

Third-party Comments

Yoshinao Kozuma

Emeritus Professor
Sophia University

1. Progress in the Transition Plan

The JFE Group has shifted its transition plan into the implementation phase and is dynamically advancing its multipronged measures for decarbonization. At the core of the transition plan is the decarbonization of its steel business, where CO₂ emissions in FY2022 decreased by 13% compared to FY2013, putting the Group on track to achieve its short-term target of reducing emissions by 18% in FY2024. JFE's medium-term target is to reduce emissions by at least 30% from FY2013 levels by FY2030, and it is making steady progress in shifting to low-carbon steelmaking processes by implementing measures such as increasing the volume of scrap used in converter furnaces while also bolstering and introducing new electric arc furnaces. The Group is also making progress in its plan to establish a supply chain that will enable overseas procurement of direct-reduced iron in collaboration with other companies. With regard to the long-term target of achieving carbon neutrality by 2050, JFE has begun construction of a test blast furnace for carbon recycling demonstrations, an ultra-innovative technology.

One particularly interesting initiative in FY2023 is JGreeX™, a green steel material that JFE began supplying in the first half of the year. This raw material has received third-party certification for CO₂ reduction and has the potential to grow into a unique brand as a product that can contribute to reducing Scope 3 emissions downstream in the value chain.

Even when all industries are included, there are not many examples of companies that are proceeding with their transition plan so quickly or comprehensively. I highly commend the JFE Group for its achievements in advanced climate management.



2. Evaluating Biodiversity Risks

On the environmental front, JFE has stepped up its biodiversity initiatives. In FY2023, it began trials on systematically evaluating biodiversity risks based on scientific evidence by applying the LEAP approach recommended by the Taskforce on Nature-related Financial Disclosures (TNFD). I look forward to the full-scale disclosure of its management of the initiative as a tool for effectively managing biodiversity risks in the supply chain.

3. Promoting Human Rights Due Diligence

On the social front, the JFE Group Human Rights Basic Policy was substantially revised in April 2023, and a human rights risk management system based on implementing human rights due diligence was established. This is another commendable achievement. Currently, the scope of identification and evaluation of human rights risks is being expanded, and a greater effort is being made to include all Group companies and suppliers within the scope of management. Continuous improvement is desired in this area so as to prevent human rights risks from becoming an obstacle to corporate growth.

4. Future Challenges

Since JFE has been falling short of meeting its KPI target on workplace accidents, there is clearly room for improvement. While I can imagine the relevant departments working strenuously each day to eliminate accidents, a fundamental review of measures may be necessary to improve the situation. In addition, the scope of aggregation has yet to be expanded for several important social indicators, including the KPI for workplace accidents, and employment of people with disabilities.

Mariko Kawaguchi

Specially appointed professor of the Graduate School of Social Design Studies, Rikkyo University

Over the past seven years, I have had the opportunity to observe the evolving process of JFE Holdings' activities as they developed. It is evident from the latest report that its initiative for decarbonization has now become a Group-wide business strategy that has also been adopted as a personal concern for employees at every business site.

First of all, it is encouraging to see the efforts being made by the Group to raise the feasibility of achieving carbon neutrality by 2050. It has created a multipronged roadmap that clearly outlines what needs to be done over the short, medium, and long term, and it has steadily put that into action. By conserving energy and developing technologies at facilities, the Group has already achieved a 13% reduction in CO₂ emissions against its short-term target of reducing emissions by 18% by FY2024. At the same time, JFE has begun work on initiatives such as shifting to electric arc furnaces, expanding the use of scrap, and improving the efficiency of electric arc furnaces. I understand that as a result, the Group is now within reach of achieving its medium-term target of reducing emissions by at least 30% by 2030. In addition, JFE also reported on concrete initiatives for achieving its goal of carbon neutrality by 2050, starting construction of a test blast furnace to demonstrate innovative technologies such as carbon recycling blast furnaces and hydrogen-based ironmaking. Furthermore, the locations of the initiatives are not limited to Japan but have expanded to overseas locations involving numerous collaborations with partners, which shows the growing scope and depth of its relationships with regions and stakeholders. It has become clear that although carbon neutrality by 2050 is still an abstract idea for most people, the JFE Group sees it as a concrete future.

I also noticed interesting ongoing initiatives in JFE's products and mechanisms. JGreeX™, which the Group began supplying in FY2023, is a green steel material that has been certified as CO₂-free by allocating the volume of CO₂ reduced by JFE based on the mass balance approach. This interesting mechanism visualizes the Group's CO₂ reductions in the form of a green product. Moreover, JFE also envisions a mechanism where this green steel is used to build vessels that transport its materials. It is a breakthrough business model that is circular and effective, in which the Group's own efforts contribute to decarbonizing its entire supply chain.

The report also introduces many eco-friendly products and projects over a remarkably wide range of fields, such as steel slag products with blue carbon credit certification for creating seaweed beds, electrical steel sheets used in energy-saving products, wind power generation, and PET recycling. Many of these are the result of JFE's own efforts as well as collaboration with a broad range of stakeholders, including companies, research institutions, NGOs, and municipalities, in Japan and overseas. The Group is adopting the outside-in approach to resolve issues in the field through partnerships called for by the SDGs. I expect that this clear decarbonization strategy and efforts for commercialization in the highly carbon-intensive steel industry will serve as the driver for decarbonizing other industries and the economy as a whole.

With regard to measures for adapting to climate change, there is growing interest in and demand for disaster prevention measures due to the increasing frequency of extreme weather events. In addition to enhancing the Group's own disaster prevention measures, society's need will continue to increase for resilient material infrastructure that is resistant to wind and flood. I look forward to the development of unique technologies and products based on ideas originating in the field.

That said, judging from the extreme weather conditions we are experiencing lately, it seems that even a 1.5°C scenario, let alone a 4.0°C scenario, would result in severe climate conditions. I hope the JFE Group will review its scenarios and consider accelerating its activities.



In the area of biodiversity, the Group is recognized as a certified enterprise under the Aichi Biodiversity Company Certification Program and many of its ecosystem preservation initiatives are underway domestically, while the opportunity and risk assessment for disclosing information recommended by the TNFD is particularly noteworthy. The general public has not yet recognized biodiversity risks, and even the steel industry views these risks as less urgent for its core business than climate change. Mining and mine development, however, have traditionally been recognized by experts as a source of ecosystem destruction and pollution as well as human rights violations. This study of risks and opportunities is a key step for integrating biodiversity into JFE's core business. I hope the Group will accelerate these efforts and demonstrate the same leadership in disclosing biodiversity information (TNFD) as it has for climate change (TCFD). In the social aspect of its activities, JFE's efforts on human rights due diligence since FY2021 are commendable, but I believe its human rights risk map merits further scrutiny given the aforementioned risks from mining. Meanwhile, it is significant that a new policy category has been titled "human capital" instead of "human resources." Human capital is a resource that will generate future returns. Consider how investments for human capital might reach beyond conventional human resource management. My suggestion to JFE is to start with formulating a medium- to long-term strategy for human capital, just as it has done with the strategic roadmap for climate change.

I have observed a steady evolution over the years in how the JFE Group incorporates sustainability into its management and business activities, leading to expanding content in both breadth and depth. I think it would be a good idea to organize the report in multiple layers by listing key points for its management strategies, long-term targets, and results for the reporting year, and to present information on products and technologies by gathering the data into categories. This might more clearly distinguish the strategy as the skeletal framework supporting the "muscles" of business practices. The public might then recognize how sustainability has indeed developed into the business "muscle" that drives corporate management. I have high expectations that this will further accelerate the initiatives of the JFE Group.