



Challenging Spirit.
Flexibility. Sincerity.

**JFE GROUP
REPORT
2023**
Integrated Report

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Publication of JFE GROUP REPORT 2023

Since fiscal 2018, JFE Holdings, Inc. has published an integrated report that combines non-financial information, such as environmental, social, and governance (ESG) initiatives, with financial information including business strategies, with the objective of furthering the understanding of the JFE Group's value creation narratives over the medium to long term among all stakeholders, including shareholders and investors.

Fiscal 2023 is the third year of the Seventh Medium-term Business Plan, an important year for advancing our growth strategy and finishing structural reforms. Our mission is to be essential to society's sustainable development and to create safe, comfortable lives for people everywhere. Ensuring environmental and social sustainability (helping to resolve social issues) and establishing economic sustainability (stable earnings power) will be crucial to making this happen. We aim to be a robust corporate group able to provide value over the long term. We hope this report furthers everyone's understanding of our initiatives on these fronts.

On editing this report, we referred to the IFRS Foundation's International Integrated Reporting Framework and the Ministry of Economy, Trade and Industry's Guidance for Collaborative Value Creation. Relevant departments worked earnestly together to prepare this report in accordance with the Company's guidelines. Here, we state that the production process and content of this report is fair and just.

We will continue to engage in dialogues with our stakeholders, and do our utmost to realize sustained environmental value and social value, while also enhancing our corporate value. After reading the JFE GROUP REPORT 2023 integrated report, please share with us your ideas and opinions about JFE Holdings. While building relationships of trust with all of our stakeholders from a long-term perspective, we would like to take a step forward together into a brighter future. We ask for your continued support.



Koji Kakigi

Representative Director,
President and CEO
JFE Holdings, Inc.

<Reporting Period>

FY2022 (April 1, 2022, to March 31, 2023)

Reports on some activities undertaken outside this period are included.

<Organizations Covered>

The holding company JFE Holdings, Inc. and its three operating companies JFE Steel Corporation, JFE Engineering Corporation, and JFE Shoji Corporation. Additionally, some reports may include the equity-method affiliate Japan Marine United Corporation and Group companies under the operating companies (consolidated subsidiaries and equity-method affiliates).

Guidelines

- IFRS Foundation: International Integrated Reporting Framework
- Ministry of Economy, Trade and Industry: Guidance for Collaborative Value Creation
- GRI: Sustainability Reporting Guidelines GRI Standards
- Financial Stability Board: The final report of the Task Force on Climate-related Financial Disclosures (TCFD)



Publication Date

October 2023; (Next issue (planned): October 2024)

Disclaimer

All current plans, strategies, and beliefs published in this report that are not historical facts contain forecasts about future performance, which are subject to risks and uncertainties. Actual results may greatly differ from those forecasts due to various factors including future trends in the global and Japanese economies, and in related industries. Accordingly, please note that we do not guarantee the reliability of such forward-looking information.



Value Creation Framework

The JFE Group has contributed to the development of industries and society through products and services that originate from steel.

This section introduces the framework for value creation at the JFE Group.

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- 

JFE is

サス鉄ナブル!

Sus-tetsu-nable!*

* A term unique to our Company, it combines steel and sustainability, both of which are essential to society

The JFE Group is involved in a number of businesses centered on the production of steel. We strive to deliver to the world the diverse value that steel offers in pursuit of a sustainable society.

Steel Business JFE Steel

An integrated steel manufacturer that handles everything from raw materials such as iron ore to the production of steel products. JFE Steel has world-class steel production capacity as well as expertise in technological development.

Engineering Business JFE Engineering

A comprehensive engineering company that constructs and operates plants and structures. JFE Engineering supports people's livelihoods and industries alike in areas such as energy, the environment, and social infrastructure.

Trading Business JFE Shoji

JFE Shoji is the core trading company of the JFE Group. Centered on steel products, the company handles a broad range of goods, from raw materials for steel to foods and electronics, and conducts business globally through a comprehensive supply chain that covers both domestic and international markets.

Shipbuilding Business Japan Marine United

A leading shipbuilding company with top-class domestic construction capabilities and technological expertise. The company constructs large general merchant ships, various naval vessels, and icebreakers.

Reductions in CO₂ emissions

About **13%**
(comparison with FY2013)

Contribution of CO₂ emissions reductions

11.14 million tons

Steel scrap utilization

900,000 tons

Recycled water resource usage

93.2%

Introduction and implementation of eco-friendly products and technologies

16 cases

Figures based on fiscal 2022 results



CORPORATE VISION

Contributing to society
with the world's most
innovative technology

CORPORATE VALUES

Challenging Spirit.
Flexibility. Sincerity.

Group Name

The name of the Group is JFE Group. "J" is for Japan, "F" is for steel (as in Fe, the atomic symbol of iron) and "E" is for engineering. The acronym can also be thought of as standing for "Japan FutureEnterprise," i.e., a future-oriented Japanese business group centered around the core businesses of steel and engineering.



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



Group Symbol

The continuously rotating globe represents a group that is in constant pursuit of new opportunities, actively seeking to make new contacts and to strengthen communication with its customers.

The blue color denotes trust and profundity, symbolizing a global company pursuing infinite business possibilities.



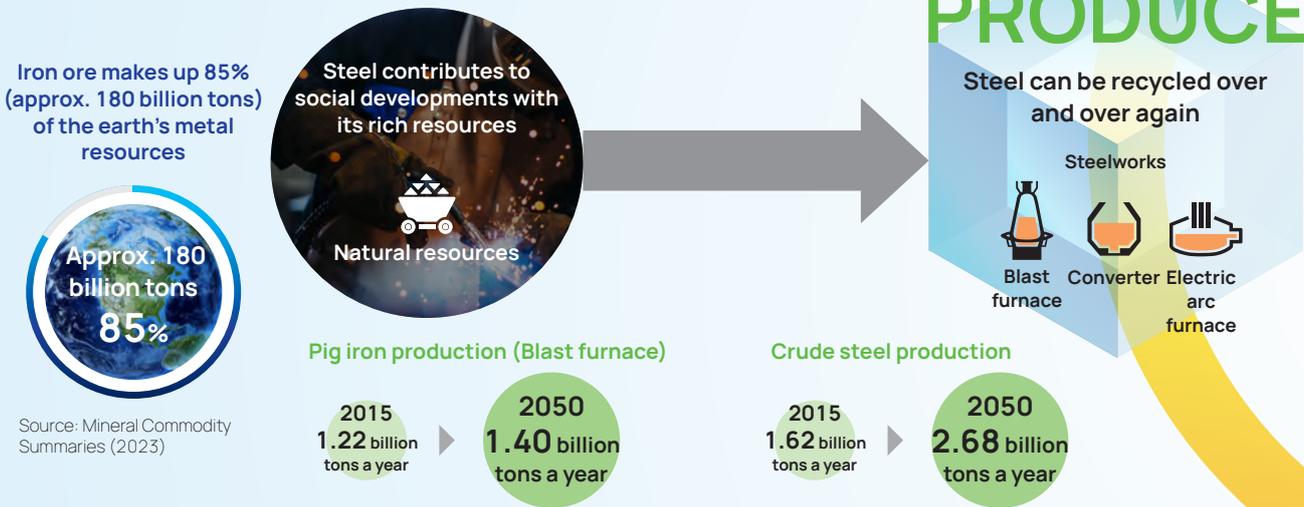
The Value of Steel

Steel supports safe and comfortable lives for an abundant world in the future

Steel's Life Cycle Assessment (LCA)

Steel establishes a highly sophisticated value chain of Produce–Use–Recycle thanks to its excellent recyclability, and is reborn as anything over and over again. Therefore, it is important to evaluate steel's environmental impact by encompassing the entire life cycle including recycling. JFE Steel participated in the initiative to quantify the life cycle environmental impact of steel products, which is led by the Japan Iron and Steel Federation, as one of the core members, and developed an ISO/JIS Standard*1 for the calculation. The results provided through the use of this standard have shown that the more superior the recyclability of material is, the less environmental impact such as global warming becomes. In Japan, there are 15 blast furnace and electric arc furnace steelmakers, including JFE Steel, that compile and disclose*2 average data for life cycle inventory (LCI) for each steel product.

*1 ISO 20915: Life Cycle Inventory Calculation Methodology for Steel Products (2018.11)
 JIS Q 20915: Life Cycle Inventory Calculation Methodology for Steel Products (2019.6)
 *2 <https://www.jisf.or.jp/en/activity/lca/data/index.html>



High economic efficiency and low environmental impact

Steel can be reliably produced in large volumes to support our lives and society. Steel is also an environmentally friendly material, emitting far less CO₂ than other materials during production. Steel is an essential material for the safe and comfortable lives of people, and it is key to the sustainable development of society.

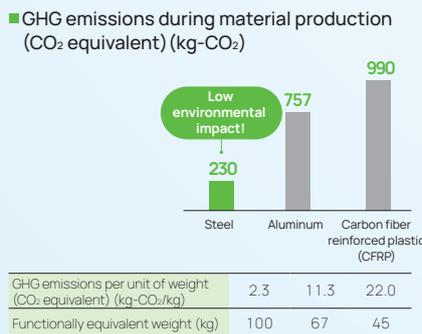
Mass production at low cost

Steel is a material with rich reserves and a long history of development. It can be stably mass produced at a reasonable price, contributing to the sustainable development of society.



Extremely low environmental impact at the manufacturing stage when compared to other materials

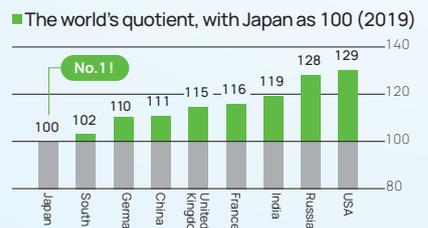
The functional equivalent of greenhouse gas (GHG) emissions of steel at the manufacturing stage is 1/4 to 1/5 of that of aluminum and carbon fiber.



Source: World Auto Steel data

Japan's steel industry keeps the top energy efficiency in the world

The Japanese steel industry (converter furnace steel) produces steel with the lowest environmental impact when compared to other major countries in the world as a result of its longstanding efforts toward environmental conservation, including developing and spreading the use of energy-saving technologies.



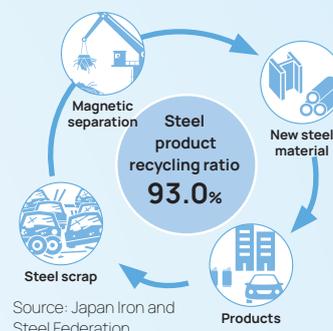
Source: Research Institute of Innovative Technology for the Earth (RITE)

Excellent recyclability

Steel is a material with excellent recyclability, such as its property enabling magnetic separation and retrieval. Even after a final product made of steel ends its life in society, it is reborn over and over again into a high-quality, high-functional product through highly efficient separation and retrieval technologies, thereby reducing environmental load throughout its life cycle.

Closed-loop recycling of steel

Steel can be recycled many times as the raw material of products made in the same steel material while maintaining the original properties of the iron material itself. Closed-loop recycling is superior to open-loop recycling* that recycles other materials in terms of sustainability. This is due to the fact that it is designed to reduce the amount of natural resources being newly introduced, moreover reduce the discharge of environmentally hazardous substances, and reduce waste.



Source: Japan Iron and Steel Federation

* A limited form of material recycling that involves application of the heat generated from the incineration of materials as well as recycling where the material may deteriorate or change in quality.

RECYCLE

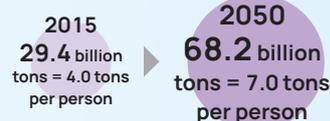
Efficient separation and retrieval of steel using its magnetic property

Dismantle and collect

Steel can be reborn as anything over and over again



Steel stock



Demand for steel



USE

Contributing to sustainable development of our lives and economy by the world's best energy-saving and environmental technologies

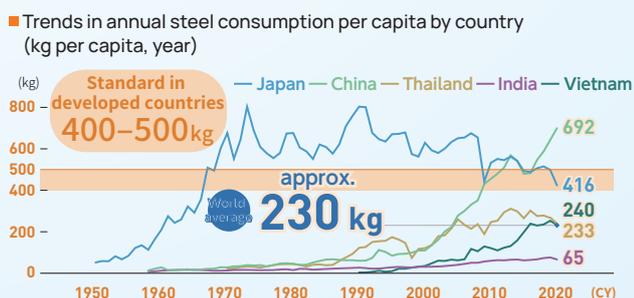
Processing and different manufacturing
Automobiles, construction materials, etc.

Foundation for life and society

In our lives, steel helps reduce our burden on the environment. For example, by using high-tensile steel (thinned-down steel sheets that keep their strength) in automobiles, automobile weight can be substantially reduced without sacrificing passenger safety during vehicle collisions, thereby contributing to lower CO₂ emissions in society as a whole.

The potential to grow on a global level

The world average of the annual consumption of steel currently stands at approximately 230 kg per capita. Going forward, the long-term global demand for steel is expected to keep growing alongside the economic development of emerging countries.

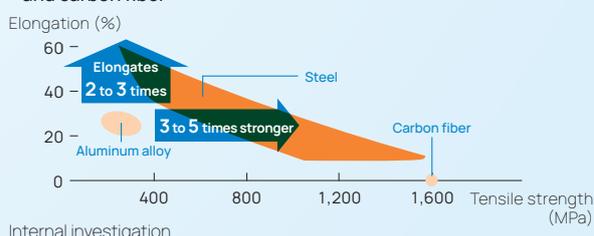


Source: World Steel Association

Potential for evolution

Steel can be elongated two to three times more than aluminum at the same strength, and is three to five times stronger at the same extended rate, making it the optimal material for the world-class structures of the times, such as Tokyo Skytree. Steel still has considerable potential for evolution. The emerging needs of society will make steel evolve, and contribute to a productive future.

Comparison of strength and elongation between steel, aluminum, and carbon fiber



History

To remain an essential presence in any era

Start of the JFE Group 2002

Creation of holding company and five operating company structure

Merger of Nippon Kokan (1912-) and Kawasaki Steel (1950-)



Second Medium-term Business Plan 2006-2008

Expanding high-value-added products

- JFE focused on the production and sale of high-value-added products.
- We actively invested management resources to establish a stable production structure and expanded sales of high-value-added products.



First Medium-term Business Plan 2003-2005

Realizing our merger's full potential

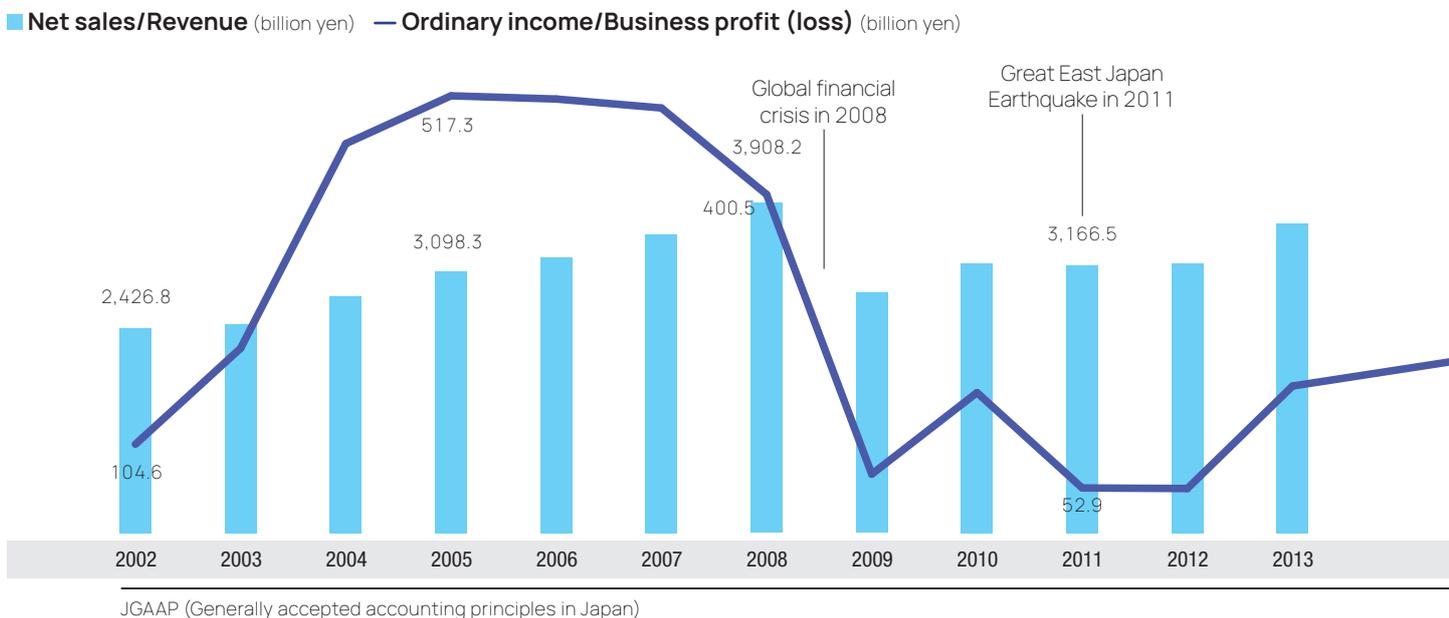
- Secure stable profitability early on and strengthen the business foundation through active investment and financing
- We consolidated facilities and reorganized and integrated Group companies to build a strong business structure by strengthening the competitiveness of our core businesses in steel and engineering.



Third Medium-term Business Plan 2009-2011

Targeting future-oriented technological development

- Despite a harsh business environment, we pursued development of innovative technologies to accelerate our leap forward into the future, with a focus on envisioned developments in the following 10 years.
- We also reinforced our corporate structure to increase profitability as the No. 1 supplier of high-value-added products.

Fourth Medium-term Business Plan 2012-2014

Expanding into growing markets overseas

- We further strengthened our profit base for growth by investing overseas and developing innovative new products.
- Corporate resources were allocated intensively in emerging markets. We also reinforced production abroad and strengthened overseas sales and technical functions.



Sixth Medium-term Business Plan 2018-2020

Boosting competitiveness with advanced technology

- Our focus was on strengthening competitiveness through the application of data science and other advanced technologies to meet sophisticated and diversifying needs throughout society.
- Having made realizing a sustainable society one of our priorities, we pursued a number of ESG initiatives, including environmental protection, development of human resources, and establishment of a governance system.



Fifth Medium-term Business Plan 2015-2017

Capturing global demand to the fullest extent

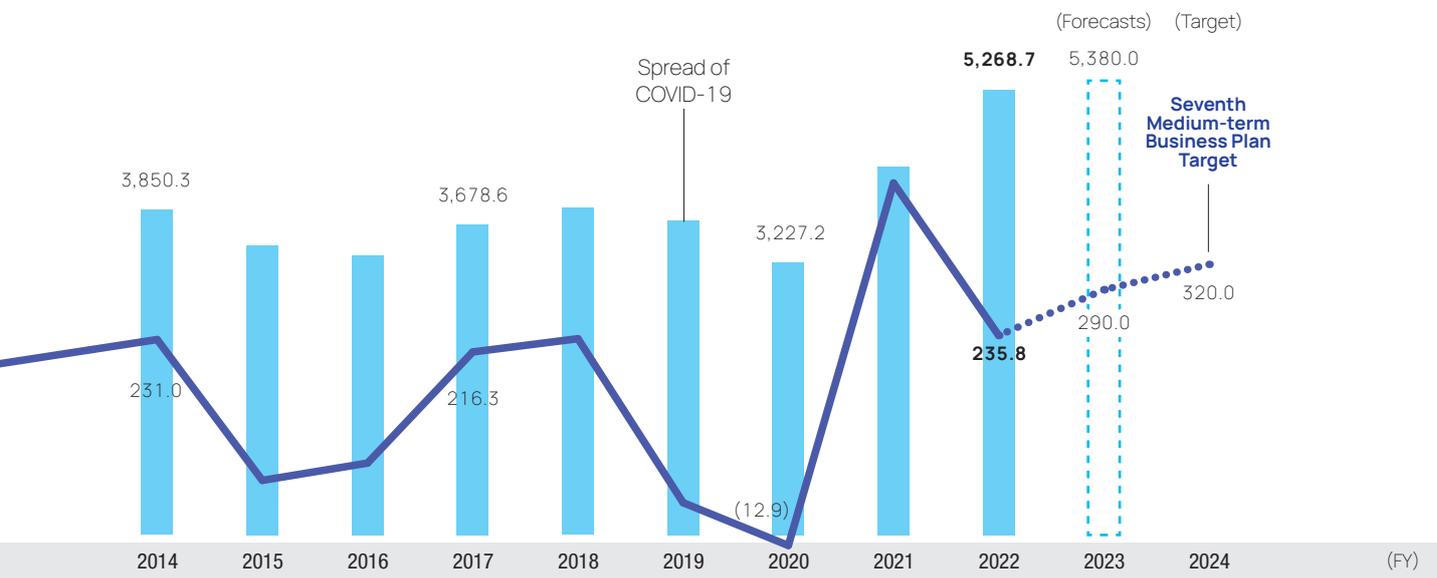
- We formulated a manufacturing and sales system to maximize opportunities for capturing demand in Japan stemming from government initiatives to upgrade disaster resilience and prepare for the Olympic and Paralympic Games in 2020.
- Overseas, we focused on capturing demand related to infrastructure reinforcement in emerging countries and initiatives for energy savings and environmental protection. We also continued to invest in new businesses in fields and geographic regions showing strong potential for future growth.



Seventh Medium-term Business Plan 2021-2024

Biggest transformation in the Company's history

- Promote the JFE Group Environmental Vision for 2050 toward carbon neutrality
- Pivot from quantity to quality in the domestic steel business (pursue world-class profitability)
- Advance the growth strategy with focus overseas, and the DX strategy to drastically improve productivity
- Effectively execute investments and ensure financial soundness



IFRS (International Financial Reporting Standards)

JFE's Technological Capabilities

Supporting Society with World-Class

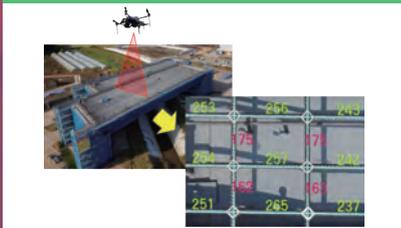
With "Contributing to society with the world's most innovative technology" as our corporate vision, some of our innovative technologies are described below.

HBL® Series of high-strength thick steel plate with low yield ratio for building structures



Featuring high strength and high deformation performance, the HBL® Series of thick steel plate is instrumental in making building structures taller and more resilient to earthquakes while saving welding-related labor. Contributes to resource conservation and CO₂ reduction by reducing the heaviness of steel plate through the application of high-strength steel

AI-driven rebar arrangement inspection



Development of a world-first system that automates inspections of reinforcing rebar layout using AI-driven image recognition and photographs taken from flying drones, in order to inspect rebar at bridge construction sites. Helps shorten inspection time and increases labor efficiency

Updates to social infrastructure

SP 3 pearlitic steel rail with excellent wear resistance for heavy cargo railways with improved abrasion resistance



Increases the lifespan of train rails, helps reduce rail maintenance costs of railway operators

JFE-METS (Integrated multi-site energy network services)



Optimizes energy services with integrated management of multiple sites (not optimized energy of a single site) at business owner and area levels

Marine Blocks® for seaweed beds and coral reefs



Contributes to revitalization of coral reefs by using by-products from the steelmaking process

JGreeX™



JGreeX™ is a steel product with significantly lower CO₂ emissions than conventional products, which helps reduce CO₂ emissions related to the use of steel products by customers, calculated using the mass balance method.

Contributions to

Technologies

JFE Steel JFE Engineering

Denjiro[®] insulation-coated pure-iron powder for soft magnetic composites

Contributes to thinner monitors



JESOLVA[®] technology for using automotive steel sheets

Contributes to lighter and improved performance of vehicles by expanding applications for ultra-high-strength steel sheet with our unique application technologies

JEFORMA[®] Series of highly formable ultra-high-strength steel sheet

Contributes to reliable production of high-strength, lightweight parts and expands applications for high-strength steel sheet by providing high-performance, optimal steel sheet that meets required characteristics in parts

J-STAR[®] Weld high-efficiency ultra-narrow groove welding system



Helps reduce energy usage and CO₂ emissions, in addition to shortening construction times and lowering installation costs with major improvements in welding efficiency

Development of industry

Gradient Si Super Core[®] contributes to energy savings of electrical equipment



Contributes to greater efficiency and downsizing of electrical equipment with high-performance materials that excel in energy conversion efficiency

Crack Arrest Steel Plate that improves safety of ships



Steel plate with excellent performance that helps stop spread of rare brittle cracks in welded areas and minimizes damage to ship hulls

Bottle to bottle



The West Japan PET Bottle MR Center has an integrated production system for bottle-to-bottle raw material, a first in the Chubu and West Japan region, that leveraged the operational experience of Kyoei Industry Co., Ltd. and J&T Recycling Corporation.

carbon neutrality

Information about other technologies can be found below.

Green transformation:	P57-62
Intellectual property strategy:	P63
Digital transformation:	P64

Process of Value Creation

External conditions with significant impact

- Climate change
- Resource and energy problems
- Falling birthrate and aging population
- Market globalization, development of emerging countries
- Aging of infrastructure and equipment
- Advances in AI and IoT



Intellectual capital

R&D expenses (FY2022): 43.0 billion yen
 Number of registered patents: Approx. 27,000 patents (about 14,000 in Japan, 13,000 overseas)



Manufacturing capital

Number of blast furnaces (as of October 2023):
 West Japan Works: 6, East Japan Works: 1
 Number of bases (as of April 2023):
 116 locations in 22 countries and regions (Group total)
 Capital expenditures (FY2022): 325.6 billion yen



Natural capital

Steel raw materials (FY2022): 62.2 million tons (iron ore, coal, and limestone)
 Recycled raw materials (FY2022): 0.9 million tons (steel scrap)



Social and other related capital

Number of customers (delivery destinations) (FY2022): Approx. 24,000 customers
 * Total of JFE Steel, JFE Engineering, and JFE Shoji (FY2022)



Human capital

Number of employees (as of the end of March 2023): 64,241 persons (Group consolidated)
 Annual training hours (FY2022):
 Approx. 0.79 million hours a year (total of operating companies: approx. 39 hours a year per employee)
 Safety investments: 10 billion yen annually



Financial capital

Total equity (IFRS) (as of the end of March 2023): 2,193.3 billion yen

Carbon neutrality

Shift focus from quantity to quality

Advance growth strategies

Greatly improve competitiveness with DX strategy

Steel Business

Comprehensive in each business by world-class

Trading Business

Creation of Group synergies

Important management issues

Business activities



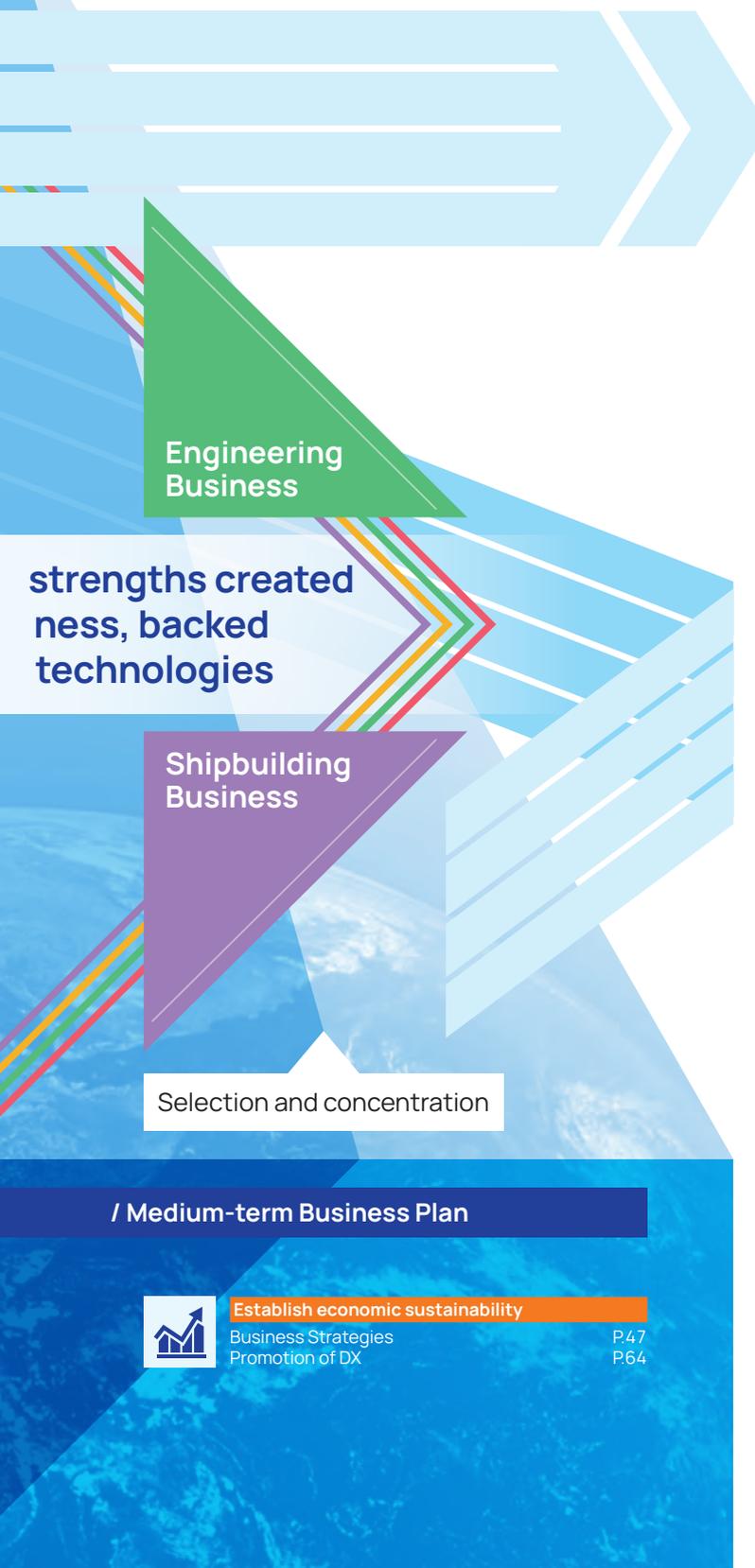
Sustainability of the environment and society

Helping to Resolve Issues Related to Climate Change	P.57
Securing and Training Diverse Talent	P.65
Ensuring Occupational Safety and Health	P.87

Basics of business activities



Corporate Governance	P.77
Thorough Compliance	P.84
Respect for Human Rights	P.89



Establish economic sustainability

Business Strategies
Promotion of DX

P.47
P.64

Be essential to society

Increase economic value

- Increase cash flow
- Achieve world-class earnings power
- Ongoing investment in technological development
- Return value to stakeholders
- Establish a robust financial foundation

Increase environmental value and social value

- Become carbon neutral
- Contribute to safe and comfortable lives
- Secure excellent human resources and enhance job satisfaction
- Create a prosperous coexistence with local communities

FY2022 results

- Contributions to resolving climate change
 - JFE Steel
 - Reductions in CO₂ emissions: About 13% (comparison with FY2013)
 - JFE Engineering
 - Contribution of CO₂ emissions reductions: 11.14 million tons
 - JFE Steel
 - Recycled water resource usage: 93.2%
- Earnings capabilities
 - JFE Group revenue: 5,268.7 billion yen
 - JFE Group business profit: 235.8 billion yen
- Increase competitiveness
 - <DX>
 - JFE Steel Data scientists: 550
 - <World-class technological capabilities>
 - JFE Steel Ratio of high-value-added products: 47%
 - JFE Group Domestic patent publications: 1,037
- Dividends
 - JFE Group Dividends per share: 80 yen

* Total patents published in Japan and patents published under Patent Cooperation Treaty, designated to be transferred to Japan



Strategy to Create Value

The JFE Group is committed to ensuring both environmental and social sustainability, as well as establishing economic sustainability. This section introduces our strategies aimed at realizing further value creation based on initiatives in our Seventh Medium-term Business Plan.

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Create

サス鉄ナブル!

Sus-tetsu-nable!*

* A term unique to our Company, it combines steel and sustainability, both of which are essential to society

Steel is a material that can be reliably produced in large quantities with less environmental impact during manufacturing!

Steel is a material that can be reliably produced in large quantities at reasonable prices thanks to technological developments, and its abundance in raw form as iron ore. Furthermore, GHG emissions from the manufacture of steel are approximately one-fourth to one-fifth of the emissions from aluminum or carbon fiber production.

The amount of CO₂ emissions is overwhelmingly lower than other materials, making it an environmentally friendly option.

World's recoverable reserves of iron ore

Iron ore represents **85%** of the earth's metal resources (approximately 180 billion tons).

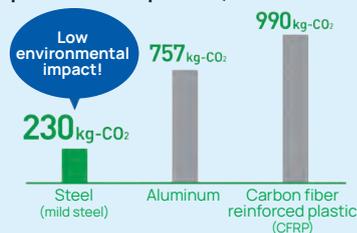


About **180 billion tons**

85%

Source: Mineral Commodity Summaries (2023)

GHG emissions during material production (per functionally equivalent component)



GHG emissions per unit of weight (CO ₂ equivalent) (kg-CO ₂ /kg)	2.3	11.3	22.0
Functionally equivalent weight (kg)	100	67	45

Source: World Auto Steel data

For more details, please see The Value of Steel ▶ P.7-8

Message from the CEO

JFE's Biggest Transformation Ever, Targeting Global Success

Through the completion of structural reforms, we will pivot from quantity to quality and consistently secure high revenue. Simultaneously, we will concentrate the collective strengths of the Group to accelerate the development of decarbonization technologies.



Koji Kakigi

Representative Director,
President and CEO
JFE Holdings, Inc.

Our Vision

The Seventh Medium-term Business Plan was formulated in 2020, a time when the global economy was crippled by the COVID-19 pandemic. In the core steel business, there was a period of uncertainty for the future as demand for steel plummeted, yet it was during this time that we thoroughly discussed and formulated this business plan. As it was unknown when the pandemic would end, we decided to extend the plan from three to four years, with consideration for our post-pandemic future. Since then, significant changes have arisen in society and the world economy, such as the surge in raw material and energy prices after Russia invaded Ukraine, and emerging economic security issues due to the U.S.-China decoupling. However, I am confident that the fundamental direction of this business plan is still on track.

JFE was established in 2002 through the merger of Nippon Kokan and Kawasaki Steel. At the time, as head

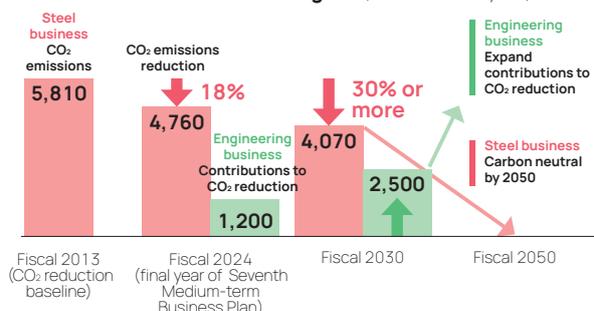
of the human resources department in the steel business company, my feelings of anxiety and elation resonated with the basic stance of the current business plan and its slogan, "JFE's biggest transformation ever, targeting global success." In implementing this plan, our mission has been to be essential to society's sustainable development and to create safe, comfortable lives for people everywhere. With this in mind, we continue to take on challenges aimed at transformation and achieving environmental and social sustainability in addition to economic sustainability. With regard to environmental and social sustainability, our top management priority is to address climate change. To this end, we have formulated the JFE Group Environmental Vision for 2050 with a focus on reducing CO₂ emissions in the steel business, contributing to reduction of CO₂ emissions across the society in technology development while viewing decarbonization as a path to business opportunities.

As for economic sustainability, although we achieved our medium-term targets in fiscal 2021, the first year of the business plan, conditions in the following year, including one-off effects such as inventory valuation differences and rapidly deteriorating economic conditions, prevented

us from reaching our goals in fiscal 2022. I will elaborate on this later, but after completing structural reforms in our core steel business as of September 2023, we are firmly committed to advancing our crucial pivot from quantity to quality and surpassing our future targets.

Despite the rapidly changing business environment, JFE remains committed to achieving sustainable growth under its corporate vision of “contributing to society with the world’s most innovative technology.”

CO₂ emissions reduction targets (10,000 tons/year)



Consolidated business profits (billion yen)



Review of Fiscal 2022 and Future Outlook

Modest Profit Despite Challenging Conditions in Second Year of Plan

In fiscal 2022, the second year of the business plan, the economy continued to recover from the COVID-19 pandemic. However, the recovery was complicated by the prolonged war in Ukraine, economic stagnation in China, rising concerns about global inflation, yen depreciation, price inflation, and supply constraints. Against this backdrop, business profit in the steel business declined due to factors such as inventory valuation differences and fluctuations in foreign currency exchange rates. Nevertheless, we made steady progress in building a robust revenue structure that is not dependent on volume and market conditions, including by raising prices to pass on the higher costs of primary raw materials and other items, making efforts to increase the sales ratio of high-value-added products, restructuring operations, and renovating blast furnaces.

Regarding price hikes, we improved our spread* by 74 billion yen compared to fiscal 2021 by actively passing on the rising costs of metals, energy, freight, etc., despite the harsh business environment characterized by a slow recovery in domestic steel demand and a slump in overseas steel prices.

* Margin after deducting costs of primary raw materials and other items from selling prices

Outlook for Fiscal 2023 and Fiscal 2024

For fiscal 2023, despite weakness in the overseas steel market, particularly in Asia, we forecast business profit to increase 54.2 billion yen thanks to the completion of structural reforms, price hikes, and the absence of one-off factors that reduced profits in the previous fiscal year. In the steel business, we expect to achieve our initial target of 10,000 yen in profit per ton of steel, excluding inventory valuation differences. Additionally, in the plan’s final year, fiscal 2024, we are targeting segment profit of at least 260 billion yen, higher than the current target of 230 billion yen. This will be possible by realizing the full benefits of restructuring, worth about 45 billion yen, as well as launching grain-oriented electrical steel sheet production lines and continuing to increase prices.

Notably, in September 2023 we successfully completed the final phase of our structural reforms to pivot from quantity to quality by suspending upstream processes at our Keihin district as planned. By reducing domestic crude steel production capacity by approximately four million tons annually (about 13% of the total), JFE Steel will cut fixed costs by 45 billion yen and accelerate adjustments to its product mix. Since the steel industry is capital intensive, there was a time when prioritizing volume was the right strategy, but going forward we will focus on increasing sales of high-value-added products for the global market. We will reduce our production of commodity products that are difficult to differentiate in terms of value, and we will significantly reduce production capacity through restructuring. At the same time, we will leverage our technological capabilities to increasingly sell high-value-added products that contribute to customer value and are highly profitable.

Message from the CEO

Specifically, JFE Steel is steadily increasing its sales ratio of high-value-added products, mainly high-tensile automotive steels, high-alloy seamless steel pipes, automotive wire rods, and high-grade shaped steel for export (shipbuilding). With additional contributions from expanded capacity for non-oriented electrical steel sheet, we are on track to achieve our medium-term target of 50% sales of high-value-added products. In terms of pricing, customers are recognizing that JFE offers value commensurate with prices. We have already exceeded our medium-term target for differences in the margins of commodity versus high-value-added products.

The supply-demand balance for electrical steel used in electric vehicle (EV) motors is likely to tighten as the movement toward vehicle electrification gains momentum worldwide. JFE Steel excels at producing high-grade electrical steel that enables EVs to travel longer distances. The company aims to expand production capacity for top-grade non-oriented electrical steel sheet threefold compared to the current level by expanding its production facilities for electrical steel at the West Japan Works (Kurashiki district) in April 2024 and 2026. The EV market offers promising growth, so JFE Steel is committed to satisfying the needs of automakers with

its world-class technological capabilities (see page 35).

In the engineering business, we aim to achieve our medium-term target for segment profit of 35 billion yen by continuing to win more orders and reliably secure earnings by focusing on countermeasures to rising material and equipment costs for existing projects. In line with our goal to become a leader in this field, we merged our domestic water engineering business with Tsukishima Aqua Solution Co., Ltd. in October 2023. As a company that supports lifestyles and society, our engineering business will also continue to strengthen its competitiveness through M&A, business alliances, etc., targeting revenue of 1 trillion yen by fiscal 2030.

In the trading business, we have consistently strengthened our earnings base, both domestically and internationally, especially in the United States, where the business environment has been favorable. Our trading business achieved record profits in both fiscal 2021 and fiscal 2022. Although a slowdown in our high-performing U.S. business is likely in fiscal 2023, we are forecasting segment profit of 48 billion yen, exceeding our initial target of 40 billion yen, and in the business plan's final year, fiscal 2024, our target is segment profit of 50 billion yen.

Progress with the Seventh Medium-term Business Plan

Striving Toward for Carbon Neutrality

In the previous fiscal year, we disclosed the roadmap for our steel business through 2050, and also announced the possibility of replacing the Kurashiki No. 1 blast furnace with a high-efficiency, large-scale electric arc furnace by around 2027–2030. Moreover, we have introduced converter furnaces in all districts for greater use of steel scrap, which will lead to a significant reduction in CO₂ emissions. In addition, we will expand the capacity of electric arc furnaces in our Sendai Works. In the engineering business, our construction and operation of renewable energy plants and recycling facilities helped Japanese society reduce CO₂ emissions by approximately 580,000 tons compared to fiscal 2021.

To further these initiatives, we decided to link non-financial indicators related to climate change to the performance-based compensation of directors.

In fiscal 2023, JFE Steel decided to introduce electric arc furnaces for stainless steel production at its Chiba facility. With assistance from the government, we are tackling a number of challenges simultaneously, including

carbon recycling blast furnaces*¹ and hydrogen steelmaking,*² including the construction of prototype facilities for each technology at Chiba.

For the time being, given our progress in developing ultra-innovative technologies while hydrogen supply remains limited, we will focus on reducing CO₂ emissions by electric arc furnaces and investing in energy conservation. To secure necessary iron resources, we are exploring participation in Emirates Steel Arkan's reduced iron*³ plant project in the United Arab Emirates (UAE), which we hope will provide a low-cost and stable supply base for reduced iron in the future.

It will be a daunting challenge to convert blast furnaces to electric arc furnaces on a large scale in Japan, China, South Korea, India, and other countries in Asia. Moreover, there are uncertainties about supply conditions for renewable energy as well as steel scrap and reduced iron, which are essential for steel production in electric arc furnaces. In addition, electric arc furnaces may not end up being the best technology for producing carbon-free steel on the path to carbon neutrality. This is why it is extremely important to rapidly develop ultra-innovative technologies, such as carbon recycling blast furnaces and hydrogen steelmaking, which may ultimately prove to offer the greatest potential for contributing to carbon neutrality.

In the first half of fiscal 2023, JFE Steel began supplying JGreeX™ green steel, which is made with considerably reduced CO₂ emissions. Tsuneishi Shipbuilding Co., Ltd. has already decided to use JGreeX™ to construct hydrogen-fueled ships, and eight Japanese shipping companies have also decided to adopt it for dry bulk carriers. With our customers having accepted a premium of about 40% for the price of JGreeX™, this is the world's first model for sharing the cost of reduced-CO₂ environmental value across entire supply chains. This business model will be crucial for our sustained growth as we seek to reduce CO₂ emissions through massive investments. We are committed to creating markets where customers recognize the value of green steel as an essential means of realizing a carbon-neutral world.

*1 Insert methane derived from CO₂ emitted from the blast furnace back into the furnace as a reducing agent

*2 Uses hydrogen instead of coal as a reducing agent

*3 High-grade iron ore from which oxygen is removed using natural gas

Commercialization of Offshore Wind Power Business

Our engineering business, aiming to develop its offshore wind power business, has started to construct Japan's first manufacturing plant for monopiles (base structures for wind turbines) in Kasaoka, targeting production from April 2024. Despite some initial setbacks, we have begun marketing large-diameter structural components (not monopiles) for the foundations of offshore wind turbines that can be produced at the Kasaoka plant. In the late 2020s, when offshore wind power construction will gain momentum, we forecast sales of around 40 billion yen as we tap demand mainly in Japan but also overseas.

As materials for the production of monopiles, we plan to produce high-quality, extra-heavy steel plate at the No. 7 continuous casting machine at our West Japan Works (Kurashiki district). These extra-heavy steel plates are even larger than conventional heavy steel plate. As wind turbines become larger to generate more electricity, our extra-heavy steel plates will help reduce production costs and improve labor efficiency by reducing the need for welding. There are only a few steelmakers in the world that can manufacture and deliver such large-size extra-heavy steel plates in sufficient quantities, and JFE Steel is one of the largest in Asia. I believe JFE Steel will be able to leverage its competitive advantages in this regard.

In the trading business, we are utilizing the expertise accumulated in our steel, raw materials, and equipment businesses to build supply chains and offer optimal solutions to customers. Moreover, we are exploring an operation & maintenance (O&M) business for offshore wind power. We anticipate that collaboration among group companies in our steel and engineering businesses will

enable us to leverage our cumulative group knowledge and expertise for the proposed O&M business (see page 59).

Advancing Our DX Strategy

The business environment surrounding JFE is changing at an unprecedented pace and scale. In order to keep pace with these changes nimbly and swiftly, we have been advancing digital transformation (DX) to enhance corporate value over the medium and long term.

In the steel business, we invested 115.0 billion yen in DX in the mid-term, and we are targeting an annual profit improvement of 30 billion yen through the introduction of cyber-physical systems (CPS) for all lines. By the end of fiscal 2022, about 45% of our planned investments had been approved, an indicator of the steady progress we are making. Looking ahead, we will continue to invest in DX initiatives, focusing on their potential to increase earnings. In the next business plan, we intend to further automate and remotely operate facilities through CPS installed on production lines. In our engineering business, we are steadily investing in DX initiatives, reinforcing digital platforms, and utilizing DX to design engineering, procurement, and construction (EPC) projects, which will help us steadily progress toward our goal of a 20% improvement in design efficiency by fiscal 2024 (see page 64).

* Obtains big data from sensors in physical space (equipment and products), analyzes it in cyberspace via various methodologies, and feeds the results back into physical space in real time

Land Reuse in the Keihin District

Since the suspension of upstream processes in September 2023, JFE has been working in earnest to reuse its 222 hectares of land in Ohgishima along the waterfront of Tokyo Bay in Kanagawa Prefecture. In response to an administrative policies on land use in the area announced by Kawasaki City in August 2023, we published our "OHGISHIMA 2050" vision, based on which we are working with government agencies to explore possible ways to reuse the land, such as for carbon-neutral energy generation in Lead area or other diverse uses (see page 39).

Progress to date includes specific projects in the Ohgimachi area and in Minami-watarida north area. Looking ahead to future development, we are considering taking gains on land sales or land leasing income, or the discussion use of public funds for land development. While leveraging the characteristics of each area, we will advance initiatives along three avenues, namely, land sales, land leasing, and business use, with the objective of maximizing corporate value.

Progress with Growth Strategies

Overseas Strategies and Solutions Business

In the steel business, JFE is targeting growth centered on quality instead of quantity through a strategic reallocation of corporate resources, with a special focus on overseas markets, especially in Asia, where demand for steel is expected to strengthen.

India, a country with prospects for rapid growth, is an extremely attractive market, including because of barriers to importing steel from China. As needs for electricity quickly expand, we are likely to see strong demand for grain-oriented electrical steel sheet used in transformers. JFE, which has long sought to localize its production and sale of grain-oriented electrical steel sheet in India, recently entered into an agreement with JSW Steel, a major steelmaker, to establish a 50:50 joint venture for the production and sale of steel sheet. By teaming up with this trusted partner with a deep understanding of local conditions, JFE Steel will combine this “insider advantage*” with advanced technological capabilities to meet growing demand in India. Once the joint venture is established, construction of a local steel plant will commence, aiming at full production from fiscal 2027. Thereafter, production capacity will be expanded as required to meet local demand for steel (see page 37).

In addition, executives from JFE and Nucor, the largest steelmaker in the United States, have been communicating closely about a new growth proposal that combines their mutual strengths. JFE already has a close relationship with Nucor through Nucor-JFE Steel Mexico (NJSM) in Mexico and in cooperation with U.S. steelmaker CSI.

In the solutions business, a promising new business model, revenue is expected to triple from fiscal 2020 to fiscal 2024, including expanding by more than 150% in fiscal 2022 and at least 200% (target) in fiscal 2023. In the longer term, we expect to commercialize promising products developed with advanced technologies centered on CPS and safety.

In the engineering business, we are developing overseas markets, mainly in Asia, a key region. In the environmental field, we aim to expand earnings by advancing into facility operations for public-private, power generation, electricity, and recycling projects, in addition to reinforcing the competitiveness of existing projects through our engineering bases in India, the Philippines, and elsewhere in Asia. In the field of core infrastructure, JFE is keen to increase orders for chemical plants by leveraging synergies with JFE Project One Co., which

became a subsidiary via M&A. For bridges and other steel structures, we expect to win projects not only in Asia but also in fast-growing Africa.

In the trading business, fiscal 2022 saw us expand various plants and processing facilities, such as press machines, at our processing bases in Japan, China, and Canada, aiming to meet envisioned growth in demand for electrical steel. Our trading business is building out its global processing and distribution structure with the intention of becoming a world leader in this field. In the building materials field, we acquired a U.S. manufacturer and distributor of steel sheet building materials to secure related demand for steel sheet in the expanding North American market. We will continue to pursue such growth strategies and strengthen our supply chain through Group collaboration in order to increase JFE's market presence and earnings.

* “Insider advantage” means to invest in leading, locally trusted partners in overseas markets, and process and sell locally produced steel in local markets

Human Resources Management

We have formulated the JFE Group's Basic Policy on Human Resource Management and the JFE Group Health Declaration to guide our efforts in drawing out the best in employees by investing in our human resources.

Amid a rapidly changing business environment, we are combining various value systems and ways of thinking to develop new ideas and methods for personnel management that can be translated into increased corporate value. JFE values diversity and inclusion and strives to create work environments where people of diverse backgrounds, including gender, nationality, value systems, and lifestyles, can maximize their abilities. To further empower women, based on input from the Board of Directors we decided to set ambitious key performance indicators (KPIs) for women in managerial positions and female hiring ratios in fiscal 2022. Each operating company sets and enacts policies for diversity and inclusion based on discussions with management. We are implementing a variety of measures to recruit more female candidates for managerial positions, retain personnel by expanding internal and external networking opportunities and providing role models, and place and develop female employees through individual training initiatives.

In addition, to enable our diverse employees to realize their capabilities and potential, we are working to create internal environments in which employees can feel a sense of job satisfaction. JFE Holdings and its operating companies each conduct an annual engagement survey to gauge employee awareness, identify issues related to job satisfaction, and consider any necessary remedial measures.

Maintaining safe work environments and preventing occupational injuries are essential to ensuring that our employees can work with confidence. Starting with the basic principle of putting safety first, JFE sets safety-related KPIs and implements measures to ensure safety. The current business plan includes priority investments in safety measures worth around 10 billion yen per year

Groupwide, striving to adopt the latest technologies and continue with ongoing safety activities to prevent equipment and other work-related injuries. Also, to minimize occupational injuries in fiscal 2022, JFE introduced a safety-related metric linked to the performance-based compensation of directors.

Capital Market's Evaluation of JFE

JFE Holdings' share price is one of the Company's key management indicators, based on which the current business plan targets a return on equity (ROE) of at least 10% above the cost of shareholders' equity. While the Company believes this target is achievable by fiscal 2024, so far capital markets have a different view of our ability to achieve this target.

It seems the market is not convinced that JFE can reliably maintain its ROE above the cost of shareholders' equity going forward, due to factors such as earnings volatility in the steel business, increasing uncertainty related to Japan's declining birthrate, and the global need to decarbonize.

It is imperative that we clearly convey to the public that we have transformed JFE's structure to generate stable, high-level earnings by shifting from quantity to

quality under our current business plan. Moreover, we will advance our overseas strategy as a source of growth and formulate business models that enable us to grow and generate profits overseas, particularly the expanding markets of India and North America. However, since it will take time to develop ultra-innovative technologies for decarbonization, we will strive to disclose information in a detailed and easy-to-understand manner, including our progress in developing such technologies and their expected impact on society.

There is no doubt that steel, which is produced about 1.9 billion tons a year worldwide, is an essential material for the development of the global economy and human society. As a company that provides products and services centered on steel, we are keenly aware of the need to quickly develop technologies necessary for decarbonization in an economically sustainable manner. JFE, aiming to turn this challenge into an opportunity, will mobilize its collective capabilities to rapidly develop decarbonization technologies.

In Conclusion

In 2022, JFE Holdings celebrated the 20th anniversary of the merger of Nippon Kokan and Kawasaki Steel. With this milestone in mind, at the end of 2022 we launched an ad campaign in Japan with the tagline "Sus-tetsunable,"* which embodies our ambition to be an irreplaceable presence on the path to a sustainable world. The initiative is aimed at not only raising awareness of JFE among as many people as possible but also attracting more talented people to work with us and help JFE grow. Through this campaign, we hope to convey to employees who will carry us into the future, as well as to students who may join us in the future, that we offer them almost limitless opportunities to contribute to the world through

our work with steel. Young employees who have seen the commercials have responded positively, saying that it reinforces their understanding of how important their work is from a societal perspective. Going forward, with the goal of being an irreplaceable presence on the path to a sustainable world, we are committed to working with our employees to enhance our corporate value and communicate our vision of where we are going and how we will get there. I thank you for your understanding and support as the JFE Group continues onward.

* A term unique to our Company, it combines steel and sustainability, both of which are essential to society

Koji Kakigi

Representative Director,
President and CEO

Market Trends and Business Risks and Opportunities



Steel Business and Trading Business

Global demand for steel is likely to steadily increase over the long term amid economic growth in emerging countries, centered on Asia. Over the long term, we believe steel will retain its advantages over other materials, such as its overwhelming scale of production capacity, high economic viability, low environmental burden, and high processability.

With a falling birthrate and aging population shrinking the market in Japan, and depending on global economic conditions, demand for steel in Japan and other countries could have an impact on the JFE Group's steel sales volume and prices. In overseas markets, competition could intensify as a result of structural changes, such as higher exports from China as domestic demand weakens, and expansion in steel production capacity in emerging countries.

In response to such changes in the external environment, JFE is taking the following measures.

Steel business

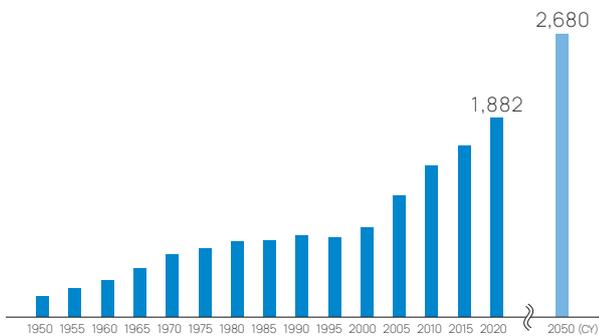
- 1) Optimize production volume in tandem with changes in supply-demand balance for steel in Japan and overseas
- 2) Build an optimal production structure by retiring and consolidating facilities
- 3) Enhance cost competitiveness through strategic investments
- 4) Increase sales ratio of technologically advanced products
- 5) Produce steel locally by investing in overseas steelmakers and a vertically integrated structure overseas

Trading business

- 1) Strengthen sales capabilities in Japan through a restructuring of distribution functions, upgrade processing equipment
- 2) Strengthen processing and distribution functions in our four-pronged global structure
- 3) Increase sales of JFE Steel's products in high-value-added fields
- 4) Use JFE Group materials (including alliance partners) and products of other suppliers overseas

Global crude steel output

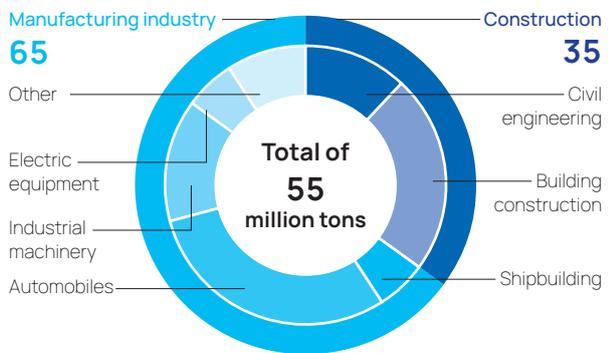
(million tons)



Source: World Steel Association (actual), Japan Iron and Steel Federation (estimates)

Consumption of steel in Japan

(%)



Engineering Business

Public works infrastructure accounts for a majority of the engineering business portfolio, and in recent years domestic demand has been brisk for the upgrading of environmental plants, bridges, and other core infrastructure. There is considerable potential demand for moving public services from the government to the private sector, owing to aging lifestyle infrastructure, worker shortages, and insufficient financial resources in Japan. We are expanding the O&M business by establishing new regional power utilities in collaboration with local governments, which we have been doing for a while, and we also established an integrated utility company for gas, water, and wastewater services.

Regarding private-sector demand, initiatives are gaining momentum to reduce GHG emissions after the national government declared its goal of becoming carbon neutral by 2050. In

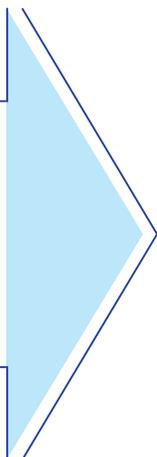
light of changes in society, we are constructing a new factory to manufacture foundational structures attached to the seabed (monopiles) for offshore wind power generation, and aim to commence production in April 2024. We are also proactively developing CO₂ and ammonia transportation and storage technologies. To address the needs of companies for recycling, we are participating in the PET bottle recycling business and expanding bases in the food recycling business.

The JFE Group aims to forge a corporate structure where earnings are less affected by whether orders are received for public works projects that depend on the aims and policies of the national and local governments. We aim to build a stable business foundation while addressing the changing needs of society, such as by expanding our O&M business, which includes the recycling business.



Major Risks and Opportunities for the JFE Group

Major changes in external environment	Risks	Opportunities
<p>Climate change problem</p> <p>▶ Helping to Resolve Issues Related to Climate Change P.57</p>	<ul style="list-style-type: none"> • Sharply growing needs for decarbonization of (blast furnace) steelmaking process • Higher burden of investments to introduce ultra-innovative technologies • Carbon tax • Disruptions to supply chains from natural disasters • Risk of flooding of bases due to rising sea level • Competition from other materials • Tougher environmental regulations 	<ul style="list-style-type: none"> • Development of ultra-innovative technologies and securing of competitive advantages • Contribution to reduction of CO₂ emissions by supplying high-performance steel, such as high-tensile steel and electrical steel • Expansion of electric arc furnace steelmaking and electric arc furnace engineering business • Stronger demand for renewable energy solutions • Stronger response to disasters caused by climate change
<p>Resource and energy problems</p> <p>▶ Business Strategies P.47</p>	<ul style="list-style-type: none"> • Depletion of resources, harder to obtain raw materials and equipment, rising prices • Higher prices for scrap waste, harder to obtain materials, lower grade ores • Risk of depletion of water resources, risk of pollution at drainage sites 	<ul style="list-style-type: none"> • Renewed attention on recyclability of steel • Expansion of logistics business and opportunities to use scrap • Stronger waste-to-resource demand (plastic recycling, power generation with food waste)
<p>Falling birthrate and aging population in Japan</p> <p>▶ Promotion of DX P.64</p> <p>▶ Securing and Training Diverse Talent P.65</p>	<ul style="list-style-type: none"> • Labor shortage • Disruptions of skill transfer to next generation • Weaker domestic demand for steel • Decrease in EPC orders and projects due to shrinking private-sector investment 	<ul style="list-style-type: none"> • Secure talented personnel with work-style reforms • Introduce new technologies to reduce personnel and save labor (stronger needs for automation, remote monitoring)
<p>Globalization of markets, development of emerging countries</p> <p>▶ Business Strategies P.47</p>	<ul style="list-style-type: none"> • Expansion of steel production capacity in emerging countries • Constraints on export transactions due to higher duties and import restrictions • Country risk, impact from higher commodity prices and foreign exchange fluctuations 	<ul style="list-style-type: none"> • Increase in demand for steel in growth markets • Greater use of high-value-added products • Increase in infrastructure projects in emerging countries
<p>Aging of infrastructure facilities</p> <p>▶ Business Strategies P.47</p>	<ul style="list-style-type: none"> • Impact from accidents and larger damage from natural disasters due to aging infrastructure • Contraction in domestic public utilities business from transition to preventive maintenance 	<ul style="list-style-type: none"> • Stronger demand for infrastructure renewal, including reinforcement against natural disasters • Provision of high-quality products and services to meet demand for longer-living infrastructure • Business expansion from privatization of public services
<p>Development of AI and IoT technologies</p> <p>▶ Promotion of DX P.64</p>	<ul style="list-style-type: none"> • Information leaks and system damage due to cyberattacks and illicit use of systems 	<ul style="list-style-type: none"> • Creation of new value added and expansion of service offerings with DX and AI



Material Issues of Corporate Management

Material Issues of Corporate Management (Materiality)

The JFE Group has identified material issues and set KPIs to address these issues with the objective of maximizing the creation of social value and minimizing its negative impact on society as Group capital is deployed to satisfy the needs of diverse stakeholders. In fiscal 2016, we identified our material CSR issues. In fiscal 2021, based on the Seventh Medium-term

Business Plan, we embarked on a new initiative and identified material issues in corporate management by adding economic issues to our existing CSR issues. We will demonstrate the Group's vision of "contributing to society with the world's most innovative technology" by working to address these issues.

Process for identifying material issues

FY2016: Identifying material CSR issues

- Discuss issues at Groupwide meetings
- Prioritize issues based on stakeholder expectations and business relevance (impact on society)

FY2021: Identifying material issues of corporate management

STEP 1 Reevalue existing material CSR issues

The material CSR issues were reassessed for their importance in terms of relating to current operations, stakeholder expectations, and achievement of KPIs.

STEP 2 Set material economic issues

Identify issues from an economic viewpoint based on sources of competitive advantages in the Seventh Medium-term Business Plan and the JFE Group's business model.

STEP 3 Select 20 material issue candidates

Economic-related issues were added to the list of reassessed material CSR issues and deliberated by the Group Management Strategy Committee, screening out 20 material issue candidates.

STEP 4 Identify the 13 most important material issues

The Group Management Strategy Committee and the Board of Directors discussed the candidates, and identified 13 material issues as the most important for the JFE Group

The JFE Group has set and worked toward achieving KPIs for the identified material issues. In fiscal 2022, we evaluated the results in the previous fiscal year, revised KPIs based on these results and the opinions of stakeholders, and undertook fresh initiatives to address issues. The fiscal 2022 KPIs

for material issues of corporate management were deliberated and evaluated, and fiscal 2023 KPIs were set following examination by operating companies, discussion at management meetings, and deliberations by the Group Management Strategy Committee and the Board of Directors.

Sustainability Initiatives and Promotion Structure

The JFE Group, aware of its responsibility as a corporation and member of society, believes that striving for sustainability to build a better society is a central tenant of its management principles. Chaired by the president of JFE Holdings, the JFE Group Sustainability Council has been established as an organization for supervising and guiding Groupwide sustainability initiatives. Various committees are set up under the JFE Group Sustainability Council to deliberate Group policy; assess the state of policies, share information about issues, problems that arose; and examples of how they were addressed; supervising and guiding the Group's sustainability initiatives. Moreover, 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 are periodically reported to and deliberated by the Board of Directors, which gives directions and supervision. Each operating company sets up their own councils to coordinate with the JFE Group Sustainability Council, working together Groupwide to improve and prevent deterioration in the JFE Group's corporate value.

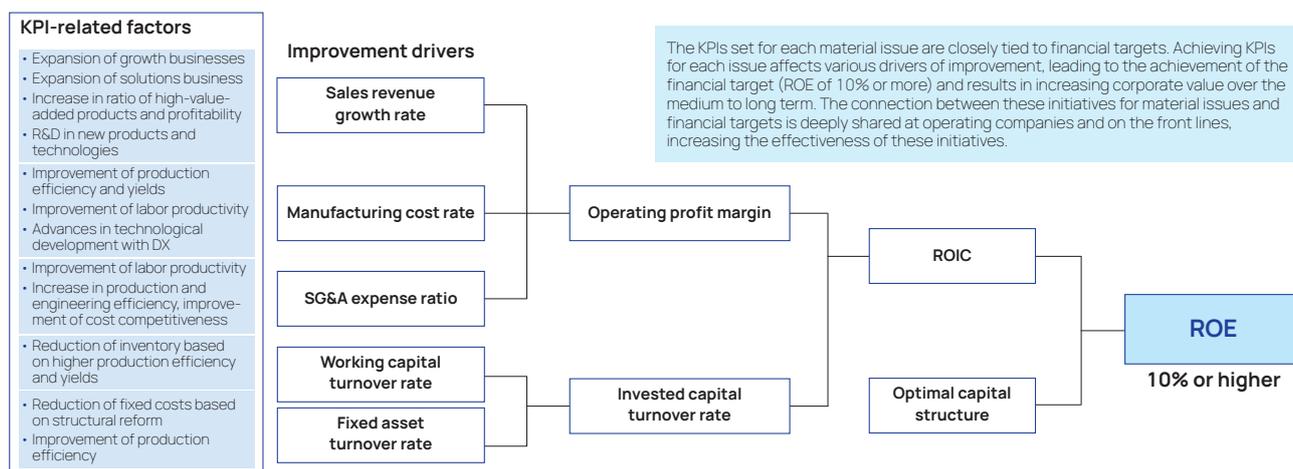
Sustainability promotion structure



	Areas of Focus	Details	Material Issues	Relevant SDGs
Activity	Contribute to resolving climate change issues (initiatives for achieving carbon neutrality by 2050) → P.57	<ul style="list-style-type: none"> ● Initiatives for achieving carbon neutrality by 2050 ● Reduce the JFE Group's CO₂ emissions ● Contribute to reduction of CO₂ emissions in society 	<ul style="list-style-type: none"> ● Reduce the JFE Group's CO₂ emissions ● Contribute to reduction of CO₂ emissions across the society 	
	Ensure occupational safety and health → P.87	<ul style="list-style-type: none"> ● Prioritize safety first ● Maintain the physical and mental health of employees and their families 	<ul style="list-style-type: none"> ● Prevent workplace accidents ● Ensure the health of employees and their families 	
	Recruit and nurture diverse human resources → P.65	<ul style="list-style-type: none"> ● Maintain work environments where all personnel can maximize their abilities ● Accumulate and hand down technologies and skills 	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● 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 	<ul style="list-style-type: none"> ● 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)	<ul style="list-style-type: none"> ● 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 	<ul style="list-style-type: none"> ● 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		<ul style="list-style-type: none"> ● Ensure adherence to corporate ethical standards and compliance 	
	Respect human rights → P.89		<ul style="list-style-type: none"> ● Respect human rights across the supply chain 	

▶ Please see page 27 for KPIs for each priority issue.

Improvement in ROE by achieving KPIs



Material Issues of Corporate Management and KPIs

The JFE Group has set key performance indicators (KPIs) for its initiatives to address priority issues, and worked toward achieving its targets. In fiscal 2021, the Company revised its material CSR issues, adding material economic issues to the list, and defined key issues for management. As a unified Group, we aim to contribute to the realization of sustainable growth for both the JFE Group and society as a whole by tackling these key issues for management.

Areas of Focus	Material Issues	Operating Company	FY2022 KPIs	
Activity	Contribute to resolving climate change issues (initiatives for achieving carbon neutrality by 2050)	Reduce the JFE Group's CO ₂ emissions	JFE Steel	<ul style="list-style-type: none"> Achieve 50% of the CO₂ reduction target from energy conservation and technological development for the target of reducing CO₂ emissions by 18% from FY2013 levels by the end of FY2024 Complete the approval of investment plans for reducing CO₂ emissions by 90% cumulatively for CO₂ reduction targets from energy conservation and technological development for the target of reducing CO₂ emissions by 18% from FY2013 levels by the end of FY2024 Formulate a CO₂ reduction plan aimed at realizing the CO₂ reduction target for FY2030 (30% or more) with an eye on achieving carbon neutrality by 2050
			JFE Engineering	<ul style="list-style-type: none"> Reduce CO₂ emissions in its own plants and offices FY2024: 40% reduction from FY2013 levels
			JFE Shoji	<ul style="list-style-type: none"> Reduce CO₂ emissions through the procurement of electricity derived from renewable energy FY2022 domestic CO₂ emissions: Reduce by 10% from FY2019 levels (Reduce by 5% per year from FY2019 levels from FY2021 to FY2024)
		Contribute to reduction of CO ₂ across the society	JFE Steel	<ul style="list-style-type: none"> Launch sales and implement eco-friendly products and technologies*: 15 or more cases in FY2022 (the cumulative total of 60 or more cases for the period from FY2021 to FY2024) * Products and technologies that contribute to saving energy and resources, reduce waste and environmentally hazardous substances, and do not require hazardous substances for manufacturing or use.
			JFE Engineering	<ul style="list-style-type: none"> Contribute to reduction of CO₂ in society by providing renewable energy power generation facilities and expanding the basis of the recycling business (for plastic, food, etc.) Contribute to reduction in CO₂ emissions (FY2022): 1.1 million tons per year
			JFE Shoji	<ol style="list-style-type: none"> Global resource recycling of steel scrap FY2022 scrap transactions: Above the transaction quantity for FY2020 (FY2024 target: +5% from FY2020) Increase transaction quantity of fuel for biomass power generation plants and create framework for reliable supply of fuel <ul style="list-style-type: none"> FY2022 biomass fuel (palm kernel shells and wood pellets) transactions: Above the transaction quantity for FY2020 (FY2024 target: 100% increase from FY2020) Diversify supply sources to ensure stable supply
	Ensure occupational safety and health	Prevent workplace accidents	Groupwide	<ul style="list-style-type: none"> Workplace fatalities: Zero occurrences Lost-workday injuries rate <ul style="list-style-type: none"> 0.10 or less 0.25 or less 0.45 or less
			JFE Steel	[Key measures] (1) Enhance safety Install electromagnetic locks at the secondary mill entrances: 60% by FY2022, 100% by FY2024 (2) Restructure the safety and health management system ISO 45001 certification in all districts: 100% by FY2022
			JFE Engineering	[Key measures] (1) Implement 100% of the following key points for eliminating falling and tumbling, getting wedged between or caught in machinery, and being struck by flying or falling objects <ul style="list-style-type: none"> Pre-operation checks (curing openings in high locations and edges of work floor, ensuring on-site understanding of work plans, and covering and enclosing/turning off of machinery) Strict adherence during operations (use of safety belts, no entry measures/allocation of worksite guides) (2) Multifaceted management of occupational safety and health using IT <ul style="list-style-type: none"> Complete development of an AI-based system for detecting intruders (plan)
		JFE Shoji	[Key measures] (1) Installation of safety fences, covers, etc. (100% of plan) (2) 100% implementation of crane operation drills (once a year or more at each company)	
		Ensure the health of employees and their families	Groupwide	1. Provision rates of healthcare guidance <ul style="list-style-type: none"> 60% (2023 target)
				2. Reduce rates of smokers (ensure employee health and prevent exposure to passive smoke) <ul style="list-style-type: none"> 1.5% reduction per year (total for operating companies)
Recruit and nurture diverse human resources	Pursue diversity and inclusion	Groupwide	<ol style="list-style-type: none"> Rates for female recruits <ul style="list-style-type: none"> Career-track (white-collar position): Degree of gender parity Career-track (technical position): 10% or more On-site position: 10% or more Career-track (white-collar position): Degree of gender parity Career-track (technical position): 15% or more Production/construction position: 10% or more (four-year average) Career-track position: Degree of gender parity Women in managerial positions <ul style="list-style-type: none"> 10% or more in the position qualified as section manager or above. Of whom, 20% or more to be in management and sales departments (FY2030 target) Rate of male employees taking childcare leave or time off related to child rearing <ul style="list-style-type: none"> Aim for all male employees whose spouses have given birth to take such leave or time off 	
			Strengthen human resources development	<ul style="list-style-type: none"> Training hours per person <ul style="list-style-type: none"> 40 hours or more per year 20 hours or more per year 20 hours or more per year
				Create workplaces that motivate employees

■ Groupwide ■ JFE Steel ■ JFE Engineering ■ JFE Shoji

Evaluation criteria

Target attributes		○	△	×
Quantitative	Set for each fiscal year	Accomplished 100% or better	Accomplished 80%–99%	Accomplished 79% or less
	Set medium- to long-terms (in case of setting a multi-year target)	Final target accomplished 100% or better	Final target partly accomplished with some results (80% or better with linear interpolation).	Working toward the goal but no results yet (79% or less with linear interpolation).
Qualitative		Fully accomplished with significant results.	Partly accomplished with some results.	Working toward the goal but no results yet.

*1 In Groupwide evaluations, the lowest result among the companies is taken as the overall result.

*2 Prevention of occupational injuries evaluated as Groupwide (safety performance)

Initiatives and Results for FY2022		Assessment	FY2023 KPIs
<ul style="list-style-type: none"> CO₂ reduction target: 58% achieved 	○	<ul style="list-style-type: none"> Achieve 75% of the CO₂ reduction target from energy conservation and technological development for the target of reducing CO₂ emissions by 18% from FY2013 levels by the end of FY2024 	
<ul style="list-style-type: none"> Total investment budget: 88% approved 	△	<ul style="list-style-type: none"> Complete the approval of capital investment plans for reducing CO₂ emissions by 100% cumulatively for CO₂ reduction targets from energy conservation and technological development for the target of reducing CO₂ emissions by 18% from FY2013 levels by the end of FY2024 Obtain third-party certification, and build a green steel supply structure in the first half of FY2023 	
<ul style="list-style-type: none"> CO₂ reduction target: Set multiple targets that anticipate future changes in the environment 	○	<ul style="list-style-type: none"> Reduce CO₂ emissions in its own plants and offices FY2023: 40% reduction from FY2013 levels Reduce CO₂ emissions through the procurement of electricity derived from renewable energy FY2023 domestic CO₂ emissions: Reduce by 15% from FY2019 levels (Reduce by 5% per year from FY2019 levels from FY2021 to FY2024) 	
<ul style="list-style-type: none"> 48% reduction from FY2013 levels (FY2013: 15,600 tons, FY2022: 8,100 tons) 	○	<ul style="list-style-type: none"> Launch sales and implement eco-friendly products and technologies*: 15 or more cases in FY2022 (the cumulative total of 60 or more cases for the period from FY2022 to FY2024) *Products and technologies that contribute to saving energy and resources, reduce waste and environmentally hazardous substances, and do not require hazardous substances for manufacturing or use. 	
<ul style="list-style-type: none"> 11.2% reduction from FY2019 levels 	○	<ul style="list-style-type: none"> Contribute to reduction of CO₂ in society by providing renewable energy power generation facilities and expanding the basis of the recycling business (for plastic, food, etc.) Contribute to reduction in CO₂ emissions (FY2023): 11.5 million tons per year 	
<ul style="list-style-type: none"> FY2022: 16 (eco-friendly products: 7, technologies: 9) (FY2021–FY2024: 32) 	○	<ul style="list-style-type: none"> 1. Global resource recycling of steel scrap FY2023 scrap transactions: Above the transaction quantity for FY2020 (FY2024 target: +5% from FY2020) 2. Increase transaction quantity of fuel for biomass power generation plants and create framework for reliable supply of fuel FY2023 biomass fuel (palm kernel shells and wood pellets) transactions: Above the transaction quantity for FY2020 (FY2024 target: 100% increase from FY2020) Diversify supply sources to ensure stable supply 	
<ul style="list-style-type: none"> CO₂ reduction contribution (FY2022): 11.14 million tons/year 	○	<ul style="list-style-type: none"> Workplace fatalities: Zero occurrences Lost-workday injuries rate ■ 0.10 or less ■ 0.25 or less ■ 0.45 or less 	
<ul style="list-style-type: none"> 14% reduction from FY2020 levels Domestic volume expanded to meet increasing electric arc furnace demand, but sales volume declined as overseas demand weakened 	×	<ul style="list-style-type: none"> [Key measures] (1) Reinforce activities to prevent similar injuries Horizontal Companywide deployment of measures, including for close calls, promote workplace activities so employees view past incidents as lessons to learn from (2) Enhance safety Install electromagnetic locks at the secondary mill entrances: 90% by FY2023, 100% by FY2024 	
<ul style="list-style-type: none"> Volume handled: +25% compared with FY2020 levels Diversify supply sources: Started transactions with three new suppliers 	○	<ul style="list-style-type: none"> [Key measures] (1) Implement 100% of the following key measures to prevent injuries with decisive work plans and proper work instructions in order to eliminate serious injuries <ul style="list-style-type: none"> Pre-operation checks (curing openings in high locations and edges of work floor, ensuring on-site understanding of work plans, and covering and enclosing/turning off of machinery) Strict adherence during operations (use of safety belts, no entry measures/allocation of worksite guides) (2) Multifaceted management of occupational safety and health using IT <ul style="list-style-type: none"> Monitor worksites, use information communications systems Use safety management operations support system 	
<ul style="list-style-type: none"> Workplace fatalities: 1 occurrence Lost-workday injuries rate ■ 0.18 ■ 0.26 ■ 0.25 	×	<ul style="list-style-type: none"> [Key measures] (1) 100% implementation of crane operation drills (once a year or more at each company) (2) Review of past incidents at the Company Finish formulating and executing measures for alternative proposals to address past incidents identified as requiring review 	
<ul style="list-style-type: none"> 72.2% 39.4% 52.1% *FY2021 results 	×	<ul style="list-style-type: none"> 1. Provision rates of healthcare guidance ■ 60% (2023 target) 	
<ul style="list-style-type: none"> 0.7% reduction per year (total for operating companies) 	×	<ul style="list-style-type: none"> 2. Reduce rates of smokers (ensure employee health and prevent exposure to passive smoke) ■ 1.5% reduction per year (total for operating companies) 	
<ul style="list-style-type: none"> Rates for female recruits Career-track (white-collar position): 24% Career-track (technical position): 6% On-site position: 6% Career-track (white-collar position): 4.7% Career-track (technical position): 1.8% Production/construction position: 4% (four-year average) Career-track position: 4.2% (2) Women in managerial positions 3.3% in the position qualified as section manager or above. Of whom, 6.1% in management and sales departments (total for operating companies) 	×	<ul style="list-style-type: none"> 1. Rates for female recruits <ul style="list-style-type: none"> Career-track (white-collar position): Degree of gender parity Career-track (technical position): 10% or more On-site position: 10% or more Career-track (white-collar position): Degree of gender parity Technical (Career-track, Production/construction position): 15% or more White-collar position: Degree of gender parity 2. Women in managerial positions 10% or more in the position qualified as section manager or above. Of whom, 20% or more to be in management and sales departments (FY2030 target) 3. Rate of male employees taking childcare leave or time off related to child rearing Aim for all male employees whose spouses have given birth to take such leave or time off 	
<ul style="list-style-type: none"> 93% (total for operating companies) 	△		
<ul style="list-style-type: none"> Training hours per person 45.2 hours per year 20.9 hours per year 20.1 hours per year 	○	<ul style="list-style-type: none"> Training hours per person <ul style="list-style-type: none"> 40 hours or more per year 20 hours or more per year 20 hours or more per year Train DX personnel <ul style="list-style-type: none"> Number of internal data scientist trainees: Total of 600 as of the end of FY2023 Number of employees who took internal data scientist training: Total of 170 as of the end of FY2023 	
<ul style="list-style-type: none"> Annual leave acquisition rate: 82% (total for operating companies) 	○	<ul style="list-style-type: none"> 1. Annual leave acquisition rate of 75% or more (total for operating companies) 	
<ul style="list-style-type: none"> Affirmative response to questions about motivation 72% 79% 78% 	△	<ul style="list-style-type: none"> 2. Engagement survey <ul style="list-style-type: none"> Affirmative response to questions about motivation: At least 75% 	

Material Issues of Corporate Management and KPIs

Areas of Focus	Material Issues	Operating Company	FY2022 KPIs	
Activity	Reinforce resilience of production and engineering capabilities (realize world-class earnings power through DX and other measures)	JFE Steel	1. Improve labor productivity Toward improving labor productivity by 20% by the end of FY2024 • Steadily implement FY2022 milestones for improving labor productivity and enhance the accuracy of plans for FY2023 and FY2024 • Approve and implement FY2022 investments for improving labor productivity, such as automation and remote operation • Steadily consolidate the steel sheet manufacturing line for cans in Chiba 2. Improve yields with DS* activities Achieve stable quality and enhance yields through measures including introduction of quality prediction technology based on integrated data encompassing the entire process from steelmaking to final processing using DS Improve yields by 1.0% in FY2022 from FY2020 levels to achieve 2.0% by FY2024 (based on figures after adjustments to the sales mix) * Data science	
		JFE Engineering	• Increase the efficiency of engineering operations by introducing DX technologies Engineers for big data analysis utilizing Pla'cello*: 1,800 * Pla'cello: Proprietary data analysis platform using AI	
		JFE Steel	1. Ensure quality • Continue implementing activities for raising awareness of quality compliance for the Company and Group companies in accordance with the Japan Iron and Steel Federation's guidelines for strengthening the quality assurance system • Establish automated technology for testing and inspections (impact test fracture rate, hole expansion, etc.) other than the four priority items (tensile test, molten steel analysis, thickness measurement for hot and cold rolled steel sheets, and coating weight measurement) to improve the level of quality assurance and product testing 2. Strengthen the manufacturing infrastructures using DX Achieve CPS* installation rate of 36% or more on a companywide basis in FY2022 to implement CPS in all production processes by the end of FY2024. * CPS: Cyber-Physical System	
		JFE Engineering	1. Secure a stable number of certificated managing engineers 2. No major quality problems	
	Strengthen competitiveness of products and services (promote the growth strategy by providing high-value-added solutions)	Expand business by increasing value added in products and services with advanced technologies	JFE Steel	1. Pursue strategic research and development focusing on priority development fields* Develop new products and technologies FY2022: 20 or more cases (80 or more cases in total from FY2021 to FY2024) * Automobiles, energy, infrastructure construction materials, DX technology, and green transformation (GX) technology 2. Increase sales ratio of high-value-added products* to 50% by FY2024 (Sell 10.9 million tons of these products, or 50% of total sales volume, excluding semi-finished products, in FY2024) Sales of high-value-added products: 10.3 million tons (sales ratio of 4.7%) (up 2.5 million tons from FY2020) * Products that offer technological advantages and are recognized by customers for their added value while having greater earnings power than commodity products. 3. As a step toward triple earnings in the solution business by FY2024 from the FY2020 level • Continuing from FY2021, focus efforts on activities for receiving orders for the new solutions model; In particular, along with concluding a contract for the first project providing DS utilization technologies via the cloud, build a platform that provides services on a subscription basis • In the existing solutions business, expand product offerings and develop new customers while increasing revenue in FY2022 by 50% from FY2020 levels by steadily executing projects
			JFE Engineering	• Develop technologies in four priority fields of waste to resources, carbon neutrality, combined utility services, and DX, and 65% or more of R&D expenses on these four fields • Number of patent applications: 80 or more per year
			JFE Steel	• Expand the earnings difference between high-value-added products (A-rank products) and commodity products to 4,000 yen per tons by FY2024 (revise evaluation method eliminating the impact of market fluctuations and product mix differences) <FY2022 KPI> Aim for 50% of target
		Sales strategies for realizing sustainable growth	JFE Engineering	Expand the stable earnings base Expand the operating businesses • Sales: 255 billion yen • Expand bases: 3 or more bases Recycling business (food, plastics, electronic appliances, etc.), regional electricity retail new power business, waste processing business, and water and sewage operations business
			JFE Shoji	• Increase competitiveness of products and services by improving value added in supply chain management through business expansion Make investments to improve value added in supply chain: 5 or more per year
Basis of Activity	Thoroughly enforce compliance	Groupwide	1. Steady execution of training to foster and maintain a sense of compliance (100% attendance from the target audience) 2. Improve employee awareness of ethics reflected in the Corporate Ethics Awareness Survey (100% attendance from the target audience)	
	Respect human rights		1. 100% attendance from the target audience for human rights awareness training 2. Implement human rights due diligence	

Initiatives and Results for FY2022	Assessment	FY2023 KPIs															
<ul style="list-style-type: none"> Set milestones and number of personnel for each fiscal year Implementing measures to improve labor productivity by 20% (48% progress toward 50% target with linear interpolation) Approved 4.8 billion yen for 38 projects as planned for investments to improve labor productivity through automation and remote operations in FY2022 Relocated facilities as planned in line with stoppage of can steel sheet manufacturing line at Chiba in September 2022 	<p>△</p> <p>○</p> <p>○</p>	<p>1. Improvement in labor productivity Toward improving labor productivity by 20% by the end of FY2024</p> <ul style="list-style-type: none"> Steadily implement FY2024 milestones each fiscal year for improving labor productivity by 20% Approve and implement FY2023 investments for improving labor productivity, such as automation and remote operation Steadily relocate facilities in accordance with structural reforms in Keihin 															
<p>Improve yields with DS activities FY2022 yield: 86.5% (up 0.4 point from FY2020)</p>	<p>×</p>	<p>2. Improve yields through DS activities Stabilize production with DS, improve yields through application of quality prediction</p> <p>Improve yields by 1.5% in FY2023 from FY2020 levels to achieve 2.0% by FY2024 (based on figures after adjustments to the sales mix)</p>															
<ul style="list-style-type: none"> About 1,950 employees (FY2021: About 1,500 employees) 	<p>○</p>	<ul style="list-style-type: none"> Increase the efficiency of engineering operations by introducing DX technologies Engineers for big data analysis utilizing Pla'cello*: 2,200 * Pla'cello: Proprietary data analysis platform using AI 															
<ul style="list-style-type: none"> Took steps as planned to improve awareness of quality and compliance among JFE and Group company employees Finished automation of four priority items in FY2021 In testing and inspections of areas other than four priority items, successfully measured impact test fracture rate in FY2022 	<p>○</p>	<p>1. Ensure quality</p> <ul style="list-style-type: none"> Continue implementing activities for raising awareness of quality compliance for the Company and Group companies in accordance with the Japan Iron and Steel Federation's guidelines for strengthening the quality assurance system Promote automated transmission of tensile test results at Group companies Targeting six companies: 67% introduction ratio in FY2023 (100% in FY2025) 															
<ul style="list-style-type: none"> Companywide CPS installation rate: 35% 	<p>△</p>	<p>2. Strengthen the manufacturing infrastructures using DX Achieve CPS installation rate of 60% or more on a companywide basis in FY2023 to implement CPS in all production processes</p>															
<p>(1) Reliably secured certificated managing engineers amid high level of sales</p>	<p>○</p>	<p>1. Secure a stable number of certificated managing engineers</p>															
<p>(2) Major quality problems: One incident</p>	<p>×</p>	<p>2. No major quality problems</p>															
<p>(1) Made necessary investments during the fiscal year to ensure reliable supply of products [Investment amount (approved amount)]</p> <ul style="list-style-type: none"> Reinforcement: 11.3 billion yen Renewal and safety: 3.1 billion yen Systems: 1.6 billion yen Total: 16.0 billion yen 	<p>○</p>	<p>1. Make consistent investment in processing and distribution operations</p>															
<p>Conducted 36 quality audits (100% audit completion rate) 18 domestic Group companies (zero remote audits) 18 overseas Group companies (five remote audits)</p>	<p>○</p>	<p>2. Conduct quality audits at Group companies Continue conducting quality audits at 36 Group manufacturing affiliate companies in Japan (same as the FY2022 level) and overseas (audit completed: 100%)</p>															
<p>FY2022: 22 cases (10 new products, 12 new technologies) (Total for FY2021 to FY2024: 43 cases)</p>	<p>○</p>	<p>Pursue strategic research and development focusing on priority development fields* Develop new products and technologies FY2023: 20 or more cases (80 or more cases in total from FY2021 to FY2024)</p> <p>* Automobiles, energy, infrastructure construction materials, DX technology, and GX technology</p>															
<p>Sales ratio for high-value-added products in FY2022: 47%</p>	<p>○</p>	<p>High-value-added product sales volume ratio in FY2023: 48%</p>															
<ul style="list-style-type: none"> Created a platform for offering subscription-based services for using DS technologies, connected with customers online in inaugural project Surpassed target for 50% growth compared with FY2020 	<p>○</p>	<p>Aiming to triple solution business revenue by FY2024 compared with FY2020 levels</p> <ul style="list-style-type: none"> Develop new products that feature DS technology, facility diagnosis technology and safety technology, launch sales activities to customers Double revenue in solutions business by FY2023 compared with FY2020 levels 															
<ul style="list-style-type: none"> Ratio of R&D spending in four priority fields: 72% Number of patent applications: 88 	<p>○</p>	<ul style="list-style-type: none"> Develop technologies in four priority fields of waste to resources, carbon neutrality, combined utility services, and DX, and 70% or more of R&D expenses on these four fields. Number of patent applications: 80 or more per year 															
<p>Expanded the earnings difference between high-value-added products (A-rank products) and commodity products to 6,000 yen per ton in FY2022 (achieving 150% of FY2024 target)</p>	<p>○</p>	<p>Expand the earnings difference between high-value-added products (A-rank products) and commodity products to 6,000 yen per ton (Achieve 150% of FY2024 target)</p>															
<ul style="list-style-type: none"> Sales of operating businesses: 272.5 billion yen New bases: 3 bases 1 regional electricity retail new power business base, 1 waste recycling base, 1 wastewater processing base 	<p>○</p>	<p>Expand the stable earnings base Expand the operating businesses</p> <ul style="list-style-type: none"> Sales: 260 billion yen Expand bases: 3 or more bases Recycling business (food, plastics, electronic appliances, etc.), regional electricity retail new power business, and waste processing business 															
<ul style="list-style-type: none"> Investments to improve value added in supply chain: 5 per year 	<p>○</p>	<ul style="list-style-type: none"> Increase competitiveness of products and services by improving value added in supply chain management through business expansion Make investments to improve value added in supply chain: 5 or more per year 															
<p>(1) 100% attendance (rank-based compliance training, training on different laws and regulations, etc.)</p>	<p>○</p>	<p>1. Steady execution of training to foster and maintain a sense of compliance (100% attendance from the target audience)</p>															
<p>(2) Conducted Corporate Ethics Awareness Survey of all employees, survey results verified improvement in employee awareness</p> <p>Questions:</p> <table border="1"> <thead> <tr> <th></th> <th>FY2019</th> <th>FY2022</th> </tr> </thead> <tbody> <tr> <td>Has your own awareness increased of the Company's improved compliance systems and initiatives?</td> <td>70.0%</td> <td>73.4%</td> </tr> <tr> <td>Are you aware of the consultation service and how to use it?</td> <td>77.3%</td> <td>86.3%</td> </tr> <tr> <td>Do you agree with and implement the Company's policies regarding power harassment?</td> <td>70.7%</td> <td>76.2%</td> </tr> <tr> <td>Do you manage your work hours in accordance with Company policy?</td> <td>88.0%</td> <td>90.3%</td> </tr> </tbody> </table>		FY2019	FY2022	Has your own awareness increased of the Company's improved compliance systems and initiatives?	70.0%	73.4%	Are you aware of the consultation service and how to use it?	77.3%	86.3%	Do you agree with and implement the Company's policies regarding power harassment?	70.7%	76.2%	Do you manage your work hours in accordance with Company policy?	88.0%	90.3%	<p>○</p>	<p>2. Improve employee awareness of ethics reflected in the Corporate Ethics Awareness Survey</p>
	FY2019	FY2022															
Has your own awareness increased of the Company's improved compliance systems and initiatives?	70.0%	73.4%															
Are you aware of the consultation service and how to use it?	77.3%	86.3%															
Do you agree with and implement the Company's policies regarding power harassment?	70.7%	76.2%															
Do you manage your work hours in accordance with Company policy?	88.0%	90.3%															
<p>(1) 100% participation rate</p>	<p>○</p>	<p>1. 100% attendance from the target audience for human rights awareness training</p>															
<p>(2) Implemented the following initiatives:</p> <ul style="list-style-type: none"> Revised the JFE Group Human Rights Basic Stance Expanded human rights due diligence to Group companies Inspected and made necessary changes to procurement guidelines of each operating company 	<p>○</p>	<p>2. Implement human rights due diligence</p>															

Progress on the Seventh Medium-term Business Plan (Fiscal 2021–2024)

1 Promotion of the JFE Group Environmental Vision for 2050 to Realize Carbon Neutrality

In fiscal 2022, CO₂ emissions in the steel business were reduced by approximately 13% compared to fiscal 2013. Additionally, through the expansion of plant construction and operation businesses in renewable energy power generation and waste-to-energy power generation in the engineering business, JFE's contribution to the overall reduction of CO₂ emissions in society reached 11.14 million t-CO₂, marking steady progress toward the achievement of targets in its medium-term business plan. In the steel business, we have formulated a more detailed CO₂ emissions reduction plan, defining the period up to 2030 as the transition phase for advancing the conversion to a low-carbon steelmaking process, and the period thereafter as the innovation phase to establish and implement ultra-innovative technologies aimed at achieving carbon neutrality. With an eye on the goal of reducing CO₂ emissions more than 30% by fiscal 2030, JFE has introduced the eco-friendly Double-slag Refining Process (DRP®), a converter-type, molten-iron pretreatment process, in all of its districts to increase the use of scrap in converters. JFE has also decided to upgrade the electric arc furnaces at Sendai Works and introduce electric arc furnaces in the stainless steel production process at facilities in the Chiba

district. Toward achieving carbon neutrality by 2050, we are advancing the development of ultra-innovative technologies on multiple fronts, and have commenced construction work on a test furnace for carbon recycling blast furnaces in the Chiba district. We have also decided to start supplying green steel (JGreeX™), which reflects the amount of emissions reduced by our CO₂ emissions reduction technologies, with plans to supply approximately 200,000 tons of green steel in fiscal 2023. In contributing to the overall reduction of CO₂ emissions in society, JFE has decided to invest in tripling its domestic production capacity for electric steel sheets in the Kurashiki district. JFE has also reached an agreement with JSW Steel Ltd. in India to set up a manufacturing and sales company for grain-oriented electrical steel sheet. Additionally, the entire Group is focused on the commercialization of offshore wind power generation, including the expansion of renewable energy power generation businesses in the engineering business. To prepare the manufacturing and supply structure for bottom-fixed foundation structures, JFE has commenced construction on a monopile production plant in Kasaoka City, Okayama Prefecture.

	FY2022 results	End of FY2024	FY2030	FY2050
CO ₂ emissions reduction (Steel business) (vs. fiscal 2013)	Approx. 13%	18%	30% or more	Carbon neutrality
Contributions to CO ₂ emissions reduction in society (Engineering business)	11.14 million tons	12.00 million tons	25.00 million tons	—

2 Pursue World-class Earnings Capabilities in Transition from Quantity to Quality in the Domestic Steel Business

In fiscal 2022, the JFE Group steadily advanced key measures toward establishing economic sustainability. We worked to rapidly reflect raw material costs in our selling prices, pass through higher commodity prices, review extras, and adjust price levels. The ratio of high-value-added products increased by two percentage points from the previous fiscal year, to 47%, marking steady progress toward the target of 50% in our medium-term

business plan. In terms of structural reforms, we halted operations at facilities in the Chiba district in order to consolidate operations in steel for cans in the Fukuyama district. We are also steadily renovating blast furnaces in the Chiba district. Regarding land utilization in the Keihin district, management has decided to sell the land in Ohgimachi, and selected a business partner for the Minamiwatarida area in the Keihin district.

Measure	FY2022 Results	Medium-term Business Plan (FY2024)
Cost reductions	¥45 billion achieved (Total through FY2022)	¥120 billion
Ratio of high-value-added products	47% (FY2020: 40%)	50%
Increase selling prices	Passed higher costs onto selling prices, in addition to executing measures in the medium-term business plan	<ul style="list-style-type: none"> Quickly reflect cost of main raw materials in selling prices Started extra improvement activities, revised some prices
Finished restructuring	<ul style="list-style-type: none"> Halted operations at facilities in the Chiba district in order to consolidate operations in steel for cans in the Fukuyama district Made better use of land in the Keihin district (decided to sell land in Ohgimachi, selected business partner for the Minamiwatarida area in the Keihin district) 	Major cuts in fixed costs, increase labor productivity, improve product mix
Per-ton profit	7,000 yen/ton (actually* 3,000 yen/ton)	10,000 yen/ton

* Excluding inventory valuation differences, raw material carryover, and foreign exchange translation differences

3 Progress on Growth Strategy

► For more information about our initiatives in each business, see pages 47–55.

Steel business

- Decided on additional expansion of electrical steel production facilities at West Japan Works (Kurashiki district) (May 2023)
- Agreement reached in August 2023 for establishment of a joint company with JSW Steel in India for the production and sales of grain-oriented electrical steel sheet
- Expand solutions business (increase earnings 1.5x by fiscal 2022 vs. fiscal 2020)

Engineering business

- Started construction of new monopile production plant (Kasaoka) for offshore wind power projects (to begin operations in April 2024)
- Expanded overseas businesses (orders received for several bridges in Africa, order received for large-scale wastewater treatment plant in Indonesia)

Trading business

- Create No. 1 global processing and distribution structure for high-performance electrical steel sheet
Capacity expansion at Zhejiang JFE Shoji Steel Products Co., Ltd. [China], JFE Shoji Steel America, Inc. [United States], and JFE Shoji Electrical Steel Co., Ltd.'s Nagoya Works [Japan]
- Growth in overseas construction materials business
Acquisition of CEMCO (third-largest structural steel frame maker in the United States) to enter the North American steel sheet construction materials field

4 Advancement of DX Strategy

► See page 64 for more details about DX initiatives.

Investment	Results through FY2022	Medium-term Business Plan (FY2024)
GX investment	Investment adoption under 50% Initiatives in offshore wind power generation business <ul style="list-style-type: none"> ● Monopile foundations / New plant construction (¥40 billion) ● Expansion of production capacity for extra-heavy steel sheet (¥13 billion) Increased production capacity for grain-oriented electrical steel sheet (¥46 billion)	¥340.0 billion
DX investment	Investment adoption over 50% Updated systems at steelworks (Kurashiki district)	¥120.0 billion

Progress on DX strategy

Steel business	Increase productivity and strengthen manufacturing base with CPS / promote automation with robotics / improve labor productivity with data science technology
Engineering business	Create new businesses (RODAS boiler power generation services) / advanced digital twin initiatives (sophisticated 3D designs and visualization of plants) / digital service initiatives (5G open lab)
Security measures	Decided to reinforce security management structure (1) Update global support systems, (2) start upgrading to zero-trust platforms, and (3) address issues at equity-method affiliates and in supply chains

5 Execution of Effective Investments, Financial Health

Consolidated	FY2022 Results	FY2024 Plan	Operating Companies	FY2022 Results	FY2024 Plan
Business profit	¥235.8 billion	¥320.0 billion	Steel business		
Profit attributable to owners of the parent	¥162.6 billion	¥220.0 billion	Profit per ton*2	7,000 yen/ton*3	10,000 yen/ton
ROE	7.9%	10%	Segment profit	¥146.8 billion	¥230.0 billion
Debt/EBITDA	3.7x	About 3x	Engineering business		
D/E ratio*1	67.8%	About 70%	Segment profit	¥13.4 billion	¥35.0 billion
Payout ratio (DPS)	28.5% (¥80)	About 30%	Revenue	¥512.5 billion	¥650.0 billion
			Trading business		
			Segment profit	¥65.1 billion	¥40.0 billion

*1 For liabilities with equity subject to credit ratings, these equities reflect the evaluations of rating agencies

*2 Steel business profit per ton (consolidated segment profit / non-consolidated sales volume)

*3 Actually 3,000 yen/ton

Message from the CFO

Looking ahead to the investment in growth and the realization of carbon neutrality in the future, JFE will firmly achieve the Seventh Medium-term Business Plan and establish a strong financial and profit base.

Masashi Terahata

Executive Vice President and CFO
JFE Holdings, Inc.

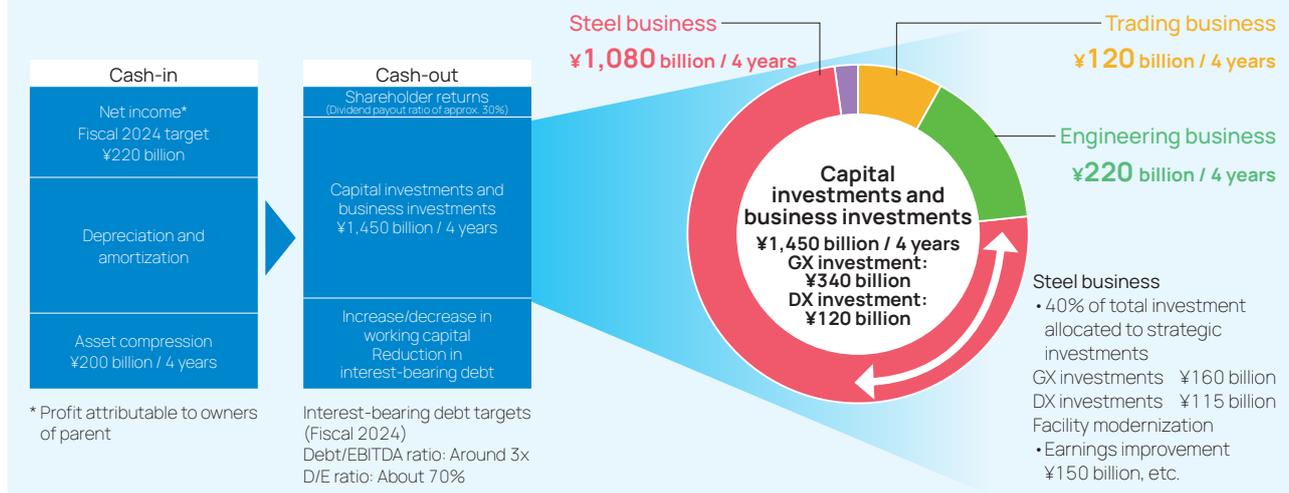


Progress on Financial Strategies and Aims in the Seventh Medium-term Business Plan

The financial strategy and policy of the Seventh Medium-term Business Plan is to balance financial soundness with the efficient execution of investments based on selection and concentration. With a budget of 1,450 billion yen for capital investments and business investments, JFE will reduce the ratio of investments for maintenance in the steel business and reallocate funds for strategic investments, such as green transformation (GX), digital transformation (DX), and cutting-edge facilities, and overseas business investments. The Company plans to

keep these investments within the scope of net income (after taxes and dividends) and depreciation and amortization. To ensure financial soundness, JFE intends to maintain a D/E ratio of about 70% while flexibly and stably procuring capital for investments in growth and the realization of carbon neutrality in the future. To this end, JFE plans to reduce assets by 200 billion yen over four years by selling cross-shareholdings and reviewing assets and businesses that contribute little to earnings.

Capital Allocation and Investment Plans under the Seventh Medium-term Business Plan



Progress as of Fiscal 2022

JFE has made capital investments and business investments in line with its plan, having decided how to spend more than 50% of the investment budget for the entire Group as of the end of fiscal 2022. Investments to achieve our CO₂ reduction targets are also being steadily approved and executed, with a cumulative total of 110 billion yen already approved. In line with its basic policy, the Company has been making investments within the scope of net income (after taxes and dividends) and depreciation and amortization. Due to an increase in working capital alongside higher prices for primary raw materials and other commodities, interest-bearing debt increased by 56.8 billion yen, to 1,862.9 billion yen.

Total Consolidated Cash Flow in Fiscal 2021 and Fiscal 2022 (billion yen)

Cash-in	Cash-out
Profit attributable to owners of parent ¥450.6	Dividend payment ¥115.5
Depreciation and amortization ¥521.8	CAPEX & investments ¥635.4
Asset compression ¥87.3	Working capital, etc. ¥365.6
Debt ¥56.8	

Interest-bearing debt outstanding:
¥1,849.4 billion at the end of FY2021 → ¥1,862.9 billion at the end of FY2022

Assets were reduced by 87.3 billion yen as a result of selling cross-shareholdings, transferring shares in Group companies following a review of operations, and selling some land in the Keihin district. Of the subordinated loans raised in March 2018, 200 billion yen was repaid in advance of maturity, and a new

subordinated loan of 205 billion yen was raised in March 2023. The rating agencies' assessment of the capital component changed from 25% to 50% for this new subordinated loan.

With these factors in play, the D/E ratio was 67.8%, achieving our target ahead of schedule.

Path to Achieving Medium-term Financial Targets

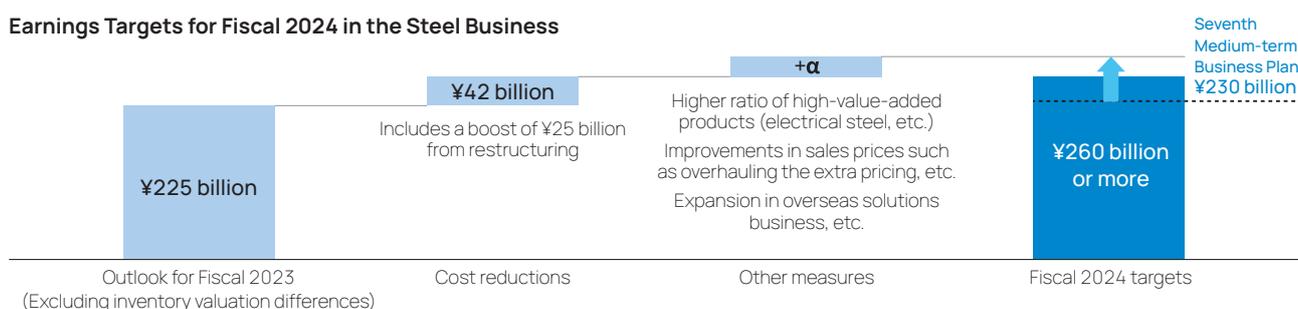
As one of the indicators we use as a financial target, we aim for a debt/EBITDA ratio of around 3x. In fiscal 2022, this ratio was 3.7x, missing our target. JFE must reduce its interest-bearing debt further and secure more EBITDA in order to achieve the target.

For fiscal 2023, JFE targets segment profit of 200 billion yen in the steel business (225 billion yen excluding inventory valuation differences). In line with the recovery of steel demand, we will further improve sales prices. In addition, we will complete structural reforms by suspending upstream processes at the Keihin district in September 2023, thereby enhancing product mix as well as reducing fixed costs. JFE expects to achieve

around 90% of its medium-term target (320 billion yen) with Group business profit totaling 290 billion yen, including 25 billion yen in the engineering business and 48 billion yen in the trading business. In the steel business, we aim for profit of 260 billion yen or more by fiscal 2024, the final year of our medium-term business plan, which is higher than our 230 billion yen medium-term target, as shown below.

With regard to interest-bearing debt, we will continue to improve the cash conversion cycle (CCC) through inventory reduction, in addition to asset reduction through the sale of cross-shareholdings and review of businesses and assets that contribute little to earnings.

Earnings Targets for Fiscal 2024 in the Steel Business



Shareholder Return Policy

We believe returning value to shareholders is one of the most important issues for management. Our proactive stance on shareholder returns entails a basic policy of targeting a dividend payout ratio of about 30% while ensuring a sustainable corporate structure for the entire Group.

In light of earnings prospects, JFE plans to distribute an annual dividend of 100 yen per share (dividend payout ratio of 30.6%) for fiscal 2023.

On the other hand, PBR has been below 1x since March 2015. We attribute this to the market perception that JFE cannot reliably realize ROE above the cost of equity due to earnings volatility in the steel business and strong uncertainties in the outlook for the steel business amid a declining birthrate, aging population, and decarbonization.

The Board of Directors continues to discuss measures for

lifting the PBR, and for the time being, JFE will pursue the measures outlined in the medium-term business plan with the intention of beating its own earnings targets. As a target in our medium-term plan, we understand it will be necessary to reliably realize ROE of 10% (it was 7.9% in fiscal 2022), which is commensurate with our estimated cost of equity. At the same time, we will work on the development of innovative technologies for realizing carbon neutrality. Including reductions during the transition period through 2030, JFE will spend on R&D and invest in equipment to make steady progress toward realizing carbon neutrality in a bid to wipe away market concerns about the future viability of the steel business. By proactively disclosing these initiatives through investor relations and other activities, we aim to increase corporate value and improve the market's perception of us.

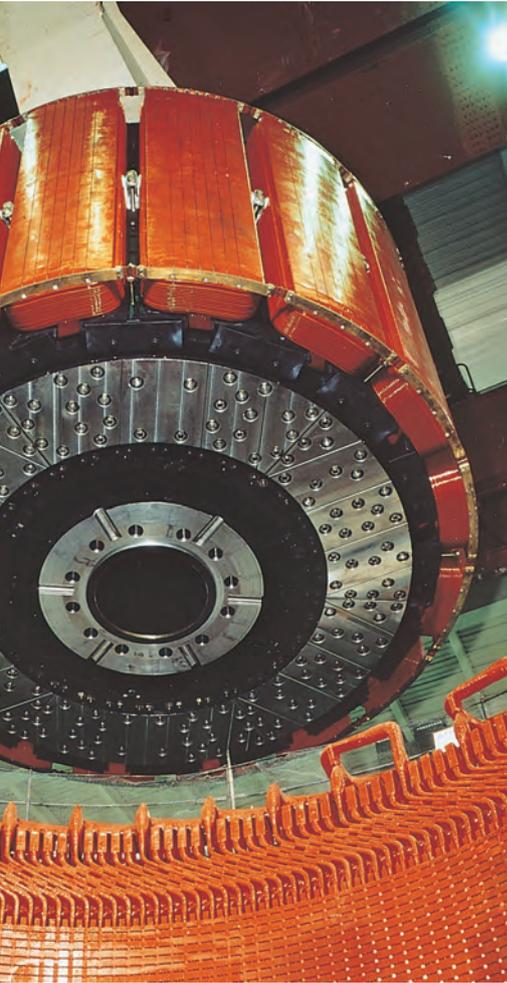
Regarding Issuance of New Shares and Convertible Bonds

In order to flexibly advance the GX strategy and achieve sustainable profit growth, JFE Holdings has determined that it is necessary to build an even stronger financial base and improve financial flexibility. In September 2023, now that a path forward has become visible in the medium-term business plan, the Board of Directors has approved a resolution to (1) issue new shares in an international offering, (2) dispose of treasury shares, and (3) issue convertible bonds due 2028. The proceeds from the

issuance of new shares will be used for investments in electrical steel, an area of strong growth potential, while proceeds from the issuance of convertible bonds will be allocated to investments in carbon neutrality.

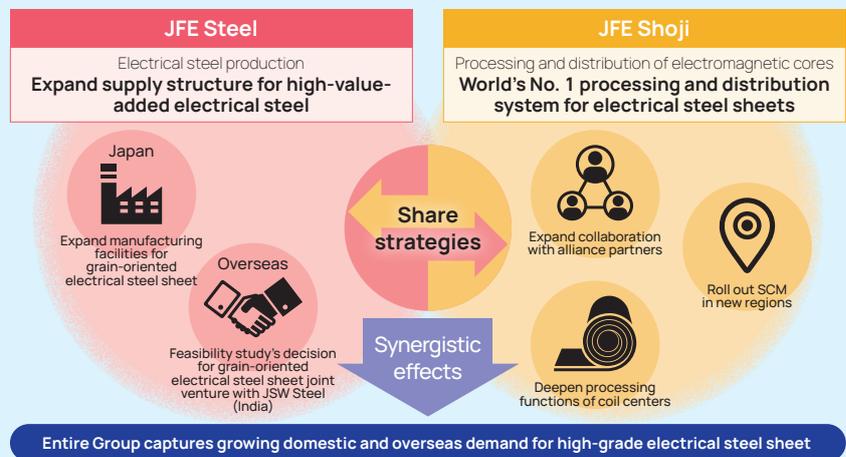
For more details, please refer to the Company's news release on September 5, 2023.
<https://www.jfe-holdings.co.jp/en/release/2023/09/230905.pdf>

Special Feature: Electrical Steel Strategy



Strengthen Production of Electrical Steel

In its Seventh Medium-term Business Plan, JFE Holdings has designated electrical steel as one of its high-value-added products to see expansion in production. As environmental regulations are tightened around the world, the electrification of automobiles has gained momentum. Accordingly, supply-demand conditions look likely to tighten as a result of strong growth in demand for high-grade non-oriented electrical steel sheet used in the primary drive motors of BEVs and other electric vehicles. In addition, global consumption of electricity is likely to increase, particularly in India, a growth market where demand is on the rise for grain-oriented electrical steel sheet used to make transformers. With synergies between its steel business and trading company operations, JFE Holdings aims to latch onto this demand and spur further growth.



Steel Business

< Japan >

West Japan Works (Kurashiki district) Additional expansion of electrical steel production facilities

Modernization of electrical steel production capacity
Planned for fiscal 2026

Expand **3** times

As global initiatives toward carbon neutrality advance, the move toward vehicle electrification is accelerating. With the tightening of environmental regulations worldwide, demand for BEVs and other electric vehicles is expected to surge. Compared to 2019, demand is anticipated to increase more than sixfold by 2026 and more than fourteenfold by 2035. Alongside this growth, JFE Steel forecasts a rise in demand for non-oriented electrical steel sheets, which are essential for drive motors.

To reliably capture this burgeoning demand, JFE Steel will increase its production capacity for top-grade non-oriented electrical steel sheets to three times the current level. We are presently advancing our capacity expansion efforts and plan to double current production capacity in the first half of fiscal 2024, and to triple it by the middle of fiscal 2026.

The top-grade non-oriented electrical steel sheets that we are increasing production volumes for feature lower iron loss, higher strength, and higher magnetic flux density than other types of non-oriented electrical steel sheets used for EVs. Utilizing our sheets as core materials contributes to more power-efficient motors with higher revolutions and output, allowing for a smaller and lighter motor, and either longer driving ranges or smaller battery sizes. These benefits would not be possible without the application of our proprietary technologies, and meet the performance requirements of automobile manufacturers.

Alongside the electrification of vehicles, increased efficiency in energy utilization, and the expanded adoption of renewable energy, we foresee sustained growth in global demand for high-grade electrical steel sheets. Moving forward, JFE Steel will evaluate additional capital investments to meet this growing demand.

What is electrical steel?

Electrical steel is a material that incorporates silicon (Si) and aluminum (Al), etc., into iron. It possesses exceptional magnetic properties in terms of high magnetic flux density and low iron loss, and exhibits nearly uniform magnetic characteristics in all directions. There are two types of electrical steel: non-oriented electrical steel sheet, which is suitable for use as core material in motors; and grain-oriented electrical steel sheet, which displays highly superior magnetic properties in a single direction (the rolled direction), making it a suitable core material in transformers, for example.

From household appliances and IT equipment to trains,

elevators, automatic doors, and conveyor belts, a diverse array of equipment that utilizes electricity play a crucial role in our affluent and convenient lifestyles. Among these, electrical steel sheets are essential component materials for motors and transformers. Notably, one of the distinctive features of electric steel sheets is their remarkably low iron loss (the energy loss that occurs when iron undergoes magnetization, which is a contributing factor to reduced efficiency in transformers and motors). This significantly contributes to enhancing the efficiency, miniaturization, and lightweight design of various equipment.

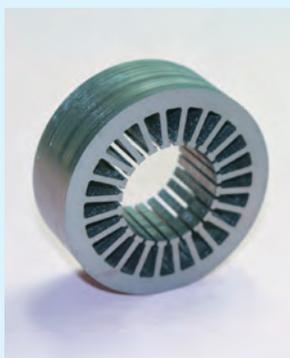
Non-oriented electrical steel sheet

Main applications

- BEVs and other electric vehicles
- Electrical equipment such as motors
- Electric power generators

Main customers

- Manufacturers of automobiles, automobile parts, home appliances, and industrial machinery in Japan and overseas



Grain-oriented electrical steel sheet

Main applications

- Electric power and distribution, transformers

Main customers

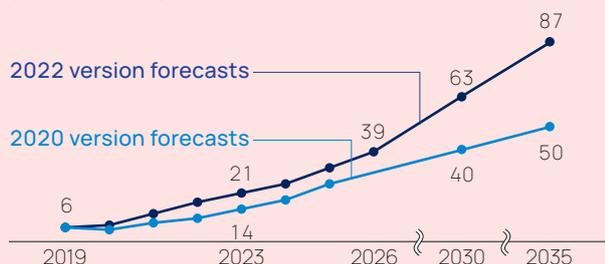
- Heavy electric machinery makers, etc., in Japan and overseas



Increase production and sales of top-grade non-oriented electrical steel sheets by leveraging the Group's extensive supply chain, as well as its product development capabilities and production technologies

Outlook for global demand for EVs

(millions vehicles)



Source: Fuji Keizai 2020, 2022 edition HEV, EV-related market thorough analysis survey

Aims of primary drive motors in EVs

Higher efficiency
(higher power efficiency)

Longer driving ranges,
smaller battery sizes

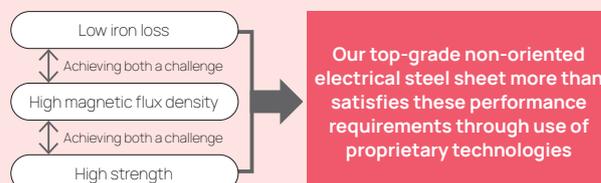
Higher revolutions
and output

Smaller and lighter motors

Expansion of production capacity

	Total investment amount	Commencement of operations (planned)	Production capacity (planned)
Phase I	About ¥49.0 billion	First half of fiscal 2024	Double current production capacity for top-grade non-oriented electrical steel sheets for primary driver motors of EVs
Phase II	About ¥46.0 billion	During fiscal 2026	Tripling of current capacity includes Phase I expansions

JFE Steel satisfies performance requirements for electrical steel



Steel Business

< Overseas >

Expand business in India, where economic growth is strengthening

Demand for grain-oriented electrical steel sheet

Projected size of market in 2030

480,000
tons

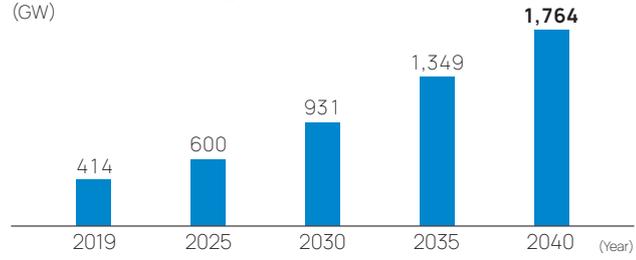
In addition to growing global demand for electricity, the increasing adoption of renewable energy is likely to lead to a significant increase in demand for power transformers and distribution transformers. In particular, India's economy is growing at an annual clip of 7%, and demand for grain-oriented electrical steel sheets is likely to increase at a similar pace. We anticipate that by 2030, the scale of this market will reach 480,000 tons in India.

Furthermore, due to high-efficiency regulations imposed by the Indian government on power generation plants, high-grade grain-oriented electrical steel sheets have primarily been used in transformers for government projects since 2018. This suggests potential for further growth in demand for high-grade steel products.

Since we entered into the strategic comprehensive alliance agreement with JSW Steel in 2009, we have deepened the level of our collaboration through capital participation, as well as the provision of environmentally friendly technology solutions for automotive steel materials and non-oriented electrical steel sheets. Looking ahead, JFE Steel will continue to fully leverage its technologies and steadily tap into this demand.

Outlook for power generation capacity in India

(GW)



Source: IEA India Energy Outlook 2021

Trading Company Business

< Japan and Overseas >

Aim to be the world's No. 1 processor and distributor

Electrical steel processing centers
End of fiscal 2022

11 countries
15 bases

The JFE Shoji Group currently has a five electrical steel processing bases in Japan, as well as in 15 overseas locations across 11 countries, including China, the ASEAN region, India, Mexico, and Canada.

In light of the accelerating global movement toward decarbonization, demand is increasing for electrical steel amid the rapid shift to EVs, increasing efficiency of transformers, and the expanded adoption of renewable energy. In response, the JFE Shoji Group is expanding capacity at all of its domestic and overseas bases.

In Japan, we are proceeding to expand plants and upgrade press processing equipment at the Nagoya plant of JFE Shoji Electrical Steel Co., Ltd.



Basic Agreement with India's JSW Steel for Establishment of Production and Sales Company for Grain-Oriented Electrical Steel Sheets

JFE Steel and JSW Steel have been conducting detailed studies aimed at commercializing the production and sales of grain-oriented electrical steel sheets in India. In August 2023, this culminated in a contract for the establishment of a joint venture company with JSW Steel. Plans call for the joint venture to be located in the Bellary district of Karnataka, India, where JSW Steel's Vijayanagar Works is situated. Hot-rolled steel sheet, the raw material for grain-oriented electrical steel sheets, will be produced at JSW Steel's Vijayanagar Works, thereby establishing India's first integrated production system for grain-oriented electrical steel sheet. By locally producing the high-grade grain-oriented electrical steel sheets that feature excellent energy efficiency thanks to the technologies that JFE Steel has developed over the years, JFE Steel will contribute to the development of greener power transmission and distribution infrastructure and support the significant growth of the Indian economy. Once approvals from relevant authorities have been obtained with the intention of commencing full-scale production by fiscal 2027, we will proceed with the establishment of the joint venture and the construction of the production facility.



JSW Steel Ltd. Vijayanagar Works

Overseas, through our collaboration with the major French motor core manufacturer Bourgeois S.A., we are keen to supply motor cores mainly to European automakers in China, Mexico, and the United States. JFE Shoji Steel de Mexico, S.A. de C.V. continues to strengthen processing and logistics capabilities for non-oriented electrical steel sheets used in motor cores, as well as grain-oriented electrical steel sheets used in transformer cores.

Additionally, JFE Shoji Power Canada Inc., which joined the Group in 2019 (formerly Cogent Power), aims to complete within the year the expansion of its processing facilities for grain-oriented electrical steel sheets for transformers, a market expected to grow in North America, while also developing markets in the EV field.

Furthermore, JFE Shoji Steel India Private Limited is synchronizing strategies with JFE Steel, which is establishing a joint venture with JSW Steel, to improve supply chain management, including the strengthening of existing businesses. In China, we have commenced plant expansion and equipment upgrades for automotive motor cores at Zhejiang JFE Shoji Steel Products Co., Ltd. in order to capture EV demand.

We will steadily move forward on the building of a processing and distribution structure in Japan and abroad with the aim of creating the world's No. 1 processing and distribution system, to lock into anticipated growth in demand for electrical steel sheet.

Mutually Fruitful Collaboration with JSW Steel

JFE Steel has built up solid ties with JSW Steel in India to cater to rising demand, driven by rapid development in the country, with "Make-in-India" steel products. Since our capital participation in 2010, we have contributed to JSW Steel's dramatic growth by providing our well-established technology for high-grade steel, including automotive steel sheets and non-oriented electrical steel sheets. With our recent agreement to establish a joint venture company for production and sales of grain-oriented electrical steel sheet, we will further contribute to India's green growth and development.



Chairman Sajjan Jindal of JSW Steel and President Yoshihisa Kitano of JFE Steel

History of collaboration with JSW Steel

Date	Event
November 2009	Conclusion of Comprehensive Strategic Collaboration Agreement
July 2010	Capital participation and Technical Collaboration Agreement
August 2010	Licensing of automotive steel sheet production technology and steelmaking operation improvement technology
February 2012	Application of the Equity Method
December 2012	Licensing of non-oriented electrical steel sheet production technology
August 2023	Agreement to jointly establish grain-oriented electrical steel sheet production and sales company

Voice from the Front Lines

— Trading Company Business VOICE

Demand for electrical steel sheet has steadily increased in North America due to needs for higher energy efficiency, greater adoption of renewable energy, and the electrification of automobiles.

Through collaboration with JFE Shoji Steel America, Inc. (JSA), which is part of the JFE Shoji Group, we are able to secure a larger market share in the electrical steel sheet markets for transformers and automobiles in North America.

We plan to complete the installation of new transformer processing equipment by the end of 2023, and will continue to develop the EV market in line with demand for electrical steel sheets in North America.

We are extremely pleased to be able to contribute to the JFE Shoji Group, one of the world's leading processors of electrical steel sheet for transformers and motor cores.



Ron Harper

President and CEO
JFE Shoji Power Canada Inc.

Special Feature: Land Utilization in the Keihin District

Large-Scale Land Conversion to Pave the Way for the Next 100 Years

Following the suspension of upstream operations in the Keihin district of the East Japan Works, areas exceeding 400 hectares, centered around the 222-hectare Ohgishima site, will be subject to land use transition.

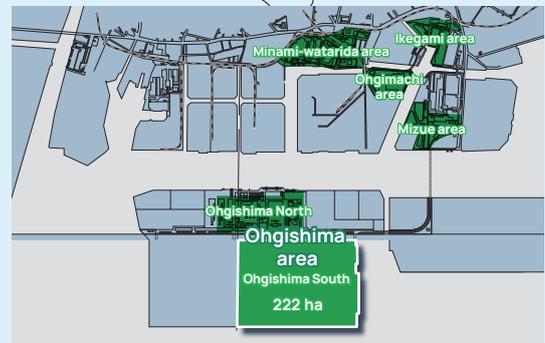
The JFE Group will take on the challenge of transitioning this land to a different use, with an eye on the future and the sustainable development of the local community and society.

Aiming to Utilize Land for Sustainable Regional Development in Collaboration with Kawasaki City

JFE Holdings, in the pursuit of an optimal domestic production structure through reforms, has entered into an agreement with Kawasaki City to repurpose the use of land in the Keihin district. The two parties are working together to explore ideas for using this land.

Characteristics of the Keihin district:

- Vast land located in the Greater Tokyo area, a major economic region
- Geographical advantages: Close to major roads, such as the Metropolitan Expressway Bayshore Route, and Haneda Airport
- Concentration of power plants and other energy facilities in the vicinity
- Location in Keihin Port and the existence of one of the Japan's deepest berths



PICK UP

Announcement of OHGISHIMA 2050 Land Use Concept

Along with the suspension of blast furnaces in September 2023, JFE Holdings announced OHGISHIMA 2050 as a concept for using land centered in the Ohgishima South, in line with Kawasaki City's land use policy.



CONCEPT:

We aim to create fields of innovation and enterprise that will address the complex challenges involved in the pursuit of carbon neutrality, developing the site into an urban area that will contribute to the sustainable development of communities and society as a whole and help address some of the key challenges Japan faces. It is also hoped that the area will be able to provide support for the Greater Tokyo area's disaster prevention and management initiatives.

Rendered using Geospatial Information Authority of Japan map data.

Start of Business as Pioneer of Transitioning Large-scale Land Use in Minami-watarida Area

In March 2023, we selected a business partner for the north side of the north district of the Minami-watarida area. We began work on urban development with a focus on R&D functions, taking the first step in transitioning the large-scale use of land encompassing about 400 hectares. In the same month, JFE decided to sell land to companies that can capitalize on its

proximity to major transportation arteries and Kawasaki Port in the Ohgimachi area.

We intend to prepare the Mizue district to become a major recycling hub in the Greater Tokyo area, with J&T Recycling Corporation, a subsidiary of JFE Engineering, in charge of working with the government to launch operations in fiscal 2024.

Role of the JFE Group and Business Use

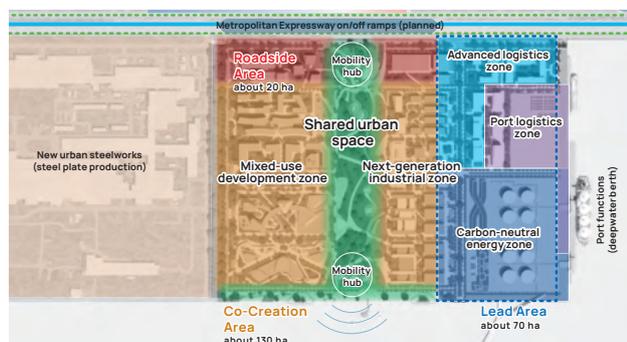
The JFE Group is working with Kawasaki City, other government agencies, and local companies, including energy companies, to develop the area in a way that will help fuel the sustainable development of the Keihin Waterfront Area, and we will accordingly

undertake comprehensive land management, encompassing site sales, leasing, and business use. In terms of business use, we will be looking at new carbon-neutral businesses and recycling businesses on a Groupwide basis.

Ohgishima Lead area	Carbon-neutrality business	■ ■ ■	Participation in supply chains for hydrogen, ammonia, etc.
Ohgishima North	Carbon-neutrality business		
	CO ₂ business	■ ■ ■	Collection, transport, storage, liquefaction, shipping, CCS/CCU for CO ₂ emitted by local energy companies etc.
Mizue area	Electric power business	■ ■	Introduction of H ₂ into power plants for clean electricity generation, storage, and sale
	Recycling business	■	Collaborating with Kawasaki City to develop the site as a major recycling center for Greater Tokyo

■ JFE Steel ■ JFE Engineering ■ JFE Shoji

Land Use Zoning and Realization Process for Ohgishima District



● Roadside Area ● Co-Creation Area

In addition to the Pilot Area, the Roadside Area will feature facilities that align with the land use concept and take advantage of the proximity to the road. The Co-Creation Area will be for testing technologies of the future and implementing the latest services, and feature next-generation industries, commerce, and culture & lifestyles.

At the center of the Co-Creation Area will be the Shared urban space with rich greenery and the latest infrastructure that supports DX and GX, including next-generation mobility, carbon-neutral energy, and high-speed information platforms. On each side of the Shared urban space will be the Mixed-use development zone and the Next-generation industrial zone for Japanese and foreign companies to come up with applications related to next-generation industries, commerce, and culture & lifestyles. The aim is to promote urban development through public-private co-creation that is in tune with the dynamic and diverse changes in modern times. Based on this outline of the overall district, JFE will advance preparations in stages without interruption, setting its sights on targets for 2050.

● Lead Area

In the Lead Area, using the deepwater berth, plans call for the creation of hydrogen supply bases and port logistics facilities, which will guide the entire district toward carbon neutrality and facilitate the transition of land use. A portion of the land in the Lead Area is slated to become available in fiscal 2028.

Message from the Director in Charge

Promoting OHGISHIMA 2050, JFE Holdings aims to transition this land use, which has high public utility and help solve important national issues. Through efforts to establish new industries and create jobs for the next century, we aim to play our part in the sustainable development of the region and society. While collaborating with Kawasaki City and other government entities, as well as neighboring energy companies and other local firms, JFE will leverage the comprehensive potential of the Keihin Waterfront area and engage in responsible area management guided by the concept for 2050. We are ready to make strong progress transitioning the use of this land.

Makoto Iwayama

Senior Executive Officer in charge of Keihin Area Land Development Dept. JFE Holdings, Inc.





Initiatives to Create Value

At the JFE Group, we are collectively working on the Seventh Medium-term Business Plan and the JFE Group Environmental Management Vision for 2050. In this section, we introduce the specific measures being undertaken in each organization with a focus on their progress in these initiatives.

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Use

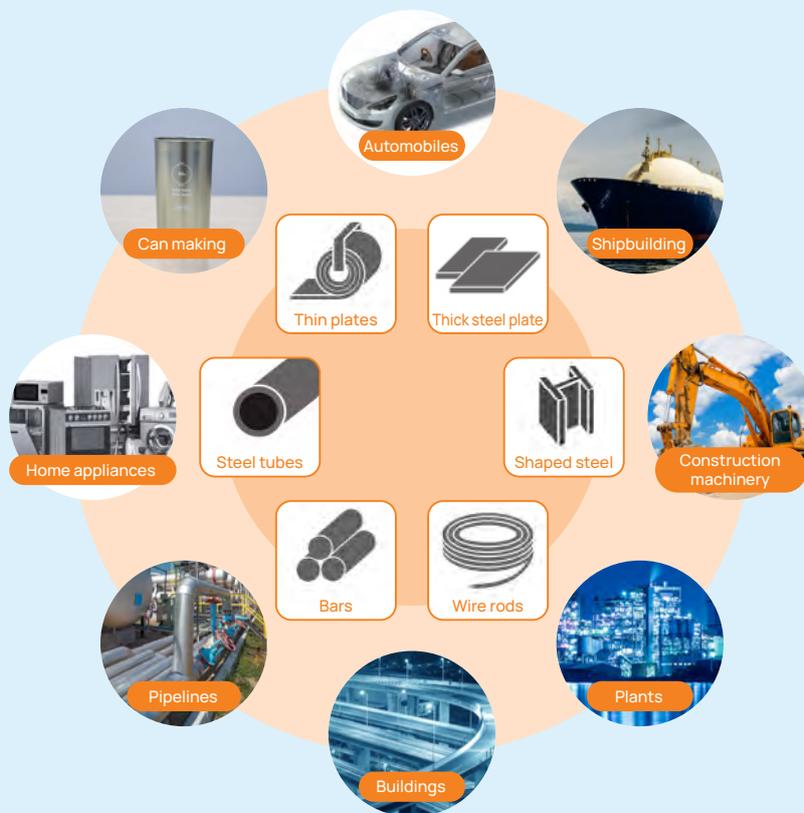
サス鉄ナブル!

Sus-tetsu-nable!*

* A term unique to our Company, it combines steel and sustainability, both of which are essential to society

Steel continues to provide long-lasting support
in everyone's lives!

Steel is an indispensable material in daily life and is used across
a wide range of industries.

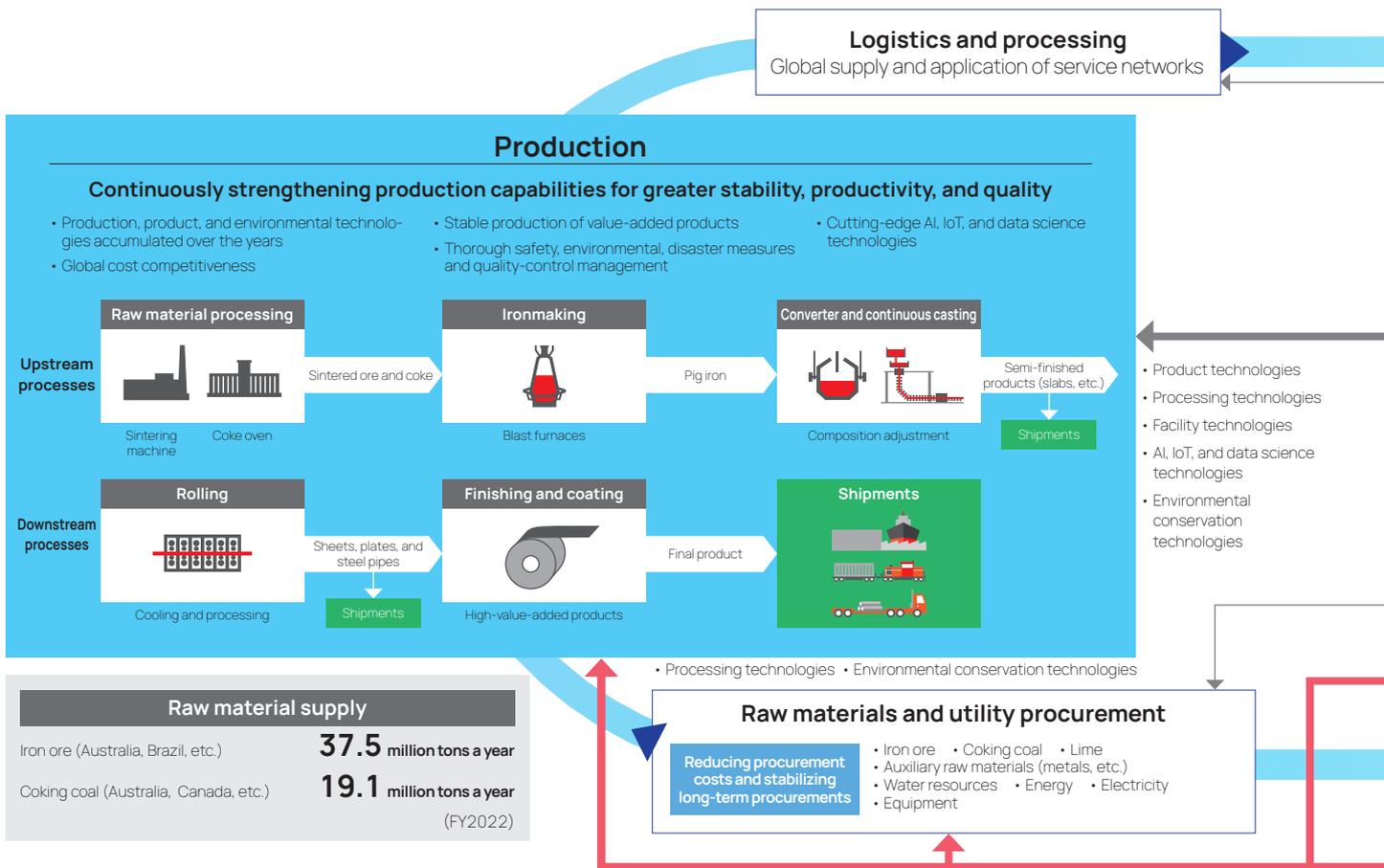


For more details, please see The Value of Steel ▶ P.7-8

Business Model (Steel Business and Trading Business)

A business model that creates a JFE brand associated with high added value

The competitive advantages of JFE's steel and trading businesses are on three fundamental capabilities: (1) leading-edge technological development capabilities focused on customer needs, (2) production capabilities constantly being developed and enhanced at production sites, and (3) sales capabilities underpinned by solid relationships of trust with customers established over years by JFE Steel and JFE Shoji. We create new value tailored to customer needs and provide optimized solutions based on these three strengths. These competitive advantages, treasured assets accumulated through many decades of effort and not easily matched by other companies, are the driving force behind our sustainable growth.

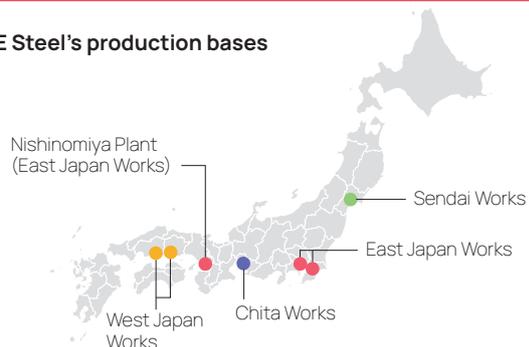


Steel business overview

JFE provides highly functional steel products to customers worldwide as a blast furnace steelmaker with operations of the integrated steelworks, where it can produce final products from iron ore as raw materials. As a global strategy, we are expanding solutions-oriented businesses and deepening our "insider business" model,* starting with the overseas steelmakers in our alliance.

* In overseas markets accelerating, we invest in leading partners with local credibility, and locally process and sell steel manufactured by these partners.

JFE Steel's production bases



Leveraging competitive advantages through our business model ▶ Measures Steel Business P.47 Trading Business P.53

Technology

Technological development to realize value creation

JFE continuously elevates its technological capabilities to world-class levels to meet Japanese demands for top-quality steel, which in turn enables the company to compete globally and create new value through advanced technological development.

Production

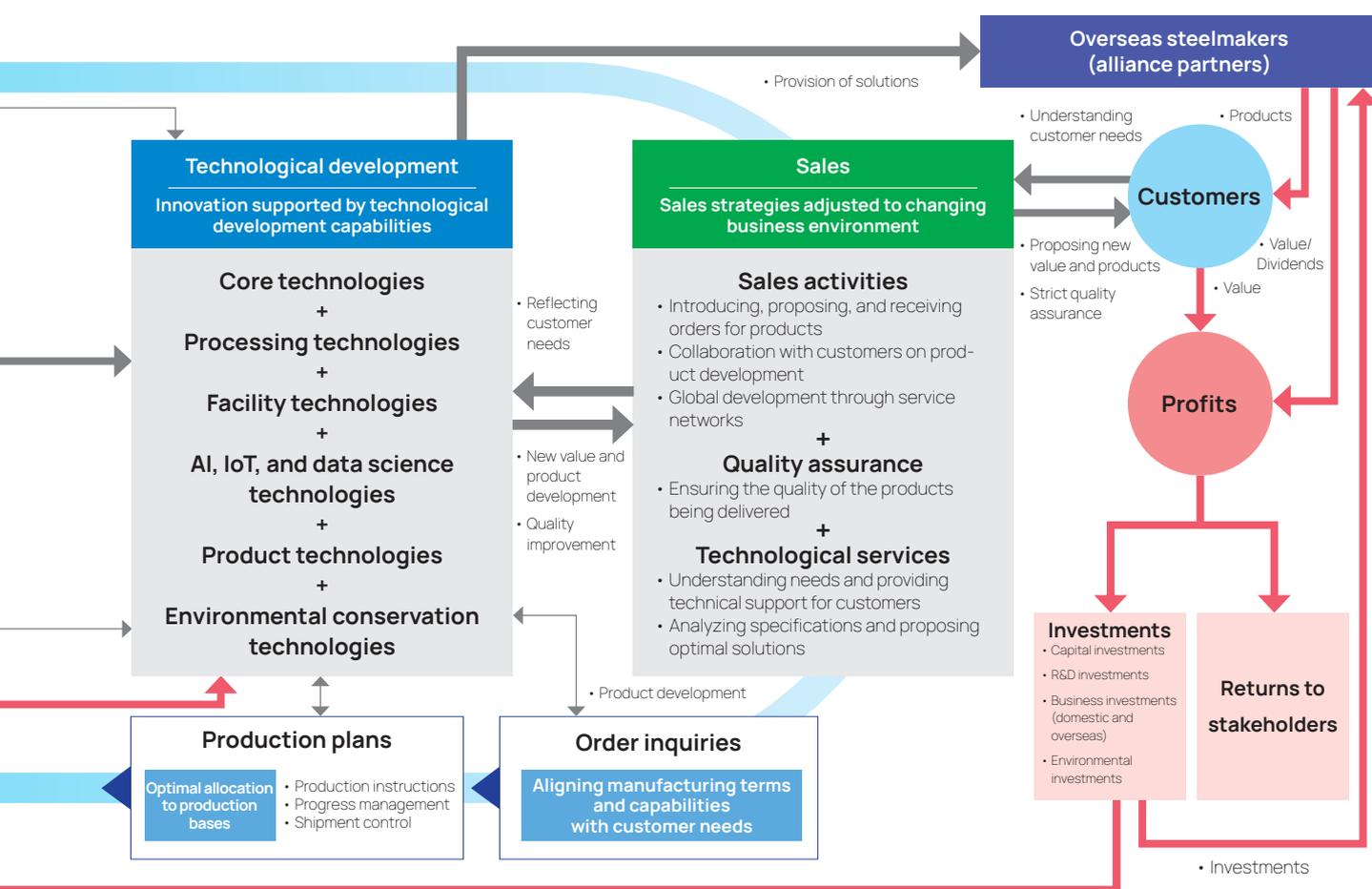
Two major integrated steelworks with highly competitive strengths

JFE has two major integrated steelworks, one each in western and eastern Japan, that boast world-class costs, products, and technologies. Both facilities leverage the highly competitive technologies, intellectual property, and know-how accumulated by JFE over many decades.

Sales

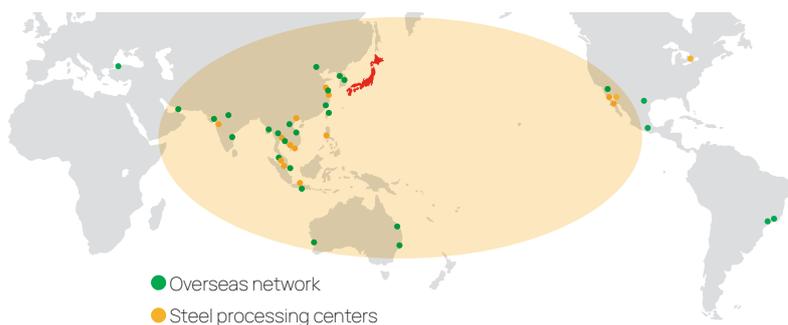
Responding to needs in our stable customer base

JFE has built a solid and highly stable global customer base—one that cannot be easily matched by rivals—thanks to its practice of collaborating from the early development stage to accurately address the exacting needs of its many customers.



Trading business overview

The JFE Shoji Group is engaged in businesses ranging from steel materials, machinery, non-ferrous metals, chemicals, biomass fuels, and ships to food and electronics, with an overarching focus on steel products. Through a global network encompassing 97 companies, JFE Shoji provides services that add value to supply chain operations.

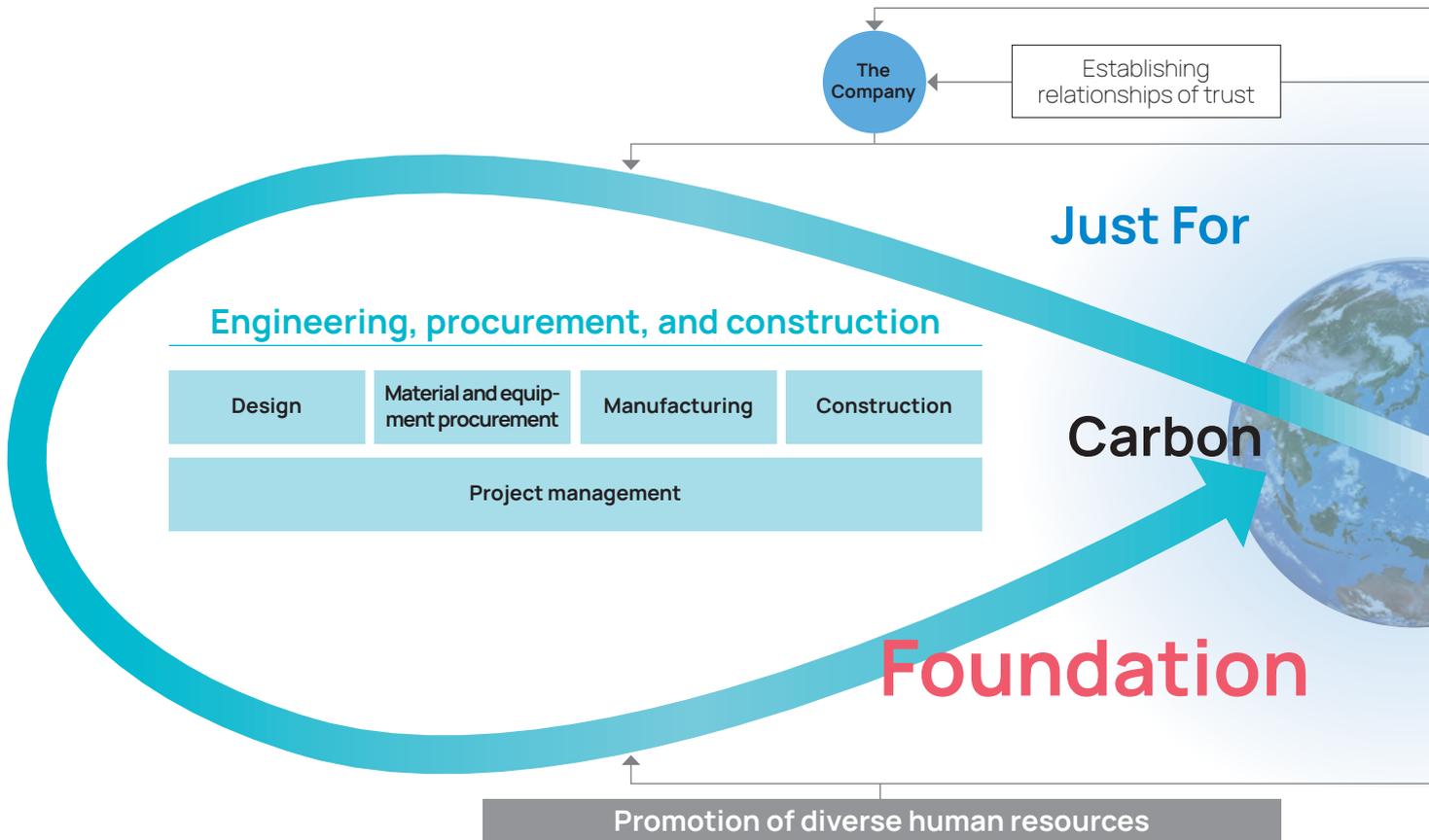


Business Model (Engineering Business)

Business model that strongly supports the lives of people

The sources of our competitive edge in the engineering business are (1) our engineering capabilities (engineering, procurement, and construction (EPC)) centered on building infrastructure that supports industry and human life, and (2) know-how to operating, maintenance & managing accumulated over the years, especially in waste-to-energy power generation and waterworks plants, which (3) paired with our diverse human resources and DX projects, leads to more abundant life in the future. Leveraging these three advantages, we aim to help the world become carbon neutral while promoting a circular economy. We aim to be an engineering company that is constantly leading the world and adapting to the change of the times.

As long as people in the world long for more comfortable and abundant life, there will never be an end to our mission. We will provide optimal solutions for society and strive to realize a sustainable society.



Business overview

By focusing on these business fields, which are needed around the world all the time,

Environment



- Waste-to-energy plants
- Industrial waste processing

Recycling



- Food waste recycling
- Plastic recycling
- Incineration/power generation

Water



- Water and sewage treatment plants
- Water and sewerage pipelines

Note: JFE Engineering Corporation's aqua engineering business in Japan (excluding overseas business and steel pipe business for water pipeline) was transferred to TSUKISHIMA JFE AQUA SOLUTION CO.,LTD. on October 1, 2023 through the corporate divestiture.

The source of competitive advantages that reinforce our business model ▶ Measures P.50

Engineering, procurement, and construction

Project execution capabilities with abundant experience and global structure

In a variety of fields, such as energy, the environment, and bridges, JFE has constructed numerous highly functional and high-quality structures that satisfy customer needs, covering everything from engineering to project handover. Moreover, we will strengthen our competitiveness by building out a global engineering system at overseas bases.

Operating business

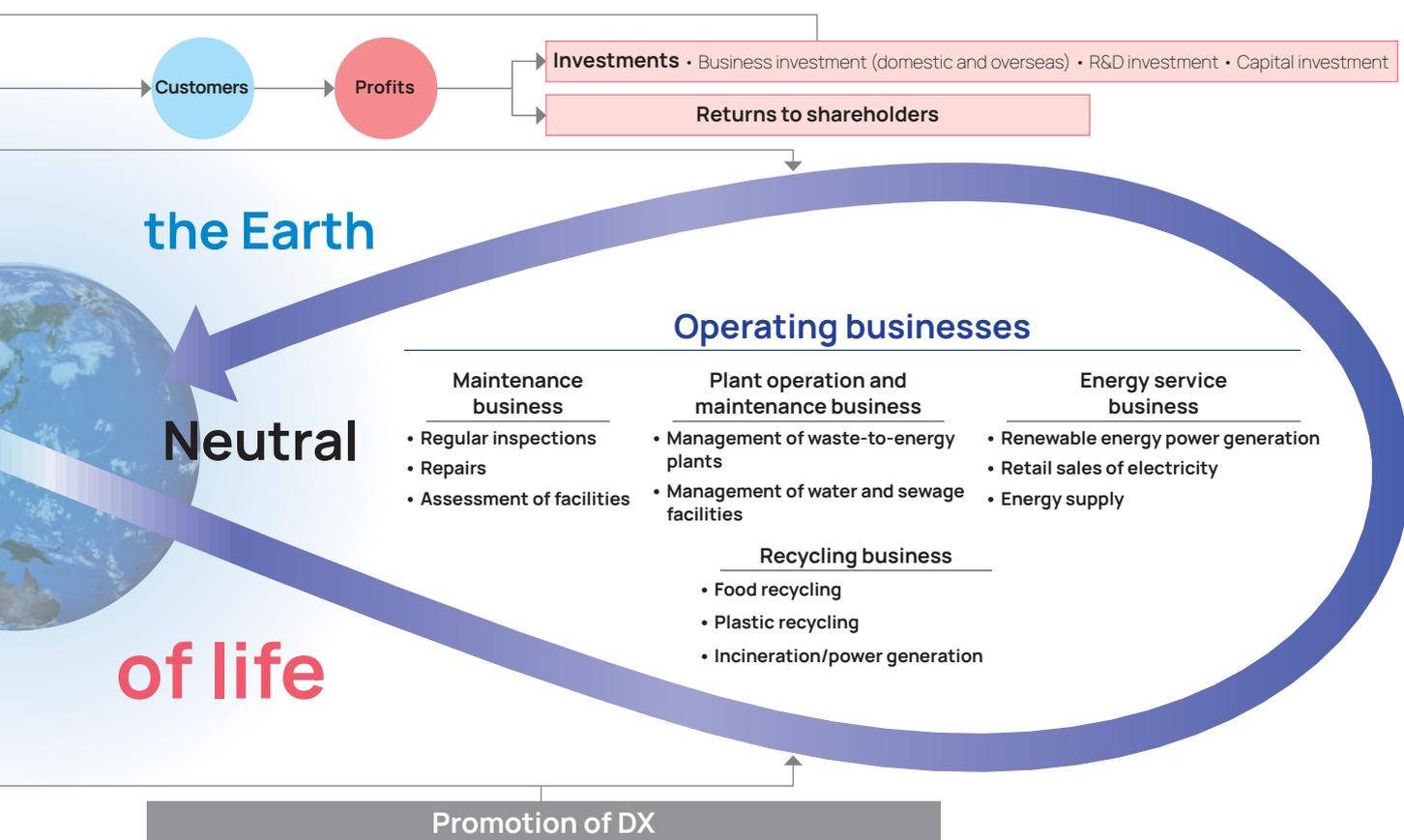
Business management capabilities with strengths in manufacturing expertise

We have accumulated operational know-how in plants in particular, such as waste-to-energy power generation and waterworks, and in the public services field, the company has an extensive track record in public-private projects. We also engage in our own recycling operations and renewable energy power generation business, and are expanding our presence in operation & maintenance business domains around the world.

Diverse human resources and DX

Diverse human resources to support the business and promotion of DX to support the evolution of the company

Approximately 40% of our employees have diverse backgrounds, such as women, foreign nationals, and mid-career hires. We also strive to create work environments that draw out the best abilities of each and every employee. We support the advancement of "creation" and "responsibility" while digitalizing operations with AI and IoT.



we propose integrated services from business planning to EPC and operating businesses.

Energy

- LNG terminals
- Oil and gas pipelines
- Chemical plants

Power generation and retail

- Electricity retailing
- Renewable energy power generation
- Energy service provider

Steel structures and industrial machinery

- Transportation and logistics infrastructure (Bridges, ports, and harbor facilities)
- Disaster prevention infrastructure (Seawalls and breakwaters)
- Industrial machinery (Cranes and steam turbines)

Business Strategies

Steel Business

JFE Steel Corporation



Transformation toward carbon neutrality while shifting from quantity to quality

JFE Steel is accelerating the development of technologies for becoming carbon neutral and adapting to structural changes in the business environment. The company is establishing a solid yet lean business structure while shifting from quantity to quality. In order to remain essential to society, JFE Steel aims to sustain growth over the medium to long term by establishing economic sustainability in addition to environmental and social sustainability.

Yoshihisa Kitano

President and CEO
JFE Steel Corporation

Key measures in the Seventh Medium-term Business Plan and fiscal 2024 earnings targets

1. Transition to a lean, robust business structure by shifting focus from quantity to quality
2. Pursue innovation aimed at achieving carbon neutrality
3. Use digital technologies to strengthen production bases and achieve new growth
4. Expand and accelerate overseas business via solutions based on knowledge, skills, and data

Per-ton profit*1

10,000 yen/ton

(Target segment profit of 230.0 billion yen*2)

*1 Segment profit / unconsolidated sales volume in tons

*2 Target of at least 260.0 billion yen by the final year of the medium-term management plan

Strengths

- World-class technologies that reduce environmental load and contribute to carbon neutrality
- World-class production technologies for high-value-added products
- Abundant world-leading technologies and operational/research know-how
- Cutting-edge AI, IoT, and data science technologies to evolve the company through DX
- Extensive customer base built up over the decades, alliances with steelmakers around the world

Threats and risks

- Long-term decline in domestic steel demand
- Local production for local consumption of steel in emerging countries
- Anti-globalization movement around the world
- Uncertain outlook for the global economy due to Russia's invasion of Ukraine
- Rising commodity prices, including energy and logistics costs

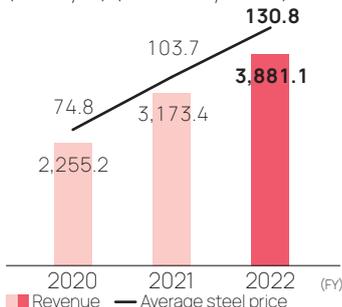
Opportunities

- Stronger demand for eco-products and solutions that help reduce CO₂ emissions
- Increasing demand for high-grade steel due to the shift to lighter and electric vehicles and greater safety and durability
- Increasing demand for steel materials due to medium- and long-term growth in emerging countries, and needs for operational and environmental technical assistance from local steelmakers
- Increasing demand for infrastructure for natural disaster prevention and replacement to make Japan more resilient
- Top global runner in carbon-free manufacturing processes

Fiscal 2022 results

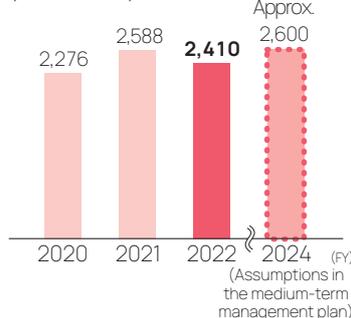
Revenue/Average steel price

(billion yen) (thousand yen/ton)



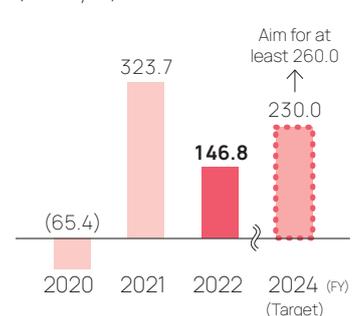
Non-consolidated crude steel output

(10,000 tons)



Segment profit

(billion yen)



Initiatives in Fiscal 2022

In fiscal 2022, the demand environment saw delays in the recovery of activity levels in the automotive sector due to supply constraints in semiconductors and other parts, as well as the postponement of projects in the construction and civil engineering sectors due to soaring raw material costs. Overseas, demand for steel also lacked strength due to uncertainties in China's domestic demand and the European economy. While being confronted by issues like the weaker yen and rising prices for energy and other commodities, JFE Steel took measures to correct price levels through early reflection of primary material costs in prices, passing higher costs onto prices, and revising extras.

In addition, with an eye on structural reforms, we carried out key measures as planned, including suspending facilities in the Chiba

district to consolidate production of steel sheets for cans in the Fukuyama district in the first half of the fiscal year, and completing the revamp of the No. 6 blast furnace at the Chiba district in the second half.

Regarding efforts to strengthen production bases through digitalization, JFE Steel is steadily advancing DX initiatives with the latest digital technologies, including completing a refresh of core systems at the Sendai Works, our first production base to do so.



Chiba No. 6 blast furnace

Medium- to Long-term Strategy and Future Initiatives

● Pursuing Structural Reforms

Aiming to transform into a lean and resilient company, JFE Steel has undertaken a series of structural reforms. In September 2023, we completed the suspension of upstream processes and hot-rolled steel facilities in the Keihin district. In fiscal 2023, management anticipates a boost of 33.0 billion yen from cost reductions, including major cuts in fixed costs as a result of selective concentration aimed at reinforcing competitiveness. Based on OHGISHIMA 2050, unveiled in September 2023, JFE Steel is examining the use of land after the suspension of facilities.

● Carbon-neutral Initiatives

Aiming for carbon neutrality by 2050, we have commenced the construction of various prototype furnaces in the Chiba district, such as a carbon-recycling blast furnace, a hydrogen direct-reduction steel-making furnace, and an electric arc furnace, in a project to test the use of hydrogen in the steelmaking process, which was selected as a New Energy and Industrial Technology Development Organization (NEDO) Green Innovation Fund Project. JFE Steel will continue to research and develop several ultra-innovative technologies like these. We consider the period up to 2030 as a transition phase, during which we are working to reduce carbon emissions in our processes. For example, JFE Steel is cutting CO₂ emissions by introducing the eco-friendly Double-slag Refining Process (DRP®), a converter-type, molten-iron pretreatment process that makes existing steel-making processes more environmentally friendly by allowing extra scrap to be used in converters. We are also expanding the use of electric arc furnaces by increasing the capacity of electric arc furnaces at the Sendai Works and examining the introduction of high-efficiency, large-scale electric arc furnaces in the Kurashiki district. From fiscal 2023, we started supplying JGreeX™, green steel materials that feature significantly reduced CO₂ emissions in the steelmaking process.

Regarding initiatives aimed at the innovation phase after 2030, JFE Steel will conduct demonstration tests of technologies for effectively utilizing CO₂, such as R&D in technologies for fixating CO₂ in steel slag, and the construction of CO₂ methanol



Prime Minister Fumio Kishida (right) and JFE Steel President Yoshihisa Kitano (left) at the UAE signing ceremony

synthesis prototype facilities in the Fukuyama district. Overseas, we will conduct a business feasibility study for building a low-carbon reduced-iron supply chain in the UAE. We will also collaborate on a joint study about constructing a CCS value chain that originates in Japan, aligned with a joint study on CCS in Malaysia.

● Transition from Quantity to Quality

JFE Steel is steadily progressing in its shift from quantity to quality in sales. The sales ratio of high-value-added products has risen from 40% in fiscal 2020 to approximately 47% in fiscal 2022, moving as planned toward our fiscal 2024 target of 50%. In fiscal 2023, we will begin supplying J-TerraPlate™, large and heavy steel plates for off-shore wind power generation, and we plan to finish the expansion of production facilities in the second half. In electrical steel, JFE Steel has decided to expand capacity even more, in addition to ongoing facility upgrades, strengthening its supply system for top-grade non-oriented electrical steel sheet for use in the main motors of EVs, which only a few steelmakers in the world can produce.

Thanks to our efforts to correct selling prices and structural reforms to reduce fixed costs, we expect to achieve our medium-term target of 10,000 yen per ton in profit, excluding inventory valuation differences, in fiscal 2023.

● Overseas Business Strategy

In fiscal 2023, we will delve deeper into the "insider" business, such as by entering into a joint venture agreement with JSW Steel for the establishment of a joint venture in India that specializes in grain-oriented electrical steel sheet. JFE Steel will contribute to the growth of the Indian economy through the establishment of the country's first integrated steel production system and supplying energy-efficient electrical steel sheets.

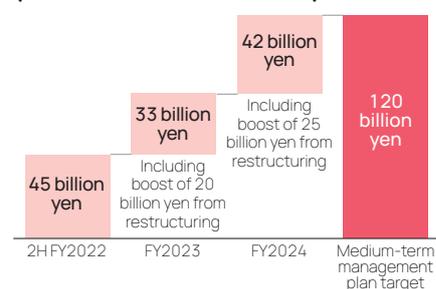
● DX, Solution Business

As part of the DX solutions business JFE Steel aims to automate operations with a unified approach to DX, conducting self-driving vehicle tests at its steelworks, and advancing the use of robotics at production sites. Additionally, along with IBM Japan, JFE Steel has started sales activities for J-mAlister®, an AI-powered system to support recovery from control failures, expanding its solution business for customers in Japan and overseas.

Progress on restructuring and major capital investment plans

Facilities	FY2021	FY2022	FY2023	FY2024-
Shutdown of tin mills in Chiba Consolidation at Fukuyama district		Shut down (Aug. 2022) (No. 2 Tandem Mill, No. 4 CAL, TFL)		
Blast furnace (BF) revamp	Kurashiki Revamp No. 4 BF (-Dec. 2021)	Chiba Revamp No. 6 BF (Sep. 2022-Jan. 2023)		
Shut down of upstream hot-rolling facilities in Keihin			Shut down (Sep. 2022)	
Keihin land utilization		Selection of business partner for north side of north area of Minamiwatanida (Mar. 2023)	Unveiling of OHGISHIMA 2050 (Sep. 2023)	Ohgimachi land sale (Dec. 2024)

Progress on cost reductions (actions + structural reforms)



TOPICS

Carbon Neutral

Launch of Green Steel Material JGreeX™

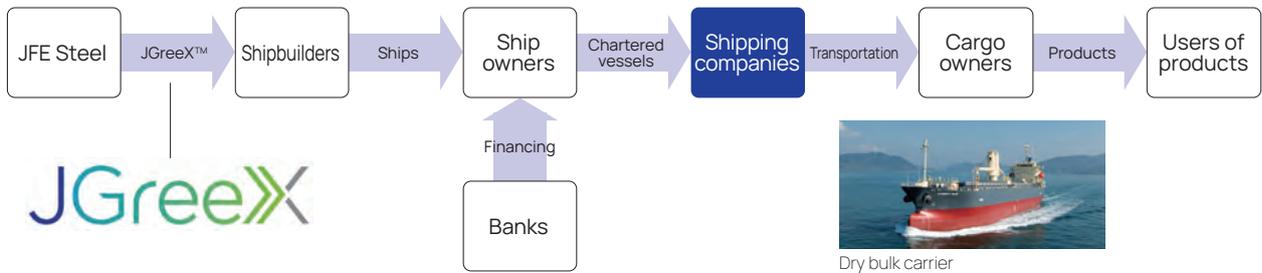
JFE Steel has started to supply JGreeX™, a green steel material that significantly reduces CO₂ emissions in the production process compared to conventional products. Given the current hardships faced in supplying green steel materials that substantially reduce or eliminate CO₂ emissions, JFE Steel first obtained third-party certification of the amount of CO₂ reduced as a result of its CO₂ emissions reduction technologies. Using the mass balance method (see page 58), JFE Steel allocated this certified reduction in CO₂ emissions to specific steel materials, thereby enabling the supply of green steel.

Adoption Cases

JGreeX™ has been adopted by several shipping companies for use in the planned construction of cargo ships (dry bulk carriers). Plans call for JGreeX™ to be used for all steel materials in the construction of these dry bulk carriers, making them the world's first ships to be built solely with green steel. Moreover, this project, jointly carried out by the shipping companies and the JFE Steel, which is also a cargo owner, is

the first one in the world to use a new business model where the value from CO₂ emissions reductions is distributed across the supply chain for the benefit of society. Understanding that the environmental value of CO₂ emissions reductions is crucial for the widespread adoption of green steel throughout society, we will continue to promote activities to gain recognition for this environmental value.

Business Model

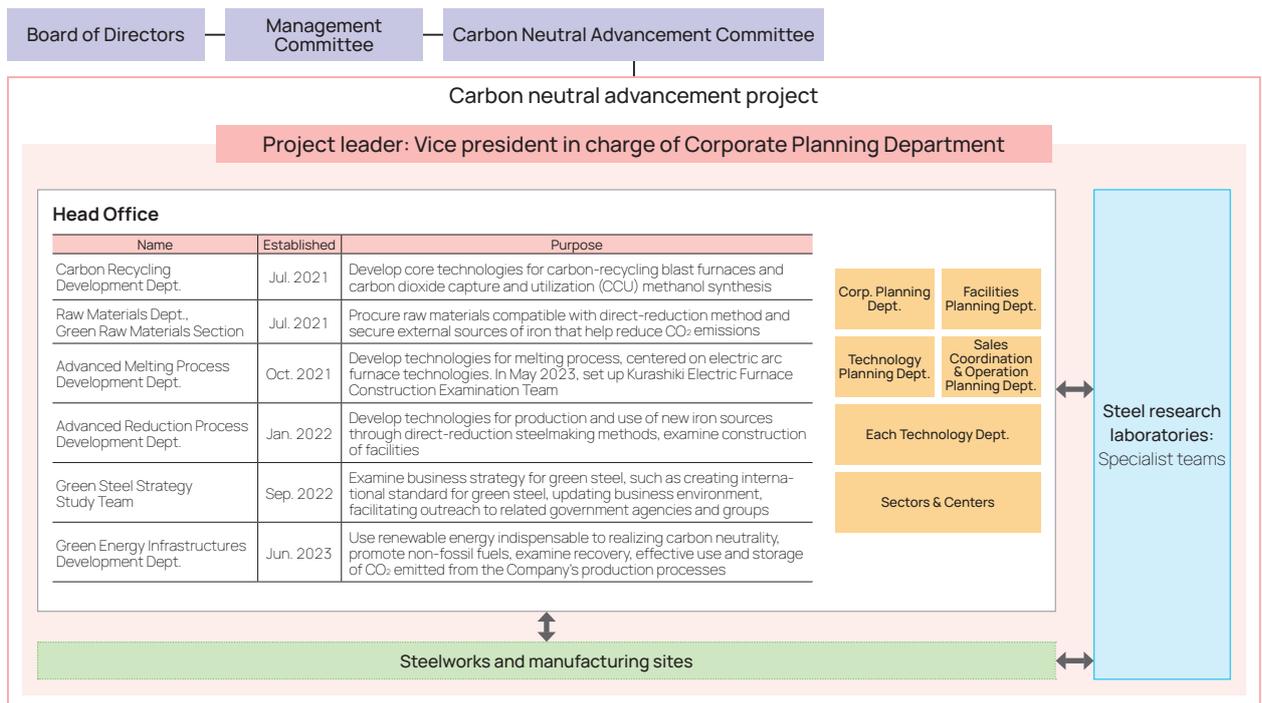


Dry bulk carrier

Carbon Neutral

Organizational Structure for Achieving Carbon Neutrality by 2050

To achieve carbon neutrality by 2050, JFE Steel established a cross-organizational project team directly under the president in October 2020 to advance various initiatives to develop and implement technologies. Since July 2021, we have set up a number of specialist teams to accelerate these initiatives.



Engineering Business

JFE Engineering Corporation

Becoming an engineering company that contributes to the achievement of the SDGs with the mission of foundation of life

When formulating a medium- to long-term strategy targeting the year 2030, JFE Engineering came up with its purpose called “foundation of life,” Just for the Earth. We strongly back people’s lives and the creation of a safe society for current and future generations. Driven by a mission of “Just for the Earth,” the entire company is working diligently to contribute to the achievement of the SDGs and achieve its targets in the Seventh Medium-term Business Plan.



Hajime Oshita

President and CEO
JFE Engineering Corporation

Strengths

- Track record and technological capabilities in the broader infrastructure business
- Track record and technological prowess in the environmental, recycling, and renewable energy fields
- Stable earnings foundation thanks to expansion in the O&M business
- Integrated provision of utilities (water, electricity, gas, etc.)

Threats and risks

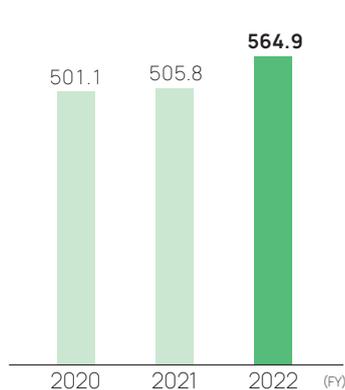
- Contraction in domestic public works projects in line with government aims and policies
- Increase in construction costs due to changes in prices for equipment and materials
- Decline in EPC projects due to fall in private-sector capital investment
- Uncertainties in the global economy caused by geopolitical risks, such as Russia’s invasion of Ukraine

Opportunities

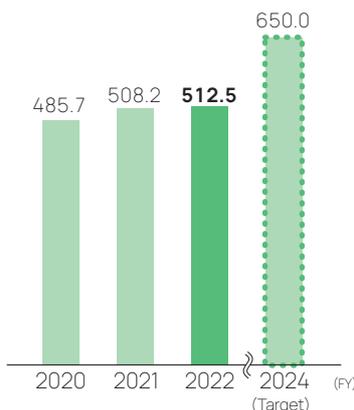
- Greater social expectations for SDGs achievement
- Stronger demand for infrastructure upgrades and service life extension
- Changes in social structure with privatization of public services
- Growing needs for renewable energy

Fiscal 2022 results

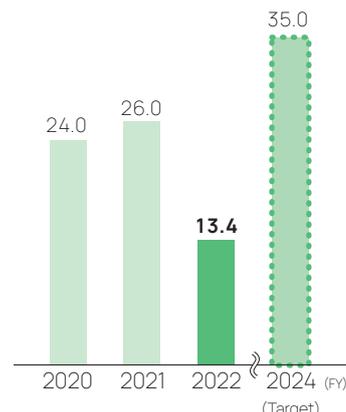
Orders received
(billion yen)



Revenue
(billion yen)



Segment profit
(billion yen)



Business Strategies

Key measures in the Seventh Medium-term Business Plan and fiscal 2024 earnings targets

1. Enhance medium- to long-term priority areas as growth fields
 - Waste to resources
 - Carbon neutral
 - Combined utility services
 - Infrastructure
2. Expand overseas operations by developing business in tune with local needs
3. Advance DX projects for all engineering work

Revenue
650.0 billion yen

Segment profit
35.0 billion yen

Initiatives in Fiscal 2022

JFE Engineering expanded the operation and maintenance (O&M) business that is responsible for upholding the foundation of our life in public-private partnership (PPP) operations, the power generation and electricity business, and the recycling business, in addition to the traditional engineering, procurement, and construction (EPC) business.

In the EPC business, as a "creation" business of the foundation of life, JFE Engineering received record-high orders, the most since it was founded, marking steady progress in winning major projects, especially in its fields of expertise, centered on core infrastructure fields in Japan and overseas: environmental plants, pipelines, and bridges.

In O&M businesses, JFE Engineering is addressing future issues, such as labor shortages and the passing down of technical expertise, while expanding and advancing remote monitoring bases with DX technology in the O&M and related businesses with a focus on environmental plants. In the combined utility services field, JFE Engineering supplies heat and electricity through the installation of gas cogeneration systems at the production plants of food

companies. The company received orders in the energy service business, which is involved in electric power interchange at 10-19 bases within Japan. In Sendai City, J&T Recycling Corporation, a Group company in charge of the recycling business, participates in a recycling operation for plastic waste, the first of its kind in Japan, based on the Plastic Resource Recycling Promotion Act. It is also expanding bases in the recycling business, such as launching a food recycling operation in Komaki City, Aichi Prefecture. By expanding our O&M businesses, we aim to establish a corporate structure with earnings that are less susceptible to fluctuations in orders for projects.

In overseas operations, we posted a new record high in total orders for overseas projects, winning orders for a chemical plant in Singapore, LNG receiving facility in Taiwan, a wastewater treatment plant in Indonesia, a bridge in Africa, and other major EPC projects in new areas.

Leveraging our accumulated technologies and know-how, we have expanded and advanced business domains related to "creation," "responsibility," and "connections" to the future as the foundation of life.

Medium- to Long-term Strategy and Future Initiatives

JFE Engineering focuses its efforts on the following five major fields in its medium- to long-term strategies formulated in fiscal 2021.

The first is **the waste to resources field**. With the intention of creating a business model centered on thoroughly using waste, we will build a rock-solid earnings foundation by steadily expanding assets over the long term and tapping into demand for replacing aging waste-to-energy power facilities. Overseas, we are accelerating the development of O&M businesses, in addition to EPC projects. In the recycling business, we have identified three core businesses with strong social needs: food recycling, plastic recycling, and waste incineration / power generation. We aim to aggressively invest in and develop these core businesses nationally.

The second one is **the carbon neutral field**. In addition to solar and biomass power generation that we have focused on, we are strengthening our presence in the fields of offshore wind power and geothermal power generation. In the offshore wind power field, we will construct a new plant to manufacture foundational structures attached to the seabed, an area of expertise. JFE Engineering is also accelerating the development of carbon-recycling technology by

leveraging its accumulated know-how in incineration technology.

The third field is **combined utility services**. As an O&M business that is a "responsible" foundation of life, JFE Engineering comprehensively provides utility services (water, electricity, and gas) to regions, including heat supply services, through the launch of new local electric power companies and participation in concessions for the privatization of waterworks services, which has expanded in recent years.

The fourth field is **infrastructure**. JFE Engineering is developing and introducing new products, construction methods, and materials that address needs to maximize the use of already built infrastructure, by reinforcing and extending the service life of infrastructure such as bridges, gas plants, waterworks systems, and pipelines.

DX projects are the fifth field. We are advancing the use of digital technology in all kinds of engineering work. In addition to increasing the efficiency of work, our aim is to widely reform work processes and provide digital twin and digital services that utilize AI and IoT, such as adding new functionality to products and services.

Business fields for medium- to long-term initiatives

Field	Main Applicable Businesses	Revenue Target for fiscal 2024
Waste to resources	Establish stable profit base in the domestic environment business Priority investment and expansion of domestic market in the recycling business—Food, plastic, incineration, and power generation	290 billion yen
Carbon neutral	Put priority in renewable energy (offshore wind power generation, biomass power plant, solar power plant, geothermal power plant, etc.) Develop carbon-neutral technologies	80 billion yen
Combined utility services	Shift to comprehensive business model, including for efficient operation of facilities to contribute to energy savings and decarbonization	20 billion yen
Infrastructure	New technologies (new products, construction methods, and materials) to address newly arising needs for strengthening and improving life of infrastructure	260 billion yen



Advances in DX
Strongly advancing DX as a technology platform in four business fields

TOPICS

Carbon Neutral

Construction of Japan's First Monopile Production Factory

In July 2021, JFE decided to construct a monopile production factory for offshore wind power on the site of JFE Steel's West Japan Works (Fukuyama district) in Kasaoka City, Okayama Prefecture. Construction commenced in June 2022 with the aim of starting operations in April 2024. Of the basic structural components for offshore wind power turbines, the plant will produce monopiles as the support post and transition pieces for connecting to the wind turbine tower. These ultra-thick, long, and super heavy objects have a large diameter, making it difficult to manufacture at existing factories in Japan. When completed, this plant will be the first monopile production factory in Japan.



Monopile production factory (as of August 2023)

Completed image

Core Infrastructure

Completion of Large-scale Road Closure and Renewal Project in Chugoku

In March 2023, a joint venture led by JFE finished a project to renovate a 10.8-kilometer stretch of closed road in Chugoku from the Chugoku Expressway Suita Junction to the Chugoku Ikeda Interchange. This project involved approximately 17,300 tons of steel, and was separated into a total of six segments that took roughly 1.5 months of continuous construction 24 hours a day. The project also entailed construction on one of Japan's largest bridges. There were many constrictive conditions in the large-scale work to renovate the bridge, and to get around these restrictions we deployed a number of new construction methods and technologies. Including the jack-up construction method for new steel girders to replace existing expressways, which was adopted for the first time in Japan, JFE will continue to take on large-scale bridge renovation projects that minimize road closures in urban areas.



Bridge replacement work at night

Waste to Resource

Expansion of Food Recycling Bases

JFE Group company J&T Recycling Corporation has launched full-scale operations at food recycling power generation plants in Sendai City, Miyagi Prefecture in May 2022, and in Komaki City, Aichi Prefecture in May 2023. These operations contribute to local production and local use of energy, as well as the realization of a low-carbon society, by using microorganisms to ferment food waste and use the methane that this fermentation process produces as fuel for power generators. J&T Recycling Corporation has already established these recycling operations in Chiba, Yokohama, and Sapporo, and is constructing plants in Fukuoka, in addition to Sendai and Komaki. We provide technologies that help realize a resource recycling society in regions.



External view of plant at Tohoku Bio Food Recycle Co.,Ltd.

Business Strategies



Trading Business

JFE Shoji Corporation

Increasing our abilities to offer proposals and convey information, aiming to be a trading company with presence

As the JFE Group's core trading company, we constantly consider the overall optimum sharing strategies with other Group companies to work on strengthening functions. As well, we seek to further increase our abilities to offer proposals and convey information, growing sustainably with our customers to be a company with a strong market presence.

The company contributes to the realization of a sustainable society by providing eco-products via its corporate activities and initiatives for the global recycling of resources.

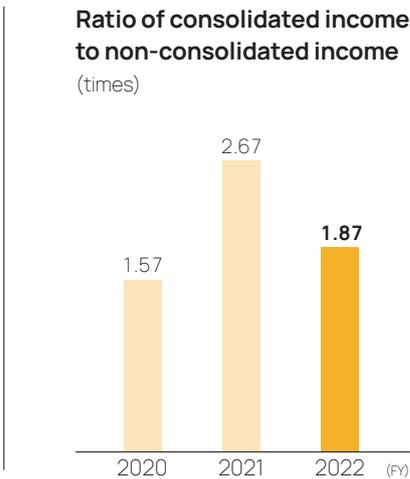
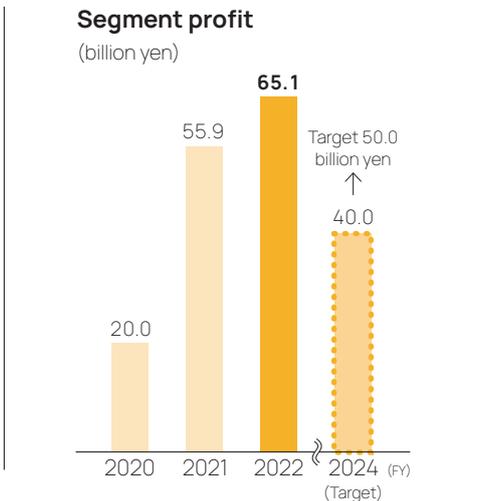
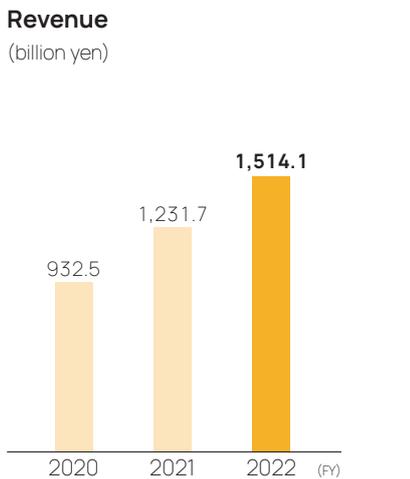


Toshinori Kobayashi

President and CEO
JFE Shoji Corporation

Strengths	Threats and risks	Opportunities
<ul style="list-style-type: none"> Robust business foundation with steel-related businesses such as steel products, raw materials, and machinery Solid sales, processing, and distribution network in the four global key regions (Japan, the Americas, China, and ASEAN) Maximization of comprehensive Group capabilities through strong collaboration with JFE Steel and JFE Engineering Highly specialized human resources with the ability to propose projects backed by extensive experience in steel-related businesses 	<ul style="list-style-type: none"> Uncertainties in the global economy caused by geopolitical risks, such as Russia's invasion of Ukraine Slowdown in the global economy from monetary tightening to control inflation in Europe and the United States Slower growth in the domestic market and contraction in the manufacturing industry due to declining population Changes in market structure and government policy due to a faster movement toward carbon neutrality 	<ul style="list-style-type: none"> Reviews of customers' supply chains and procurement strategies, in line with changes in the external environment, such as heightened geopolitical risks and post-pandemic recovery Stronger demand for steel in the emerging markets of India and the ASEAN region Higher demand for eco-products that can help reduce CO₂ emissions and conserve energy, in response to growing social expectations in the context of ESG and the SDGs Increasing potential to create new value added and provide services in distribution using DX and AI

Fiscal 2022 results



Key measures in the Seventh Medium-term Business Plan and fiscal 2024 earnings targets

1. Initiatives in priority fields

- Electrical steel: Establish No. 1 position in global processing and distribution
- Strengthen supply chain management of automotive steel composite materials
- Accelerate activities overseas in construction materials business
- Fully capture steel demand in Japan

2. Strengthen purchasing and sales capabilities

- Expand our presence in steel, raw materials, machinery and materials

3. Initiatives for new business opportunities

- Expand environmental-solution businesses
- Promotion of DX

Segment profit

40 billion yen*

(Build a structure able to reliably generate segment profit of 40 billion yen)

* Target 50 billion yen by final year of the medium-term business plan

Initiatives in Fiscal 2022

With restrictions on movement due to the pandemic being lifted, the economy has continued to recover at a moderate pace. Demand for steel products has been firm overall, with consumer spending and capital investment staging a gradual comeback even while concerns mount regarding sharply rising energy and raw material prices due to Russia's invasion of Ukraine, and declining manufacturing activity in some industries due to parts supply shortages. Meanwhile, a sense of crisis has spread for climate change, human rights, and a variety of other ESG issues, and corporations are strongly expected to take part in solutions to these problems.

In this environment, JFE focused efforts on strengthening competitiveness over the medium and long term, carrying on with the previous medium-term business plan's basic policy of "solidifying its footing while moving toward the next stage of growth" in the Seventh Medium-Term Business Plan.

In the steel business, we moved to strengthen supply chains based on a four-pronged global structure. In the electrical steel field, JFE Shoji invested in growth, such as augmenting secondary processing bases at each location in Japan and overseas, further expanding our processing and distribution network in response to the movement toward EVs in the automobile industry, and tapping into growing demand for transformers in tandem with the increasing supply of electricity derived from renewable energy sources. In the overseas steel sheet construction materials field, JFE Shoji acquired a 100% stake in California Expanded Metal Products Co. (CEMCO), the third-largest U.S. manufacturer of steel framing field. In the U.S., investment in building construction is among the largest in the world, and investment is likely to remain brisk as the population grows. JFE Shoji aims to further increase earnings by fully entering this field.

In the raw materials, machinery and materials business, in an effort to address ESG issues, JFE Shoji took steps to expand businesses that help resolve environmental problems, such as expanding the handling of biomass fuel, such as palm kernel shells (PKS) and wooden pallets, expanding suppliers and upgrading yards in order to meet growing demand for scrap in the future, and strengthening sales of blast furnace slag.

In the increasingly important field of DX, we linked a video management system (VMS) to SCADA, a plant monitoring system developed by Group company JFE Shoji Electronics Corporation, to create SDxV®, an integrated system able to manage videos and data together. This system was deployed at JFE Steel's steelworks. The JFE Shoji Group will sharpen its competitiveness by continuing to create and improve corporate value through the provision of groundbreaking services via DX.



Main plant at CEMCO

TOPICS

Environmental Initiatives

Realization of Net Zero CO₂ Emissions in Steel Processing, a First in Japan

Steel processing subsidiary JFE Shoji Coil Center Corporation (JCC) has collaborated with Urban Energy Corporation, a new electric power subsidiary of JFE Engineering, to realize net zero CO₂ emissions in steel processing, a first in Japan, by using on-site PPA (electricity sales contract) provided by JCC to switch to 100% renewable energy sources for electricity used at JCC Shizuoka Works. The JFE Shoji Group will continue efforts to realize a sustainable society, and aims to remain a trading company chosen by its customers and suppliers for its quality, safety, and environmental friendliness.



JFE Shoji Coil Center Corporation Shizuoka Works

Shipbuilding Business

Japan Marine United Corporation (equity-method affiliate)



Challenges and Changes in a New World A company that creates shared value with customers

Japan Marine United provides high-value-added products and services while swiftly responding to the latest changes. Balancing manufacturing with technological development, the basis of its cutting-edge technologies, Japan Marine United is committed to addressing issues in a sustainable society, such as carbon neutrality, safety and security, and digitalization.

Nobuyuki Nada

President and CEO
Japan Marine United Corporation

Strengths

- Ability to build large merchant ships, such as high-performance GHG-reducing ships
- Extensive years of experience and development capabilities in icebreakers
- Renewable energy technologies, including offshore wind power
- Capital and business alliance with Imabari Shipbuilding Co., Ltd.
- Naval ship building and repair structure with four shipyards and five bases

Threats and risks

- Greater volatility in foreign exchange rates and prices for steel and machinery
- Tougher competition due to excess supply of ships from China and South Korea
- Slowdown in the global economy and maritime transportation due to inflation, rising interest rates, and international tensions

Opportunities

- Stronger demand for new ships and replacements to reduce GHG emissions
 - ▶ Stricter regulations for CO₂ emissions from ships
 - ▶ More demand for carbon-neutral chemistry carriers
 - ▶ Expansion in wind farm experiments and projects
- Stronger needs for building and maintaining naval ships as national security strategy is reinforced

Initiatives in Fiscal 2022

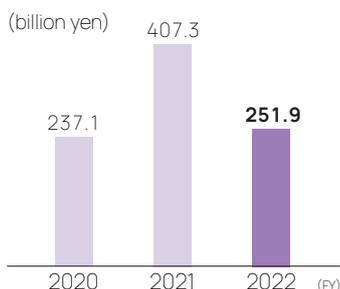
In the merchant ships business, orders have increased as a result of collaboration with Nihon Shipyard Co., Ltd., a sales and design joint venture between Japan Marine United and Imabari Shipbuilding, one of the top two shipbuilders in Japan. On the technology front, Japan Marine United engaged in R&D, such as autonomous ship technologies, and the development of ships powered by alternative fuels such as ammonia. Digital ship navigation services have also been growing. In the naval ships business, Japan Marine United was selected as the primary contractor for a new class of patrol ships that have received high marks. In the offshore and engineering business, progress was made on development of a floating wind power generation project selected by the Green Innovation Fund (NEDO). Moreover, Japan Marine United completed two self-elevating platform (SEP) vessels, which are necessary for the construction of wind farms, and began joint development of installation technologies for large-scale wind turbines on semi-sub floater base ports.

Future Initiatives

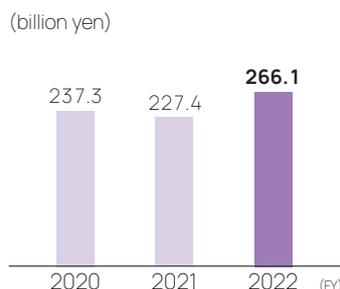
In the core merchant ships and naval ships businesses, Japan Marine United will tap into growing needs for shipbuilding and ship repair, build a sustainably profitable business structure, and advance growth strategies that combine technologies, businesses, and human resources. In addition to past initiatives, we are keen to reduce costs, eliminate bottlenecks in the shipbuilding process, alleviate long-term labor shortages, establish advanced digital designs that leverage AI and robotics technologies, mechanize and automate the shipbuilding process, and improve the capacity of our existing facilities. In technological development, Japan Marine United intends to participate in projects related to the development of practical offshore wind power, early establishment of design and shipbuilding technologies for new carriers of ammonia, hydrogen, and liquified carbon dioxide, with an eye on achieving the SDGs and a carbon-free society from 2030.

Fiscal 2022 results

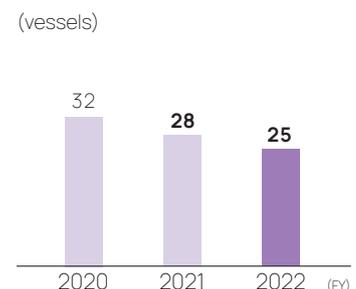
Orders received



Net sales



Vessels built



Annual Highlights

JFE Holdings

2022

- Apr. ENEOS, JERA, and JFE Holdings began joint study of a hydrogen and ammonia supply collaboration based at the Keihin Waterfront Area
- May Executed a stock exchange agreement for JFE Steel, a wholly owned subsidiary of JFE Holdings, to make JFE Container its wholly owned subsidiary
- Jun. Decided terms for issuance of transition bonds
- Jul. Selected for first inclusion in MSCI Japan ESG Select Leaders Index
- Sep. Published JFE Group Report 2022
- Sep. JFE 21st Century Foundation decided university research grants and grant research for fiscal 2022
- Sep. Published JFE Group CSR Report 2022

- Oct. Launched Ohgishima Town Association for studying land use at Ohgishima area near the Keihin Waterfront Area
- Dec. JFE Group's corporate commercial aired and special website launched

2023

- Feb. Published JFE Group's DX REPORT
- Feb. Raised funds through subordinated loans
- Feb. Selected as Environmentally Sustainable Company by Ministry of the Environment's Fourth ESG Financing Awards Japan
- Mar. Sold portion of land at JFE Steel's East Japan Works (Keihin district)
- Mar. Exhibited at WIND EXPO Wind Power Exhibition
- Mar. Introduced climate-change indicators in executive remuneration
- Mar. Selected business partners for north side of north district of Minamiwatarida area

JFE Steel (Steel Business)

2022

- Apr. Integrated JFE Mineral, Mizushima Ferroalloy, and JFE Material
- Apr. Launched high-tensile steel sheets capable of cold forming for use in automobile frames with thyssenkrupp Steel Europe
- Apr. Fiscal 2022 Science and Technology Award from Ministry of Education, Culture, Sports, Science and Technology (for development of resource-conserving Si gradient steel sheet that helps conserve energy in electrical equipment)
- Apr. Recognized as 2022 Steel Sustainability Champion by World Steel Association
- May Fiscal 2021 Japan Society of Civil Engineers Environmental Award (for creating abundant seas with Yokohama City)
- Jun. Received ISO 45001 certification for occupational health and safety management at production facilities in Kurashiki and Chiba
- Jun. Full-scale launch of project to use hydrogen in steelmaking process for GI fund project
- Jun. Decided to build facility for testing prototypes of technology for effectively using CO₂
- Jul. Obtained EcoLeaf, the Japan EPD Program by SuMPO for tinplate products
- Aug. Five construction products including H-beams certified under EcoLeaf
- Sep. Agreed with Emirates Steel and ITOCHU to study building a supply chain of low-carbon reduced iron
- Sep. Recognized with 5th EcoPro Award from Minister of Land, Infrastructure, Transport and Tourism (for creating abundant seas in public-private collaboration with Yokohama City)
- Sep. Held JFE Steel Carbon Neutrality Strategy Briefing
- Sep. Successfully test produced low-carbon precast concrete using alkaline active materials

- Oct. Announced Steelish® recyclable steel cup idea
- Nov. Fully transitioned to open environment for core systems in Sendai
- Nov. Obtained technical examination certificate for J-domer™ earth retaining steel wall
- Nov. Developed JFE Anti-Seismic Wall, an anti-seismic product for building structures
- Dec. Signed memorandum of understanding on joint study for realization of a carbon-neutral industrial complex in Goi District of Ichihara City and Soga District of Chiba City in Chiba Prefecture
- Dec. California Steel Industries decided to build hot dip continuous galvanizing line
- Dec. Started to demonstrate automated truck transportation system at Keihin site with IHI

2023

- Jan. Obtained J Blue Credit™ certification for seaweed bed creation project with Iwakuni City, Yamaguchi Prefecture using steel slag products
- Jan. Resumed operations of No. 6 blast furnace at Chiba
- Jan. Commissioned JFE Hakuryu, a bi-level roll-on, roll-off ship with automated internal loading and unloading
- Feb. Obtained ISO 45001 certification for all works in Japan
- Feb. Received Chairman's Award in 57th Machinery Awards from Japan Society for the Promotion of Machine Industry (for development of autonomous precision inspection robot)
- Mar. Recognized with Fiscal 2022 Japan Institute of Energy's Award (technical section) (for development of guidance system for fuel and electric power management at steelworks)
- Mar. Developed AFD™ Steel, a thin anti-fatigue steel for steel structures

JFE Engineering (Engineering Business)

2022

- Apr. Established Aqua Connect Namie Corporation as hydroelectric power generation company
- May Launched power generation business at Tohoku Bio Food Recycle Co.,Ltd. (J&T Recycling)
- Jun. Received order for Intersection multilevel construction (viaduct) from Republic of Ghana
- Jul. Established JFE Engineering Collaborative Research Cluster for Carbon Neutrality with Tokyo Institute of Technology
- Aug. Full-scale entry into storage battery business: Integrated solutions from project proposal and EPC to optimal operations
- Sep. Agreed to implement integrated multi-site energy network services (JFE-METS) for House Foods Group Inc.
- Sep. Participated in plastic waste recycling business in Sendai City (J&T Recycling)
- Oct. Launched operations of Dam Optimal Operation System with Hokuriku Electric Power Co., Ltd.

- Nov. Received order for Intersection multilevel construction (viaduct) from Republic of Côte d'Ivoire
- Nov. Received order for construction of high-performance elastomer Tafmer™ plant in Singapore
- Dec. Received order for large-scale sewage treatment facility, the first in the Special Region of Jakarta in Republic of Indonesia

2023

- Jan. Received order for construction of large-scale LNG receiving facility in Taiwan
- Feb. DX service package RODAS™ for boiler power plants recognized with Fiscal 2022 Energy Conservation Award in Minister's Prize, the Ministry of Economy, Trade and Industry
- Mar. Participated in financing for Nyuzen Offshore Wind Power Project, Japan's first privately funded offshore wind power plant in open seas
- Mar. Received order and began construction of CO₂ liquefaction, storage and loading facility construction (EPC) project

JFE Shoji (Trading Business)

2022

- Jul. Obtained sales rights from Mandal Pipe, a steel pipe sales company in America
- Oct. Acquired 100% shares in CEMCO, a company that produces and sells Steel Framing and Metal Lath in America

2023

- Jan. Started operations of large-scale press column processing line at Kyushu Tech
- Feb. Became carbon neutral in steel processing at JFE Shoji Coil Center Corporation Shizuoka Works.

Japan Marine United (Shipbuilding Business)

2022

- May Shiojimar training ship built for Tokyo University of Marine Science and Technology recognized with Ship of the Year 2021 award in fishing and research vessel category
- Aug. Commenced sea trials related to hybrid mooring of floating offshore wind power facilities off the coast of Akita City and Katagami City in Akita Prefecture
- Oct. Began the social collaboration course at Maritime and Ocean Digital Engineering (MODE) at the University of Tokyo

2023

- Jan. Delivered BLUE WIND, one of the world's largest self-propelled SEP ships, equipped with a crane with maximum lifting capacity of 2,500 tons
- Feb. Autonomous Navigation Ship initiative, in which Japan Marine United participates, received Minister of Land, Infrastructure, Transport and Tourism Award at Fifth Japan Open Innovation Prize sponsored by the Cabinet Office

Helping to Resolve Issues Related to Climate Change

Having become an essential part of the sustained development of society and the safe and comfortable lives of people, the JFE Group believes that climate change is a serious management issue that may affect its ability to sustain growth and improve corporate value over the medium to long term. We will advance initiatives while exploring various possibilities, such as taking a multitrack approach to developing technologies for achieving our goal of being carbon neutral by 2050.

JFE Group Environmental Vision for 2050

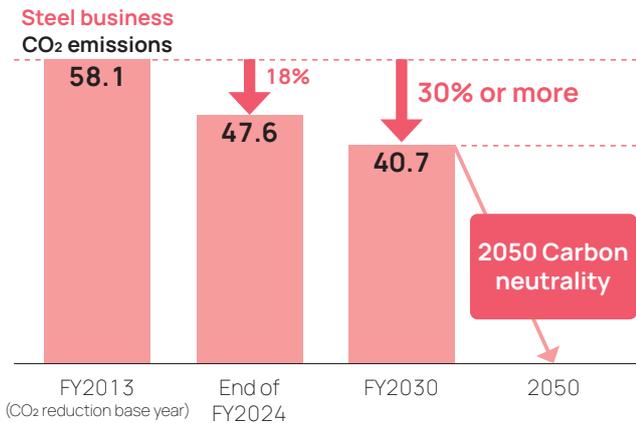
In 2021, the JFE Group formulated the JFE Group Environmental Vision for 2050 with the aim of becoming carbon neutral by 2050, positioning climate change initiatives as one of the most important issues in its Seventh Medium-term Business Plan. In formulating this vision, we will systematically work to resolve climate change problems while reflecting TCFD concepts in our management strategy.

In the steel business, we aim to cut CO₂ emissions by at least 18% by the end of fiscal 2024, compared with the fiscal 2013 level. The JFE Group targets a reduction of more than 30% in CO₂ emissions by fiscal 2030, compared with the fiscal 2013 level. To explore all possibilities for realizing carbon

neutrality by 2050, we will take on the challenge of developing ultra-innovative technologies such as carbon-recycling blast furnaces developed with our unique technology while also adopting a multitrack approach for pursuing other technologies. In our engineering business, we will widen our contribution to the reduction of CO₂ emissions in society as a whole by expanding and advancing renewable power generation and carbon-recycling technologies, by supplying high-performance steel products in the steel business, and through other initiatives. Furthermore, we will accelerate commercialization of our offshore wind power business by applying the strengths of the Group.

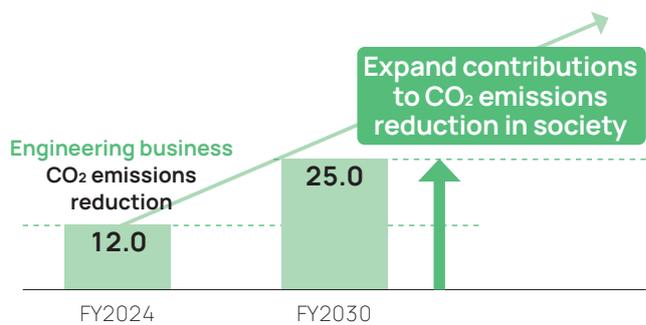
Steel business Carbon neutrality by 2050

(million tons/year)



Engineering business Expand contributions to CO₂ emissions reduction in society

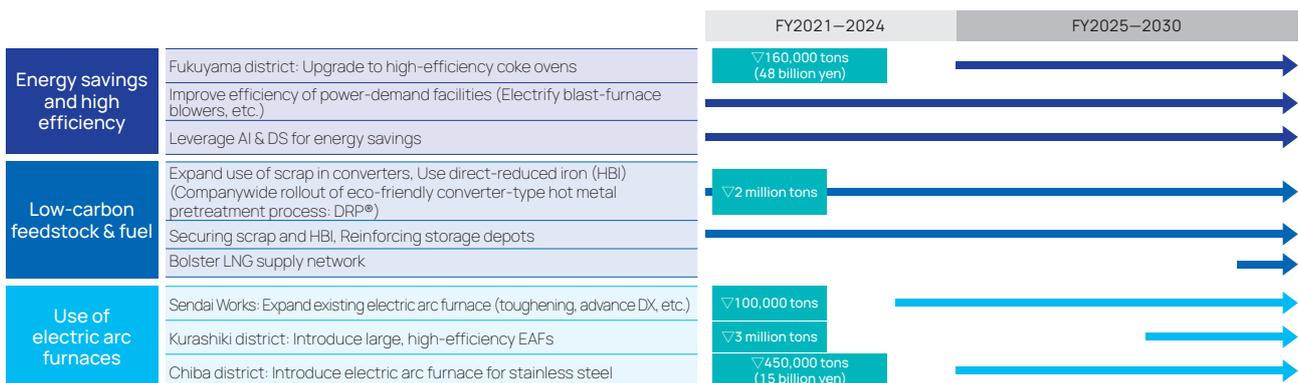
(million tons/year)



Transition to Low-carbon Steel Processing

JFE is advancing multifaceted efforts, including the development of ultra-innovative technologies, toward achieving carbon neutrality by 2050. In the steel business, we have defined

the period up to 2030 as the transition phase, and the period thereafter as the innovation phase. During the transition phase, JFE is working on energy conservation and efficiency





improvements in existing processes, as well as the utilization of electric arc furnace technology. In anticipation of achieving our CO₂ emissions reduction target for fiscal 2030, we see the potential need for investments and loans on the order of 1

trillion yen, and have authorized approximately 110 billion yen as of fiscal 2022. JFE will continue to steadily authorize and execute the necessary investments and loans to achieve these reduction targets.

Development of Ultra-innovative Technologies

During the innovation phase, we will challenge ourselves with the research and development of ultra-innovative technologies such as carbon-recycling blast furnaces and hydrogen steelmaking (direct reduction), aiming to achieve carbon neutrality by 2050.

With the aim of becoming carbon neutral by 2050, JFE Steel has formed a consortium with Nippon Steel Corporation, Kobe Steel, Ltd., and the Japan Research and Development Center for Metals that won a contract from NEDO for its Green

Innovation Fund Project / Project to Use Hydrogen in the Ironmaking Process.

JFE Steel decided to construct facilities at East Japan Works (Chiba district) for conducting experiments related to these projects such as the carbon-recycling blast furnace. The JFE Group is accelerating the development of ultra-innovative technologies with members of the consortium, efficiently advancing development.

Details of plan for experiments

Carbon-recycling blast furnace (150 m ³ capacity)	Plan to start site construction in 2023, launch operations in April 2025, and finish trials by 2026
Direct reduction compact bench pilot furnace	Plan to start site construction in 2023, launch operations in 2024, and finish trials by 2026
Pilot electric arc furnace (10t pilot furnace)	Plan to start site construction in 2023, launch operations in 2024, and finish trials by 2025

Commencement of JGreeX™ Green Steel Supply

In the first half of fiscal 2023, JFE Steel commenced the supply of JGreeX™, a steel product that offers significantly reduced CO₂ emissions compared to conventional products. JGreeX™ has already been adopted by multiple shipping companies (details on page 49). JFE contributes to the reduction of CO₂ emissions related to its customers' use of steel, calculated by applying the mass balance method to find the amount reduced through our CO₂ emissions reduction technologies, and supplying it as steel aggregated into any steel product with third-

party certifications.

As CO₂ emissions reduction across the entire supply chain gains momentum, JFE aims to achieve further reductions in CO₂ emissions through the expanded application of various low-carbon technologies and energy-saving and efficiency-improving technologies. By simultaneously expanding the supply capacity of JGreeX™, we will contribute to the decarbonization of society as a whole.

Summary of JGreeX™ supply

Start of supply	First half of fiscal 2023
Supply capacity in fiscal 2023	Approximately 200,000 tons
Applicable products	All steel products manufactured by JFE
Certification organization	Nippon Kaiji Kyokai



Origins of JGreeX™ name:

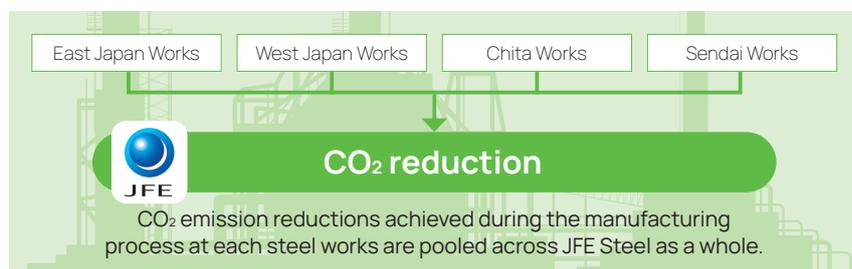
JFE + Green + GX

After asking employees in related departments for ideas, we decided on JGreeX™ as the name because it clearly conveys that it is "green steel supplied by JFE Steel."

In the design of the logo

The letter "X," shaped like a pointer to the right, symbolizes the progress being made toward carbon neutrality.

Concept of Green Steel JGreeX™



e.g.) 25% reduction in CO₂ emissions for JFE Steel as a whole



CO₂ emission reductions across JFE as a whole are allocated to any steel products; these are designated as products with zero CO₂ emissions,* and supplied as green-steel products.

* CO₂ intensity: Scope 1 and 2

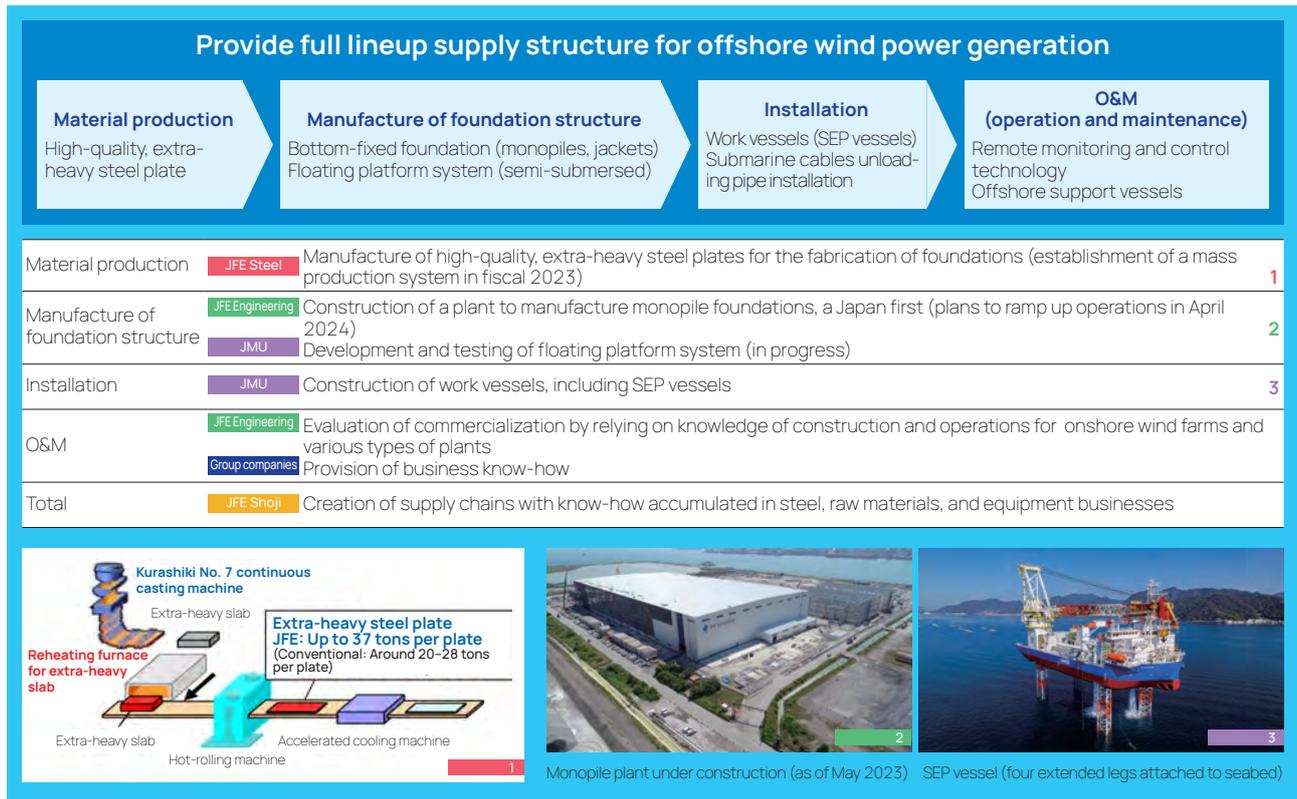
Helping to Resolve Issues Related to Climate Change

Advancing Commercialization of the Offshore Wind Power Business

Offshore wind power has been introduced mainly in Europe and China, but is forecasted to grow significantly in Asian countries, including Japan. The Japanese government has positioned offshore wind power as one of the pillars of its Green Growth Strategy toward achieving carbon neutrality by 2050.

At the JFE Group, we are constructing a manufacturing plant for foundation structures (monopiles) that will support

the country's first offshore wind turbines in Kasaoka City, Okayama Prefecture. The material used to fabricate the monopiles will be extra-heavy steel plates supplied from our steel works (Kurashiki district). The JFE Group is marshaling all of its strengths to develop new technologies necessary for these monopiles, such as welding technology as well as operational and maintenance technologies for the open seas.



In the offshore wind power business, the JFE Group's advantages are derived mainly from its steel business, but also the engineering business, trading business, and shipbuilding business, in addition to the diverse businesses of Group companies. The JFE Group is also able to generate synergies

through collaboration among all these businesses. Maximizing the business knowledge of the Group, JFE is moving to commercialize the offshore wind power generation business by providing a full lineup supply structure for the diverse functions required of the offshore wind power generation business.

Information Disclosure Based on the TCFD Recommendations



JFE Holdings declared its agreement with the summary of the final TCFD* recommendation report, released on May 27, 2019.

* The Task Force on Climate-related Financial Disclosures, established by the Financial Stability Board (FSB), based on the opinions of G20 Finance Ministers and Central Bank Governors.

Climate-related risks and opportunities significantly affect the finance of companies in the medium to long term. The TCFD is a task force established by the FSB as requested at G20, to reduce risks that could destabilize the financial market. The TCFD reviews methods of information disclosure that allows the financial market to appropriately evaluate climate-related risks and opportunities, and announces them as final recommendation reports.

The TCFD considers that it is important for investors and other parties to accurately grasp what effects climate-related risks and opportunities pose on the financial conditions of the investee before financial decision-making, based on which the TCFD recommends that information related to four core elements in organizational management—Governance, Strategy, Risk management, and Metrics and targets—should be disclosed.

■ Governance

The JFE Group's Standards of Conduct states that we will actively work to exist harmoniously with the global environment, as well as to raise living standards and advance societies. We acknowledge that activities to protect the global environment, such as reinforcement of environmental conservation and response to climate change issues, are absolutely essential to achieving a sustainable society.

In fiscal 2016, we designated "mitigating climate change" as our CSR materiality in order to pursue a steady plan-do-check-act (PDCA) cycle and appropriate management of our ongoing initiatives to reduce CO₂ emissions in iron and steel-making processes and to develop and provide environmentally friendly products. In 2021, we added an economic perspective to materiality, prioritized issues based on importance, and

launched new initiatives to address these important management issues.

The JFE Group Environmental Committee, established under the JFE Group Sustainability Council and chaired by the President of JFE Holdings, supervises and directs these initiatives across the Group by setting targets, assessing progress, and holding discussions to improve the Group's overall performance.

The Group Management Strategy Committee also deliberates topics that are vital to our business, such as climate change issues, and reports to the Board of Directors. The Board of Directors provides supervision through discussions on environmental issues such as climate change based on these reports.

Examples of climate change-related issues reported to, deliberated, and decided at Board of Directors' meetings

- Declaration of endorsement of the final TCFD recommendation report
- Information disclosure following the TCFD recommendations (scenario analysis, etc.)
- Formulation of the JFE Group Environmental Vision for 2050 in the Seventh Medium-term Business Plan
- Review reduction targets for CO₂ emissions by fiscal 2030
- Introduce executive compensation linked to climate change indicators

■ Strategy

The many risks and opportunities involved with climate change issues are integrated into the business strategies of the JFE Group in the following ways. The Group has created the Seventh Medium-term Business Plan to guide business and operations from fiscal 2021 to fiscal 2024. Initiatives to address climate change are positioned as a high priority issue for management within the context of achieving sustained growth over the medium to long term for the Group while increasing corporate value. Moreover, the Company formulated the JFE Group Environmental Vision for 2050 to plot a path toward achieving carbon neutrality by 2050, with ensuring environmental and social sustainability as a key measure. While incorporating initiatives to address climate change in business strategies, the Company is systematically tackling climate change by reflecting the concepts of the TCFD in

business strategies. The JFE Group is disclosing scenario analysis and other information in accordance with the TCFD recommendations, and reflecting in its business strategies its assessments of identified risks and opportunities.

Under the JFE Group Environmental Vision for 2050, the Company engages in corporate activities based on the three strategies of reducing CO₂ emissions in the steel business, making greater contributions to CO₂ emissions reductions in society, and taking initiatives in the offshore wind power generation business. We are taking steps to reduce CO₂ emissions in the steelmaking process and also taking aggressive action to reduce burden on the environment by developing environmentally friendly products and process technologies, and providing solutions for recycling resources.

■ Risk management

JFE Holdings is responsible for comprehensive risk management in accordance with its Basic Stance for Building an Internal Control System. The JFE Group Sustainability Council, chaired by the President of JFE Holdings, collects Groupwide information and enhances management for the purpose of reducing the frequency and impact of risks. The Corporate Officer responsible for risk works to identify potential risks associated with ESG risks such as climate change. If potential risks are identified, they are reviewed and assessed by the JFE Group Sustainability Council as necessary for further examination or the deployment of countermeasures.

The Board of Directors deliberates, decides, and receives reports on important matters related to ESG risks and sustainability, including climate change issues.

We identify and evaluate climate-related risks at the corporate level, taking into account scenario analysis based on the framework recommended by the TCFD. We select material factors impacting business and perform a closer analysis of their effects, then utilize this in formulating future business strategies, including the Seventh Medium-term Business Plan.

Helping to Resolve Issues Related to Climate Change

Methods of monitoring risks relating to climate change

The JFE Group Sustainability Council, the Group Management Strategy Committee, and the Management Committee monitor risks that may impact our business. Monitoring is conducted through quarterly reports on climate change issues from each operating company deliberated by its environmental committee,

etc., to take suitable measures. The JFE Group Environmental Committee strengthens the collection and management of information relating to risks, to not only reduce the likelihood of risks occurring and their impact but also to strive to maximize opportunities.

Metrics and targets

JFE Steel, the steel operating company of the JFE Group, is a member of the Japan Iron and Steel Federation (JISF). The JFE Group is pursuing the "Three Ecos" and innovative iron and steelmaking process development, which are the main pillars of the Low-Carbon Society Implementation Plan formulated by the JISF. Under this plan, the JISF targeted the reduction of nine million t-CO₂ by fiscal 2030. Phase I of the Low-Carbon Society Implementation Plan finished in 2020, and was renamed to the Carbon Neutral Action Plan. In Phase II, targets have been revised to a 30% reduction in CO₂ emissions from energy sources by fiscal 2030, compared with the fiscal 2013 level. JFE Steel is also actively pursuing action to attain these targets.

The JISF, in addition to these initiatives, established and announced its long-term vision for climate change mitigation for 2030 and beyond, which ultimately aims for zero-carbon steel production. JFE Steel also played an instrumental role in the formulation of this long-term vision. Moreover, in 2021 the JISF announced the Basic Policy of the Japan Steel Industry on 2050 Carbon Neutrality, declaring its support for the bold challenge of quickly moving Japan's steel industry to zero-carbon steel.

While restructuring its business in response to changes in the steel business environment, the JFE Group aims to increase

sustainability by resolving climate change issues on a global scale. Positioning 2020 as a pivotal year for enhancing its response to climate change, the JFE Group has set targets for reducing CO₂ emissions on the path toward achieving carbon neutrality by 2050, namely a reduction of at least 20% in CO₂ emissions by fiscal 2030, compared with fiscal 2013.

In May 2021, the JFE Group announced new targets for reducing CO₂ emissions, formulating the JFE Group Environmental Vision for 2050, which aims to achieve carbon neutrality by 2050. Initiatives to address climate change are also positioned as an issue of the highest priority in the Seventh Medium-term Business Plan. In February 2022, we raised the fiscal 2030 CO₂ emissions reduction target to 30% or more, compared with fiscal 2013. Moreover, JFE Steel's major domestic group companies set CO₂ emissions reduction targets on a par with JFE Steel. Our business strategies include the initiatives of all Group companies within and outside Japan to tackle climate change. Reflecting the concepts behind the TCFD recommendations in its business strategies, the Company is taking systematic steps to reduce CO₂ emissions.

TCFD content index

TCFD Disclosure Recommendations	Summary of TCFD Recommendations	JFE's Disclosure (relevant sections in the SUSTAINABILITY REPORT)
< Governance > Disclose the organization's governance associated with climate-related risks and opportunities	a. Describe the Board of Directors' oversight of climate-related risks and opportunities	Corporate governance Risk management Climate change (Governance)
	b. Describe assessment of climate-related risks and opportunities, and management's role in company management	
< Strategy > Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy, and financial planning (if such information is important)	a. Describe the climate-related risks and opportunities over the short, medium, and long term the organization has identified	Seventh Medium-term Business Plan (Major measures) JFE Group's value chain Climate change (JFE Group Environmental Vision for 2050) Climate change (JFE Group's climate change strategy) Scenario analysis based on the TCFD recommendations
	b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	
	c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C scenario	
< Risk management > Disclose the processes used by the organization to identify, assess, and manage climate-related risks	a. Describe the organization's processes for identifying and assessing climate-related risks	Risk management Environmental management Climate change (Risk management)
	b. Describe the organization's processes for managing climate-related risks	
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	
< Metrics and targets > Disclose the metrics and targets used to assess and manage climate-related risks and opportunities	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management	Seventh Medium-term Business Plan (Major measures) Important management issues (materiality) Climate change (Metrics and targets)
	b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions, and the related risks	
	c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	

Scenario analysis

While using scenario analysis to correctly understand the risks and opportunities related to climate, we evaluate the effects they have on current business strategies, and utilize them in establishing future strategies. Due to our business having the potential to be significantly affected by climate change, we had used the 2°C and 4°C scenarios, and widened the scope to the 1.5°C scenario in fiscal 2022.

All scenarios are based on the scenarios announced by the International Energy Agency (IEA). The analysis was performed

under the assumption that carbon pricing would be introduced into major CO₂ generating countries in order to achieve the 2°C target. Under the 1.5°C scenario we added for reference, we need to accelerate the development and implementation of decarbonization technologies, but there are issues related to development costs, green hydrogen, and green electricity that need to be addressed. The JFE Group is promoting various measures to decarbonize ahead of schedule.

	Societal Changes and Responses to Changes	Expectations and Concerns of Stakeholders towards the JFE Group	Evaluation Results
<p>1.5°C / 2°C scenario</p> <p>Important factor 1 Decarbonization in steel production processes</p>	<p>Rising societal demands for decarbonization towards steel production processes</p> <p>Implementation of innovative technologies that achieve large-scale decarbonization</p> <p>Implementation of carbon pricing</p>	<ul style="list-style-type: none"> Significant contribution through innovative technologies Increase in investment in the implementation of innovative technologies Increase in operation costs due to the introduction of carbon pricing 	<p>[Opportunities]</p> <ul style="list-style-type: none"> Development and implementation of innovative technologies on top of existing technologies <p>[Risks]</p> <ul style="list-style-type: none"> Investment in the implementation of innovative technologies is possible Need to accelerate R&D and implementation under 1.5°C scenario Cost competitiveness is maintained when carbon pricing is implemented worldwide Increase in operational costs (if not introduced in an appropriate manner)
<p>1.5°C / 2°C scenario</p> <p>Important factor 2 Increase in demand for the effective use of steel scraps</p>	<p>Increased focus on electric arc furnace method, which emits low levels of carbon</p> <p>Rising expectations toward electric arc furnace steel</p> <p>Increase in scrap generation</p>	<ul style="list-style-type: none"> Replacement of converter steel with electric arc furnace steel Increase in JFE Group's production of electric arc furnace steel 	<p>[Opportunities]</p> <ul style="list-style-type: none"> Restrictions on the amount of scrap provided, increase in production of converter steel Increase in production of electric arc furnace steel and the need for electric arc furnace engineering Expansion of the scrap logistics business
<p>1.5°C / 2°C scenario</p> <p>Important factor 3 Change in demand for steel for automobiles and others</p>	<p>Change in automobile needs</p> <p>Increase of EV motors</p> <p>Decrease of internal combustion engines</p> <p>Reduction of weight and the increased use of multi-materials</p> <p>Rising demands for eco-friendly raw materials</p> <p>Demand for decarbonization and recyclability</p>	<ul style="list-style-type: none"> Increase in demand for electrical steel sheets for EV motors Decrease in demand for special steel due to the decrease of internal combustion engines Replacement of automobile steel due to the increased use of multi-materials Demand for further decarbonization and recyclability in steel production 	<p>[Opportunities]</p> <ul style="list-style-type: none"> Increase in demand for electrical steel sheets due to more electric vehicles Increase in demand for special steel due to increase in automobile sales Increase in demand for high-tensile steel sheets for automobiles Refocus on the recyclability of steel Increase in demand for low-CO₂ steel <p>[Risks]</p> <ul style="list-style-type: none"> Limited impact of the increased use of multi-materials
<p>1.5°C / 2°C scenario</p> <p>Important factor 4 Increase in demand for solutions promoting decarbonization</p>	<p>Shifting to decarbonization</p> <p>Increase in demand for solutions promoting transition toward decarbonization</p> <p>Overseas development of energy conservation technologies</p>	<ul style="list-style-type: none"> Renewable-energy power generation plants Low-carbon business (Eco Solution) in developing countries using Best Available Technology (BAT) developed and commercialized in Japan 	<p>[Opportunities]</p> <ul style="list-style-type: none"> Integrated constructions and operations of renewable energy (biomass, geothermal, and solar power) plants Integrated constructions and operations of waste incinerators and plastic recycling plants Integrated constructions of CCU and CCS facilities Overseas development of low carbon businesses
<p>4°C scenario</p> <p>Important factor 5 Procurement of raw materials becomes unstable due to increased frequency in climate disasters</p>	<p>Intensifying climate disasters alongside rising temperatures</p> <p>Procurement of raw materials becomes unstable</p>	<ul style="list-style-type: none"> Procurement of raw materials becomes unstable 	<p>[Risks]</p> <ul style="list-style-type: none"> Undergoing concrete measures "Alternative procurement methods and source distribution" and "Strengthen capabilities of facilities"
<p>4°C scenario</p> <p>Important factor 6 Damages to business bases due to climate disasters</p>	<p>Intensifying climate disasters alongside rising temperatures</p>	<ul style="list-style-type: none"> Increased damages due to typhoons and rainstorms Increased damages due to water shortages Flood damages due to rising sea levels 	<p>[Risks]</p> <ul style="list-style-type: none"> Flood and water shortage response measures already in motion Flood impacts due to rising sea levels can be coped with the current measures
<p>4°C scenario</p> <p>Important factor 7 National resilience</p>	<p>Intensifying climate disasters alongside rising temperatures</p> <p>Increase in importance of strengthening infrastructure</p> <p>Increased demand for disaster prevention products</p>	<ul style="list-style-type: none"> Contribution with steel and related products that help strengthen infrastructure 	<p>[Opportunities]</p> <ul style="list-style-type: none"> Strengthening infrastructure with steel and related products

Intellectual Property Activities



With its corporate vision of “contributing to society with the world’s most innovative technology,” the JFE Group engages in creative R&D activities. The advanced technologies and products borne from this R&D become vital management resources for the JFE Group, properly protected as intellectual property rights, and strategically deployed in business activities.

JFE Steel’s Intellectual Property Activities

JFE Steel promotes an intellectual property strategy aligned with its business strategies for each business field. In each area of business, the business division, R&D division, and intellectual property division work together to advance intellectual property activities. Especially for vital R&D themes such as green innovation and high-value-added products, there is strong collaboration between the R&D division and the intellectual property division. They prioritize strategic patent filing activities and the monitoring of patents at other companies.

In particular, JFE Steel focuses on solution businesses that offer knowledge, skills, and data cultivated in domestic operations to overseas companies via a platform, thereby accelerating and expanding overseas business. To achieve this, it is essential to acquire patent rights in each country, and JFE Steel is strategically expanding its patent applications abroad. Consequently, the number of its published international patents increased to 386 in fiscal 2022, the highest number among steelmakers worldwide. Furthermore, these activities have led to expansion in international patent licenses.

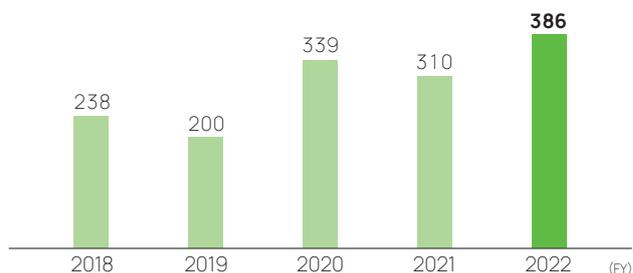
With the aim of encouraging the creation of outstanding inventions, JFE Steel internally established an invention award system in 2018. Every year, the company president presents awards to many inventors. Patents borne from this system have been highly regarded by external parties. For instance, at the Japan Institute of Invention and Innovation’s National Invention Awards event, our patent related to ultra-high

strength thin steel sheets that improve automobile fuel efficiency and collision safety was honored with the Minister of Economy, Trade and Industry Award in 2023. Over the past 10 years, we have received nine National Invention Awards. Additionally, in the Patent Asset Size Ranking 2022 released by Patent Result Co., Ltd., JFE Steel received the top rank in the steel, non-ferrous metals, and metal products category.

In addition to patents, JFE Steel promotes brand strategies to enhance corporate value, such as launching the JGreeX™ brand of green steel and the Steelish® brand for lifestyles that use recyclable steel products.



Number of international patent publications



Major External Awards for Technology and Product Development, etc.

JFE Steel

Award name	Description	Sponsor
Fiscal 2023 National Invention Award Minister of Economy, Trade and Industry Award	Ultra-high-strength thin steel sheet that improves automobile fuel efficiency and collision safety	Japan Institute of Invention and Innovation
57th Machinery Promotion Award, Japan Society for the Promotion of Machine Industry Chairman’s Prize	Development of automated precision inspection robot	Japan Society for the Promotion of Machine Industry
FY2023 The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology, Awards for Science and Technology (Development Category)	Development of ultra-heavy high-strength steel plate for construction of ultra-large containerships	Ministry of Education, Culture, Sports, Science and Technology



Fiscal 2023 National Invention Award ceremony

Initiatives in Response to International Rule Formation and Standardization

JFE Steel is actively involved in activities related to the formation of international rules and standardization needed for the future of the steel industry, and makes every effort to establish them early on. In this context, JFE identifies technologies that should be shared across the industry, and technologies that

should be used to differentiate JFE Steel. With this in mind, implementing standardization strategies and intellectual property strategies from the R&D stage, we aim to contribute to the steel industry and establish a competitive advantage for JFE Steel both inside and outside the steel industry.

Promotion of DX



In the Seventh Medium-term Business Plan currently underway, we position DX strategy as one of the key strategies that will determine the success or failure of our largest transformation since our founding. We are committed to advancing the DX strategy across the Group to achieve longer-term improvement in corporate value. Additionally, we aim to provide new added value that contributes to the sustainable development of society and for people's safe and comfortable lives.

JFE Group's DX Initiatives

Having long been engaged in diverse businesses, we possess vast amounts of world-class operational data, know-how, and technologies, a unique and invaluable asset not found at other companies.

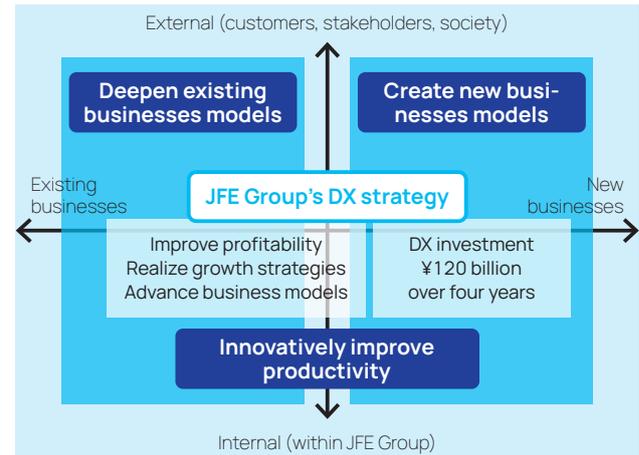
These intangible assets, a wellspring for value creation at the JFE Group, are being combined with cutting-edge technologies, such as AI, IoT, and data science. We are focusing our efforts on innovatively improving productivity, deepening existing businesses, and creating new businesses.

Meanwhile, it is becoming increasingly important to address cyberattacks and the risk of information leaks. It is therefore vital that we strengthen Group security and governance while advancing our DX strategy.

Furthermore, securing and developing the human resources who will be the driving force behind DX is key to the advancement of DX. Across the entire JFE Group and at various levels within the Group, we are progressing with the hiring and training of personnel who are well-versed in each business and capable of advancing DX.

We will proactively advance DX to improve profitability,

achieve growth strategies, and increase the sophistication of our business model.



Source: "DX Stock Selection 2023 Report," Secretariat of DX Survey, Ministry of Economy, Trade and Industry

Business Strategies and Initiatives

JFE Steel Strategy: Establish Competitive Advantages through Advanced Data Utilization

Aiming for complete openness in core systems and intelligent steelworks

At JFE Steel, one of the pillars supporting the advancement of DX is structural reforms in IT that integrate and transition aging legacy systems to open platforms. We finished the transition to open core systems at our head office in fiscal 2021 and our Sendai site in fiscal 2022, making steady progress toward completely open systems across the company.

At our steelworks, we aim to realize Intelligent Steel Plants by advancing the CPS conversion of all processes, including blast furnaces, sintering, and hot rolling. Additionally, we are also working on automation and autonomous driving, such as the autonomous operation of trailers.

JFE Engineering Strategy: Sweeping Business Reforms with Further Data Utilization and Provision of Digital Services

RODAS® DX service for boiler power plants

JFE Engineering is committed to creating new services that leverage DX technologies. RODAS® is a DX service that contributes to the optimal (energy-saving) and stable operation of biomass power plants by managing and analyzing plant data, offering remote support, and applying advanced control technologies. This DX service won the Minister of Economy, Trade and Industry Award in the Product and Business Model Category of the Fiscal 2022 Energy Conservation Awards.

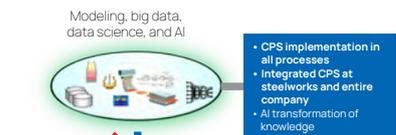
Going forward, JFE Engineering will continue to contribute to the expansion of renewable energy use through the promotion of DX and optimal operation of plants.

JFE Shoji Strategy: Create Businesses through External Sales and Intra-Group Utilization of DX Solutions

Enabling integrated management of steelworks data (temperature, pressure, etc.) and surveillance camera footage

Accurately and promptly understanding and making decisions based on the conditions at production sites can be a significant challenge for operators. JFE Shoji Electronics offers the remote monitoring system SDxV® that enables the consolidated management of plant information and surveillance camera footage. With the implementation of SDxV®, it becomes possible not only to visualize the situation on-site but also to detect anomalies and anticipate maintenance needs through AI-augmented video.

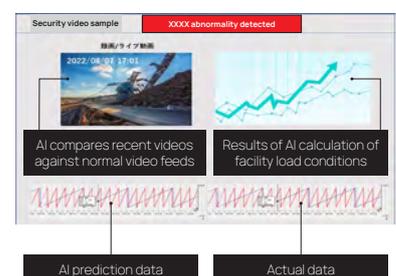
Cyber



Physical



SDxV® Control Screen



Securing and Training Diverse Talent

In a rapidly changing business environment of increasing complexity, the abilities of each and every employee are a key supporting factor for the JFE Group to continuously enhance corporate value into the future. We have established the JFE Group's Basic Policy on Human Resource Management to guide our efforts to implement measures that bring out the maximum abilities and vitality of employees through investments in human capital.

Basic Policy on Human Resource Management

The Basic Policy on Human Resource Management serves as an overall guideline for the JFE Group in securing and developing diverse talent. Each Group company implements specific measures based on this policy.

JFE Group's Basic Policy on Human Resource Management

(Full text: <https://www.jfe-holdings.co.jp/en/csr/social/diversity/>)

- 1 Respect human rights and facilitate fair management of human resources
- 2 Foster a corporate culture that nurtures people and promotes satisfying workplaces
- 3 Diversify human resources
- 4 Recruit and steadily nurture excellent human resources

DX Human Resource Development

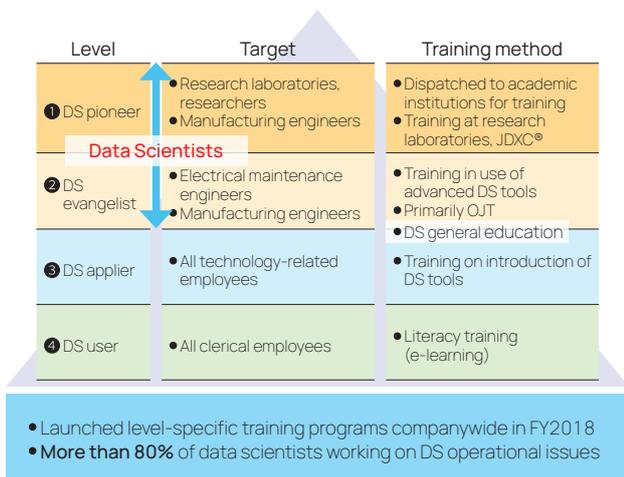
We aim to enhance our training and education systems to improve the abilities of each and every employee, while placing emphasis on the training of global human resources for expanding overseas businesses. In recent years, the JFE Group has been focused on securing and developing the human resources necessary to pursue DX strategy, which is one of its management strategies.

Data science (hereinafter, "DS") technology is being applied in industry at a rapid pace. In order to incorporate DS technology into its business processes, JFE Steel has established a system to independently foster data scientists in-house. Having knowledge unique to the field of the steel industry is essential to applying DS in actual manufacturing and on R&D front lines. With the aim of fostering in-house data scientists and human resources that can harness DS, the Company established a pyramid-shaped rank-based training system according to the required level.

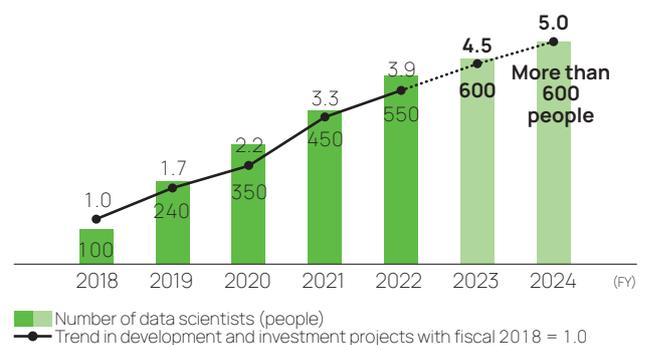
As of the end of fiscal 2022, we have trained 550 in-house data scientists, increasing by 3.9 times the number of DS-related initiatives compared with fiscal 2018. By pursuing further training, we plan to increase our number of in-house data scientists to 600 by the end of fiscal 2023 and more than 600 by the end of fiscal 2024. Starting in fiscal 2023, we aim to advance these initiatives further by instilling our vision and changing mindsets through training on DX literacy for all employees, in addition to mindset training for executive officers and managers.

At JFE Engineering, we are holding data scientist training courses where employees can gain expert knowledge about data analysis and visualization, as well as machine learning. We aim to have a total of 170 employees take this course by the end of fiscal 2023.

Educational programs by level (JFE Steel)



Training of data scientists (JFE Steel)



We have trained about 550 data scientists as of the end of fiscal 2022. We aim to increase this to 600 people by the end of fiscal 2023 and even more by the end of fiscal 2024.



Diversity and Inclusion

Positioning D&I as an important management issue, the JFE Group must be committed to diversity to see it flourish. Working in unison, we are formulating and rolling out Companywide policies that include setting up D&I promotion committees chaired by the presidents of each operating company. We also have an ongoing effort to raise awareness of diversity through training tailored to managers.

The Board of Directors discussed policies and targets related to the empowerment of women, and in fiscal 2022 raised its target for the ratio of female hires and set a target for women qualified as section managers or above to be at least 10% by 2030 (at least 20% in management and sales divisions). At each operating company, management is advancing various measures related to recruitment, retention, and placement and development. In recruitment, for example, JFE Steel missed its target for the ratio of female hires in fiscal 2022, but intends to achieve this target by proactively participating in seminars and augmenting advertising activities so that women can more easily envision a career working at JFE Steel. In terms of retention, we are focusing efforts on hosting networking events for female employees and actively dispatching them to external training programs at Keidanren (Japan Business Federation) and Japan Women's Innovative Network (J-Win), in order to promote networking both inside and outside the Company and create role models for others to follow. Regarding placement and development, we are formulating individual placement and development plans for female employees and carrying out systematic training aimed at management

positions. JFE Engineering has introduced a mentoring program for female managers led by executive officers. JFE Shoji is also conducting training for supervisors and their female employees aimed at cultivating an awareness of career options for women and a career-supporting mindset among managers.

We are also focusing efforts on helping male employees participate in childrearing, and have set as a common target for all operating companies the goal of getting all male employees whose partner has given birth time off for childrearing and also days off as needed for childcare. In addition to disseminating information about in-house systems, we are working to cultivate a culture in which more male employees can take paternity leave, by conveying messages aimed at encouraging men to take paternity leave and sharing examples of employees who have availed themselves of this leave.

Good examples from each operating company are regularly shared among Group companies, and joint initiatives across operating companies are also underway. In fiscal 2022, with the aim of further cultivating a mindset for management roles, we held a roundtable discussion involving JFE Holdings' Director Yoshiko Ando and female managers from both JFE Holdings and other operating companies. Through such efforts, we aim to further promote diversity across the entire JFE Group.



Roundtable discussion

Engagement

We believe that establishing an internal environment where employees find value in their work is essential for diverse talent to fully demonstrate their abilities. Each operating company conducts an engagement survey once a year to regularly grasp employee sentiment. As a key performance indicator (KPI), we have set a target of "over 75% affirmative responses to questions related to job satisfaction," and this KPI helps us identify issues related to job satisfaction and consider measures for improving the work environment. We have implemented various measures, such as instituting an in-house open recruitment system that offers opportunities for new career challenges through voluntary actions, and holding one-on-one meetings to support employee growth. Moving forward, we aim to further improve work motivation through discussions with management and other initiatives.

Creating a comfortable workplace is also a critical element for employees to find their work fulfilling. Therefore, at the JFE Group, we are promoting initiatives for a new way of working aimed at allowing diverse employees to choose flexible working styles based on their individual circumstances. This is to ensure that they find motivation and job satisfaction while helping to improve the Company's productivity. For example, we have expanded remote work systems, introduced coreless

flextime systems, implemented chat and web conferencing tools, advanced RPA, and have moved toward paperless operations. Through these initiatives, we aim for higher-value-added work styles. We are also cultivating a culture that makes it easier to take time off, for instance by setting recommended annual leave days, to enhance work-life balance.

Advertising Activities (Sus-tetsu-nable)

サス鉄ナブル!

Sus-tetsu-nable!*

* A term unique to our Company, it combines steel and sustainability, both of which are essential to society

In 2022, JFE Holdings celebrated its 20th anniversary, and JFE Steel, JFE Engineering, as well as Group companies are similarly marking their 20th anniversaries in 2023. In conjunction with these milestones, we produced corporate commercials aimed at introducing our stakeholders to our efforts toward realizing a sustainable future for the JFE Group. The objective is to get stakeholders to feel more closely connected with us.

We actively engage in these efforts in anticipation that they are broadening awareness through advertising and promotional activities, and will also contribute to enhancing employee engagement and strengthening our hiring capabilities.



Management Foundation that Supports Growth

The JFE Group is enhancing its responsiveness to changes in the business environment in order to sustainably increase corporate value.

In this section, we introduce our organizations and initiatives aimed at achieving this goal.

- 67 | Management Foundation that Supports Growth
- 69 | Management Organization
- 71 | Dialogue with Outside Executives
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- 85 | Risk Management
- 87 | Ensuring Occupational Safety and Health
- 89 | Respect for Human Rights
- 92 | Stakeholder Relationships

Recycling

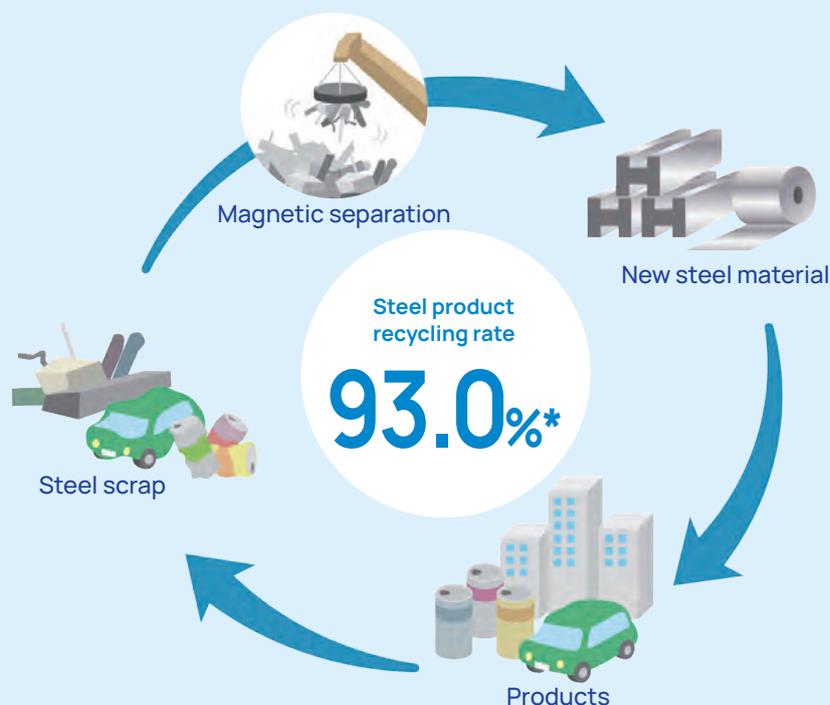
サス鉄ナブル!

Sus-tetsu-nable!*

* A term unique to our Company, it combines steel and sustainability, both of which are essential to society

Steel can be reborn again and again into anything!

Steel is a material that is easy to separate and collect, making it highly recyclable. Even after fulfilling its mission in society, steel can be recycled and transformed into high-quality products time and time again. Through recycling, it is possible to reduce the consumption of new natural resources. Moreover, recycling helps to limit the emission of CO₂ and generates minimal waste, thereby contributing to a sustainable future.



* Source: Japan Iron and Steel Federation

For more details, please see The Value of Steel ▶ P.7-8

Management Organization

Executive Structure (as of July 1, 2023)

Directors



Koji Kakigi
Representative Director

Nomination Committee Member
Remuneration Committee Member

Date of birth: May 3, 1953

1977 Joined Kawasaki Steel Corporation
2015 Representative Director, President and CEO of JFE Steel Corporation, Representative Director of JFE Holdings, Inc.
2019 Representative Director, President and CEO of JFE Holdings, Inc. (current post)

Mr. Kakigi has abundant experience and knowledge required for management of the Group, which he has accumulated through his experience in operations in human resource and labor administration departments, and execution of duties as Corporate Officer in general administration, legal, accounting, finance, and procurement, in the Company and JFE Steel Corporation.




Yoshihisa Kitano
Representative Director

Nomination Committee Member

Date of birth: February 20, 1958

1982 Joined Kawasaki Steel Corporation
2019 Representative Director, President and CEO of JFE Steel Corporation (current post), Representative Director of JFE Holdings, Inc. (current post)

Mr. Kitano has abundant experience and knowledge required for management of the Group, which he has accumulated through his experience in operations in steelmaking technology and production control departments, and execution of duties as Corporate Officer such as supervision of steelworks and overseas business, corporate planning, and IT in JFE Steel Corporation.




Masashi Terahata
Representative Director

Remuneration Committee Member

Date of birth: October 31, 1959

1982 Joined Kawasaki Steel Corporation
2018 Representative Director and Executive Vice President of JFE Steel Corporation
2019 Representative Director and Executive Vice President of JFE Holdings, Inc. (current post)

Mr. Terahata has abundant experience and knowledge required for management of the Group, which he has accumulated through his experience in operations such as general administration and legal departments in the Company as well as operations in human resource and labor administration departments, and execution of duties as Corporate Officer in management divisions such as accounting, finance, and procurement departments in JFE Steel Corporation.




Hajime Oshita
Director

Date of birth: September 11, 1957

1982 Joined NKK Corporation
2017 Representative Director, President and CEO of JFE Engineering Corporation (current post), Director of JFE Holdings, Inc. (current post)

Mr. Oshita has abundant experience and knowledge required for management of the Group, which he has accumulated through his experience in corporate planning, accounting, and finance, and a wide range of duties as Corporate Officer, including overseeing domestic and overseas businesses at JFE Engineering Corporation.




Toshinori Kobayashi
Director

Date of birth: December 19, 1957

1980 Joined Kawasaki Steel Corporation
2016 Representative Director and Executive Vice President of JFE Steel Corporation
2021 Representative Director, President and CEO of JFE Shoji Corporation (current post), Director of JFE Holdings, Inc. (current post)

Mr. Kobayashi has abundant experience and knowledge required for management of the Group, which he has accumulated through his experience in operations related to sales of automotive steel at JFE Steel Corporation, and supervising sales divisions as Corporate Officer.



Audit & Supervisory Board Members



Nobuya Hara
Audit & Supervisory Board Member

Date of birth: December 11, 1961

1984 Joined NKK Corporation
2016 Audit & Supervisory Board Member of JFE Steel Corporation (current post)
2017 Audit & Supervisory Board Member of JFE Holdings, Inc. (current post)

Mr. Hara has abundant experience and knowledge in finance and accounting that he has accumulated through operations related to corporate planning, accounting, and finance at JFE Steel Corporation as well as accounting operations at the Company. He also has abundant experience and knowledge gained through corporate management operations at the group companies of JFE Steel Corporation, in addition to duties as its Audit & Supervisory Board Member.




Nakaba Akimoto
Audit & Supervisory Board Member

Date of birth: May 2, 1968

1991 Joined NKK Corporation
2022 Audit & Supervisory Board Member of JFE Holdings, Inc. (current post), Audit & Supervisory Board Member of JFE Engineering Corporation (current post), Audit & Supervisory Board Member of JFE Shoji Corporation (current post)

Ms. Akimoto has abundant experience in properly designing and operating the Group's internal control systems and other operations through work in legal affairs of the Company and JFE Steel Corporation, the Group's core company. She also has insights as a lawyer in the State of New York, U.S. In addition, she is currently serving as an Audit & Supervisory Board Member of JFE Engineering Corporation and JFE Shoji Corporation. Based on such experience and knowledge, she is capable of accurately and fairly auditing the execution of duties by the Directors.



Outside Executive Structure (as of July 1, 2023)

Directors



Independent Executive
Chairperson Nomination Committee
Remuneration Committee Member

Masami Yamamoto
Director

Date of birth: January 11, 1954

- Apr. 1976 Joined Fujitsu Limited
- Jan. 2010 Corporate Senior Executive Vice President of Fujitsu Limited
- Apr. 2010 President of Fujitsu Limited
- Jun. 2010 President and Representative Director of Fujitsu Limited
- Jun. 2015 Chairman and Representative Director of Fujitsu Limited
- Jun. 2017 Chairman and Director of Fujitsu Limited, Director of JFE Holdings, Inc. (current post)
- Jun. 2019 Director and Senior Advisor of Fujitsu Limited (current post)

Significant concurrent posts

Director and Senior Advisor of Fujitsu Limited
Outside Member of the Board of Directors of Mizuho Financial Group, Inc.




Independent Executive
Chairperson Remuneration Committee

Nobumasa Kemori
Director

Date of birth: April 12, 1951

- Sep. 1980 Joined Sumitomo Metal Mining Co., Ltd.
- Jun. 2006 Director, Managing Executive Officer and General Manager of Non-Ferrous Metals Div. of Sumitomo Metal Mining Co., Ltd.
- Jun. 2007 Representative Director and President of Sumitomo Metal Mining Co., Ltd.
- Jun. 2013 Representative Director and Chairman of the Board of Sumitomo Metal Mining Co., Ltd.
- Jun. 2016 Director and Chairman of the Board of Sumitomo Metal Mining Co., Ltd.
- Jun. 2017 Executive Advisor of Sumitomo Metal Mining Co., Ltd.
- Jun. 2018 Director of JFE Holdings, Inc. (current post)
- Jun. 2021 Honorary Advisor of Sumitomo Metal Mining Co., Ltd. (current post)

Significant concurrent posts

Honorary Advisor of Sumitomo Metal Mining Co., Ltd.
Outside Director of Sumitomo Realty & Development Co., Ltd.




Independent Executive
Nomination Committee Member

Yoshiko Ando
Director

Date of birth: March 17, 1959

- Apr. 1982 Joined Ministry of Labour
- Jul. 2013 General Manager, Workers' Compensation Division, Labour Standards Bureau of Ministry of Health, Labour and Welfare
- Jul. 2014 Director-General, Equal Employment and Child and Family Bureau of Ministry of Health, Labour and Welfare
- Oct. 2015 Director-General for Labour of Ministry of Health, Labour and Welfare
- Jun. 2016 Director-General for Statistics and Information Policy of Ministry of Health, Labour and Welfare
- Jul. 2017 Director-General for Human Resources Development of Ministry of Health, Labour and Welfare
- Jul. 2018 Retired from Ministry of Health, Labour and Welfare
- Jun. 2020 Director of JFE Holdings, Inc. (current post)

Significant concurrent posts

Audit & Supervisory Board Member of Kirin Holdings Company, Limited
Outside Director of Sansel Technologies, Inc.



Audit & Supervisory Board Members



Independent Executive
Remuneration Committee Member

Isao Saiki
Audit & Supervisory Board Member

Date of birth: August 11, 1961

- Apr. 1989 Admitted to the bar
- Apr. 1989 Joined Ginza Law Office (current Abe, Ikubo & Katayama Law Firm)
- Jan. 1998 Promoted to Partner Lawyer of Abe, Ikubo & Katayama Law Firm (current post)
- Apr. 2014 Audit & Supervisory Board Member of JFE Holdings, Inc.
- Jun. 2014 Retired as Audit & Supervisory Board Member of JFE Holdings, Inc.
- Jun. 2017 Audit & Supervisory Board Member of JFE Holdings, Inc. (current post)

Significant concurrent post

Partner Lawyer of Abe, Ikubo & Katayama Law Firm




Independent Executive
Nomination Committee Member
Remuneration Committee Member

Tsuyoshi Numagami
Audit & Supervisory Board Member

Date of birth: March 27, 1960

- Apr. 2000 Professor of Graduate School of Commerce and Management of Hitotsubashi University
- Jan. 2011 Dean of Graduate School of Commerce and Management of Hitotsubashi University
- Dec. 2014 Board Member and Executive Vice President of Hitotsubashi University
- Apr. 2018 Professor of Graduate School of Business Administration of Hitotsubashi University
- Jun. 2018 Audit & Supervisory Board Member of JFE Holdings, Inc. (current post)
- Apr. 2023 Professor of Waseda University's Institute for Business and Finance (current post)

Significant concurrent posts

Professor of Waseda University's Institute for Business and Finance
Outside Director of Tokyo Century Corporation
Outside Director of EBARA CORPORATION




Independent Executive
Nomination Committee Member

Takuya Shimamura
Audit & Supervisory Board Member

Date of birth: December 25, 1956

- Apr. 1980 Joined Asahi Glass Co., Ltd. (current AGC Inc.)
- Jan. 2013 Senior Executive Officer and President of Electronics Company of AGC Inc.
- Jan. 2015 President & CEO of AGC Inc.
- Mar. 2015 Representative Director and President & CEO of AGC Inc.
- Jan. 2021 Chairman & Representative Director of AGC Inc.
- Mar. 2021 Director and Chairman of AGC Inc. (current post)
- Jun. 2022 Audit & Supervisory Board Member of JFE Holdings, Inc. (current post)

Significant concurrent posts

Director and Chairman of AGC Inc.
Outside Director of EBARA CORPORATION



Expertise and background



Corporate management/
Management strategy



Technology/DX



Internal control/
Governance



Human resources man-
agement and development



Sustainability/Environment



Finance/Accounting



Legal/Compliance



Sales/Marketing

Please see page 79 for Skill Matrix.

Progress on Medium-term Business Plan and JFE's Vision



Masami Yamamoto
Outside Director

Mr. Yamamoto joined Fujitsu Limited in 1976 and was appointed director and then senior advisor (current post from June 2019) after first serving as president and later chairman. He is also an outside Member of the Board of Directors of Mizuho Financial Group, Inc. He has been a director of JFE Holdings since June 2017.



Isao Saiki
Audit &
Supervisory Board Member

Mr. Saiki was admitted to the bar in 1989 and joined Ginza Law Office (current Abe, Ikubo & Katayama Law Firm), where he has been a partner lawyer since January 1998. He has been an Audit & Supervisory Board Member of JFE Holdings since June 2017.



Nobumasa Kemori
Outside Director

Mr. Kemori joined Sumitomo Metal Mining Co., Ltd. in 1980 and served as president, chairman, and executive advisor before being appointed honorary advisor in June 2021. He is also an outside director of Sumitomo Realty & Development Co., Ltd. He has been a director of JFE Holdings since June 2018.



Tsuyoshi Numagami
Audit &
Supervisory Board Member

Mr. Numagami became a professor of the Graduate School of Commerce and Management at Hitotsubashi University in 2000. He became a board member and executive vice president at the university in 2014. After serving as professor in the university's Graduate School of Business Administration, he assumed his present position as professor of Waseda University's Institute for Business and Finance in April 2023. He is also an outside director of Tokyo Century Corporation and an outside director of EBARA CORPORATION. He has been an Audit & Supervisory Board Member of JFE Holdings since June 2018.



Yoshiko Ando
Outside Director

Ms. Ando joined the Ministry of Health, Labour and Welfare in 1982 and retired in 2018 after serving as Director-General for Labour, Statistics and Information Policy, and Human Resources Development. She is currently an outside audit & supervisory board member of Kirin Holdings Company, Limited and an outside director of Sansei Technologies, Inc. She has been a director of JFE Holdings since June 2020.



Takuya Shimamura
Audit &
Supervisory Board Member

Mr. Shimamura joined Asahi Glass Co., Ltd. (current AGC Inc.) in 1980. After serving as representative director, president & CEO of AGC, he assumed his present position as chairman in March 2021. He is also an outside director of EBARA CORPORATION. He has been an Audit & Supervisory Board Member of JFE Holdings since June 2022.

Looking at the measures set forth in the Seventh Medium-term Business Plan, please share your assessment of the Company's pivot from quantity to quality in the steel business, as well as any challenges for the future.

Kemori JFE is past the halfway mark of the current medium-term business plan, and progress has been exceptional. In fiscal 2023, profit per ton of steel, excluding inventory valuation differences, is expected to reach the medium-term target of 10,000 yen.* As for cost reductions, JFE has reduced costs by 45 billion yen over the past two fiscal years, somewhat behind its four-year target of 120 billion yen. However, with upcoming structural reforms in the Keihin district, this target looks achievable. In the steel industry, a capital-intensive, large-scale, heavy equipment industry, the norm has traditionally been to pursue profits by increasing production. Under its medium-term business plan, however, JFE is keen to increase profits while decreasing its number of blast furnaces from eight to seven and lowering production volumes accordingly. I appreciate the results it has achieved so far under these circumstances.

I believe there are three challenges. The first is maintaining a system where maximum production capacity can be deployed whenever needed. Second, even if profit per ton of steel exceeds the target, JFE needs to quantitatively verify if the value of its steel is truly competitive when compared to that of its global peers. Third, can JFE shorten the construction period for its non-oriented electrical steel production plant currently underway? A longer construction period might expose the Company to adverse effects from changes in the external business environment, so I think JFE needs to launch the plant in a shorter time frame in order to reap the benefits sooner.

* Based on earnings forecasts announced on August 3, 2023

Shimamura It has been a year since I assumed the position of auditor, and I have been impressed by the candid and sincere discussions at the Board of Directors' and Audit & Supervisory Board meetings. This atmosphere is cultivated by the secretariat and the executive side, ensuring an open and inclusive environment for Board meetings.

What I appreciate most is that the Seventh Medium-term Business Plan was created after reaffirming the fundamental importance of steel to society. The steel business offers social value, but it is a capital-intensive industry that requires huge investments and has historically been difficult to maintain its profitability. The suspension of upstream processes in the Keihin district this year is a symbolic step for JFE as it begins to boldly reform its domestic production and business structures. Additionally, while it is common practice for Japanese companies in the materials industry to set prices by adding a profit margin to costs, I give high marks to JFE for trying to set prices based on the intrinsic value of its products, which has borne tangible results.

However, the challenge lies in financial soundness. Because significant investments are required for GX and DX, management needs to brainstorm on the issue of capital procurement. Furthermore, I hope JFE can delve deeper into creating value that only the JFE Group can provide. I am excited that the JFE Group is working in unison to create value by combining the strengths of each business segment—producing differentiated high-value-added products in the steel business, providing social solutions using steel in the engineering business, and acting as a bridge from within to outside the Group in the trading business.

Ando I also believe the shift from quantity to quality is progressing smoothly. Management's structural reform initiatives are steadily advancing as planned, leading to visible improvements in profit margins through price hikes.

Going forward, I think management should focus more on increasing selling prices. JFE's corporate vision is to "contributing to society with the world's most innovative technology." Products crafted with the most innovative technology should be valued and priced commensurately with such technology. Also, while the medium-term business plans have been scoped for 3–4 years, I think it would be good to consider rolling reviews over a span of about 3 years, with a medium- to long-term vision of about 10 years ahead, for example. As is the case of expanding production facilities for electrical steel sheets, it takes years to make the investment decision, then build the facilities and finally start producing and selling. Because the external business environment undergoes rapid changes after an investment decision is made, management must make investment decisions while thinking far into the future. As for the natural environment, the JFE Group Environmental Vision for 2050 is a medium- to long-term vision, so I think it would be beneficial to have plans and policies shaped around this vision as well.



What aspects of the JFE Group's growth strategy interest you the most in terms of the future?

Yamamoto The role of the JFE Group is being reexamined at a time when the world is striving to achieve sustainability. Simply put, I believe this can be summed up as a shift from quantity to quality. In other words, the future of JFE lies along the extension of the Seventh Medium-term Business Plan. Strong, lightweight, high-quality steel can contribute to a carbon-neutral world and greater well-being for all. Although the Company is sometimes criticized for its high emissions of CO₂, I believe this global perception will change once JFE begins using advanced technologies to better control such emissions. I hope JFE will relentlessly pursue its global role as a company that translates its stated goals into accomplishments. As mentioned earlier, one of JFE Holdings' strengths is its three operating companies, so now the Company will be tested on whether these strengths can be deployed for the benefit of society.



Numagami Living in an industrialized country, the steel industry might seem like a mature industry, but in reality it still has many opportunities for growth. One of these is overseas business, notably JFE's establishment of a joint venture with India's JSW Steel in grain-oriented electrical steel sheet. I am also paying close attention to the efforts by JFE Steel and JFE Shoji to expand their market share in non-oriented electrical steel sheet, demand for which is growing in industrialized countries. Another growth opportunity is carbon recycling blast furnaces and large-scale electric arc furnaces. It is vital that JFE develops technologies for these furnaces ahead of rivals in order to lock in long-term growth. And a third growth opportunity is the engineering business, for which I have high expectations. Realizing JFE Engineering's potential will be a key factor in the Group's ability to flourish in a resource-recycling society. This includes, for example, JFE Engineering's recycling business for PET bottles and

various other materials, and its Global Remote Center for providing various plants with remote monitoring and support. Deploying the latter technology in the steel business might realize opportunities to provide remote support from Japan as massive blast furnaces in Asia are replaced with carbon recycling blast furnaces.

An important issue, in my opinion, will be securing cash flow. It is essential to determine the areas where investment is necessary from a best-owner perspective. And given the wide range of businesses that JFE is considering, training diverse managers who possess different skills and personalities will be another challenge. Public relations and advertising would be effective means of recruiting such employees.

Saiki I too am keenly interested in the Indian joint venture with JSW Steel in terms of capturing profits overseas. Another area of interest is the offshore wind power business that the Group is advancing toward commercialization. Wind power is bound to become a significant power source in Japan, so I hope the Group will continue to develop this business without falling behind the trend.

As for future issues, I think management needs to talk more about how to formulate medium-term plans. When formulating the Seventh Medium-term Business Plan, the Board of Directors spent considerable time discussing what concepts to use for medium- to long-term planning, while also reflecting on the reasons why conditions during the previous business plan had diverged considerably from initial assumptions. Given the rapidly changing business environment, for the next medium-term plan it will be essential to address immediate challenges while also keeping long-term objectives in mind.



How do you evaluate progress toward carbon neutrality? Also, please shed light on the key focus areas going forward.

Ando The objectives set out in the JFE Group Environmental Vision for 2050 have been thoroughly scrutinized, and I am confident that these objectives can be achieved given JFE's steady progress so far. I have three expectations for the future. The first one is carbon recycling blast furnaces, a unique initiative being undertaken by JFE. As hydrogen steelmaking has not yet become fully practical, the accelerated deployment of carbon recycling blast furnaces utilizing existing facilities would lead to faster reductions in CO₂. My second expectation is for JGreeX™ green steel, which JFE Steel launched recently. If a market forms around customers who recognize the value of using green steel, there will be a growing consensus for market mechanisms to share the significant cost of transitioning to carbon neutrality. The key will be how best to position JGreeX™ brand value. My third hope is for the engineering business' contribution to CO₂ reduction. By utilizing JFE's superior technologies for developing waste-to-energy power generation and recycling businesses worldwide, not only in Japan, the Company could contribute to global CO₂ reduction. I look forward to the increased presence of Japanese companies in this field.

Shimamura I commend JFE for its quantification of CO₂ reduction targets for 2030, a milestone on the path to carbon neutrality by 2050, and for taking concrete actions to achieve them, as well as for clearly setting out its contribution to CO₂ reduction in society using the Company's technologies and products, including specific numerical values. While the path to carbon neutrality might seem daunting, laying plans and spurring innovations will lead to technological progress. With such goals in place, I believe the passions and dreams of JFE employees will grow stronger. By 2030, JFE's level of progress in turning these ideas into reality will determine its competitive advantages far into the future. For this reason, I hope JFE will aim even higher in its development of technologies. In light

of possible changes in external factors, such as a carbon tax, I would like to see management make more efforts to help society understand the value of JFE's new products, such as green steel.

Yamamoto JFE is addressing environmental issues in line with my expectations. However, I think JFE should put more effort into expounding the importance of steel as a core material for society, and explaining the challenges of reducing CO₂ in the steel manufacturing process. While steel might seem ubiquitous, not all steel is made the same. JFE's steelmaking technologies have contributed greatly to making lighter and stronger electric vehicles as well as enhancing electric motor performance. Moreover, JFE is taking on bold challenges to deploy cutting-edge technologies in order to use new raw materials for reduced CO₂ emissions. JFE should put more effort into showcasing these bold efforts; otherwise, the value of green steel might not be well understood. In this context, the "Sus-tetsu-nable* Steel" commercials that the Company is airing in the media seem to be quite effective. Steel is an indispensable material, so, as Mr. Numagami mentioned, if the Company can realize innovative technologies for reduced CO₂ and remote control, I see a very bright future ahead for JFE.

* A term unique to our Company, it combines steel and sustainability, both of which are essential to society



Regarding executive compensation (performance-based remuneration), metrics related to safety were introduced in fiscal 2022, and metrics related to climate change were introduced in fiscal 2023. What kind of discussions were held by the Remuneration Committee?

Kemori Discussions in the Remuneration Committee regarding the introduction of non-financial metrics began in May 2021 when the Seventh Medium-term Business Plan was announced. We decided to promptly introduce ESG-linked compensation at JFE, as there were no significant differences between the non-financial metrics we had initially considered and those already introduced by leading companies. These new metrics

were aimed at establishing an optimal executive compensation system to help improve corporate value. Initially, safety and climate change, the most critical issues in the current medium-term business plan, were considered as candidate metrics. However, due to several challenges related to the introduction of climate change metrics, we first introduced safety metrics and then climate change metrics a year later. The challenges

Dialogue with Outside Executives

regarding climate change included deciding whether the metrics should be tied to short-term or medium- to long-term performance-based remuneration, and variances in the degree of difficulty and importance of KPIs depending on the business characteristics of each operating company. One significant reason for ultimately tying climate change to short-term performance-based remuneration was our belief in the importance of its introduction and our decision to adopt KPIs that had already been set for single fiscal years. We believe that JFE's early adoption ahead of other industry peers was ultimately a smart move.

In the future, JFE will need to introduce climate change metrics based on medium- to long-term perspectives. However, many uncertainties surround CO₂ reduction targets for 10 to 30 years in the future. The KPIs for medium- to long-term performance-based remuneration require thoughtful discussions. We will continue to discuss such matters, including the introduction of non-financial metrics other than safety and climate change, and the proportion of ESG-based remuneration to total compensation.

Saiki Regarding climate change metrics, there is a need for more substantive discussions about KPIs for 2030 and beyond. Questions are likely to arise when setting KPIs, such as future innovations and the level of hydrogen supply, a prerequisite for carbon neutrality. While this may deviate from the discussions of the Remuneration Committee, I believe the Company needs

to discuss safety and also how the achievement of safety indicators can be passed on to employees.

Numagami Since the discussions that take place in the Remuneration Committee have already been explained, I will share my thoughts on metrics, of which there are three types. First is financial metrics. Companies must provide customers with valuable but reasonably priced products and services, so financial metrics are essential for the survival and growth of a company. In contrast, there are also metrics such as biodiversity that everyone, not just companies, must guard in order to live within international society. Between these two is the third metric, diversity and inclusion, which is not only good for society but also essential for an organization's long-term health and competence. This metric for decision-making may not seem logical when implementing business measures, but like innovation, it will make more sense when looking back after changes occur in society or the organization. I want JFE to contribute to society and become a strong organization in the long run, so I would like to make sure that these three metrics are well organized and discussed in the Remuneration Committee.

Investors are putting more pressure on companies to make decisions with a keen awareness of the cost of capital and the share price. Please share your views on what should be done to improve perceptions of JFE in the eyes of capital markets, and include any relevant discussions by the Board of Directors.

Investors are putting more pressure on companies to make decisions with a keen awareness of the cost of capital and the share price. Please share your views on what should be done to improve perceptions of JFE in the eyes of capital markets, and include any relevant discussions by the Board of Directors.

Yamamoto This topic has been discussed in meetings where only outside directors are present. It has been a topic of interest even before the Tokyo Stock Exchange released guidelines for listed companies. As I mentioned earlier, JFE is an indispensable company in global society. However, we need to place more emphasis on having people recognize the process of how JFE contributes to the world and returns profits to shareholders. It is important to communicate not only the Company's pursuit of profits but also explain in an easy-to-understand manner how much it can contribute to the world.

Kemori The outside directors are all aware that the current PBR is quite low. JFE needs to improve its ROE and disclose growth strategies that investors will appreciate. We hope that the Company will not be content with an ROE of around 10%, but rather strive to maintain a significantly higher level of perhaps around 15%, excluding inventory valuation gains, in the next medium-term business plan. If investors are not likely to favor a particular growth strategy, then there is little reason to put forward

such a strategy. Despite setting goals for structural reforms, large-scale cost reductions, and increasing the sales ratio of high-value-added products in the Seventh Medium-term Business Plan, and even though JFE Steel is forecasting segment profit of 260 billion yen in the final year of the business plan, the company's share price does not adequately reflect these positive factors. Many investors and shareholders probably have a hard



time envisioning the future for JFE beyond its current trajectory and may struggle to imagine a future where profits will grow significantly in new areas. In its next medium-term business plan, I think JFE needs to present a vision of what the Company should look like in 10 to 20 years and clarify what needs to be done in the short term through backcasting.

Ando To earn a better evaluation from the market, a company must not only have the ability to grow, it is also necessary for the market to be able to understand the company's ability and growth potential. Ability is easy to understand because it can be expressed in numbers, but growth potential cannot be understood unless it is explained with a story. I feel that JFE is not particularly adept in this regard. The materials industry, which is greatly affected by economic fluctuations, tends to focus on short-term trends, but the demand structure is changing along with carbon neutrality and global population changes, so it is important to draw a growth story from a long-term perspective that responds to these changes. With its advanced technical capabilities and three operating companies, I believe JFE Holdings has the ingredients for a good growth story, so I am eager to hear JFE clearly explain how it will play a valuable role in future society.

Saiki Low PBR are a concern that plagues the entire steel industry. Yet, when compared to its peers, I wonder if JFE has a hard time engaging with investors in a compelling way. In meetings of the Board of Directors, we have had discussions about why the share price remains subdued despite relatively strong earnings and ongoing structural reforms. In these discussions, I have consistently pointed out the lack of effective outreach to investors. While JFE's prudence and caution with information disclosures are commendable, it sometimes feels like an opportunity is being missed.

JFE's share price seems to have responded to disclosures about the Company's forward-looking initiatives based on a clear vision for the future, building on relatively strong performance of late. I hope that JFE will continue to actively disclose information about its commendable initiatives, which can be accumulated in small increments, in order to attract more attention from investors. I believe that such efforts would help to improve PBR.

Numagami Regarding investor perceptions, I think that another side of the story is that there are lingering concerns about future cash flows. In this context, if JFE can convincingly demonstrate that its technological innovations, like carbon recycling blast furnaces, can overcome environmental challenges, its share price will probably respond accordingly.

Additionally, JFE fundamentally needs to allocate capital and generate synergies. I believe investor perceptions would improve if management makes decisions with a strong awareness of the cost of capital, effectively allocates capital to profitable areas, and supports areas in the Group where synergies are possible. Deploying young talent to areas where invested capital can yield substantial returns will facilitate growth. Furthermore, the holding company must support necessary risk-taking and monitor each operating company to ensure appropriate levels of capital and human resources are allocated to maximize returns.

Shimamura PBR and share prices are common headaches for companies in the materials industry. Investors seem to dislike the volatility of steel and glass because of the strong impression that they are market commodities. The first priority is to generate stable earnings, but as JFE pursues efficiency through structural reforms, there is a great opportunity to adjust its portfolio of businesses and products. I think the share price will rise if JFE can change the perception that as a steel company it is tied to an upfront investment business model with poor asset efficiency, and instead looks for way to appeal to investors with its cutting-edge manufacturing capabilities and progressive stance on resolving environmental issues.

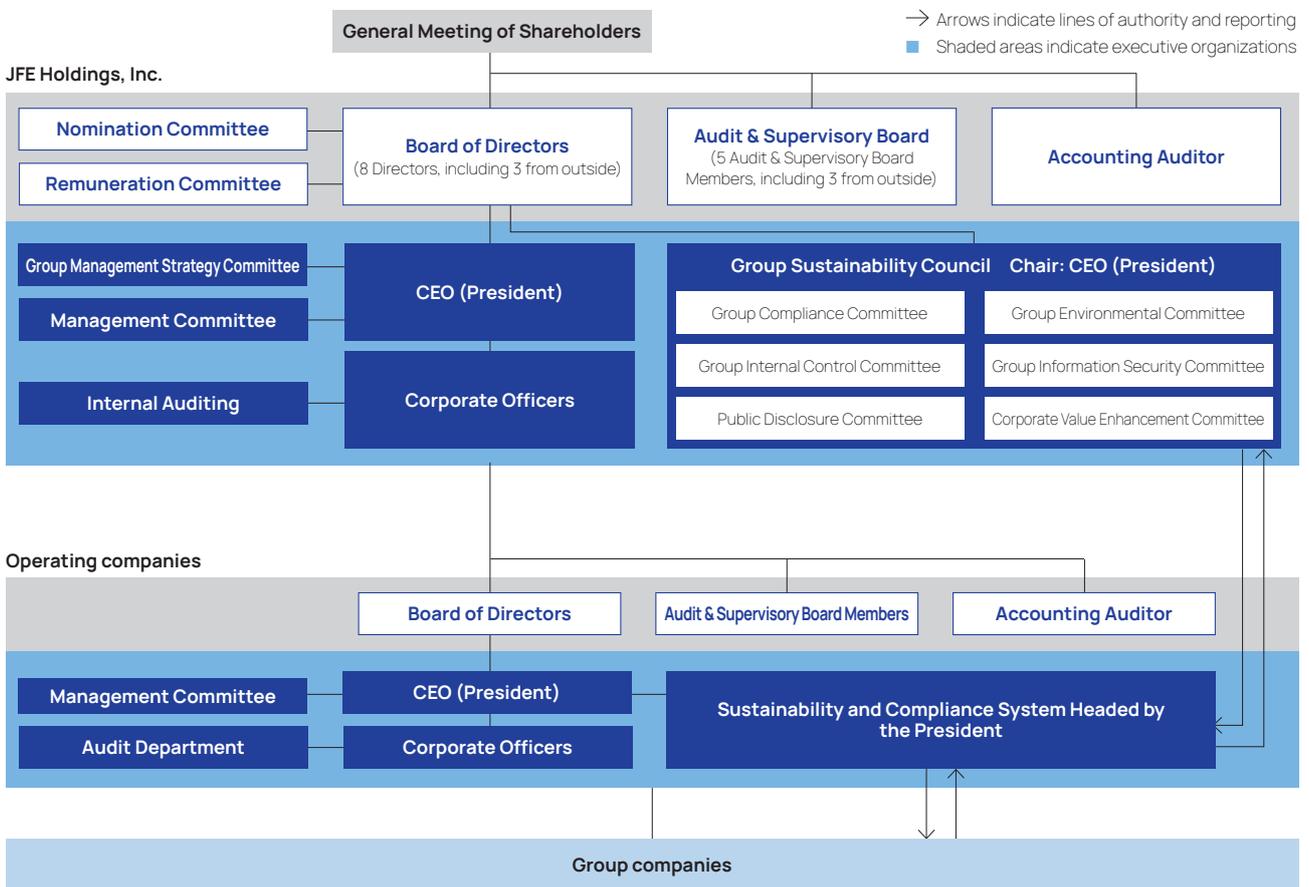


Corporate Governance



With the steel business, engineering business, and trading business at its core, the JFE Group develops a broad range of businesses in a wide range of areas together with many Group companies and partners. Establishing a proper governance system is essential toward improving independence and raising efficiency in each operating company, along with the optimal management of risks, which include those related to the environment, safety, and disaster prevention in the Group. It is also necessary for the sustainable growth of the Group and the medium- to long-term improvement of its corporate value.

Corporate governance system



Establishment of Basic Policy on Corporate Governance

The JFE Holdings, Inc. Basic Policy on Corporate Governance was established with the aim of pursuing the best practices in corporate governance in line with its corporate vision.

JFE Holdings, Inc. Basic Policy on Corporate Governance
<https://www.jfe-holdings.co.jp/en/company/info/pdf/basic-policy.pdf>

Corporate Governance Report
<https://www.jfe-holdings.co.jp/en/company/info/pdf/corporate-governance.pdf>

Overview of the Corporate Governance System

Group Governance System

The JFE Group comprises a holding company and three operating companies: JFE Steel, JFE Engineering, and JFE Shoji.

JFE Holdings, a pure holding company at the core of the Group's integrated governance system, guides Groupwide strategy, risk management, and public accountability.

Each operating company has developed its own system suited to its respective industry, ensuring the best course of action for competitiveness and profitability.

Overview of the corporate governance system

Organizational design type	Company with an Audit & Supervisory Board
Number of Directors	8
Number of Independent Outside Directors	3
Number of female Directors	1
Number of Audit & Supervisory Board Members	5
Number of Independent Outside Audit & Supervisory Board Members	3
Number of female Audit & Supervisory Board Members	1
Term for Directors	1 year (The same for Outside Directors)
Corporate Officer System	Adopted
Voluntary advisory committees of the Board of Directors	Nomination Committee and Remuneration Committee

Governance System

JFE Holdings and each operating company have their respective Audit & Supervisory Boards Members (Audit & Supervisory Boards). The companies are crosschecked by the Directors, who supervise operational execution, and the Audit & Supervisory Board Members, who conduct audits. Also, a Corporate Officer system separates decision-making and execution to clarify authority and responsibility, as well as to accelerate execution. JFE Holdings' Board of Directors is responsible for maintaining and enhancing management efficiency and passing resolutions as legally required, laying down key management policies and strategies and supervising operational execution. The Audit & Supervisory Board oversees management for the purpose of strengthening its soundness. In fiscal 2022, the Board of Directors deliberated about progress on the Seventh Medium-term Business Plan and initiatives related to sustainability issues.

Major topics discussed at the fiscal 2022 Board of Directors' meeting

- Progress on the Seventh Medium-term Business Plan
- Large-scale capital investment (blast furnace blower electrification upgrade project (Kurashiki district), No. 6 coke furnace Group A construction project (Fukuyama district), etc.)
- Initiatives to address ESG issues (carbon-neutral efforts, assessment and review of KPIs for important management issues, etc.)

Major Initiatives to Strengthen the Governance System



Independent Outside Directors

We elect Independent Outside Directors so that one-third or more of the Directors are Independent Outside Directors. Independent Outside Directors will be elected from persons who are appropriate to bear the responsibility of strengthening governance, such as those who possess abundant experience as management in global enterprises or experts who possess profound knowledge and satisfy our independence standards. Currently, of the eight Directors, three are Independent Outside Directors.

Moreover, more than half of the Audit & Supervisory Board Members are from outside. Independent Outside Audit & Supervisory Board Members will be elected from persons who are appropriate to bear the role of enhancing the auditing function, such as those who possess abundant experience as management in global enterprises or experts who possess profound knowledge and satisfy our independence standards. Currently, of the five Audit & Supervisory Board Members, three are Independent Outside Audit & Supervisory Board Members.

Standards for Independence of Outside Directors/Audit & Supervisory Board Members of JFE Holdings, Inc.
<https://www.jfe-holdings.co.jp/en/company/info/pdf/independence.pdf>

Approach to Diversity in the Board of Directors

With regard to the composition of the Board of Directors, the Company elects Officers following deliberations by the Nomination Committee, by focusing on the enhancement of diversity of the Board members, such as their expertise, knowledge, and experience in various fields, while balancing with the appropriate size of the Board. One female Audit & Supervisory Board Member was appointed in June 2019 and one female Director was appointed in June 2020, respectively. The Company is working to enhance gender and global diversity mainly by electing Directors and Audit & Supervisory Board Members who possess a wealth of knowledge and experience as management in global enterprises. The Company will continue to systematically engage in initiatives to foster such human resources suitable for candidates for Directors and Audit & Supervisory Board Members by setting specific targets. We have identified skills for the Board of Directors that are necessary for the management of the Company, and arranged the main skills of each director and Audit & Supervisory Board member in a matrix, as follows.

Corporate Governance

Skill matrix of JFE Holdings' Directors and Audit & Supervisory Board Members (as of July 1, 2023)

Position/Name	Corporate management / Management strategy	Sustainability / Environment	Technology / DX	Finance / Accounting	Internal control / Governance	Legal / Compliance	Human resources management and development	Sales / Marketing	Expertise held in:	Independent executive	Nomination Committee	Remuneration Committee	FY2022 Board of Directors' attendance	FY2022 Audit & Supervisory Board attendance
Representative Director Koji Kakigi	○	○	○	○	○	○	○		Steel Business		Member	Member	15/15 (100%)	—
Representative Director Yoshihisa Kitano	○	○	○		○				Steel Business		Member		15/15 (100%)	—
Representative Director Masashi Terahata	○	○		○	○	○	○		Steel Business / Trading Business			Member	15/15 (100%)	—
Director Hajime Oshita	○	○	○	○	○			○	Engineering Business				15/15 (100%)	—
Director Toshinori Kobayashi	○	○	○		○			○	Steel Business / Trading Business				15/15 (100%)	—
Director Masami Yamamoto	○	○	○		○				—	○	Chair	Member	15/15 (100%)	—
Director Nobumasa Kemori	○	○	○		○				—	○		Chair	15/15 (100%)	—
Director Yoshiko Ando		○			○	○	○		—	○	Member		15/15 (100%)	—
Audit & Supervisory Board Member Nobuya Hara	○			○	○				Steel Business				15/15 (100%)	19/19 (100%)
Audit & Supervisory Board Member Nakaba Akimoto					○	○			Steel Business / Engineering Business / Trading Business				12/12 (100%)	13/13 (100%)
Audit & Supervisory Board Member Isao Saiki					○	○	○		—	○		Member	15/15 (100%)	19/19 (100%)
Audit & Supervisory Board Member Tsuyoshi Numagami	○			○	○			○	—	○	Member	Member	15/15 (100%)	19/19 (100%)
Audit & Supervisory Board Member Takuya Shimamura	○	○			○			○	—	○	Member		12/12 (100%)	13/13 (100%)

* Ms. Nakaba Akimoto and Mr. Takuya Shimamura were appointed as new members of the Audit & Supervisory Board at last year's General Meeting of Shareholders (held on June 24, 2022), so their number of meetings attended differs for Board of Directors' and Audit & Supervisory Board meetings.

Nomination Committee and Remuneration Committee

In October 2015, the Company set up the Nomination Committee and the Remuneration Committee as advisory bodies to the Board of Directors to secure fairness, objectivity, and transparency in the appointment of and remuneration for Directors and Audit & Supervisory Board Members. For both committees, the majority of committee members are Outside Directors/Outside Audit & Supervisory Board Members and the chairs are chosen from among these people.

The Nomination Committee deliberates and reports to the Board of Directors on matters pertaining to the basic stance on the election and dismissal of the President of the Company, proposals for the election of candidates for the President of the Company, succession plans of the President of the Company, and the nomination of candidates for Outside Directors/Outside Audit & Supervisory Board Members. Three meetings were held in fiscal 2022. All committee meetings had 100% attendance rates. The Remuneration Committee deliberates matters pertaining to the basic stance on the remuneration of Directors, etc., of the Company and each operating company and reports to the Board of Directors. Six meetings were held in fiscal 2022. All committee meetings had 100% attendance rates.

Nomination Committee and Remuneration Committee structure (as of July 1, 2023)

Committee	Inside Directors	Outside Directors	Outside Audit & Supervisory Board Members	Chair
Nomination Committee	2	2	2	Masami Yamamoto (Outside Director)
Remuneration Committee	2	2	2	Nobumasa Kemori (Outside Director)

Support for Directors and Audit & Supervisory Board Members

Directors and Audit & Supervisory Board Members are provided with opportunities and funding to receive training in legal matters, corporate governance, risk management, and other subjects that help them fulfill their roles and duties.

In addition, a briefing is held for Outside Directors and Outside Audit & Supervisory Board Members prior to Board of Directors' meetings.

Furthermore, Outside Directors and Outside Audit & Supervisory Board Members are provided with relevant information and opportunities to exchange opinions with the President of the Company and other top managers, attend key hearings on the operational status of individual departments, and inspect business sites and Group companies within and outside Japan.

Evaluation of Effectiveness of the Board of Directors

At JFE Holdings, the effectiveness of the Board of Directors is evaluated based on the Basic Policy on Corporate Governance. In fiscal 2022, all Directors and Audit & Supervisory Board Members answered a revised questionnaire about effectiveness. In addition, the outcome of initiatives in fiscal 2022 were examined while referencing the opinions and suggestions received from the fiscal 2021 analysis and evaluation.

Based on the results of the questionnaire and evaluation by the third-party organization, the Board of Directors determined that its overall effectiveness has been ensured through invigorated discussions facilitated by thorough preliminary briefing sessions attended by all Outside Directors/Outside Audit & Supervisory Board Members, and by appropriate direction by the chairperson.

Fiscal 2022 initiatives based on effectiveness evaluation results through fiscal 2021

- In addition to revising KPIs related to important management issues and initiatives for carbon neutrality, the Board of Directors received reports about and extensively deliberated sustainability issues and risk management matters deliberated by the Group CSR Council (now the JFE Group Sustainability Council). This included initiatives on human rights due diligence, quality assurance, taxation, and compliance with antitrust laws. Based on the discussions of the Board of Directors, we aim to improve the risk management of the entire Group.
- To spread awareness centered on compliance, JFE Holdings and its operating companies conducted surveys of awareness of corporate ethics and other areas. Based on the survey results, we aim to augment discussions regarding responses to identified issues.
- We revised agenda criteria for the purpose of invigorating discussions, further strengthening oversight functions and accelerating decision-making of the Board of Directors.
- From the perspective of enlivening discussions of the Board of Directors, we regularly held meetings with only Outside Directors to further expand opportunities for them to exchange opinions freely.

Furthermore, in addition to accurate and fair audits performed by the Audit & Supervisory Board Members, the members also expressed opinions and actively asked questions at Board of Directors' meetings on management decision-making and reporting to further invigorate deliberations. Such outcomes support the

conclusion that JFE functions more efficiently as a company with an Audit & Supervisory Board.

The following issues were identified in the survey as areas where effectiveness can be improved further.

Issues to further improving effectiveness

- The Company should advance measures related to human resource management and respect for human rights, which are priority management issues for sustainable growth. The Board of Directors should have more in-depth discussions and revise KPIs related to diversity and inclusion, personnel training, and realizing a rewarding workplace.
- The Board of Directors should receive in-depth reports with information about subsidiaries and affiliated companies for the purpose of understanding latent Groupwide risks from a risk management standpoint.
- It is important to prevent risks from materializing by constantly reviewing and improving existing measures with the objective of further instilling an awareness of compliance.

In fiscal 2023, JFE aims to increase opportunities to exchange opinions with managers of operating companies, by examining the implementation of supervision of business sites within and outside Japan, and holding meetings of the Board of Directors at domestic business sites.

In light of these points, we will continue to proactively implement measures to improve the effectiveness of the Board of Directors, with the ultimate aim of increasing the corporate value of the JFE Group.

Operating System

Key Decision-making

JFE companies are responsible for business decisions in accordance with their respective rules and procedures, whereas JFE Holdings makes final decisions about Groupwide matters. Each operating company determines key matters through a deliberative process by its own Management Committee and Board of Directors. In April 2017, JFE Holdings changed the operating structure of key

committees. Management strategies involving the entire Group are now deliberated by the Group Management Strategy Committee, and core issues of JFE Holdings, the operating companies, and the Group are deliberated by the Management Committee before they are submitted to the Board of Directors for resolution.

Structure of Group Management Strategy Committee and Management Committee

Committee	Company	Chairperson	Attendees
Group Management Strategy Committee	JFE Holdings	President	Inside Directors (including 3 operating company Presidents), Corporate Officers, and full-time Audit & Supervisory Board Members
Management Committee	JFE Holdings	President	Inside Directors (excluding 3 operating company Presidents), Corporate Officers, and full-time Audit & Supervisory Board Members
	Each operating company	President	Directors, major Corporate Officers, and Audit & Supervisory Board Members

Executive Remuneration

Executive remuneration is based on the Basic Policy on Remuneration for Directors and Corporate Officers and the Policy for Deciding Individual Remuneration for Directors and Corporate Officers, which were formulated based on discussions and reports by the

Remuneration Committee, and it is decided through either a resolution of the Board of Directors or deliberations by the Audit & Supervisory Board Members, for an amount within the total limit approved at the General Meeting of Shareholders.

Executive remuneration (FY2022)

Position	Total remuneration (thousand yen)	Total by type of remuneration (thousand yen)				Number of executives
		Basic remuneration	Bonuses	Stock remuneration		
				Performance-linked portion	Service length portion	
Directors (excluding Outside Directors)	303,881	217,415	48,890	23,912	13,664	5
Audit & Supervisory Board Members*1 (excluding Outside Audit & Supervisory Board Members)	78,335	78,335	—	—	—	3
Outside Directors/Outside Audit & Supervisory Board Members*2	91,847	91,847	—	—	—	7

*1 Audit & Supervisory Board Members (excluding Outside Audit & Supervisory Board Members) include one Audit & Supervisory Board Member who retired during the fiscal year under review.

*2 Outside Directors/Outside Audit & Supervisory Board Members include one Outside Audit & Supervisory Board Member who retired during the fiscal year under review.

Corporate Governance

Basic Policy on Remuneration for Directors and Corporate Officers

- The Board of Directors shall determine a remuneration system for Directors and Corporate Officers based on deliberations regarding its appropriateness by the Remuneration Committee to ensure fairness, objectiveness, and transparency.
- The remuneration level for Directors and Corporate Officers shall be determined to secure excellent human resources who are able to put the Group's corporate vision into practice, taking into consideration the business environment of the Group and remuneration levels at other companies in the same industry or of the same scale.
- The ratio between basic remuneration and performance-linked remuneration (annual bonus and stock remuneration) shall be properly established according to the roles and responsibilities, etc., of each Director and Corporate Officer so as to function as sound incentives toward the sustainable growth of the Group.

Outline of the Policy for Deciding Individual Remuneration for Directors and Corporate Officers

- Remuneration for Directors and Corporate Officers shall be determined by a resolution of the Board of Directors in accordance with the Basic Policy and the Decision Policy, based on reports from the Remuneration Committee.
- Remuneration for the Company's Directors and Corporate Officers is comprised of basic remuneration and performance-linked remuneration (annual bonus and stock remuneration).
- Basic remuneration is paid as a fixed amount, in cash, each month according to position.
- Annual bonus is linked to the Company's single-year performance (calculated based on financial and non-financial indicators) and is paid in cash once a year.
- Stock remuneration is granted as the Company's shares and cash equivalent to the amount of the Company's shares converted to market value through the trust upon retirement.
- The ratios of remuneration by type are structured so that the higher the position, the greater the weight of performance-linked remuneration, and the ratio for the Company's President has been set so that when performance targets are achieved the ratio is "basic remuneration : annual bonus : stock remuneration = 60% : 20% : 20%."

The Company pays only basic remuneration to Outside Directors and Outside Audit & Supervisory Board Members given their respective roles of supervising and auditing management from an independent and objective standpoint. Annual bonuses and stock remuneration are not paid by the Company to Directors who concurrently serve as executive directors of operating companies.

Performance-linked remuneration is calculated as follows.

Annual bonus

The annual bonus is calculated by multiplying the total amount of segment profit in a single fiscal year and an employee safety-related indicator and climate change-related indicators, as a performance-linked indicator, by the degree of achievement of the indicator and a preset coefficient for each position.

For non-financial indicators, JFE introduced an employee safety-related indicator in fiscal 2022 and climate change-related indicators in fiscal 2023.

The employee safety-related indicator is calculated as the achievement rate for zero workplace fatalities and the lost-work injuries rate, which are KPIs set for each operating company. Climate change-related indicators are calculated as the achievement rate for a selection of metrics related to contributions to resolving climate change issues (initiatives to realize carbon

neutrality by 2050), which is a KPI set for each operating company. (Please see the chart.)

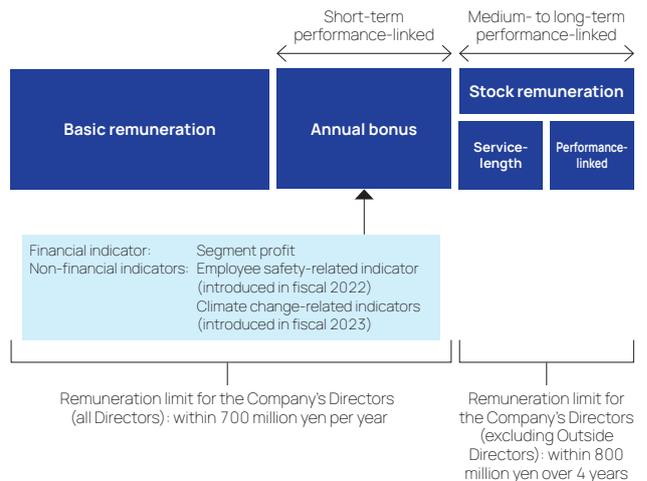
Stock remuneration

The stock remuneration plan is determined in accordance with the performance targets, etc., in the Group's medium-term business plan. For the period between fiscal 2021 and fiscal 2024, the payment level is determined according to the level of achievement of the target profit attributable to owners of parent of 220.0 billion yen per year, set under the Seventh Medium-term Business Plan. Furthermore, 5% or more ROE is the minimal requirement for the payment.

In the event that a Director is dismissed or found to have engaged in illegal behavior, by resolution of the Board of Directors, the Director will lose the right to receive payments. In the event that a Director who has already received payment is found to have engaged in illegal behavior, by resolution of the Board of Directors, the Company can ask the Director to return economic value equivalent to the stock remuneration that they had received.

The JFE Group aims to have a Director compensation system that functions as a healthy incentive to pursue sustainable growth, and continues to review the system at meetings of the Remuneration Committee and the Board of Directors.

Composition of remuneration for the Company's Directors



Method for calculating achievement rate of climate change-related indicators

	KPI		
JFE Steel's Board Members	Degree of achievement in CO ₂ reduction target by conserving energy and developing technology (75%)		Degree of achievement in market introduction and uptake target for eco-friendly products and technologies (25%)
JFE Engineering's Board Members	Degree of achievement in target for reducing own CO ₂ emissions (25%)	Degree of achievement in target for contributing to CO ₂ reductions (75%)	
JFE Shoji's Board Members	Degree of achievement in target for reducing own CO ₂ emissions (100%)		
JFE Holdings' Board Members	JFE Steel's degree of achievement (70%)	JFE Engineering's degree of achievement (20%)	JFE Shoji's degree of achievement (10%)

* Excludes outside directors

* Weighted average of degree of achievement at each operating company

Internal Control

The JFE Group's internal control system, in accordance with the Basic Stance for Building an Internal Control System, is maintained through various committee regulations including the Rules of the Board of Directors, Regulations for the Group Management Strategy Committee, Regulations for the Management Committee, Regulations for the JFE Group Sustainability Council, Regulations for the Organization and Operations, Regulations for Document Management, Regulations for Addressing Violence Directed at Companies, and installation of the Corporate Ethics Hotline. The Basic Stance for Building an Internal Control System is revised and improved from time to time to boost sustainable corporate value.

Basic Policies to Establish the Internal Control Systems
<http://www.jfe-holdings.co.jp/en/company/info/pdf/corporate-governance.pdf>

Strengthening Internal Control

Internal audits

JFE Holdings, the operating companies, and key Group companies had internal audit organizations comprising 172 people as of April 1, 2023. These organizations share information to enhance overall auditing within the Group. Moreover, to ensure the effectiveness of internal audits, the results of internal audits are reported to the Board of Directors and the Audit & Supervisory Board.

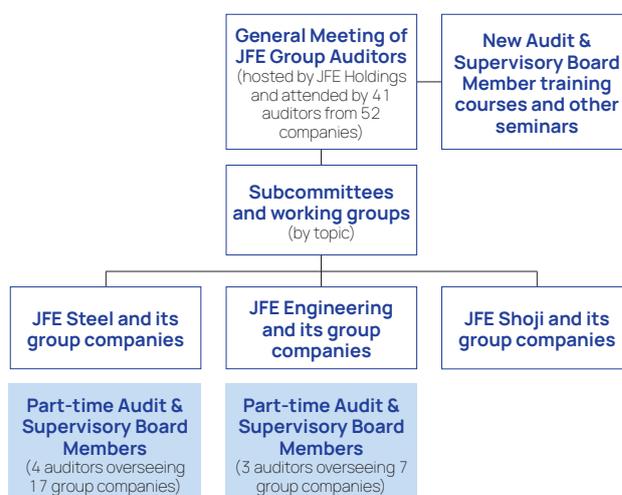
Audits by Audit & Supervisory Board Members

Audit & Supervisory Board Members attend meetings of the Board of Directors, Group Management Strategy Committee, Management Committee, and Group Sustainability Council, as well as other important meetings, and express their opinions as needed. To audit how Directors execute their responsibilities, they conduct hearings with Directors and Corporate Officers regarding operational status and receive operational reports from subsidiaries. In addition to undergoing statutory audits, JFE companies take the following initiatives to improve the effectiveness of internal auditing by the Audit & Supervisory Board Members, through efforts to share information and strengthen coordination among the Members.

A total of 34 full-time Audit & Supervisory Board Members have been appointed to 29 companies, including JFE Holdings. Operating company personnel are dispatched to Group companies as part-time Outside Audit & Supervisory Board Members. Each absentee Audit & Supervisory Board Member serves one to five subsidiaries to raise the quality of the audits by their Audit & Supervisory Board Members and enhance Group governance. Seven absentee Audit & Supervisory Board Members served 24 companies in total.

The JFE Group Board of Auditors includes both full-time Audit & Supervisory Board Members of each Group company and part-time Audit & Supervisory Board Members. Subcommittees and working groups created to address specific issues meet autonomously to share information, investigate issues, and enhance understanding. The findings of the year's activities are presented at the General Meeting of JFE Group Auditors and used for audits.

Structure of JFE Group Board of Auditors



Cooperation between Audit & Supervisory Board Members and the Accounting Auditor

In fiscal 2022, the Audit & Supervisory Board Members held nine scheduled or unscheduled meetings with Ernst & Young ShinNihon LLC, JFE's outside accounting auditor, in which the latter presented its audit plan, completed work, and detailed results. The firm also presented a detailed explanation of its quality management system to confirm its validity. In turn, the Audit & Supervisory Board Members explained their own audit plans and other matters to the firm. The two sides also shared opinions on related matters.

Cooperation between Audit & Supervisory Board Members and the internal auditing department

In fiscal 2022, the Audit & Supervisory Board Members held eight scheduled or unscheduled meetings with the internal auditing department, in which the latter presented its internal audit plan, work status, and detailed results. During the meetings, the Audit & Supervisory Board Members also shared opinions with the department.

Operating company governance

Some Directors, Corporate Officers, and Audit & Supervisory Board Members of JFE Holdings serve concurrently as the Directors or Audit & Supervisory Board Members of operating companies to strengthen governance and information sharing across the Group. To strengthen governance, JFE Holdings' managers attend each operating company's General Meeting of Shareholders and Management Planning Briefing, receive reports on their activities, and discuss the managerial policies of subsidiaries.

Corporate Governance

Approach Regarding Listed Subsidiaries

As the Company practices its corporate vision of "contributing to society with the world's most innovative technology," to realize sustainable growth and enhancement of medium- to long-term corporate value, the Company forms a corporate group comprising companies with high expertise, divides business functions within the Group, and conducts business development outside of the Group. Among the Group companies, the Company has two listed subsidiaries, described below.

GECOSS Corporation

(Prime Market of Tokyo Stock Exchange)

GECOSS is mainly engaged in the rental and sales of temporary construction materials, as well as in design and construction of temporary works. GECOSS provides products and services that meet customer needs primarily in the civil engineering and construction industries by partnering with JFE Steel Corporation and Group companies. The Company believes that managing GECOSS as a subsidiary will help to maximize the value of GECOSS and the JFE Group through various collaborative initiatives with JFE Steel in areas such as personnel exchange and R&D. GECOSS maintains its listed status as a means to enhance its competitiveness as well as to secure market recognition and credibility in funding, sales and marketing, and hiring.

The two aforementioned companies are subject to rules different from those applicable to other consolidated subsidiaries, in light of guidance concerning listed subsidiaries from the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange, and other measures are also taken so as to ensure that each of the companies conducts autonomous corporate activities exercising autonomy and flexibility, secure management independence as listed companies, and make sure that the interest of the said subsidiaries' shareholders other than the said subsidiaries and the Company will not be unfairly impaired. In addition, with respect to matters necessary for the Group's risk management, prior consultation and reporting are required from each company while securing their independent decision-making, so as to implement risk management as a member of the Group companies.

JFE Systems, Inc.

(Standard Market of Tokyo Stock Exchange)

JFE Systems is mainly engaged in systems integration and solutions for the planning, design, development, operation, and maintenance of information systems, as well as in building systems using its products and IT infrastructure solutions that support business systems. Computer systems in the steel business support overall business activities, such as receiving orders, manufacturing, shipping products, and controlling quality, and are an important base for using diverse data. In addition, as DX progresses, ensuring the accumulation of know-how and the continuity of personnel exchange will be essential for maintaining the competitiveness of JFE Steel Corporation. JFE Systems maintains its listed status as a means to enhance its competitiveness as well as to secure market recognition and credibility in funding, sales and marketing, and hiring.

On July 28, 2022, JFE Container Co., Ltd. delisted from the Standard Market of the Tokyo Stock Exchange, and became a wholly owned subsidiary of JFE Steel through a stock exchange on August 1. The corporate value of the entire JFE Group will benefit from JFE Container becoming a wholly owned subsidiary of JFE Steel, because we anticipate an increase in opportunities to create businesses and develop new fields through more Group collaboration in the high-pressure gas container business in order to realize a carbon-free hydrogen society.

Furthermore, the Company shall regularly verify the significance of maintaining the listing of the listed subsidiaries and take necessary measures upon confirmation at its Board of Directors. The content herein was verified and discussed at a Board of Directors' meeting held in May 2023.

Basic Policies for Strategic Shareholdings and Exercise of Related Voting Rights

All shares held by the Company are the shares of subsidiaries or affiliates. The Company's wholly owned subsidiaries as well as operating companies, JFE Steel Corporation, JFE Engineering Corporation, and JFE Shoji Corporation (hereinafter the "Operating Companies"), do not hold listed shares as strategic shareholdings, in principle. Strategic shareholdings, however, are allowed as an exception when holding the stocks of a company is determined to be necessary for maintaining and achieving growth for the Group's business.

The Board of Directors' meetings regularly confirm the significance of the strategic shareholdings and whether the benefits and risks of such holdings are commensurate with their capital cost, and sell strategic shareholdings if there is no significance of such shareholdings or there is a risk of damage to shareholders' interest. In fiscal 2022, the Company sold 27.1 billion yen (on a market value basis) worth of all or parts of 30 stocks. Furthermore, at a meeting held in September 2022, the Board of Directors examined the significance of its strategic shareholdings and return on investment.

The exercise of voting rights of strategic shareholdings is decided upon reviews by the Operating Companies on the content of the proposal and is appropriately implemented in a way that will maximize shareholder interest. To be specific, the content of the proposal is to be checked by the investment application department and the investment control department, and approval will be given to proposals which are considered not to pose any threat to the maximization of interest of these Operating Companies as shareholders.

Of the shares for investment purposes held by JFE Steel, which has the largest balance sheet amount and accounts for the majority of the shares for investment purposes posted in the consolidated financial statements of the company, those shares of JFE Steel that are held for purposes other than pure investments are shown below.

	End of FY2019	End of FY2020	End of FY2021	End of FY2022
Number of issues	219	171	146	138
Total balance sheet amount (billion yen)	1,661	960	712	590

Thorough Compliance



In expanding our businesses in Japan and abroad, it is important that JFE maintains relationships of trust with all stakeholders, including its customers, shareholders, and local communities. Trust can only be built upon a strong foundation of “Ensuring Thorough Compliance.” Misconduct and scandals resulting from compliance violations can instantly shatter the trust that has taken many years to establish. Therefore, JFE believes it is extremely important that all members of the organization deepen their knowledge and awareness of compliance and perform their jobs accordingly.

Compliance System

The JFE Group's Standards of Conduct guides employees to conduct their business activities based on the Corporate Vision and Corporate Values. They also help to strengthen awareness among all JFE Group executives and employees and ensure adherence to corporate ethics.

The Compliance Committee, chaired by the President of JFE Holdings, generally convenes every quarter to deliberate basic policies and issues and then supervise their implementation. Each operating company has a similar in-house system for promoting and supervising compliance. In addition, operating companies have introduced a Corporate Ethics Hotline to ensure that crucial information regarding compliance can be communicated directly from the front lines to top management.

JFE Group's Standards of Conduct <https://www.jfe-holdings.co.jp/en/company/philosophy/guideline.html>

Ensure Adherence to Corporate Ethical Standards and Compliance

Thorough Compliance

As a part of initiatives to enhance awareness of compliance, the JFE Group has compiled a Compliance Guidebook and distributed it to executives and employees (domestic and overseas), to be used in activities such as collation, to ensure that the rules are fully communicated and informed.

Compliance
<https://www.jfe-holdings.co.jp/en/csr/governance/compliance/index.html>

Internal Whistleblowing System

We have established a Corporate Ethics Hotline to maintain corporate ethics, comply with laws and regulations, and prevent corruption. It is accessible to all executives and employees of the JFE Group (employees, contract workers, part-time workers, temporary staff, and retirees) as well as the executives and employees of business partners. As a specific means of reporting and consultation, an environment has been prepared for receiving inquiries (it is also possible to anonymously file reports and seek consultation) by email, a dedicated phonenumber, and by regular mail. Additionally, an external hotline to a law firm is also provided.

Whistleblowing and requests for consultation are regularly reported to full-time Audit & Supervisory Board Members. Moreover, the operational status of the system is monitored by the Board of Directors.

Cases handled by the Corporate Ethics Hotline

Company	FY2019	FY2020	FY2021	FY2022
JFE Holdings and operating companies	101	87	133	127

Antimonopoly Act Compliance

We take past violations of the Antimonopoly Act seriously and continue to implement thorough measures to eliminate the possibility of future infringements. Moreover, initiatives to prevent a reoccurrence in the future are reported to the Group Compliance Committee with the objective of enhancing their effectiveness.

Prevention of Bribery

We do not tolerate any kind of illegal activity in Japan or any other country, including bribery, such as offering money or other benefits to public officials, and never resort to these illegal activities to gain profit or resolve problems. Based on these thoughts, the Group issued the JFE Group's Basic Policy on Preventing Bribery of Public Officials and disseminates it throughout the Group including operating companies. The JFE Group also maintains various systems to prevent the bribery of public officials.

JFE Group's Basic Policy on Preventing Bribery of Public Officials
<https://www.jfe-holdings.co.jp/en/company/philosophy/anti-bribery.html>

Resisting Organized Crime

We declare in our Standards of Business Conduct that we will firmly resist all antisocial forces, and have established the JFE Group Policies for Addressing Antisocial Forces and Regulations for Addressing Violence Directed at Companies to clarify the measures to be taken in response to any issues against antisocial forces, including manuals for initial responses to violence against the Group.

Employee Ethics Awareness Surveys

We regularly conduct Corporate Ethics Awareness Surveys of executives and employees of JFE Holdings and operating companies for the purpose of assessing the degree of understanding in the Group's Corporate Vision, Corporate Values, and Standards of Conduct.

Risk Management



Based on its corporate vision of “contributing to society with the world’s most innovative technology,” the JFE Group maintains and actively uses a risk management structure to accurately identify and respond to Groupwide risks, with the aim of sustaining growth and improving corporate value across the Group.

Risk Management System

JFE Holdings is responsible for comprehensive risk management in accordance with its Basic Stance for Building an Internal Control System. A structure has been put into place for the Board of Directors to supervise risk management and verify its effectiveness.

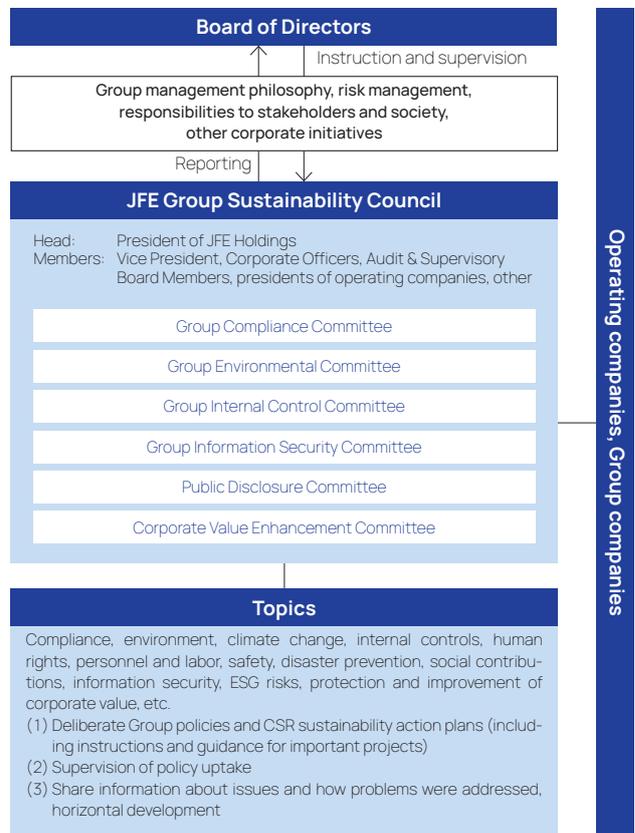
The JFE Group Sustainability Council, chaired by the President of JFE Holdings, verifies, evaluates, deliberates, and decides issues related to policy and actions plans for risk management. Specifically, adherence to Company policies and rules are monitored, such as for business activities, compliance, and the corporate vision. It also supervises Corporate Officers responsible for the environment, climate change, personnel and labor, safety, disaster prevention, preventing human rights violations, such as sexual and power harassment, quality management, financial reporting, information security, ESG risks, and other risks.

The Board of Directors regularly receives reports on Group policies and action plans for risk management, and discusses and decides on important matters related to risk management in its role of supervising and verifying the effectiveness of risk management.

The Company intends to continuously improve Groupwide risk management in light of deliberations by the Board of Directors.

Risk Management
<https://www.jfe-holdings.co.jp/en/csr/governance/risk/index.html>

Sustainability promotion structure



Response to Major ESG Risks

Response to Climate Change Risks

The JFE Group has formulated the JFE Group Environmental Vision for 2050, which plots a path for becoming carbon neutral by 2050, and positions climate change initiatives as the highest priority for management. Initiatives in the Seventh Medium-term Business Plan call for reducing CO₂ emissions by 18% versus the fiscal 2013 level by fiscal 2024 in the steel business, and reducing CO₂ emissions by 30% or more versus the fiscal 2013 level by the end of fiscal 2030, while plotting out multiple avenues to attaining carbon neutrality by 2050.

Risks are identified and evaluated based on a scenario analysis conducted under the framework recommended by the Task Force on Climate-related Financial Disclosures (TCFD), and important factors that may affect management are selected for further analysis and used in formulating business strategies, including the Seventh Medium-term Business Plan.

► Please see page 59 for details on TCFD-based information disclosure and risk management.

Intellectual Property Management

The JFE Group meticulously manages intellectual property across its diverse business activities. To prevent infringement on third-party intellectual property, the Group constantly monitors the latest information on intellectual property and implements all necessary measures.

▶ Please see page 63 for details on intellectual property activities.

Privacy Protection

JFE has established the JFE Group Privacy Statement for managing information including "My Numbers," which are personally identifiable numbers under Japan's social security and tax number systems.

To maintain the appropriate protection of personal information, employee trainings on the rules, which have been set in place in accordance with the privacy statement, have been conducted as stipulated in the applicable laws of each country related to businesses and guidelines.

JFE Group Privacy Statement
<https://www.jfe-holdings.co.jp/en/privacy.html>

Information Security

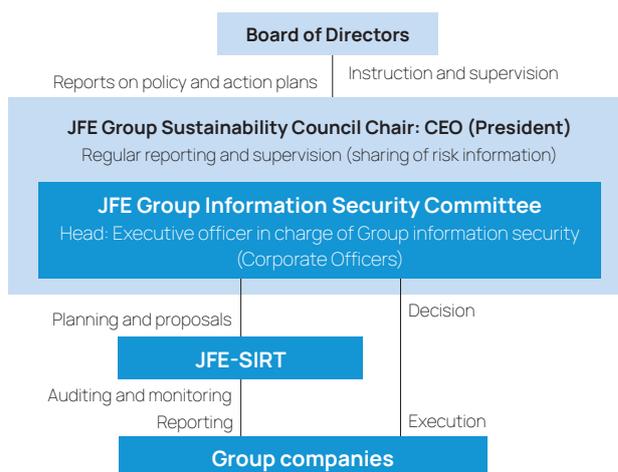
The JFE Group formulates various rules on information security management to prevent information leakage and system failures due to cyberattacks and improper system use. Efforts are made to enhance information security knowledge and awareness of rules among employees through training and education. Additionally, shared IT measures are applied in each Group company and regular information security audits are conducted to reinforce the overall information security management level in the Group.

The JFE Group Information Security Committee deliberates important matters related to IT, especially information security, and decides policy.

Based on policies set by the committee, the JFE-SIRT* formulates and implements information security measures, performs information security audits, offers guidance on responding to incidents, and generally enhances the level of Groupwide information security management.

* JFE-Security Integration and Response Team, established in April 2016

JFE Group information security governance system



JFE Group's BCP

Anticipating the possibility of natural disasters caused by typhoons and major earthquakes as well as a rapid expansion in infectious diseases such as a new strain of influenza, we have formulated a business continuity plan (BCP) to address contingencies. We conduct regular training based on the BCP while also pursuing other countermeasures.

Response to Large-scale Natural Disasters

The JFE Group has designated evacuation locations in the event of a tsunami, maintains a Companywide system for sending out guidance and instructions during communications controls and power blackouts, and regularly backs up all of its data. The Company is reinforcing its water removal facilities in steelworks in response to the increasingly severe typhoons and torrential rainfalls in Japan over the past few years.

Response to Infection

JFE Group has created a policy for responding to a novel influenza outbreak and keeping important operations running, including at steelworks and production sites. JFE Steel also conducted operational simulations for the event that a local outbreak increased the ratio of employees missing work, and took various other steps as conditions changed. We periodically inspect and review this policy in meetings of the JFE Group Sustainability Council, for example. Moreover, to protect employees from the threat of infectious diseases, we encourage employees stationed overseas and their immediate families, as well as employees on overseas business trips, to get recommended vaccinations and health checkups when necessary. We provide employees with safety information and data on infectious diseases in each country, and implement safety measures, such as restrictions on overseas travel, depending on the situation.

Ensuring Occupational Safety and Health



The JFE Group has identified ensuring occupational health and safety as a material issue related to human capital. In order to sustain business activities, our basic stance is to prioritize safety above all else and help employees and their families maintain their mental and physical health. Working together with Group companies and our partners, we aim to create safe and healthy workplaces.

Prevention of Workplace Accidents

The JFE Group views establishing a safe work environment and preventing occupational accidents as fundamental requirements for allowing diverse employees to work with peace of mind. We have set KPIs for the number of fatal accidents (zero incidents) and the lost-work injuries rate. Although we did not meet our goals for fiscal 2022, we will continue to prioritize

investment in safety measures as outlined in the Seventh Medium-term Business Plan, with an annual investment of approximately ¥10 billion across the Group. We are advancing initiatives aimed at fundamentally preventing accidents caused by the equipment itself.

JFE Steel's Initiatives

Acquisition of ISO 45001 Certification across All Business Units

At JFE Steel, we are focusing on the companywide deployment of countermeasures to prevent similar and recurring accidents, including near-miss incidents. We are also strengthening workplace activities so that employees take ownership of past accidents. Furthermore, to promote occupational safety and health management more autonomously and systematically throughout the organization, we have established an occupational

safety and health management system compliant with ISO 45001. We have obtained ISO 45001 (JIS Q 45001) certification for all business units.

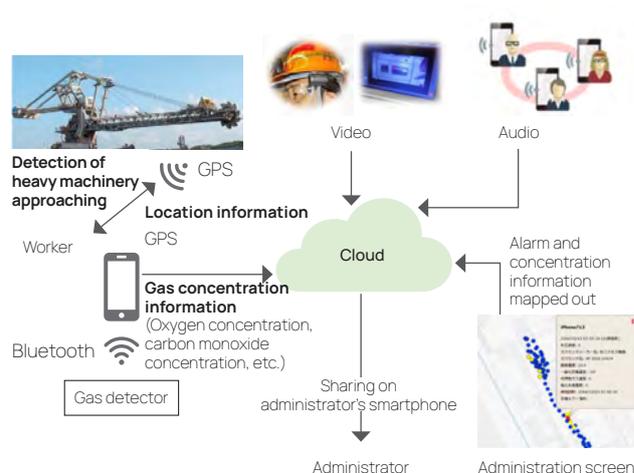
By continually and effectively operating the occupational safety and health management system, we are committed to creating a safer and healthier workplace.

Key points of PDCA cycle at JFE Steel



Securing the safety of employees using AI

We ensure the safety of workers at manufacturing sites by utilizing the latest ICT, AI, and data science to pursue the development and commercialization of further advanced technologies. One example is the use of the safety support system. This system has communications functions such as audio and video sharing within the Group, and also allows the sharing of information including the locations and status of workers, detection of approaching heavy machinery, and operational environment such as the presence of gas, to ensure the safety of workers. This information is also shared to administrators through smartphones and the cloud. Moreover, we are digitalizing on-site risk prediction activities with voice recognition input instead of the previous paper-based process, and this is leading to more accurate risk predictions. We will continue to strive to secure the safety of workers using the latest technology.



JFE Engineering's Initiatives

JFE Engineering has set shared companywide priorities that must be adhered to by all of its employees and the employees of its partner companies. Focusing on eradicating work injuries, management promotes safety measures while identifying the sources of risks through risk assessments that take into account the uniqueness of operations in each business division. JFE Engineering is taking a multifaceted approach to occupational health and safety management with the use of IT for work surveillance, information dissemination systems, and safety management administrative

support systems. For example, JFE Engineering is using large outdoor display signage as a means of conveying important information and warnings in order to prevent occupational injuries.



Example of digital signage used at a construction site

JFE Shoji's Initiatives

JFE Shoji aims to achieve zero serious injuries at its coil centers and other processing bases, and has set the goal of eliminating unsafe work that could result in serious injuries. Patrolling worksites to identify unsafe work conditions, JFE Shoji is taking steps to improve facilities. Management aims to enhance the level of occupational health and safety activities at each company by sharing knowledge and information through safety managers assigned to each group company.

In recent years, each company has been comprehensively checking whether measures taken in the wake of past incidents

are still functioning effectively. If changes are needed, new measures are drawn up and implemented as a part of activities to review past incidents.



Regular safety inspection at a group company conducted by the vice president in charge of safety (Vice President Tsumura)

Ensuring the Health of Employees and Their Families

In order to realize safe and highly attractive workplaces that provide motivation to workers and to powerfully promote the development of environments where diverse human resources can demonstrate

their full potential, the JFE Group has formulated the JFE Group Health Declaration and collaborates with its health insurance union and industrial health staff to strengthen employee health.

JFE Group Health Declaration

1. JFE, recognizing that safety and health are fundamental for fulfilling its mission, creates workplaces in which every employee can work with vigor.
2. JFE and its health insurance union work together to advance initiatives for maintaining and upgrading the physical and mental health of employees and their families.
3. JFE gives top priority to safety and health and to creating a health culture in which each employee takes personal responsibility.

The JFE Group has set KPIs related to the implementation rate of specific health guidance as well as for reducing smoking rates. The reduction of smoking rates is positioned as an initiative that also contributes to the maintenance and promotion of family health, through measures targeted at employees to prevent

passive smoking at home. As we make progress toward these goals, information exchanges are regularly carried out among the various operating companies. Going forward, we aim to achieve further improvement by horizontally deploying initiatives that have had a significant impact at each company.

Respect for Human Rights



The JFE Group endorses and abides by the Universal Declaration of Human Rights, the International Bill of Human Rights, and other international conventions as well as the International Labour Organization (ILO)'s Declaration on Fundamental Principles and Rights at Work. The Group views respect for human rights as both a corporate social responsibility and a foundation of its business. Our determination to not engage in discrimination in our business activities is clearly expressed in our Standards of Conducts, which we have upheld throughout our actions. We will work together to push forward initiatives to realize a society that respects and protects human rights.

Promoting Human Rights

In order to steadily work on human rights initiatives, we established the JFE Group Human Rights Promotion Council, chaired by a corporate officer of JFE Holdings, under the JFE Group Compliance Committee, chaired by the President of JFE Holdings. This framework allows us to define Groupwide policies and share information with departments responsible for human rights issues that have been set up at each operating company.

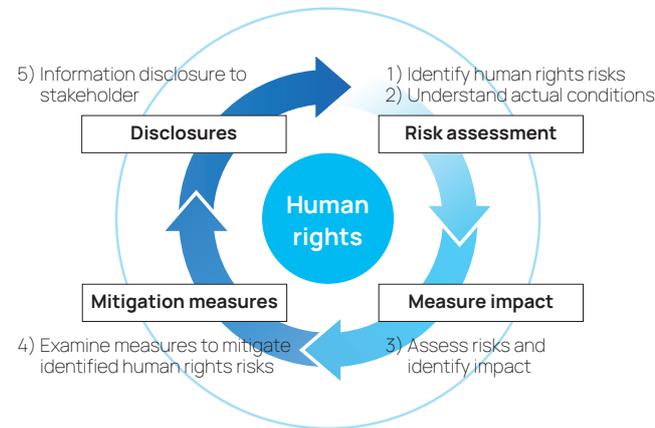
In addressing all kinds of human rights risks, we emphasize communicating with stakeholders through such initiatives as setting up a Corporate Ethics Hotline at not only each operating

company but also an external hotline to an independent law office, and dedicated consultation desks on harassment issues at major offices, to ensure people can anonymously report issues and seek consultation. Additionally, external stakeholders are able to use an online form to ask questions about human rights problems and other compliance issues (this can be done anonymously as well). The Board of Directors and the JFE Group Sustainability Council receive regular reports on the operational status of these help desks and cases of harassment as well as other human rights violations, and any incidents are advised and monitored.

Human Rights Due Diligence

In accordance with the UN Guiding Principles on Business and Human Rights, the JFE Group conducts due diligence on human rights.

Human rights due diligence process



1) Identify human rights risks

We identified human rights risks in the JFE Group's supply chain for each type of stakeholder, i.e., employees and suppliers (women, children, local residents, etc.), taking into consideration local character and human rights risks unique to the sector, after creating a long list of human rights risks while referring to international rules and guidelines.

Identified 15 human rights issues to consider

1. Comply with standards and guidelines for respecting human rights in line with international norms	2. Non-complicity in human rights violations, compliance, social security, fair competition	3. Prohibition of discrimination under the law
4. Access to relief	5. Thorough management of suppliers	6. Harassment and coercion
7. Women's rights	8. Child labor	9. Forced labor
10. Occupational safety and health	11. Work hours	12. Proper work environment
13. Wages that afford adequate living standards	14. Freedom of association, right to group negotiation	15. Rights of indigenous tribes and local residents

2) Understand actual conditions

In the JFE Group Human Rights Basic Stance and the basic procurement policies of each Group company, we disclose policies for dealing with human rights risks, such as child labor and forced labor. As access to relief, we have set up a whistleblowing system. We also stringently engage in compliance, including the prevention of corruption. We audit the human rights initiatives, systems,

and rules of other companies to confirm the current human rights risk management system is working as designed.

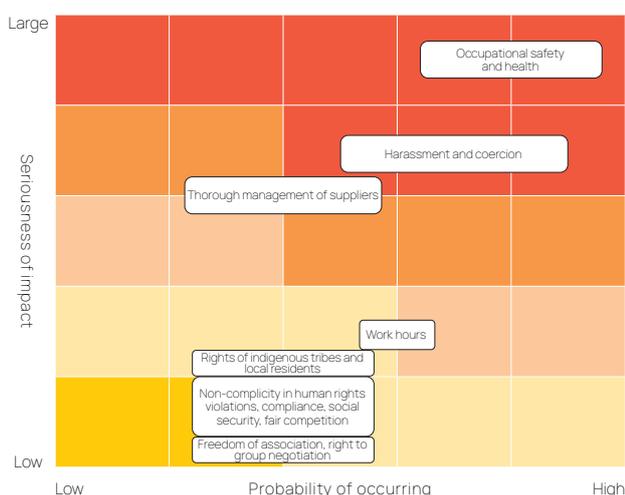
3) Assess risks and identify impact

Regarding identified human rights issues that should be addressed, the Company conducted a risk assessment that considers the seriousness of the impact and likelihood of the risk, and examined the state of initiatives to respect human rights through documented surveys and interviews, in order to gain a more accurate understanding of actual conditions. In the risk assessment process, we identified the negative impact that human rights risks could have on the JFE Group and our stakeholders.

Human rights risks identified as requiring a response due to high risk

- Occupational safety and health
- Harassment and coercion
- Thorough management of suppliers (create human rights risk management system for entire supply chain)

Map of Serious Human Rights Risks



4) Examine measures to mitigate identified human rights risks

We addressed the identified human rights risks, took corrective and preventative action, set up promotion structures, and implemented measures to mitigate risks. We have set KPIs for occupational health and safety and workplace harassment, and advanced efforts to eliminate injuries and harassment at work. We continue to implement and strengthen these activities. We are creating a management structure for human rights risks throughout the supply chain with the aim of building a sustainable and robust supply chain. We determine the priority of our investigations while considering the severity and potential emergence of human rights risks. We will also continue to survey our suppliers about human rights risks.

5) Information disclosure to stakeholder

We disclose the JFE Group Human Rights Basic Stance and procurement guidelines of each operating company on our website. We will continue to appropriately disclose information to stakeholders concerning our initiatives for respecting human rights, including human rights due diligence, as well as progress on these initiatives.

Fiscal 2022 Initiatives

1) Review and revision of the JFE Group Human Rights Basic Stance

The JFE Group believes that respecting human rights is not only a corporate social responsibility but also a foundation of its business. In the past, we have been active in explicitly stating our commitment to non-discrimination in corporate activities in our Standards of Conduct. Taking into account recent changes in awareness and challenges related to human rights, we have revised the JFE Group Human Rights Basic Stance, which was established in 2018, to further strengthen our commitment to respecting human rights across the Group and entire supply chain.

2) Deployment of human rights due diligence process to major Group companies

We held explanatory meetings on human rights issues for approximately 70 Group companies. We have also conducted factual surveys through written documents and hearings with 14 Group companies. Based on the results of these surveys, we have identified key issues and are considering measures to reduce and prevent human rights risks, thereby advancing human rights due diligence across the entire Group.

3) Strengthening human rights risk management system for suppliers

In line with the revisions to the JFE Group Human Rights Basic Stance, we have reviewed and revised the procurement guidelines that had been drawn up for each operating company. In addition, based on the severity and potential occurrence of human rights risks, we have determined priorities for surveying suppliers and have advanced preparations for questionnaire surveys related to human rights risks.

Future Initiatives

1) Expansion of human rights due diligence process to Group companies

In fiscal 2023, the JFE Group will conduct new factual surveys concerning human rights risks at approximately 80 major domestic Group companies. For Group companies where surveys are already underway, we will continue to support their corrective and improvement actions with regard to human rights risks, and will consider regular risk assessments and methods for confirming the state of corrective actions. Additionally, for our overseas Group companies, we will proceed to examine priorities and methodologies for carrying out factual surveys.

2) Building a human rights risk management system for suppliers

We will continue to disseminate the revised JFE Group Human Rights Basic Stance and guidelines to our suppliers. We will sequentially conduct questionnaire surveys related to human rights risks for approximately 600 high-priority suppliers. Furthermore, we will provide support for specific improvements based on the responses to the surveys.

The JFE Group will build systems for reducing the risk of human rights violations throughout its supply chain by continuing to implement these measures. With supervision provided by the JFE Group Sustainability Council and the Board of Directors, we will evaluate these initiatives to respect human rights and work to improve them and increase their effectiveness.

JFE Group Basic Policy on Human Rights

JFE hereby establishes the JFE Group's Basic Policy on Human Rights based on the United Nations Guiding Principles on Business and Human Rights in order to promote group-wide efforts to respect human rights and to fulfill its responsibilities to all stakeholders that it influences in the course of its business activities.

1. Basic approach to respect for human rights

We, the JFE group, support and respects the International Bill of Human Rights, which consists of the Universal Declaration of Human Rights and the International Covenants on Human Rights, as well as the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work.

We believe that respect for human rights is a corporate social responsibility and a foundational aspect of our operations. In addition to clearly stating and implementing our policy for respecting all members of the company and the general public and refraining from any form of discrimination in our corporate activities, we implement initiatives to ensure that we are not complicit in human rights abuses.

This policy represents our commitment to respect human rights based on the JFE Group Standards of Conduct.

2. Scope of application

This policy applies to all officers and employees of the JFE group. We also encourage all stakeholders, including members of our supply chain, to understand and support this policy.

3. Compliance with applicable laws

We comply with the laws and regulations of Japan and all other countries and regions where we operate, but if there is any conflict with internationally recognized human rights and regulations, we seek ways to respect internationally recognized human rights as much as possible.

4. Human rights due diligence

We identify negative impacts on human rights and utilize our internal mechanisms for human rights due diligence to prevent or mitigate such impacts.

5. Corrections and remedies

We maintain reporting contact points for receiving reports from both internal and external sources regarding negative impacts on human rights caused by any of our business activities. If we are made aware that we have caused or been involved in a negative impact on human rights, we will follow the necessary procedures to correct and remedy the problem.

6. Education

We provide education on respecting human rights to ensure that all of our officers and employees understand and implement the company's basic policy.

7. Oversight

The JFE Group Sustainability Council, chaired by the President of JFE Holdings, Inc., oversees compliance with this policy and the implementation status of initiatives referred to herein.

8. Dialogue and consultations with stakeholders

Among the initiatives taken under this policy, we utilize outside experts as well as engage in discussion and consultation with internal and external stakeholders.

9. Information disclosure

We appropriately disclose all relevant information about our

initiatives concerning respect for human rights and the progress of such initiatives via JFE group websites and other means.

10. Business-related human rights issues

(1) Non-discrimination and equality under the law

We respect every individual connected with our corporate and business activities and do not discriminate on the basis of race, nationality, ethnicity, creed, religion, social status, lineage, age, gender, sexual orientation, gender identity, disability, or any other such factor.

(2) Engaging with business partners

We seek the cooperation of all of our business partners in initiatives to respect and protect human rights in order to contribute toward creating a society in which the rights of all humans are respected and protected.

(3) Harassment

We do not engage in any kind of harassment based on gender, status, or any other factors, including through language or behavior that offends or violates the dignity of others.

(4) Forced labor and child labor

We never use forced labor or child labor in any country or region. We also do not tolerate or sanction any form of "modern slavery," including bonded labor and human trafficking.

(5) Occupational health & safety and appropriate working environments

In accordance with the fundamental idea that "safety is our top priority above all else," we pursue health and safety in all of our activities and strive to create safe, healthy workplaces where all employees feel assured that their physical and mental health is protected.

(6) Working hours and livable wages

We comply with all laws and regulations concerning working hours and wages applicable in the countries and regions where we operate. We work to ensure wages that allow employees to enjoy an adequate standard of living.

(7) Right to freedom of association and collective bargaining

We respect employee rights to freely associate and collectively bargain in accordance with the laws and collective bargaining agreements in each country. In addition to taking into account each country's laws and labor practices, we work to build sound labor-management relations and resolve problems by engaging in sincere and constructive dialogue with employees in accordance with international norms.

(8) Rights of local and indigenous peoples

We respect and give due consideration to local people's land rights, access to water, safety and health as well as the rights of indigenous peoples in regions where we operate.

This policy revision was formulated with the assistance of human rights experts and approved at the JFE Group Sustainability Council chaired by the President of JFE Holdings, Inc.

Established: April 2018

Revised: April 2023

Koji Kakigi

Representative Director, President and CEO

JFE Holdings, Inc.

Stakeholder Relationships



Promotion of interactive communication

The JFE Group strives to maintain agreeable and favorable relationships with all stakeholders, including shareholders, customers, clients, employees, and local communities, for the sustainable growth and medium- to long-term increase of corporate value.

Examples of Dialogues with Our Main Stakeholders

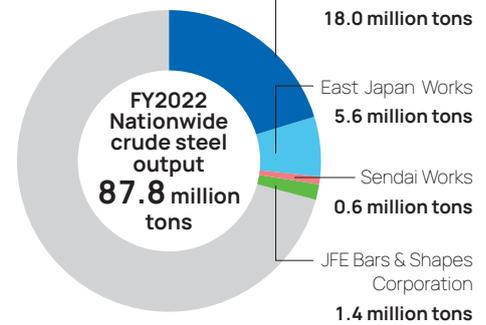
Stakeholders	Approach	Examples of dialogues with our main stakeholders	Others	
			Frequency (per year)	Scale, etc.
Shareholders/ Investors	We work to disclose information accurately, fairly, and in a timely and appropriate manner as well as strive for active communication. We established the Investor Relations and Corporate Communications Department as an organization responsible for communication with domestic and international shareholders and investors, and promote constructive dialogue as well as provide management with the information acquired, with the aim of maintaining and improving the relationship of trust.	Ordinary General Meeting of Shareholders	1	Approx. 220,000 persons (Unit shareholders)
		IR meetings (mainly with fund managers and analysts at institutional investors)		51 domestic companies (162 times) 65 overseas companies (130 times)
		SR meetings (mainly with ESG and voting rights officers at institutional investors)		23 domestic companies (48 times) 17 overseas companies (17 times)
		Investors' meeting ESG briefings (for analysts and ESG officers)	5	Approx. 1,100 persons in total
		Online corporate briefings (for individual investors)		Live participants: 100 individuals Online views: More than 10,000 times
		Onsite and online plant tours (for individual investors)	11	Approx. 1,500 persons
		Shareholder newsletters (JFE Dayon)	2 (Mid-year and annual)	Approx. 280,000 copies/issue
		Various reports, including integrated reports and sustainability reports (* Number of copies for integrated report; sustainability report only available on the Company's website)	1	Approx. 23,000 copies
	Information via websites (for shareholders and investors), etc.	As needed		
Customers	The Group believes that the stable supply of products and services and reliable quality assurance, along with advancing research and development, are necessary to meet customer needs. We will work to establish win-win relationships by continuously meeting customer needs and the trust they place in us.	Communication through sales activities and support for quality assurance	As needed	Conducted at each operating company
		Interviews and questionnaires, such as that on customer satisfaction	As needed	Conducted at each operating company
		Information via websites (product information), etc.	As needed	
Employees	With the recognition of top management that creating workplaces to provide dignity and job satisfaction for all is essential for maximizing the potential of individuals, we have formulated the Basic Policy on Human Resource Management and Health Declaration and are conducting various activities toward attaining the goals.	Communication through daily operations and in the workplace	As needed	
		Internal newsletters and intranet	As needed	
		Various labor-management committees	2 to 4	Management and labor unions at each operating company
		Corporate Ethics Hotline	As needed	127 calls in FY2022
		Various training sessions	As needed	Position-specific, compliance, human rights, etc.
		Family days (visits by employee families, lunch at employees' cafeterias, etc.) * Online for FY2020 and FY2021	As needed	Conducted at each operating company
		Corporate Ethics Awareness Survey * Plan to change to once every two years starting in FY2024	1 (every 3 years)	At the Company and operating companies
		Engagement survey (employee satisfaction survey) * An all-employee survey to understand the level of satisfaction with the Company, used to shape measures and operations	1	At the Company and operating companies
	Management feedback (360-degree diagnosis) * Corporate Officers and top managers evaluate their peers and subordinates, providing feedback to individuals	1	At the Company and JFE Steel	
Local communities	To ensure business continuity at manufacturing bases where steelworks are located and elsewhere, constructing a relationship of trust with citizens in local communities and realizing coexistence and prosperity are crucial. We will pursue various activities with the aim of realizing sustainable growth and regional development, including continued initiatives toward ensuring safety and reducing our environmental impact.	Communication through local residents' associations, events, etc.	As needed	
		Events at manufacturing bases (festivals, etc.)	Approx. once in each region	Approx. 56,000 persons a year
		Plant tours	As needed	70,000 or more persons a year
		Clean-up activities (vicinity of manufacturing bases, regional cleaning, etc.)	As needed	* Conducted with measures in place to prevent the spread of COVID-19
		Sports promotion (baseball or jogging workshops, various sports competitions, etc.)	As needed	
		Others (education at elementary schools, craft workshops, workplace experience events, etc.)	As needed	
		Information via websites (environmental information, etc.)	As needed	
		Social contribution through JFE 21st Century Foundation (various research support, regional activity support, etc.) ▶ JFE 21st Century Foundation: http://www.jfe-21st-cf.or.jp/eng/	As needed	

Data

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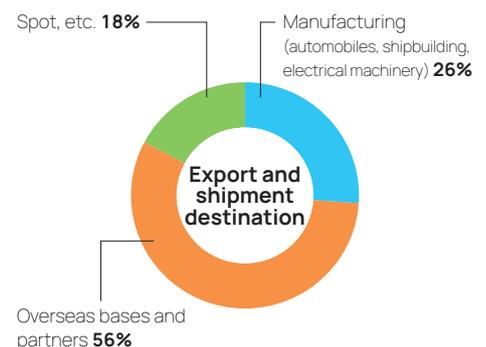
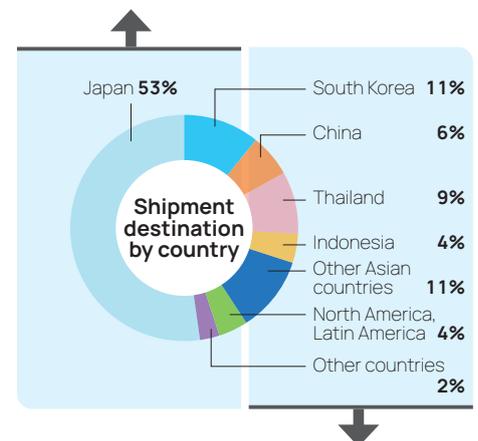
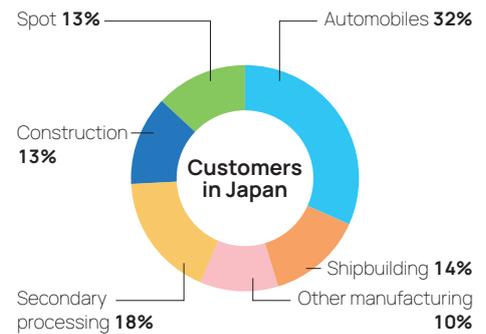
Main Domestic Bases

Domestic production volume (Steel business)



About **30%**
of domestic crude steel output

Shipment destination (Steel business)



Main domestic bases



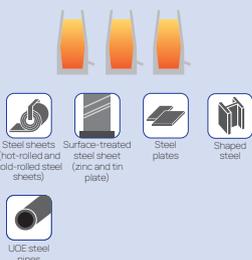
JFE Steel

West Japan Works

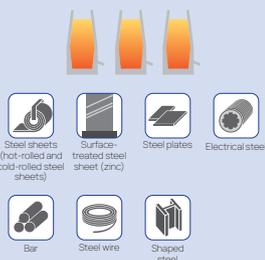
A

The West Japan Works is situated on roughly 25.1 million square meters of land as JFE Steel's core steelworks, one of the largest steelworks in the world. We aim for it to be the best steelworks in the world in terms of both quality and quantity, with advanced technological capabilities and highly efficient production.

Fukuyama district



Kurashiki district



East Japan Works

B

The East Japan Works sits on approximately 15.98 million square meters of land located near the Tokyo metropolitan area. It consists of the Keihin district, where Japan's first private-sector steelworks was built, and the Chiba district, where Japan's first integrated steelworks was constructed after the end of World War II. The Nishinomiya plant produces stainless steel products with the Chiba district.

Keihin district



Chiba district



Nishinomiya Plant

C

Sendai Works

D

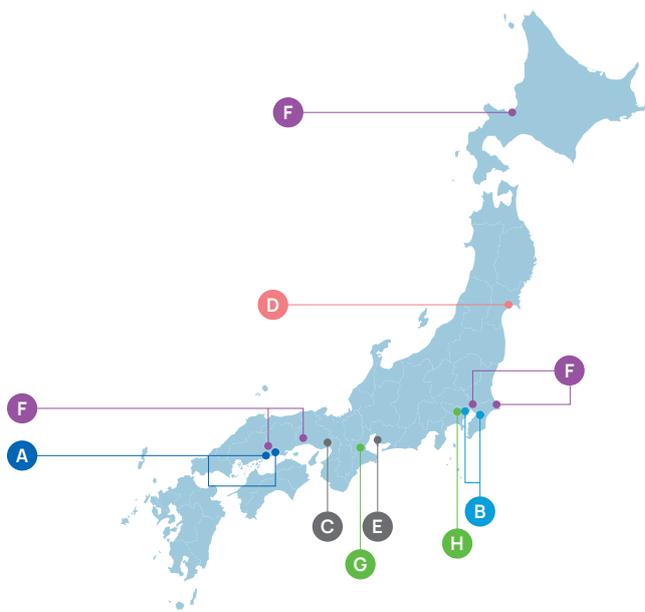
The Sendai Works specializes in bar and steel wire. With an integrated production system from steelmaking to rolling, the Sendai Works provides high-quality products thanks to thorough quality and process management.



Chita Works

E

The Chita Works is one of a few steelworks in the world that specializes in the production of steel pipes. It boasts the best product lineup in the world for a single steelworks, producing a wide variety and sizes of steel pipe products.



JFE Bars & Shapes Corporation

F

JFE Bars & Shapes recycles steel products from steel scrap by utilizing the steelmaking process of electric arc furnaces at five domestic steelworks.



● Production bases of JFE Bars & Shapes

JFE Engineering

Tsu Works

G



Tsurumi Works

H



Steel Research Laboratory

This laboratory conducts research in basic technology that supports all of our production bases, while also developing production processes and products.

Joint development facilities with customers

Chiba district

Customer Solutions Lab (CSL)

Early vendor involvement (EVI) base for customers in the automobile field

Keihin district

Steel Structural Materials Solutions Center (THINK SMART)

Joint research with customers, universities, and corporate research institutions in the structural steel field

Fukuyama district

Customer Center Fukuyama (CCF)

EVI base for customers in the automobile and steel materials fields



Main Overseas Bases

[116 bases in 22 countries and regions]

Europe/Middle East

<Steel>

- AGPC (Manufacture and sale of large-diameter welded steel pipe; U.A.E.)

<Engineering>

- Standardkessel (All engineering of environmental and power generation plants; Germany)

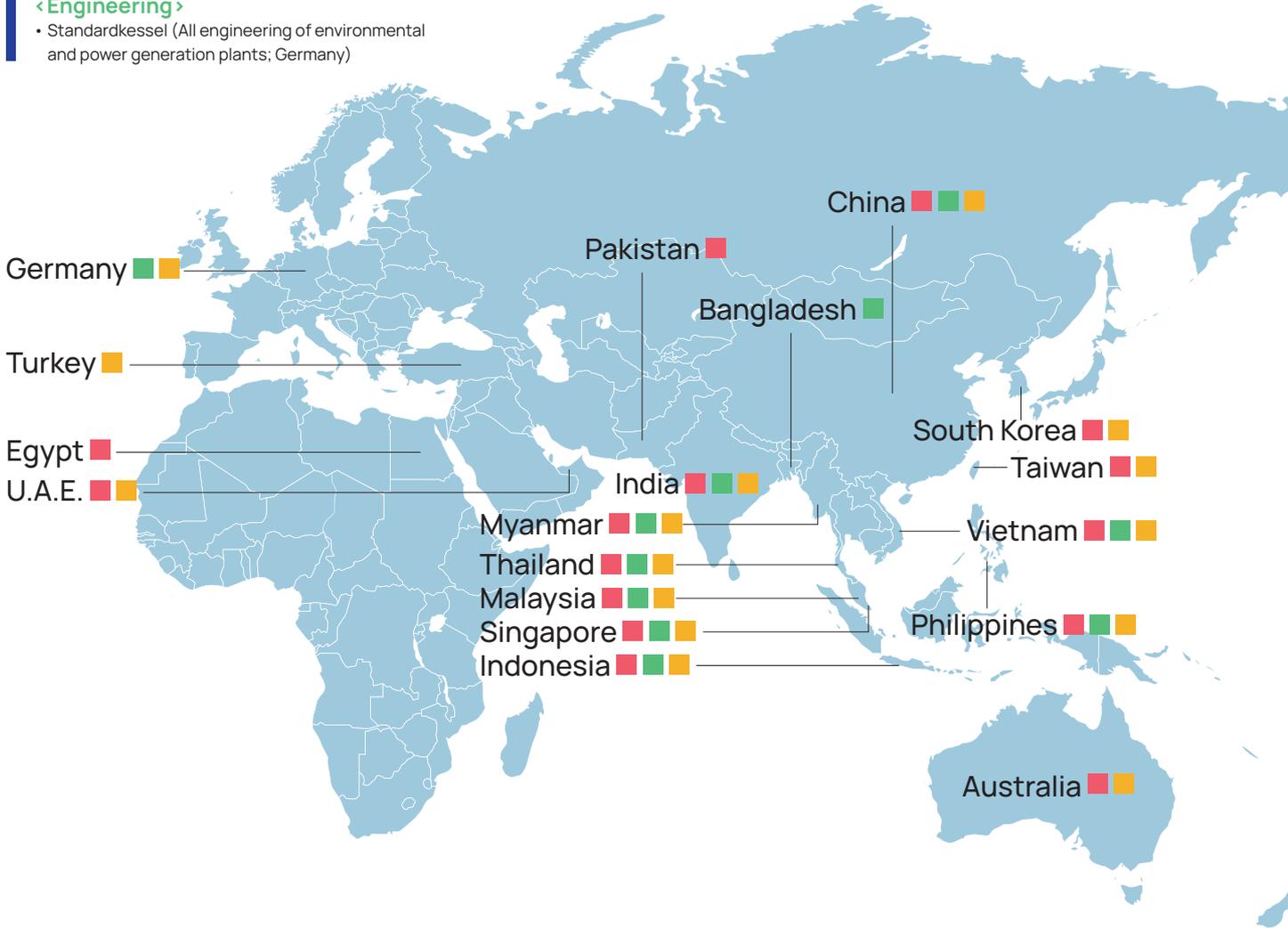
China

<Steel>

- Fujian Sino-Japan Metal (Manufacture and sale of steel sheet (tin plate) for cans)
- BHNK (Processing and welding of tool joints for drill pipes, sale of drill pipe)
- GJSS (Manufacture and sale of steel sheet for automobiles)
- JJP (Manufacture and sale of steel pipe for automobiles)
- BJCMX (Manufacture and sale of steel powder for automobiles, and technical services)
- BJSS (Manufacture and sale of special steel bar)

<Shoji>

- KSG (Processing and sale of steel sheet for automobiles)
- KSZ (Processing and sale of electrical steel)





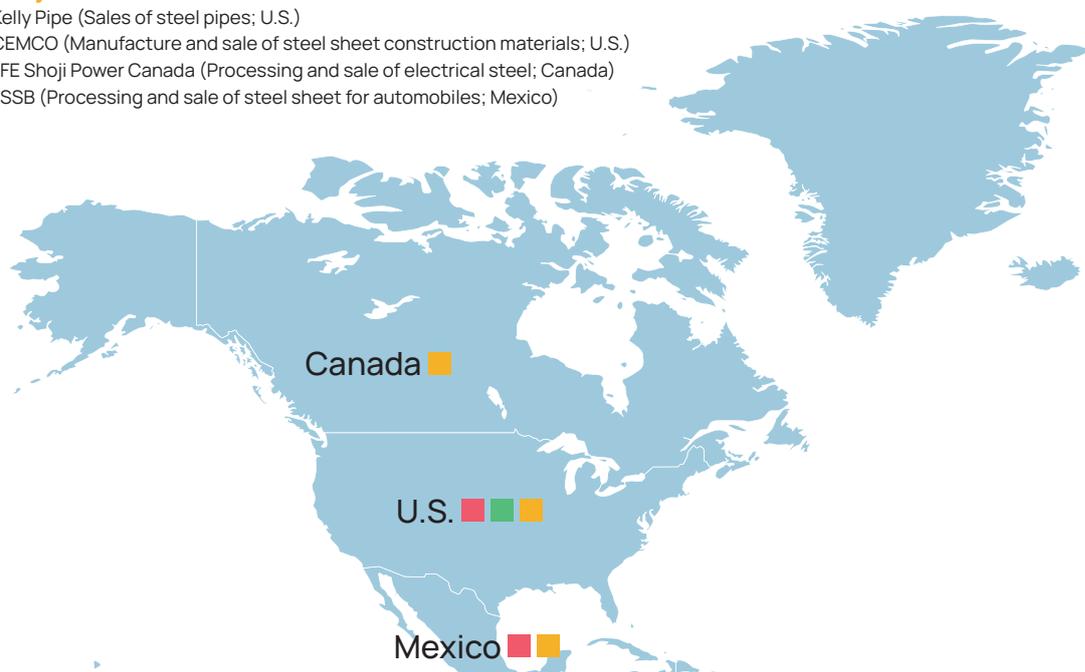
North/Central/South America

<Steel>

- CSI (Manufacture and sale of steel products; U.S.)
- NJSM (Manufacture and sale of steel sheet for automobiles; Mexico)
- NES (Manufacture and sale of ferrosilicon; Brazil)

<Shoji>

- Kelly Pipe (Sales of steel pipes; U.S.)
- CEMCO (Manufacture and sale of steel sheet construction materials; U.S.)
- JFE Shoji Power Canada (Processing and sale of electrical steel; Canada)
- JSSB (Processing and sale of steel sheet for automobiles; Mexico)



Asia/Oceania

<Steel>

- Dongkuk Steel (Manufacture and sale of shaped steel, rebar, thick steel plates, and cold-rolled products; South Korea)
- TCR (Manufacture and sale of cold-rolled steel sheet; Thailand)
- TCS (Manufacture and sale of electrogalvanized steel sheet; Thailand)
- JSGT (Manufacture and sale of steel sheet for automobiles; Thailand)
- SSI (Manufacture and sale of hot-rolled steel sheet; Thailand)
- J-Spiral (Manufacture and sale of spiral steel pipe and processed construction materials; Vietnam)
- FHS (Overseas integrated steelworks; Vietnam)
- PSC (Manufacture and sale of sintered ore; Philippines)
- JSGI (Manufacture and sale of steel sheet for automobiles; Indonesia)
- Perstima (Manufacture and sale of steel sheet for cans; Malaysia)
- JSW Steel (Overseas integrated steelworks; India)
- JFE-STAR (Investments in resource projects; Australia)

<Engineering>

- JFETM (Planning, design, and project management; Philippines)
- JFEE Pune Engineering Centre (Planning and design of environmental and power generation plants; India)

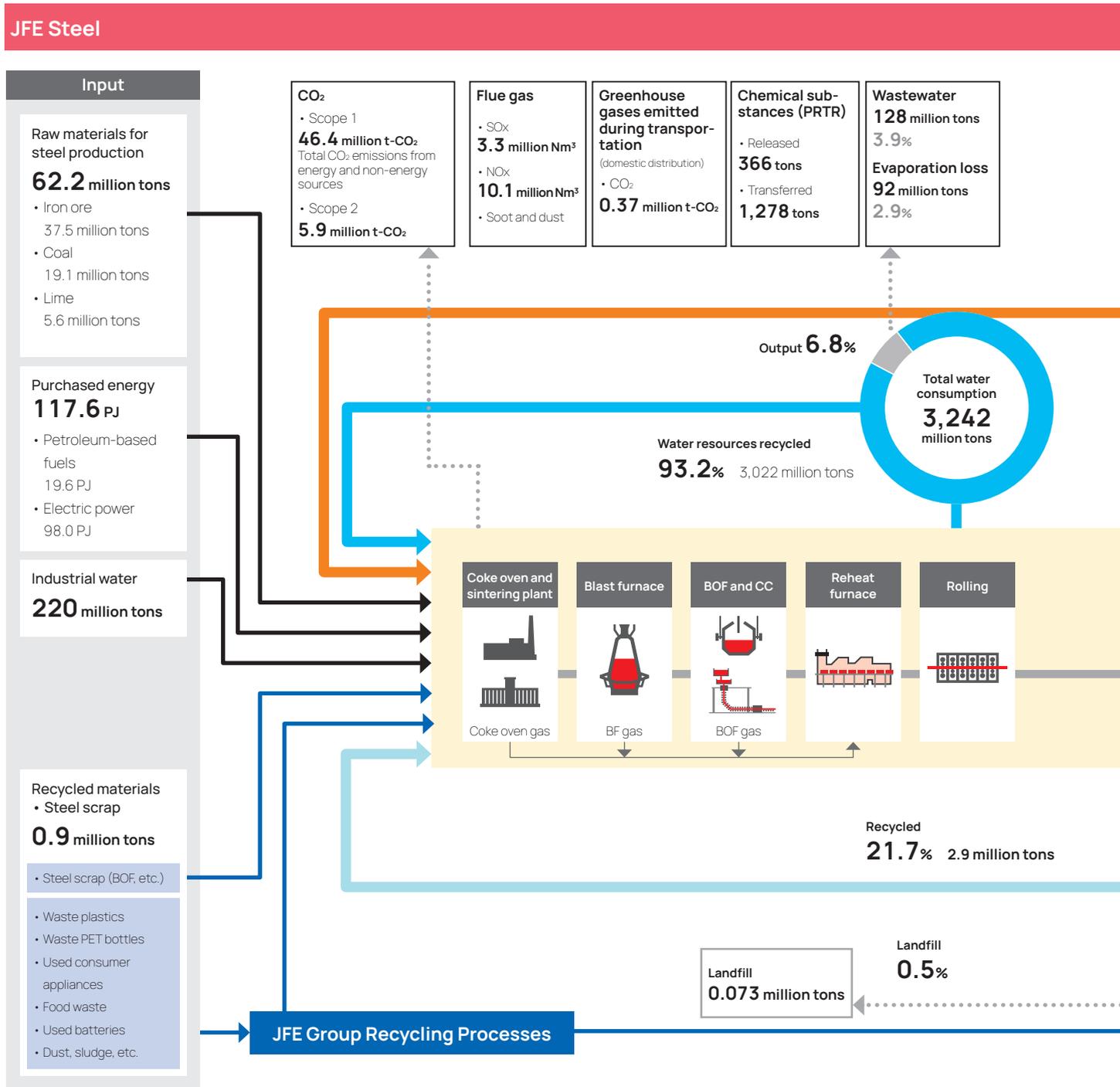
<Shoji>

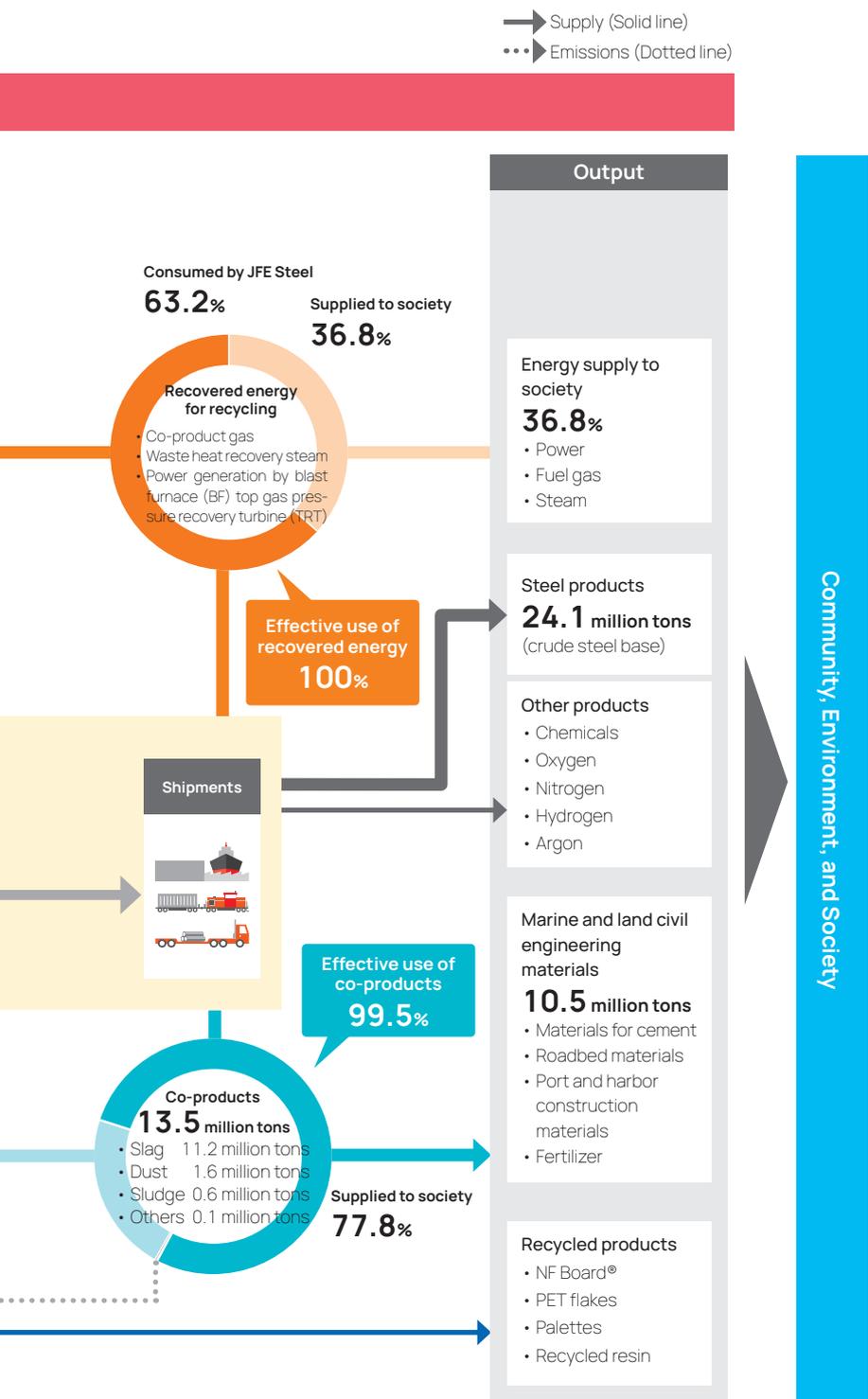
- JSSI (Processing and sale of electrical steel; Indonesia)
- JSSV (Processing and sale of electrical steel; Vietnam)
- CMT (Processing and sale of steel sheet for automobiles; Thailand)
- SASC (Processing and sale of steel sheet for automobiles; Thailand)

Material Flow

JFE Steel works to reduce the environmental impact of its iron and steelmaking processes, including through the effective use of resources. The company recycles 93.2% of the water it uses for production and uses 99.5% of its co-products, such as iron-steel slag. In addition, 100% of co-product gas generated during production is reused as fuel for reheating slabs, generating power for internal use and supplying power to the public.

FY2022 results





JFE Engineering (Head Office and Works)

Input	
Steel	27,900 tons
Energy	
• Electric power purchased	24.5 GWh
• Class A heavy oil	137 kl
• Kerosene	4.0 kl
• Light oil	291 kl
• Gasoline	14.4 kl
• City gas	305,000 Nm ³
• LPG	89.2 tons
Water	64,500 tons

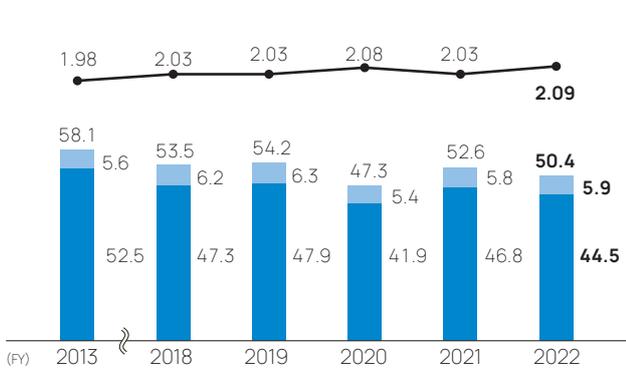
JFE Engineering	
• Tsurumi Engineering and Manufacturing Center	
• Tsu Works	

Output and Emissions	
Products	27,000 tons
CO ₂	6,600 t-CO ₂
• Scope 1	2,800 t-CO ₂
• Scope 2	3,800 t-CO ₂
Waste generated	1,081 tons
• Industrial wastes	821 tons
• General wastes	259 tons
Wastewater (ocean only)	122,000 tons
Others (PRTR)	128 tons

Non-financial Highlights

Environmental Indicators

CO₂ emissions from energy sources (million t-CO₂) and CO₂ emission intensity (t-CO₂/t-s) of JFE Steel

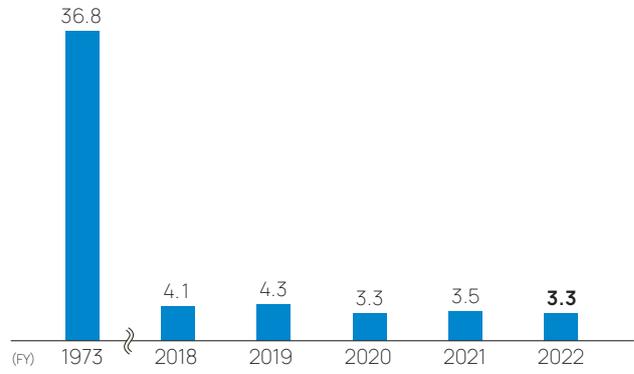


■ Scope 1 ■ Scope 2 ● CO₂ emissions from energy sources intensity

*1 The CO₂ coefficient for electricity purchased in FY2021 is that of FY2020 on the Japan Iron and Steel Federation's Commitment to a Low Carbon Society.

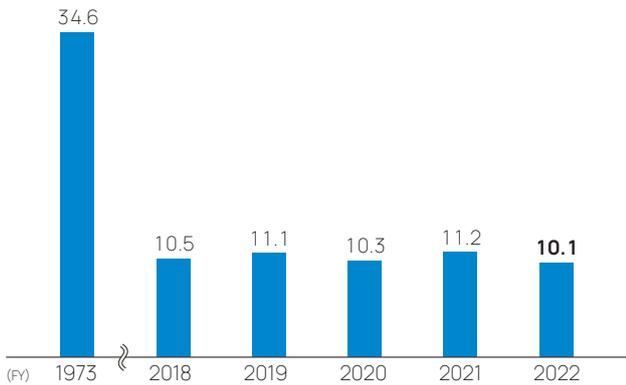
*2 Data of JFE Bars & Shapes Corporation Sendai Works is included in the figures FY2013.

SOx emissions by JFE Steel (million Nm³)



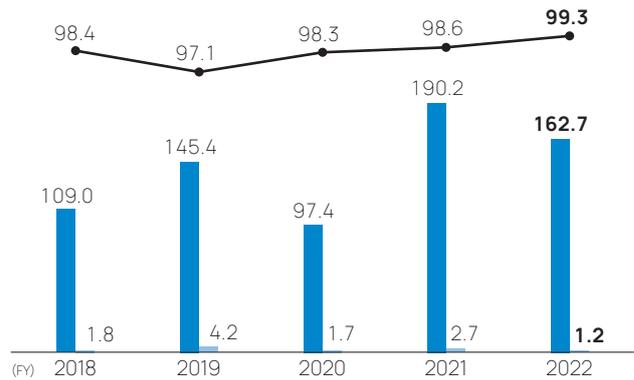
■ Emissions by JFE Steel (non-consolidated)

NOx emissions by JFE Steel (million Nm³)



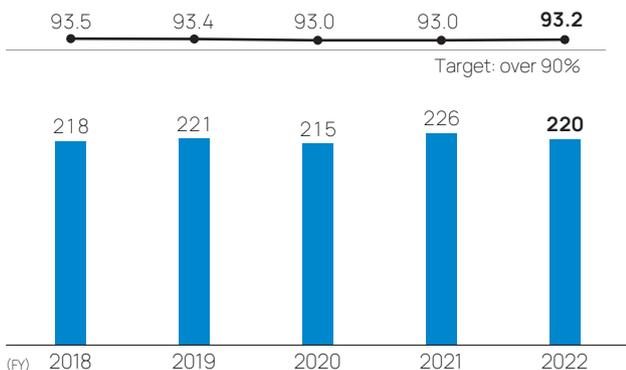
■ Emissions by JFE Steel (non-consolidated)

Waste generated at construction sites (thousand tons) and recycling rate (%) of JFE Engineering



■ Total ■ Final disposal ● Recycling rate

Industrial water accepted (million tons) and circulated (%) by JFE Steel

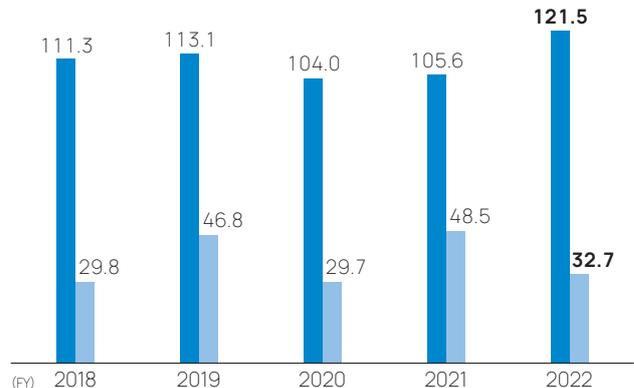


■ Industrial water accepted by JFE Steel (non-consolidated)

● Industrial water circulated by JFE Steel* (non-consolidated)

* Industrial water circulated (%) = (Total amount - industrial water accepted) / total amount × 100

Environmental capital investment (billion yen) and promotion expenses for environmental activities (billion yen) of JFE Steel

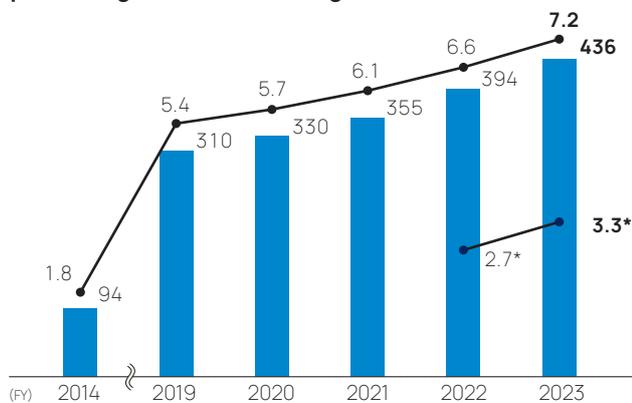


■ Promotion expenses for environmental activities

■ Environmental capital investment

Societal Indicators

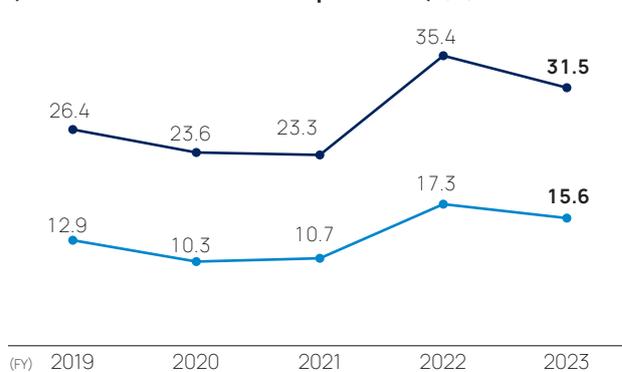
Number of female managers (persons) and percentage of female managers (%)



■ Number of female managers ● Percentage of female managers
 Note: Number of women in management positions (section manager or higher) set as new KPI from FY2022

* Scope of calculation: JFE Holdings and operating companies

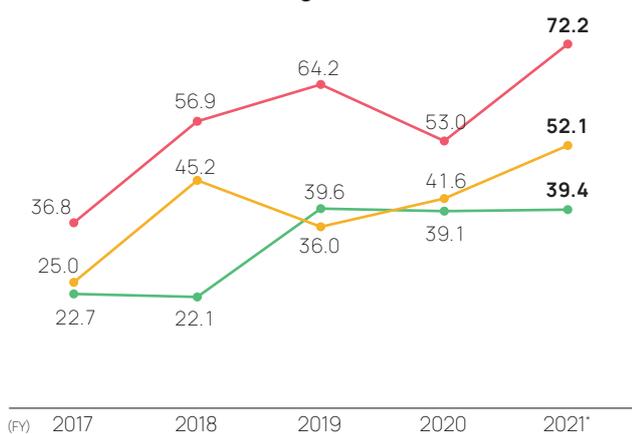
Percentage of female recruits (total) (%) and percentage of female recruits (career-track white-collar positions) (%)



● Percentage of female recruits (total)
 ● Percentage of female recruits (career-track white-collar positions)

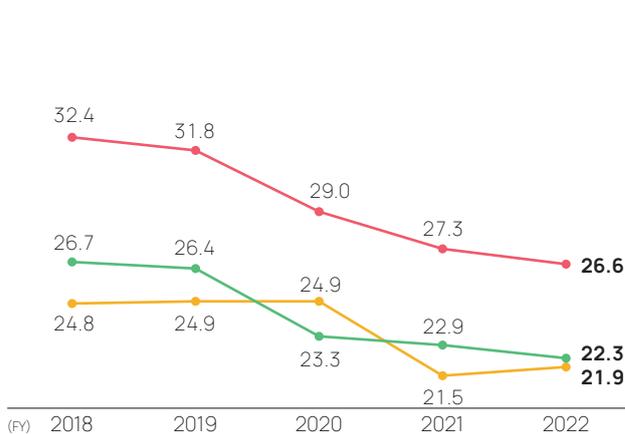
* Scope of calculation: total of three operating companies

Provision rates of health guidance (%)



● JFE Steel ● JFE Engineering ● JFE Shoji
 * Figures for fiscal 2021 shown because fiscal 2022 results are not yet determined.

Ratio of smokers (%)



● JFE Steel ● JFE Engineering ● JFE Shoji
 * JFE Steel counts ratio of smokers on a calendar year basis.
 * JFE Shoji's ratio of smokers (FY2018) reflects employees at least 40 years old.

Lost-work Injuries



● JFE Steel ● JFE Engineering ● JFE Shoji Group ● Manufacturing industry average
 * JFE Steel and JFE Engineering: parent company, business associates, and contractors;
 JFE Shoji Group: domestic parent and group companies, business associates, and contractors
 * Lost-work injuries = Number of lost-time injuries / number of hours worked × 1,000,000

Employment of people with disabilities (as of June 1 of each year) (%)



● JFE Steel ● JFE Engineering ● JFE Shoji

Financial Highlights

The JFE Group adopted International Financial Reporting Standards (IFRS) from FY2018, in place of the generally accepted accounting principles in Japan (JGAAP).

	JGAAP			
	FY2012	FY2013	FY2014	FY2015
Operating results				
Net sales (JGAAP) / Revenue (IFRS)	3,189	3,666	3,850	3,431
Ordinary income (JGAAP) / Business profit*1 (IFRS)	52	173	231	64
Income before income taxes (JGAAP) / Profit before tax (IFRS)	75	160	226	74
EBITDA*2 (JGAAP) / EBITDA*3 (IFRS)	260	368	421	254
Profit attributable to owners of parent	39	102	139	33
Capital expenditures (construction basis)	179	175	225	212
Depreciation and amortization	194	181	176	177
Research and development expenses	33	31	32	35
Financial position				
Total assets	4,107	4,241	4,639	4,234
Property, plant and equipment	1,606	1,599	1,629	1,627
Shareholders' equity (JGAAP) / Equity attributable to owners of parent (IFRS)	1,558	1,702	1,938	1,804
Net assets (JGAAP) / Equity (IFRS)	1,596	1,745	1,990	1,857
Debt outstanding (JGAAP) / Interest-bearing debt outstanding (IFRS)	1,596	1,534	1,501	1,379
Cash flows				
Cash flows from operating activities	287	254	297	267
Cash flows from investing activities	(163)	(164)	(216)	(137)
Free cash flow*4	123	90	81	129
Cash flows from financing activities	(147)	(105)	(78)	(144)
Per share data				
Profit attributable to owners of parent (yen/share)	71	177	242	58
Net assets (JGAAP) / Equity attributable to owners of parent (IFRS) (yen/share)	2,701	2,951	3,362	3,128
Dividends (yen/share)	20	40	60	30
Payout ratio (%)	28.1	22.5	24.8	51.4
Financial indicators				
Debt/EBITDA ratio*5 (JGAAP) / Debt/EBITDA ratio*6 (IFRS) (times)	6.1	4.2	3.6	5.4
ROE*7 (JGAAP) / ROE*8 (IFRS) (%)	2.7	6.3	7.7	1.8
ROA*9 (JGAAP) / ROA*10 (IFRS) (%)	1.6	4.5	5.5	1.7
Equity ratio (%)	37.9	40.1	41.8	42.6
D/E ratio*11 (JGAAP) / D/E ratio*12 (IFRS) (%)	76.9	67.9	59.0	56.9
Year-end share price (yen/share)	1,767	1,943	2,654	1,516
Segment information				
Net sales (JGAAP) / Revenue (IFRS)				
Steel business	2,499	2,691	2,873	2,445
Engineering business	267	284	367	397
Trading business	785	1,781	1,934	1,756
Ordinary income (JGAAP) / Segment profit*13 (IFRS)				
Steel business	15	126	188	27
Engineering business	16	18	18	20
Trading business	7	21	24	15
Others				
Crude steel production (JFE Steel on a non-consolidated basis) (million t)	28.0	28.7	28.4	27.4
Crude steel production (JFE Steel on a consolidated basis) (million t)	30.7	31.6	31.0	29.8
Shipment (JFE Steel on a non-consolidated basis) (million t)	25.2	25.5	26.1	25.4
Average selling price (JFE Steel on a non-consolidated basis) (thousand yen/t)	70.6	75.7	77.1	66.8
Export ratio on a value basis (JFE Steel on a non-consolidated basis) (%)	49.9	48.4	48.1	45.8
Employees (JFE Holdings on a consolidated basis) (persons)	57,044	57,210	58,856	59,460

*1 Business profit: Profit before tax excluding finance income and one-time items of a materially significant value

*2 EBITDA (JGAAP): Ordinary income + Interest expenses + Depreciation and amortization

*3 EBITDA (IFRS): Business profit + Depreciation and amortization

*4 Free cash flow: Cash flows from operating activities + Cash flows from investing activities

*5 Debt/EBITDA ratio (JGAAP): Debt outstanding / EBITDA

*6 Debt/EBITDA ratio (IFRS): Interest-bearing debt outstanding / EBITDA

*7 ROE (JGAAP): Profit attributable to owners of parent / Shareholders' equity

*8 ROE (IFRS): Profit attributable to owners of parent / Equity attributable to owners of parent

(billion yen)

FY2016	FY2017	FY2018	IFRS				FY2022
			FY2018	FY2019	FY2020	FY2021	
3,308	3,678	3,961	3,873	3,729	3,227	4,365	5,268
84	216	221	232	37	(12)	416	235
105	213	209	209	(213)	(4)	388	210
279	388	405	428	269	223	668	505
67	144	164	163	(197)	(21)	288	162
234	257	287	329	391	342	340	325
182	159	172	196	231	236	252	269
35	34	37	37	38	36	39	43
4,336	4,440	4,648	4,709	4,646	4,654	5,287	5,524
1,650	1,702	1,782	1,835	1,717	1,772	1,850	1,891
1,865	1,949	2,012	1,926	1,627	1,679	1,988	2,120
1,921	2,009	2,079	1,991	1,706	1,760	2,070	2,193
1,375	1,330	1,449	1,523	1,814	1,806	1,849	1,862
185	298	235	268	261	247	298	395
(163)	(194)	(284)	(313)	(358)	(164)	(288)	(274)
21	103	(48)	(45)	(97)	83	10	121
(18)	(90)	56	51	103	(30)	(57)	(110)
118	251	285	284	(343)	(38)	500	281
3,236	3,382	3,495	3,345	2,826	2,916	3,453	3,650
30	80	95	95	20	10	140	80
25.5	31.9	33.3	33.5	—	—	28.0	28.5
4.9	3.4	3.6	3.6	6.7	8.1	2.8	3.7
3.7	7.6	8.3	8.6	(11.1)	(1.3)	15.7	7.9
2.3	5.2	5.1	5.0	0.8	(0.3)	8.4	4.4
43.0	43.9	43.3	40.9	35.0	36.1	37.6	38.4
51.4	58.1	62.0	68.2	96.4	93.2	80.8	67.8
1,909	2,144	1,879	1,879	703	1,363	1,723	1,679
2,349	2,715	2,808	2,830	2,681	2,255	3,173	3,881
426	391	485	485	512	485	508	512
1,671	1,907	2,060	1,125	1,084	932	1,231	1,514
40	198	164	161	(8)	(65)	323	146
26	19	20	20	23	24	26	13
21	33	35	35	27	20	55	65
28.1	28.5	26.3	26.3	26.7	22.8	25.9	24.1
30.4	30.1	27.9	27.9	28.1	24.0	27.3	25.5
25.7	25.3	23.8	23.8	23.5	20.5	22.4	21.7
62.8	75.3	81.5	81.5	78.8	74.8	103.7	130.8
44.0	44.4	41.7	41.7	41.5	42.3	45.5	44.5
60,439	61,234	62,076	62,083	64,009	64,371	64,296	64,241

* 9 ROA (JGAAP): (Ordinary income + Interest expenses) / Total assets (average)

*10 ROA (IFRS): Business profit / Total assets

*11 D/E ratio (JGAAP): Debt outstanding / Shareholders' equity

For debt having a capital component, a portion of its issue price is deemed to be capital, as assessed by rating agencies.

*12 D/E ratio (IFRS): Interest-bearing debt outstanding / Equity attributable to owners of parent

For debt having a capital component, a portion of its issue price is deemed to be capital, as assessed by rating agencies.

*13 Segment profit: Profit including finance income in business profit

Financial Performance

Consolidated Statement of Financial Position

(million yen)

	As of March 31, 2022	As of March 31, 2023
Assets		
Current assets		
Cash and cash equivalents	101,773	119,391
Trade and other receivables	796,955	776,115
Contract assets	123,888	116,293
Inventories	1,227,935	1,367,230
Income taxes receivable	1,009	22,957
Other financial assets	22,830	18,937
Other current assets	118,235	96,759
Subtotal	2,392,629	2,517,685
Assets held for sale	—	40,929
Total current assets	2,392,629	2,558,615
Non-current assets		
Property, plant and equipment	1,850,779	1,891,053
Goodwill	8,174	14,911
Intangible assets	108,547	126,855
Right-of-use asset	98,417	98,611
Investment property	57,660	53,559
Investments accounted for using equity method	454,642	465,482
Retirement benefit asset	24,079	23,521
Deferred tax assets	60,372	74,728
Other financial assets	217,217	200,599
Other non-current assets	15,388	16,100
Total non-current assets	2,895,280	2,965,425
Total assets	5,287,909	5,524,040
Liabilities and equity		
Liabilities		
Current liabilities		
Trade and other payables	678,377	703,212
Bonds payable, borrowings, and lease liabilities	339,726	397,026
Contract liabilities	32,580	48,543
Income taxes payable, etc.	50,547	32,320
Provisions	12,345	10,781
Other financial liabilities	143,406	181,046
Other current liabilities	236,856	265,268
Subtotal	1,493,840	1,638,200
Liabilities directly associated with assets held for sale	—	23,598
Total current liabilities	1,493,840	1,661,798
Non-current liabilities		
Bonds payable, borrowings, and lease liabilities	1,509,739	1,465,939
Retirement benefit liability	125,927	120,663
Provisions	22,663	19,128
Deferred tax liabilities	12,065	5,480
Other financial liabilities	43,976	41,325
Other non-current liabilities	8,957	16,308
Total non-current liabilities	1,723,330	1,668,846
Total liabilities	3,217,170	3,330,644
Equity		
Share capital	147,143	147,143
Capital surplus	652,233	640,536
Retained earnings	1,294,875	1,397,735
Treasury shares	(180,580)	(156,408)
Other components of equity	74,596	91,315
Equity attributable to owners of parent	1,988,268	2,120,322
Non-controlling interests	82,470	73,073
Total equity	2,070,739	2,193,395
Total liabilities and equity	5,287,909	5,524,040

Consolidated Statement of Profit or Loss

(million yen)

	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Revenue	4,365,145	5,268,794
Cost of sales	(3,694,690)	(4,659,371)
Gross profit	670,454	609,423
Selling, general and administrative expense	(360,415)	(392,446)
Share of profit of investments accounted for using equity method	99,730	23,002
Other income	37,524	38,060
Other expenses	(30,828)	(42,198)
Business profit	416,466	235,841
Gain on sales of land	—	4,105
Impairment losses	(11,355)	(3,542)
Loss on liquidation of subsidiaries and associates	(4,918)	(6,739)
Restructuring expenses	—	(4,578)
Operating profit	400,192	225,086
Finance income	1,549	3,677
Finance costs	(13,205)	(18,481)
Profit before tax	388,535	210,282
Income tax expense	(98,741)	(43,530)
Net profit	289,793	166,752
Profit attributable to:		
Owners of parent	288,058	162,621
Non-controlling interests	1,734	4,130
Net profit	289,793	166,752
Earnings per share		
Basic earnings per share (yen)	500.28	280.68
Diluted earnings per share (yen)	500.12	280.52

Consolidated Statement of Comprehensive Income

(million yen)

	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Net profit	289,793	166,752
Other comprehensive income		
Items that will not be reclassified to profit or loss		
Remeasurements of defined benefit plans	8,978	8,144
Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income	5,984	(8,651)
Share of other comprehensive income of investments accounted for using equity method	(3,954)	2,891
Total of items that will not be reclassified to profit or loss	11,007	2,384
Items that may be reclassified to profit or loss		
Exchange differences on translation of foreign operations	16,707	18,239
Effective portion of cash flow hedges	4,931	1,823
Share of other comprehensive income of investments accounted for using equity method	32,808	14,614
Total of items that may be reclassified to profit or loss	54,447	34,677
Total other comprehensive income	65,455	37,061
Comprehensive income	355,249	203,814
Comprehensive income attributable to:		
Owners of parent	352,318	198,999
Non-controlling interests	2,930	4,815
Comprehensive income	355,249	203,814

Financial Performance

Consolidated Statement of Changes in Equity

Fiscal year ended March 31, 2022

(million yen)

	Equity attributable to owners of parent								Total	Total	Non-controlling interests	Total equity
	Share capital	Capital surplus	Retained earnings	Treasury shares	Other components of equity							
					Re-measurements of defined benefit plans	Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income	Exchange differences on translation of foreign operations	Effective portion of cash flow hedges				
Balance as of April 1, 2021	147,143	652,465	1,029,976	(180,639)	—	61,620	(32,256)	914	30,278	1,679,223	80,930	1,760,154
Net profit	—	—	288,058	—	—	—	—	—	—	288,058	1,734	289,793
Other comprehensive income	—	—	—	—	9,015	2,120	48,343	4,780	64,260	64,260	1,195	65,455
Comprehensive income	—	—	288,058	—	9,015	2,120	48,343	4,780	64,260	352,318	2,930	355,249
Purchase of treasury shares	—	—	—	(68)	—	—	—	—	—	(68)	—	(68)
Disposal of treasury shares	—	47	—	77	—	—	—	—	—	125	—	125
Dividends	—	—	(40,355)	—	—	—	—	—	—	(40,355)	(1,237)	(41,592)
Share-based payment transactions	—	123	—	50	—	—	—	—	—	173	—	173
Changes in scope of consolidation	—	—	—	—	—	—	—	—	—	—	232	232
Changes in ownership interest in subsidiaries	—	(403)	—	—	—	—	—	—	—	(403)	324	(79)
Transfer from other components of equity to retained earnings	—	—	17,195	—	(9,015)	(8,180)	—	—	(17,195)	—	—	—
Transfer to non-financial assets	—	—	—	—	—	—	—	(2,745)	(2,745)	(2,745)	—	(2,745)
Other	—	—	—	—	—	—	—	—	—	—	(709)	(709)
Total transactions with owners	—	(232)	(23,159)	58	(9,015)	(8,180)	—	(2,745)	(19,941)	(43,274)	(1,389)	(44,664)
Balance as of March 31, 2022	147,143	652,233	1,294,875	(180,580)	—	55,560	16,086	2,949	74,596	1,988,268	82,470	2,070,739

Fiscal year ended March 31, 2023

(million yen)

	Equity attributable to owners of parent								Total	Total	Non-controlling interests	Total equity
	Share capital	Capital surplus	Retained earnings	Treasury shares	Other components of equity							
					Re-measurements of defined benefit plans	Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income	Exchange differences on translation of foreign operations	Effective portion of cash flow hedges				
Balance as of April 1, 2022	147,143	652,233	1,294,875	(180,580)	—	55,560	16,086	2,949	74,596	1,988,268	82,470	2,070,739
Net profit	—	—	162,621	—	—	—	—	—	—	162,621	4,130	166,752
Other comprehensive income	—	—	—	—	9,023	(6,700)	31,854	2,200	36,377	36,377	684	37,061
Comprehensive income	—	—	162,621	—	9,023	(6,700)	31,854	2,200	36,377	198,999	4,815	203,814
Purchase of treasury shares	—	—	—	(60)	—	—	—	—	—	(60)	—	(60)
Disposal of treasury shares	—	(2,000)	—	24,204	—	—	—	—	—	22,204	—	22,204
Dividends	—	—	(75,198)	—	—	—	—	—	—	(75,198)	(1,815)	(77,014)
Share-based payment transactions	—	131	—	27	—	—	—	—	—	158	—	158
Changes in scope of consolidation	—	—	—	—	—	—	—	—	—	—	(127)	(127)
Changes in ownership interest in subsidiaries	—	(9,827)	—	—	—	—	—	—	—	(9,827)	(12,382)	(22,210)
Transfer from other components of equity to retained earnings	—	—	15,437	—	(9,023)	(6,413)	—	—	(15,437)	—	—	—
Transfer to non-financial assets	—	—	—	—	—	—	—	(4,221)	(4,221)	(4,221)	—	(4,221)
Other	—	—	—	—	—	—	—	—	—	—	112	112
Total transactions with owners	—	(11,696)	(59,761)	24,172	(9,023)	(6,413)	—	(4,221)	(19,658)	(66,944)	(14,213)	(81,157)
Balance as of April 1, 2023	147,143	640,536	1,397,735	(156,408)	—	42,446	47,941	928	91,315	2,120,322	73,073	2,193,395

Consolidated Statement of Cash Flow

(million yen)

	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Cash flows from operating activities		
Profit before tax	388,535	210,282
Depreciation and amortization	252,283	269,600
Changes in allowance	(2,917)	(5,172)
Interest and dividend income	(5,417)	(9,315)
Interest expenses	12,652	16,760
Share of loss (profit) of investments accounted for using equity method	(99,730)	(23,002)
Changes in trade and other receivables	(23,333)	19,336
Changes in inventories	(431,449)	(124,579)
Changes in trade and other payables	174,808	6,995
Other	39,122	117,396
Subtotal	304,554	478,301
Interest and dividends received	35,450	37,250
Interest paid	(11,559)	(15,155)
Income taxes paid	(29,706)	(104,599)
Net cash provided by (used in) operating activities	298,738	395,797
Cash flows from investing activities		
Purchase of property, plant and equipment, intangible assets, and investment property	(313,328)	(289,197)
Proceeds from sale of property, plant and equipment, intangible assets, and investment property	2,711	17,673
Purchase of investments	(5,557)	(9,072)
Proceeds from sale of investments	33,449	20,939
Other	(5,309)	(14,651)
Net cash provided by (used in) investing activities	(288,034)	(274,308)
Cash flows from financing activities		
Changes in short-term borrowings	13,834	(4,576)
Changes in commercial papers	—	19,999
Proceeds from long-term borrowings	122,422	305,876
Repayments of long-term borrowings	(103,959)	(330,944)
Proceeds from issuance of bonds	35,000	30,000
Payments for redemption of bonds	(30,000)	(20,000)
Payments for purchase of treasury shares	(65)	(60)
Dividends paid to owners of parent	(40,355)	(75,198)
Other	(54,303)	(35,271)
Net cash provided by (used in) financing activities	(57,427)	(110,175)
Effect of exchange rate change on cash and cash equivalents	6,080	7,839
Changes in cash and cash equivalents	(40,643)	19,153
Changes in cash and cash equivalents resulting from transfer to assets held for sale	—	(1,536)
Cash and cash equivalents at beginning of period	142,416	101,773
Cash and cash equivalents at end of period	101,773	119,391

Operating and Main Group Companies (As of April 1, 2023)

Notes: 1. Net sales/Revenue: Results for FY2022

2. Number of employees: As of March 31, 2023 (Consolidated)

* Equity method affiliates

Steel Business | JFE Steel

Head office Chiyoda-ku, Tokyo **Revenue** 3,881.1 billion yen **Number of employees** 44,469 (male: 38,682; female: 5,787)

Domestic group companies

■ JFE Mineral Company, Ltd. ■ Chiba Riverment and Cement Corporation ■ Mizushima Riverment Corporation ■ JFE Precisions Co., Ltd.
 ■ JFE Plastic Resource Corporation ■ JFE Bars & Shapes Corporation ■ JFE Metal Products & Engineering, Inc. ■ JFE Galvanizing & Coating Co., Ltd.
 ■ JFE Welded Pipe Manufacturing Co., Ltd. ■ JFE Container Co., Ltd. ■ JFE Steel Pipe Co., Ltd. ■ Galvatex Corporation ■ JFE Tubic Corporation
 ■ JFE Techno-Wire Corporation ■ JFE Kozai Corporation ■ Daiwa Kohtai Co., Ltd. ■ GECOSS Corporation ■ JFE Plant Engineering Co., Ltd.
 ■ JFE Advantech Co., Ltd. ■ JFE Civil Engineering & Construction Corporation ■ JFE Sekkei Ltd. ■ JFE Logistics Corporation
 ■ JFE West Technology Corporation ■ JFE Wing Corporation ■ JFE Techno-Research Corporation ■ JFE Systems, Inc. ■ JFE Chemical Corporation
 ■ JFE Life Corporation ■ JFE East Japan GS Co., Ltd. ■ JFE West Japan GS Co., Ltd. ■ JFE Apple East Corporation ■ JFE Apple West Corporation
 ■ Shinagawa Refractories Co., Ltd.* ■ Nippon Chuzo K.K.* ■ Nippon Chutetsukan K.K.* ■ EXA Corporation* ■ Setouchi Joint Thermal Power Co., Ltd.*
 ■ K.K. JFE SANSO CENTER* ■ Mizushima Eco-Works Co., Ltd.*

Engineering Business | JFE Engineering

Head office Chiyoda-ku, Tokyo **Yokohama head office** Yokohama, Kanagawa Prefecture **Revenue** 512.5 billion yen

Number of employees 11,086 (male: 9,592; female: 1,494)

Domestic group companies

■ Asukasoken Co., Ltd. ■ Urban Energy Corporation ■ AnyTech Inc. ■ Omuta Recycle Power Co., Ltd. ■ Kitanihon Industrial Co. Ltd.
 ■ J&T Recycling Corporation ■ JFE Aqua Machine and Service Corporation ■ JFE Environmental Service Corporation
 ■ JFE Environment Technology Co., Ltd. ■ JFE Career Navi Corporation ■ JFE Technos Co., Ltd. ■ JFE Pipeline Engineering Corporation
 ■ JFE Business Support Yokohama Corporation ■ JFE Project One Co., Ltd. ■ J Farm Tomakomai Corporation ■ Japan Tunnel Systems Corporation*
 ■ JP Steel Plantech Co.* ■ Tohoku Dock Tekko K.K. ■ Fuji Kako Co., Ltd. ■ Mie Data Craft Co., Ltd. ■ Myoko Green Energy Co., Ltd.

Trading Business | JFE Shoji

Head office Chiyoda-ku, Tokyo **Revenue** 1,514.1 billion yen **Number of employees** 8,631 (male: 6,201; female: 2,430)

Domestic group companies

■ JFE Shoji Steel Construction Materials Corporation ■ JFE Shoji Pipe & Fitting Corporation ■ JFE Shoji Electrical Steel Co., Ltd.
 ■ Kawasho Foods Corporation ■ JFE Shoji Electronics Corporation ■ JFE Shoji Coil Center Corporation ■ Niigata Steel Corporation
 ■ Nagano Can Corporation ■ Toyo Kinzoku Corporation ■ JFE Shoji Terre One Corporation ■ Tochigi Shearing Corporation ■ Hokuriku Steel Co., Ltd.
 ■ K&I Tubular Corporation ■ Taisei Kogyo Corporation ■ Kadota Kozai Corporation ■ JFE Shoji Zosen Kako Corporation
 ■ JFE Shoji Kohnan Steel Center Co., Ltd. ■ Naigai Steel Corporation ■ JFE Shoji Tinplate Center Corporation ■ Mizushima Steel Corporation
 ■ Mizushima Metal Products Corporation ■ Nihon Jiseizai Kogyo Co., Ltd. ■ Kyushu-Tech Corporation ■ JFE Shoji Matech Inc.
 ■ JFE Shoji Machinery & Materials Corporation ■ JFE Shoji Business Support, Inc. ■ JFE Shoji Service Corporation ■ Kadowaki Steel Material's Corporation
 ■ Tohsen Corporation ■ Shin Nihon Kogyo Corporation ■ Yashimanada Corporation ■ Mitsuya Tekken Corporation ■ JFE Shoji Jutaku Shizai Corporation
 ■ Rollmat Japan Co., Ltd. ■ Aichi Kanzai Kogyo Corporation ■ Hoshi Kinzoku Corporation ■ Hokuriku Kogyo Corporation
 ■ Kohnan Blanking Service Corporation ■ JFE Shoji Cormec Co., Ltd. ■ Hanwa Kozai Co., Ltd.* ■ Kita-Kanto Steel Corporation* ■ Ohmi sangyo Co., Ltd.*

Shipbuilding Business | Japan Marine United

Head office Yokohama, Kanagawa Prefecture **Net sales** 266.1 billion yen **Number of employees** 4,820 (male: 4,514; female: 306)

Domestic group companies

■ JMU AMTEC Co., Ltd. ■ IMC Co., Ltd. ■ JMU Defense Systems Co., Ltd.

Employee Data (Non-consolidated: Actual figures for FY2022)

JFE Steel

Number of employees (April 1, 2023)	15,185 (Male 13,909, Female 1,276)
Number of managers	1,641 (Male 1,613, Female 28)
Ratio of female managers	1.7%
Number of recruits	320 (Male 293, Female 27) (New graduates 240, Mid-career 80)
Average years employed	16.7 (Male 16.4, Female 19.8)
Turnover rate	2.8%
Number of annual leave days taken (average)	16.7 days/year
Overtime working hours (average)	25.1 hours/month
Number of employees working shorter hours for childcare (total number of persons)	82
Number of dispatched employees	157

JFE Engineering

Number of employees (April 1, 2023)	3,846 (Male 3,294, Female 552)
Number of managers	1,617 (Male 1,566, Female 51)
Ratio of female managers	3.2%
Number of recruits	152 (Male 120, Female 32) (New graduates 86, Mid-career 66)
Average years employed	15.4 (Male 15.4, Female 15.3)
Turnover rate	2.3%
Number of annual leave days taken (average)	19.1 days/year
Overtime working hours (average)	26.7 hours/month
Number of employees working shorter hours for childcare (total number of persons)	56
Number of dispatched employees	656

Overseas group companies

- Nova Era Silicon S.A. ■ Thai Coated Steel Sheet Co., Ltd. ■ JFE Steel Galvanizing (Thailand) Ltd. ■ Philippine Sinter Corporation
- PT. JFE Steel Galvanizing Indonesia ■ JFE Steel Australia Resources Pty. Ltd. ■ NUCOR-JFE STEEL MEXICO, S. de R.L. de C.V.*
- California Steel Industries, Inc.* ■ Fujian Sino-Japan Metal Co., Ltd.* ■ Bohai NKK Drill Pipe Co., Ltd.* ■ Guangzhou JFE Steel Sheet Co., Ltd.*
- Inner Mongolia Erdos EJM Manganese Alloys Co., Ltd.* ■ Jiaxing JFE Precision Steel Pipe Co., Ltd. ■ Shanghai Baowu JFE Clean Iron Powder Co., Ltd.*
- BaoWu JFE Special Steel Co., Ltd.* ■ JSW Steel Ltd.* ■ Thai Cold Rolled Steel Sheet Public Co., Ltd.* ■ PT. Sermani Steel*
- Perusahaan Sadur Timah Malaysia (Perstima) Bhd.* ■ JFE Steel Tubular Technical Center Pte. Ltd.* ■ J-Spiral Steel Pipe Co., Ltd.*
- AGRIMECO & JFE STEEL PRODUCTS CO., LTD.* ■ AL GHARBIA PIPE COMPANY LLC* ■ JFE MERANTI MYANMAR HOLDING PTE. LTD.
- JFE Connections America, Inc. ■ GECOSS VIETNAM COMPANY LIMITED

Overseas group companies

- JFE Techno Manila, Inc. ■ JFE Engineering (M) Sdn. Bhd. ■ PT. JFE Engineering Indonesia ■ JFE Engineering India Private Limited
- Mitr Project Services Co., Ltd. ■ Standardkessel Baumgarte Holding GmbH ■ J&M Steel Solutions Company Limited

Overseas group companies

- Guangzhou JFE Shoji Steel Products Co., Ltd. ■ Dongguan JFE Shoji Steel Products Co., Ltd. ■ Zhejiang JFE Shoji Steel Products Co., Ltd.
- Jiangsu JFE Shoji Steel Products Co., Ltd. ■ JFE Shoji Steel Philippines, Inc. ■ Central Metals (Thailand) Ltd. ■ Steel Alliance Service Center Co., Ltd.
- New Bangpoo Manufacturing Co., Ltd. ■ JFE Shoji Steel Vietnam Co., Ltd. ■ JFE Shoji Steel Hai Phong Co., Ltd. ■ JFE Shoji Steel Malaysia Sdn. Bhd.
- PT. JFE Shoji Steel Indonesia ■ JFE Shoji Steel India Private Limited ■ VEST Inc. ■ JFE Shoji Steel America, Inc. ■ JFE Shoji Steel de Mexico, S.A. de C.V.
- Kelly Pipe Co., LLC ■ CEMCO, LLC ■ JFE Shoji Steel Service Center Bajio, S.A.P.I. de C.V. ■ JFE Shoji Power Canada Inc.
- Marushin Canneries (Malaysia) Sdn. Bhd. ■ JY Steel Processing Co., Ltd. ■ Kawarin Enterprise Pte. Ltd.* ■ r. bourgeois JFE Shoji Magnetic Lamination, Inc.*

JFE Shoji

Number of employees (April 1, 2023)	1,035 (Male 613, Female 422)
Number of managers	614 (Male 567, Female 47)
Ratio of female managers	7.7%
Number of recruits	80 (Male 53, Female 27) (New graduates 59, Mid-career 21)
Average years employed	12.3 (Male 12.5, Female 11.9)
Turnover rate	3.4%
Number of annual leave days taken (average)	14.5 days/year
Overtime working hours (average)	28.7 hours/month
Number of employees working shorter hours for childcare (total number of persons)	65
Number of dispatched employees	34

Company Profile / Share Information

Company Profile (As of March 31, 2023)

Head Office: 2-2-3 Uchisaiwaicho, Chiyoda-ku, Tokyo 100-0011, Japan
 TEL: +81-3-3597-4321
 Established: September 27, 2002
 Capital: 147.1 billion yen
 Number of Employees: 64,241 (Consolidated) Male: 54,510 / Female: 9,731

Share Data (As of March 31, 2023)

Total Number of Shares Authorized to Be Issued
 2,298,000,000 shares
 Total Number of Shares Issued
 614,438,399 shares
 Total Number of Shareholders
 286,625 persons

Share Information (As of March 31, 2023)

Minimum Trading Unit 100 shares
 Fiscal Year-end March 31 of each year
 Stock Exchange Listing Tokyo Stock Exchange, Inc.
 Security Code 5411
 Shareholder Registry Administrator
 Mizuho Trust & Banking Co., Ltd.
 1-3-3 Marunouchi, Chiyoda-ku,
 Tokyo 100-8241, Japan

Major Shareholders (As of March 31, 2023)

Name	Number of shares held (Thousand shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (trust account)	87,157	14.99
Custody Bank of Japan, Ltd. (trust account)	36,418	6.26
Nippon Life Insurance Company	15,855	2.73
The Dai-ichi Life Insurance Company, Limited	13,127	2.26
JFE Employees Stock Ownership Plan	12,272	2.11
Mizuho Bank, Ltd.	12,138	2.09
STATE STREET BANK WEST CLIENT - TREATY 505234	9,702	1.67
JFE Business Partners Stock Ownership Plan	9,480	1.63
Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.	7,352	1.26
Tokio Marine & Nichido Fire Insurance Co., Ltd.	7,042	1.21

Note: In addition to the above, the Company retains 32,862 thousand shares as treasury shares. The treasury shares are not included in the shareholding ratio calculation.

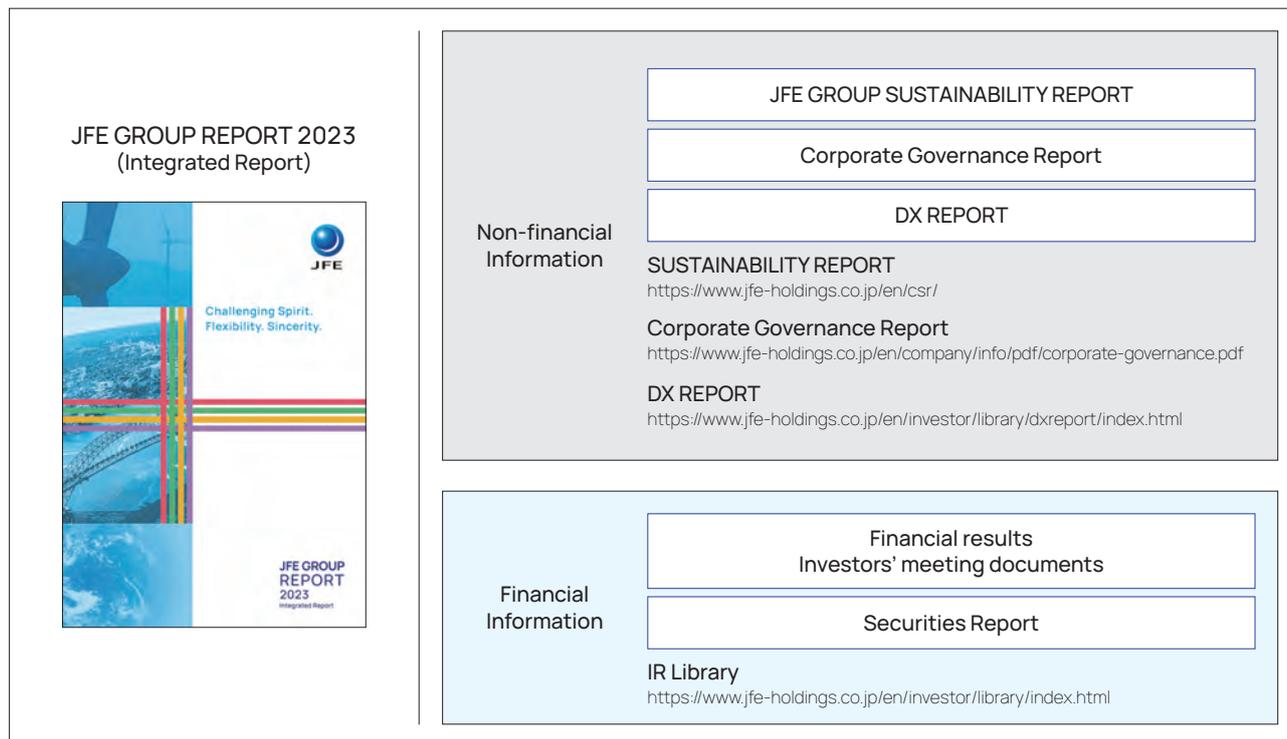
Distribution of Shareholders (As of March 31, 2023)



Changes in Share Prices, Trading Volume, and Dividends

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Share price (Yen) (As of year-end)	1,767	1,943	2,654	1,516	1,909	2,144	1,879	703	1,363	1,723	1,679
Trading volume (Million shares) (Fiscal year)	1,206	1,113	799	1,080	1,141	896	685	823	1,077	2,708	1,384
Annual dividends per share (Yen)	20	40	60	30	30	80	95	20	10	140	80

Tool map



The JFE GROUP REPORT and JFE GROUP SUSTAINABILITY REPORT can also be viewed on smartphones.



▶ JFE GROUP REPORT



▶ JFE GROUP SUSTAINABILITY REPORT

External recognition



FTSE Blossom Japan



FTSE Blossom Japan Sector Relative Index

2022 CONSTITUENT MSCI JAPAN ESG SELECT LEADERS INDEX

2022 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)



FTSE4Good



2022 MSCI ESG Leaders Indexes Constituent

[CDP 2022 scores]
 Climate change: A-
 Water security: A-
 Supplier/Engagement: A-



2022 Sompo Sustainability Index



JFE Holdings, Inc.

2-2-3 Uchisaiwaicho, Chiyoda-ku, Tokyo 100-0011, Japan

URL: <https://www.jfe-holdings.co.jp/en/>

