

ESG Day 2021 Q&A (E/S/G)

[Date] December 3rd, 2021

[Speaker]

Kenichi Hori, Representative Director, President and Chief Executive Officer

Takakazu Uchida, Representative Director, Executive Vice President and Chief Financial Officer

Shinichiro Omachi, Representative Director, Executive Vice President and Chief Strategy Officer

Yoshiaki Takemasu, Representative Director, Executive Managing Officer and Chief Human Resources Officer

Kazumasa Nakai, Chief Operating Officer of Infrastructure Projects Business Unit

Takeshi Furutani, Chief Operating Officer of Basic Materials Business Unit

Hiroshi Kakiuchi, Chief Operating Officer of Performance Materials Business Unit

<Q1>

I have a question about GHG emission reduction. I understand that your approach is very effective and reasonable. Is there a possibility of receiving global certifications such as RE100 or SBT (Science Based Targets)? Do you think that these are not suitable for your business structure?

<Hori>

We are still in the process of examining the possibilities.

<Omachi>

At this time, we are not in the process of obtaining such certifications. We will continue to study the possibilities.

<Q2>

In your path to halving GHG impact by 2030, you indicate that new renewable energy, hydrogen, ammonia, and next-generation fuels etc. will contribute 10 million tons to GHG reduction contribution between FY Mar/2024 and FY Mar/2030. What are your thoughts on the scale and impact of each of these factors? Also, what are your thoughts on the feasibility of achieving renewable energy ratio above 30%, and in which areas (domestic or international) will you focus your efforts?

<Hori>

The amount of decrease in emissions and the increased reduction contribution for the period from FY Mar/2024 and FY Mar/2030 are based on the accumulation of specific projects. As for further portfolio transformation in the area of decrease in emissions, we have to take into account that it is a matter of mutual agreement with our partners etc. and is necessary to implement in a manner

that ensures economic efficiency. As for increased reduction contribution, we have to make sure that feasibility studies will be successful. However, we intend to combine technologies that have been proven to some extent at this stage and expand the scale, in order to realize the projects.

<Omachi>

We expect large-scale projects will be renewable energy, hydrogen, ammonia, and forestry. However, this may be changed in the future depending on the pipeline projects in each business unit and their combination.

<Nakai>

At present, our power generation total net capacity is about 10 to 11 GW, and renewable energy ratio is 15%, which is equivalent to 1.5 GW. To increase this ratio to 30%, we need to add another 1.5 GW. At present, there are various pipeline projects, including onshore / offshore wind power generation and solar power generation. We will build up our renewable energy assets with a target of 1.5 GW by FY Mar/2030, considering the profitability of each project. However, since denominator may become smaller due to the recycling of existing assets, the required net capacity of renewable energy will be determined considering the snapshot of Mar/2030. In terms of areas, the current list of pipeline projects include domestic offshore wind power generation projects whereas consideration for the following process is subject to study results including economics that is to become available by the end of this year or early next year.

<Q3>

Regarding how to shift to hydrogen and ammonia in the medium term, it is explained that it will be locally produced for local consumption in the short term and the expansion will be emerged in the medium to long term. Please tell us the way of thinking about the timing of investment and the time axis in case of importing 3 million tons of ammonia in 2030.

<Hori>

Potential projects for clean ammonia in Australia and the Middle East, if all the assumptions and hurdles are smoothly overcome, for example, may become commercial at the time frame of 2025 and 2028. As we all know, such projects need to carefully set the milestones, but so far, I have an image of such a time axis. Hydrogen tends to contain a characteristic which leans towards local production for local consumption.

<Furutani>

When it comes to ammonia, blended combustion with coal is being tested by mainly Japanese utility companies. Results shall, I believe, become available for a blended combustion operational status around 2027 to 2028, which can be said to be the current schedule we are looking at.

Before moving from the test phase to the actual implementation, we are of the opinion that the overseas ammonia production project will proceed to some extent. It takes about two to three years to build an ammonia plant. Subtracting these number of years from the implementation, 2024 or 2025 shall be the last minute timing to make the final investment decision.

Though it depends on the schedules of those projects we are pursuing, if the related studies progress as scheduled, we might be able to go so far as to make a final investment decision in 2023 for the earliest cases.

<Kakiuchi >

I'd like to talk about hydrogen. As we all know hydrogen has a characteristic that it is very difficult to transport. As our CEO mentioned earlier, when it comes to hydrogen, if anything, manufacturing business of local production for local consumption would be in our scope.

In my explanation earlier, I introduced our initiatives in the California state, U.S. where zero emission vehicles regulation is going to be introduced in 2024 for commercial vehicles, the sector which demand is expected to increase. There shall be many truck operators and bus companies working on zero emission vehicles and, in particular hydrogenization, where we observe specific activities and development already starting. The regulation requires achieving 100% zero emission vehicles within 10 years after being introduced in 2024, so back calculating from this fact, we believe large-scale hydrogen demand will occur from 2025 to 2030. With this time axis in mind, we are proceeding with our studies on manufacturing business contributing to local production for local consumption, with clean hydrogen.

<Q4>

When it comes to the emissions allowance business, my understanding is that you have strength in this area, and I remember that you have a track record of recording trading gain from the business though it's a long time ago. You talked about carbon credit in Australia earlier, so please explain what are the strength that you have in this area in the sense that you're not just a broker, and where you have opportunities for monetization in the future.

<Hori>

We believe that the emission allowance is a trading object with great fit for a general trading company where we have collaboration among each division, and that it also is an activity that creates value. Especially in our case, there are of course various technologies that we talked about today, the technologies that come from the field of materials, and carbon credits coming from forest businesses. And, of course, there will be a market for carbon credit. However, there needs to be strict rules such that for example the same credit is not counted twice, and that the criteria is managed according to global standards. The standards are intricate now, but I believe they will gradually converge as a global standard. If these standards are established bilaterally or

multilaterally, it shall become very easy to make good use of, but I think various verifications will still need to be carried out toward that point. We would like to prepare ourselves for that occasion. In the creation of emission credits themselves, we would like to bring the materials that we can use and ideas from each division to realization, and we shall also prepare by establishing a central command tower that can manage emission credits overall the company, and I think we will need precise trading control like we currently have in various trading businesses. Or, in the cases we emit greenhouse gases to fulfill our supply responsibilities, it is very advantageous to have such emission credits on our own as an offset to the captive emissions. If this can be done bilaterally or multilaterally, we will expand the discussion to the point of optimization in trading business. Now, while preparing various hypotheses, we are doing it with a point of view inclusive of financial control analysis.

<Kakiuchi >

As our CEO explained, our team is just embarking on the forest-derived emissions credit business. Through afforestation and reforestation for many years, we have a good understanding of how to partner with local farmers and deal with mountainous terrains, and the characters of tree species (broad-leaved trees, coniferous trees), and through dialogue with partners who are engaged in this business. We would like to carry out various verifications with the activities we have on the ground in Australia which has a compliant system.

Emission credits also have a financial aspect, so we would like to continue to expand the transaction volume in the future as a one-whole team together with members in the fields that are very good at such transactions within our company.

<Q5>

My question is about social, diversity and inclusion, and human rights. The ESG scores by ESG rating agencies under the social aspect is not very high. And this is related to Q1, we consider your un-certified situation might be causing the discount. In order to let the market know about your efforts in social and environment, I think you should do something to raise the ESG score, or you should perhaps aggressively go after certification. So, do you have a strategy on this?

I think you may have some comments about the fairness and appropriateness of these certification agencies and the assessments, but institutional investors and asset owners do tend to use these metrics as screening for their screening criteria. That's what I feel firsthand, so I do hope that you aggressively go after such certification or rating.

<Hori>

We take importance of the feedback from ESG rating agencies and they are reviewed at the BoD level, and is discussed at large on how correspondences are made.

This is something very basic, but we want to enrich the content of our replies to questions. There

perhaps were cases where the efforts we were making were not fully explained and communicated to the agencies. We are working to improve the matter for such cases. Furthermore, we shall of course heighten the level of publicizing comprehensively all the activities we are engaging ourselves in, around the world.

We're not working for certification as the goal, but to have our activities evaluated properly. Then after, we will take a long-term perspective taking into consideration how the values of the society transcends and how we can correspond to them in a sustainable manner. Because a patchwork approach would not lead to strengthening the company, I am conscious to deal with rating agencies which contains long-term perspective with objectivity.

<Takemasu>

As our CEO stated, and whilst the objective of diversity is of utmost importance, I honestly think that for us to publicize diversity from more of a data driven perspective is a subject for us. We shall further improve our disclosure on our global and diversified situation and communicate them through dialogue with stakeholders.

<Q6>

Please comment on the issues that you recognize or the background behind, regarding introducing new systems for the purpose of creating various career opportunities. I would like to confirm the company's way of thinking, as the goal of bringing up the female managerial ratio from current 8.4% to 10% does not look ambitious in comparison to 21% which is already achieved overseas.

<Hori>

Task of a global trading company, or sogo-shosha, is to provide effective solutions to diverse issues. I'm of the belief that a team of members with different backgrounds has the capability of drawing out valid solution, in other words a team without diversity cannot create value.

Therefore, not only training new graduates from zero, but also open-endedly hiring mid-career professionals globally, or rehiring those who had once left the company and procure a matrix type of human resources is required, and as a result shall also require training of managers who should be competent in hiring capable people. We are also combining various measures to promote D&I initiatives, considering things like the employee's increasing interest in multi-track career system that offers various career paths.

<Takemasu>

The millennials and the Z generation are not minorities in our demographics anymore and rather are those who should play an active part at the frontlines. Their views on the jobs and careers are quite different from the previous generations and can be characterized as tendency to put priority on self-realization over opportunity to promote by seniority as well as not everyone aiming of becoming a line manager. As for promotion of active participation of women within the group, we

must admit that we were a little bit behind in formalizing the recruitment of female career staff thus the female managerial ratio is comparatively low. Recently, however, approximately 40% was female out of the career staff who joined our company last year and the ratio was above 30% for those who joined April this year. While our current aim is to raise the ratio of female managers to 10% by 2025, this ratio should go up to the female ratio of new graduates, in a natural manner.