Q&A Summary for July 2024 ESG Presentation

Date	July 9, 2024 Morning: Media session; Afternoon: Analysts and investors session
Venue	Tokyo Midtown Yaesu and online stream
Explainers/ respondents	HASHIMOTO Osamu -Representative Director, Member of the Board, President & CEO YOSHINO Tadashi -Representative Director, Member of the Board, Senior Managing Executive Officer & CTO, SHIBATA Shingo -Managing Executive Officer, Center Executive, R&D Center, R&D Center SAMBE Masao -Managing Executive Officer & CDO, Sector President, Digital Transformation Sector ICHIMURA Satoshi -Managing Executive Officer & CSO MIMURA Takayoshi -Member of the Board, Outside Director
Explanatory materials	Materials for the ESG Presentation on July 9, 2024

Q&A

■ Group-Wide Risk Management

Q1. With climate change risks escalating faster than envisaged, people say that we'll need to achieve carbon neutrality sooner. There's also talk that the shift toward electric vehicles could slow down or reverse if there's a change of president in the U.S. Could you please explain your thinking about how to deal with these changes in external factors?

A1. ICHIMURA, CSO

In terms of our carbon neutrality response, we've set a target of reducing GHG emissions by 40 percent from the 2013 level by 2030, and have currently reached a 25 percent reduction. We believe that, going forward, efforts to achieve reductions through technological innovation and regional collaboration will be effective in reaching carbon neutrality. Efforts in pursuit of recycling will need to be undertaken in partnership with local governments, rather than by the company alone. As the national government is also supporting such efforts, we believe collaboration with all kinds of stakeholders will be even more important.

As part of our risk management at a time of growing uncertainty, we're also collating information from our subsidiaries and affiliates, including those overseas. Every staff member in every region will keep their ear even closer to the ground so that we can obtain local information swiftly in a more direct way and take action in an agile manner.

■ Innovation / Digital Transformation (DX)

Q2. When Mitsui Chemicals was going through tough times about 10 years ago, it seemed to have trouble getting not only its digital transformation efforts but also its investments as a whole to go as it intended, and was struggling to secure human resources as well. Could you explain what kind of human resources you've been able to hire since getting out of that period, or at least during the last three years? I'd also like to hear what kind of position you're in compared to other companies in terms of the state of your investment in digital transformation. And could you tell us about how the introduction of digital transformation has affected plant operations in such areas as reducing accidents and improving production efficiency?

A2. HASHIMOTO, CEO

For a while after the global financial crisis of 2008, we faced a very difficult financial situation, so investment in IT and infrastructure fell behind – and although we were hiring personnel, we curbed investment in their education. Eventually, however, our financial position began to change for the better and we became able to turn a profit from our growth domains, which allowed us to invest in our management infrastructure.

In light of this situation, we've discussed long-term management plans twice so far, in 2016 and 2021. On both occasions, the discussions were based on the premise that Mitsui Chemicals was

lagging behind other companies in strengthening our management infrastructure. Particularly during our 2021 round of discussions, we recognized that investment in ERP and other aspects of our IT environment had been insufficient, and that it would be difficult to recover from this with in-house human resources alone. Accordingly, we invited Mr. SAMBE to join us as CDO from outside the organization, set up the Digital Transformation Division and have been working since to enhance it. Initially, we were three or four laps behind other companies in the same industry. However, due in part to the effects of systematic investment, I believe that – while we can't yet describe ourselves as the front runner – we now have our management infrastructure in place.

With regard to investment in human capital, we've also introduced non-financial KPIs as part of the operation of our key talent management system, and we're following through on these KPIs. We've launched various initiatives, including, for example, efforts to diversify membership of the Board of Directors, methodically cultivate a pool of CxO candidates and systematically nominate individuals via the Nomination Committee. Looking at the hiring of staff, while we formerly focused primarily on recruiting new graduates, mid-career hires now account for around half of all personnel hired. Due partly to the numerous M&As that we've conducted since Mitsui Chemicals' founding in 1997, our overall employee structure has also changed, with less than 20 percent of our staff having worked for one of our forerunner companies, Mitsui Petrochemical Industries and Mitsui Toatsu Chemicals. We're also aware that all these individuals come from increasingly diverse backgrounds.

One key point for us to address going forward is how to translate our progress so far into our Ideal Vision for 2030. As we've managed to put in place the fundamentals for advancing our corporate management, I believe it'll now be vital to strike a good balance in our efforts to achieve our ideal vision and "our financial targets and our non-financial targets".

YOSHINO, CTO

Mitsui Chemicals has long had quite rigorous safety performance targets in such areas as accidents and other problems, and has been working on improvements in these areas. But now, we'll leverage digital transformation here to achieve further changes for the better. The company's array of efforts on this front include, for example, an initiative in which trilingual safety checks are carried out during a simultaneous linkup of three countries, with engineers in Japan giving instructions to operators overseas concerning facility operation and maintenance. As a result, we've identified a fall in the total number of accidents and problems.

With regard to regular maintenance and repair: as with the "2024 problem" in the field of logistics, we face the challenge of securing personnel to carry out these tasks. More specifically, the implementation of overtime restrictions could give rise to such problems as regular maintenance and repair taking longer to complete. However, we're moving forward with the introduction of digital technologies capable of addressing this situation. For example, there have been advances in measures that enable workers' time to be used more effectively, such as using digital devices to communicate before starting tasks, and entry procedures that use image recognition. We expect to see a reasonable number of positive outcomes from these efforts going forward. Including those belonging to our subsidiaries and affiliates, we have over 100 plants in Japan, and can therefore expect substantial effects from a reduction in lost opportunities resulting from problems.

Q3. Is it conceivable that Mitsui Chemicals could collaborate with other companies on the use of digital transformation? I imagine that collaboration entails a risk that know-how might leak. Could you please tell us your approach to managing this risk?

A3. YOSHINO, CTO

I believe that collaboration with other companies is absolutely crucial in order to respond to the speed at which things are progressing. I also think we'll see further progress on this front – not only in regard to digital transformation, but also in R&D, with development based on an open innovation approach. While there's certainly a risk, we intend to manage it appropriately by making arrangements beforehand for frameworks covering such matters as confidentiality and the proportional distribution of profits. The sensors mentioned just now in our presentation are actually the result of a project we conducted with a company specializing in image processing, based on a confidentiality agreement.

In terms of the technologies we've built up, I believe that properly securing our intellectual property

will, in the future, enable us to roll out those technologies worldwide based on a licensing system.

Q4. As automation and autonomy progress, it's envisaged that there will be no people in the production sites of the future, but I'd imagine there are some aspects of R&D that can't be carried out in a virtual world. Please tell us your thoughts on dealing with the digital world.

A4. SHIBATA, Center Executive, R&D Center

Leveraging digital transformation will enable us to make R&D more efficient and speed it up to a pace well beyond anything we've experienced to date. However, as you'd expect, it's people who verify and judge the results obtained from virtual simulations. Digital transformation is a tool, and researchers will have to design for themselves an approach to making full use of it and translating it into innovation.

YOSHINO, CTO

I explained that we're also creating a system in which AI makes judgments about safety at production sites. But here too, as technology evolves, new processes are created and new products emerge, we'll need people to amass and input new know-how, as we won't have any previous data on these things. Rather than aiming for a completely unmanned plant, so I believe that skillfully combining people and digital technology will be crucial.

Q5. With regard to support for safety at manufacturing sites, would I be correct in understanding that if past problems and experience by Mitsui Chemicals are entered into the AI system, it'll also be able to cover matters deduced from problems experienced at other companies? And could you explain whether adding some kind of software would make it possible to cover all safety-related information, without exception?

A5. YOSHINO, CTO

We don't think that the information obtained from our current system is perfect; rather, we use it as a point of reference when less experienced individuals are carrying out tasks. However, we're adding case data in parallel with this process, and plan to increase the volume of data and update it at the same time by incorporating data not only from our own company, but also from external examples. We'll also increase the accuracy of risk management by incorporating examples that are openly shared within the industry, as well as publicly available data about the safety of chemical substances.

Q6. Could you explain what outcomes have emerged from R&D using materials informatics (MI)? I'd also like you to tell us your thoughts on returning the profits earned via the use of AI to the rights holders.

A6. SHIBATA, Center Executive, R&D Center

I believe we can expect to see huge effects from the use of MI and the like in domains where we have no previous experience, and also in the screening of reactions involving complex processes and a large number of combinations, such as in the bioscience field. We intend to translate those effects into future outcomes. We're also using generative AI in tasks that had been labor-intensive, such as patent searches and registration applications in various countries. I've heard from the Japan Patent Office that activities of this kind are increasingly widespread, and we intend to use these technologies to ramp up our intellectual property activities.

Regarding the point about returning the profits from AI use to rights holders, the system currently operates on a voluntary basis, so we intend to consider the matter going forward.

Q7. With regard to the resource circulation platform, please explain your motivation in seeking improvements to the 1.3 million tons of recovered plastic being exported by the company, and the path you intend to take to achieve this.

A7. SAMBE, CDO

We believe that recovered plastic will come to be regarded as a new resource in due course. For example, if the government introduced a regulation mandating that a certain percentage of recycled material be used by automotive OEMs, a system for distributing recovered plastic would be

required. To build such a system, it would be necessary to amass data about such matters as what volume of usable recovered material is available and where, and which are the fastest routes for shipping it. A company's activities can be divided into competitive realms and collaborative realms, and this would be a collaborative realm, to my mind. Rather than going it alone, creating an ecosystem for sharing data with parties outside the company – including assorted users, collection vendors and freight carriers – increases the possibility of being able to acquire the materials you need, when you need them. There's also potential for creating new flows of resources procured from places with which we haven't previously done business. This is what we want to achieve.

Q8. What's the status of Mitsui Chemicals' response to cyberattacks? In addition, some businesses have recently been adopting the approach of bolstering cybersecurity not only for their own company, but also throughout the supply chain, including their suppliers. Please explain Mitsui Chemicals' response on this point as well.

A8. SAMBE, CDO

Cybersecurity measures are usually divided into phases: identify, protect and recover. At Mitsui Chemicals, we're fortifying our protections by introducing multilayered defenses in each phase. We're increasing our security level via a combination of methods: in addition to training and assessment by an external security company, as well as efforts to prevent problems from arising by installing endpoint detection and response, we've introduced a 24-hour monitoring service by our security operation center, in case any problems do arise.

When it comes to cybersecurity, we believe that cybersecurity literacy among staff members is of paramount importance. Every year, we conduct several drills using a simulated virus. As we're in an unending battle with hackers, we review our measures annually and progressively update them.

We're also aware that we also need to be able to detect anomalies in the event that a supplier connected to the same network suffers a cyberattack, so we intend to make steady progress in evaluating and installing appropriate software.

Q9. I've heard that with Japan lagging behind other countries in the development of digital transformation, efforts by individual companies in pursuit of digital transformation won't be enough to let them compete with foreign companies. Rather, they'll need to adopt an approach of standardizing those elements that can be standardized, with each company then seeking to differentiate itself in its fields of strength. You said that Mitsui Chemicals is now catching up with other companies in terms of investment in digital transformation, compared to where it was during its difficult period 10 years or so ago. Could you explain your thoughts on dealing with the elements that should be standardized, either within Japan or within the same industry?

A9. SAMBE, CDO

First of all, we're moving forward based on a policy of standardizing all the elements that should be standardized within the Mitsui Chemicals Group. Our aims here are to curb duplicate investment within the Group and to keep a lid on increases in running costs due to the installation of separate systems in each company. We're currently upgrading our mission-critical SAP system with a view to standardization; in doing so, we intend to ensure full compliance with the clean core approach, which involves using the software as packaged, rather than customizing it. When we introduced the current system 20 years ago, there were 2,000 custom add-ons, but with the new system, we've managed to consolidate them down to just seven by strictly adhering to the principle of using the software as packaged. I believe that deploying this approach throughout the Group will enable us to not only minimize duplicate investment and running costs, but also enjoy the benefits of new technologies in an agile manner.

We'll also see industry-wide standardization, I believe. Going back to that idea of competitive realms and collaborative realms – for things that fall under the latter, I don't see any need for each company to introduce different systems. Taking the switch to joint logistics as an example, I think that undertaking operations based on the construction of a single system shared by the participants in the initiative will enable us to both reduce wasteful costs and increase the international

competitiveness of Japanese companies in the long term. I believe there are other realms of this kind, as well. Pursuing industry-wide innovative change will, I believe, enable us to enjoy the kind of benefits I've just described.

HASHIMOTO, CEO

In the disclosure of ESG information relating to such matters as human rights and reducing CO_2 emissions, I think having data that's versatile at the global level will come to be more important than having unique data specific to our company. And I believe this is a good fit with the clean core approach.

Q10. Could you explain whether I'm correct in understanding that installing a system based on the clean core approach will make it easier to standardize future data?

A10. SAMBE, CDO

Working on a clean core basis will eliminate the need for superfluous add-ons, thereby enabling us to keep a lid on unnecessary costs. Installing an industry-standard system (OpenAPI) will also make it easier for Mitsui Chemicals to link up with partners that are trying to build an ecosystem.

■ Corporate Transformation (CX)

Q11. I'd like you to explain Mitsui Chemicals' vision for what the company will look like once it has achieved corporate transformation by means of digital transformation.

A11. ICHIMURA, CSO

In terms of support for our business activities, the focus in commercial products is evolving from selling goods to selling services. For example, rather than simply selling plastics, it's the traceability aspect – identifying whether it's recycled and how much energy has gone into it – that will constitute the value for customers. This is something we can't do without digital transformation. In the area of sales and marketing, too, we'll have to build up a picture of customer needs, so that, we can also suggest ways of using materials, rather than simply supplying them. This will lead to changes in the way we approach sales activities.

Corporate transformation is the process of conducting these activities in greater depth by ensuring that each and every individual masters digital transformation and undertakes a range of related initiatives, which should help us to get to where we want to be on this front and contribute to society.

HASHIMOTO, CEO

What Mitsui Chemicals will look like once we've achieved corporate transformation is expressed in VISION 2030's Ideal Vision for 2030: "Chemistry for Sustainable World." We're aiming to be "a global solutions company that leads change and contributes to a sustainable future." In other words, I see that as a situation in which we'll have achieved all our financial and non-financial KPIs in their entirety, and will have brought our corporate transformation to fruition. VISION 2030 doesn't involve any approaches focused on directly changing the corporate culture itself. I believe we'll ultimately be able to say corporate transformation has been accomplished when both the company and its culture have been transformed by pursuing our five basic strategies and achieving VISION 2030, which is aimed at our ideal vision.

Right now, to address the delays in our current numerical plan, we're making revisions, with reference to the gap between the present situation and the VISION 2030 concept and ideal vision. We plan to disclose the details in November.

Q12. I'd like to know your thoughts on whether digital transformation is a tool or the core of corporate management.

A12. HASHIMOTO, CEO

In order to transform our business portfolio, we also need to transform our business operations, which means that we'll have to make changes to such intangible aspects as work styles and culture. We regard digital transformation as a powerful driver for bringing this to fruition. When all's said and done, the core of our corporate management is our ideal vision and our corporate vision. We see digital transformation as the core tool for translating this vision into reality.

■ Approach to M&A

Q13. What measures are required to further enhance the accuracy of due diligence when it comes to M&A? And with regard to capturing new markets, I'd imagine that if a business has maintained a high level of profitability in an existing region, it has a high probability of success in other regions. However, I'd like to know how you intend to control the situation if a business to which this doesn't apply is involved in M&A in another region. In addition, I believe that the weak yen has caused the sums invested in overseas M&A to balloon. Please explain your thoughts on addressing this situation.

A13. MIMURA, Outside Director

To my mind, M&A won't go well unless it can ensure either technology acquisition, faster development or the acquisition of a new market. Accordingly, I've always been fastidious about these points, regardless of the scale of the M&A deal, ever since I was in my previous role. Now, you've alluded to there being a need to increase the accuracy of due diligence in M&A because not only technology, but also the perspective of business matters has to be considered. And indeed, given the rapid weakening of the yen of late, accurate due diligence is acquiring even greater importance. I believe M&A will be essential to the Mitsui Chemicals Group's future growth, but there's a mounting need for corporate management that keeps investment efficiency at front of mind, so it's vital for the company to have an even stronger cost consciousness than before.

M&A in other regions that involve businesses with a low level of profitability will need to be considered on a case-by-case basis, but at the very least, I believe it'll be important for the party making the proposal to stay level-headed and take a pause for thought before proceeding.

■ ESG in General

Q14. I'd like you to explain the initiatives relating to ESG issues that you think investors appreciate, and the issues that you think you should address as a priority.

A14. ICHIMURA, CSO

I believe we're appreciated for our proactive stance and actions aimed at developing Japan's chemical industry in a sustainable way, with a sense of responsibility regarding the achievement of carbon neutrality.

We recognize that society has increasingly high expectations relating to ESG, with regard not only to carbon neutrality, but also to such aspects as resource use, water and human rights. We must show all stakeholders that our efforts to address these challenges, and our corporate activities themselves, truly contribute to society. I believe that there is some room for improvement in our information disclosure, so I'm keen to work on expanding the domains covered.