Daido Steel Co. Ltd.

Daido Steel Co., Ltd. FY2022 ESG Briefing Q&A Session (Summary)

Date : Monday, December 19, 2022

Respondents: Tsukasa Nishimura, Representative Executive Director, Executive Vice President Ikuo Sugie, Executive Officer and General Manager, Technical Planning & Administration Dept. Tetsuya Niwa, Executive Officer and General Manager, Corporate Planning Dept.

- Q. Could you tell us about any cost increases you are anticipating due to the increased purchase of CO₂-free electricity and how you plan to cover those?
- A. The power company obliges us to maintain confidentiality regarding the costs we will incur, so we can't answer your question directly. Our basic assumption is that we should not allow the company profits to be lower than those of the previous year. Therefore, we are going to purchase CO₂-free electricity by using some of the money that we obtain through cost reductions elsewhere. Each year, we plan to increase the amount of CO₂-free electricity we purchase by 10%. We believe that we will allow us to reduce costs by at least that amount.
- Q. Do you plan to achieve the 50% CO₂ emissions reduction target (as compared with FY2013) by increasing the amount of CO₂-free electricity relative to the total amount of electricity purchased to 70% in FY2027?
- A. We suspect that achieving a 50% reduction target of CO₂ emissions in FY2027 is the best possible case scenario. Since the various investment projects that we attempt for achieving energy-savings do not always bear fruit, we have set FY2030 as the target date for a 50% CO₂ emissions reduction, with a margin of 3 years. However if we seem likely to fail to attain that target even after applying energy-saving practices, then we plan to attain that target by increasing our purchase of CO₂-free electricity.
- Q. Could you elaborate on the development schedule for the next-generation sewage sludge carbonization system?
- A. We are aiming to apply for the project of the Ministry of Land, Infrastructure, Transport and Tourism, which usually solicits applications from the private sector in January of each year. If we get government approval to submit a project, we would like to present demonstrations in cooperation with local governments.
- Q. Would you tell us who will be the customers for the next-generation sewage sludge carbonization system?
- A. The customers of the system will be mainly municipalities. We have received inquiries from various local governments, and the results of our demonstration tests are attracting attention.
- Q. Why is Daido Steel planning to purchase only 70% of its electrical power in the form of CO₂-free energy, instead of 100%?
- A. The reason is that this leaves a margin of 30%. We can observe the effects of our attempts to conserve energy on our pattern of CO2 emissions, and see if we are on track to achieve the 50% CO2-emissions reduction target by FY2030 that we are aiming for. If we seem likely to fail to attain that intended target, even after applying our energy-saving efforts, then we can continue toward the 50% reduction target by increasing our purchase of CO2-free electricity using money obtained through cost reductions.

- Q. Could you explain more about the innovative steelmaking process planned on the No.2 CC line at the Chita Plant?
- A. At present, the No.1 CC line for the production of structural steel has one 150-ton electric arc furnace with rotating drives. The No.2 CC line for the production of stainless steel and tool steel has three 80-ton furnaces, and the molten steel from those furnaces is sent to the continuous casting line using an admittedly ineffective transportation system. Therefore, we are planning to consolidate the function of the three 80-ton furnaces into what is provided by two large furnace with rotating drives. These will be located closer to the No.2 CC line, so that the molten steel can be transferred from the furnaces to the No. 2 CC line over a shorter distance and in a shorter time. We believe that this layout will maximize the energy conversion of the Chita Plant's steelmaking process.
- Q. Please tell us about the investment costs of introducing this innovative steelmaking process on the Chita Plant's No.2 CC line.
- A. We installed the Chita Plant's No. 1 CC line in FY2013. It cost about 20 billion yen, including the costs of the 150ton furnace and other incidental facilities. The plan for the No.2 CC line we are considering will consist of the installation of two large 100- or 150-ton furnace with rotating drives and the construction of a new building. Although we cannot give specifics, we estimate that the investment will be in the range of tens of billions of yen.
- Q. There was a statement that CO₂ emissions could increase if there was an increase in the amount of crude steel produced. This leads me to think that it will probably be necessary to make a bold change in the product mix, in order to increase the added value of product per ton. What do you think about this idea?
- A. We suspect that the steel demand for making automobile engines and transmissions will decrease in the future, so we have to make up for this decline with other products. As we often explained at the past financial results briefings, we believe that drastic product portfolio reform is necessary, and we are aggressively investing in plants and equipment to deal with this circumstance. Speaking more specifically, we would like to expand our global sales of both stainless steel that resists brittleness caused by hydrogen and of stainless steel used for semiconductor manufacturing equipment. The Shibukawa Plant has the equipment and capacity to expand our global sales of superalloy products. We intend to increase our product portfolio in the fields of aircraft, energy and drilling by further increasing the production capacity of the Shibukawa Plant.
- Q. I think that, in order to increase the value of steel per ton, it is necessary to introduce a new pricing system that gets users to recognize the added value of steel produced under low environmental loads and to help bear the increased environmental costs incurred by the producer, just like the efforts being made by blast furnace operators. Could you give your opinions about this approach?
- A. I think you are talking about Green Steel. Regarding the amount of CO₂ emissions from the blast furnace, there is a clear calculation method called the mass balance method, wherein the mass balancing of blast furnaces is certified by a third-party organization. However, the method for calculating the amount of CO₂ emissions from electric furnaces has not yet been fully established. In addition, we have only received inquiries about Green Steel from a few domestic and overseas companies. While establishing a more precise method of calculating CO₂ emissions from electric furnaces and taking into account customer needs, we would also like to make active strides toward the production of Green Steel, which reflects the costs of increased energy used in its price.

The figures in our plans contained in this document are based on certain assumptions that cannot be fully evaluated at the present time.

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