

Progress of the Seventh Medium-term Business Plan

In FY2021, the JFE Group **formulated the Seventh Medium-term Business Plan** for FY2021 through FY2024 to steadily increase corporate value over the medium to long term. Recognizing that the four years covered by the plan will be the most transformative period in the Company's history, we will establish a robust foundation for sustained, long-term growth while steadfastly taking on the challenge of transformation to become an essential part of the sustainable development of society and the safe and comfortable lives of people. We are working to ensure environmental and social sustainability by promoting initiatives addressing climate change issues as outlined in the JFE Group Environmental Vision for 2050 and implementing initiatives for promoting employee success, contributing to local communities, and ensuring respect for human rights throughout the supply chain. We are also striving to ensure economic sustainability based on stable profitability by completing structural reforms and promoting DX strategies in the steel business to raise cost competitiveness. And we are viewing advances in decarbonization as opportunities for pursuing business growth strategies, such as supplying high-performance electrical steel sheets and other products with high added value and expanding renewable power generation.

▶ [Seventh Medium-term Business Plan \(CSR Report 2021\)](https://www.jfe-holdings.co.jp/en/common/pdf/sustainability/data/2021/csr2021e.pdf) (https://www.jfe-holdings.co.jp/en/common/pdf/sustainability/data/2021/csr2021e.pdf)

Status of Initiatives for the Seventh Medium-term Business Plan

Ensure Environmental and Social Sustainability

Addressing Climate Change Issues

The JFE Group considers addressing climate change as a vital management concern and upholds the **JFE Group Environmental Vision for 2050** for realizing carbon neutrality by focusing on strategies for **reducing CO₂ emissions in its steel business as well as in society as a whole**. In FY2023, we reduced CO₂ emissions in the steel business by 17.5% from FY2013 and will continue our efforts to achieve the target under the medium-term plan of reducing emissions by at least 18%. We are also expanding the construction and operation of plants for renewable energy power generation, waste-to-energy power generation, along with other efforts in the engineering business, which contributed to reducing 11.53 million tonnes of CO₂ emissions in society as a whole in FY2023, as we make steady progress toward achieving our mid-term target of reducing emissions by 12.00 million tonnes.

In the steel business, we intend to reduce CO₂ emissions by at least 30% in FY2030 from FY2013 and to achieve carbon neutrality by 2050. In FY2022, we took our first step forward by formulating a more specific CO₂ reduction plan*¹ which positions the timeframe up to 2030 as the transition period for shifting to a low-carbon steel process and the timeframe up to 2050 as the innovation period, during which we will establish and implement ultra-innovative technologies and strive for carbon neutrality. In order to achieve the goal of reducing emissions by 30% or more by FY2030, we expanded the use of scrap in converter furnaces by introducing the eco-friendly Double-slag Refining Process (DRP™) in all districts, which will significantly reduce CO₂ emissions. In addition, we reinforced the electric arc furnace at the Sendai Works and are currently constructing an electric furnace in stainless steel manufacturing in the Chiba district. In the Kurashiki district, we are considering **installing high-efficiency electric arc furnaces** and launch operations to coincide with the renovation of the blast furnace in FY2027, and we will execute the necessary capital investment to achieve these goals. With the support of the NEDO Green Innovation Fund Project, we have been simultaneously developing ultra-innovative technologies since FY2023 with the aim of achieving carbon neutrality in 2050. In the Chiba district, we began construction of **test facilities for the carbon recycling blast furnace***², and we will accelerate research and development toward the early implementation of ultra-innovative technologies.

We also began supplying JGreeX™, an eco-friendly steel material created using the mass balance method that generates significantly lower CO₂ emissions during the manufacturing process compared to conventional products. We will actively work to establish a market in which customers recognize the value of green steel materials that contribute to realizing a carbon neutral society.

In the area of contributing to the reduction of CO₂ emissions in society as a whole, we decided to invest in the Kurashiki district to triple the current production capacity of electrical steel sheets to improve the efficiency of motors and transformers for EVs. As for our activities overseas, we established a production and sales joint venture for (grain-oriented) electromagnetic

steel sheets with JSW Steel in India and have begun constructing a plant scheduled to start full production in FY2027. In addition to expanding renewable energy power generation and other businesses in the engineering business, the entire Group is working to commercialize offshore wind power generation. In FY2023, we completed construction of a manufacturing plant for monopiles in Kasaoka City, Okayama Prefecture, to establish a system for manufacturing and supplying foundation structure for offshore wind power generation. The plant came online in April 2024. By expanding the supply of eco-friendly products and renewable energy-related businesses, we will contribute reducing CO₂ emissions in society as a whole.

▶ [*1 Roadmap to Carbon Neutrality](#) (P.83)

*2 Technology for converting CO₂ emitted from a blast furnace into methane, which is then blown into the blast furnace as a reductant

Addressing Social Issues

For the JFE Group to achieve sustainable growth in the future, addressing social as well as environmental issues is essential. We are implementing **human rights due diligence** toward the realization of a society where human rights are respected and protected. We also revised the JFE Group Basic Policy on Human Rights in April 2023 to further intensify these efforts as part of our ongoing commitment to ensure respect for human rights for all stakeholders, including those in our supply chain.

Ensuring the safety and health of employees is a fundamental requirement for corporate activities, and with regard to safety in particular, we are focused on initiatives for **eliminating major accidents** by making our facilities safer. As planned, we made safety investments of about 10 billion yen per year for the entire Group in FY2023. Meanwhile, we are promoting initiatives on **diversity and inclusion** and workstyle reform to maximize the capabilities of employees with diverse backgrounds. Since FY2022, we have been advancing our efforts by setting more ambitious KPIs for hiring female employees and increasing the ratio of female managers. We will consistently invest in human capital to secure and nurture diverse human resources and create working environments and systems that enable employees to feel pride in their work and fully demonstrate their abilities.

Starting in FY2022, we will calculate **performance-linked remuneration for Directors** based on non-financial indicators related to the environment and society in addition to existing financial indicators. In FY2022, we introduced indicators related to employee safety, and in FY2023 we introduced indicators for climate change beginning as an incentive to accelerate efforts in this area, which we recognize as a top priority.

We will actively promote initiatives addressing ESG issues, particularly climate change, and contribute to the realization of a sustainable society to ensure environmental and social sustainability as set forth in our medium-term plan.

Ensure Economic Sustainability

Shift focus from Quantity to Quality and Promotion of Growth Strategies

In FY2023, we continued to steadily implement the key measures of the medium-term plan to establish economic sustainability. In the steel business, we maintained our efforts to improve sales pricing by reflecting fluctuations in raw material costs and higher prices in various goods, and correcting price levels, which led to a significant improvement of 5,000 yen/tonnes over the previous fiscal year. The ratio of high value-added products increased by 1% from the previous year to 48%, showing steady progress toward the 50% target of the mid-term plan. We will strive to increase the ratio of high value-added products and further improve sales prices and spreads by expanding sales of high-grade, non-oriented electrical steel sheets for EV main motors, large and heavy steel plates for offshore wind power generation, and other products. In September 2023, we suspended the upstream process in the Keihin area, thereby completing the structural reform and making steady progress in subsequent land use based on the OHGISHIMA2050 concept.

In the engineering business, we will strive to increase profits by improving the usage rate of the monopile plant, mainly for offshore wind power projects in Japan starting in FY2025, and by increasing orders in the waste-to-resource and carbon neutrality fields. The trading business posted a record-high segment profit of 48.9 billion yen in FY2023, exceeding the final target of 40 billion yen in the medium-term plan.

Promoting DX Strategy

Our medium-term plan positions DX as a **key for accomplishing the greatest transformation** since our founding. Advanced use of data is one of the key strategic themes in the steel business. Data related to our accumulated expertise in manufacturing high-grade steel, measures for aging facilities and data on predictive management are sources of our competitive strength, and various initiatives are underway to deploy this data. In FY2023, the West Japan Works (Kurashiki Area) became the first large-scale integrated steel works to complete the migration of its core system to a cloud environment for shaped steel products. We also promote migration in other steel works, which will ensure the continuity and development of our business by moving away from legacy systems, while the introduction of the latest technologies such as AI will also enable advanced use of accumulated data and know-how. In addition, we have applied digital-twin technology, constituting the core of cyber physical systems (CPS), to coke furnace design. This allowed us to confirm the effectiveness of the mechanism for partially controlling air supply, leading to quantitative results such as reducing fuel consumption by 5% and CO₂ emissions by 6,600 t/year.

In the engineering business, an AI-supported waste incinerator achieved 92 days of fully automated operation, which is part of our initiatives leveraging our Global Remote Center (GRC), a next-generation service base that remotely monitors incineration plants in Japan and overseas.

We plan to invest around 120 billion yen in DX over the four-year period and have already decided to execute over 80% of the total by FY2023. We will implement our DX strategy in a united Group effort to enhance corporate value and provide new added value to society.

Balancing Effective Investment and Financial Soundness

Aggressive management for medium- to long-term growth requires the establishment of a stable financial base. To this end, we must **balance effective investment based on a “select and concentrate” approach to ensure sufficient profitability and financial soundness**. The balance of interest-bearing debt at the end of FY2023 declined by 32.7 billion yen from the previous fiscal year to 1,830.2 billion yen, due in part to 52.0 billion yen in stock issued to overseas subscribers and 62.4 billion yen in disposal of treasury stock. The Debt/EBITDA ratio, which is the financial target of the medium-term plan, was 3.2 times higher, and the D/E ratio was 58.0%, achieving the mid-term plan target of around 70% a year ahead of schedule. We will continue to secure the necessary funding for investments while ensuring financial soundness by reviewing businesses and assets to thoroughly reduce assets and by improving the cash conversion cycle to reduce inventories.

The JFE Group will complete the measures set forth in the medium-term plan to achieve sustainable growth, enhance corporate value over the medium to long term and overcome difficulties by quickly and accurately responding to unpredictable, rapid changes in the business environment.

JFE Group's Performance and Profitability Targets, Dividend Policy, FY2023 Results, and FY2024 Forecast

Performance and profitability targets	Seventh Medium-term Business Plan (final year: FY2024)	FY2023 Results	FY2024 Forecast
Consolidated business profit (excluding steel business inventory valuation difference, etc.)	320.0 billion yen	298.2 billion yen (296.2 billion yen)	260.0 billion yen/year (308.0 billion yen)
Profit attributable to owners of parent	220.0 billion yen	197.4 billion yen	205.0 billion yen
ROE	10%	8.6%	8.1%
Debt/EBITDA	About 3 times	3.2 times	—
D/E ratio	About 70%	58.0%	—

Dividend policy	Seventh Medium-term Business Plan	FY2023 Results	FY2024 Forecast
Payout ratio	About 30%	30.9% (100 yen)	34.1% (110 yen)

Performance and Profitability Targets, FY2023 Results, and FY2024 Forecast for Operating Companies

Performance and profitability targets for operating companies		Seventh Medium-term Business Plan (final year: FY2024)	FY2023 Results	FY2024 Forecast
Steel business	Per-ton profit (excluding inventory valuation difference, etc.)	10,000 yen/tonnes	10,000 yen/tonnes (10,000 yen/tonnes)	8,000 yen/tonnes (10,000 yen/tonnes)
	Segment profit (excluding inventory valuation difference, etc.)	230.0 billion yen	202.7 billion yen (200.7 billion yen)	165.0 billion yen (213.0 billion yen)
Engineering business	Segment profit	35.0 billion yen	24.3 billion yen	20.0 billion yen
	Sales revenue	650.0 billion yen	539.9 billion yen	580.0 billion yen
Trading business	Segment profit	40.0 billion yen	48.9 billion yen	50.0 billion yen

Investment and Asset Downsizing Plans, Cumulative Results up to FY2023

Content		Seventh Medium-term Business Plan (four-year total)	Cumulative Results for FY2021 and FY2023
Investment	Total capital expenditures, investment and loans	Approx. 1,450.0 billion yen	Adopted around 80% of plan
	GX investment*1	Approx. 340.0 billion yen	Adopted around 90% of plan (investments related to offshore wind power-business, expansion in production facility for grain-oriented electromagnetic steel sheets, introduction of electric-arc furnace for stainless steel production, other)
	DX investment*2	Approx. 120.0 billion yen	Adopted more than 80% of plan (system upgrades at steelworks)
Asset downsizing		Approx. 200.0 billion yen	120.0 billion yen

*1 GX investment: Investments for green transformation.

*2 DX investment: Investments for digital transformation.