers there are proactively increasing production. As such, the sales of agricultural chemicals materials have also grown. As for how long this will continue in the future, we believe that there are certain aspects of Brazil that are a bit cyclical. If farmers there become overly aggressive in increasing their purchases of agricultural chemicals materials, there is a risk of inventories piling up, so we will need to keep in mind there is a potential risk of temporary adjustments in Brazil. However, from a macro perspective, the world has a population of over 8 billion people, and there is not much room to increase agricultural production, so we believe that the agricultural chemicals businesses in Brazil, North America, and India will continue to expand. Regarding the performance of our agricultural chemicals, it is true that margins for generic crop chemicals have temporarily grown this year. However, the strong performance in Brazil was not only due to generics, but also due to the growth of business for our new product INDIFLIN, our leading herbicide Flumioxazin, and biorationals. We believe that the temporarily enlarged margins for generics will fade away in 2023. We intend to make up for this decrease in margins for generics by expanding the sales of our proprietary herbicide, INDIFLIN, and biorationals. Regarding the current status of methionine, sales were comparatively strong in the first half of 2022, with 1 kilogram exceeding 3 dollars at times, but they have recently fallen quite sharply.

In the methionine market, when the consumption of poultry meat increases, so does the demand for the feed additive for raising the chickens. However, the present situation is such that the global demand of poultry meat, which normally grows by several percentage points annually, and the accompanying demand for feed additives, has mostly stopped in Asia due to COVID-19. *Meanwhile, on the supplier side, major players such as Adisseo and Chinese manufacturer NHU are ramping up their capacity, and the global capacity utilization rate, which is said lead to higher prices as it approaches 85%, is currently hovering back and forth at around 80%.*

Therefore, the situation is such that selling prices have remained low due to a lack of growth on the demand side and a series of increases on the supply side. Essentially, as we enter 2023, we anticipate that demand for poultry meat will return to the upward trend it had for many years previously due to growth in the population and an increase in the middle class.

As for production capacity expansion at other companies, there are currently no plans for expansion in Europe after Chinese manufacturers and Adisseo has completed their increase, so we believe that the capacity utilization rate for 2023 to 2025 will be close to 85%, that selling prices will return to previous levels, and that revenue will recover. Incidentally, the current selling price is by no means historically low. One of the reasons for this occurring is the catastrophic increase in the cost of raw materials, and we expect that the methionine business will recover when issues, such as logistics, are resolved.

Q. 1 million tons of greenhouse gas (GHG) emissions are created to generate 200,000 tons of methionine. However, the GHG reduction achieved through using methionine is to the level of 20 million tons, which will reduce GHG emissions by about 100 times the amount that is produced by making it. Since the science based targets (SBT) framework underestimates how much the usage of a GHG alternative contributes to the reduction of GHG, I think it is possible that investors will say to stop operations where the production process generates a large amount of GHG emissions. What are you thinking of doing to better promote Sumitomo Chemical's contributions, not just with methionine, but also in areas such as SSS (Sumika Sustainable Solutions)? Also, please share any ideas you have on how you can improve on suitably linking these contributions to the Company.

A. SSS includes products whose contributions to GHG emissions reduction are difficult to calculate. For example, it is difficult to ascertain how much separators contribute when they are used in electric vehicles. As for other issues, for example, we are internally reviewing the establishment of rules for measuring the direct contribution to GHG emission reduction of products derived from processes where the reduction can be ascertained, such as our methionine and propylene oxide production methods, including having third-party verification. We are preparing to make a public announcement about this in the near future. We must first start with what can be understood objectively on a scientific basis, and we are working on it, so please bear with us for a little while longer.

In regard to methionine, there are various methods used to make estimations. However, we currently believe that, while 1 million tons of GHGs are emitted during the production process, 200,000 to 1 million tons are offset through its use, resulting in a further reduction of about 1 million tons of GHG emissions.

Q. Would the contribution be even larger if you factor in the yield improvement for poultry meat?

A. That is correct. We are being somewhat conservative in our calculation of the magnitude of the contribution.

Q. I would like to ask about your profit margins for new products, such as INDIFLIN and Rapidicil, as well as your biorational business and seed treatment business, differ from the margins on your agricultural chemicals business up to now.

A. Regarding INDIFLIN and Rapidicil, I think one could say that we think about them in the same way as conventional agricultural chemicals. Still, for INDIFLIN, in the field of Asian soybean rust, where there is growing fungicide resistance among rust fungi, there is no question that it exhibits the highest level of activity compared to existing fungicides. Because we can set the pricing to reflect the added value it delivers, even if we can say that our approach to profitability is conventional, I would like to maximize income by emphasizing its superior performance.

Regarding Rapidicil, as well, it is an exceptionally fast-acting herbicide, and when used in no-till farming, in comparison with the nonselective herbicide glyphosate, which has been around for many years, its speed of action is overwhelmingly faster, so it has the advantage of enabling farm work to begin immediately after no-till planting. Moreover, it has demonstrated that it is extraordinarily effective even against weeds that have become resistant to glyphosate, so while it is a conventional agricultural chemical, I would like us to leverage its unique characteristics in order to maximize the income it generates.

Regarding seed treatments, the business model there differs a bit from that of conventional agricultural chemicals. For corn, the seed companies treat the seeds themselves and then sell the seeds to farms. For us, it is a B-to-B business, in which we provide our treatments to the corn seed companies. We want to build strategic relationships with seed companies that value our entire portfolio, and I think our business model will be to create long-term, stable business with them. On the other hand, with soybeans, some farms treat the seeds themselves, and there are seed treatment contractors who seek to work for the farms in treating seeds. That is where we will sell our branded products. Compared to spray-type agricultural chemicals, the volume of the treatment used is less, but just as with conventional agricultural chemicals, we would like to take advantage of its superior characteristics in setting the price to generate income.

Regarding biorationals, at the present time we are targeting high value-added produce, including fruits and vegetables. Within those markets, our focus is on products that lighten the agricultural workload or improve produce quality, including products that can use organic farming methods. Because we are selling a high value-added product, the gross margins are high compared to agricultural chemicals. Although, compared to agricultural chemicals, the scale of the business is still small, I think we can say that it is a driver of our performance in terms of income.

Q. Regarding INDIFLIN, you are projecting over 40 billion yen in sales within a few years, but, in the process, is it not a problem if it is a higher level than your profit margins for Flumioxazin in that product's expansion phase? In addition, are we correct in understanding that the same is true for Rapidicil?

A. That is what we are anticipating at the present time.

Q. Your biorational products have a high margins, and, in accordance with the graph on slide 61, which shows higher sales in the years to come, I think we can expect higher income in the future, as well. Among your biorational products, you have plant growth regulators and microbial pesticides, but which products account for a high ratio of your sales now, and for which products do you think sales will grow in the future? For the expansion in your production capacity you are planning for your Iowa plant, for which products will your capacity expand? In addition, you expressed an intention to make acquisitions, and recently Corteva announced its agreement to acquire Stoller, which has excellent microbial pesticide technology. Were you not thinking of targeting that kind of acquisition?

A. Because the market for biorationals has many small and medium-sized companies, statistics on the size of the market can vary, but if the size of the market for agricultural chemicals at current exchange rates is around 7-8 trillion yen, the market for biorationals is around one-tenth of that. Within that, our product line falls in three categories. The first is biological crop protection products, which are like agricultural chemicals. The second, biorational crop enhancement products, are plant growth regulators, which improve the quality of the produce, and they also lighten the agricultural workload. The third, biorational rhizosphere products, improve the health of the rhizosphere and the soil. At the present time, the first two categories, especially biorational crop enhancement products, account for the bulk of our 40 billion yen in sales. In the future, we would like to grow our sales of biorational rhizosphere products, products that improve soil health. Products that improve plant health, including soil health, are called biostimulants. In our case, mycorrhizal fungi and other products that improve the health of the soil and, when applied to plants, also improve plant health, are categorized as biostimulants, but our sales of biostimulants, in relation to the rest of our biorationals business, are still small. Stoller, which Corteva acquired, was in the business of biostimulants, but we seek to achieve organic growth by promoting product development on our own. At the same time, we are actively considering acquisitions as a way to accelerate the development of our business.

Q. Did you consider acquiring Stoller?

A. I would like to answer by saying that, when it comes to acquisitions, we are proceeding by considering a variety of opportunities and how well they fit our business.

Q. In terms of acquisitions, rather than buying a company, are you more focused on acquiring specific products or a pipeline of products? Or does it really depend on your counterparty?

A. There are many ways to approach acquisitions, but one approach is to focus outside of the mycorrhizal fungi we already have in our biostimulants business to acquire products that we do not already have, such as seaweed extracts, amino acids, and humic acids extracted from the soil.

In addition, because the biostimulant business market is growing very rapidly in North America, Brazil, and Europe, another approach would be to strengthen our geographical footprint by acquiring a company that has a substantial presence in one of those growth markets. We want to consider acquisition targets and move to execute transactions with those two kinds of approaches.

<Other>

Q. Currently China is talking about loosening its zero-COVID restrictions. Please tell us if that would point to any positive signs for your business.

A. There are reports that China is loosening its zero-COVID restrictions, and if that happens, that would certainly benefit us, but it is unclear what would happen after these restrictions are loosened. If we can really expect them to loosen restrictions that are preventing the spread of COVID infections, that is a bit concerning.

The supply chain in the agricultural chemicals business is heavily reliant on China. In our case, however, because we have our major plants in Japan, our reliance on China is very low in comparison with the major agrochemical companies. Still, because we are reliant on China for some active ingredients and intermediates, for the past 2-3 years we have been worried that, because of the lockdowns, production would be halted at plants in China. The relaxation of the zero-COVID policies reduces the risk that plant production would be halted, and, from the perspective of stabilizing the supply chain of our business, it is certainly good news.

Regarding our petrochemical business, as I mentioned earlier, demand in China has been weak, and because demand did not increase as we had expected, the oversupply imbalance has worsened. We believe that the loosening of the zero-COVID policies would result, as a secondary effect, in an improvement in market conditions. As to whether things will immediately improve, my personal opinion is that it will not be as easy as that.

(END)

Cautionary Statement

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