

JFE Group Investor Meeting

(7<sup>th</sup> mid-term business plan FY2021 to FY2024)

Summary of Q&A Session on May 7, 2021

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**Q: What is the background behind your decision to disclose a stronger goal of becoming carbon neutral by 2050? Regarding the development of carbon neutral technologies, other companies in your industry are focusing on COURSE50 and Super COURSE50, which are initiatives of the steel industry, but what is the difference in your company's approach to this issue?**

**A:** As for the decision to go carbon neutral by 2050, since we announced our goal in September 2020, other companies in our industry have announced various goals, and the Japan Iron and Steel Federation is also aiming to go carbon neutral by 2050. Therefore, we have made this decision because we believe that achieving carbon neutrality by 2050 is a matter of life and death for us.

Regarding COURSE50 and Super COURSE50, the Japan Iron and Steel Federation has already decided to work together on it, and we are also participating. On the other hand, in this mid-term plan, we have placed particular emphasis on carbon-recycling blast furnace as our unique technology. This technology has not been discussed in the Japan Iron and Steel Federation until now, but I believe that it is important to develop various carbon neutral technologies in a multilinear manner, and that this technology should be included as an important means to achieve this.

**Q: What are the pros and cons of carbon-recycling blast furnace in terms of technology and external conditions?**

**A:** As for the carbon-recycling blast furnace, the technical issues are whether it is possible to smoothly reuse the CO<sub>2</sub> emitted from the blast furnace by methanation using a large amount of hydrogen, and the development of technology to consume the excess methane in the steel mill and CCU since the entire amount cannot be reused in the blast furnace.

However, in the sense that existing infrastructure and steel making facilities can be used as they are, I understand that this technology has a very significant meaning. Details will be explained at the May 25 briefing session.

**Q: What is your policy on the use of electric arc furnace technology in carbon neutralization?**

**A:** As for electric arc furnaces, we currently have no plans to increase the number of such furnaces in Japan or overseas. However, leveraging the cutting-edge technology of Eco-Arc and considering the factors such as inventory level of steel scrap and electricity rates Japan, and the CO<sub>2</sub> emissions reductions targets, we hope to further improve this technology and manufacture high-end products.

Overseas, we are considering to acquiring the techniques utilizing know-how of electric furnace of our joint venture company in Mexico, Nucor.

**Q: Can you tell us about your specific strategy in terms of turning this decarbonization into a business opportunity?**

A: If CO<sub>2</sub> emissions can be effectively reduced through decarbonization technologies such as carbon-recycling blast furnaces in the steel business, one way is to use this technology as a business opportunity. The Engineering business is also working on geothermal and solar power generation, and will also consider offshore wind power generation. I believe that if this becomes a business for the entire JFE Group, including the seabed-fixed structures for offshore wind power generation, it will be a major business opportunity.

**Q: Regarding offshore wind power generation, what is the market scale for monopiles for offshore wind power generation, what is the expected growth rate, and what are the strengths of your company? What is the strength of the company's integrated manufacturing and sales of offshore wind-related businesses?**

A: In the Green Growth Strategy, the Japanese government said that offshore wind power would be a major pillar of the country's economy, and we believe that the annual market for monopiles, which are applicable for deeper water areas, is expected to be 160,000 to 200,000 tons. Monopiles are cheaper overall as foundation structures than jacketed structures, and the demand for monopile is expected to increase.

If we were to increase the share of renewable energy to 50% by 2050, there is limited land suitable for solar power generation, and we believe that offshore wind power has great potential.

In addition, there is no company in Japan that makes the basic structure part. It is manufactured by European company, but bringing it from Europe to Japan would be very expensive. I think it would be ideal if the entire JFE Group could enter this area.

Also, in terms of operation and maintenance market for offshore wind turbine, there will be business opportunities for our group companies that perform maintenance in our steel business.

**Q: Regarding the GX investment, let us clarify how to link JPY340 billion of GX investment to earnings. Is it correct to understand that investment in the Steel business relates to a technology development over a longer period of time, while investment in the Engineering business mainly relates to the business expansion?**

A: The JPY50 billion includes investment to reduce CO<sub>2</sub> emissions by 18% toward FY2024, and investment in research and development toward carbon neutrality by FY2050. The rest includes capital investment and business investment of Steel business, Engineering business and Trading business, which will have investment effects.

Carbon neutrality requires a long investment period. The dilemma is that unless we invest in this, it will be difficult to create innovative technologies, but we will make every effort to link the JPY50 billion-plus to revenue as quickly as possible.

**Q: Regarding the segment profit target of JPY230 billion for the Steel business, could you tell us the factors behind the increase or decrease compared to FY2020?**

A: The segment profit of the steel business is expected to improve by JPY295 billion between the actual results for FY2020 and the target for FY2024. This includes a JPY120 billion improvement in cost reduction, a JPY60 billion improvement in volume based on the assumption that crude steel production will increase from 22.76

million tons in FY2020 to 26 million tons in FY2024, a JPY64 billion improvement in sales price, raw materials and product mix, and a JPY51 billion improvement in profits of group companies.

**Q: Referring to the connection between capital investment and cost reduction, tell us the target value of cost reduction coming from productivity improvement resulting from DX investment.**

**Also, regarding the reduction of fixed costs, please explain how much decrease in depreciation expenses as a result of structural reforms is included in the current plan, and whether it is outside of the JPY120 billion cost reduction.**

**A:** As for the DX investment effect, it is difficult to quantify the investment effect in some areas. In the case of the steel business, part of the 20% improvement in labor productivity is accounted for as a DX investment effect.

As for fixed costs, about less than 60% out of the JPY120-billion cost reductions accounts for fixed costs reductions, including labor productivity improvement in Steel business. About JPY10 billion out of the fixed cost reduction, approx. JPY60 billion, resulting from the structural reforms announced in March 2020 has been realized ahead of schedule in FY2020. The rest of it, approx. JPY50 billion, will be realized during this mid-term plan.

JPY120 billion cost reduction does not include the change of depreciation and amortization.

**Q: Could you give us a breakdown of the JPY64 billion in terms of sales price, raw materials and mix? You are aiming for a high value-added ratio of 50%, what is the ratio as of FY2020? What kind of high value-added products will increase its volume? Please also tell us what you mean by a drastic revision of selling prices.**

**A:** I will refrain from answering the specific breakdown of sales price, raw materials and mix for now. The ratio of high value-added products was approximately 40% in FY2020, and we will increase it by 10% in this medium term.

Although our customers already recognize the value of our high value-added products, we believe that in some cases the value is not fully reflected in the price. In the background, I think there is a business practice of setting prices that customers think if a certain amount of profit is made in total, it is okay, as each customer buys both high value-added products and general-purpose products. In the future, we should set prices that are appropriate for high value-added products, otherwise we will not be able to increase profits even if we increase the ratio of high value-added products. Therefore, we will proceed with a drastic review of selling prices.

**Q: With regard to electrical steel sheets, to what extent do you expect the market to expand from the current level to FY2024?**

**A:** There are studies that show that demand for high-grade non-oriented electrical steel sheets will more than triple in 2024, and our investment in electrical steel sheets will double in capacity in 2024. We would like to adjust our production capacity in reaction to the demand.

**Q: You mentioned that Group companies will improve by JPY51 billion compared to FY2020. I think that would be an improvement of JPY35 billion from FY2021 onward. Please tell us where this improvement will be seen.**

**A:** With regard to the improvement of earnings at Group companies, I cannot discuss the assumptions of individual companies, but each company has formulated a plan that anticipates an increase in earnings, both overseas and in Japan.

**Q: Please tell us your image on the growth strategy overseas. If an overseas M&A deal with good conditions comes up, is there any possibility that you will consider executing it even if you have to change your cash flow policy?**

**A:** As for the overseas growth strategy, up until now, we have been aiming to expand profits on the premise of volume growth to some extent. However, geopolitical risks have emerged, and it is unclear whether investments based on volume will generate sufficient returns due to the large capital requirements. Considering the need to invest in carbon neutrality in the future, the company has decided that it should shift from quantity to quality in its overseas business.

If there is a good deal on M&A, we will not rule out the possibility and will consider it.

**Q: In considering a JV with JSW for electrical steel sheets, please tell us how you will balance technology licensing and compensation recovery.**

**A:** As for the electrical steel business with JSW, the creation of a framework for investment and recovery will depend on future discussions. However, our manufacturing technology for grain-oriented electrical steel sheets is very advanced, and we would like to use it as a business model for earning profits through JVs, rather than simply licensing the technology as in the past.

**Q: Please provide additional explanation regarding the policy for the land use of Keihin district after its upper facilities are stopped operation.**

**A:** We have established a specialized department to address the issue of land use of Keihin district. We have started discussions with Kawasaki City, but it will take some more time to formulate a policy for the use of the land since it is a very large area and there are restrictions on its use. However, in order to proceed as quickly as possible, we are requesting that the development of the Minami-Watarida area proceed first, and we are discussing with Kawasaki City to clarify the development policy for the Ogishima area to some extent by 2023.

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