

## 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/csr/pdf/csr2021e.pdf) (<https://www.jfe-holdings.co.jp/en/csr/pdf/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 CO<sub>2</sub> emissions in its steel business as well as in society as a whole. In FY2022, we reduced CO<sub>2</sub> emissions in the steel business by 13% 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 11.14 million tonnes of CO<sub>2</sub> emissions in society as a whole in FY2022, 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 CO<sub>2</sub> 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 CO<sub>2</sub> reduction plan\*<sup>1</sup> 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 CO<sub>2</sub> emissions. In addition, we decided to reinforce the electric arc furnace at the Sendai Works and to incorporate an electric furnace in stainless steel manufacturing in the Chiba district. In the Kurashiki district, we are considering installing high-efficiency electric arc furnaces to coincide with the renovation of the blast furnace, 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 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\*<sup>2</sup>, and we will accelerate research and development toward the early implementation of ultra-innovative technologies.

We also decided to start supplying JGreeX™, an eco-friendly steel material that generates significantly lower CO<sub>2</sub> emissions during the manufacturing process compared to conventional products, and plan to supply approximately 200,000 tons in FY2023. 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 CO<sub>2</sub> 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, and we reached a basic agreement overseas with JSW Steel in India to establish a production and sales joint venture for (grain-oriented) electromagnetic steel sheets. 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 FY2022, we began construction on 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. By expanding the supply of Eco-friendly Products and renewable energy-related businesses, we will contribute reducing CO<sub>2</sub> emissions in society as a whole.

### ▶ [\\*1 Roadmap to Carbon Neutrality](#) (P.53)

\*2 Technology for converting CO<sub>2</sub> 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 FY2022. Meanwhile, we are promoting initiatives on diversity and inclusion and workstyle reform to maximize the capabilities of employees with diverse backgrounds. In FY2022, we advanced 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. We have also decided to introduce indicators for climate change beginning in FY2023 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 Environmental and Social Sustainability

### Progress in Shift from Quantity to Quality and Structural Reforms

In FY2022, we continued to steadily implement the key measures of the medium-term plan to establish economic sustainability. In the steel business, we improved 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 74.0 billion yen (3,000 yen/ton) over the previous fiscal year. The ratio of high value-added products increased by 2% from the previous year to 47%, 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 in the key areas of high tensile strength steel sheets for automobiles, electrical steel sheets, and construction materials for infrastructure. With regard to structural reforms, we suspended operations at facilities for steel sheets used in cans in the Chiba district and completed consolidating production to the Fukuyama district. We also renovated and relaunched the blast furnace in the Chiba district. In September 2023, we plan to suspend the upstream process in the Keihin area and will complete structural reforms to promote the shift from quantity to quality. We are also making steady progress in land use in the Keihin area after the structural reform. We selected a project partner for the northern side of the Minami-Watarida-Kita area and decided to sell our land in Ogimachi. Furthermore, following the announcement of Kawasaki City's land use policy, we plan to announce our own land use policy for Ogishima in September 2023.

## Promoting Growth Strategies

In August 2023, we signed an official agreement for the **establishment of a production and sales joint venture for (grain-oriented) electromagnetic steel sheets with JSW Steel in India**. We are further developing our strategy based on localized production. In addition, we are focusing on winning orders for our solutions business, which provides technological, operational, and research know-how for manufacturing high-value-added products and reducing environmental impact. By steadily implementing these initiatives, we raised the earnings target for the steel business under the medium-term plan by 30 billion yen from the initial plan to 260 billion yen. In the engineering business, while segment profit for FY2022 declined due to the soaring prices of materials and equipment, orders received reached a record high of 564.9 billion yen. The trading business posted a record-high segment profit of 65.1 billion yen in FY2022, reflecting our commitment in both businesses to achieve further growth against the medium-term plan.

## Promoting DX Strategy

Our medium-term plan positions **DX as a key for accomplishing the greatest transformation since our founding**. In FY2022, we pursued initiatives including expanded deployment of an anomaly detection system using data science technology for facilities in our steel business. In addition to existing internal optimization efforts such as business reforms and improved productivity, we will seek to deliver added value to external parties and create new businesses utilizing DX. We will leverage the rapid and drastic changes taking place around us as growth opportunities. For example, we began offering the RODAS® packaged service for boiler power plants as a new business that won the Energy Conservation Grand Prize for 2022. We have confidently progressed in our plan to invest a total of around 120 billion yen in DX over the four-year period, executing nearly 50% of this investment in FY2022. We will also take such actions as shifting to a cyber physical system (CPS) in the steel business and business process reform utilizing digital technology in the engineering business.

## 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 FY2022 was 1,862.9 billion yen, an increase of 13.5 billion yen from the previous fiscal year. The Debt/EBITDA ratio, which is the financial target of the medium-term plan, was 3.7 times higher. Taking into account the accumulation of cash and deposits, however, the net position between interest bearing debt and cash and deposits was a decrease of about 4 billion yen from the previous fiscal year. The D/E ratio was 67.8%, achieving the mid-term plan target of around 70% two years 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, FY2022 Results, and FY2023 Forecast

Performance and profitability targets	Seventh Medium-term Business Plan (final year: FY2024)	FY2022 Results	FY2023 Forecast
Consolidated business profit (excluding steel business inventory valuation difference, etc.)	320.0 billion yen	235.8 billion yen (162.8 billion yen)	290.0 billion yen/year (315.0 billion yen)
Profit attributable to owners of parent	220.0 billion yen	162.6 billion yen	190.0 billion yen
ROE	10%	7.9%	8.7%
Debt/EBITDA	About 3 times	3.7 times	—
D/E ratio	About 70%	67.8%	—

  

Dividend policy	Seventh Medium-term Business Plan	FY2022 Results	FY2023 Forecast
Payout ratio	About 30%	28.5% (80 yen)	30.6% (100 yen)

## ■ Performance and Profitability Targets, FY2022 Results, and FY2023 Forecast for Operating Companies

Performance and profitability targets for operating companies		Seventh Medium-term Business Plan (final year: FY2024)	FY2022 Results	FY2023 Forecast
Steel business	Per ton profit (excluding inventory valuation difference, etc.)	10,000 yen/tonnes	7,000 yen/tonnes (3,000 yen/tonnes)	9,000 yen/tonnes (10,000 yen/tonnes)
	Segment profit (excluding inventory valuation difference, etc.)	230.0 billion yen	146.8 billion yen (73.8 billion yen)	200.0 billion yen (−225.0 billion yen)
Engineering business	Segment profit	35.0 billion yen	13.4 billion yen	25.0 billion yen
	Sales revenue	650.0 billion yen	512.5 billion yen	550.0 billion yen
Trading business	Segment profit	40.0 billion yen	65.1 billion yen	48.0 billion yen

## ■ Investment and Asset Downsizing Plans, Cumulative Results up to FY2022

Content		Seventh Medium-term Business Plan (four-year total)	Cumulative Results for FY2021 and FY2022
Investment	Total capital expenditures, investment and loans	Approx. 145.00 billion yen	Adopted around 50% of plan
	GX investment <sup>*1</sup>	Approx. 340.0 billion yen	Adopted around 40% of plan (investments related to offshore wind power-business, expansion in production facility for grain-oriented electromagnetic steel sheets, other)
	DX investment <sup>*2</sup>	Approx. 120.0 billion yen	Adopted slightly more than 50% of plan(system upgrades at steelworks)
Asset downsizing		Approx. 200.0 billion yen	87.0 billion yen

\*1 GX investment: Investments for green transformation.

\*2 DX investment: Investments for digital transformation.