23-D-1390
January 19, 2024

Japan Credit Rating Agency, Ltd. (JCR) announces the following Climate Transition Finance Framework Evaluation Results.

JFE Holdings, Inc.

Green/Transition Finance Framework

Assignment

Overall Evaluation	Green and Transition Evaluation (Use of Proceeds)	Management, Operation and Transparency Evaluation
Green 1(T)(F)	gt1(F)	m1(F)

Issuer/Borrower	JFE Holdings, Inc. (security code: 5411)
Subject	JFE Holdings, Inc. Green/Transition Finance Framework

Evaluation Overview

1. Overview of JFE Holdings, Inc.

As an integrated iron and steel manufacturer, the JFE Group (hereinafter referred to as "the Group") is primarily engaged in the manufacture and sale of various steel products. The Group consists of three operating companies: JFE Steel Corporation, which manufactures/sells steel processed products or raw materials as well as peripheral businesses, such as transportation and equipment maintenance/construction; JFE Engineering Corporation, which engages in engineering, recycling and electricity retailing on energy, urban environment, structural steel or industrial machinery; and JFE Shoji Corporation, which purchases, processes and sells steel products, steelmaking raw materials, non-ferrous metal products or foodstuffs. The Group is working to build an optimal operating system suited to the characteristics of each business field.

JFE Holdings, Inc. (hereinafter referred to as "JFE Holdings" or "the Company") serves as a slim group headquarters function as a representative listed company of the Group, consolidating functions, such as the formulation of management strategies for the Group as a whole, the

business management and risk management of group companies, external briefings on the Group's IR and the financing of the Group as a whole.

▶▶▶ 2. Overview of JFE Holdings' Transition Strategy

The Group published its Environmental Vision for 2050 in May, 2021 and has set forth the achievement of carbon neutrality throughout the Group in 2050 in its Vision. In order to realize the long-term goal, the Group has assumed two pillars: (i) the decarbonization of the steelmaking process in the steelmaking businesses (Scope 1, 2) and (ii) the contribution to reducing CO_2 emissions in society through projects in the engineering business. In particular, the Group set its target to reduce CO_2 emissions by 18% for FY 2024 from FY 2013 and simultaneously announced its measures for toward achievement in terms of decarbonization during the steelmaking process. In February 2022, the Group has set and announced its goals to reduce CO_2 emissions in Scope 1 and 2 throughout the Group by 30% or more from FY 2013 with a view to contributing to the Paris Agreement.

In the Environmental Management Vision 2050, the Group announced a roadmap in the steelmaking business, its core project, which accounts for 99% of the CO_2 emissions (Scope 1, 2.) The Group has defined the period up to 2030 as the transition phase and the period thereafter as the innovation phase with regard to the strategy toward decarbonization. On one hand, the Group will expand the application of low-carbon technologies centered on "reducing" initiatives and will accelerate the research and development of ultra-innovative technologies toward carbon neutrality in the transition phase. On the other hand, the Group will establish and implement ultra-innovative technologies assuming that it introduces an optimal process depending upon external conditions in the innovation phase.

The Group plans to invest a total of 340 billion yen in line with its transition strategy from FY 2021 to FY 2024 in the Seventh Medium-term Business Plan. The Group announced it needs a capital investment of 1 trillion yen to achieve the CO_2 reduction target for FY 2030 through low-carbon technologies in the steelmaking process in the 2022 Carbon Neutral Strategy Briefing.

▶▶▶ 3. Relevance on Transition Strategy (Outline of Alignment Evaluation with CTFH and so forth)

The transition strategy and specific policies in JFE Holdings meet the four components in the Climate Transition Finance Handbook[1] and the Basic Guidelines for Climate Transition Finance[2] (hereinafter collectively referred to as "CTFH and so forth.")

JFE Holdings has set a goal of reducing CO_2 emissions by 18 % in FY 2024 and 30 % or more in FY 2030 from FY 2013, respectively in its core steel business. The Company has set a target of contributing to reducing CO_2 emissions of 12 million t-CO_2/year in FY 2024 and 25 million t-

[1] ICMA(International Capital Market Association) *Climate Transition Finance Handbook 2023* https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/climate-transition-finance-handbook/

[2] Financial Services Agency, Ministry of Economy, Trade and Industry, Ministry of the Environment (2021) *Basic Guidelines for Climate Transition Finance* https://www.meti.go.jp/press/2021/05/20210507001/20210507001-1.pdf

CO_2/year in FY 2030 throughout society in the engineering business. These goals have been established based on the scenario analysis and have been aligned with the goals and measures in the "Transition Roadmap for Steel Sector" provided by the Ministry of Economy, Trade and Industry. JFE Holdings has disclosed specific measures or investment plans to achieve this goal, and therefore has highly kept transparency. JCR has evaluated that the Company has had a structure in place to steadily implement its transition strategy.

▶▶▶ 4. About the Green/Transition Finance Framework

The subject of this evaluation is Green/Transition Finance Framework (the "Framework") published by JFE Holdings to use the proceeds only to expenditures to the projects to improve environment. JCR evaluates whether this Framework aligns with the Green Bond Principles[3], the Green Loan Principles[4], the Green Bond Guidelines[5] and the Green Loan Guidelines[6]. These principles and guidelines are voluntarily published by the International Capital-Marketing Association (ICMA), Loan Market Association (LMA) etc., and the Ministry of Environment, respectively, and are not legally regulated based on evidences. JCR however refers these principles and guidelines as they are referred to as unified standards domestically and globally.

In this Framework, JFE Holdings has categorized uses of proceeds in green finance and transition finance into "1. Development of ultra-innovative steelmaking process," "2. Sifting to low-carbon manufacturing process," "3. Energy conservation for higher efficiency initiatives," "4. Manufacturing eco-friendly products," "5. Renewable energy" and "6. Initiatives to realize a resource recycling society." The eligible projects from 1 to 3 above have been positioned as businesses that contribute to reducing CO_2 emissions in the steel business listed in the Environmental Management Vision 2050, and the eligible projects from 4 to 6 above have been positioned as businesses that contribute to reducing CO_2 emissions in other industries through business activities in the Group in the Vision. It has been stipulated that appropriate measures shall be taken in consideration of negative impacts on the environment and society when implementing eligible projects. Based on the above, JCR evaluates the use of proceeds in this Framework is expected to improve the environment.

The criteria and processes for selecting the use of proceeds have been properly established with the management involvement, and third parties have confirmed the management of proceeds by properly controlling them. Additionally, JCR has confirmed that reporting on the use of proceeds and items on impact reporting have been adequate. Based on the above, JCR evaluated that the management and operation system of JFE Holdings has been appropriately established and is transparent.

Based on JCR Green Finance Evaluation Methodology, JCR assigned "gt1(F)" for "Green/Transition Evaluation (Use of Proceeds)" and "m1(F)" for "Management, Operation and

[3] ICMA(International Capital Market Association) (2021, with June 2022 Appendix 1) *Green Bond Principles*
https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/
[4] LMA (Loan Market Association), APLMA (Asia Pacific Loan Market Association), LSTA (Loan Syndications and Trading Association) (2023) *Green Loan Principles*
https://www.lsta.org/content/guidance-on-green-loan-principles-glp/
[5] Ministry of the Environment (2022) *Green Bond Guidelines*
https://www.env.go.jp/content/000062495.pdf
[6] Ministry of the Environment (2022) *Green Loan Guidelines*
https://www.env.go.jp/content/000062495.pdf

Transparency Evaluation." As a result, JCR assigned "Green 1(T)(F)" for the overall “JCR Climate Transition Finance Framework Evaluation.”

The Framework meets the standards for the items required in the Green Bond Principles, the Green Loan Principles, the Green Bond Guidelines, the Green Loan Guidelines and CTFH and so forth.

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Chapter 1: Overview of Evaluation Target

This evaluation is subject to the Green/Transition Finance Framework (hereinafter referred to as "this Framework") prepared by JFE Holdings. This Framework covers green finance of green bonds and green loans and transition finance of transition bonds and transition loans.

The transition finance has been in accordance with Climate Transition Finance (hereinafter referred to as "CTF".) CTF refers to a financing means to promote initiatives to reduce long-term, strategic greenhouse gas (hereinafter referred to as "GHG") emissions that are taken by a company that is considering to tackle climate change for the achievement of a carbon-free society. JCR will confirm whether this Framework has been aligned with CTFH and so forth formulated by ICMA.

Then, JCR will evaluate whether or not green finance and transition finance have been aligned with the Green Bond Principles, the Green Loan Principles, the Green Bond Guidelines and the Green Loan Guidelines based on the JCR Green Finance Evaluation Methodology.

Chapter 2: Alignment with the Climate Transition Finance Handbook

2-1. Medium- to Long-term Management Plan and Transition Strategy

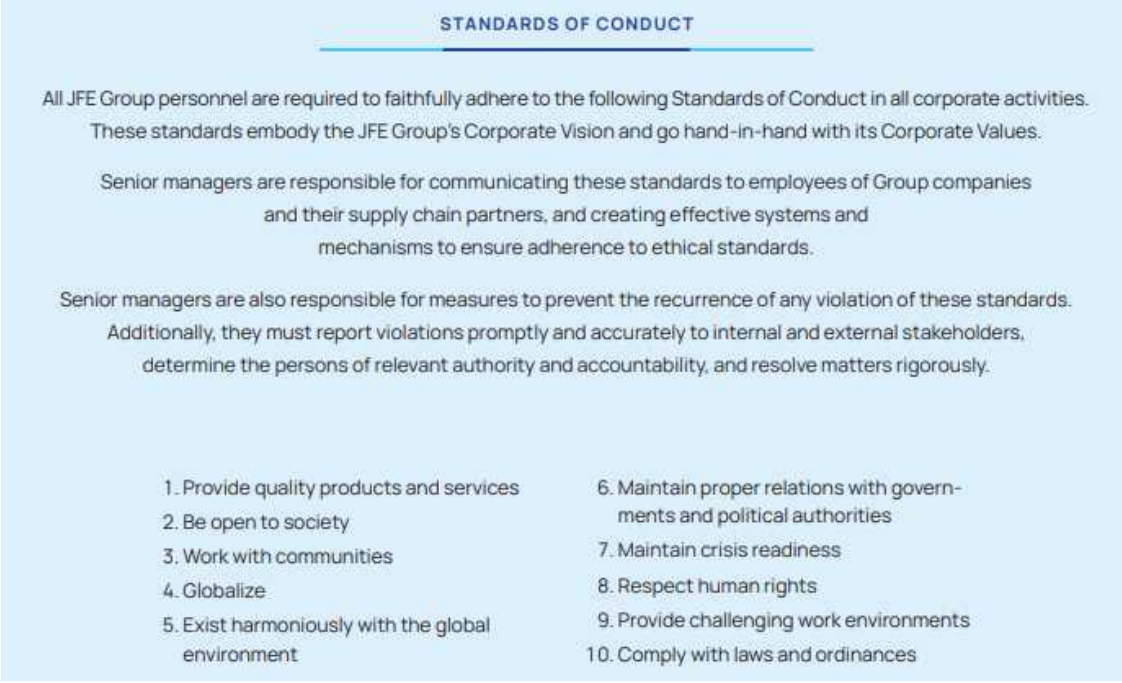
<Business Overview>

As an integrated iron and steel manufacturer, the Group is primarily engaged in the manufacture and sale of various steel products. The Group consists of three operating companies: JFE Steel, which manufactures/sells steel processed products or raw materials as well as peripheral businesses, such as transportation and equipment maintenance/construction; JFE Engineering Corporation (hereinafter referred to as "JFE Engineering,") which engages in engineering, recycling and electricity retailing on energy, urban environment, structural steel or industrial machinery; and JFE Shoji Corporation, which purchases, processes, and sells steel products, steelmaking raw materials, non-ferrous metal products or foodstuffs. The Group is working to build an optimal operating system suited to the characteristics of each business field.

JFE Holdings serves as a slim group headquarters function as a representative listed company of the Group, consolidating functions, such as the formulation of management strategies for the Group as a whole, the business management and risk management of group companies, external briefings on the Group's IR and the financing of the Group as a whole.

<JFE Group Corporate Vision>

The Group has set forth its corporate vision, "Contributing to society with the world's most innovative technology." In order to realize the corporate vision, the Group has valued the three spirit of "Challenging spirit, flexibility and sincerity" set in the corporate values. The Group has stipulated the following 10 items as standards of conduct with which all Group personnel are required to comply, and it has listed "Exist harmoniously with the global environment" as one of them.



STANDARDS OF CONDUCT

All JFE Group personnel are required to faithfully adhere to the following Standards of Conduct in all corporate activities. These standards embody the JFE Group's Corporate Vision and go hand-in-hand with its Corporate Values.

Senior managers are responsible for communicating these standards to employees of Group companies and their supply chain partners, and creating effective systems and mechanisms to ensure adherence to ethical standards.

Senior managers are also responsible for measures to prevent the recurrence of any violation of these standards. Additionally, they must report violations promptly and accurately to internal and external stakeholders, determine the persons of relevant authority and accountability, and resolve matters rigorously.

1. Provide quality products and services
2. Be open to society
3. Work with communities
4. Globalize
5. Exist harmoniously with the global environment
6. Maintain proper relations with governments and political authorities
7. Maintain crisis readiness
8. Respect human rights
9. Provide challenging work environments
10. Comply with laws and ordinances

Figure 1: Standards of Conduct of JFE Group[7]

[7] Source: JFE GROUP REPORT 2023

<JFE Group's Seventh Medium-term Business Plan>

In May 2021, the Group formulated and announced its Seventh Medium-term Business Plan in light of the rapidly and significantly changing business environment. The Group has deemed the Seventh Medium-Term Business Plan Period (from 2021 to 2024) as the biggest transformation in the Company's history and has positioned it as a four-year period to establish a strong management foundation for a long-term sustainable growth and to make a leap forward to a new stage.

The Group has stated the followings for its contributions to the global environment in the opening sentence in the explanatory material in the Medium-term Business Plan and has believed that its mission is to become an essential part of the sustained development of society and the safe and comfortable lives of people through its business activities. To that end, the Group has considered that it needs to establish "environmental and social sustainability (contributions to solving social issues)" and "economic sustainability (stable profitability)" and then to achieve medium- to long-term sustainable growth and to increase the corporate value in the Group will lead to further contributions to social sustainable development for an abundant world in the future.

<JFE Group Environmental Vision 2050>

In the Environmental Vision 2050 formulated and announced with the Seventh Medium-Term Business Plan in May 2021, the Group has stated that responding to climate change issues is an extremely important management challenge from the perspective of business continuity and that it is urgent to globally respond to climate change issues, based on which, the Group has listed CO_2 reduction activities as the most vital concerns in the Seventh Medium-term Business Plan and has announced that it will aim to achieve carbon neutrality in 2050.

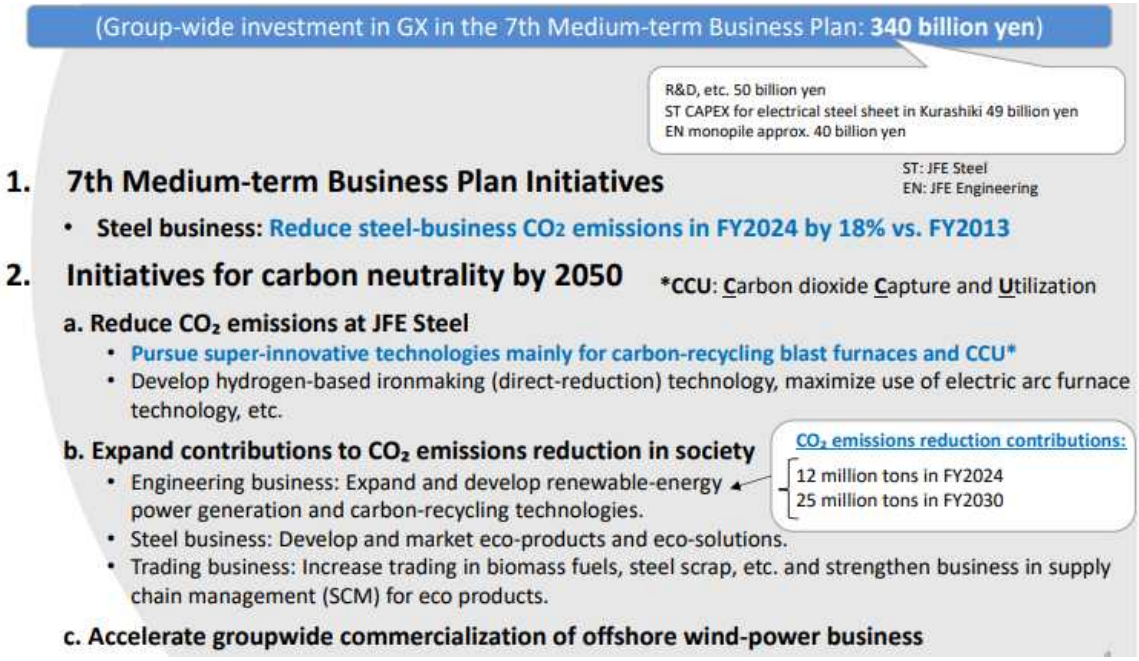


Figure 2: Overview of JFE Group Environmental Vision 2050[8]

[8] Source: JFE Group Environmental Vision for 2050

The medium- to long-term goals for carbon neutrality throughout the Group set forth in this vision are shown in the figure below. In the Environmental Management Vision, the Group has listed to promote to dig deep into energy conservation and high efficiency so as to realize the medium- to long-term goals on CO_2 emissions reduction in the steel business, a core project in the Group, which accounts for 99 % of its CO_2 emissions (Scope 1 and 2) and to challenge ultra-innovative technologies toward decarbonization in order to respond to business risks. The Group has also stated that it will expand and develop renewable energy or carbon recycling technologies and will develop and provide eco-products to contribute to reducing CO_2 throughout society in the engineering business.

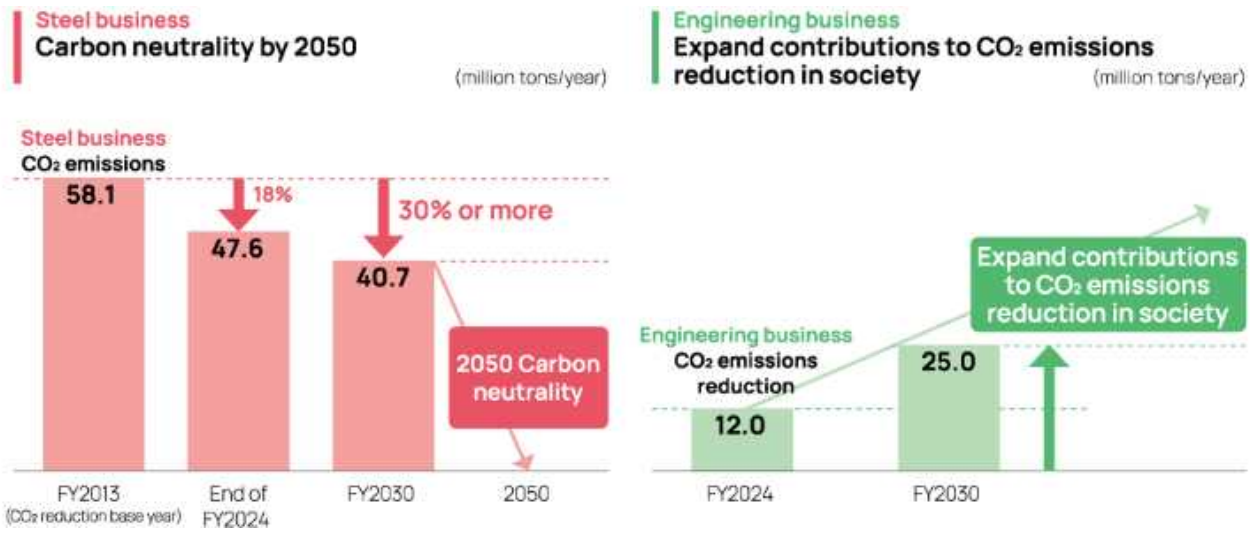


Figure 3: JFE Group's Initiatives toward Carbon Neutrality[9]

The roadmap that has reflected these efforts into the timeline has been published as follows: the Group has annually disclosed and explained the progress of efforts in Steel Carbon Neutrality Strategy Briefing in the steel business and the roadmap shown below (next page) was disclosed in the Briefing in FY 2022.

[9] Source: JFE Holdings' website
https://www.jfe-holdings.co.jp/en/sustainability/environment/climate/#climate_vision2050

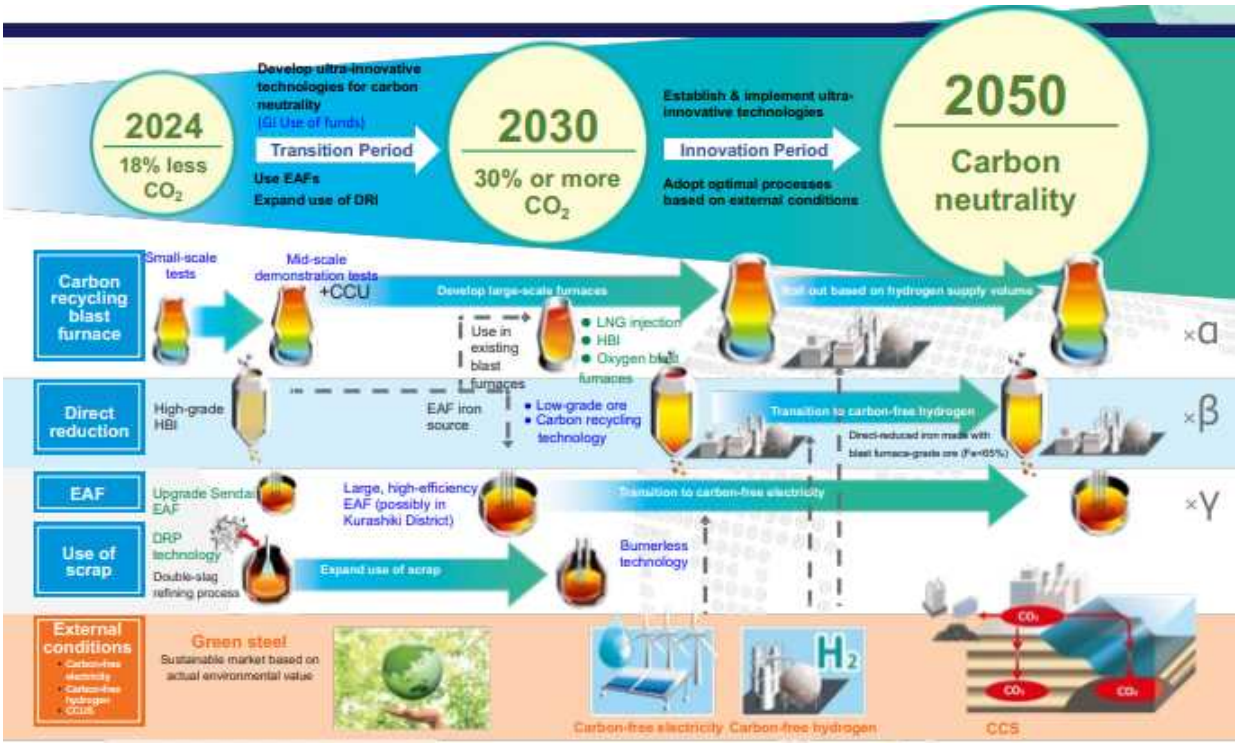


Figure 4: Roadmap toward 2050 Carbon Neutrality in the Steel Business[10]

JFE Steel Corporation (hereinafter referred to as "JFE Steel" or "the Corporation") in charge of the steel business has defined the period up to 2030 as the transition phase and the period thereafter as the innovation phase for strategies toward decarbonization. On one hand, the Corporation will expand the application of low-carbon technologies centered on "reducing" initiatives and will accelerate the research and development of ultra-innovative technologies toward carbon neutrality in the transition phase. This will certainly carry out plans to achieve CO_2 reduction targets for FY 2024 and FY 2030, respectively. In particular, the Corporation plans to promote initiatives, such as the introduction of electric furnaces or the increase of the use of reduced iron. On the other hand, the Corporation will establish and implement ultra-innovative technologies in the innovation phase, and it has assumed to introduce the optimal process depending upon external conditions. Specifically, the Corporation will promote the "use wisely" initiative by early implementing carbon recycling blast furnaces that have applied carbon recycling technologies - its own unique technologies or a direct-reduction steelmaking method - or increasing the application of CCU. The Corporation will also work on "fixation" with CCS to build a carbon-neutral society in collaboration with local communities or respective industrial complexes. The Corporation has aimed to realize carbon neutrality in 2050 through the three initiatives: "reduce," "use wisely" and "fixation."

It is currently in the first half of the transition phase, and the proceeds are assumed to be used for many of the "reducing" initiatives in this Framework. In order to achieve carbon neutrality in 2050, there will be a variety of technical paths and many issues, and the Corporation presently cannot see which path will lead to the realization of carbon neutrality as quickly as possible; therefore, the Corporation has recognized that it needs to take a multitrack approach to develop technologies. Hence, the research and development for multiple innovative technologies that

[10] Source: this Framework

contribute to the "use wisely" and "fixation" are also included in the use of proceeds in this Framework.

<Material Issues>

The Group has identified material issues and set KPI to address these issues with the objectives of maximizing the creation of social value and minimizing its negative impact on society as the Group capital is deployed. In FY 2021, the Group has reorganized the previous CSR issues by adding important economic challenges and identified them as "material issues of corporate management" based on the Seventh Medium-term Business Plan. The Group has been working on efforts for these significant issues by setting KPI, has evaluated the results of KPI for the previous year and has annually reviewed KPI based on the evaluation results or opinions exchanged with stakeholders.

	Areas of Focus	Details	Material Issues	Relevant SDGs
Activity	Contribute to resolving climate change issues (initiatives for achieving carbon neutrality by 2050) → P.57	● Initiatives for achieving carbon neutrality by 2050 · Reduce the JFE Group's CO_2 emissions · Contribute to reduction of CO_2 emissions in society	· Reduce the JFE Group's CO_2 emissions · Contribute to reduction of CO_2 emissions across the society	
	Ensure occupational safety and health →P.87	● Prioritize safety first ● Maintain the physical and mental health of employees and their families	· Prevent workplace accidents · Ensure the health of employees and their families	
	Recruit and nurture diverse human resources → P.65	● Maintain work environments where all personnel can maximize their abilities ● Accumulate and hand down technologies and skills	· Pursue diversity and inclusion · Strengthen human resources development · Create workplaces that motivate employees	
	Reinforce resilience of production and engineering capabilities (realize world-class earnings power through DX and other measures) → P.64	● Pursue world-class earnings power ● Promote DX and other measures to improve production efficiency, yields, and labor productivity · Shift focus of steel business from quantity to quality (structural reform) · Reduce costs to strengthen cost competitiveness and ensure quality competitiveness	· Increase efficiency and enhance cost competitiveness in production and engineering · Raise quality of products and services and ensure reliable supply	
	Strengthen competitiveness of products and services (promote the growth strategy by providing high-value-added solutions)	● Improve margins and ensure stable earnings power · Increase ratio of high-value-added products and services · Ensure stable earnings power based on the sales strategy, including technological solutions and expansion of growth businesses	· Expand business by increasing value added in products and services with advanced technologies · Sales strategies for realizing sustainable growth	
Basis of Activity	Thoroughly enforce compliance → P.84		· Ensure adherence to corporate ethical standards and compliance	
	Respect human rights → P.89		· Respect human rights across the supply chain	

Figure 5: SDGs related to Materialities Identified[11]

[11] Source: JFE GROUP REPORT 2023

<Sustainability Promotion System in JFE Holdings>

Chaired by the president of JFE Holdings, the JFE Group Sustainability Council has been established with Vice President (Director,) Corporate Officers, full-time Audit & Supervisory Board Members and presidents in operating companies as an organization for supervising and guiding groupwide sustainability initiatives. Various committees on compliance, environment, internal control, information security, public disclosure and corporate value enhancement have been set up under the JFE Group Sustainability Council to deliberate the Group policies; supervise the state of policies, share information about issues or problems that arose; and examples of how they were addressed. Of the matters discussed by the JFE Group Sustainability Council, the Group's basic policy, action plans, details of important measures and responses to critical events have been periodically reported to and deliberated by the Board of Directors, which have given directions and supervision. Each operating company has set up its own councils to coordinate with the JFE Group Sustainability Council, aiming to foster the Group's basic policy or CSR awareness. The Group CSR Council changed its name to the JFE Group Sustainability Council in April 2023 so as to focus on the Company's initiatives to its sustainable growth and to explain the connection between ESG efforts and corporate value enhancement, with no change in roles, members or frequency of councils.

Figure 6: Sustainability Promotion Structure[12]

The Corporation has established a cross-organizational project team directly under the control of the president in October 2020 to realize carbon neutrality in 2050 and has newly set up specialist teams of technologies to accelerate efforts since July 2021.

[12] Source: JFE GROUP REPORT 2023

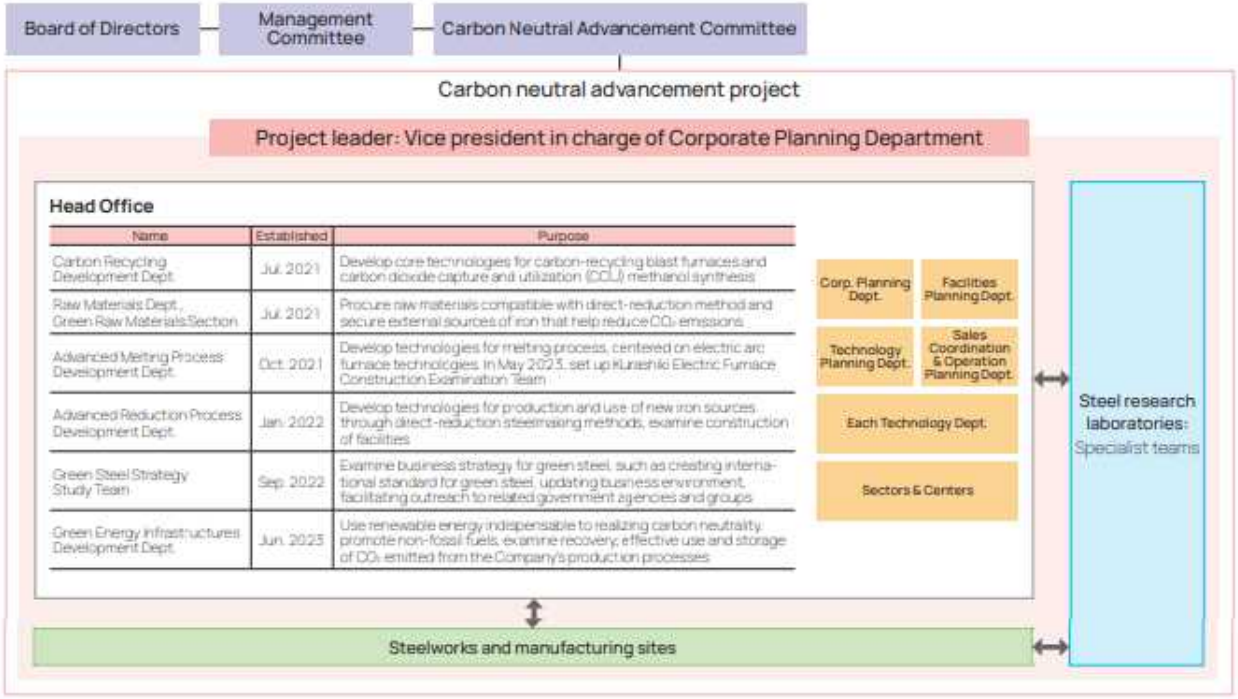


Figure 7: JFE Steel's Promotion Structure for Carbon Neutrality[13]

[13] Source: JFE GROUP REPORT 2023

2-2. Alignment with Items Required in the Climate Transition Finance Handbook

Element 1. Issuer's climate transition strategy and governance

(1) Does the issuer who is financing proceeds have a transition strategy for climate change mitigation?

The Group formulated JFE Group Environmental Vision for 2050 in May 2021 in which it has claimed that "Climate change is an extremely important issue from the perspective of business continuity" and "Global climate change issues must be addressed urgently," Based on which, the Group has positioned the CO_2 reduction activities as the top priority issue in the Seventh Medium-term Business Plan and has expressed to realize carbon neutrality by 2050. Then, in February 2022, the Group announced that it had set its CO_2 emission reduction target of 30% or more for FY 2030.

Table 1: Environmental Management Vision 2050 in the Group[14]

FY 2024	· Reduce CO_2 emissions by 18% from FY 2013 in the steel business · 12 million t-CO_2 of the contribution of CO_2 emissions reductions in the engineering business
FY 2030	· Reduce CO_2 emissions by 30% or more from FY 2013 in the steel business · 25 million t-CO_2 of the contribution of CO_2 emissions reductions in the engineering business
2050	· Zero CO_2 emissions along with business activities

Of the aforementioned goals, concrete measures to realize the CO_2 reduction targets in the steel business and progress up to FY 2022 are shown in Figure 8, and the Group has disclosed specific detailed efforts on innovative technology development, such as high-efficiency/large-scale electric arc furnaces, ultra-innovative blast furnaces or hydrogen direct-reduction in addition to promoting energy conservation and high efficiency.

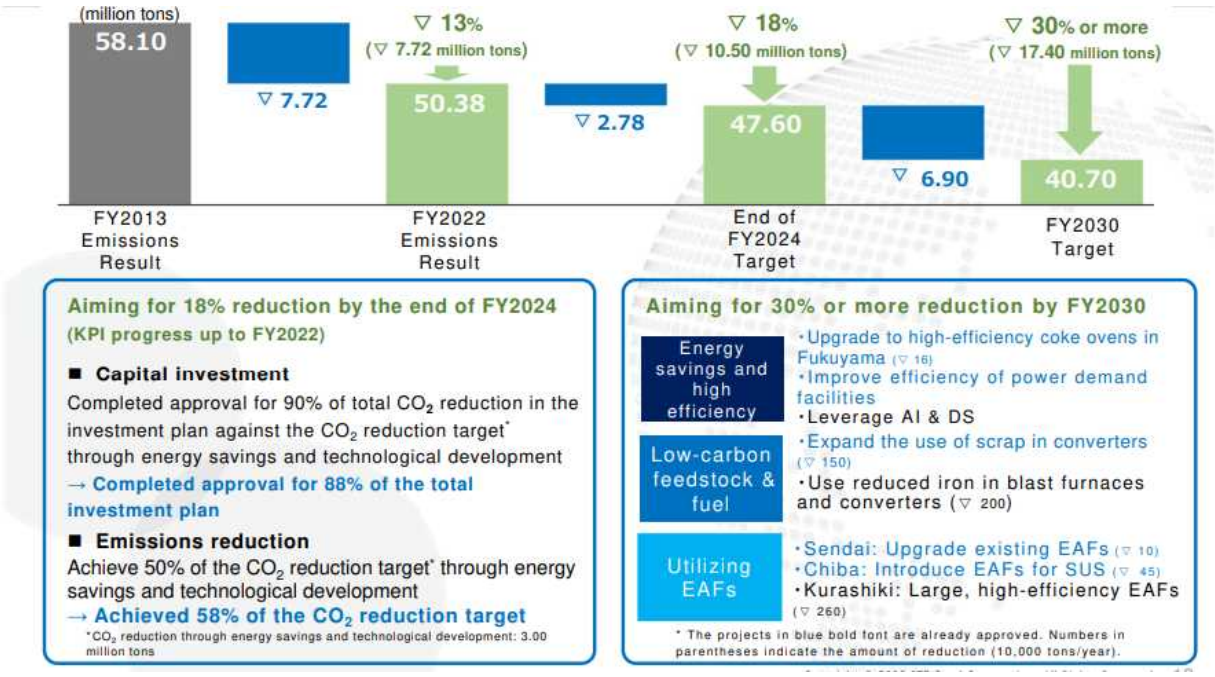


Figure 8: Progress and Concrete Measures toward Achievement of Medium-term Goals[15]

[14] Created by JCR from materials published by the Group
[15] Source: JFE Steel Carbon Neutrality Strategy Briefing 2023
https://www.jfe-steel.co.jp/en/company/pdf/en_carbon-neutral-strategy_231108_1.pdf

JFE Holdings has aimed to early implement several innovative technological development for the efforts in the steelmaking process by 2050, which will gain momentum in or after 2030, as shown in Figure 9. The Company has listed two major issues in the social implementation of innovative technological development. Firstly, all innovative technologies require large amounts of research and development proceeds and capital expenditure. In order to deal with these issues, the Company has internally and externally conducted its activities to establish a structure that will bear the burden of costs throughout society through disseminating green steel[16]that has adopted a mass balance method[17]while making maximum use of the government support such as the GI Fund. Then, the JFE Holdings needs to secure a cheap and large supply of clean hydrogen, which is essential for the supply of co-product gas when introducing ultra-innovative blast furnaces, direct reduction steelmaking methods or electric arc furnaces. In this regard, the Company is on the demand side; however, it plans to actively cooperate with the supply side and contribute to expanding the supply network.

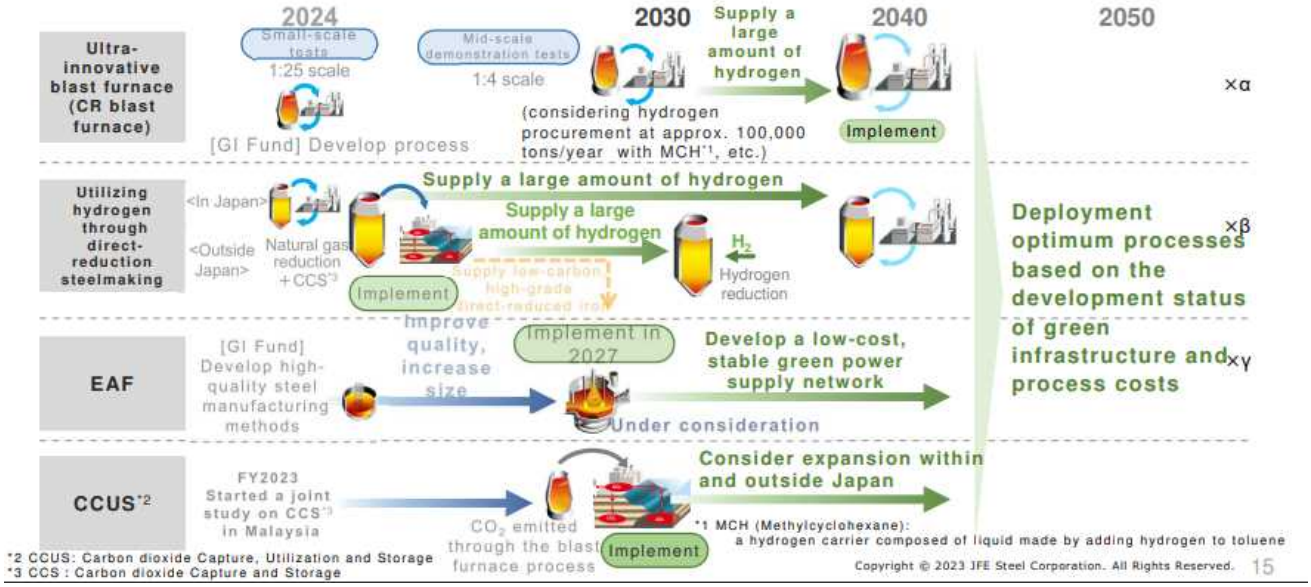


Figure 9: CO_2 Reduction Measures in Steelmaking Processes through a Multitrack Approach[18]

JFE Holdings has been currently promoting the expansion of existing renewable energy power generation business, such as solar power, wind power, geothermal power, biomass or waste power generation as concrete measures to achieve the CO_2 reduction contribution target through the engineering business. The Company will also consider the contribution to realize the CO_2 reduction target by carbon recycling technologies, such as separation/recovery of CO_2, conversion to syngas/chemical products or by expanding the contribution related to

[16] Steel materials that significantly reduce CO_2 emissions during manufacturing compared to conventional steel. The Corporation allocates the company-wide CO_2 emission reductions created through efforts to reduce CO_2 emissions at each steelworks and Works to specific steel materials by applying the mass balance method, thereby steels without CO_2 emissions are supplied as JGreeX™. The Corporation has obtained third-party certification for the CO_2 emission reduction effect through JGreeX™ and the calculation method/result of its intensity from ClassNK.

[17] A method, which aggregates environmental value in reducing CO_2 emissions in the entire manufacturing process into the part of steel products and deems them as steel products with low CO_2 emission intensity.

[18] Source: JFE Steel Carbon Neutrality Strategy Briefing 2023

hydrogen/ammonia in addition to increase projects in the renewable energy power generation business for a medium to long term.

Accordingly, JCR has confirmed that (i) JFE Holdings has set quantitative targets for the medium to long term in its transition strategy, (ii) it has formulated a clear roadmap for specific measures, and (iii) it has recognized the challenges in the social implementation of innovative technologies to realize carbon neutrality in 2050 and has been considering measures to overcome these challenges. JCR has evaluated that the Group's transition strategy has achieved a high level of transparency and has actively taken concrete measures under careful consideration in light of its effectiveness.

(2) Is the use of the "transition" label in financing intended to contribute to realizing a corporate strategy to transition to a business model that allows issuers to effectively address climate change-related risks and to contribute to achieving the goals of the Paris Agreement?

It has been required to formulate strategies on GHG emission reduction for a long-term in the Paris Agreement. In "the Long-Term Strategy as a Growth Strategy Based on the Paris Agreement[19]" approved by the Cabinet in October 2021 in response to the Paris Agreement, thorough energy conservation or decarbonization of thermal or manufacturing processes have been described as initiatives required for the industrial sector such as the "Carbon Neutral by 2050." JCR has determined that the initiatives and goals described in this strategy have been aligned with the efforts and medium- to long-term goals set forth in the "JFE Group Environmental Vision for 2050" and the "Roadmap for carbon neutrality in the steel business through 2050."

The Group has endorsed the recommendations of TCFD (Task Force on Climate-related Financial Information Disclosure,) has identified risks/opportunities on climate change for a medium to long term and has appropriately reflected the specific results on the Group's strategy. The Group has analyzed risks in climate change based on the IEA[20]'s scenarios and confirmed the probability that can manage various risks at an appropriate level in the efforts listed in the "Environmental Management Vision 2050." The Group has been analyzing not only the conventional 2 degrees Celsius and 4 degrees Celsius scenarios but also the 1.5 degrees Celsius scenario since FY 2022 as its businesses will have a significant effect caused by climate change. The Group's transition strategy has been formulated based on the results of risk scenario analyses in line with the TCFD guidance, and JCR has evaluated it as a significant strategy for its business model transition.

Accordingly, JCR has evaluated that the Group's transition strategy has been aligned with the realization of the Paris Agreement's goals.

[19] "Long-term strategy as a growth strategy based on the Paris Agreement" endorsed by the Cabinet on October 22, 2021 https://www.env.go.jp/content/900440767.pdf

[20] IEA: International Energy Agency

(3) Is a governance system established to ensure the effectiveness of the transition strategy?

JFE Holdings has established a system to promote sustainability as mentioned above and has managed in order for the Group Sustainability Conference or Group Environmental Committee to promote the initiatives listed in the Environmental Management Vision 2050. The Company in charge of the steel business has been actively building a promotion system such as establishing a specialized technological organization to achieve carbon neutrality.

JCR has therefore evaluated that JFE Holdings has established a structure to steadily implement its transition strategy.

Accordingly, JCR has evaluated that the Company has satisfied the requirements in the Element 1 as the transition strategy for climate change mitigation and a governance system to steadily implement the transition strategy has been established.

Element 2. Business model environmental materiality

The CO_2 domestically emitted in the steel industry amounted to 145 million tons for FY 2021, which accounted for roughly 40% of the industrial sector (approximately 15% of the total CO_2 emission in Japan[21].) On one hand, the CO_2 globally emitted came to 2,623 million tons for FY 2022[22] and the industry is required to further reduce the total CO_2 emission. On the other hand, iron is a material that can be mass-produced at low cost due to its abundant reserves and can be repeatedly recycled as many times as possible; therefore, it is used for various purposes as a basic material that supports livelihoods and society. There has been new demand for NEV vehicles[23], eco-products, such as transformers to expand energy-saving power distribution or offshore wind power as materials to lower environmental burdens. The iron has much smaller burdens on the environment during manufacturing than GHG emissions per unit weight of aluminum or CFRP (carbon fiber reinforced plastic.)[24] IEA has shown that global crude steel production is expected to slightly increase from 1,880 million tons in 2022 to 1,970 million tons in 2030 and 1,960 million tons in 2050[25]. In the future, it is essential to work on reducing CO_2 emissions throughout the steel industry so as to achieve carbon neutrality, which is required to maintain social functions as the world moves toward carbon neutrality. Therefore, promoting initiatives for carbon neutrality in the steel business, the main business of JFE Holdings, is one of the most important issues in its business model.

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[21] Ministry of the Environment, (FY 1990 - FY 2021) A ratio of emissions (electricity/heat after distribution) in the steel industry to CO_2 emissions from *Japan's GHG emissions data <Final Figures>* https://www.env.go.jp/content/000128693.pdf

[22] IEA "Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach" https://iea.blob.core.windows.net/assets/4d93d947-c78a-47a9-b223603e6c3fc7d8/NetZeroRoadmap_AGlobalPathwaytoKeepthe1.5CGoalinReach-2023Update.pdf.

[23] It is an abbreviated name for New Energy Vehicle, including BEV (Battery Electric Vehicle,) PHEV (Plug-in Hybrid Electric Vehicle) and FCV (Fuel Cell Vehicle.)

[24] JFE GROUP REPORT 2023. GHG emissions per functionally equivalent weight (equivalent to 100 kg of steel) when manufacturing Steel: 230 kg-CO_2, Aluminum: 757 kg-CO_2, CFRP: 990 kg-CO_2.

[25] Created by JCR from "Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach" provided by IEA https://iea.blob.core.windows.net/assets/4d93d947-c78a-47a9-b223-603e6c3fc7d8/NetZeroRoadmap_AGlobalPathwaytoKeepthe1.5CGoalinReach-2023Update.pdf.

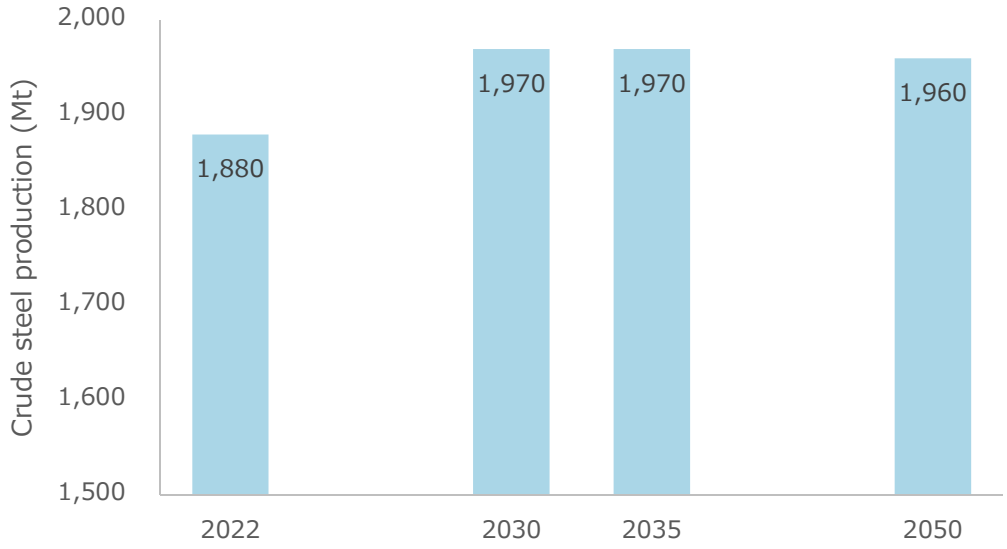

Figure 10: Crude Steel Production Estimated by IEA[26]

The Group has listed contribution to solving climate change issues (efforts to achieve carbon neutrality in 2050) as the first item in its most important management issues (materialities) and has deemed "Reducing its CO_2 emissions and increasing contribution to CO_2 reduction throughout society" as significant. In the engineering business, the Group has set a quantitative target for the contribution of CO_2 emissions reductions and has recognized that efforts toward decarbonization is of significance not only in the steel business but also in its entire business.

Accordingly, JCR has evaluated that JFE Holdings' carbon neutrality efforts are important environmental challenges in its business model, recognizing which, the Group has formulated the Environmental Management Vision 2050 and has reflected concrete investment plans in the Seventh Medium-term Business Plan. JCR has evaluated that these transition strategies have been formulated based on the importance and roles of the aforementioned iron in society and the request to reduce environmental burdens. It is expected to contribute to reducing CO_2 emissions in society as a whole by steadily promoting to reduce CO_2 emissions in the steel industry, a core business and developing initiatives that contribute to CO_2 reductions in the engineering business, which promote to contribute to reducing CO_2 emissions in other industries, considering that the Group's production scale is the second largest in Japan (which accounts for roughly 30% of the national crude steel production) and that it has a large presence in the steel industry.

Element 3. Climate transition strategy and targets to be science-based

Does the transition roadmap meet the followings?

(1) It is quantitatively measurable and the target covers Scope 1 and 2 (It is recommended that the target of Scope 3 be established to the extent feasible)

JFE Holdings has disclosed the figures for Scope 1 and Scope 2 of GHG emissions, which is guaranteed by independent third parties. The goal settings include Scope 1 and Scope 2 with

[26] Created by JCR "Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach" provided by IEA

large emissions and targets for the downstream of the Group's value chain have been established for the contribution to reduce CO_2 emitted by its products. JCR has evaluated that the Group's applicable scope for target settings has been quantitatively measurable in consideration of the entire value chain. JCR has expected for the Group to set interim targets with more specific figures for Scope 3 hereafter.

(2) Alignment with generally recognized science-based target setting

The Group's transition strategy, as mentioned above, has been formulated based on the TCFD scenario analysis. JCR has evaluated that the Group's goals and measures to realize the targets have been aligned with the goals and measures indicated in the "Transition Roadmap for the Steel Sector" formulated and published by the Ministry of Economy, Trade and Industry in February 2022.

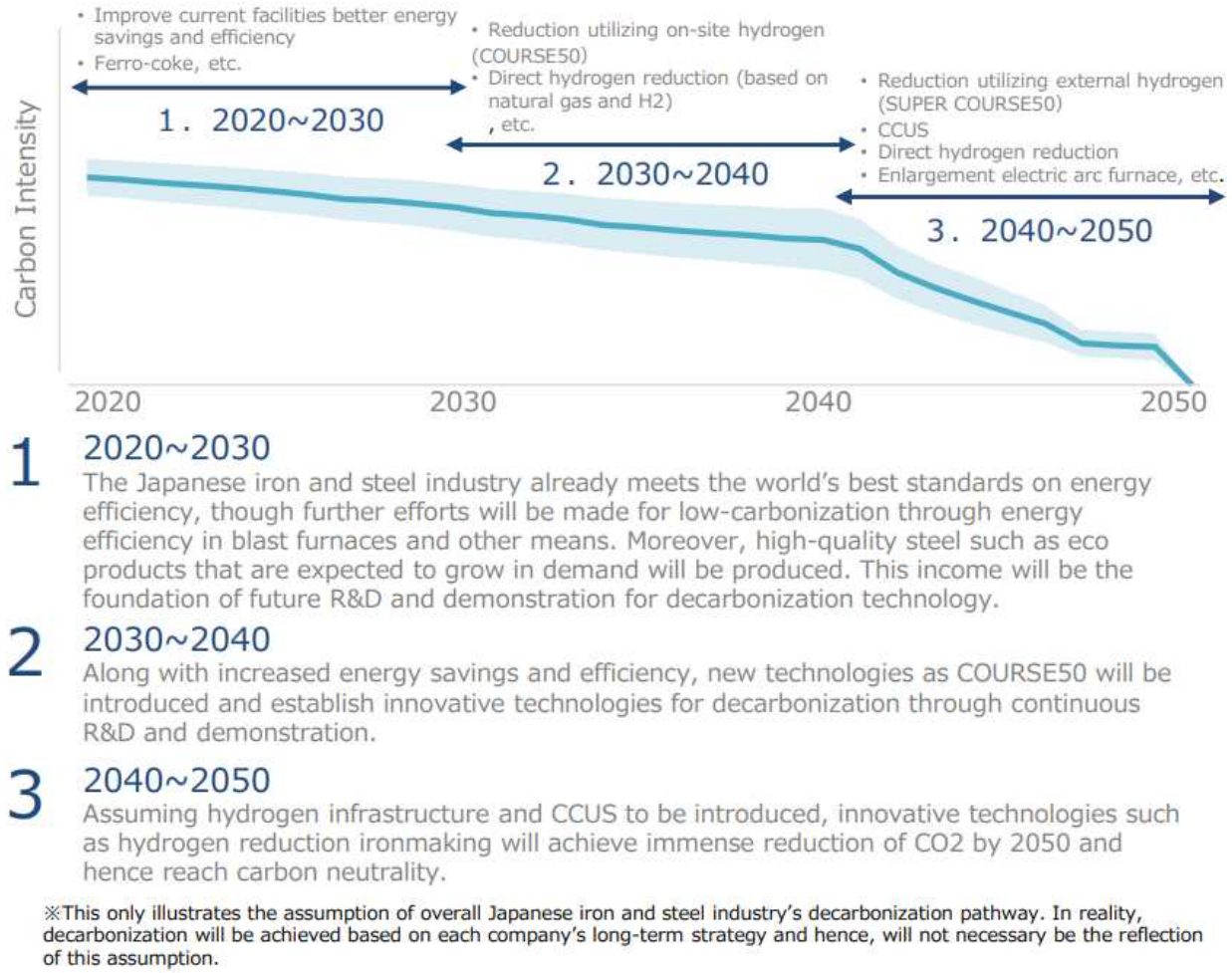

Figure 11: Transition Roadmap in the Steel Sector[27]

[27] Source: Ministry of Economy, Trade and Industry (2021) Technology Roadmap for "Transition Finance" in Iron and Steel Sector

(3) It shall be Publicly disclosed (including Interim Targets)

The Group's Environmental Management Vision 2050 has been published on the Company's website and milestones for FY 2024 and FY 2030 have been also announced on the website, respectively.

(4) It shall be Supported by Independent Assurance or Verification

The actual value of GHG emissions (Scope 1, Scope 2 and Scope 3) in the Group has been guaranteed from independent third parties[28].

Accordingly, JCR has evaluated that the transition strategy of the Group has been science-based and met the requirements in the Element 3. JCR has expected for the Group to set more specific numerical targets for Scope 3 hereafter.

Element 4. Implementation transparency

In the Seventh Medium-term Business Plan, JFE Holdings has announced future investment plans for the Green Transformation (GX investment) and carbon neutrality. The Company announced that an investment and loan of 1 trillion yen was required to achieve the CO_2 reduction target in FY 2030 through low-carbon technologies in the steel process in the Carbon Neutral Strategy Briefing in 2022. The breakdown of investments and loans includes large electric furnaces, ferro coke, steel scrap/reduced iron measures or LNG.

		Seventh medium-term business plan	Notes
Consolidated Investment	Equipment Investment	About 1,200 billion yen	
	Business Investment	About 250 billion yen	
	Total	About 1,450 billion yen	Steel business: 1,080 billion yen Steel business maintenance: About 30%
(Of above)	GX Investment	About 340 billion yen	Steel business: 160 billion yen Engineering business: 130 billion yen Trading business: 50 billion yen
	DX Investment	About 120 billion yen	
Asset Downsizing		About 200 billion yen	
Non-consolidated Crude Steel Production (FY2024)		About 26 million tons	
Steel Business Cost Reduction		120 billion yen	

Figure 12: JFE Group's Seventh Medium-term Business, Plan Investment Plan[29]

[28] JFE Holdings' website
https://www.jfe-holdings.co.jp/sustainability/esg_data/assurance/index.html

[29] Source: JFE Group Seventh Medium-Term Management Plan
https://www.jfe-holdings.co.jp/en/release/2021/210507.pdf

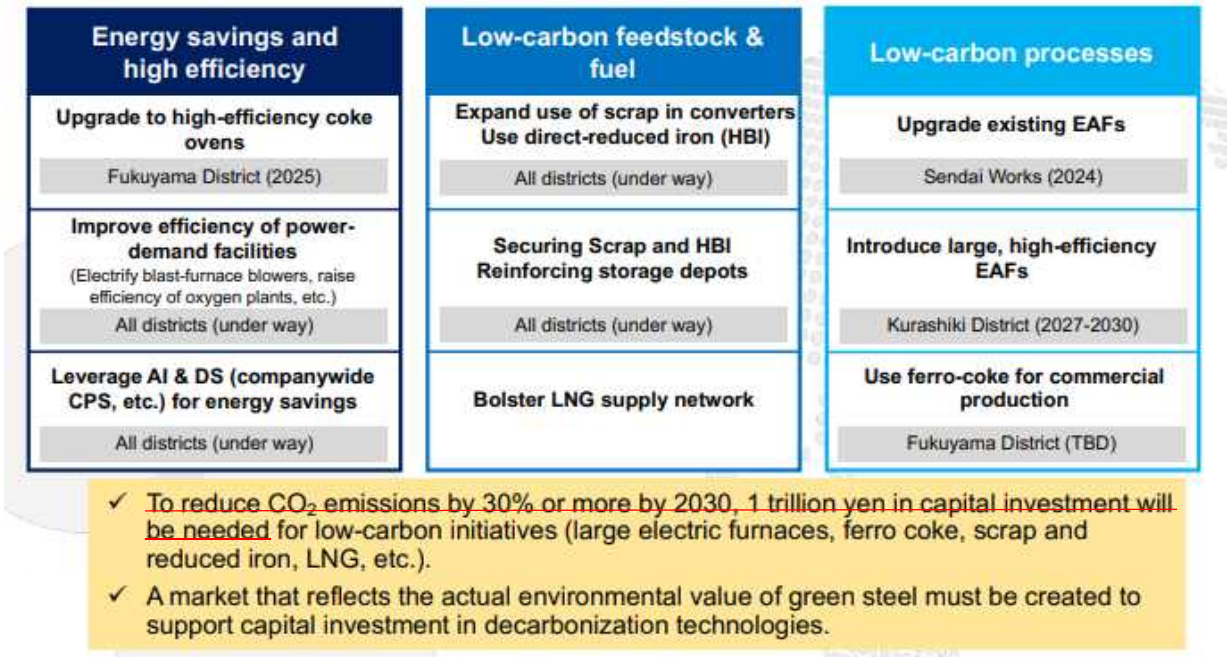

Figure 13: JFE Steel's Investment Plan by FY 2030[30]

Accordingly, the Group has set the Environmental Management Vision 2050 and medium- to long-term targets in light of the GHG reduction targets defined by the Japanese government and has disclosed specific investment plans to realize these goals as much as possible. JCR has evaluated that the Group has achieved a high level of transparency.

There will be no negative impact on the environment and society such as impacts on employment along with the implementation of the Group's transition strategy. In terms of the environment, the Group has formulated quantitative targets from the perspectives of effective use of resources, use of water or prevention of pollution in addition to responding to climate change and has been actively working toward environmental conservation. The Group additionally has endorsed "Keidanren Declaration for Biodiversity and Guideline" and has begun to make evaluation in line with the LEAP approach recommended by the TNFD (Task Force on Nature-related Financial Information Disclosure.) On the social side, the transition strategy to decarbonization in the steel business that is the main business has deemed as transition strategies in consideration of a just transition as it utilizes energy saving/high efficiency and carbon recycling of existing facilities to the maximum in parallel with promoting the development of ultra-innovative decarbonization technology without rapid industrial transformation. It has been assumed that there will be no impact as the Group will work on manufacturing environmentally friendly products, leveraging technologies it has cultivated to date in other businesses.

JFE Holdings, in terms of a lock-in to fossil fuels, has aimed to achieve carbon neutrality by 2050 in its Environmental Management Vision 2050 for which a concrete roadmap has been formulated. The Company has assumed to convert to carbon-free hydrogen and carbon-free

[30] Source: JFE Steel Carbon Neutral Strategy Briefing 2022

electricity in its roadmap and has evaluated that its transition strategy is not intended to lock-in to fossil fuels. Furthermore, it is not expected that the investment plan on transitions in this Framework will cause significant harm to other projects with environmental benefits (Do No Significant Harm,) nor is any impact on a just transition expected at this time as a result of the aforementioned investment.

Accordingly, JCR has evaluated that this Framework satisfies the four components required in the Climate Transition Finance Handbook.

Chapter 3: Alignment with Green Bond Principles

Evaluation Phase 1: Green and Transition Evaluation gt1(F)

I. The Use of Proceeds

JCR's Key Consideration on This Factor

In this section, JCR first confirms whether the proceeds set out in the Framework is used for green/transition projects that have clear environmental improvement effects. Then, in cases where the use of proceeds is expected to have a negative impact on the environment and society, JCR confirms whether the impact is fully examined by an internal specialist department or an external third party and whether necessary measures have been taken for its workaround and mitigation. Finally, JCR confirms the consistency with the Sustainable Development Goals (SDGs.)

▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

The eligibility criteria and projects for which the proceeds will be used established by JFE Holdings are expected to have environmental benefits as both of them are initiatives to achieve the Group's Environmental Management Vision 2050.

The Framework for Use of Proceeds

6-2. Use of Proceeds

The proceeds financed through green or transition finance will be allocated to refinance new and existing investments related to eligible projects that meet the following eligibility criteria. In case of an existing investment, the allocation is made only to expenditure made within two years from the financing green or transition finance.

<Green/Transition Finance Eligible Projects>

The use of proceeds category		Project example	Alignment with SDGs
Development of ultra-innovative steelmaking process	Development of ultra-innovative steelmaking process	・ Funding for R&D on a carbon-recycling blast furnace, CCU, hydrogen ironmaking, and an electric furnace for high-grade steel production	7: Affordable and Clean Energy 9: Industry, Innovation and Infrastructure 11: Sustainable Cities and Communities 12: Responsible Consumption and Production 13: Climate Action
Shift to low-carbon manufacturing processes	Shift to low-carbon manufacturing processes	・ Expenditure on expansion of existing electric furnaces and introduction of high-efficiency/large electric furnaces (capital expenditure)* ・ Expenditure on reduced iron production (capital expenditure/contribution) ・ Expenditure on capacity increasing of LNG supply network (capital expenditure) ・ Expenditure on hydrogen infrastructure construction * (capital expenditure) ・ Expenditure on CCS-related facilities (CO_2 separation/recovery/liquefaction/storage/shipping facilities) (capital expenditure)*	

Energy conservation for higher efficiency initiatives	**Equipment investments and R&D targeting conversion of blast furnaces to AI and IoT**	・ Expenditures on the development of DS technology ** that can reduce CO_2 through operation stabilization and detect the status of the operating system and predict anomalies (CAF)	
	Expanding the use of scrap	・ Expenditures for research development and capital investment aimed at increasing scrap usage in converters (capital investment funds and R&D funds)	
	Improving coke furnaces	・ Cost of renovating coke ovens (improved combustion efficiency and reduced use by renovating aged coke ovens) ・ Expenditures for renewal of heat furnaces, boilers, power generation facilities, and air separators	
	Equipment investments targeting recovery and effective use of waste heat, byproduct gas	・ Expenditures for the effective use of waste heat and by-product gas generated at steelworks (capital investment funds)	
	Resource conservation	・ Expenditures aimed at the reduction effect of reducing materials used in the BF (capital investment fund)	
Manufacturing eco-friendly products*	**Manufacture of high value-added electrical steel sheets, maintenance of processing centers**	・ Equipment investments and R&D targeting the manufacture of electromagnetic steel sheets and expenditure on maintenance of processing centers (capital investment funds, research and development funds, working funds)	11. Sustainable Cities and Communities
Renewable energy*	**Initiatives related to renewable energy (biomass, geothermal, and solar power generation)**	・ Expenditure related to initiatives(EPC and operation) in the Renewable Energy Management (capital investment funds, working capital)	7: Affordable and Clean Energy 9: Industry, Innovation and Infrastructure
Efforts to realize a recycle-oriented society*	**Recycling of plastic waste**	・ Expenditure on recycling of plastic waste (capital expenditure, working capital)	9: Industry, Innovation and Infrastructure

* Projects recognized by JFE Holdings as green projects

JCR's Evaluation for the Framework

1. Environmental improvement effects of the project

Of the proceeds financed in this Framework, the use of proceeds category, "Development of ultra-innovative steelmaking processes," "Shift to low-carbon manufacturing processes" and "Efforts on energy saving and high efficiency" cover projects that contribute to reducing CO_2 emissions in the steel business in the Environmental Management Vision 2050. JFE Steel aims to realize carbon neutrality in 2050 through technological development of innovative steelmaking

processes and a multitrack approach by digging deep into existing energy-saving and high-efficiency technologies. All of the target projects are significant measures included in the CO_2 reduction target formulated in the "Basic Policy of the Japan steel industry on 2050 Carbon Neutrality aimed by the Japanese government" and the CO_2 reduction measures prepared by the Low-Carbon Society Implementation Plan by the Japan Iron and Steel Federation (hereinafter referred to as "JISF") and have been aligned with the Steel Roadmap presented by the Ministry of Economy, Trade and Industry and therefore JCR has evaluated that they will greatly contribute to the transition strategy toward carbon neutrality in 2050 in the steel industry. The use of proceeds category, "Manufacturing eco-products," "renewable energy" and "recycling-oriented society" have been positioned as businesses that contribute to reducing CO_2 in other industries through the Group's business activities in the Environmental Management Vision 2050.

JCR has evaluated that the use of proceeds specified in this Framework is an initiative that contributes to decarbonizing the steel process and expanding contribution to CO_2 reduction through business, which are the two pillars indicated in the Group's Environmental Vision 2050, and both are significant businesses to realize its sustainable corporate growth.

(1) Use of proceeds 1: Development of ultra-innovative steelmaking process

Use of proceeds 1 is technological developments related to super-innovative steelmaking processes that contribute to reducing CO_2 emissions in the steelmaking process. This project falls under "Energy efficiency" in the Green Bond Principles and the Green Loan Principles, and "Projects for energy efficiency" in the Green Bond Guidelines and the Green Loan Guidelines.

In February 2021, JISF announced its Basic Policy of the Japan steel industry on 2050 Carbon Neutrality aimed by the Japanese government that the Japanese steel industry will (i)contribute through its technologies and products, and (ii) work to reduce CO_2 emissions in the steel industry's own production processes (Zero Carbon Steel). According to this policy, there is no solution other than disposal of inevitable CO_2 emissions at a high cost by challenging advanced technological development such as CCUS under the blast furnace method with high hydrogen reduction rate (reduction by carbon) or conducting hydrogen reduction steelmaking without CO2 emissions so as to realize zero carbon steel. The Use of Proceeds Category 1 is proceeds for the development on ultra-innovative technologies to achieve zero carbon steel.

Of the ultra-innovative technological development, the project to use hydrogen in the steelmaking process was adopted as the Green Innovation Fund Project in January 2022, and JFE Steel was selected as one of its participating companies. The Project aims to develop technologies to reduce the use of fossil fuels from the entire steelmaking process, mainly by establishing (i) a hydrogen reduction technology to the blast furnace method (a blast furnace hydrogen reduction technology) and (ii) a technology to directly reduce low-grade iron ore with hydrogen (a direct hydrogen reduction technology,) and to reduce CO_2 emissions by 50% or more, respectively by 2030.

The followings are examples of projects in which the Group has begun research as ultra-innovative technological development.

Project example 1: Collaboration between Carbon Recycling Blast Furnace and CCU Technology

As the development of innovative steelmaking processes, technology to reduce CO_2 in the blast furnace is crucial so as to take advantage of the mass/high-efficiency production of the blast furnace method and the characteristics of high-grade steel manufacturing. JFE Steel is aiming to reduce CO_2 emissions by combining the recycled blast furnace with the CCU technology to enable excess CO_2 in its steelworks.

The Carbon Recycle Blast Furnace has an ultra-innovative blast furnace technology that converts CO_2 emitted from the blast furnace into methane by a methanation technology and repeatedly uses it as a reducing agent in the blast furnace. This technology has features as follows:

1. Reducing CO_2 emissions by approximately 30 % in the blast furnace alone.
2. Aiming to achieve carbon neutrality by leveraging CCU/CCUS
3. Increasing the thermal efficiency in the process by replacing the energy used to heat nitrogen in the air with methane heating and by replacing the air inserted into the blast furnace with pure oxygen.
4. Becoming easier to separate CO_2 without nitrogen, can miniaturize/streamline facilities in which CO_2 will be separated for methanation and making available efficient gas through CCUS.

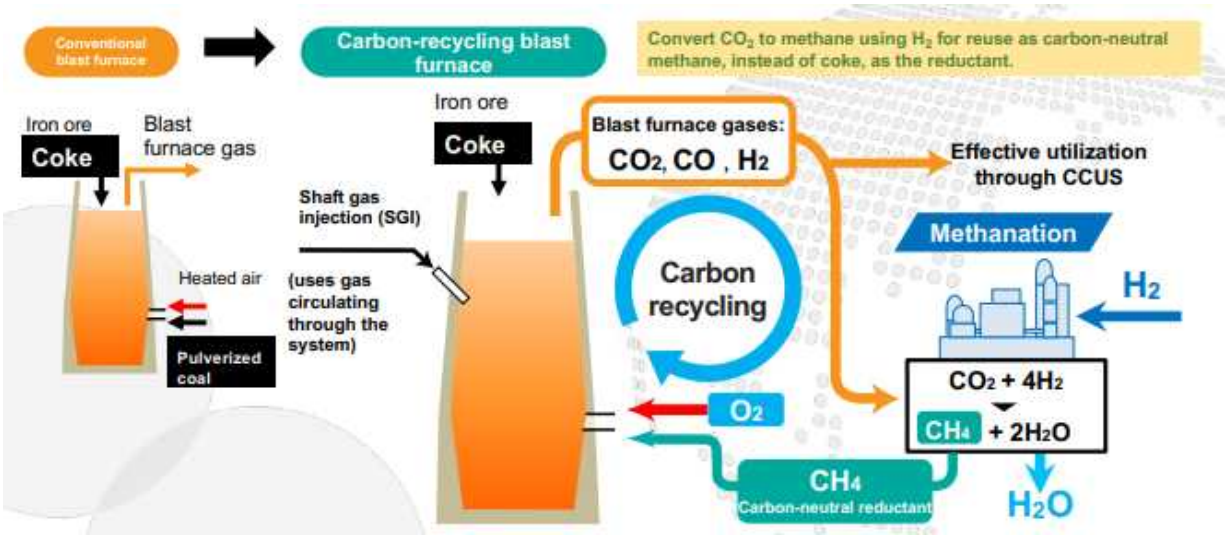

Figure 14: Overview of Carbon Recycle Blast Furnace[31]

JFE Steel will develop elemental technologies and will test small equipment for both carbon recycled blast furnaces and CCU methanol synthesis and will demonstrate technologies to reduce CO_2 emissions by 50% or more compared to those with the current blast furnace method through a small-sized test of a 1/25 scale by 2024, followed by a medium-scale demonstration of a 1/4 scale. The carbon recycled blast furnaces are targeted to reduce CO_2 by 50% or more and the utilization of CCUS is essential to achieve carbon neutrality; therefore, the proceeds will

[31]Source: JFE Steel Carbon Neutral Strategy Briefing 2022

be used for the research and development of CCUS in this Framework. Capital investments in CCS-related facilities have been included in the use of proceeds 2.

JCR has evaluated this project as technological development that enables to reduce CO_2 emissions generated from its own blast furnaces.

Project example 2: Direct hydrogen reduction technology

A hydrogen reduction technology refers to a technology in which oxygen is removed from iron ore with hydrogen instead of coke (C) in a reduction furnace to produce reduced iron (Fe,) which is melted in an electric furnace. The CO_2 generated with the current direct reduction method is roughly half of that with the blast furnace method; however, the Company is aimed to make CO_2 emissions zero by utilizing hydrogen during reduction and green electricity during melting.

There are two problems in this technology. First, a reduction may fail under the conditions of insufficient heat as endothermic reactions interfere with reduction reactions, for which the raw material preheating technology and hydrogen heating technology have been developing. The direct reduction needs high-grade raw materials that are easier to pelletize than those of the present blast furnaces; however, high-grade raw materials have a low production volume. The high-grade raw materials remain at 170 million t/year while low- and medium-grade raw materials amount to 2.06 billion t/year in the global production volume. The Group has been cooperating with BHP in Australia, one of the three largest iron ore suppliers so as to develop technology that can process low- and mid-grade raw materials as raw materials for direct reduction.

JCR has evaluated that the aforementioned technological development enables to reduce CO_2 emissions in its own steel production process through reducing the coke use and enables to produce zero-carbon steel in the future.

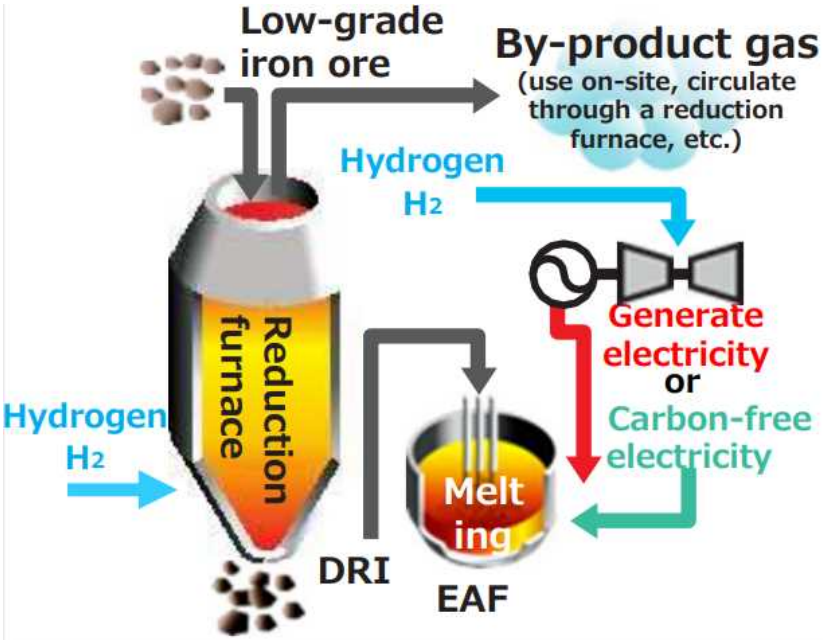

Figure 15: Hydrogen Reduction Steelmaking Process[32]

[32] Source: JFE Steel Carbon Neutral Strategy Briefing 2023

Project example 3: Production of high-grade steel in electric arc furnace process

An electric arc furnace has a technology to manufacture steel products by melting steel scrap or direct reduced iron in the electric arc furnace, through which with CCS, the CO_2 emissions are only roughly 1/4 of that generated by the blast furnace-converter method. The CO_2 emissions are reducible to zero with hydrogen-reduced iron and green electricity in the future (Figure 16.) The current issue is that the productivity of the electric arc furnace process is roughly 30% lower than that of the blast furnace-converter process. JFE Steel has already introduced an eco-friendly, high efficiency electric arc furnace, "ECOARC™," however, the energy efficiency and productivity need to be improved. Since scrap is melted in the electric furnaces, impurities are mixed; therefore, some steel is difficult to manufacture in electric arc furnaces, such as vehicle steel sheets or electrical steel sheets. JFE Steel also plans to develop technologies to detoxify and remove impurities.

JCR has evaluated that the aforementioned technology is a technological development that enables to reduce CO_2 emissions in its own steel production process and to produce zero-carbon steel in the future as same as the Project example 2.

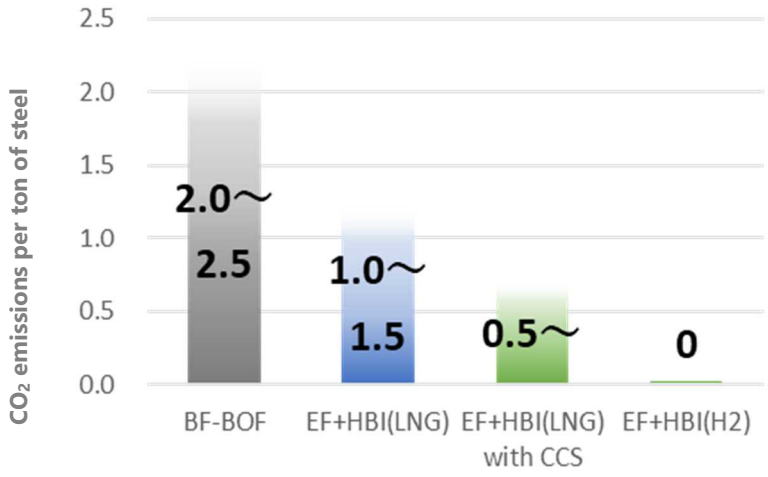

Figure 16: CO_2 Emission Intensity of Electric Furnaces[33]

(2) Use of proceeds 2: Shift to low-carbon manufacturing process

Use of proceeds 2 is expenditure on capital investment related to low-carbon manufacturing process that contributes to reducing CO2 emissions in the steelmaking process, especially during the transition phase. This project falls under "Energy efficiency" in the Green Bond Principles and the Green Loan Principles, and "Projects for energy efficiency" in the Green Bond Guidelines and the Green Loan Guidelines.

JFE Steel has been taking a multitrack approach to realize carbon neutrality as mentioned above. In light of the technological development and the progress of social supply chain construction, the Company has assumed that electric furnaces will be commercially available sooner than other technologies. JFE Steel has assumed electric arc furnaces and their related facilities as the use of proceeds that cover capital expenditure at the present moment, the first half of the transition phase. Capital expenditures in hydrogen receiving facilities have also been included in

[33]Created by JCR from materials published by JFE Holdings

the use of this proceeds as capital investments to promote low-carbonization in manufacturing processes that are not limited to electric arc furnaces. The Company has not assumed to eliminate processes other than electric arc furnaces as keeping furnaces processes that intend to reduce CO_2 emissions to the maximum is of significance from the viewpoint of process efficiency, utilization of existing management resources and responsibility for supplying large amounts of steel and high-quality/high-performance steel.

Capital expenditure on electric furnaces and their related facilities

The environmental benefits of electric furnaces is as described in Figure 16. JFE Steel plans to increase the production capacity of electric arc furnaces in Sendai by approximately 140,000 t/year in FY 2024 through expanding the capacity and loading facilities by reinforcing electric arc furnaces in its Sendai Works or introducing DX as part of the expansion of existing electric arc furnaces. With this plan, JFE Steel aims to reduce CO_2 emissions by roughly 100,000 t-CO_2/year. The Company has decided to introduce electric arc furnaces in the stainless steel production process in the Chiba district. JFE Steel has expected to have CO_2 emission reduction effects by up to approximately 450,000 t-CO_2/year by replacing a part of the hot iron in furnace with scrap.

JFE Steel has considered to change its process from the Kurashiki No. 1 blast furnace to a high-efficiency, large-scale electric arc furnace in 2027 when its renovation is necessary. The Company is to achieve a structure to massively supply green high-quality/high-performance steel materials, which is comparable to the blast furnace method that is difficult to realize in existing large electric arc furnaces for the first time in the world by applying innovative process technologies, such as high quality/high efficient melting technologies whose development has been promoted by the GI Fund Project in addition to its unique development technologies in the electrical arc furnace in Kurashiki. It is expected for JFE Steel to reduce its annual production by approximately 2 million t/year and its CO_2 emissions by about 2.6 million t-CO_2. In May 2023, the Company has set up the "Kurashiki Electric Furnace Construction Examination Team" to proceed with the concrete examination of this project.

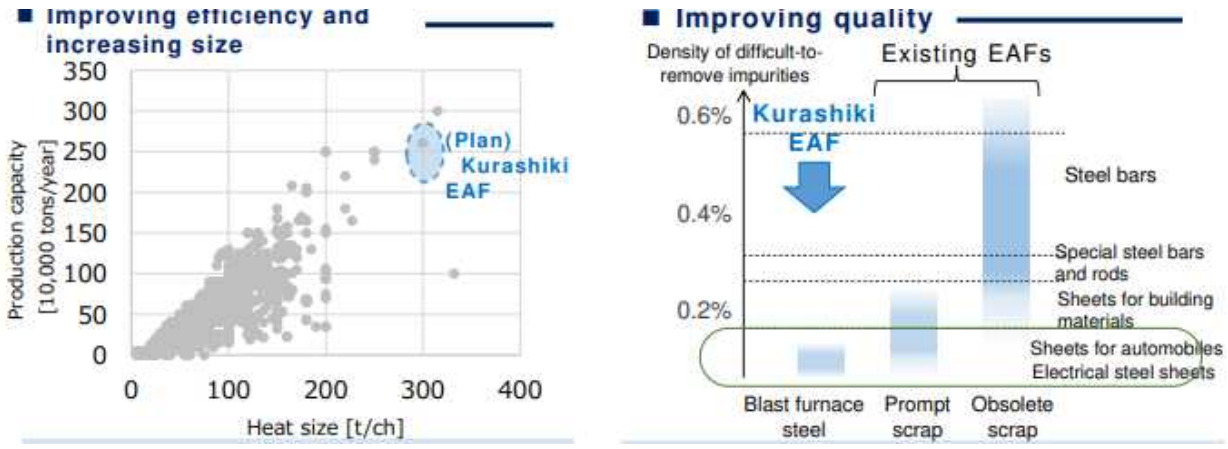

Figure 17: Characteristics of Kurashiki Electric Furnace[34]

[34] JFE Steel Carbon Neutral Strategy Briefing 2023

■ Capital investments related to the introduction of electric arc furnaces

(1) Capital expenditure on the production of reduced iron used as raw materials for electric arc furnaces

Scrap is usually used as a raw material in electric arc furnaces; however, reduced iron with a certain degree of impurities is required for high-grade steel production. JFE Steel plans to use reduced iron reduced with LNG and replace it with hydrogen steelmaking in the future. JFE Steel has been actively working with Emirates Steel Arkan and ITOCHU Corporation to construct a collaborative structure toward the establishment of a low-carbon reduced iron supply chain in the United Arab Emirates (UAE.) This project is an initiative that contributes to introducing electric arc furnaces, and JCR has evaluated that the environmental benefits are recognizable. The reduced iron produced may also be used in blast furnaces, and the CO_2 reduction effect can be enhanced in blast furnaces by reducing coke use and by adding reduced iron instead of iron ore and coke in blast furnaces and therefore, the environmental benefits are also recognizable.

(2) Capital investment on replacement of co-product gas

In cases where blast furnaces are converted to electric arc furnaces, co-product gas[35]used in the Works will no longer generated; therefore, the Company assumes to make capital investments so as to secure alternative fuels. The co-product gas generated through the blast furnace converter process is used as fuels in reheat furnaces in the primary mill, such as blowing hot air into a blast furnace, in-house power generation, hot rolling/steel plates or heat treatment furnaces to improve the performance of products. The co-product gas has been replaced with LNG; however, JCR has confirmed that JFE Steel has assumed to change LNG to decarbonized fuels such as hydrogen in the future. JCR has evaluated that this project is an indispensable initiative for introducing electric arc furnaces and environmental benefits are recognizable.

Accordingly, JCR has evaluated that these projects include capital investments required for the introduction of electric arc furnaces and contribute to reducing CO_2 emissions in its own steel production process.

Capital expenditure that contribute to low-carbon manufacturing processes, which is not limited to electric arc furnaces

(1) Capital expenditures on hydrogen infrastructure construction

The Group has been studying the procurement of carbon-free hydrogen and electricity, recognizing that it is essential to build and strengthen a large-scale infrastructure that supplies a large amount of carbon-free hydrogen and electricity so as to realize a carbon-free society. Among others, the Company has assumed to use the proceeds for capital investments essential to procure hydrogen used for hydrogen reduction steelmaking or substitute for the aforementioned co-product gas. JFE Steel has begun jointly examining the utilization of hydrogen with ENEOS Corporation, which is adjacent to the West Japan Works

[35] Co-product gas is classified into three categories: CO-based blast furnace gas, hydrogen-based coke oven gas and CO- and hydrogen-based mixed gas.

(in the Kurashiki district,) taking advantage of the location of the Mizushima industrial complex, aiming to build a hydrogen supply chain by 2030 (up to 100,000 t-H_2/year.)

JCR has evaluated that this capital investment is a project that contributes to hydrogen reduction steelmaking or decarbonization of fuels.

(2) Capital investment on CCS-related equipment (CO_2 separation, collection, liquefaction, storage and shipping)
The Group will promote to implement ultra-innovative technologies or shift to carbon neutral energy as mentioned above; however, CO_2 emissions from the manufacturing process cannot be zero and therefore utilizing CCUS is required to achieve carbon neutrality. The Group has estimated that CCUS up to roughly 20 million t-CO_2 is required in cases where a carbon recycled blast furnace is used. JFE Steel has been proactively working on its initiatives; for instance, it has started a joint study for constructing a CCS value chain that originates in Japan in collaboration with CCS in Malaysia.

JCR has evaluated that the proceeds will be used for a project that has important technologies to remove CO_2 unavoidably emitted and that contributes to reducing CO_2 emissions in the Company's steel production process.

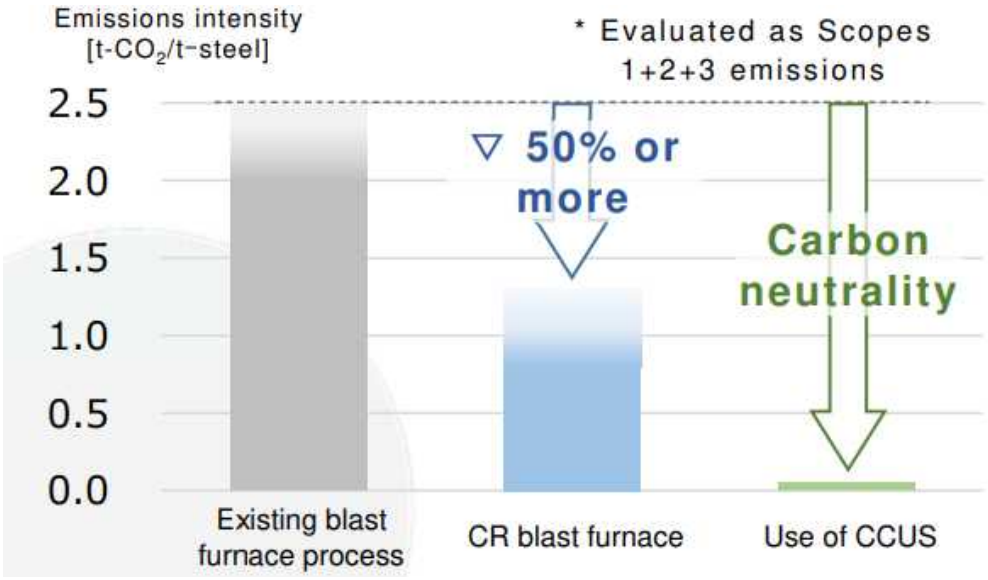

Figure 18: CO_2 Emission Intensity in Carbon Recycled Blast Furnace[36]

(3) Use of proceeds 3: Energy conservation and high efficiency

Use of proceeds 3 is for capital investment and technological development related to the deployment of technologies that contribute to reducing CO_2 in the steelmaking process. This project falls under "Energy efficiency" in the Green Bond Principles and the Green Loan Principles, and "Projects for energy efficiency" in the Green Bond Guidelines and the Green Loan Guidelines.

JISF has set four pillars: three Ecos (eco-processes, eco-solutions and eco-products) and one innovative technology development on the Green Innovation Fund, "Project to Use Hydrogen in the Ironmaking Process" and will contribute to reducing CO_2 worldwide and take on the

[36]JFE Steel Carbon Neutral Strategy Briefing 2023

challenge of achieving carbon neutrality in the Carbon Neutral Action Plan (previously known as Low-Carbon Society Action Plan.)[37]The target for three Ecos in this plan, the results for FY 2021 and orders by item are as follows:

Table 1: Goals in Carbon Neutral Action Plan Established by JISF[38]

Eco-process **Energy saving/CO_2 reduction efforts in its own process**	A 30 % reduction in CO_2 emissions from energy in FY 2030 from FY 2013[*1]
Eco-products **Contribution to reducing products use phase by supplying high-performance steel**	Contribution to reducing approximately 42 million t-CO_2 (estimated)[*2]
Eco-solution **Contribution to global reduction by transferring and spreading energy-saving technologies developed and commercialized by the steel industry in Japan**	Contribution to reducing roughly 80 million t-CO_2 (estimated)[*3]

* 1 The goal given that requirements to take macro assumptions in the government's Basic Energy Plan or various measures are satisfied.

* 2 The Institute of Energy Economics, Japan (hereinafter referred to as "IEEJ") calculated the reduction potentials for 2030 under its certain assumption in IEEJ, based on a methodology to calculate reduction effects by target steel established in IEEJ for five products (automotive steel sheets, oriented electrical steel sheets, ship steel plates, boiler steel tubes and stainless steel sheets) that have been evaluated for their quantitative contribution of reduction.

* 3 JISF calculated with its certain assumptions regarding the increase in the number of main energy-saving facilities installed, such as TRT or CDQ along with increasing in steel production with the RITE scenario and the contributions made by Japanese firms to the increase. This trial assessment presently refers to reduction potentials by energy-saving facilities that can be transferred/disseminated at this time, and in cases where a new technology is required to be assessed in the future, the reduction potentials will increase.

[37]Initiatives in the Steel Industry, Carbon Neutrality Action Plan
https://www.jisf.or.jp/business/ondanka/kouken/keikaku/
[38]Source: JISF's website
https://www.jisf.or.jp/business/ondanka/kouken/keikaku/

Initiatives	FY2021 Performance (Mt-CO2)	Expected FY2030 Performance (Mt-CO2)	Remarks
1.Promote energy conservation Improving efficiency of coke ovens and power generating facilities; reinforcement of energy-saving facilities; improving efficiency of power-consuming facilities; making EAF process energy efficient	▲100	Approx. ▲270	• All member companies continued their efforts to promote energy saving by sequentially upgrading their coke ovens, which had increased CO_2 emissions due to age deterioration and the impact of the Great East Japan Earthquake.
2.Expand chemical recycling of waste plastics	▲4	Approx. ▲210	• The amount of waste plastic collected in FY2021 increased by 10,000 tons compared to FY2013.
3.Adopt innovative technologies COURSE50, Ferro coke	0	Approx. ▲260	
4.Other Using raw material and fuel with less CO2 emissions, etc.	▲333	Approx. ▲850	• Promotion of utilization of cold iron sources and heating furnace fuel conversion (from heavy oil, etc. to city gas).
5.Improve CO2 emission factor of purchased electricity	▲300	Approx. ▲800	• Calculated using the 2013 coefficient (0.567 kg-CO_2/kWh) and the 2021 coefficient (0.436 kg-CO_2/kWh).
6.Production volume change, etc	▲2,398	Approx. ▲3,400	• The production fluctuations includes energy-saving factors such as operation efforts and the effect of fixed energy due to production fluctuations (consumption rate fluctuations).
Total	▲3,134 (16.1% reduction)	Approx.▲5,790 (30%reduction)	

Figure 19: FY 2021 Results and FY 2030 Targets in the Carbon Neutral Action Plan (Orders by item)[39]

The proceeds will be used for measures that contributes to JISF's Carbon Neutrality Action Plan and JFE Holdings' medium-term CO_2 emission reduction targets (an 18% reduction by FY 2024 and a 30% reduction by FY 2030 (from FY 2013.) The specific use of proceeds under assumption is as follows:

(1) AI and IoT of Blast Furnace, Introduction of Cyber Physical System (CPS)

This project is related to the development of data science technology (hereinafter referred to as "DS technology") that contributes to reducing CO_2 through operational stabilization in the steelmaking process. JFE Steel has identified the DX strategy as one of its important issues along with decarbonization in the Seventh Medium-term Business Plan. The Company has introduced the DS technology aiming for constructing a cyber physical system (CPS[40]) in the domestic blast furnaces. This enables to detect signs of abnormal conditions and to predict the conditions in furnaces, which are important for stable operations. By using big data to manage the steelmaking process, it is expected to further improve efficiency of the process and save energy, and to contribute to worker safety. To enable data management that makes extensive use of DX technology, JFE Steel plans to increase the number of data scientists to approximately 1.7 times its current level to 600 by the end of FY 2024 and to focus on their training.

JFE Steel has developed a guidance system to manage fuels, steam and electricity for energy-saving and CO_2 reduction in operations for fuels and electricity in its domestic steelworks as a leading system for this use of proceeds.

Since a large amount of energy is required in the steelmaking process, optimizing the operations to use fuels and electricity is a crucial issue to save energy and reduce CO_2. Co-product gases

[39] Source: JISF "Activities of Japanese Steel Industry to Combat Global Warming Report of "JISF's Carbon Neutrality Action Plan" https://www.jisf.or.jp/en/activity/climate/documents/20230216_tekkouwg_en.pdf

[40] It refers to a system that creates value by aggregating the enormous amount of sensor information (big data) in physical space into cyber space, analyzing it through various methods and by feeding the results back to physical space in real time.

generated in the upstream processes, such as blast furnaces, coke ovens or converter furnaces in steelworks; electric power and steam obtained from energy conversion facilities such as power generation facilities or waste heat recovery, have been effectively utilized at plants in the Company, and the shortage has been compensated by externally purchasing them. In the operation of fuels and electricity, operators are required to determine various factors, such as allocation of co-product gases to each process, electric power purchased, fuels (heavy oil or city gases) purchased and amounts of co-product gases stored so as to minimize costs or energy losses based on data, including supply and demand, operations in power generation facilities and agreements with electric power companies or gas firms.

The existing systems for managing fuels or electricity are to optimally calculate by inputting supply and demand forecast value based on operators' experiences or management. Under circumstances where supply and demand greatly change, its forecast error also increases, which makes it difficult to operate the systems with similar optimal operating conditions. The new guidance system has introduced a concept of CPS and has following functions: (i) a supply and demand forecast function that accurately predicts the supply and demand of fuels/electricity based on the production plan in each plant from a vast amount of measurement data obtained in real time, (ii) a constraint value creation function that formulates a constraint value required in the optimal operation simulation based on the operations in facilities and (iii) optimal operating simulation and guidance function utilizing a model predictive control technology that requires operating conditions to minimize energy losses in a mathematical programming. The above functions minimize energy use by simulating optimal operating conditions and guiding an operator.[41] In addition to increasing energy efficiency, this system also contributes to improving worker safety as it can detect signs of abnormal conditions and predict the state of heat in furnaces, which are important for stable operations.

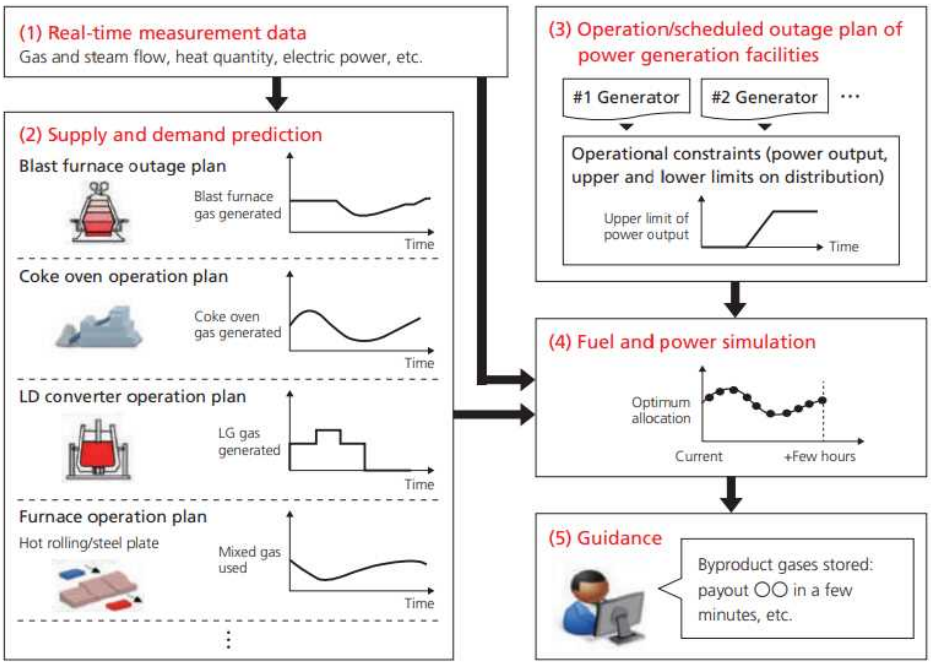

Figure 20: Fuels, Steam and Power Operational Guidance System in Steelworks[42]

[41] Guidance for Fuel and Power Management in Steel Works through Model Predictive Control (February 2020) *JFE GIHO No. 45*
[42] Source: JFE GROUP Sustainability Report 2023
https://www.jfe-holdings.co.jp/en/sustainability/pdf/sustainability2023e_A3.pdf

JFE Steel received an Academic Award (Technical Division) of the Japan Institute of Energy 2022 for the development of this system. The Group has set forth to implement CPS in all production processes at the end of 2024 as a KPI for one of the important issues, "Reinforce resilience of production and engineering capabilities (realize world-class earnings power through promoting DX)" and has been steadily introducing CPS, with the results of 35 % in FY 2022. JCR has evaluated that this project has contributed to the efficiency of its own manufacturing process and the reduction of CO_2 emissions.

(2) Capital Investment and Technology Development to Expand Scrap Use of Converters

A converter is a furnace in which pig iron and iron scrap melted in a blast furnace are injected, oxygen is blown in to remove carbon and the steel is smelted into molten steel. Technological development has been underway to reduce CO_2 emissions through reduction of the amount of pig iron by increasing the ratio of iron scrap.

According to JFE Steel, the current scrap ratio in the converter is 12-15%. As the amount of scrap used increases, the amount of heat supplied will be insufficient; therefore, new heat-applying technology will need to be developed to increase the scrap ratio. However, the Company aims to achieve its goal of increasing the scrap ratio to 20 % or more by using large, highly efficient heat-applying burners, planning to make them larger in size and more durable, in converter scrap melting, and promoting the use of carbon-free fuels such as hydrogen gas.

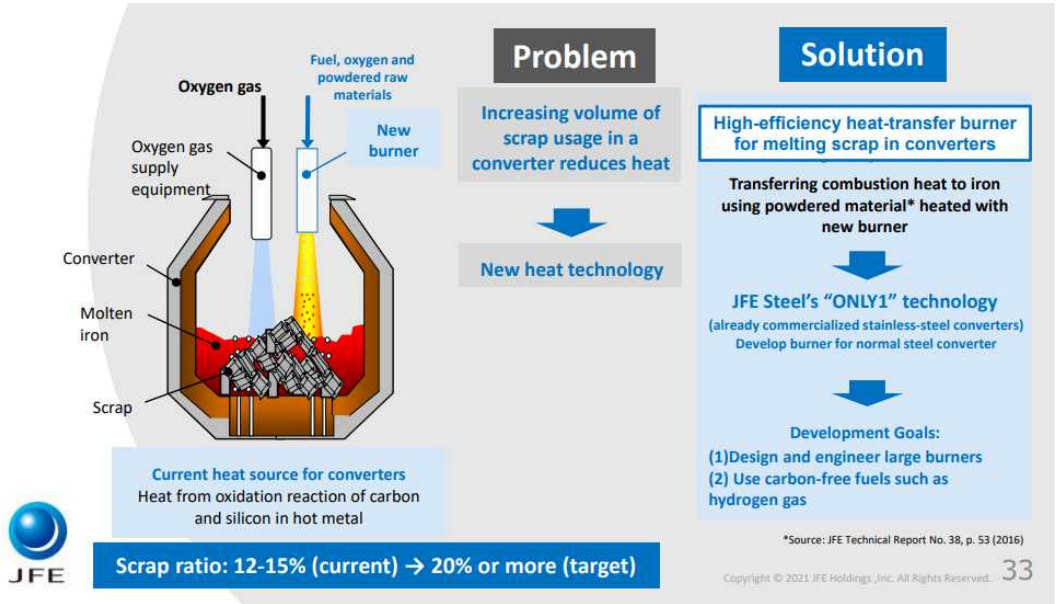

Figure 21: Measures to Improve the Scrap Ratio of Converters[43]

To expand the use of steel scrap, the converter-type dephosphorization process[44] will be fully utilized. In the converter, molten iron from the blast furnace is made into tough steel by removing impurities, such as carbon, phosphorus and silicon. By increasing the ratio of scrap

[43] Source: JFE (August 2016) *JFE GIHO No. 38*
[44] Source: JFE (August 2016) Progress and Future Prospects of Steelmaking Technology, *JFE GIHO No. 38*

metal to be included in the process, CO_2 emissions can be reduced. Temperature control, which was conventionally difficult can be made easier by improving the processing order or method, and scrap input can be increased. JFE Steel has developed an eco-friendly Double-slag Refining Process (DRP,) a converter-type, molten-iron pretreatment process, which increases the input of scrap in converters by making maximum use of silicon (Si) in hot metal as a heat source. With the introduction of this technology, the hot iron ratio can be reduced to 82 % from 90 % of the conventional process. JFE Steel has already completed the implementation of DRP equipment in all districts in 2021 and has reduced CO_2 emissions by approximately 170,000 t-CO_2/year (2021 results) by increasing the amount of scrap used in converters. Accordingly, JCR has evaluated that it has the effect of reducing CO_2 emissions.

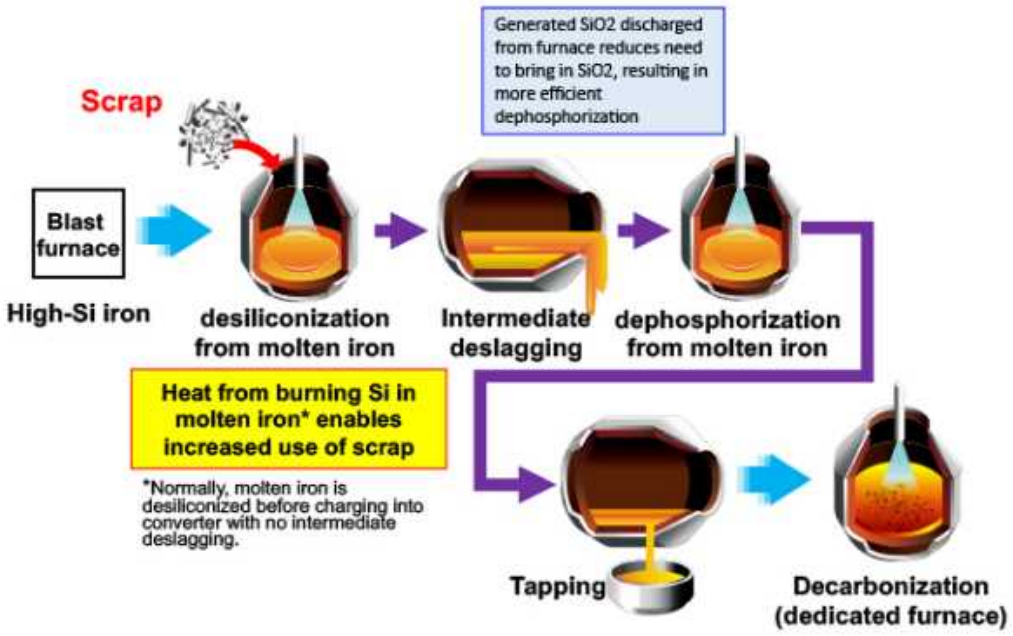

Figure 22: Overview of DRP[45]

(3) Renewal of aging facilities and various equipment such as coke oven renovation

A coke oven is an industrial furnace used for high-temperature carbonization of coal for coke production. The structure consists of dozens of firebrick carbonization chambers, and the space between the carbonization chambers serves as a heating chamber.

It has known that the deterioration of firebricks in coke ovens leads to a decrease in efficiency of coke ovens and to an increase in CO_2 emissions. According to JISF, an amount of CO_2 emissions was increased by 980,000 t-CO_2 caused by the deterioration of firebricks in coke ovens in FY 2020, and renovation/equipment renewal of coke ovens are essential initiatives to reduce CO_2 in the steelmaking process. The deterioration of firebricks in coke ovens may be caused by aging degradation and influenced by the Great East Japan Earthquake, and the members of the

[45] Source: JFE Holdings
https://www.jfe-holdings.co.jp/en/sustainability/environment/climate/#climate_vision2050

JISF have sequentially started to renew furnaces. Accordingly, heat consumption intensity in coke ovens tends to improve.

The Corporation has already renewed coke ovens seven times since FY 2013 shown by the record of the JISF and will be continuously renewed in or after FY 2023[46]. JFE Steel also includes the reduction of CO_2 emissions through renovation/renewal of aging facilities and equipment with decreased thermal efficiency in addition to coke ovens in this project classification.

JCR has evaluated that the project contributes to reducing CO_2 emissions by improving efficiency of coke ovens.

(4) Recovery and effective use of exhaust heat and by-product gas

In the steelmaking process, co-product gas and exhaust heat are generated; however, these are directly supplied with heat or are converted into energy as in-house power generation and steam. (See the chart below.) According to the JISF, approximately 40 % of the fuel inputs to power generation and steam are covered by co-product gas and waste heat, which have positioned as important infrastructure not only to save energy and reduce purchased power but also to enhance resilience in case of a disaster.

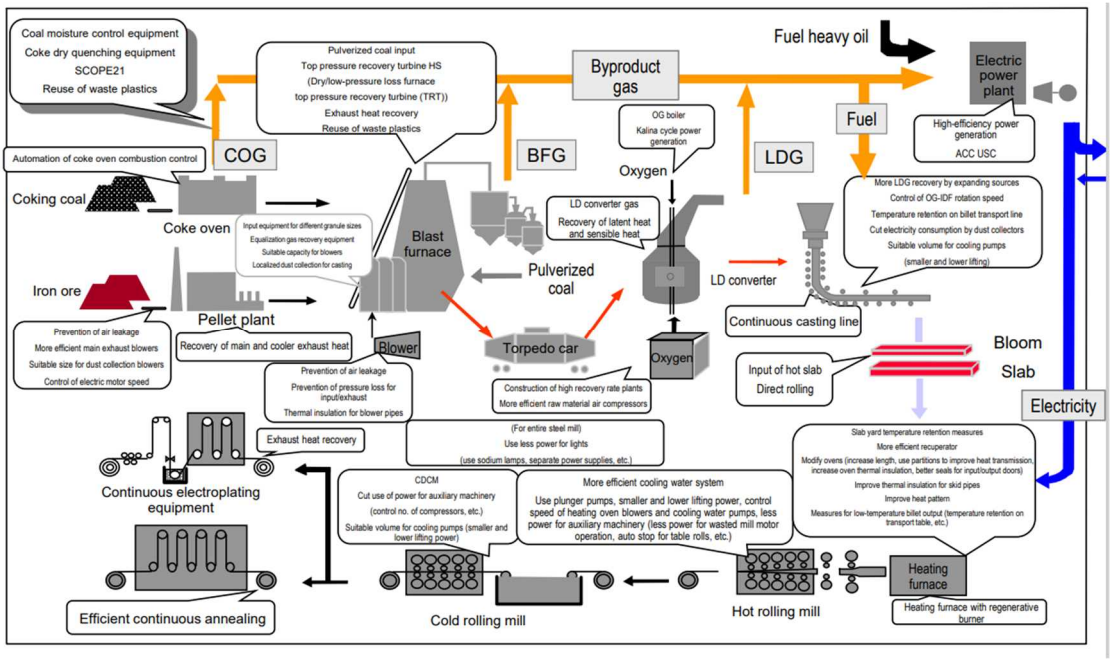

Figure 23: Energy Conversion of Waste Heat/Co-product Gas in Steelmaking Process[47]

Thanks to the promotion of co-product gas utilization and further improvement of power generation efficiency through equipment renewal, the energy efficiency in the steel industry in Japan is outstanding compared with other countries as shown in the figure below[48]. The Japan's

[46] JISF "Activities of Japanese Steel Industry to Combat Global Warming Report of 'JISF's Carbon Neutrality Action Plan'" https://www.jisf.or.jp/business/ondanka/kouken/keikaku/documents/tekkowg_ppt1.pdf.
[47] Source: JISF, Actual Operation of Power Generation Facilities in the Steel Industry
[48] Estimated energy intensity of Steel Department of RITE (Research Institute of Innovative Technology for the Earth)

steel industry has world-class energy efficiency, indicating that the Corporation has the lowest energy conservation potential and has more room for energy saving overseas. JISF is to actively make efforts on energy-saving measures in domestic steelworks based on the "Carbon Neutrality Action Plan" so as to firmly maintain the world-class energy efficiency hereafter and JFE Steel will promote the energy conservation measures in accordance herewith. The Corporation also has considered to accelerate energy-saving cooperation with other countries and regional steel industries, including China, India or ASEAN and to contribute to global warming measures.

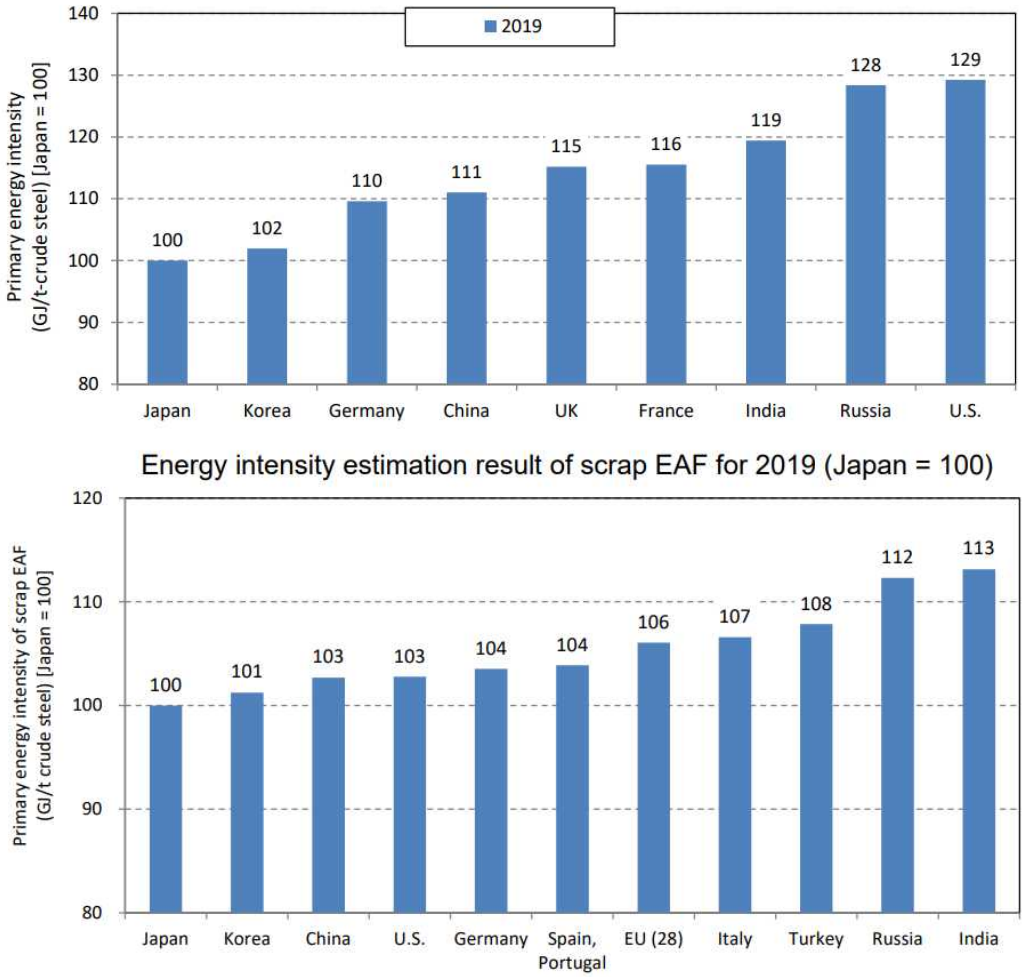

Figure 24: Energy Efficiency in the Steel Industry in Each Country (top: converter furnace steel, bottom: electric arc furnace steel)[49]

JCR has evaluated that the project has contributed to energy saving in the entire steelmaking process and has had environmental benefits.

(5) Resource saving

Assumed in this use is capital investment aimed for decreasing a reducing agent (coke) used in blast furnaces. There are a variety of investments to cut down the reducing agent, and replacement of coke ovens have some effects of lowering the reducing agent. However,

[49] Source: Estimated energy intensity of Steel Department of RITE (2019)
https://www.rite.or.jp/system/en/latestanalysis/2022/05/Comparison_EnergyEfficiency2019steel.html

investments related to the improvement of properties of raw material such as coke, are cited as a currently anticipated business. JCR, as mentioned above, has evaluated that the CO_2 reduction has been effective as CO_2 emissions in coke ovens and blast furnaces will be reduced by using less coke.

(4) Use of proceeds 4: Manufacturing eco-friendly products

Use of proceeds 4 is mainly expenditure on the increase in manufacturing facility capacity along with the growing demand for high-grade non-oriented electrical steel sheets, which are essential for the electrification of automobiles, and for high-grade grain-oriented electrical steel sheets, which contributes to energy savings in transformers. This project falls under "Clean Transportation," "Energy efficiency" in the Green Bond Principles and the Green Loan Principles, and "Projects for clean transportation," "Projects for energy efficiency" in the Green Bond Guidelines and the Green Loan Guidelines.

High-value-added electrical steel sheets are widely used as core materials for electrical equipment, such as motors or transformers and are important materials that affect the performance of electrical equipment. Motors are indispensable for manufacturing electric vehicles (NEV) and the demand for grain-oriented electrical steel sheets used in transformers is also increasing worldwide due to expansion of the transmission and distribution network along with the expansion of the supply of renewable energy. This use of proceeds is to enhance the manufacturing equipment capacity of high-grade non-oriented electrical steel sheets and high-grade oriented electrical steel sheets against these backgrounds.

(1) Enhancement of manufacturing equipment capacity of high-grade non-oriented electrical steel sheets

According to IEA forecasts[50], the volume of global EV vehicle sales in 2030 is expected to rapidly increase from over 10 million units in 2022 to around 70 million units, which accounts for roughly 60% of all the sales volume in the NZE Scenario[51].

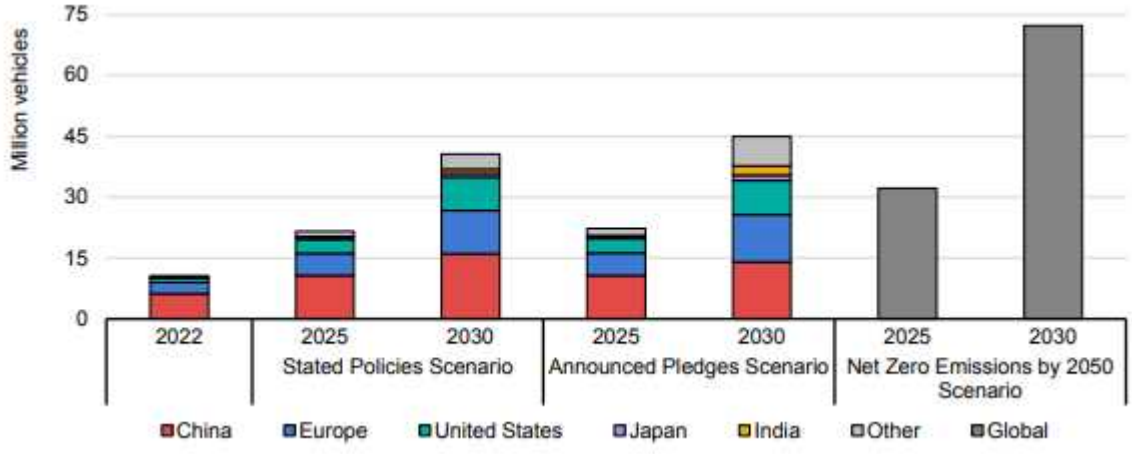

Figure 25: EV Vehicle Sales Forecasted by IEA[52]

[50] IEA Global EV Outlook2023 https://iea.blob.core.windows.net/assets/dacf14d2-eabc-498a-8263-9f97fd5dc327/GEVO2023.pdf
[51] Scenario aiming to achieve net zero in 2050. The IEA has handled the NZE scenarios as normative.
[52] Source: IEA Global EV Outlook2023 https://iea.blob.core.windows.net/assets/dacf14d2-eabc-498a-8263-9f97fd5dc327/GEVO2023.pdf

As a result, demand for high-grade non-oriented electrical steel sheets manufactured by JFE Holdings is expected to rapidly expand. The figure below shows the forecast of demand for high-grade non-oriented electrical steel sheets by JFE Holdings. In response to this demand, the Group has decided to invest approximately 49 billion yen to double the production capacity of high-grade non-oriented electrical steel sheets in West Japan Works (Kurashiki district) in the first half of FY 2024.

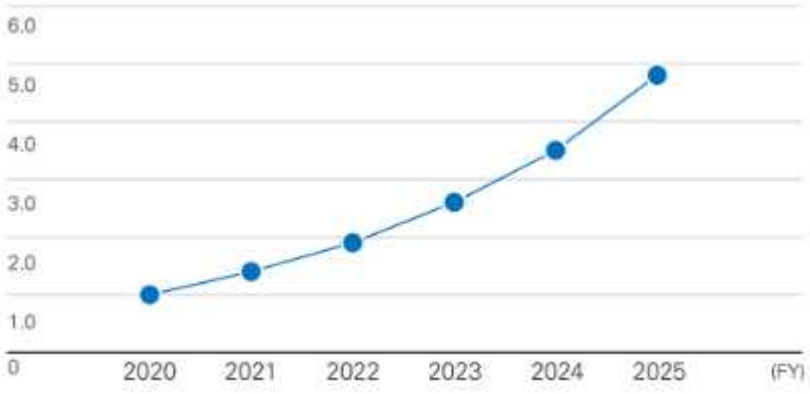

Figure 26: Demand Forecast for High-Grade Non-Oriented Electrical Steel Sheets (Assessed by JFE, relative value with 2019 results of 1.0)[53]

JCR has evaluated that the proceeds will enhance the production capacity of steel, which is essential to increase EV vehicles and will contribute to reducing CO_2 emissions throughout society.

(2) Enhancement of manufacturing equipment capacity for high-grade grain-oriented electrical steel sheets

Grain-oriented electrical steel sheets have highly superior magnetic properties in a rolled direction and are mainly used as core materials for transformers. Grain-oriented electrical steel sheets are materials that contribute to energy saving and CO_2 reduction during power transmission and distribution by using top-grade products as its iron loss[54]properties have a great impact on the energy efficiency in transformers. Low-loss electromagnetic steel related to the reduction of no-load loss of transformers has been under consideration to be introduced in reviewing the top runner program in Japan.

[53] Source: JFE Holdings' website https://www.jfe-holdings.co.jp/en/sustainability/environment/climate/#climate_vision2050
[54] Energy loss in iron core parts, such as motors o transformers.

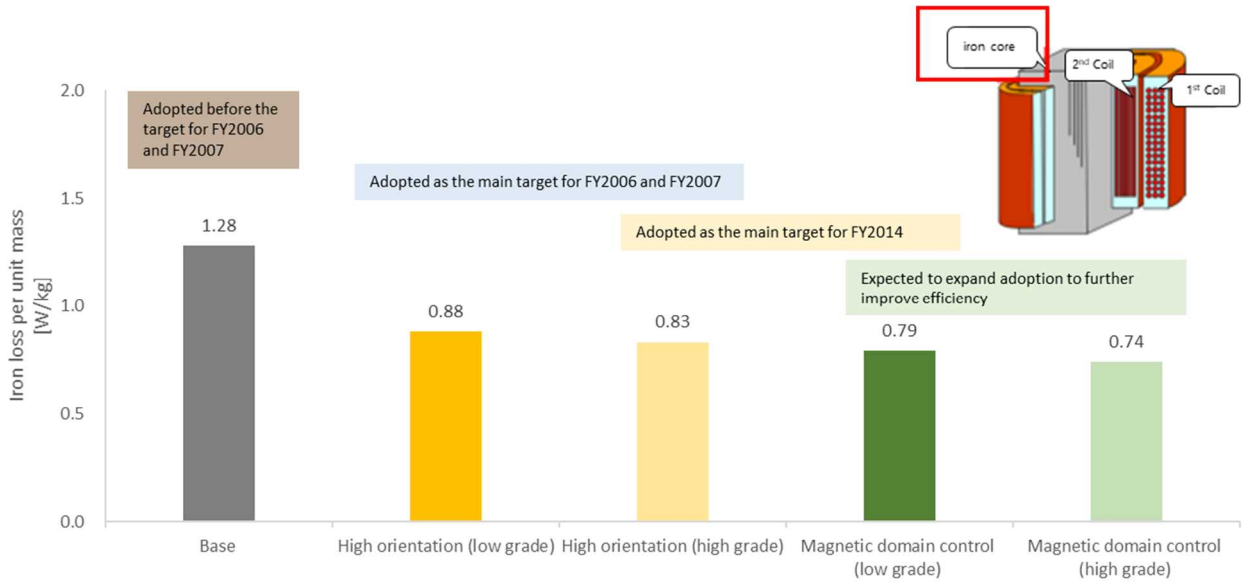

Figure 27: Review on Adoption of Low-loss Electrical Steel Sheets in Core Materials for Transformers[55]

It is expected to grow demand for grain-oriented electrical steel sheets used in transformers as the global demand for electricity continues to increase and the introduction of renewable energy continues to grow hereafter. JFE Steel has estimated that the demand for grain-oriented electrical steel sheets will increase 1.8 times compared to the 2019 results as of 2030 in particular in India. Therefore, JFE Steel and JSW Steel Limited concluded a joint venture agreement on the establishment of JSW JFE Electrical Steel Private Limited, a joint venture company for grain-oriented electrical steel sheets in India in August, 2023 and have been working to launch full production in FY 2027.

The improvement of energy efficiency of transformers is related to the amount of electricity used in Japan only, roughly 1 trillion kWh/year, and JCR has evaluated that the initiatives contribute to decarbonizing society as a whole.

(5) Use of proceeds 5: Renewable energy: biomass, geothermal, solar power (EPC, operation)

Use of proceeds 5 is Renewable energy: biomass, geothermal, solar power (EPC, operation). This project falls under "Renewable Energy" in the Green Bond Principles and the Green Loan Principles, and "Projects for renewable energy" in the Green Bond Guidelines and the Green Loan Guidelines.

In the Sixth Strategic Energy Plan, the government plans to increase the share of renewable energy from 22 - 24% in FY 2019 to 34 - 38%, and even higher if technological progress is made, and it is a field in which further supply increase is expected in the future.

[55] Created (translated) by JCR using Agency for Natural Resources and Energy's material "Energy consumption efficiency, measurement method, target year, classification, target standard value, achievement evaluation and display items with regard to consumer transformers (draft)"

The following two perspectives has listed so as to accelerate contributions to SDGs in the JFE Engineering Medium-to Long-Term Strategy.

1. Promotion of businesses that contribute to CO_2 reduction

2. Development of businesses for realizing a circular economy

Renewable energy for which this proceeds will be used, is classified as carbon neutral in the fields in which JFE Engineering promotes mid-to long-term initiatives from the above viewpoint. JFE Engineering has been contributing to this field as a business that is responsible for the construction and operation of biomass, geothermal and solar power generation identified in this use of proceeds. The JFE Engineering's sales in the carbon neutral field in FY 2020 was 79 billion yen, and the goal is to increase to 200 billion yen in FY 2030.

JCR has evaluated as eligible as the proceeds will be used for the spread of renewable energy without CO_2 emissions.

(6) Use of proceeds 6: Efforts to realize a recycling-oriented society

Use of proceeds 6 is efforts to increase use of waste plastics. This project falls under "Energy efficiency" in the Green Bond Principles and the Green Loan Principles, and "Projects for energy efficiency" in the Green Bond Guidelines and the Green Loan Guidelines.

Two methods have been utilized in the steel industry, focusing on that waste plastics are organic substances as same composition as coals as follows: (i) a method for "producing chemical raw materials using coke ovens," which utilizes coke ovens as pyrolytic furnaces and (ii) so-called chemical recycling, "a blast furnace (reduction with carbon) method," which utilizes an reducing agent for iron ore in blast furnaces. The chemical recycling, which chemically decomposes waste into raw materials and reuses them, has a CO_2 reduction of roughly twice as effective as thermal recycling (Fig. 28.) The target is to use 1 million tons of waste plastics per year in the JISF's Carbon Neutrality Action Plan on CO_2 emission reduction in the steel industry.

Securing waste plastics is however considered to be an issue as various companies have been examining to use waste plastics, such as fuels or chemical raw materials. JFE Steel is therefore to work on the use of industrial waste-derived plastics as well as packaging plastics so as to stably collect waste plastics toward the achievement and announced that it would introduce treatment facilities to increase the use of waste plastics in November 2023. The overview is shown in the Table 2. In January 2024, the Corporation decided to cooperatively work with J Circular System Co. Ltd. to use more waste plastics and announced that J Circular System Co. Ltd. would collect waste plastics to be processed in the Corporation's facilities and operate the processing facilities and therefore it has been actively working on it.

JCR has evaluated that the project has a CO_2 reduction effect in addition to resource recycling.

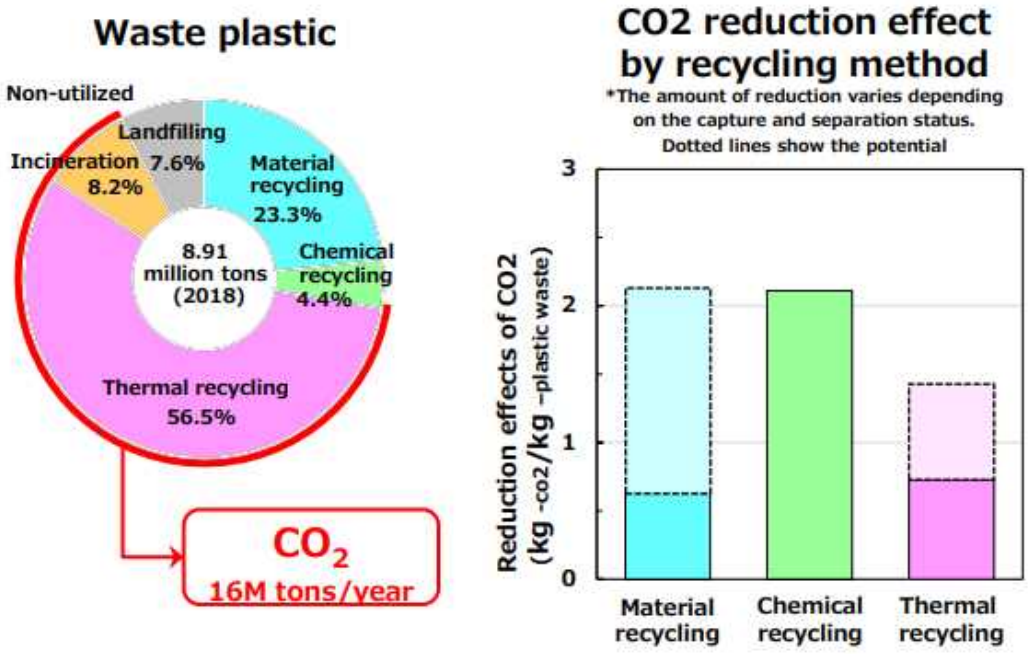

Figure 28: Overview of Chemical Recycling[56]

Table 2: Overview of Introduction of Processing Facilities to Increase the Use of Waste Plastics

Waste plastic processing capacity	60,000t/year
Scale of investment	6.75 billion yen (an investment amount made by the Group as a whole)
Location where processing facilities are installed	East Japan Works (in the Keihin region,) JFE Steel Co., Ltd.
CO_2 reduction effect	160,000t-CO_2/year (the effect in FY 2030)
Operation period	October 2024

Accordingly, JCR has evaluated that the use of proceeds specified in this Framework by JFE Holdings has had environmental benefits.

[56]Source: Ministry of Economy, Trade and Industry (2021) Technology Roadmap for "Transition Finance" in Chemical Sector

2. Negative Impacts on the Environment and Society

The Framework for Use of Proceeds

6-2. Use of Proceeds

(Omitted) When selecting the target project, we confirm that we take measures that take into account the following anticipated reduction of environmental and social risks.

■ Controlling Air Emissions

JFE Steel is controlling emissions by installing low-nitrogen oxides (NOx) burners in reheat furnaces, switching to low-sulfur fuels and deploying desulfurization and denitration devices in sintering plants, all major sources of sulfur oxides (SOx) and NOx emissions. In addition, the company suppresses dust dispersion through measures that include enhancing on-site cleaning, installing sprinklers and windbreak fences in raw material yards, and improving the performance of dust collectors.

To ensure compliance with the Air Pollution Control Law and relevant local regulations, JFE Engineering properly manages facilities that emit soot and smoke, by regularly measuring NOx emissions, etc., at its Yokohama head office, Tsurumi works, and Tsu works. In addition, efforts are being made at construction sites to protect the environment through the use of construction machinery and on-site vehicles in compliance with the Automotive NOx and PM Law and Act on Regulation, Etc. of Emissions From Non-road Special Motor Vehicles (Off-Road Vehicle Law).

■ Preventing Water Pollution

JFE Steel strives to reduce its environmental impact on waterways by thoroughly purifying water used in iron and steelmaking processes before releasing it into public waterways or sewers. The company has concluded agreements with the administrative entity in each area that set out more rigorous effluent standards, compared to those stipulated under the Water Pollution Prevention Act. It also established a strict voluntary control standard to improve water quality.

Wastewater from the JFE Engineering Yokohama head office, Tsurumi works, and Tsu works, is released into public waterways or sewer systems. Nitric oxide, phosphorus, and COD in the wastewater are measured on a regular basis and effectively managed in accordance with the Water Pollution Prevention Act and Sewerage Act.

■ Management of Chemical Substances and Emission Control

JFE Steel lowers its environmental impact by voluntarily reducing the chemical substances it releases. Release and transfer amounts of substances subject to Japan's Law concerning Pollutant Release and Transfer Register (PRTR Law) are reported in accordance with the law.

■ Biodiversity Preservation

To minimize the ecological impact of our business activities on surrounding areas, we are monitoring biodiversity around all of our business sites and planting trees while also preserving rare species in the compound. An environmental impact assessment is conducted in accordance with laws and regulations before launching construction of a new manufacturing site or business. We assess the biodiversity of the surrounding areas as well as

our premises to fully understand the situation and to implement the necessary measures for preserving the ecosystem. In addition, for large-scale construction or construction work carried out near watersheds or mountainsides, customers and/or the relevant authorities may conduct preliminary investigations depending on the importance of preserving the surrounding environment. Various preservation conditions may then be required, including the protection of living creatures. JFE Engineering respect the proposed conditions and thoughtfully consider biodiversity preservation by keeping the impact of construction works at a minimum. For example, the company may propose a construction method that minimizes the impact of noise or drainage pollution. For its steelworks, the status of biodiversity on its premises and in surrounding areas are checked, and necessary measures are taken to ensure preservation.

6-3. Exclusion criteria

Funds raised from Green Bonds or Transition Bonds will not be used for projects related to:

- Unfair trade, bribery, corruption, extortion, embezzlement, and other inappropriate relationships that do not comply with the laws and regulations of the host country.
- Transactions that could cause social problems such as human rights and the environment.

JCR's Evaluation for the Framework

(1) Negative Impacts on the Environment in the Implementation of Businesses

JCR has evaluated that JFE Steel and JFE Engineering, the organizations to use proceeds, have taken measures to appropriately identify, avoid, mitigate and manage the anticipated negative impacts on the environment and society.

(2) Potential Lock-in to Fossil Fuels

JFE Holdings aims at carbon neutrality by 2050, and a concrete roadmap for this aim has also been formulated in the Environmental Management Vision 2050. Of the uses of proceeds in this Framework, projects on reducing CO_2 in the steelmaking process are all positioned as contents to be addressed prior to the implementation of innovative technological development in the Technical Roadmap established by JFE Holdings and the Ministry of Economy, Trade and Industry, and the Low-Carbon Society Implementation Plan established by the JISF. Therefore, JFE Holdings' transition strategy does not lock in to fossil fuels.

(3) Do No Significant Harm Assessment[57]

This use of proceeds in the Framework has no significant influence over other green projects.

(4) Consideration for a Just Transition

The promotion of businesses in this use of proceeds stipulated in this Framework will have no major impact on the present employment. The transition strategy for JFE Steel to decarbonization has considered a just transition as it will advance the energy conservation and

[57] Verify that implementing the target projects will not hinder other green eligible projects (projects on climate change adaptation, environmental pollution/pollution prevention, clean water and marine conservation, circular economy, energy conservation and ecosystem protection.)

high efficiency of existing facilities, the maximum utilization of carbon recycling and the development of ultra-innovative decarbonization technologies in parallel, and it is not accompanied by rapid industrial conversion.

JCR has therefore evaluated that JFE Holdings has appropriately identified the negative impacts on the environment and society and has taken appropriate measures to address them.

JCR has evaluated that all eligible projects take into account the negative impacts on the environment and society and that appropriate measures have been taken.

3. Consistency with SDGs

JCR evaluated the use of proceeds set out in the Framework contributes to the following SDGs' goals and targets in reference to ICMA's SDGs mapping.

Goal 7: Affordable and Clean Energy

Target 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix

Goal 9: Industry, Innovation and Infrastructure

Target 9.1. Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being with a focus on affordable and equitable access for all

Target 9.4. By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Goal 11: Sustainable Cities and Communities

Target 11.2. By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

Goal 12: Responsible Consumption and Production

Target 12.4. By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

Goal 13: Climate Action

Target 13.1. Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Evaluation Phase 2: Management, Operation and Transparency Evaluation

m1(F)

I. Selection Standards and Processes for Use of Proceeds

JCR's Key Consideration on This Factor

In this section, JCR confirms that the objectives to be achieved through green/transition financing, the appropriateness of green project selection standards and processes, and whether or not a series of processes are properly disclosed to investors/lenders and others.

▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

JCR has determined that departments with specialized knowledge and the management have been appropriately involved in the goals, selection criteria for green/transition projects and processes in this Framework and that transparency has been also kept.

1. Goals

The Group has deemed that iron is of significance as a variety of industrial foundation and demand for iron is expected to further expand along with future advances in decarbonization technology as a closed-loop recyclable resources. The Group aims to promote contributions to other industries through this value of iron in conjunction with moving ahead on decarbonization in the steelmaking process.

The recent preparation of the Green/Transition Bond Framework has been positioned as fundraising for the realization of the JFE Group Environmental Management Vision 2050, and it has also been positioned as an opportunity to disseminate the Company's efforts.

Accordingly, JCR has confirmed that the use of proceeds set out in this Framework has been aligned with the long-term environmental goals and sustainable growth goals for which the Group aims.

2. Selection criteria

The eligibility criteria for this Framework are described in Evaluation Phase 1 of this report. JCR assesses that the selection criteria for the project are appropriate.

3. Processes

The Framework for Processes

6-4-3. Project evaluation and selection process

Each operating company under the JFE Holdings Group will select the eligible businesses stipulated above, and the final determination of eligible businesses will be made by the

executive officer for finance at JFE Holdings. We comprehensively analyze and examine the appropriateness of our business through discussions based on eligibility criteria and other means. In the operation and implementation of projects, related departments are working to preserve the surrounding environment.

JCR's Evaluation for the Framework

Respective operating companies under the umbrella of JFE Holdings will select projects for which the proceeds will be used through green/transition finance and Corporate Officer in charge of Finance will make the final decision in selecting projects that are subject to the use of proceeds for green/transition finance.

Accordingly, JCR has evaluated that the management in operating companies in charge of each business in the Group and the Corporation have been appropriately involved in the project selection process specified in this Framework.

JFE Holdings' goals on green/transition finance, selection criteria and processes will be disclosed in this evaluation report and this Framework. The Company plans to disclose the target projects through an amended shelf registration statement or a loan agreement when carrying out green/transition finance. Therefore, JFE Holdings has achieved transparency, to investors.

II. Management of the Proceeds

JCR's Key Consideration on This Factor

It is usually assumed that the management of the proceeds varies widely depending on issuers/borrowers. JCR confirms whether the proceeds are surely appropriated to the green project and whether a mechanism and internal system are in place to make tracking easy.

JCR also focuses on whether the proceeds are scheduled to be used for green projects at an early stage and the management and operation methods for unallocated proceeds.

▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

JCR has evaluated that JFE Holdings has achieved a high level of transparency as its proceeds management system has been properly established, and that how to manage proceeds financed will be disclosed in this evaluation report.

The Framework for Management of the Proceeds

6-4-4. Management of Proceeds

JFE Holdings manages the appropriation of the proceeds from the issuance of the Green Bonds or Transition Bonds on a quarterly basis through the use of an internal control system by our Finance Department until the proceeds are fully appropriated. Procurement funds are managed in cash or cash equivalents until all proceeds of the Green Bonds or Transition Bonds have been allocated.

JCR's Evaluation for the Framework

In addition to the above, JCR has confirmed the followings:

- The Proceeds financed by JFE Holdings shall be made a loan to operating companies in the Group that operates each business selected in accordance with the selection process. The loan will be made with the approval of Senior Manager for Finance in the Company.
- The management ledger of the appropriation of the proceeds financed will be held until the repayment period of the Green Bond or Transition Bond arrives.
- In accordance with the Financial Instruments and Exchange Act, JFE Holdings has organized and operated internal control over financial reporting, such as business processes or the use/control of IT and has published an internal control report that evaluates them. Internal control audit has been also conducted by an audit firm.

JCR has evaluated that the proceeds management set forth in this Framework has been adequate and transparent as the tracking system on the proceeds financed under this Framework has been properly established, and the tracking method of the appropriation and its internal control and how to manage the unallocated proceeds have been properly planned.

III. Reporting

JCR's Key Consideration on This Factor

In this section, JCR evaluates whether the disclosure system for investors/lenders before and after financing based on the Framework, is planned in detail and in an effective manner.

▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

JCR has evaluated in terms of reporting of JFE Holdings that it plans to appropriately disclose both the appropriation of proceeds and the environmental benefits to investors.

The Framework for Reporting

6-4. Reporting

6-4-1. Reporting on Proceeds Allocation

JFE Holdings will annually publish the proceeds appropriation until they are fully allocated to the projects that are aligned with the eligibility criteria on its website. In case of a loan, the Company can choose to directly report the proceeds appropriation to the lender.

The detailed disclosure includes an amount appropriated as existing expenditure of the allocated amount per use of proceeds category, the unappropriated proceeds financed and the appropriated proceeds financed.

In case of a significant event; for instance, there are any major change in the allocation plan of proceeds financed, the Company will disclose that effect in a timely manner.

6-4-2. Impact Reporting

JFE Holdings will report the following indicators and project outlines to the extent practical possible so long as the green or transition finance is outstanding on its website. In case of a loan, the Corporation can choose to directly report the following indicators and project outlines to the lender.

[Green/Transition Finance Eligible Projects]

		Project Example	Reporting Items
Development of ultra-innovative steelmaking process	**Development of ultra-innovative steelmaking process**	・ Funding for R&D on a carbon-recycling blast furnace, CCU, hydrogen ironmaking, and an electric furnace for high-grade steel production	◆
Shift to low-carbon manufacturing processes	**Shift to low-carbon manufacturing processes**	・ Expenditure on expansion of existing electric furnaces and introduction of high-efficiency/large electric furnaces (capital expenditure)* ・ Expenditure on reduced iron production (capital investment/contribution) ・ Expenditure on capacity increasing of LNG supply network (capital investment) ・ Expenditure on hydrogen infrastructure construction * (capital investment)	・ Estimated CO_2 reduction (t-CO_2) ・ Environmental benefits expected by appropriation projects

		・ Expenditure on CCS-related facilities (CO_2 separation/recovery/liquefaction/storage/shipping facilities) (capital investment)*	
Energy conservation for higher efficiency initiatives	**Equipment investments and R&D targeting conversion of blast furnaces to AI and IoT**	・ Expenditures on the development of DS technology ** that can reduce CO_2 through operation stabilization and detect the status of the operating system and predict anomalies (CAF)	・ Estimated CO_2 savings (t-CO_2)for funded facilities
	Expanding the use of scrap	・ Expenditures for research development and capital investment aimed at increasing scrap usage in converters (capital investment funds and R&D funds)	
	Improving coke furnaces	・ Cost of renovating coke ovens (improved combustion efficiency and reduced use by renovating aged coke ovens) ・ Expenditures for renewal of heat furnaces, boilers, power generation facilities, and air separators	
	Equipment investments targeting recovery and effective use of waste heat, byproduct gas	・ Expenditures for the effective use of waste heat and by-product gas generated at steelworks (capital investment funds)	
	Resource conservation	・ Expenditures aimed at the reduction effect of reducing materials used in the BF (capital investment fund)	
Manufacturing eco-friendly products*	**Manufacture of high value-added electrical steel sheets, maintenance of processing centers**	・ Equipment investments and R&D targeting the manufacture of electromagnetic steel sheets and expenditure on the maintenance of processing centers (capital investment funds, research and development funds, working funds)	・ Estimated CO_2 reduction amounts by introducing electrical steel sheets
Renewable energy*	**Initiatives related to renewable energy (biomass, geothermal, and solar power generation)**	・ Expenditure related to initiatives(EPC and operation) in the Renewable Energy Management (capital investment funds, working capital)	・ Business overview and capacity of renewable energy business(MW) ・ Amount of electricity generated (kWh), expected CO_2 reduction (t-CO_2)
Efforts to realize a recycling-oriented society*	**Recycling of waste plastics**	・ Expenditure on recycling of waste plastics (capital investments, working capital)	・ Amount of waste recycled ・ Estimated CO_2 reduction (t-CO_2)

* Projects recognized as green projects

◆ Research results on ultra-innovative steelmaking process development will make reporting to the extent disclosable.

JCR's Evaluation for the Framework

Reporting on the allocation status of the proceeds

The appropriation of proceeds financed under this Framework will be annually announced on the Company's website until the proceeds financed are fully allocated to projects that meet the eligibility criteria. The detailed disclosure includes an amount appropriated as existing expenditure of the allocated amount per use of proceeds category, the unappropriated proceeds financed and the appropriated proceeds financed.

JCR has confirmed that the aforementioned proceeds will be annually reported.

Reporting on environmental improvement effects

JFE Holdings plans to annually update the aforementioned indicators and project outlines on its website to the extent practical possible so long as green bonds or transition bonds are outstanding. JCR has evaluated that the contents assumed by JFE Holdings as detailed reporting on the appropriation of proceeds and the environmental benefits have been adequate.

Accordingly, JCR has evaluated that the reporting system by JFE Holdings has been proper.

IV. Organization's Sustainability Initiatives

JCR's Key Consideration on This Factor

In this section, JCR evaluates whether the management of the issuer/borrower positions sustainability issues as a high priority for management and whether the sustainability policy, process and selection criteria for green projects are clearly positioned through the establishment of a department specializing in environmental issues or in collaboration with external organizations.

▶▶▶ Current Status of Evaluation Targets and JCR's Evaluation

JCR has highly evaluated that JFE Holdings has positioned sustainability issues including carbon neutrality as significant management challenges, has a council on sustainability issues to tackle them from a practical and management perspective and has been promoting the initiatives listed in this Framework while taking in the knowledge of departments in charge of internal operations or external experts.

Under the corporate philosophy of "Contributing to Society with the World's most innovative technology," the Group has intended to promote various initiatives, aimed to improve corporate value and continued to gain the confidence of society by contributing to social sustainable development. As mentioned above, the Group has promoted initiatives for issues by identifying material issues and setting KPI and has set forth the response to climate change issues as the most significant challenge. As detailed above, the Group, toward the decarbonization, has been actively working to decarbonize its own manufacturing processes and providing products that will lead to a carbon-free society.

In order to create a carbon-neutral society, the Group has determined that it is necessary for the entire society to bear the cost on the creation of environmental value. The Group has been considering a variety of measures against increasing in cost, including product prices or government subsidies as well as burdens borne by companies. Along with this, the Group has been actively discussing with government officials, exchanging opinions with various stakeholders, such as shareholders, investors, customers, suppliers or employees, and the Group has been working on social issues with which its shall wrestle throughout its value chain.

The Group has provided "JGreeX^{TM}," green steel as a technology that contributes to decarbonization in the entire society since the first half of FY 2023. The amount reduced by JFE Steel's CO_2 emissions reduction technology has been applied to specific steel materials and supplied as green steel via a "mass balance method[58]" as it is difficult to immediately supply green steel materials that have significantly reduced CO_2 emissions or made them zero. While the green steel has not been defined globally, the Group has been actively participating in internationally accepted rulemaking as a member of the Climate Action data collection program of the World Steel Association (WSA.)

[58] Consolidate the environmental value of reducing CO2 emissions throughout the product manufacturing process into some steel products and consider them as steel products with low CO2 emission intensity.

The Group has been working on adaptation businesses that contribute to a resilient society in addition to mitigating climate change. In particular, JFE Engineering has constructed and operated hybrid seawalls or steel open type Sabo dams. The Group has established a variety of policies or promotion systems for human rights or human capital from a social perspective. The Group has reviewed some of the KPI to make it for more challenging goals based on the social trends for human capital.

Accordingly, JCR has confirmed that the management in the Group has positioned sustainability issues as highly prioritized management challenges, has identified significant issues in the three ESG categories and has established a specialized committee or council to resolve issues.

Evaluation phase 3: Evaluation result(Conclusion)

Green 1(T)(F)

Based on its JCR Green Finance Evaluation Methodology, JCR assigned "gt1(F)" for the "Green and Transition Evaluation (Uses of Proceeds)" and "m1(F)" for the "Management, Operation and Transparency Evaluation." As a result, JCR assigned "Green 1(T)(F)" for the "JCR Climate Transition Finance Framework Evaluation." The Framework meets the standards for the items required in the Green Bond Principles, the Green Loan Principles, the Green Bond Guidelines, the Green Loan Guidelines and CTFH so forth.

		Management, Operation, and Transparency Evaluation				
		m1(F)	m2(F)	m3(F)	m4(F)	m5(F)
Green and Transition Evaluation	gt1(F)	Green 1(T)(F)	Green 2(T)(F)	Green 3(T)(F)	Green 4(T)(F)	Green 5(T)(F)
	gt2(F)	Green 2(T)(F)	Green 2(T)(F)	Green 3(T)(F)	Green 4(T)(F)	Green 5(T)(F)
	gt3(F)	Green 3(T)(F)	Green 3(T)(F)	Green 4(T)(F)	Green 5(T)(F)	Not qualified
	gt4(F)	Green 4(T)(F)	Green 4(T)(F)	Green 5(T)(F)	Not qualified	Not qualified
	gt5(F)	Green 5(T)(F)	Green 5(T)(F)	Not qualified	Not qualified	Not qualified

（Responsible analysts for this evaluation） Atsuko Kajiwara, Haruna Goto

Important explanations of this Evaluation

1. Assumptions, Significance and Limitations of JCR Climate Transition Finance Framework Evaluation

   JCR Climate Transition Finance Framework Evaluation, which is determined and provided by Japan Credit Rating Agency, Ltd. (JCR), covers the policies set out in the Climate Transition Finance Framework, and expresses JCR's comprehensive opinion at this time regarding the appropriateness of the Green/Transition Project as defined by JCR and the extent of management, operation and transparency initiatives related to the use of proceeds and other matters. Therefore, JCR Climate Transition Finance Framework Evaluation is not intended to evaluate the effects of specific environmental improvements and the management, operation and transparency of individual bonds and borrowings, etc. to be implemented based on these policies. In the event an individual bond or individual borrowing based on this Framework is subject to a green/transition finance evaluation, a separate evaluation is needed. JCR Climate Transition Finance Framework Evaluation does not prove the environmental improvement effects of individual bonds or borrowings implemented under this Framework, and does not assume responsibility for their environmental improvement effects. JCR confirms the environmental improvement effects of funds procured under the Climate Transition Finance Framework measured quantitatively and qualitatively by the issuer/borrower or by a third party nominated by the issuer/borrower, but in principle it does not directly measure such effects.

2. Method used to conduct this evaluation

   The methodologies used in this assessment are described in "JCR Green Finance Evaluation" on the "Sustainable Finance ESG" section of the JCR website (https://www.jcr.co.jp/en).

3. Relationship with Acts Concerning Credit Rating Business

   JCR Climate Transition Finance Framework Evaluation is determined and provided by JCR as a related business, which is different from its activities related to the credit rating business.

4. Relationship with Credit Ratings

   The Evaluation is different from the Credit Rating and does not assure to provide or browse a predetermined credit rating.

5. Third-Party Evaluation of JCR Climate Transition Finance Framework Evaluation

   There are no capital and/or personnel relationships that may result in a conflict of interests between the subject of this evaluation and JCR.

■ Glossary

JCR Climate Transition Finance Framework Evaluation: This evaluates the extent to which the funds procured through Green/Transition Finance are appropriated for green/transition projects as defined by JCR and the degree to which the management, operation and transparency of the Green/Transition Finance are ensured. Evaluations based on a 5-point scale are given from top to bottom using the Green 1(T)(F), Green 2(T)(F), Green 3(T)(F), Green 4(T)(F), and Green 5(T)(F) symbols.

■ Status of Registration as an External Evaluator of Sustainability Finance

- Registered as an External Reviewer of Green Bonds by the Ministry of the Environment
- ICMA (registered as an observer with the Institute of International Capital Markets)

■ Status of registration as a credit rating agency, etc.

- Credit Rating Agency: the Commissioner of the Financial Services Agency (Rating) No.1
- EU Certified Credit Rating Agency
- NRSRO: JCR has registered with the following four of the five credit rating classes of the U.S. Securities and Exchange Commission's Nationally Recognized Statistical Rating Organization (NRSRO): (1) financial institutions, broker-dealers, (2) insurance companies, (3) general business corporations and (4) governments and municipalities. If the disclosure is subject to Section 17g-7 (a) of the Securities and Exchange Commission Rule, such disclosures are attached to the news releases appearing on the JCR website (https://www.jcr.co.jp/en/).

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<Reference>

Check Sheet for Consistency with Basic Guidelines on Climate Transition Finance

January 16, 2024

Japan Credit Rating Agency, Ltd.

Companies to be evaluated: JFE Holdings, Inc.

The following are the check results of the consistency of the Finance with respect to the items recommended in the Basic Guidelines on Climate Transition Finance (the "Guidelines") published by the Financial Services Agency, the Ministry of Economy, Trade and Industry, and the Ministry of the Environment.

The Guidelines use three expressions: "should," "recommended," and "be considered/possible." These expressions are used in the following context:

- Items described with the word "should" are basic elements that financial instruments labeled as transition finance are expected to have.
- Items described with the word "recommended" are elements that financial instruments labeled as transition finance are optimally recommended to have under the Guidelines although instruments which do not have these items can also be labeled as transition finance.
- Items described with the word "be considered" or "possible" are elements that they are not considered problematic even if financial instruments labeled as transition finance do not have them.

Element 1: Fundraiser's Climate Transition Strategy and Governance

a) Financing through transition finance **should** aim to implement or incentivize the achievement of transition strategies. Such strategies **should** incorporate a long-term target to align with the goals of the Paris Agreement, relevant interim targets on the trajectory towards the long-term goal, disclosure on the levers towards decarbonization, and fundraiser's strategic planning.
Consistency: ✓ In the "Roadmap toward Carbon Neutral" within the "JFE Group Environmental Vision 2050," the company has set the 2050 Carbon Neutral Targets and its short-and medium-term targets of a reduction of at least 30% from the fiscal 2013 level by the end of fiscal 2030, and a reduction target of 18% from the fiscal 2013 level by the end of fiscal 2024. (On February 8, 2022, JFE Holdings announced its fiscal 2030 CO2-reduction target.) The JFE Group has established two scenarios for climate change that have a major impact on its business in order to use them in formulating future business strategies. Both scenarios are based on scenarios published by the International Energy Agency (IEA). In addition, it endorses the "Challenge Zero" Declaration, which is an initiative of the Keidanren (Japan Business Federation)

and the Japanese government toward the realization of a "decarbonized society," for which the Paris Agreement is positioned as a long-term goal, and is taking on the challenge of various innovations.

b) A transition strategy **should** serve to explicitly communicate the implementation of an issuer's strategy to transform the business model in a way which effectively addresses climate-related risks and contributes to achieving the goals of the Paris Agreement. Transformation of a business model is not limited to initiatives as an extension of existing businesses but **can** also be transformation based on various other perspectives. It includes fuel conversion that achieves significant carbon and GHG reduction benefits, introduction of innovative technologies, improvement of / changes in manufacturing processes and products, and development and provision of products and services in new fields.
Consistency: ✓ In May 2019, it announced its endorsement with TCFD to develop scenarios based on scenarios published by the IEA. The scenarios identify potential climate-related risks and opportunities. As a business transformation related to the transition strategy for carbon neutrality in 2050, the company aims to realize carbon neutrality through the following initiatives. 1. Pursue super-innovative technologies mainly for carbon-recycling blast furnace and CCU (developing hydrogen-based ironmaking (direct reduction) technology, maximize use of electric arc furnace technology, etc.) 2. Expand contributions to CO_2 emissions reduction in society ・Engineering Business: Expand and develop renewable‐energy power generation and carbon‐recycling technologies. ・Steel business: Develop and market eco‐products and eco‐solutions ・Trading business: Increase trading in biomass fuels, steel scrap, etc., and strengthen business in supply chain management (SCM) for eco products. 3. Offshore wind-power generation business

c) The implementation of a transition strategy assumes cases where it affects society and environment other than climate change, such as employment or stable provision of products and services, through transformation of a business model. In such cases, it is **recommended** that the fundraiser also takes into consideration the impact of business innovations to society and environment other than climate change.
Consistency: ✓ Based on its corporate vision of "Contributing to society with the world's most innovative technology," the JFE Group develops and provides processes and products for solving climate change issues and reducing environmental impact.

In addition to the JFE Group's efforts to reduce CO_2 emissions and expand contributions to reducing CO_2 for society as a whole, announced in the JFE Group Environmental Vision 2050, the JFE Group aims to improve corporate value and realize a sustainable society by developing and providing various processes and products related to global environmental conservation. As part of the initiatives described above, it develops major environmentally conscious products and technologies by business. It is taking environmental considerations that are not limited to climate change, such as improving water quality, resource recycling, and biodiversity conservation, from energy conservation and CO_2 emissions reductions.

d) Climate change-related scenarios11 **should** be referenced in developing transition strategies. The pathway to transition **should** be planned for respective sector and regions of individual fundraiser, who may generally be placed in a different starting point and pathway to transition.
Consistency: ✓ Identified possible climate-related risks and opportunities. The transition risk scenarios are described in "Sustainable Development Scenario (SDS)," "2°C Scenario (2DS)" by the International Energy Agency (IEA). The 4°C Scenario is described in "New Policy Scenario (NPS)" and "Reference Technology Scenario (RTS)". The physical risk scenarios are analyzed with reference to the climate change projection scenario "Representative Concentration Pathways (RCP) Scenario" by IPCC. A 1.5 °C Scenario has been additionally analyzed in addition to the conventional 2 °C Scenario and 4 °C Scenario since FY2022.

e) Transition strategies and plans must be highly credible in terms of their effectiveness. Therefore, it is **recommended** that a transition strategy and plan are linked to management strategy and business plan, including Medium-term Business Plans.
Consistency: ✓ The Seventh Medium-term Business Plan sets a target of reducing CO_2 emissions by 18% (by the end of FY2024) and by 30% or more (by the end of FY2030) from the fiscal 2013 level as a short- to medium-term target for achieving 2050 carbon neutrality formulated in the newly formulated JFE Group Environmental Vision 2050.

f) However, because such strategies and plans run for a long period of time, it is **possible** that the content may be modified or adjusted in the event of a major change in the assumed external environment and so on.
Consistency: ✓ The CO2 emission reduction target for 2030 that is a reduction of at least 20% compared to fiscal 2013, which had been previously to be revised during the Seventh Medium-Term Management Plan

period, was revised in February 2022 to a reduction of at least 30% compared to fiscal 2013.

g) In the initial phase of developing a transition strategy by the fundraiser, it is **considered** as an option for the fundraiser to indicate a plan for future implementation of items described with the words "recommended" and "be considered/possible" in these Guidelines.
Consistency: ✓ All matters that are considered "should" in the Basic Guidelines satisfy their requirements. In addition, almost all items identified as "desirable" and "considered/possible" have met their requirements or are expected to be implemented in the future.

h) In order to secure the effectiveness of the transition strategy, the fundraiser **should** establish an organizational structure for the board of directors and/or other such committee to oversee the activities addressing climate change and for management to play a role in assessing and managing such climate-related activities.
Consistency: ✓ Under the JFE Group Sustainability Council, the JFE Group Environmental Committee chaired by the CEO has been established to set environmental targets, check the status of achievement, improve the environmental performance of the Group as a whole, and resolve various other environmental issues. Issues of particular importance to management, including climate change issues, are also discussed by the Group Management Committee and further reported to the Board of Directors. The Board of Directors oversees the reported environmental issues through discussions. In addition, each operating company and group company has also established expert committees to promote the activities of each corporate unit.

i) While a transition strategy shall be basically developed by a company in need of finance, it is **possible** for entities to utilize the strategy of companies that are wholly or partially responsible for the initiatives to establish or explain their own strategy, given that the finance supports GHG emissions reduction initiatives of not just a single company but its supply chain.
Consistency: ✓ In the "JFE Group Value Chain," the company is identifying the risks and opportunities that should be addressed in business operations in response to social issues that the Group should contribute to resolving, and is advancing initiatives to address these issues. In addition, in supply chain management, we believe it is important for not only our own group but also the entire supply chain to tackle global corporate issues in order to realize a sustainable society. We will continue to promote initiatives while gaining the understanding of our business partners,

including our customers.

j) Transition strategies **should** be disclosed in advance in a company's integrated report, sustainability report, statutory documents and other materials for investors (including such disclosures on the website). This also applies to the other three elements.
Consistency: ✓ The Transition Strategy has been announced in the Integrated Report, "JFE GROUP REPORT 2023" and "the Seventh Medium-term Business Plan," and so on.

k) It is **possible** to disclose transition strategies and elements concerning the governance guaranteeing that the execution of transition strategies is in alignment with the reporting frameworks such as the Recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD; Final Report).
Consistency: ✓ It analyzes the impacts of climate change issues, and discusses, decides, or reports on the following at the Board of Directors meeting. ・Representation of endorsement of the purpose of TCFD Final Report ・Disclosure in line with TCFD recommendations (e.g., scenario-based analysis) ・Formulation of the JFE Group Environmental Vision 2050, The Seventh Medium-term Business Plan

l) If the implementation of a transition strategy assumes impacts on society and environment other than climate change, it is **recommended** that the fundraiser explain the view underlying its approach14, etc. to address such impacts and disclose how the strategy on the whole contributes to achieving the Sustainable Development Goals (SDGs) so that the effects can be appropriately evaluated by the financier.
Consistency: ✓ In addition to contributing to the resolution of climate change issues as a contribution to achieving SDGs, it is also promoting initiatives by identifying the securing of occupational health and safety, securing and developing diverse human resources, strengthening production and engineering capabilities (realizing global-class profitability by promoting DX, etc.), and enhancing the competitiveness of products and services (promoting a growth strategy through the provision of high-value-added solutions) as fields of issues.

m) Considering the length of application and other factors, there may be instances when a transition strategy and plan will need to be modified due to major changes in the external environment and

relevant conditions that were assumed at a planning phase. In this case, the contents of the modification **should** be disclosed together with the underlying reason in a timely manner.
Consistency: ✓ The CO2 emission reduction target for 2030 that is a reduction of at least 20% compared to fiscal 2013, which had been previously to be revised during the Seventh Medium-Term Business Plan period, was revised in February 2022 to a reduction of at least 30% compared to fiscal 2013.

n) In terms of governance, it is **recommended** that disclosures include an organizational structure for overseeing the implementation of a transition strategy and for assessing and managing related initiatives. It is also **recommended** that disclosures include the specific roles of the constituent organizations and the management and the process by which the content of deliberations is reflected in management.
Consistency: ✓ The Group Environmental Committee chaired by the president of JFE Holdings has been established to set environmental targets, check the status of achievement, and improve the environmental performance of the Group as a whole. The Group Management Strategy Committee also deliberates on climate change issues and further reports to the Board of Directors. The Board of Directors oversees the reported environmental issues through discussions.

o) In cases where the fundraiser determines the need for an objective assessment regarding the transition strategy, it is **recommended** that a review, assurance and verification by an external organization for its transition strategy.
Consistency: ✓ Review by Japan Credit Rating Agency, Ltd. (JCR) is assumed.

p) It is **recognized** useful to obtain a review particularly concerning the following in connection with the transition strategy: - Alignment of short-term, mid-term and long-term targets (for targets, refer to Element 3) with the overall scenario - Credibility of the fundraiser's strategy to reach the targets - Appropriateness of the management process and governance for the transition strategy
Consistency: ✓ JCR confirmed the above three items and provides this evaluation report.

Element 2: Environmental Materiality (Priority) in Business Models

a) Initiatives for achieving the transition strategy **should** be such that contribute to transforming

core business activities that are environmentally material parts today and in the future.
Consistency: ✓ Steelmaking using blast furnaces in the steel business, which accounts for the majority of the Group's emissions and is positioned as a core business, is a process that cannot avoid CO2 emissions at present. Transition initiatives aim to achieve an 18% reduction (FY2024), 30% or more reduction (FY2030) in emissions at JFE Steel, which is responsible for the core business. In terms of initiatives for transition, the company will promote technological innovation in the core steel business, in particular, such as expanding the use of ferrocoke and converter scrap, as well as low-carbon energy transition.

b) When identifying business activities that are environmentally material parts, it is **recommended** that the fundraiser consider multiple climate change-related scenarios that may possibly impact its judgment on the identification.
Consistency: ✓ Identified possible climate-related risks and opportunities. The transition risk scenarios are analyzed by referring to the "Sustainable Development Scenario (SDS)" and "2°C Scenario (2DS)" by the International Energy Agency (IEA), the "New Policy Scenario (NPS)" and the "Reference Technology Scenario (RTS)" for the 4°C Scenario, and to the climate change scenario "Representative Concentration Pathways (RCP) Scenario" by IPCC for the physical risk scenarios. A 1.5 °C Scenario has been additionally analyzed in addition to the conventional 2 °C Scenario and 4 °C Scenario since FY2022.

c) In terms of considering materiality, it is **possible** to apply existing guidance provided by an organization that creates standard criteria concerning sustainability reporting.
Consistency: ✓ It is promoting the Carbon Neutrality Action Plan that was formulated by the Japan Iron and Steel Federation, of which it is a member, and that focuses on the three ecos initiatives and the development of innovative new iron and steelmaking processes. It is working toward the plan's target of 2030 (Phase II).

d) The fundraiser **should** indicate that climate change is an environmentally material part of business activities.
Consistency: ✓ In The Seventh Medium-term Business Plan, the challenge to climate change was positioned as the most important issue, and the JFE Group Environmental Vision 2050 was formulated with the aim of realizing carbon neutrality.

e) It is **recommended** that disclosures include the contents of climate change-related scenarios used in identifying business activities that are environmentally material parts along with the underlying reasons (e.g., regional and industrial characteristics) for selecting such scenarios.
Consistency: ✓ Identified possible climate-related risks and opportunities. The transition risk scenarios are analyzed by referring to the "Sustainable Development Scenario (SDS)" and "2°C Scenario (2DS)" by the International Energy Agency (IEA), the "New Policy Scenario (NPS)" and the "Reference Technology Scenario (RTS)" for the 4°C Scenario, and to the climate change scenario "Representative Concentration Pathways (RCP) Scenario" by IPCC for the physical risk scenarios. A 1.5 °C Scenario has been additionally analyzed in addition to the conventional 2 °C Scenario and 4 °C Scenario since FY2022.

Element 3: Scientifically Rationalized Climate Transition Strategies (Including Targets and Channels)

a) The fundraiser **should** reference science-based targets in developing its transition strategies.
Consistency: ✓ Identified possible climate-related risks and opportunities. The transition risk scenarios are analyzed by referring to the "Sustainable Development Scenario (SDS)," "2°C Scenario (2DS)" by the International Energy Agency (IEA), the "New Policy Scenario (NPS)" and the "Reference Technology Scenario (RTS)" for the 4°C Scenario, and to the climate change scenario "Representative Concentration Pathways (RCP) Scenario" by IPCC for the physical risk scenarios. A 1.5 °C Scenario has been additionally analyzed in addition to the conventional 2 °C Scenario and 4 °C Scenario since FY2022.

b) This **should** include mid-term targets (short- to mid-term targets) in addition to long-term targets for 2050 and be quantitatively measurable based on a measurement methodology which is consistent over a long period of time.
Consistency: ✓ Aiming to achieve carbon neutrality by 2050 and aiming to reduce CO_2 emissions by 18% from 2013 levels by the end of fiscal 2024 and by 30% or more from fiscal 2013 levels by fiscal 2030 as short-and medium-term targets. (On February 8, 2022, JFE Holdings announced its fiscal 2030 CO2-reduction target.)

c) In addition, it is recommended that GHG reduction targets, which could be formulated either in intensity and absolute terms, **should** consider environmental materiality and cover Scopes 1

through 3 of GHG Protocol, the international standard on supply-chain emissions.

It is **recommended** that targets covering Scope 3 be set using a practical calculation method when it could be subject to significant reduction in the fundraiser's business model.

It is also **possible** to disclose the avoided emissions as necessary.

Consistency: ✓

Targets are set for high-emission Scope1 and 2. For the downstream of the JFE Group's value chain, targets are being set for the contribution of its products to CO_2 reduction. With regard to emissions, CO_2 emissions for Scope1, 2, and 3 are calculated and announced.

d) Science-based targets are GHG reduction targets required for achieving the goals of the Paris Agreement and **should** be set while taking into account differences in regional characteristics and industries. In so doing, it is **possible** to refer to the following trajectories.

- Scenarios widely recognized in the international community (Examples include the Sustainable Development Scenario (SDS) outlined by the International Energy Agency (IEA))
- Objectives verified under the Science Based Targets Initiative (SBTi) and such like
- Nationally Determined Contributions (NDC) of countries aligned with the goals of the Paris Agreement, roadmaps by industry sector, industries set out plans that are science-based achieving the Paris Agreement and so on.

Consistency: ✓

Identified possible climate-related risks and opportunities. The transition risk scenarios are analyzed by referring to the "Sustainable Development Scenario (SDS)" and "2°C Scenario (2DS)" by the International Energy Agency (IEA), the "New Policy Scenario (NPS)" and the "Reference Technology Scenario (RTS)" for the 4°C Scenario, and to the climate change scenario "Representative Concentration Pathways (RCP) Scenario" by IPCC for the physical risk scenarios. A 1.5 °C Scenario has been additionally analyzed in addition to the conventional 2 °C Scenario and 4 °C Scenario since FY2022.

e) Short- to mid-term targets (with a term of three to fifteen years) **should** be set by referencing the aforesaid trajectories or on the pathway toward the long-term targets planned as benchmarks.

Consistency: ✓

In the "Roadmap toward Carbon Neutral" within the "JFE Group Environmental Vision for 2050," the company has set the 2050 Carbon Neutral Targets and its short-and medium-term targets of a reduction of more than 30% from the fiscal 2013 level by the end of fiscal 2030, and a reduction target of 18% from the fiscal 2013 level by the end of fiscal 2024. (On February 8, 2022, JFE Holdings announced its fiscal 2030 CO2-reduction target.)

f) In doing so, since short- to mid-term targets will likely be set in consideration of various factors (including the starting point and track records of the issuer, timing of capital investments, economic rationality, cost-benefit analysis, and availability of technology necessary to achieve the targets), it is **possible** that the pathway may not necessarily be linear with the same slope at all times but may be nonlinear.
Consistency: ✓ Targets have been set taking into account a variety of factors in addition to a road map for decarbonization, such as investment plans and the resulting returns. As a result, it is assumed that it is not a linear path of the same slope.

g) The fundraiser **should** disclose the short- to mid-term and long-term targets they have set, including the base years etc.
Consistency: ✓ The target of reducing CO_2 emissions by 18% by fiscal 2024 and by 30% by fiscal 2030, which are the short- to and long-term targets, has been set as the base year for fiscal 2013. (On February 8, 2022, JFE Holdings announced its fiscal 2030 CO2-reduction target.)

h) In order to show that long-term targets are science-based, disclosures **should** explain the methodology or trajectory used to define target, including the underlying reasons (e.g., characteristics specific to a region or industry). In particular, when reference is made to plans and industry roadmaps established by an industry, etc., the explanation **should** include that they are grounded in scientific basis.
Consistency: ✓ The Japan Iron and Steel Federation (JISF) conducts a scenario analysis based on the calculation of the assumed future per capita steel accumulation from the United Nations' World Population Prospects 2017 and its long-term global warming mitigation scenario of steel industry in its challenge to "Zero-Carbon Steel," the long-term vision for climate change mitigation of JISF. The Ministry of Economy, Trade and Industry has formulated a technology roadmap as an overseas scenario roadmap that is aligned with the Paris Agreement by reference to the followings in light of regional characteristics in Japan. ✓ Clean Energy Technology Guide (IEA) ✓ Energy Technology Perspective2020 (IEA) ✓ Industrial Transformation 2050 (Material Economics) ✓ Science Based Target initiative

i) It is **possible** that disclosures explain the pathway toward a long-term target and the alignment

between the short- to mid-term targets on the pathway and the transition strategy, based on the investment plan (refer to Element 4) and other plans.
Consistency: ✓ For 4 years (from 2021 to 2024), the company plans to invest JPY 160 billion in the steel business, JPY 130 billion in the engineering business, and JPY 50 billion in the trading business as a total of JPY 340 billion in GX investments (green transformation investments).

j) Concerning targets and trajectories, obtaining expert reviews on the following is **considered** to be particularly useful: - Whether the long-term target is aligned with science-based targets -> Whether the disclosed information explains the alignment with the Paris Agreement - Whether the short- to mid-term targets are determined using a GHG emissions forecast calculated based on a climate change scenario analysis -> Whether scenarios, etc. widely recognized in the international community are used or referenced - Whether the actual values of the indicators used for the targets are quantitatively measured using consistent measurement methods -> Whether a specific GHG emissions reduction measure has been developed to achieve short- to mid-term targets aligned with long-term goals
Consistency: ✓ JCR has confirmed that all of the above items have been met in this Report.

Element 4: Transparency of Implementation

a) In implementing transition strategies, the fundraiser **should** provide transparency of the basic investment plan to the extent practicable.
Consistency: ✓ For 4 years (from 2021 to 2024), the company plans to invest JPY 160 billion in the steel business, JPY 130 billion in the engineering business, and JPY 50 billion in the trading business as a total of JPY 340 billion in GX investments (green transformation investments). The Group announced it needs a capital investment of 1 trillion yen to achieve the CO2 reduction target for FY 2030 through low-carbon technologies in the steelmaking process in the 2022 Carbon Neutral Strategy Briefing.

b) The investment plan includes not only capital expenditure (Capex) but also capital and operational expenditure (Opex). Therefore, costs related to research and development, M&A, and dismantling and removal of facilities are also subject to the investment plan. In other words, it is **recommended** that the investment plan incorporate, to the extent possible,

expenditure and investment necessary for implementing the transition strategy.
Consistency: ✓ The investment plan includes not only capital investment but also research and development expenses, etc.

c) It is **recommended** that the investment plan outline the assumed climate-related outcomes and impacts in a quantitative fashion where possible, along with the calculation methods and prerequisites. If quantification is difficult, the use of external certification systems **can** be considered as a substitute for qualitative assessment.
Consistency: ✓ The Company plans to update the indicators and project summary on its website once a year for the expected outcomes and impact of the investment to the extent practicable. Quantitative indicators, such as CO_2 reductions, are used as much as possible for the indicators, and the impact of technological developments is scheduled to be reported when it becomes available for disclosure.

d) In particular, when outlining the assumed climate-related outcomes and impacts, it is **recommended** that the disclosure include not only GHG emission reduction and other initiatives to ease climate change but also report how consideration of a "just transition" is incorporated into the transition strategy.
Consistency: Not applicable There are no points that require consideration for a just transition in JFE Holdings' implementation of the transition strategy.

e) If implementing the transition strategy has the potential of having a negative impact on employment or the environment and communities other than climate change, it is **recommended** that any expenditures to mitigate such negative impacts be added to the plan.
Consistency: ✓ There is no fear that the implementation of JFE Holdings' transition strategy will have a major impact on the current status of employment. In terms of the environment, appropriate measures have been taken, such as controlling air emissions, preventing water pollution, management of chemical substances and emission control, and biodiversity preservation.

f) Moreover, the outcomes arising from investments included in the investment plan **should** align with the targets.
Consistency: ✓ Efforts will be made to realize carbon neutrality by 2050 through an investment of 340 billion yen

in GX investment (Green Transformation Investment), which is the current plan. The Group announced it needs a capital investment of 1 trillion yen to achieve the CO2 reduction target for FY 2030 through low-carbon technologies in the steelmaking process in the 2022 Carbon Neutral Strategy Briefing.

g) Transition finance is a means to financially support the implementation of a transition strategy, and it is **recommended** that financing be provided for new initiatives. However, in the case of transition finance in the format of Use of Proceeds instruments, refinancing for a reasonably set lookback period (the period during which refinancing is to be applied for projects that have already started) is **considered** to be eligible.
Consistency: ✓ The proceeds are expected to be used for new investments and refinancing with a lookback period of two years.

h) It is **recommended** that investment plans be disclosed by linking the outcomes and impacts with the expenditures to the extent practicable.
Consistency: The amount of investment targets, outcomes and impact of this financing are tied together and disclosed in the Framework. For the overall transition strategy, each investment target and the total amount of investment are clarified, but it is difficult to link the results and impact individually at this time, and therefore the information is not disclosed. It will be disclosed as soon as specific individual plans are finalized.

i) It is **recommended** that the fundraiser, after securing financing, reports any deviations between the initial plan and the actual expenditure, outcomes and impacts. For any deviations, it is **recommended** that the underlying reasons be explained.
Consistency: ✓ The difference between the original plan and the actual expenditures, results and impact of this financing will be disclosed in the impact reporting that is expected to be conducted periodically after the issuance of the bonds.

j) In cases where the Use of Proceeds bonds include refinancing, the fundraiser **should** provide an explanation on the lookback period set under the framework or other relevant methods along with the underlying reasons and factors.
Consistency: ✓ JFE Holdings disclosed in the Framework that it plans to use the proceeds to refinance existing

investments with a lookback period of two years and to fund new investments.

k) While there are differences in business practices, such as the fact that loans are traditionally made based on the bilateral relationship between a borrower and a lender, it is **recommended** that disclosure on the above be made to the extent possible in order to ensure transparency and credibility of transition finance. However, if it is difficult to disclose such information to the public from the standpoint of confidentiality and competition, it is **possible** to report such information only to lenders or external evaluation organizations without disclosing it to the public.
Consistency: ✓ JFE Holdings has established a plan to appropriately disclose both the proceeds allocation and environmental benefits in its Framework. In cases where, however, it is difficult to disclose the information to the public from the confidentiality or competitive perspectives, the information can be reported only to lenders instead of making information available to the public.

l) Similarly, in cases where the fundraiser is a small-to-medium-sized enterprise and it is difficult to disclose to the public the same content as that reported to the financier or an external evaluation institution, it is **possible** for the fundraiser to simplify the content of disclosure, for example, by limiting disclosure to a summary of h) to j) of this section.
Consistency: Not applicable Although it does not fall under the category of SMEs, it is under consideration to disclose the content of the report to the extent practicable by the project.