Summary of Questions and Answers of on-line Briefing Session on the Medium-Term Management Plan (2021-2025) held April 2, 2021

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Questions	Response
Page 4: Is it alright to say that the revitalization plan is coming smoothly?	As shown on page 4, a certain results have been achieved for items with a mark "○". However, the promotion of innovation has been halfway because the loss of a specific project made future investment, such as DXoT/R&D investment, insufficient, which was originally intended by the capital increase from Integral Corporation.
In regard to P.7, if we assume backlog of contracts is over 400 billion yen in 2025, will it be around 100 billion yen in the new area? Please tell us about the size of the new area in 2025 and whether fuel ammonia will be the main of it.	It is essential to secure an annual order level of 300 billion yen as premises for achieving the goal of annual net sales of 300 billion yen. Regarding the fuel ammonia, feasibility study of its value chain and small-scale projects at the validation phase will be counted in the beginning. However, even if some orders are received around FY2025, it will take some time for big contribution.
Each company says it wants to develop business related to decarbonization. Could you explain the position of Toyo and the points where Toyo can demonstrate its strengths?	We have been actively engaged in the generation of renewable energy of large-scale photovoltaic power plants and biomass-fired power plants since fiscal 2012. We will focus on fuel ammonia and SAF, which are expected to expand in the market shown on page 8. As shown on page 20, we have constructed 85 ammonia plants to date and there are ongoing projects in India and Nigeria. Although CO2 is emitted when ammonia is produced from fossil fuels, the feasibility study of using this CO2 for EOR will be verified. In regard to the technology that has recently attracted attention as a CCUS, TOYO has been working on since the 1980s, and possesses specialized technical knowledge and experience. We recognize that the longtime relationship with KBR, the biggest ammonia licensor, is also a major strength. The second is Synthetic Gas Technology, which holds the key to carbon recycling shown on page 21. In the carbon recycling business model shown here, we will use FT synthesis technology to produce liquid fuels such

	as SAF and plastic raw materials through synthetic gas produced from CO2 using Toshiba's technology. In addition, a demonstration plant was constructed to produce synthetic gas from biomass, which is being implemented together with Mitsubishi Power, to produce SAF. The FT synthesis technology is from Velocys, Inc. of the United States, based on our longtime alliance.
P.9 shows a graph of global electricity demand. Nippon Steel Engineering Co., Ltd. (NSE) a partner of TOYO, has indicated its policy of focusing on offshore wind power. What is the possibility of cooperation in the offshore wind field?	Offshore wind power is one theme of our comprehensive collaboration. A combination of NSE's strengths in marine structures, and TOYO's EPC project management, could be one possibility, but it is not at the stage that we will collaborate in specific projects immediately.
What are your thoughts on traditional businesses such as petrochemicals, oil & gas in the EPC field?	Demand for petrochemicals and fertilizer continues to be high in countries such as India where we have group EPC companies. In Brazil, there are many expected projects for FPSO, gas separation, and power generation. As shown in the top page 9, the need for "Quality of Life" is an important social issue in emerging countries, both harmony with the environment and enrich people's lives are essential. We respond to local needs through our group EPC companies. Focus area of each country are shown on page 16.
I would like to ask you a little more about the topic on page 12 of earning 50% gross profit in the future from non-EPC businesses.	While promoting "Advanced EPC operation", exploring opportunities to participate as business operators under the strategy "Sustainable Technology and Business Development". We are considering a variety of forms to contribute to gross profit from new business area in addition to EPC.
In regard to P.12, I understand non-EPC is less than 20% now. It seems difficult to achieve 50% by 2030. How are you going to achieve it?	Of course, we will actively seek to create non-EPC business opportunities. We have examined a variety of business models. It should also be noted that non-EPC area consists of new business area shown in P.19 and existing business area such as FEED and EP contracts (the green portion at the top of P.12). As you pointed out, we anticipate business investment as a new business model, and there will be a need in the future. The Ammonia Value Chain is not limited to conventional business models, such as plant EPC and pipeline laying, but it is considered that various roll as operators will be one option and we would like to realize it.

I think that “New business area EPC“ on page 12 includes SAF, but what else is specific?	In addition to SAF, blue ammonia, waste plastic recycling, and special engineering plastics used for smartphone lenses will also be included in “New business area EPC (the second blue from below on P.12). “New business area Non-EPC (the third green from below)” includes the development and licensing of next-generation urea synthesis technology, co-creation engineering with customers and partners, and new business models. “Existing business area non-EPC (the top green) “ is service type business such as concept design and feasibility study of conventional area.
In P.12, is the ammonia business for fertilizer contained in the lowest “Existing business area EPC” and in the “New business area EPC” for blue ammonia? In other words, will EPC be still main business in 2030?	Blue ammonia, which will be used as fuel mainly, is considered as a new business area. As you can see, EPC still represents 50% of the ¥10 billion in net income in 2030. We will pursue the possibility of EPC's lineup in new business area in addition to fuel ammonia.
If the gross profit is 30 billion yen in future, the gross margin is 10% of sales of 300 billion yen. If sales are between ¥200 billion and ¥250 billion, what is the impact on gross profit? If fuel ammonia is not realized smoothly, will it affect to the profit target?	It would take a little time to return to sales of 300 billion yen because new orders of last two years were not sufficient. However, if the Covid-19 subsides, demand will increase mainly in the plant EPC market in emerging countries. Since EPC's gross profit is improving every year, we would like to increase this and achieve the target then the gains will be allocated to investment of DXoT and R&D.
Regarding risk management, are the management methods different between new and existing areas?	In the area of new technology development, there are both cases we are developing ourselves, and working together with partners. When we develop ourselves, we can apply the methods developed for urea and other proprietary technologies with existing EPC. If there are partners, we can work in the same way. In the field of business development, there will be business investments that we have less experience. We are considering get the advice of outside experts, including large shareholders, in such case.
On page 13, it is stated that the sales target is 300 billion yen. Please explain in more detail how to make a profit.	In the previous medium-term management plan, which began in fiscal 2012, the company set a goal of expanding its sales up to ¥500 billion. As a result, we received multiple orders for large-scale projects, but the quality of projects have not been maintained properly due to the rapid expansion of orders. This has led to a difficult situation in recent years. Although the amount of orders received from non-EPC service work is small,

	the profit margin is high, so we value this as an important point. On the other hand, we exercise competitiveness in procurement and construction with a certain scale of EPC, and therefore sales amount cannot be ignored at all. As a result of prioritizing profitability, large projects may be also included in new orders.
In regard to Advanced EPC Operation of P.15, how will DXoT be promoted globally? What are specific examples of P.17 DXoT? What are the problems and issues, and how are they solved?	The joint development actions are implemented simultaneously with the group EPC companies. As described on page 17, DXoT has been working on the entire work flow in EPC since FY2019, and in FY2020, some actions to improve efficiency by DXoT have been implemented. For example, " bottleneck visualization" is a reform of the material control at construction site which has begun at IKPT project of an Indonesian subsidiary. Toyo-Japan has built a system as a control tower with, for example, Toyo-India and IKPT's IT division.
As shown on page 16, I think there is a risk that additional costs may be incurred when projects are implemented independently at each group company. What measures will be taken?	Both Toyo-Japan and group EPC companies have adopted the same risk management methodology, which was restructured in fiscal 2015, and improvements have been made year by year. Since the beginning of 2021, we have changed the framework to include the heads of group EPC companies in the management meetings at Toyo-Japan and have been aligning toward the same direction.
We would like to know the possibility and magnitude of each new business area described on pages 19, 20, and 21.	It takes 1-2 years, 3-5 years, or more to make the business profitable, and it is organized specifically for each individual business. However, since it includes businesses that cannot be disclosed or those that are in the early stages, the company has refrained from disclosing information to the public. As shown in P.8, 3-5 ammonia plants are required for 3-5 million tons/year demand of fuel ammonia in 2030. 30 units are required by 2050 for demand in Japan. On the other hand, SAF is only rough estimates of construction costs. It is assumed ammonia plant for fuel will become large size and be commercialized earlier than SAF because of the government's support. We will refrain from disclosing each business in detail, but we believe that some can be monetized within the next few years.

Please reiterate your strengths in developing new technologies and businesses on page 19.	As for fuel ammonia, we have a wealth of experience in building ammonia plants since the 1960s. We have a good relationship with ammonia licensor KBR. CO2-EOR, which is required for blue ammonia, has been taken up since the 1980s and has knowledge on how to deal with the geological stratum and depth. Synthetic gas technology, which we have been working on for many years, is the key to SAF. One example of SAF production was demonstrated in a NEDO project using a comprehensive agreement with Velocys of the United States, which possesses FT synthesis technology. We also have technical knowledge to produce green methanol and MTO as shown on P.21.
What are the specific types of ICT/DXoT investments in P.23 totaling ¥28 billion?	This includes personnel costs related to DXoT, outsourcing costs, and expenses for purchasing software.
At the end of last year, we heard the outlook for a recovery in the plant market for the next year or two. What is your outlook at the current situation as crude oil prices rise and the outlook for vaccine penetration of Covid-19 is becoming brighter?	The outlook is now brighter than it was at the end of last year. In the autumn of last year, when we asked customers about their investment plan, many responded that they would like to see the situation become a little bit more stable. As you pointed out, oil prices have risen, and chemical companies are showing signs of a recovery in earnings, and I feel that their willingness to invest are returning.
What is the relationship with major shareholders such as Integral and Mitsui & Co. in achieving the medium-term management plan?	We will consider collaborating not only with Mitsui but also with other partner companies to promote measures for carbon neutral. In regard to the new business model, it may be possible to make use of Integral's knowledge and know-how, who is investing in a variety of businesses. The contents of the medium-term plan are explained to both companies.

(Note)

- On the same day, we held briefing sessions for reporters, analysts, and institutional investors, and these sessions are combined.
- In some cases, the order of the contents has been changed to make it easier for readers to understand.