JFE Holdings, Inc. |Overview

JFE Holdings, Inc. Green/Transition Finance Framework

■ Corporate Profile

Industry	Iron and steel
Location	Japan
Business	One of Japan's two largest iron and steel groups. A holding company with JFE Steel Corporation, JFE Engineering Corporation, and JFE Shoji Corporation as wholly owned subsidiaries.

Alignment with the Four Elements in the Guidelines

Element 1

- The JFE Group has set a target of achieving carbon neutrality by 2050, and as an interim target, has set a reduction of at least 30% (Compared to FY 2013, both Scope 1 and 2) in its main steel business by FY 2030.
- This transition strategy is intended to promote group-wide efforts toward decarbonization, such as energy-saving and high-efficiency improvements in existing processes and the use of electric furnace technology. Since it does not involve a drastic industrial transformation, it is a transition strategy that considers a just transition.
- With regard to governance, the JFE Group as a whole discusses risks and opportunities, action policies, and targets related to climate change in the group and checks the progress of the results at the Group Sustainability Meeting and various committees. In April 2024, JFE Steel established the GX Strategy Headquarters and the GX Planning Department.

Element 2

- The JFE Group identified 16 key issues that are important to both society, stakeholders and the JFE Group by identifying issues from the assessment items of the SDGs and ESG assessment organizations.
- The JFE Group commits to initiatives aimed at reducing its own GHG emissions, contributing to GHG reduction across society, and achieving a circular economy

Element 3

- The JFE Group's roadmap for steel process transformation includes energy-saving and high-efficiency technologies for the carbon recycling blast furnace process, direct reduction steelmaking process, and electric furnace process. These technologies aligns with the Ministry of Economy, Trade and Industry's Technology Roadmap for transition finance in the Iron and Steel Sector.

Element 4

- In the 7th Medium-Term Business Plan, ¥800 billion was invested in line with the transition strategy over 4 years from FY 2021 to FY 2024.
- In the 8th Medium-Term Business Plan, ¥250 billion will be invested in line with the transition strategy over 3 years from FY 2025 to FY 2027.
- Decided to construct a large, high-efficiency innovative electric furnace in the Kurashiki district to achieve the target of 30% or more reduction in GHG emissions by FY 2030. Expected operation in FY 2028, investment of approximately ¥330 billion is planned.

■ Overview of Green/Transition Finance Framework

Scheduled Issue Date	TBD
Scheduled Issue Amount	TBD
Structuring Agent	Nomura Securities Co., Ltd.
Evaluation Agency	Japan Credit Rating Agency, Ltd.

Candidate for Use of Proceeds

The Green/Transition Finance Framework has been updated to add elements related to the 8th Medium-Term Business Plan, expanding the use of proceeds and funding methods.

Use of proceeds Category	Project example (draft) *bold blue texts indicates Use of proceeds to be added
Development of super innovative iron and steelmaking processes	・Expenditures on technological development for high-grade steel production in carbon recycling blast furnaces, CCUs, hydrogen steelmaking, and electric furnaces
Energy saving and increased efficiency	・Expenditures on development of DS technology that can reduce CO2 emissions through stable operations and detect furnace conditions and signs of abnormalities ・Expenditures on technological development and capital investment to increase scrap consumption in converters ・Replacement investment in hot air furnaces, boilers, power plants, and air separation units ・Expenditures for effective utilization of waste heat and by-product gas generated at steelworks ・Expenditures to reduce reducing materials used in blast furnaces
Conversion to low-carbon production processes	・Expenditures for upgrading the existing electric furnaces and installing high-efficiency, large-scale electric furnaces ・Expenditures for reduced iron production **・Expenditures for procurement of reduced iron** ・Expenditures for upgrading the LNG supply network ・Capital investment for hydrogen receiving facilities ・Capital investment in CCS-related facilities (for CO2 separation, capture, liquefaction, storage, and shipping) **・Investment for use of direct reduced iron in blast furnaces**
Manufacture of eco-products	・Expenditures on development of manufacturing and processing centers for electrical steel sheets **・Manufacturing of offshore wind power generation system**
Initiatives related to renewable energy	・Expenditures related to renewable energy initiatives (EPC, Management)
Initiatives to realize a recycling-based society	・Expenditures on the introduction of waste plastic treatment facilities **・Expenditures on horizontal recycling of plastic bottles (Investment and financing)** **・Expenditures for converting food waste to electricity and fertilizer (capital investment)** **・Expenditures related to chemical recycling of waste (R&D funds)**

Source: JFE Holdings website, prepared based on briefing materials for JFE Group Environmental Management Vision 2050, etc.

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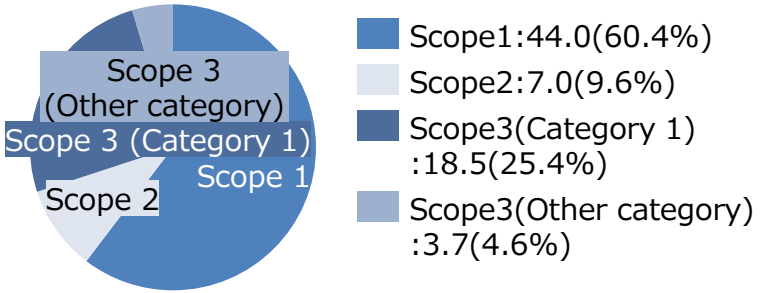
Fundraiser's Climate Transition Strategy and Governance (Element 1)

JFE Group's targets related to carbon neutrality

FY 2027	24% reduction in CO_2 emissions from steel business (Compared to FY 2013)
FY 2030	30% or more reduction in CO_2 emissions from steel business (Compared to FY 2013)
FY 2035	Contribution to CO_2 reduction in engineering business 30 million tons or more
2050	Achievement of carbon neutrality

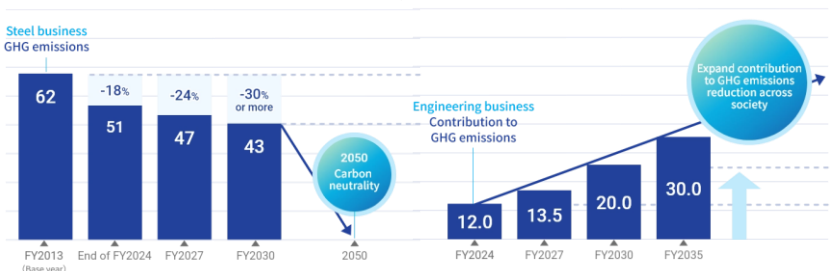
FY 2024 CO_2 emissions results

Unit: One million tCO_2



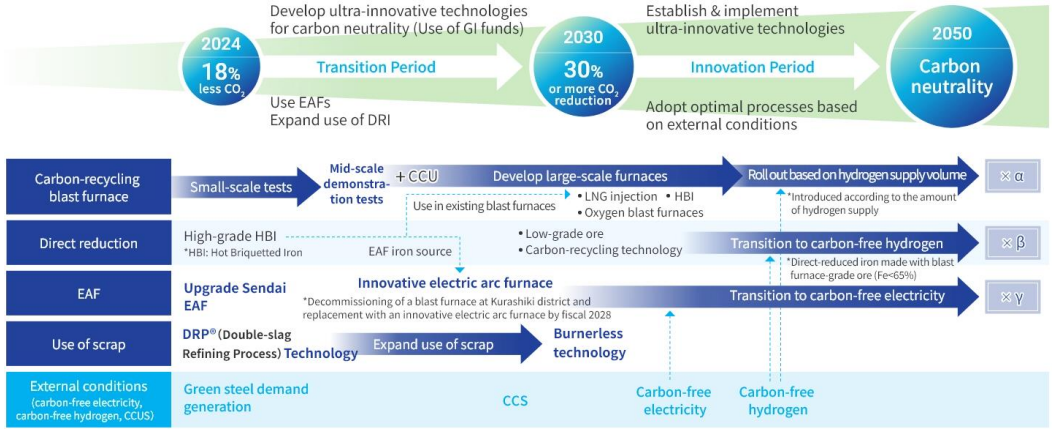
*Scope of data: 77 major domestic and overseas subsidiaries
*Scope 3 Calculation Scope: Categories 1, 2, 3, 4, 5, 6, 7, and 15 (varies by subsidiary)

Actual and target figures for GHG emissions in steel business and CO2 reduction contribution from the engineering business



Source: JFE Holdings HP Climate Change Initiatives. Compiled based on the JFE Group Sustainability Report 2025

Climate Transition Strategy for Achieving Carbon Neutrality by 2050



Additional Use of Proceeds under the 8th Medium-Term Business Plan

Use of Proceeds Category	Additional Use of Proceeds	Business Overview and Purpose
Conversion to low-carbon manufacturing process	·**Expenditures on procurement of reduced iron**	Establishment of reduced iron procurement methods for use in electric furnaces and blast furnaces as part of a two-track approach
	·**Investment for direct reduced iron utilization in blast furnaces**	Further reduced iron utilization in blast furnaces for coke reduction
Manufacture of eco-products	·**Manufacture of equipment for offshore wind power generation system**	Production of offshore wind planks at Japan's first offshore wind monopile foundation manufacturing plant
Initiatives to realize a circular economy	·**Expenditures on horizontal recycling of PET bottles**	Manufacture of recycled PET flakes from used PET bottles
	·**Expenditures on conversion of food waste into electricity and fertilizer**	Use of methane gas generated by decomposition of food waste for power generation and fermentation residue as solid fuel
	·**Expenditures on chemical recycling of waste**	Development of waste chemical recycling technology by gasification reforming and ethanol production using microorganisms * Adopted as a NEDO GI Fund project

Point

- The JFE Group has set a target of achieving carbon neutrality by 2050, and has set an interim target of reducing its core steel business by at least 30% by FY 2030 (Compared to FY 2013, both Scope 1 and 2).
- To achieve carbon neutrality by 2050, the period up to 2030 is defined as the "transition period," and the period thereafter as the "innovation period." During the transition period, the Group will promote initiatives such as energy conservation, increased efficiency of existing processes, and utilization of electric furnace technology.
- This is a group-wide strategy to promote decarbonization initiatives, including zero-carbon steel, and is considered a just transition strategy as it does not involve a drastic industrial transformation.

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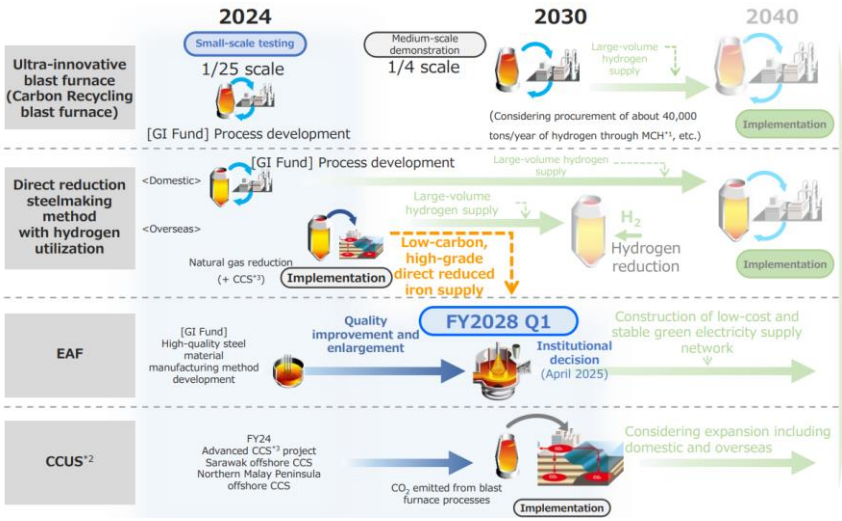
Climate transition strategy and targets to be science-based (Element 3)

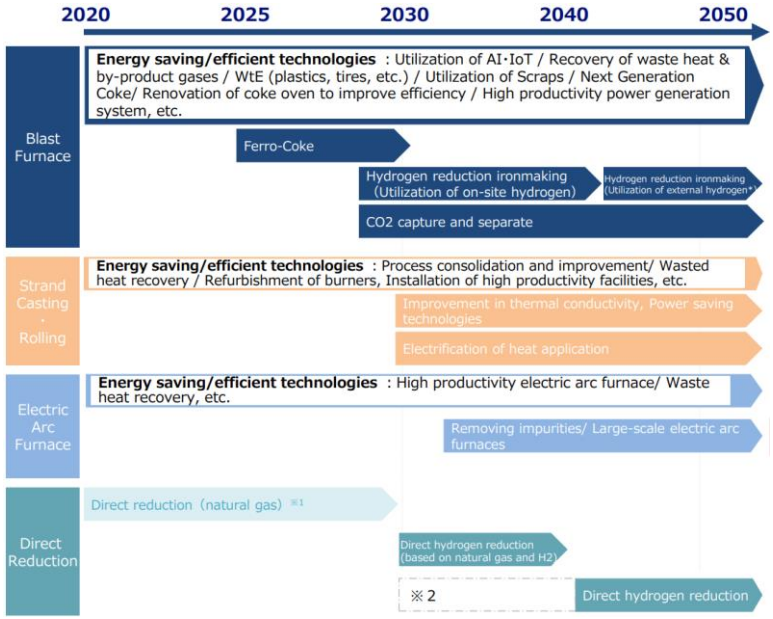
JFE Group's roadmap for steel process transformation

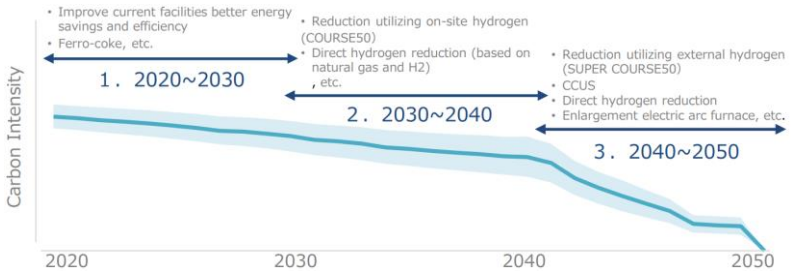


Initiatives aligned with the Iron and Steel Sector Roadmap

- ×α units: Increased efficiency through process development, etc., in blast furnaces
- ×β units: Development of hydrogen-based steelmaking (direct reduction) technology
- ×γ units: Enhancement in quality and size of electric furnaces
- CO2 capture, utilization and storage

the Ministry of Economy, Trade and Industry's Technology Roadmap for transition finance in the Iron and Steel Sector





Key points

- The JFE Group's steel process transformation roadmap aligns with the Ministry of Economy, Trade and Industry's Technology Roadmap for transition finance in the Iron and Steel Sector.

Source: Prepared based on the JFE Group's Environmental Management Strategy for the Future (2025) and the Ministry of Economy, Trade and Industry's Technology Roadmap for transition finance in the Iron and Steel Sector (2021)

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Implementation Transparency (Element 4)

Investment Performance and Plan in the Medium-Term Business Plan

	Investment Performance under the 7th Medium-term Business Plan (FY21-24)	Investment Plan under the 8th Medium-term Business Plan (FY25-27)
Growth Investment	5,200	9,100
GHG reduction	3,900	1,200
Contribution to GHG reduction	4,100	1,300
DX	1,400	1,100
Renewal	3,700	3,200
Total	18,200	15,900

Major Strategic Investments in Japan

- 7th Plan: Innovative Electric Furnace (Kurashiki), expansion of electrical steel sheet production capacity (Kurashiki), New CGL (Fukuyama), manufacturing of offshore wind power substructures, etc.
- 8th plan: Demonstration facilities for CN technology development, etc.

Specific Investment Measures for FY 2030 (Steel Business)

Large-scale growth investment in Japan

June 2021 **¥53.0 billion**

Construction of a new continuous caster at Kurashiki
→ Manufacturing of **large and heavy steel plates** made possible

September 2024 **¥49.0 billion**

Phase I of the **high-grade non-oriented (NO) electrical steel sheet manufacturing** capacity expansion at Kurashiki
(twice the previous capacity)

FY2026 Planned **¥46.0 billion**

Phase II of the **high-grade non-oriented (NO) electrical steel sheet manufacturing** capacity expansion at Kurashiki
(three times the previous capacity)

1Q of FY2028 Planned **¥329.4 billion**

Construction of **an innovative EAF** at Kurashiki

October 2028 Planned **¥70.0 billion**

Construction of CGL for manufacturing **ultra-high strength steel** at Fukuyama

POINT

- Under the 7th Medium-Term Business Plan, the company invested 800 billion yen in line with its transition strategy over the four years from FY2021 to FY2024.
- In the 8th Medium-Term Business Plan, the company has disclosed a plan to invest 250 billion yen in line with its transition strategy over the three years from FY2025 to FY2027.
- To achieve its target of reducing GHG emissions by 30% or more by FY2030, the company has decided to construct a high-efficiency, large-scale innovative electric furnace in the Kurashiki area. An investment of approximately 330 billion yen is planned, with operations scheduled to start in FY2028.

Source: JFE Group "JFE Group's Long-Term Vision "JFE Vision 2035" and 8th Medium-Term Management Plan" (2025)

Committee | Results

Case Study: JFE Holdings, Inc. Green/Transition Finance Framework

Review result: Approval

Approval as a case study for transition finance promotion project

Main Opinions

Transition Strategy

- The proposed initiatives, including the additional use of proceeds such as the "use of direct reduced iron in blast furnaces," are appropriate, and thus we support its adoption.
- With regard to the “direct use of reduced iron in blast furnaces,” there is a challenge in maintaining the heat and material balance when injecting reduced iron. We expect the company to tackle this issue by leveraging its existing knowledge.
- It would be better if the extent to which each use of proceeds contributes to emission reduction could be indicated as specifically as possible.

Matters to be considered / others

- The electricity required for the use of electric furnaces should be secured. In the future, there may be competition for electricity in the areas where electric furnaces are located, so it is necessary to take measures including discussions with the national and local governments.

This document focuses on the contribution of transition finance to our country's 2050 carbon neutrality and the realization of the Paris Agreement. It does not cover any risk assessment of transition finance as a financial instrument. It should be noted that even if this project is a model study, there are credit risks and other risks (In the case of bonds, price fluctuation risk, liquidity risk, etc.), just like ordinary finance.