

Mitsubishi Chemical Group Corporation

IR Day 2022

Performance Products

– value creation through profitability growth

Q&A Summary

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Held as Hybrid that uses both local and online meeting

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IR Day 2022

Performance Products - *value creation through profitability growth*

➤ Attendees :

Jean-Marc Gilson / Representative Corporate Executive Officer, President and Chief Executive Officer

Yuko Nakahira / Executive Vice President, Chief Financial Officer

Johei Takimoto / Executive Vice President, Head of Advanced Solutions

Hitoshi Sasaki / Executive Vice President, Head of Polymers & Compounds / MMA

Q&A1

Q1

President Gilson said that they were very good products, but they were sold only to Japan. Why is it that those products were not launched in the overseas markets? Can you expect more potential core growth from those products that can now be launched globally?

A1 (President & CEO Gilson)

I will give you the reason why I said that. I worked for many years in a specialty company at Dow Corning that was much smaller than the performance products in our company, Mitsubishi Chemical Group. They did not have as many products, but all the products were available across the world for any customer. In our company, we have not yet reached that level. When I visit all the sites and all the areas, we still have an organization that has grown out of, what I call, a product push. You have a company, generally, in Japan that sells a product, then that company tries to sell in the US, then tries to sell in Europe, then tries to sell the product. My experience with this, especially in specialty markets is, there is a point where you cannot grow because of the cost. If every small company tries to do that, the costs are so huge that you need to change the model and go to a market-based model where a market team, like an automotive team, an automotive team would have a team in the US, a team in Europe, a team in Japan. They would sell all the products that we have for automotive markets. They will coordinate all the R&D activities. This is how you grow in a specialty market. In other businesses, such as MMA or petrochemicals, it does not work, because these commodity businesses are product-push. There are different ways of approaching a market. I think the proof is when you look at per market how big we are in different areas, and we are not big enough for a company like us. The problem for us is not, I repeat it, the product portfolio. We have a fantastic portfolio. The problem for us is reaching the customers outside Japan. We have been successfully very Japanese-centric, and it worked very well. Unfortunately, the growth is happening overseas, and we are slowly growing, but we need to go faster. The easiest way to grow is geographic expansion because you already have the product. Before we spend a lot of time inventing new products, we need to do that. Let us use what we have. Again, when I visit the sites, I am amazed by what we have. The technologies, the market – let us use that, and that is the push also for one company, one team. That is why we move to the seven markets, and now we are going to start organizing. We are going to have global market teams selling everything we make, wherever it is made, and that needs to also go along with a very strong ERP system where anybody can order any product from anywhere, which is

not the case right now. Because we have been so legal entity management, this is what it does. Small entities try to do everything by themselves. We were not using the power and the strength of our company. We will do that, and you will see the change and the change of growth. This is not the first time for me to see that. I am very confident that you will see the change.

Q2

Mr. Takimoto said that you were going to emphasize semiconductor, 100 billion yen is the sales, and it does not seem to be profitable enough, but with the killer applications PET film or the LCDs maturing, what are the killer applications? This asset is so big how are you going to see this play out? As for the displays, OCA has not been so successful recently, so how do you look at that? What is the competition against OCR? How are you going to enhance the profitability of display-related businesses?

A2 (Executive Vice President Takimoto)

LCD business is maturing, that is correct. As you know, going forward, the growth of LCD, in terms of the area, will be maintained. This is going to be the stable profit that we can expect. As a player, there are no new players on the film basis, so we are assured of that. But in order to have further growth, what will be the key? In the display world, there is OLED and QD; there is also all films products, and there is further growth. Aside from films, I talked about AR glasses, also electronics as a whole. I did not touch upon this, but MLCC is now a huge growth product. MLCC is now stalling in growth for the moment, but like in semiconductors, it can be used anywhere without limit, so there is huge growth. MLCC production process needs the films that we produce, and there is no other company that can do that. OCA, which is an extremely niche product, does have a limited life. In that sense, OCA used to be quite successful, and it is now at a matured stage. If there is technological change, there could be some next phase of growth. Optical Reflective Sheet, Lumirex has grown significantly, but now stalled for the moment. There will be many other niche electronics products, like in sensors, there are several of those. In terms of electronics, as I said about the pipeline, we have to have pipeline management. Even if there is a very small product, we would like to work on something new.

Q&A2

Q1

First question is basically, the product-out and market-in, I fully agree with you that in order for you to grow in the specialty businesses, you have to focus on the market because specialty chemicals are there to solve the problem with the clients and also enable the clients' business. That is the key of the specialty chemicals. Having said that, in the Mitsubishi Chemical Group, historically, I do not think you have a great global reach and great market reach in the overseas market. In order for you to grow globally, I think you do need to expand your businesses in the global areas, which may potentially require some M&A et cetera. What are the missing pieces apart from ERP et cetera?

A1 (President & CEO Gilson)

What we are missing, first, it is not that we do not have people in the US or in Europe; it is that they are not organized the way we want to organize. For example, in the US, until very recently, we did not really have an automotive team, Mr. Takimoto talked about EV, and we had people selling for example, battery product because we have a big plant in the US. But we do not have an automotive team in the US. To answer your question,

we need to start reorganizing our salesforce. We need to start reorganizing the way we approach customers. We need to approach markets that are not selling the products. It is going to require hiring some people, organizing teams, and this is what we are doing outside Japan. I think in Japan, we are pretty good. But the real problem is the organization outside Japan. What we are doing now is we have a big pilot going on in the US now starting to align against these markets. We are already starting to see some benefits in terms of growth and profitability. You are absolutely right, everything starts from the market, the customers, and then translates into product needs. The product needs, I mean we might have new ones after, but frankly, we have a fantastic library of products in this company. It will require some investment in some segments, but we will be very selective, and if we do it, it is going to be along these seven markets. We might do that also for example, in medical. Medical business market is an incredible product market business, so we might, and we will probably do that too. We will make very selective acquisitions to build along these markets, globally. I mean that is why I am very hopeful because I have done this before, and I know how to do it. We have bright people here, and they will do it too. I would not be here if I was not confident. I am very confident because when I go and when I look at the new – we have changed the organization in the US and in Europe where people report directly to Mr. Takimoto now, and they have responsibility for all the market segments. When I talk to them and when I see what they do, and when I see the way they organize and they understand, they know what to do. They will do it. It is a major transition, but I am very confident because people get it very quickly. Under Mr. Takimoto's leadership, I think he is also convinced that this is the way to go. Yes, I am very optimistic.

Q2

I would like to ask about the exit of the petrochemical business. You mean that once the exit is completed, it will be out of the B/S?

A2 (President & CEO Gilson)

The goal is to find a way to not consolidate this business anymore, and not show up in our balance sheet. But everything will depend on the partners we find and the solution we find. It is a bit too early to make any assumptions, and I prefer not to do it. The only thing that I said today is we will, for the purpose of being ready when we have found partners, we will do an internal carve-out. So the organization now for petrochemical is completely carved out and will operate like a separate company within our company. When we exit, it will be a lot easier because it is already carved out internally. I am not going to speculate too much, but I think the range of the money we can raise by divestiture is pretty large.

Q&A3

Q1

In terms of electrolyte, LiPF₆ accounts for a large proportion of the cost, so I feel that the business is such that margins are affected by fluctuations in the price of raw materials. With the expansion of Chinese manufacturers, it may not be easy to increase market share. Do you have any plan to increase the licensing out to increase the profit? Also, inflation control bill and all-solid battery, how are you going to manage those risks?

A1 (Executive Vice President Takimoto)

Your understanding is all correct, in simple – LiPF₆ or other raw materials cost increased and electrolyte entrants are numerous. There are risks involved, and the

investments are huge. The core competitiveness and value that we have, how we can deliver them is not just by building our own plants ourselves. In that sense, the plant capacity that we build has to be maintained to a certain level. But we may fully use contract manufacturing or licensing out. We are not saying that we are exiting from the manufacturing business in the cutting-edge electrolyte of the battery. You produce them and then prove the performance is really important, our electrolyte and additive should be incorporated in the batteries that go into those cutting-edge models. All-solid batteries, this is something that we have been always aware of, and many companies are involved in the development of all-solid batteries. Some of them have already commercialized the products. Those who are familiar with the industry may know, but the liquid lithium ion battery performance is by far much higher, and it takes more time to reach that. There is nobody who believes that it takes less than 10 years. We believe that liquid LiB will stay the mainstay during that period, but we will work on the all-solid battery development. For the market base that we are building for, liquid LiB can be used for solid battery development. We are working on that, and we will continue to do that. For IRA, there are many conditions that you have to satisfy to be eligible. There are many methodologies for businesses. There are things that need production capacity in semiconductors and batteries. How we are going to incorporate that capacity would decide whether this will be in the scope of the IRA or not, and we are now studying that.

Q2

The second one is about sugar ester and food business. You have of course a 70% share globally, but then again, you are still domestically centered. So the remaining 33% is not a question, but rather you can take shares from other emulsifiers, for instance. Can you elaborate more on the growth of sugar ester? BASF is also doing the sugar ester. Are you going to compete with those players or are you targeting a different segment of the market?

A2 (Executive Vice President Takimoto)

As for the sugar ester, we have been centered around Japan. We have less presence in the overseas markets, but the need for sugar ester is present in overseas markets, and we have been convinced of that for several years. We had thought that it is quite unique to Japan, you come up with expensive food using expensive emulsifier, but that was not the case. When you preserve the food, you have to maintain the appearance and taste, and it should be available in the supermarket. Or you have the sour cream and you have the hot and fluffy bread in Japan, but there is a need in China, US, Europe as well. There are so many inquiries. We can appeal to those who prefer the expensive food, then we can increase the share ultimately. But we are also trying to increase the total pie of the market as well. As for food additives, there is a very broad and deep market. There are many different types of additives available. The way you compete varies from company to company. There are several different patterns. You can become a department store-like business, or you can become a company which is focused on a single product. Of course, there is an option for us to become a department store type player having so many different types, but we are not going for that because that would mean that we have to acquire many capabilities that we do not have right now. But it is not just emulsifiers. There are several products that we have technological competitiveness as an advantage, and we will draw them down. For example, in emulsifier, how they are going to develop into the plant-based, alternative protein. There are so many different technologies like surfactant or surface control technologies. There is a large opportunity there. We would like to focus on it.

As of EBITDA margin for food, the sugar ester is a key driver, without doubt. As I said, a new plant is now being built, and production capacity is going to increase. The highest profitable product has more capacity. But for the rest, there is some growth that is planned where we excel in food business. Also, DIAMIRON or food packaging, we are doing food packaging for specialty, which is expected to grow further. We are also involved in recycling initiative. Food packaging is expected to grow not just in volume, but in margin as well.

Q&A4

Q1

First is as follows, the electronics, non-semiconductor is the area of my question. Sales is expected to grow by 500 oku yen, but EBITDA is growing only 50. Also, 1,100 oku yen in the sales growth would lead 160 oku yen in EBITDA growth. So it seems that the marginal profit rate is quite low. That will be because the marketing cost overseas is going to increase or vis-à-vis in fiscal 2021 maybe the level of prices of our raw material may be different. I just wanted to know the reason behind it.

A1 (Executive Vice President Takimoto)

Now in a nutshell, product mix changes, so probably that is how you should understand. The major products today would gradually expand in size. But margin-wise, it will be tougher down the road for some products. Performance product has to be upgraded; otherwise, we would have to go into price competition area. Therefore, I do not want to put the blame on LCD alone, but the repricing possibility is now becoming smaller. The same applies to automotive industry. Major products may face difficulties in getting margin, and therefore, we have to introduce new products one after another. The result is that you may think EBITDA can grow much faster, but the slope of growth in revenue is higher than that of EBITDA. If the changes are not so dynamic for some of the markets, or maybe if we cannot be competitive then that will be out of focus for us. For some of the businesses, we will be defocusing. I think we will accelerate this cycle. Like for electronics, the business is quite quick, and therefore, we have to be quick and agile. In doing so, speed of the margin growth can be accelerated.

Q2

Second question, 1,000 oku yen that you will be exiting, if you could elaborate a little more on how you will determine the standard for exit? Difference in sales area, your market, or maybe the margin?

A2 (Executive Vice President Takimoto)

The change speed multiplied by our strengths. No technical change or any change is happening, and something new is needed, that environment exists or not is one situation of course. On top of that, we want to think about whether our strengths can benefit from such a change. That is another factor, and the ratio I would say. For example, if Japan's market is big and overseas is small and that is why we are not retreating, that is not the situation. If there are existing players in the overseas market, and if we see some demand for something new not offered by existing players, and if the answer is yes, maybe that is okay. But if the answer is no, then we have no place to play. That is how we see it. I cannot be more specific than that, but that is the criteria. We have a very strict yardstick of achieving certain percent of EBITDA margin. In order to keep the business, we have to understand, there is a route for that business to go over that.

Q&A5

Q1

EBITDA in the Industrial others segment has increased from 480 oku yen to 760 oku yen. Is this because of the exit?

(Request) Although the fiscal year 2021 results for revenue and EBITDA by market were presented at this time, we would like to see disclosure of past results, such as three years ago and five years ago.

A1 (Executive Vice President Takimoto)

Businesses that are targeted for exit are not generating high profit. The sales revenue, 5,500 oku yen is going to decline, but EBITDA, 480 oku yen is not going to decline much. I have not calculated the ROIC, but obviously, the businesses for exit are not that high in ROIC. There are a number of other businesses that are candidates for expansion, and several in medical area and building materials, especially overseas assets, several of them, are the targets.

Q2

You are expecting more growth in the carbon fiber in mobility business. We have had expectation for the past 10 years in the stock market, but it has not grown into a profitable one. Of course electrification and other factors are changing the situation. So what are the reasons and the changes that will drive the increase that you expect from this business in terms of profits?

A2 (Executive Vice President Takimoto)

As I said in the presentation, in the automotive business, there are mega trends, and that is tailwind for us completely. Simply put, carbon fiber composite is costlier compared to metal. So it has not been incorporated. It has been only incorporated in aircraft. But now the application is increasing because people are realizing that even if it is costly, it is worthwhile to pay that much. One of the reasons why carbon fiber composite had not grown as expected is because it was difficult to use. When you produce the parts with the new material for automotive vehicles, it is actually difficult to produce the parts. One of the challenges is to develop the technology to produce the parts. We have several part manufacturers, and we are co-developing the technologies together with the part manufacturers to expand the market. That has led to some success so far. In future, there are some commercial vehicles that are expected to come into the market. Finally, we are now seeing a pathway to the development of the market, and we are seeing that what we had expected was right.

Q&A6

Q1

You have been working on gallium nitride for many years. JSW and you have teamed up to set up a manufacturing facility in Muroran in Hokkaido. What is the position of this business, and would this become a large product going forward, or are you going to grow this in a big way?

A1 (Executive Vice President Takimoto)

We are thinking of growing this as a big product. Technology development is underway in Muroran, and the product will be evaluated by our customers. We want to achieve defectless, big products manufactured at competitive cost. Customers are quite interested in this for laser application, and that will be the entry point. The laser has a certain volume, but the power electronics application or power electronics demand are increasing, especially high frequency power electronics for communication. SiC is said to be quite difficult to respond to and therefore, power electronics related companies are showing interest in us. We would like to make this a big product through solid technological development.

Q&A7

Q1

Generally, in Japanese companies, electronics and mobility are positioned as growth areas, but food is rare. What are the changes that you are seeing in the cutting-edge market for packaging material? When you say soft food packaging materials, recycling is difficult, and the future course is not clear, so if you can explain that?

A1 (Executive Vice President Takimoto)

I talked about food packaging in detail. Technological repricing has been successful, and customization of technology is important. We are quite strong and good at conventionally customizing, so we are hoping to respond to the needs from the global market, which is expected to grow more if we can do that. Another thing about recycling, something like shrink label is now about to be recycled, and we are engaged in co-development with the customers. It has been commercialized already. Technological capability needs to be high in order to enable these products. In the packaging materials, I think there is such opportunity. In addition, we expect high growth for ion exchange resins due to their large application in food products.

Q&A8

Q1

In order for you to create a business strategy, people in business units have a forecast for the future. How do you evaluate or review the accuracy of the forecast?

A1 (President & CEO Gilson)

We have basically, two ways of doing that. Whatever comes out of the business and their forecast and what they are thinking of doing first gets reviewed by finance and gets put against historical performance just to see if we are completely off or not or if it fits within a trend of the company. We are not necessarily accepting everything that the business says. We are putting a filter that generally tampers, a little bit, the business performance that the business says they will achieve. The second one is that we have been putting a tremendous amount of pressure on cost control, and we have many activities. We will talk about significantly reducing our cost footprint, which is out of line with our major global competitors. If you want to compete with global competitors, you must have the cost structure of global competitors. This presentation today went through multiple, multiple, multiple reviews internally. What I can promise is the trajectory of sales growth, and more importantly, profitability growth will be there.

Q&A9

Q1

Going forward, you are going to emphasize sales and market-oriented, and ERP system is going to be established, that is what is said. What systems do you use currently in your company? Mr. Gilson has been emphasizing speed and the pace of introduction of this system, how are you looking at that? I am asking these questions because in 2018, Mr. Meixner told me that digital commerce efforts are gradually progressing. Can you update that and tell me how it is now? Also, more recently, Mr. Ichimura has become chief digital officer in your company. What are the differences in the chief digital officer and chief technology officer roles, how do you look at that?

A1 (President & CEO Gilson)

I will give you a little bit of a background. Again, this company was put together through the acquisition of multiple companies. There was very little effort to integrate them. One of the place where there was no integration is in the ERP and the business models. We have more than 10 different ERP systems in the company. We are somehow connecting them to make sure that we can close the books, that the financial statements are there. But these are not ERP systems that are connected from a business standpoint. If I am in the US and I want to place an order on a product that is in Japan, I cannot. That is one. One of the fundamental change between 2018 and now is the fact that we are operating at one company, one team. The reason why it took so long to integrate is because every single small, legal entity had a choice to refuse to integrate its system before. That choice is now gone. We have imposed on everyone that if we operate as one company, and if one of the major trust is global presence and having every product available to every customer, this is not an option. We are moving really fast now by first connecting all the system. It is a major effort that we have ongoing right now. So it is going to happen. About CTO and CDO's roles, their roles now are completely different. Mr. Meixner became in-charge of all central R&D for the company. Central R&D is under his leadership. We split the R&D into two groups, central R&D under Mr. Meixner, and the rest of the R&D directly into the business to make sure that they have all the resources they need. With the arrival of Mr. Ichimura, he took 100% of digitalization, including IT, digital efforts, ERP implementation business processes broadly across the globe. At his previous company, he made absolutely sure also that they were operating under one ERP system because they were selling globally. So he has a long experience about doing that, and that is what we are asking is wherever you are around the world, whatever customer you want to talk to, you need to have easy access to everywhere around the world, our inventory, our warehouse, our product availability. We are moving away fast from having a multitude of different systems that were not talking to each other. So that is the biggest difference.

Q2

Sumitomo Chemical introduced SAP HANA in 2018, but at that time, your company chose not to incorporate that. That resulted in the delay in your effort, is that correct understanding? In Sumitomo Chemical, do you think the system is working well?

A2 (President & CEO Gilson)

No idea if the system is working well at Sumitomo. What I can tell you is I have experience of working in an environment where the ERP system and the business processes are the same, and when they are the same, it is a major enabler for business growth. It is very hard to grow nowadays when you do not operate your business with a single backbone across the company. For example, we do not have online sales yet, but you can only have online sales and allow anybody to order anything from you if your

online sales is hooked up into one system. So it is a major step for us. This is a key driver in terms of hiring a new CTO who has experience in doing that and knows the benefits of doing that.

Q&A10

Q1

In terms of global market access, APTSIS20 included the establishment of four regional headquarters around the world, each with its own technical center to provide products that meet the needs of the region. What is your approach? Compared with now and the past, is the approach totally different?

A1 (Executive Vice President Takimoto)

In terms of globalization, the difference is quite clear. So far, regional headquarters' functions are – there are limited situations for what each regional headquarters can decide and what they can do. They have their local subsidiaries under their region, and the local subsidiary had big business discretion, but they are reporting directly to headquarters. Therefore, if that particular region, if they wanted to do some activities which are suited for their region, making decision by headquarters at a very fast speed was not possible; there was a limitation. But under the new organization, regional authority was strengthened substantially. In terms of day-to-day operations, the regional head is 100% making decisions, almost. That is a major difference since the past. The global market trend has to be understood, and after understanding, strategy has to be created, and that is done by global function. However, there is a certain need and the product would be this and that to match that need. What will be the priority and what will be the method of implementation, that is determined by the region, and the regional headquarter will make a decision for that. A regional headquarter is a kind of coordinator, and then there will be a regional head, which is actually doing business. That is the difference I would say.

Q&A11

Q1

I would like to ask about MMA strategy. The business environment has changed significantly, and I would like to know about the progress of the feasibility study for the new US project and the competitors' ethylene process expansion, etc. in general.

A1 (Executive Vice President Sasaki)

In the IR meeting last year, the MMA strategy that I mentioned, stays the same for the basic growth for MMA. There is no change to that. As for US project, the frontend engineering design or detailed design is now almost complete. But what has changed is not our policy, but the business environment has changed dramatically. So in this changed environment, what will be the decision that we should make. I think with the conclusion of detailed design that will come out, we will determine that, and we have to be very serious about that. Ukraine invasion by Russia, that has manifested energy crisis and ACH method manufacturer in Europe has used ammonia and natural gas, and there is no competition that they can beat now because of this price. How are we going to implement the strategy that we have had in this changed business environment is something that we have to decide in 1 month or 2. The new entrants from China or Middle East have the same variable cost for each process. They all are facing the same business environment. Ideally, we have three processes. Relatively speaking, we can

fully operate the process that is relatively more competitive, that way we have maximized the profitability for a short period of time. But there is no demand now. I do not know until when this will continue, but we are at the bottom of the business environment now.