Q&A Concerning Medium Term Plan Progress

Reference: Medium Term Plan Progress
Note:
PKG = Package substrate
HDI = High density interconnect—a printed circuit board with a high wiring density that serves as a motherboard.
L/S = Line width & space—describes how fine and how densely spaced together the wire lines of a printed circuit board are.

Q.
You explained that Engineered Materials are expected to be below the target of this Medium-Term Management Plan. Regarding the main products copper foil, copper powder and ITO, the causes are divided into market factors and self-responsibility, and what is wrong with each is not good. Could you explain what it was and how to deal with it?

A.
For copper foil MicroThin ™ for HDI, this is not a problem at all. we had prepared production facilities in advance, but unfortunately the main reason was that only customers in the Korean and US markets were expanded. The reason is that we think that the limit that can be created by the manufacturing method that does not use MicroThin ™ is L / S = 30/30, but the current Chinese smartphones are made with a slightly rougher pitch than that, and this is where we misread the original plan. However, when it comes to 5G smartphones, the number of parts to be installed will increase, so I would like to once again determine whether fine pitching will progress after the release of full-fledged 5G smartphones.
For MicroThin ™ for PKG, the growth of the market is as expected, and our market share is now almost 100%, so there is no problem at all. As the market is growing, there may have been some concern about the capacity issue, but we are not worried about that because Malaysia is capable of producing enough products for PKG.
Regarding copper powder, there was talk that MLCC would grow rapidly in the world, and we planned to increase production of atomized powder in Kamioka and Shimonoseki, but this was misread not only by our company but also by the market. However, since it tends to increase in the future, I think this means that what should be done in the 2019 Medium-Term Management Plan will be extended to the 2022 Medium-Term Management Plan.
Since ITO had the top share, I imagined a cost leadership strategy to maintain and further expand the share, and thought that I would take the share by lowering the price. However, the market environment has changed drastically when our Chinese competitors were able to produce products of a certain level. Under these circumstances, we will continue our business by focusing on customers who place importance on profits and can take high margins. Since we have decided to close our base in South Korea, there will be no major problems with ITO in the future, and I think we can extend our current business plan.

Q.
The reason why the volatility of your business performance is increasing in response to fluctuations in the metal market, for example, has the smelting network described on page 22 increased the impact of metal recycling? I don't think there used to be such volatility in the past, so could you explain about it?

A.
the factor that was particularly affected by the metal market was the catalyst business that I explained earlier that is becoming problematic. There are so many catalysts for automobile that use rhodium, and I think we must manage the price increase of precious metals more than ever, including production control and logistics. The other is that it was larger than our expectation was the large difference in the amount of precious metals produced from copper smelting at the Hibi smelters.

Q.
Please tell us how much you expect the volume of MicroThin ™ for PKG to grow in the future for non-smartphone and smartphone applications. Also, I would like to have an image of not just this year, but for the next 2 to 3 years.

A
For smartphones, we anticipate an increase in quantity as the number of 5G smartphones such as 5G antenna modules and RF modules increases and the number of parts mounted on one unit also increases. For non-smartphones, packages such as SSD (Solid State Drives) for servers and various other package applications are increasing.
For the current fiscal year, we would achieve a 10% increase in total in this fiscal year from the last fiscal year, but regarding the time after that, we are currently in the process of surveying various places, including our customers, as we prepare for the next Medium-Term Management Plan. I am not going to talk about the future here, but I can say with confidence that at least the number will increase.

Q.
You mentioned that All-Solid State Batteries for automotive use will be available in the latter half of the 2020s, but I think you used to say that it was 2022 to 2025. Please tell us about the background that changed.

A.
There was certainly talk of 2022 to 2025 for in-vehicle use, but one thing is that the hurdles, including customers, are still quite high. The other is that each company is increasing the production of liquid lithium-ion batteries, so we recognize that it is necessary to proceed with research to the point where the characteristics are clearly different from those of liquid-based batteries. Therefore, mass production is said to be done at the same timing as in the latter half of the 2020s by domestic and foreign automobile manufacturers.

Q.
Recently there have been a lot of companies talking about carbon neutrality, but what is your company's stance on this issue?

A.
The metal sector accounts for about 65% of our CO2 emissions, and Hachinohe Smelting has a considerable volume. Regarding this, we are participating in the TCFD scenario analysis support project of the Ministry of the Environment, and our company is posted on the website of the Ministry of the Environment. Including that, we are considering it again company-wide and are proceeding so that it can be disclosed at some point.
It is inevitable to achieve carbon neutrality at least by 2050. As a preliminary step, we are already working toward the goal of achieving 26% reduction from the FY2013 level by 2030, but we are now in the process of considering how we can further increase the reduction.

Q.
I think that the catalyst business was originally expected to grow like MicroThin ™, but I feel a little disappointed that it is treated like a problematic factor. Regarding the outlook for demand growth, can you tell us if there are any deviations from your initial assumptions.

A.
I don't know if "problematic factor" is the right word, but I feel so when we look at the aspect of ROIC. Since catalysts for automobile use a lot of rhodium, while the invested capital is increasing, profits are increasing, but from the viewpoint of efficiency and volatility, I said that it is necessary to be careful.
Regarding sales expansion, there is no problem with both for motorcycle and for automobile except for the influence of COVID-19, and I think that you can understand that it is as originally planned. In addition, there is no problem in that both for motorcycle and for automobiles will be adopted in the next model, so there is no problem in business operation.

Q.
Regarding catalysts, do you have an awareness of the problem that the high volatility of catalysts for automobiles that use a lot of rhodium and the swelling of invested capital impair corporate value?

A.
The ROIC was very high when the catalyst was mainly a catalyst for motorcycle. Although rhodium is soaring, ROIC will decrease as the number of catalyst for automobile increases. I think that it is a problem with volatility that profits are increasing but efficiency is decreasing a little.
This is just my opinion, but Honda Motor Co., Ltd. will stop using the ones that are mounted on engines in 2040. I heard that the lifespan of cars is roughly 10 years. If they make a change in 2040, it will match with carbon neutral in 2050. Therefore, I think Honda's catalyst, our main product, will probably be gone by 2040. There is still time before 2040, but in that sense, we need to think about how to operate catalysts more efficiently, which is a little different from the way we think about engineered materials.

Q.
You explained that you would withdraw from the copper mine business and specialize in copper smelting. What are your strengths in the copper smelting business?

A.
As for copper mining and smelting in Hibi, we make good use of recycled materials, including copper and precious metals. Therefore, we do not necessarily need to own mining because we will continue to purchase and sell raw materials through PPC. In this sense, mines are not very attractive or meaningful to us, and we would like to specialize in smelting. Since we have been running the Hibi Smelter for a long time, we know the ins and outs of the equipment, and I believe that the meaning of efficient use of this equipment will be very significant.

Q.
Regarding smelting network in the Metal segment, if you can be more specific about what synergies can be expected by making use of this, please let us know.

A.
Zinc and lead smelting contains trace amounts of copper and precious metals, and copper smelting also contains zinc and lead impurities. We are the only company that has all three of zinc, lead, and copper, and the precious metal process in Kushikino. By networking this effectively, we can eliminate what we dispose or sell other companies and recover all by ourselves. This is a great advantage for us, and we are now considering how we can achieve this more efficiently by introducing new technologies.

Q.
Regarding the future strategy of copper foil, it is stated in the P16 that MicroThin ™ for HDI will be determined in the next medium-term management plan. I would like to confirm in what direction you are going to assess. Also, this time, you will invest to improve efficiency, so I think that you will deal with upward elasticity, but please tell us what you think about the capacity of copper foil in the future as a whole.

A.
I think the most important point in expanding sales of MicroThin ™ for HDI is whether or not fine pitching will progress. I would like to see what kind of circuit design will be made when the millimeter-wave compatible 5G smartphones will come out in the future.
Regarding the capacity of MicroThin ™, Malaysia has a monthly production of 2.4 million square meters, and including Ageo, the monthly production is close to 4 million square meters. During the next medium-term management plan, it is unlikely that the monthly production for PKG will suddenly increase to nearly 4 million square meters, so one of the four MicroThin ™ facilities in Malaysia will be switched to high-end electro-deposited copper foil. Malaysia is also able to produce for PKG, and I think it is okay to increase the number for PKG with these three units.

Q.
You explained that the free cash flow did not reach the total of the Medium-Term Management Plan this time. What direction does the President have in mind in terms of the balance of investment and amortization from the perspective of increasing the stability, and the allocation of management resources for future growth.

A.
I think it is necessary to aim for equity ratio of 40%, considering the stability in the event of something like the Lehman shock. I think it is extremely important to consider what kind of financial strategy we should adopt in the next Medium-Term Management Plan.
We believe that the cash generated by existing businesses should be transferred to the next new business without delay, and along with financial discipline, I would like to have a thorough discussion on what kind of investment projects we can make.

Q.
Regarding the outlook for MicroThin ™ for the current fiscal year, sales volume will increase by 10%, but profits are expected to increase only slightly due to development costs and various costs. Please tell us what you think about cost control in the future as the market for PKG grows, if there are any countermeasures.

A.
Since both MicroThin ™in Ageo and MicroThin ™ in Malaysia are used for the same purpose of PKG, we are currently in the process of transferring production. Since Malaysia's cost is cheaper, we believe that transferring to Malaysia as much as possible while taking customer convenience into consideration will lead to an increase in margin, and we would like to proceed with that.
The other is to develop next-generation MicroThin ™ products to increase margins. We would like to grow MT-GN, MicroThin ™ for high frequency applications in the future.

Q.
Please tell us how you would like to solve your company's problems and issues from the perspective of the new president, and whether there is a business that you will exit in the future, such as a copper mine.

A.
We are often asked by people what kind of company we are and what we are doing. Since it is difficult to see what area we are focusing on, we are currently discussing it firmly as (1) Purpose of " Next Management Steps". Among them, I would like to consider the future portfolio by carefully checking whether there are businesses, products, or companies that do not in line with this purpose or that there may be another best owner. At least for us, we are definitely aiming to continue creating products that enrich people's lives by utilizing the Material Intelligence.
Since last July, I have been the team leader considering the next 2022 Medium-Term Management Plan, and I am discussing what to do with the purpose I explained earlier. Among them, at the time of the next 2022 Medium-Term Management Plan, we would like to be able to explain what kind of company we are and what we are aiming for.