Mitsubishi Chemical Group Sustainability Briefing 2026 Summary of Questions and Answers

February 25, 2026

Held as a hybrid event utilizing both in-person and online meeting

Presentation Material: https://www.mcgc.com/ir/pdf/02567/02810.pdf

This presentation material contains forward looking statements that reflect Mitsubishi Chemical Group Corporation's assumptions and beliefs based on currently available information. Actual results may differ materially from forecasts due to various risks and uncertainties.

These include, but are not limited to, demand in Japan and overseas, foreign exchange rates, price and procurement volume of raw materials and fuel such as naphtha and crude oil, market trends, speed of technological innovation, product liabilities, lawsuits, laws and regulations, as the Mitsubishi Chemical Group is engaged in a wide range of businesses, including performance products, methyl methacrylate (MMA), petrochemical products, carbon products, and industrial gases. However, these are not the only factors that may affect the business performance of the Mitsubishi Chemical Group.

The term "the Mitsubishi Chemical Group" refers to Mitsubishi Chemical Group Corporation and its group companies.

Mitsubishi Chemical Group
Sustainability Briefing 2026

- Speaker:

  Noriyuki Mita, Executive Officer, Chief Sustainability Officer

[Q&A 1]

Q1:

This is a very broad topic, but you talked about Europe, the U.S., and China at the beginning of your presentation. Could you share your views on the trends in Japan, as well as your company's positioning within that context, particularly with regard to green initiatives? In addition, could you provide your macro-level perspective on whether Japan's policy support is sufficient compared to other countries?

A1:

We believe that Japan's policies have generally been somewhere between those of Europe and the U.S. The government has put in place a combination of support measures and regulations, creating an environment that could generate opportunities for us. However, it is still unclear in some aspects how seriously the government will pursue those policies. The government's level of commitment varies by policy, and the extent to which the government will pursue these initiatives remains a matter of interest for us.

At the same time, there is growing recognition within the government that decarbonation and circularity is a "security asset." We expect that initiatives under the framework of "economic security × decarbonation and circularity" will continue to progress, and we hope that policies will be designed with a full understanding of the role that chemical materials can play within that framework.

Support measures are already being implemented in line with the sustainability trends, such as subsidies for climate change and "hard-to-abate" subsidies for high-emission industries (we have used these support measures in the inter-company collaboration in Western Japan). Looking ahead, there are two key areas: (1) support for building supply chains from a security perspective, and (2) policies that will create markets. Market formation is an area where countries are still exploring approaches, and while it is difficult for decisive policies to emerge, we will actively engage in this area.

From a positioning perspective, Japan is in a position where it can leverage a regulatory environment that lies in between Europe and the United States. In Europe, industries are at times under pressure due to strict regulations, while in the U.S., there are signs of a temporary slowdown in green initiatives (even though progress is expected to continue, it may take time). In this context, we believe it is important for Japan to leverage its policy

environment that lies in between those two regions to build strengths that set itself apart from other countries.

Q2:
Your company appears to be a frontrunner in Japan. Given that technologies are not yet fully established, is there a first-mover advantage?

A2:
At a stage where technologies are not yet fully established, it is difficult to say with certainty that we can “succeed solely through our technologies.” However, in recycling, for example, regardless of the type of technology, we believe that building the foundations, such as ensuring quality, processing waste, and securing markets, will be an important factor to stay ahead in the future.

[Q&A 2]
Q1:
Looking at the table on page 13 of the material, it appears that there have been changes from last year’s material. While the discontinuation of production seems to have contributed to improvement, the “Improve Emission Factor in Purchased Power” has decreased from a reduction of 3.82 million tons last year to 2.55 million tons this year. Could you explain the reason for this?
Also, “Business Growth” was previously expected to increase emissions by 0.96 million tons but is now 0.4 million tons. As growth investments do not seem to be slowing down, is this a net figure that includes business withdrawals? Please explain these changes.
In addition, you mentioned at the beginning that the time axis should be considered and that initiatives should be prioritized based on their economic viability and competitive advantage. Given the global pullback, are there any GHG-related initiatives for which your company has lowered their priority?

A1:
First, regarding the “Improve Emission Factor in Purchased Power,” changes in our business portfolio have had an impact on the factor. In addition, there are areas where we have not yet fully sorted out the breakdown internally. For example, elements associated with business growth may be included in this category. As a result, the figure may appear smaller than in the previous year’s material.
Furthermore, emission factors differ by country, and we believe this has had a significant impact.

Next, regarding the “Business Growth,” as you pointed out, the figure has decreased from 0.96 million tons last year to 0.4 million tons this year. While an increase in emissions associated with business growth is not necessarily a bad thing, this decrease reflects both a smaller-than-expected increase in emissions and the impact of business withdrawals. As a result, we are currently in a position where we can achieve the 29% reduction target. However, if business growth progresses further in the future, emissions may increase again. Therefore, it is important to continuously monitor the situation and take additional measures as necessary. We do not take a simplistic view that a slowdown in growth or business withdrawals are positive outcomes in themselves.

Finally, there may be some weakening of global pressure to reduce GHG emissions. However, our 29% reduction target is a commitment we have made, not a regulatory response, and we will continue to work on achieving this target. We will need to review specific measures based on policy developments, as costs fluctuate significantly depending on policies such as carbon pricing. At present, however, we are on track and will continue to proceed with the initiatives while closely monitoring the situation.

Q2:

In that case, is it correct to understand that the “Business Growth” reflects lower production volumes in high-emission businesses compared to the estimate a year ago, as well as production decreases and business withdrawals?

Also, is it possible for the “Improve Emission Factor in Purchased Power,” to fluctuate to such extent even though the emission factor values have not changed from last year’s material?

A2:

Emission factors vary significantly by country. For example, if we discontinue production in a country or region with a low emission factor and shift the production to a country or region with a higher emission factor, the overall figure may change. We believe such effects are significant.

[Q&A 3]

Q1:

I have a question about your environmental contribution products. I understand that definitions differ among chemical manufacturers, making simple comparisons difficult. However, could you share the size of sales based on your definition, as well as the past growth rate (or negative growth rate)?

A1:

We have discussed internally whether to define environmental contribution products and establish metrics such as their share of sales; however, at this point, we have not established a fixed definition or limited the scope of such products. There are two reasons for this.

First, if we strictly define such products by taking into account regulations such as Europe's Empowering Consumer Directive, the scope could become extremely limited. Second, if the definition is too broad, there is a risk of being perceived as greenwashing.

In addition, there are diverse forms of contribution and a wide range of factors involved, making it impractical to sort out all products under a single definition. Therefore, we place importance on each business being able to analyze and explain, based on data, how much their products can contribute to the environment, and we do not aggregate those figures into a total at this time.

Q2:

That makes it difficult to gauge the performance, I understand your point.

A2:

From our perspective, the five areas we have presented represent our contribution domains, and growth in these areas can be regarded as a form of contribution. As you pointed out, metrics such as a "sales ratio" may be easier to understand, but we are not considering adopting such metrics at this time.

Q3:

Renewable energy is expensive overseas, and as a Japan-based company, you may be at a disadvantage in terms of reducing your GHG emissions. However, if you can compete through added value in addition to environmental performance, such as in engineering plastics, could there be significant potential for overseas expansion? Establishing overseas bases can be challenging, so licensing could be one approach. Are there any initiatives underway in this regard?

A3:

At present, we do not have any "sustainability-related licensing projects" we can disclose, but this is certainly an area we would like to pursue. Although emission factors are lower in Europe and the U.S., market competition remains equally intense, so we need to succeed through added value. Therefore, it is crucial to gain competitive advantages in new

technologies, feedstock conversion technologies, and various functions.
However, since it may not always be realistic to achieve all of these capabilities overseas, licensing after establishing the technology could be a viable option for overseas expansion. While we have not reached the stage of disclosing specific projects, the general direction is as you suggested.

[Q&A 4]

Q1:

I would like to confirm some figures on page 13. 15 million tons in 2019 and 11.15 million tons in 2030 appear almost the same as the previous year's figures. Is it correct to understand that these figures reflect the exclusion of AMEC's 350,000 tons?

A1:

There were other acquisitions and divestitures in addition to AMEC, and as a result, the figures coincidentally ended up being the same.

Q2:

I have a question about the collaboration in Western Japan. Under the hard-to-abate support program, the total investment amount is 21.2 billion yen, with a maximum subsidy application amount of 14.0 billion yen. Accordingly, the remaining 10.0 billion-plus yen will be borne by the three companies. Is it correct to understand that this investment is expected to meet the cost of capital and be economically viable with the support of the subsidy?

A2:

This question relates more to the investment decision from the perspective of business restructuring rather than sustainability, so I am not certain if I can give you a clear answer from my position. However, in addition to the sustainability perspective, we believe this initiative is essential from the perspective of securing competitive advantage over other countries.
Beyond the standalone profitability, we view this investment as a necessary initiative for the survival of Japan's basic chemicals industry as a whole. Going forward, as we proceed to review the operations of our plants, including the Mizushima, Osaka, and Kashima Plants, the use of the hard-to-abate program and other support programs will remain a viable option. The key challenge will be how to utilize such support appropriately.

Q3:

In that context, your company has bioethanol-based production technology. Do you expect that using Revolefin (Note: Asahi Kasei's technology) as part of the collaboration could further increase the value of your products?

A3:

There are multiple approaches to utilizing bio-based materials in the cracker process. The three companies have agreed to use Revolefin, but I am not in a position to comment on specific economic calculations. After consideration, we selected what we consider to be the most realistic option at this point. As we proceed with restructuring and cooperation in the future, we believe there will be various possibilities for utilizing bio-ethylene and bio-ethanol.

[Q&A 5]

Q1:

Discussions on environmental initiatives seem to focus on whether increased costs for CO_2 reduction will be accepted. On the other hand, are there any initiatives or ongoing cases where you utilize plastic technologies and create value through social implementation, such as enhancing recyclability by reinforcing polypropylene with polypropylene fibers to turn it into a PP compound, thereby replacing conventional composites?

A1:

Based on your comment, I feel my earlier explanation may not have been sufficient. The value we are focusing on is not only on GHG emission reduction itself, but rather “other forms of positive environmental contributions, such as recyclability As a specific example, “Soarnol™,” which facilitates recycling of multilayer films by enabling them to melt more easily with other materials during recycling, provides value in terms of “recyclability.”

In addition, in solar panel recycling, the value lies not only in GHG reduction or ease of recycling, but also in the ability to efficiently collect mixed materials of metals and plastics, recover and sell them as valuable materials through metal recycling channels. Precision cleaning also provides various types of value, such as reduced water usage.

In the case of the compound example you mentioned, I believe design-related value beyond GHG emission reduction, such as recyclability and handling properties, will be important. While I do not have detailed information on individual initiatives related to compounds, I believe that “value beyond GHG emission reduction” will be a key area that leads to profitability in the future.

Q2:

For example, plastic bottles are typically made of PET for the bottle, PP/PE for the cap, and styrenics for the film. From a recycling perspective, could everything be made from PET so that it can be reprocessed without manual labor?

A2:

I think there is a possibility. It is generally referred to as “mono-materialization.” Since our company handles a wide variety of materials, our business is often built on the assumption that there is a need to recycle multiple materials together. However, I believe developing materials and designs that achieve the required functions by using a single material is an effective approach, and there may also be opportunities to combine this with additional functionality, such as shrink wrap that can be easily removed.

[Q&A 6]

Q1:

Regarding the support program for the Mizushima Plant, the maximum subsidy amount of 14.0 billion yen should not be directly compared with semiconductor subsidies that amount to several hundred billion yen. However, given that petrochemicals are an essential industry and ethylene plants form its foundation, this amount appears relatively small. At this scale, it may not be easy to generate the ROIC expected of a listed company. Based on your experience, could you share your views on whether the industry, including your company, could work together to make it easier for public funds to be allocated to petrochemicals?

A1:

The upper limit of subsidy is partly determined based on the overall budget envelope, but in this case, the 14.0 billion yen cap appears to be based on a logic of roughly half of the total investment amount (approximately 21.2 billion yen). If we were to undertake a larger investment on our side, the subsidy amount could potentially increase accordingly.

In addition, a subsidy rate of 50% is not common. Even for semiconductors, the subsidy rate is around 30%. In this case, the hard-to-abate subsidy was exceptionally generous in that it covered 50% of the investment as a result of integrating decarbonation and circularity initiatives with structural reform. Based on my own experience in government, there were only few cases where a 50% subsidy rate was approved.

The upper limit is not so much a cap on fixed costs, it rather depends on the investment amount. For example, in electric furnace projects in the steel sector, there are cases under the same framework with an investment amount of approximately 800 billion yen. In other words, rather than the cap for chemicals being small, it largely depends on how much

investment the chemical industry is willing to commit to.

Q2:
So in this case, it was because the investment was around 20 billion yen, but if you were to build an ethylene plant with capacity of over one million tons in the future, is it correct to understand that you could potentially obtain a substantial amount of subsidy?

A2:
In that case, it would be possible to request a subsidy covering 50% of the investment, and there is a possibility that such subsidy could be granted under the framework.

Q3:
Thank you for sharing your view.

A3:
Steel and chemicals are under the same subsidy framework. Under the hard-to-abate program, they are collectively treated as high-emission industries. Therefore, if chemical companies make the necessary decisions, they could be eligible under the framework (this does not mean that they would automatically receive a subsidy, but rather that they could qualify for subsidy if they apply properly and meet the requirements).

[Q&A 7]
Q1:
What is the overall budget size for the chemical industry?

A1:
The budget utilizing Japan Climate Transition Bond, which was designed as a combined subsidy framework for steel and chemicals, will amount to approximately 3 trillion yen over the next 10 years.

Q2:
If there is a budget of 3 trillion yen over the next 10 years for steel and chemicals, then if ethylene crackers costing several hundred billion yen were to be built, although this would depend on the number of crackers to be built, do you think there would be sufficient room within the budget?

A2:

I believe this largely depends on how far the chemical industry can act collectively in making decisions.
The GI Fund is a framework for technology development, whereas Japan Climate Transition Bond are based on government-issued bonds and provide a framework for supplying various subsidies separate from technology development. Support for hydrogen and ammonia supply chains is also funded through this framework, as are industry-based support measures for climate change and hard-to-abate subsidies.
Typically, a special framework tailored to a specific industry (or industries) is uncommon. However, in this case, the steel and chemical industries jointly advocated that structural reform is necessary and that the burden for climate change is significant, which led to the establishment of an industry-specific subsidy framework. Therefore, we believe we need to make effective use of this framework.

[Q&A 8]

Q1:

On page 13 of the material, there is mention of the disposal, installation, and modification of in-house power generation facilities. Looking at the entire manufacturing chain, heat sources are critical for chemical products. Is it correct to understand that LNG boilers will replace the coal-fired heat source, while electricity will shift toward renewable energy and other sources? Previously, coal-fired systems were used to efficiently generate both heat and electricity simultaneously, so I am interested in whether a reliable heat source can be secured if they are separated.

A1:

In the past, we used coal to supply both steam and electricity. Going forward, we will switch to purchased electricity, and generate steam using LNG. Up to the 2030s, our steam source will be LNG, but the steam source beyond that has not yet been finalized. This is an issue for the future, including the timing of adopting hydrogen and ammonia, as well as potential use of e-methane. First, we will separate the simultaneous supply of steam and electricity from coal and transition to a structure where “electricity is purchased” and “steam is generated using LNG boilers.”

Q2:

I think your company’s steam usage will change significantly over the next ten years compared to the past 10 years as your product portfolio changes. Is it correct to understand that this has also been taken into account?

A2:

That is correct. Previously, steam and electricity were generated at a certain ratio, and any shortfall was covered by purchased electricity or steam. Once they are separated, the so-called heat-power balance becomes more strongly affected by changes in the business portfolio. Therefore, we are designing fuel conversion while taking into account expected portfolio changes over the next five to ten years. Since purchased electricity offers relatively high flexibility for adjustment, we are determining the capacity of package boilers based on steam demand forecasts.

Q3:

In total, will costs increase?

A3:

It depends on the case. They could increase or decrease. Generally speaking, LNG tends to be more expensive. However, in cases where there has been excess capacity or where repair costs have increased due to aging facilities, a combination of purchased electricity and modern package boilers may be more cost-effective. We need to carefully assess the situation for each plant.

End