JFE

Steel has changed the world.
We will usher in the future.




2022 JFE GROUP REPORT

Integrated Report

The Enduring Spirit and Technological Legacy of JFE

Kawasaki Steel

April	1878	Shozo Kawasaki established Kawasaki Tsukiji Shipyard in Tsukiji, Tokyo
October	1896	Kawasaki Dockyard Company, Ltd. established (later renamed Kawasaki Heavy Industries, Ltd.)
August	1950	Steel division of Kawasaki Heavy Industries spun off as independent Kawasaki Steel Corporation
February	1951	Chiba Works established as first modern integrated iron and steel works in postwar Japan
July	1961	Mizushima Works established in Kurashiki, Okayama Prefecture

Nippon Kokan

June	1912	Nippon Kokan K.K. established
April	1916	Yokohama Shipyard launched (later renamed Asano Shipyard Co., Ltd.)
June	1936	First blast furnace blown in and integrated steel production started
October	1965	Fukuyama Works established
April	1968	Keihin Steel Works established (consolidation of Kawasaki, Tsurumi, and Mizue works)

2002

JFE

Establishment of JFE

For many years, major steel companies—both those that supply raw materials (e.g., iron ore) and those that use steel (e.g., automobiles), have been forming capital tie-ups and otherwise integrating for strengthened competitiveness, resulting in increasingly fierce international competition. In September 2002, Kawasaki Steel and NKK integrated their operations to achieve world-class competitiveness by combining their respective strengths and leveraging their strong sales bases, advanced technological capabilities, and robust steel mills and fabrication facilities. In April 2003, JFE Holdings, Inc. was established through a share transfer between the two companies, and in April 2003 the JFE Group made a fresh start by reorganizing its core business segments to allow each business unit to leverage its strengths for optimal performance.

CORPORATE VISION

Contributing to society with the world's most innovative technology

CORPORATE VALUES

Challenging Spirit. Flexibility. Sincerity.

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

Continuously Accepting Challenges to Change with the Times

2002-2021
A History of Challenges

JFE, aiming to maximize the benefits of its merger immediately upon establishment, quickly began to build an integrated steelworks structure spanning both eastern and western Japan as well as expand its lineup of products, horizontally deploy processing technologies, and reorganize/integrate its internal companies. Since then, in order to steadily adapt to changes in the business environment, JFE has grown its corporate value by adjusting its business portfolio, developing world-class products and technologies, and expanding overseas business under a vertically integrated business model centered on Asia, including a strategic alliance with JSW Steel Ltd. in India.

Evolution of Medium-Term Business Plans

First (2003-2005)	Maximize integration's full potential	Reinforced business foundation
Second (2006-2008)	Expand high-value-added products	Established stable production and high-earnings structure
Third (2009-2011)	Pursue forward-looking technologies	Aimed to become top supplier of high-value-added products
Fourth (2012-2014)	Expand into growing markets overseas	Strengthened production bases and increased sales and engineering functions overseas
Fifth (2015-2017)	Fully capture global demand	Strengthened production and sales structures and invested in new businesses
Sixth (2018-2020)	Competitiveness through advanced technologies	Aggressively incorporated data science

Changes in the business portfolio

For more information: https://www.jfe-holdings.co.jp/en/company/history/

‹April 1, 2003›
Establishment of operating companies

- JFE Steel Corporation
- JFE Engineering Corporation
- JFE Shoji Trade Corporation
- Universal Shipbuilding
- JFE Urban Development Corporation
- Kawasaki Microelectronics, Inc.
- JFE R&D Corporation

‹From January 1, 2013›

JFE Holdings

- JFE Steel Corporation
- JFE Engineering Corporation
- JFE Shoji Trade Corporation
- Japan Marine United Corporation (equity-method affiliate)

2022

Ascending to Next Stage on 20th Anniversary

JFE is now faced with an unprecedentedly challenging business environment, including intensifying global competition due to the rise of China, growing geopolitical risks and economic uncertainty due to conflicts between the U.S. and China, the shift toward carbon neutrality to protect the global environment, advances in digital technologies and a global pandemic. JFE, having formulated its Seventh Medium-term Business Plan (fiscal 2021–2024), is now implementing diverse initiatives in order to respond effectively to these many challenges and steadily improve the Company's corporate value over the medium to long term.

Challenges in the Seventh Medium-Term Business Plan (2021-2024)

1 Achieve carbon neutrality based on environmental vision

Processes capable of producing highly functional steel on a mass level without emitting CO_2 are absolutely required for the sustainable future of human society. Accordingly, JFE is striving to rapidly establish the necessary decarbonization technologies ahead of its global rivals.

CO_2 steel-business emissions-reduction targets
(versus fiscal 2013)

Fiscal 2024
18%

Fiscal 2030
30% or more

Initiatives for Carbon Neutrality by 2050

1. Reduce CO_2 emissions of JFE Steel
2. Support increased emissions reduction in society
3. Commercialize offshore wind-power business

2 Shift from quantity to quality for top-level profitability

As the Japanese market steadily contracts and exports become less profitable, JFE is shifting its business focus from quantity to quality to secure top-level profitability, including 10,000 yen profit per ton of steel product, supported by resilience to economic and market fluctuations.

Cost reductions
120 billion yen
(steel business)

Ratio of high-value-added products
50%
(steel business)

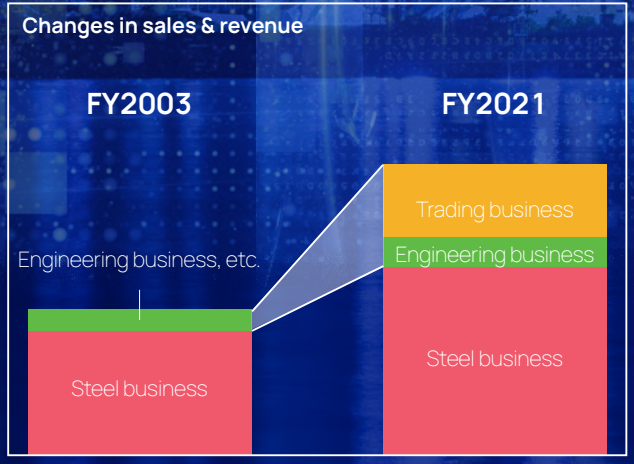
3 Implement groupwide growth strategies

Steel business
- Possible production and sales of grain-oriented electrical steel sheet via JV with JSW in India
- Expand solutions business

Engineering business
Expand sales revenue to **one trillion yen**
by fiscal 2030

Trading business
Expand overseas-processing supply-chain management for high-performance electrical steel sheet

Changes in sales & revenue



4 Carry out DX strategies

(1) Dramatically improve productivity

(2) Transform existing businesses

(3) Create new businesses

5 Invest strategically for financial vitality

ROE
At least **10%**

Consolidated business profit
¥320 billion

Dividend payout ratio
About **30%**

2050

Aiming to Secure a Sustainable Future

JFE's core business is steel, an indispensable basic material for human society. JFE also operates an engineering business that is deeply rooted in steel and supports safe and comfortable life worldwide, and a global trading business that enables JFE's diverse value propositions to reach every corner of the globe. JFE is leveraging technologies, personnel, capital, intellectual property and networks that the Company has nurtured over many decades to create value for environmental and societal sustainability (solutions for global society) as well as economic sustainability (earnings power).

Establishing an Irreplaceable Presence in Society

The human race has been using steel to produce agricultural tools, ironware, building materials, and other crucial items since around 1,500 B.C. Today, steel is still a vital basic material for diverse industries due to its overwhelming advantages in terms of mass production, economic efficiency, low environmental load, and high processability. As economies in emerging countries grow, especially in Asia, demand will continue to expand for steel-related products including automobiles, buildings, infrastructure, cargo ships, containers, and many others. Simply put, steel remains the only material suitable for such products.

The mission of JFE is to develop and provide steel products and services that can enrich human life regardless of current business conditions. Today, global society is increasingly demanding that companies support the shift toward a more decarbonized Earth. In response, JFE is working diligently to develop a decarbonized steelmaking process capable of offering high-performance, high-quality products and solutions as well as contributing to CO_2 reduction.

JFE is committed to taking on new challenges with the aim of becoming an irreplaceable member of global society, broadly recognized for its sustainable development and support for safe and comfortable human life.

Contents / Editorial Policy

Koji Kakigi

Representative Director,
President and CEO
JFE Holdings, Inc.

Publication of JFE GROUP REPORT 2022

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.

In fiscal 2022, JFE Holdings celebrates the 20th anniversary of its establishment. It is also the second year of the Seventh Medium-term Business Plan, an important year for advancing our growth strategy and taking measures toward becoming carbon neutral by 2050. 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 Value Reporting Foundation (VRF)'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 2022 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.

‹Reporting Period›

FY2021 (April 1, 2021, to March 31, 2022)
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

- Value Reporting Foundation (VRF): 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)

価値協創ガイダンス
Guidance for Collaborative Value Creation

Publication Date

October 2022; (Next issue (planned): October 2023)

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.

Tackling the Biggest Challenge Since Our Founding to Ensure Earth's Prosperity

Maximizing Group synergies for sustainable growth and enhanced corporate value over the long term.

Koji Kakigi

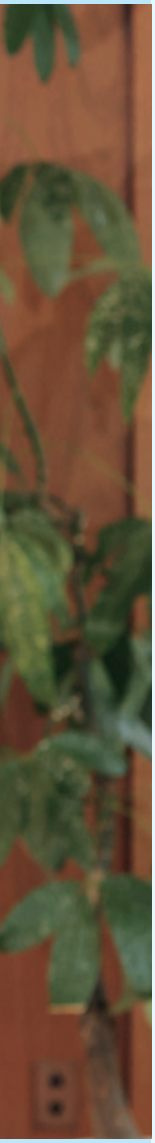
Representative Director,
President and CEO
JFE Holdings, Inc.

Looking Back at Fiscal 2021

We achieved measurable progress in shifting from quantity to quality in our Seventh Medium-term Business Plan.

In fiscal 2021 we launched our Seventh Medium-term Business Plan and succeeded in achieving a V-shaped recovery thanks to comprehensive efforts to strengthen the Group, supported by a recovery in demand due the resumption of full-scale global economic activity. Revenue reached the 4-trillion-yen level for the first time since our establishment, and both business profit and profit were the highest since the financial crisis of 2008.

In the first year after completing our Sixth Medium-term Business Plan in fiscal 2020, we made steady progress in our mainstay steel business by strengthening our manufacturing base and utilizing data science to improve our manufacturing capabilities. We also increased efforts to raise sales prices. Coking coal and iron ore, the main raw materials used to make steel, saw prices fluctuate wildly, prompting us to reflect significant changes in our main raw materials costs in our selling prices by launching earnest discussions with customers early on. In addition, we increased our ratio of high-value-added products that allow us to best leverage our unique technological strengths, and we made progress in better aligning our pricing structure with the actual value customers gain from using high-quality



products from JFE. Overall, we believe that we achieved measurable progress in shifting from quantity to quality, one of the key objectives of our current plan.

Steady Progress in All Three Segments

Segment profit in our steel business came to 323.7 billion yen in fiscal 2021, which was well ahead of our fiscal 2024 target of 230.0 billion yen. But profit per ton of steel was 6,000 yen/ton, which did not reach our target of 10,000 yen/ton after excluding inventory valuation differences and other one-time effects. As I will discuss below, there are still many areas where we must—and can—do better under our current plan.

In our engineering business, where we have steadily increased sales and profits over the past few years, segment profit in fiscal 2021 amounted to 26.0 billion yen, an improvement from the previous fiscal year. In environmental sectors where we are particularly strong, such as waste treatment facilities and recycling, we established a stable earnings base by increasing our ratio of engineering, procurement, and construction (EPC) projects and also outsourcing business in which we undertake contracted facility operation after construction.

Our trading business achieved record-high segment profit of 55.9 billion yen, thanks to a recovery in demand for steel products in Japan and overseas, and particularly strong earnings in North American business. Amid the favorable business environment, we invested in growth to acquire Cogent Power (now JFE Shoji Power Canada) in Canada as our new processing center for electromagnetic steel sheets, and also to expand processing capacity to strengthen our automotive supply chain and to establish a new construction materials business through additional investments in Vietnamese partner companies.

Need to Improve JFE's Market Valuation

Despite achieving our highest profit since the 2008 financial crisis and a strong return on equity (ROE) of 15.7%, such efforts were not fully recognized by shareholders and investors in terms of our share price. The stock market apparently views it as a challenge for the Company to achieve a stable ROE that exceeds the cost of shareholders' equity.

As we move through the most significant medium-term period since our founding, we have committed the Company to establishing a stronger foundation—one that combines economic sustainability with environmental and social sustainability. We strongly believe this is the best course for the Company, both financially and ethically, so the market's lukewarm assessment has been frankly disappointing.

Given that our mainstay steel business is a CO_2-emitting industry, undoubtedly more than a few people are concerned about the prospects for the Company and the steel industry in an increasingly decarbonizing world. In addition, domestic demand for steel is expected to plateau due to Japan's declining birthrate and aging population, even though global demand for steel is forecast to increase steadily, especially in Asia.

Going forward, we aim to redouble our efforts to dispel any such concerns of our shareholders and investors and gain a better understanding as well as more realistic expectation regarding the Group's promising future prospects and growth path.

Toward a More Robust Business Foundation

Upgrading Our Product Mix and Raising Profitability in Steel

We envision significant changes in our steel business environment, including a shrinking market in Japan due to a declining population, intensifying competition in overseas markets trending toward local production for local consumption, and the advancement of electric vehicles (EVs). Regardless of when or how these changes occur, under our current plan we are determined to establish a stronger earnings base for targeted earnings on a sustainable basis.

To this end, we are now in the middle of structurally reforming our steel business, which is a major prerequisite for our targeted shift from quantity to quality. Once we complete the suspension of upstream processes at the Keihin district of our East Japan Works, which is targeted for September 2023, we expect to reduce annual costs, mainly fixed costs, by 50 billion yen, and then strategically focus resources on our manufacture and sale of high-value-added products under a new production system.

General-purpose products, currently accounting for about 30% of our steel exports from Japan, will not be a sustainable product category over the medium to long

term as competition with local manufacturers intensifies, especially in Southeast Asia. In order to make full and effective use of leaner production capacity following structural reforms, we will accelerate our shift to the development, production, and sales of products for which we can best utilize JFE's technological strengths. We are already engaging in forward-looking discussions with customers about raising our ratio of high-value-added products as well as more closely matching pricing with the actual value of using our high-quality, high-performance steel products. By the end of the current medium term, once our structural reforms are completed, we intend to raise our ratio of high-value-added products to 50% (as compared to 40% before the current medium term) and create an overall structure capable of stably generating profit of 10,000 yen per ton.

Many customers in a variety of sectors are accelerating efforts to keep pace with change. For example, in the automotive industry, where the shift to EVs continues to move forward, strenuous efforts are being made to reduce car body weights in order to compensate for the addition of much heavier batteries. Also, demand will continue to grow for JFE-HITEN ultra-high-tensile-strength steel sheet, which is both lightweight and ensures passenger safety, and for high-grade electromagnetic steel sheets that contribute to smaller and lighter motors. Newly emerging opportunities also exist in fields such as extra-thick steel plates for offshore wind power monopiles, crack-resistant steel plates for larger container ships, and high-alloy seamless steel pipes for carbon dioxide capture and storage (CCS). Of course, competitors in China and elsewhere are working day and night on their own technological development, but we are determined to stay one step ahead of our competition at all times. In these and other promising fields, we will continue to work closely with customers to further raise our quality and production capacity.

Developing Technology for Carbon Neutrality

JFE has declared its commitment to serving as an essential participant in the development of a sustainable world that offers humankind safety and comfort. As the world becomes increasingly concerned about climate change, one of the key efforts will be to manufacture steel with as little environmental impact as possible so that diverse industries many continue to benefit from this indispensable basic material.

Initially, we are focusing on two basic tasks. The first is to quickly develop ultra-innovative decarbonized steelmaking technologies, which will stimulate increased global demand for steel products, especially in Asia. As European manufacturers continue to work on developing hydrogen steelmaking technology, we are sometimes asked why JFE doesn't stop using blast furnaces and start using electric arc furnaces. In reality, however, the race to develop decarbonized steelmaking technology has just started, and as of yet there is no dominant technology nor manufacturer. In the case of hydrogen steelmaking, only high-grade ores with low production volume can be used at present, temperatures inside furnaces must be lowered somehow, and the cost of hydrogen is high. In the case of electric arc furnace steelmaking, productivity is low, it is difficult to produce high-grade steel, and global demand cannot be met by scrap alone. To be sure, JFE is also pursuing technologies for electric arc furnaces and hydrogen steelmaking. But we also have high expectations for developing carbon-recycling blast furnaces. If we can establish a decarbonized steelmaking technology based on the blast furnace method, which has the advantage of efficient large-scale production, we expect to contribute significantly to decarbonization in Asia, where demand for steel products continues to grow. In Japan, where the development of the carbon-recycling blast furnace technology is being promoted through the Green Innovation Fund established by the New Energy and Industrial Technology Development Organization (NEDO), we plan to conduct small-scale blast furnace tests by 2026 and larger-scale tests thereafter, and then gradually implement the most proven technologies in the 2030s.

The second basic task is to steadily promote decarbonization by expanding our application of existing technologies, basically until the aforementioned ultra-innovative

technologies are developed. In February 2022, we upwardly revised our CO_2 reduction target for fiscal 2030 from our initial target of 20% or more (compared to our fiscal 2013 level) to a new target of 30% or more. We are also further reducing our hot metal content ratio and investing in new energy-saving measures wherever possible. In addition, when we carry out the scheduled suspension of a blast furnace in our Kurashiki facility, we are exploring the option of introducing a high-efficiency, large-scale electric arc furnace for high-grade steel production between 2027 and 2030.

I would like to emphasize to stakeholders that the global trend toward decarbonization represents an opportunity, not a threat, for the Company. The more that people demand decarbonization, the more opportunities we will have to leverage our world-class JFE technological capabilities. This is something we have repeatedly emphasized to our development teams and are now pursuing Groupwide in order to become a carbon-neutral company and thereby strengthen our presence in the market.

But carbon neutrality cannot be achieved without massive investments in R&D and actual implementation. Internally, in addition to improving the profitability in our core business, we are making use of Green Innovation Fund financing and transition bonds. It must be noted, however, that in places such as China and Europe, national governments are providing huge funding for R&D as nations themselves begin to compete for supremacy in decarbonized steelmaking.

Growth Strategies

Overseas Business Expansion

With growth in the Japanese domestic market forecasted to slow down due to the declining birthrate and aging population, each of our three core businesses is seizing growth opportunities in overseas markets, especially Asia.

In the steel business, current growth strategies include a joint venture with JSW Steel in India for production of directional magnetic steel sheets and expansion of solutions businesses. In the growing Indian market, we are expanding our business step by step through our relationship with JSW Steel. At present, the focus is electromagnetic steel sheets used in transformers, etc., but considering that demand for EVs will increase, collaboration in the field of non-directional electromagnetic steel sheets is also possible.

In North America, we are strengthening our relationship with Nucor, the largest steel manufacturer in the United States. In 2020, Nucor-JFE Steel Mexico (NJSM) began operating as an automotive steel sheet joint venture in Mexico and in 2021 JFE Steel and Nucor became partners in the U.S. steelmaker CSI. We aim to continue pursuing opportunities for collaboration and growth by combining Nucor's high production and sales capabilities with JFE Steel's high-grade steel sheet manufacturing technology.

Other efforts are underway to leverage our technological strengths in order to enter global markets and we plan to announce such developments as quickly as possible.

In the trading business, we are aggressively pursuing investments including M&A to establish the world's No. 1 processing and distribution system for electromagnetic steel sheets, to strengthen our supply chain management system for automotive steel products, and to accelerate our overseas construction materials business. In August 2022, we decided to acquire CEMCO, a U.S. manufacturer and distributor of steel sheet building materials.

In our engineering business, where we are scaling up strengths through M&A under our JFE Project One strategy, we are expanding our involvement with waste power generation in Europe, where demand is expected to remain strong, and in Asia we are growing our outsourcing businesses in areas such as industrial waste treatment. Our engineering business is targeting one trillion yen in net sales in fiscal 2030, compared to 508.2 billion yen in fiscal 2021. To achieve this goal, we will collaborate with outside partners to acquire new technologies and resources as well as increase the competitiveness of our products. The goal is to expand with a sense of urgency through M&A, business launches with partners, and the formation of new alliances.

Enhancing Group Synergies

Twenty years have passed since JFE was created through business integration. So far, we have implemented diverse strategies, including the establishment of an East–West geographical division of our steel mill structure in Japan, horizontal group deployment of

superior technologies and know-how, and strategic repositioning of our business portfolio, including in our trading company business. In terms of synergies among our operating companies, however, we have determined that further opportunities exist. Accordingly, we are now working to enhance our internal synergies by combining the strengths of our entire group for increased corporate value.

In the implantable (fixed) offshore wind power generation business, a key pillar of our medium-term growth plan, our steel business in Kurashiki manufactures extra-thick steel plates, our engineering business assembles them into monopiles, and our trading business handles logistics and commercial distribution. Using this system as an excellent model for our future growth, we now plan to seize opportunities for operation and maintenance businesses in the promising field of offshore wind power by adapting our steel business' facility maintenance and control technologies and our engineering business' operation and maintenance experience with onshore wind power generation.

As another example, our steel business is developing technology so that blast furnaces can use the methane gas created when hydrogen is synthesized with CO_2 separated from furnace flue gas (methanation). Our engineering business, meanwhile, is developing technology to separate and recover CO_2 from incinerators and power generation facilities and recycle it through methanation, etc. Going forward, we hope to create new value by combining these two technologies in innovative new ways.

Under the leadership of our holding company, we are now actively pursuing new growth initiatives by combining the many respective strengths of the operating companies under our corporate umbrella.

Digital Transformation

With the business environment changing more rapidly and drastically than ever before, digital transformation (DX) is an invaluable means of adapting quickly and flexibly in order realize improved corporate value over the medium to long term.

Our steel business is raising productivity and strengthening production infrastructure through the use of cyber–physical systems that link actual manufacturing processes with virtual processes in real time. Our engineering business is utilizing artificial intelligence (AI) and the Internet of Things (IoT), including the development of digital twins that allow personnel to visualize processes and costs as well as optimize operations by reproducing the real world virtually. Also, digital services are being developed to optimize facility and infrastructure operations and preventive maintenance.

Our current plan has earmarked 120 billion yen in DX initiatives, but success requires more than simply investing in new organizational structure; it also requires acceptance by employees on the front lines. Taking the steel business as an example, we have given some 450 employees opportunities to be trained as data scientists and we plan to increase this number to roughly 600 under our current plan. Furthermore, in our manufacturing and R&D divisions, we are training personnel to be able to grasp the findings of our data scientists and then turn their knowledge into action. We expect to significantly enhance our investment initiatives with innovative ideas from the front lines.

Going forward, we intend to shift from our traditional focus on internal optimization, such as productivity improvement, to the challenge of creating external added value and developing new businesses, such as solutions businesses that utilize data from our steel business and preventive maintenance services for power-generation plants based on our engineering know-how.

DX at JFE also includes vital initiatives for security management to protect information assets and to carry out business safely, for which we are strengthening not only security measures but also governance.

Work-style Reforms and Human Resources Development

The foundation of the Company is our people, which is why we actively engage in human capital management. To attract diverse and talented people, retain them as they grow with the Company and steadily maximize their abilities, we are reforming our work styles, promoting diversity and inclusion, including mid-career hiring, and enhancing our education and training systems.

Reforming our work styles is particularly important. Ideally, we want to provide employees with work styles suited to their individual characters and circumstances so that they work with a sense of fulfillment and job satisfaction, which in turn leads to improved productivity. Our initiatives include system reforms (telecommuting, coreless flex, etc.), office improvements (free address, etc.), and work reviews (paperless, discontinued use of personal seals, etc.). In addition, to improve employee engagement we conduct satisfaction surveys and reflect the feedback in Company policies as appropriate, and we are strengthening workplace communication through regular one-on-one meetings between

supervisors and subordinates. Furthermore, we revised our target for women managers to at least 10% overall for section managers or above and at least 20% in management and sales divisions by 2030.

Human resource management at JFE is based on the premise that the safety and health of employees must always be protected. Prioritizing safety over everything else, the JFE Group invests some 10 billion yen annually in safety measures and actively promotes health management.

As president, I am committed not only to enhancing these systems and frameworks but also to clearly communicating the aims and expectations behind each initiative to our employees.

To Our Stakeholders

In 2021, world crude steel production totaled about 1.9 billion tons for the first time in history. Based on projected increases in global population and economic growth, some estimates suggest that this figure will rise to 2.7 billion tons by 2050. No other industrial material can be produced and consumed on the scale of steel, and there is no candidate material capable of fundamentally replacing steel over the current medium to long term. JFE is highly conscious of its responsibility to contribute to global development in a sustainable manner as a company providing products, technologies, and services based on steel, an indispensable material for global society.

At present, steel emits less CO_2 per unit volume than aluminum or carbon fiber and it is an excellent material in terms of recyclability and production cost. By maximizing our current and future technology, however, we are convinced that we can realize even greater potential for steel in the coming decades.

The global trend toward decarbonization represents an opportunity, not a threat, for the Company, based on which we intend to elevate our position in global society.

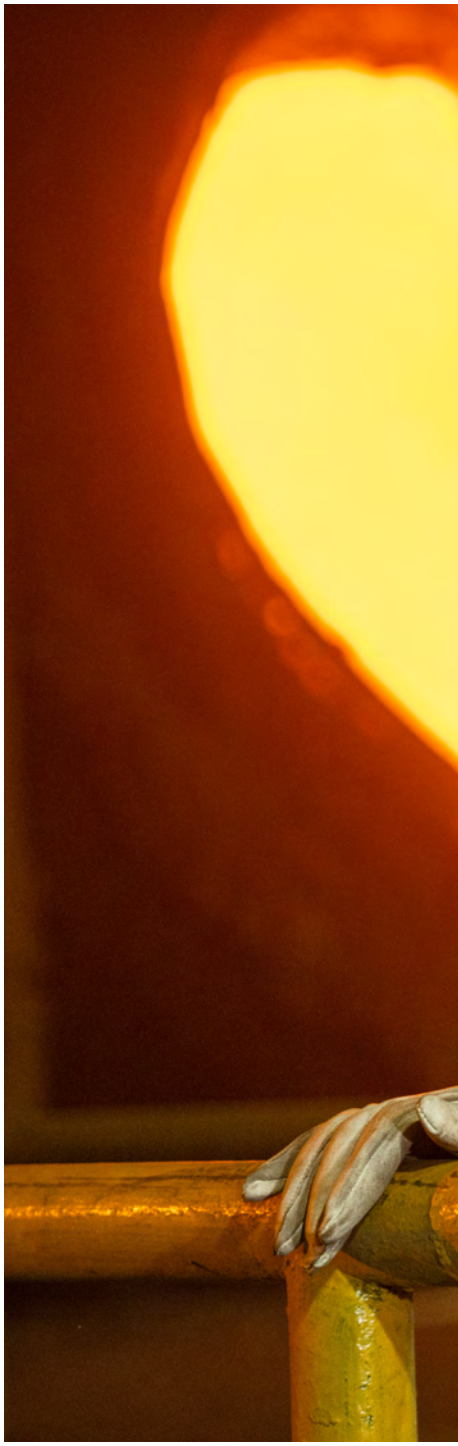
To enhance our reputation as a vital contributor to sustainable global development and safe, comfortable human life, our operating companies are respectively solidifying their revenue bases, pursuing growth opportunities, and maximizing their synergies through organic linkage within the Group. As president, I will do my utmost to explain how the Company is evolving strategically and responsibly through these initiatives to help stakeholders fully understand and indeed embrace our high expectations for the future of JFE.

Koji Kakigi

Representative Director,
President and CEO

JFE Group's Value Creation

The JFE Group has contributed to the development of industry and society through the provision of products and services based on steel. In this section, we introduce the value creation story of the JFE Group throughout our current position and future aims.



JFE Steel

Contribution to Society with Steel

Steel has played a key role, spanning the centuries, as a basic material that broadly supports society. It will continue to be an essential material. Through steel, JFE Steel is in a position to contribute to society, meeting the various needs of people while prioritizing safety, reliability, and consideration for the global environment.

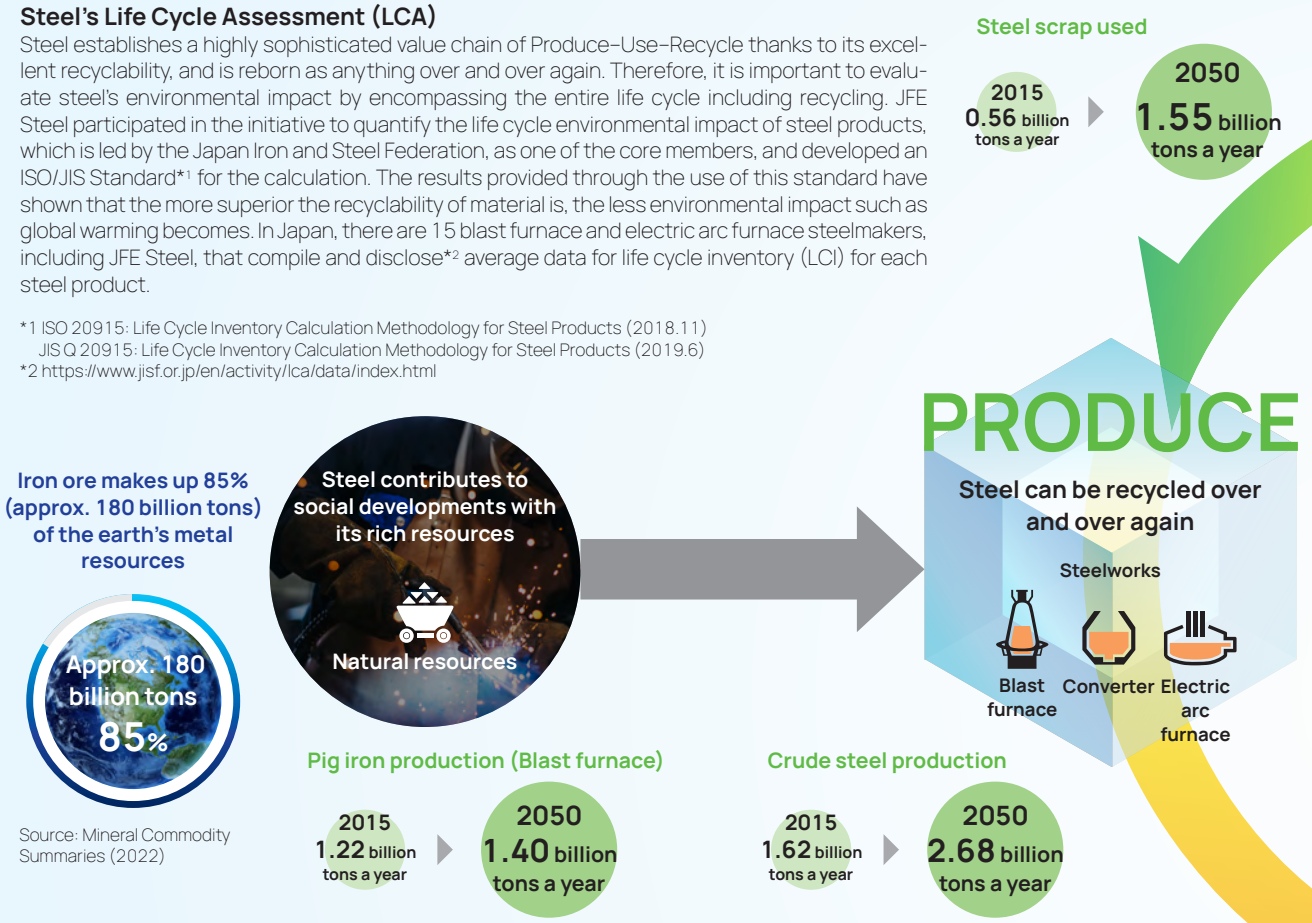
The Value of Steel

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



Source: Mineral Commodity Summaries (2022)

High economic efficiency and low environmental impact

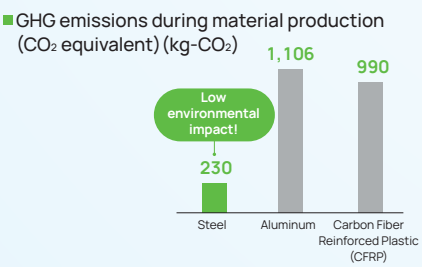
Steel can be reliably produced in large volumes to support our lives and society. Steel is also an environmentally friendly material, emitting far less CO_2 than other materials during production. Steel is an essential material for the safe and comfortable lives of people, and it is key to the sustainable 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.

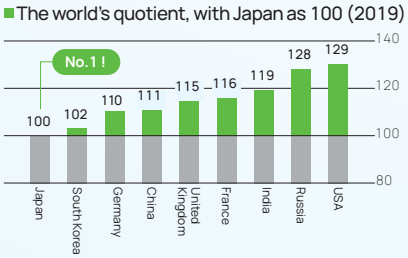


GHG emissions per unit of weight (CO_2 equivalent) (kg-CO_2/kg)	2.3	16.5	22.0
Functionally equivalent weight (kg)	100	67	45

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.



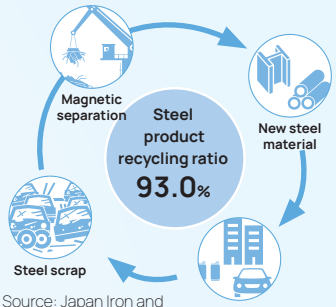
Source: Research Institute of Innovative Technology for the Earth (RITE)

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

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.

Steel stock

2015: 29.4 billion tons = 4.0 tons per person

2050: 68.2 billion tons = 7.0 tons per person

Demand for steel

2015: 1.29 billion tons a year

2050: 2.13 billion tons a year

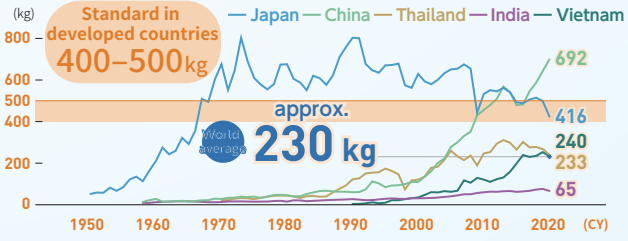
Foundation for life and society

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 CO_2 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.

■ Trends in annual steel consumption per capita by country (kg per capita, year)

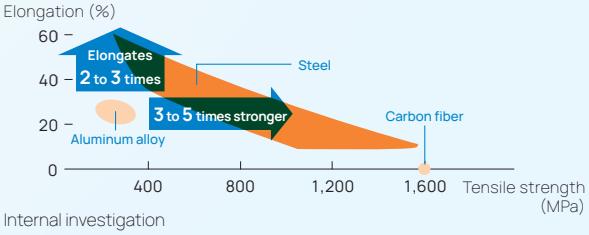


Source: World Steel Association

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



Internal investigation

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

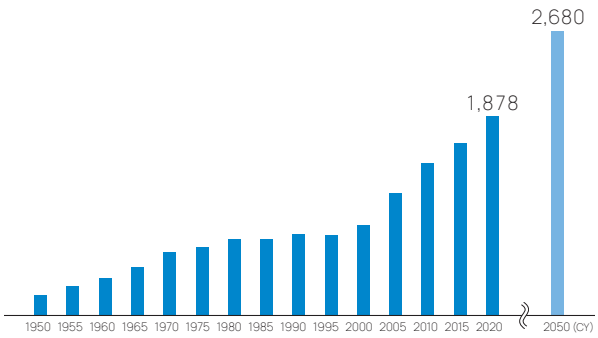
1) Optimize production volume in tandem with changes in supply-demand balance for steel in Japan and overseas
2) Build an optimal production structure by retiring and consolidating facilities
3) Enhance cost competitiveness through strategic investments
4) Increase sales ratio of technologically advanced 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 distribution and processing 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

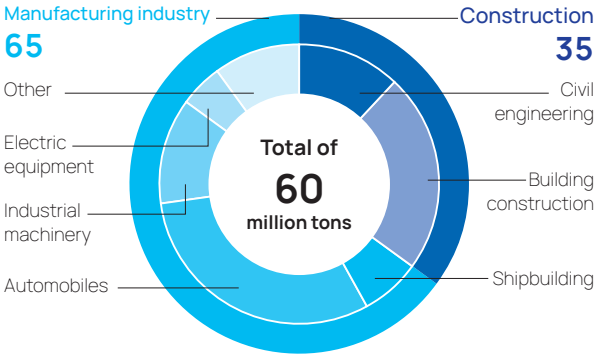
(millions of tons)



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 operation & maintenance 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, a first in Japan.

Regarding private-sector demand, initiatives are gaining momentum to reduce greenhouse gas emissions after the national government declared its goal of becoming carbon neutral by 2050. In light of changes in society, in 2021 we decided to invest in a new plant to manufacture foundational structures attached to the seabed (monopiles) for offshore wind power generation, and are preparing to commence production in April 2024. 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 operation & maintenance business, such as the recycling business.

Major Risks and Opportunities for the JFE Group

Major changes in external environment	Risks	Opportunities
Climate change problem Special Feature: The JFE Group Challenge (1) ▶ Advancing the Commercialization of the Wind Power Generation Business P.51 Special Feature: The JFE Group Challenge (2) ▶ Contributions to Resolving Climate Change P.55 ▶ Information Disclosure Based on the TCFD Recommendations P.57	• 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	• Development of ultra-innovative technologies and securing of competitive advantages • Contribution to reduction of CO_2 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
Resource and energy problems ▶ Business Strategies P.41	• 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	• 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)
Falling birthrate and aging population in Japan ▶ Human Capital P.61	• 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	• Secure talented personnel with work-style reforms • Introduce new technologies to reduce personnel and save labor (stronger needs for automation, remote monitoring)
Globalization of markets, development of emerging countries ▶ Business Strategies P.41	• 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	• Increase in demand for steel in growth markets • Greater use of high-value-added products • Increase in infrastructure projects in emerging countries
Aging of infrastructure facilities ▶ Business Strategies P.41	• Impact from accidents and larger damage from natural disasters due to aging infrastructure • Contraction in domestic public utilities business from transition to preventive maintenance	• 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
Development of AI and IoT technologies ▶ DX Strategy P.39	• Information leaks and system damage due to cyberattacks and illicit use of systems	• 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 key performance indicators (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 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 Reevaluate 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

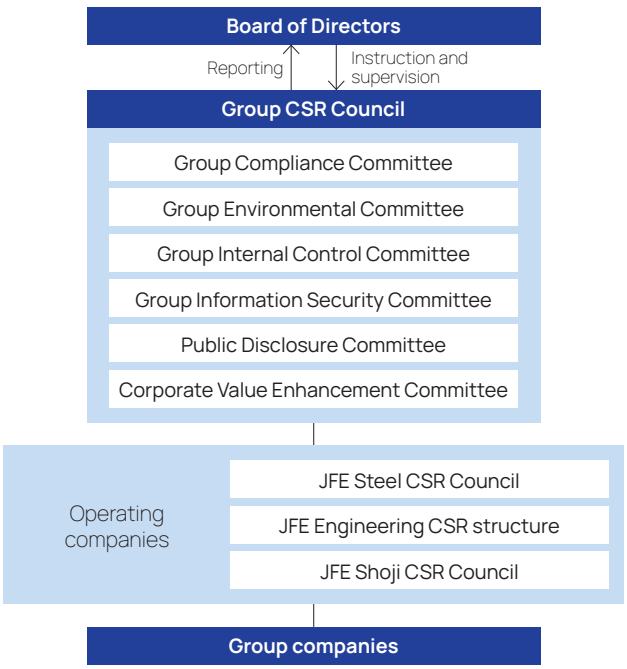
The JFE Group has set and worked toward achieving KPIs for the identified material issues. In fiscal 2021, we evaluated the results in the previous fiscal year, revised KPIs based on these results and the opinions of stakeholders, and undertook fresh initiatives to address issues. The fiscal 2021 KPIs for material issues of corporate management were deliberated and evaluated, and fiscal 2022 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.

CSR Initiatives and Promotion Structure

The JFE Group, aware of its responsibility as a corporation and member of society, believes that fulfilling its CSR to build a better society is a central tenant of its management principles.

Chaired by the president of JFE Holdings, the JFE Group CSR Council has been established as an organization for supervising and guiding Groupwide CSR initiatives. Various committees are set up under the JFE Group CSR 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 CSR initiatives. Moreover, of the matters discussed by the JFE Group CSR 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 CSR Council, working together Groupwide to improve and prevent deterioration in the JFE Group's corporate value.

CSR Promotion Structure



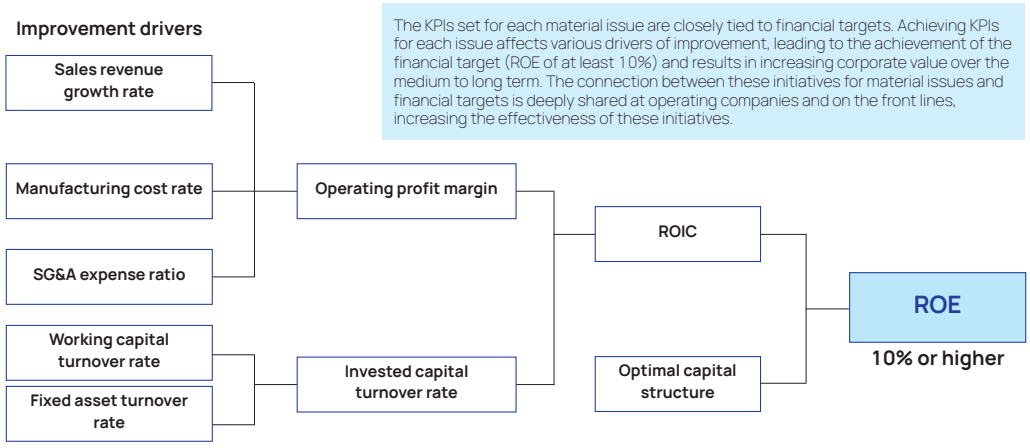
	Areas of Focus	Details	Material Issues	Relevant SDGs
Activity	Contribute to resolving climate change issues (initiatives for achieving carbon neutrality by 2050) → P.55	● Initiatives for achieving carbon neutrality by 2050 • Reduce the JFE Group's CO_2 emissions • Contribute to reduction of CO_2 emissions in society	• Reduce the JFE Group's CO_2 emissions • Contribute to reduction of CO_2 emissions across the society	
	Ensure occupational safety and health → P.63	● Prioritize safety first ● Maintain the physical and mental health of employees and their families	• Prevent workplace accidents • Ensure the health of employees and their families	
	Recruit and nurture diverse human resources → P.61	● Maintain work environments where all personnel can maximize their abilities ● Accumulate and hand down technologies and skills	• Pursue diversity and inclusion • Strengthen human resources development • Create workplaces that motivate employees	
	Reinforce resilience of production and engineering capabilities (realize world-class earnings power through DX and other measures)	● Pursue world-class earnings power ● Promote DX and other measures to improve production efficiency, yields, and labor productivity • Shift focus of steel business from quantity to quality (structural reform) • Reduce costs to strengthen cost competitiveness and ensure quality competitiveness	• Increase efficiency and enhance cost competitiveness in production and engineering • Raise quality of products and services and ensure reliable supply	
	Strengthen competitiveness of products and services (promote the growth strategy by providing high-value-added solutions)	● Improve margins and ensure stable earnings power • Increase ratio of high-value-added products and services • Ensure stable earnings power based on the sales strategy, including technological solutions and expansion of growth businesses	• Expand business by increasing value added in products and services with advanced technologies • Sales strategies for realizing sustainable growth	
Basis of activity	Thoroughly enforce compliance → P.82		• Ensure adherence to corporate ethical standards and compliance	
	Respect human rights → P.85		• Respect human rights across the supply chain	

Please see page 23 for KPIs for each priority issue.

Improvement in ROE by achieving KPIs

KPI-related factors

- Expansion of growth businesses
- Expansion of solutions business
- Increase in ratio of high-value-added products and profitability
- R&D in new products and technologies
- Improvement of production efficiency and yields
- Improvement of labor productivity
- Advances in technological development with DX
- Improvement of labor productivity
- Increase in production and engineering efficiency, improvement of cost competitiveness
- Reduction of inventory based on higher production efficiency and yields
- Reduction of fixed costs based on structural reform
- Improvement of production efficiency



The KPIs set for each material issue are closely tied to financial targets. Achieving KPIs for each issue affects various drivers of improvement, leading to the achievement of the financial target (ROE of at least 10%) and results in increasing corporate value over the medium to long term. The connection between these initiatives for material issues and financial targets is deeply shared at operating companies and on the front lines, increasing the effectiveness of these initiatives.

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 economic material 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	FY2021 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	• Formulate an investment plan for CO_2 reduction using new benchmarks for steadily achieving the target of reducing CO_2 emissions by 18% from FY2013 levels by the end of FY2024 • Achieve 35% of its CO_2 reduction target by energy conservation and technological development in FY2021 • Create a structure for promoting technological development with a focus on carbon-recycling blast furnaces toward achieving carbon neutrality by 2050
			JFE Engineering	• Reduce CO_2 emissions in its own plants and offices FY2024: 40% reduction from FY2013 levels
			JFE Shoji	• Reduce CO_2 emissions through the procurement of electricity derived from renewable energy Reduce domestic CO_2 emissions by at least 20% from FY2019 levels by the end of FY2024 (Reduce by 5% per year from FY2019 levels from FY2021 to FY2024)
		Contribute to reduction of CO_2 across the society	JFE Steel	• Launch sales and implement eco-friendly products and technologies*: at least 15 cases in FY2021 (the cumulative total of at least 60 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	• Provide renewable energy power generation facilities • Help reduce CO_2 emissions in society by expanding the bases of the recycling business (for plastic, food, etc.) Contribute to reduction in CO_2 emissions (FY2021): 10 million tons per year
			JFE Shoji	1. Global resource recycling of steel scrap Promote steel scrap transactions to exceed the volume 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 • Expand transactions of biomass fuel (palm kernel shells and wood pellets) above FY2020 levels (FY2024 target: +100% increase from FY2020) • Diversify supply sources to ensure stable supply
	Ensure occupational safety and health	Prevent workplace accidents	Groupwide	■ Workplace fatalities: Zero occurrences • Lost-work injuries rate ■ below 0.10 ■ below 0.25 ■ below 0.45
			JFE Steel	[Key measures] (1) Enhance safety Install electromagnetic locks at the secondary mill entrances: 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) Eliminate falling accidents (100% implementation of following measures) • Pre-operation checks (curing openings in high locations and edges of work floors) • Strict adherence during operations (use of safety belts) (2) Eliminate accidents involving being caught in heavy machinery or struck by flying/falling objects (100% implementation of following measures) • Pre-operation checks (ensure on-site understanding of work plans) • Strict adherence during operations (no entry measures, allocation of worksite guides) (3) Multifaceted management of occupational safety and health using IT • Conduct remote safety patrols on premises by integrating multiple video images • Introduce an AI-based system for detecting intruders
			JFE Shoji	[Key measures] (1) Install safety sensors (100% of plan) (2) 100% implementation of crane operation drills (at least once a year at each company)
		Ensure the health of employees and their families	Groupwide	1. Provision rates of healthcare guidance ■ 60% (2023 target)
				2. Reduce rates of smokers (ensure employee health and prevent exposure to passive smoke) ■ 1.5% reduction per year (total for operating companies)
	Recruit and nurture diverse human resources	Pursue diversity and inclusion	Groupwide	1. Rates for female recruits ■ Career-track (white-collar position): 35% or more Career-track (technical position): 10% or more On-site position: 10% or more ■ Career-track (white-collar position): 35% or more Career-track (technical position): 10% or more Production/construction position: 10% or more (four-year average) ■ Career-track position: 30% or more
				2. Females in managerial positions: 5 times the 2014 August figure (FY2025 target)
				3. Rate of male employees taking childcare leave or time off related to child rearing: at least 90%
		Strengthen human resources development	Groupwide	• Training hours per person ■ 40 hours or more per year ■ 20 hours or more per year ■ 20 hours or more per year
		Create workplaces that motivate employees	Groupwide	■ Annual leave acquisition rate of at least 75% (total for operating companies)
			JFE Steel	• Engagement survey Affirmative response to questions about motivation: at least 75%

■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.

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

	Initiatives and Results for FY2021	Assessment	FY2022 KPIs
	• Completed formulation of the investment plan for achieving the CO_2 reduction targets for FY2024 by utilizing investment evaluation methods that incorporate contributions to CO_2 reductions in investment decisions for the first time • Despite operating equipment capable of reducing emissions equivalent to 41% of the CO_2 reduction target from energy conservation and technological development, a delay in the realization of the effects of energy conservation and technological development meant that the actual result was 25% • Created an efficient structure for promoting technological development by establishing four dedicated departments; In addition, established the Carbon Neutral Advancement Committee as a body to discuss and decide on significant issues in relation to carbon neutrality in a centralized manner	△	• Achieve 50% of the CO_2 reduction target from energy conservation and technological development for the target of reducing CO_2 emissions by 18% from FY2013 levels by the end of FY2024 • Complete the approval of investment plans for reducing CO_2 emissions by 90% cumulatively for CO_2 reduction targets from energy conservation and technological development for the target of reducing CO_2 emissions by 18% from FY2013 levels by the end of FY2024 • Formulate a CO_2 reduction plan aimed at realizing the CO_2 reduction target for FY2030 (30% or more) with an eye on achieving carbon neutrality by 2050
	• Reduced CO_2 emissions by 34% through the installation of zero-emission power generation, etc. at the Yokohama head office (FY2013: 15,600 tons / FY2021: 10,300 tons) Steadily proceeded toward achieving the target for FY2024	△	• Reduce CO_2 emissions in its own plants and offices FY2024: 40% reduction from FY2013 levels
	• FY2021 CO_2 emissions of domestic operating companies: reduced by 10.7% from FY2019 levels	○	• Reduce CO_2 emissions through the procurement of electricity derived from renewable energy FY2022 domestic CO_2 emissions: reduce by 10% from FY2019 levels (Reduce by 5% per year from FY2019 levels from FY2021 to FY2024)
	• FY2021: 16 cases (11 new products, 5 new technologies) (FY2021–FY2024 cumulatively: 16 cases)	○	• Launch sales and implement eco-friendly products and technologies*: at least 15 cases in FY2022 (the cumulative total of at least 60 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.
	• Contributed to reduction in CO_2 emissions (FY2021): 10.56 million tons per year	○	• Contribute to reduction of CO_2 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 CO_2 emissions (FY2022): 11 million tons per year
	1. Despite an expansion in volume in Japan in response to an increase in demand for blast furnaces, sales volumes for overseas markets declined due to sharp fluctuations in market conditions and a surge in freight costs Fell short of target as the volume of scrap transactions was lower than FY2020 overall (–20% from FY2020)	×	1. Global resource recycling of steel scrap FY2022 scrap transactions: Above the transaction quantity for FY2020 (FY2024 target: +5% from FY2020)
	2. Significantly grew transaction quantity of fuel for biomass power generation plants by communicating strategy suppliers to ensure stable supply (+33% from FY2020)	○	2. Increase transaction quantity of fuel for biomass power generation plants and create framework for reliable supply of fuel • FY2022 biomass fuel (palm kernel shells and wood pellets) transactions: above the transaction quantity for FY2020 (FY2024 target: +100% from FY2020) • Diversify supply sources to ensure stable supply
	■Workplace fatalities: 2 occurrences • Lost-work injuries rate ■0.10 ■0.56 ■0.60	×	■Workplace fatalities: Zero occurrences • Lost-work injuries rate ■below 0.10 ■below 0.25 ■below 0.45
	[Key measures] (1) Installed electromagnetic locks at the secondary mill entrances: FY2021 target of 30% / Achieved 40% (2) ISO 45001 certification in all districts: completed certification in Chita works and Fukuyama district in FY2021		[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
	[Key measures] (1) Focused efforts on checking equipment and preventing unsafe behavior through patrols in order to implement 100% of the measures listed on the left for eliminating falling accidents (2) Focused efforts on checking work plans and offering guidance in order to implement 100% of the measures listed on the left for eliminating accidents involving being caught in heavy machinery or struck by flying/falling objects (3) Multifaceted management of occupational safety and health using IT • Expanded areas covered by remote safety patrols on premises • Continued verification test of an AI-based system for detecting intruders		[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 • 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 • Complete development of an AI-based system for detecting intruders (plan)
	[Key measures] Implemented all key measures according to plan (1) Installation of safety sensors (January–December): Completed 100% of plan (2) Implementation of crane operation drills (January–December): At least once a year at each company; Implemented 100% of drills		[Key measures] (1) Installation of safety fences, covers, etc. (100% of plan) (2) 100% implementation of crane operation drills (at least once a year at each company)
	1. Provision rates of healthcare guidance (preliminary figures) ■54.3% ■30.6% ■32.1%	×	1. Provision rates of healthcare guidance ■60% (2023 target)
	2. ■1.5% reduction per year (total for operating companies)	○	2. Reduce rates of smokers (ensure employee health and prevent exposure to passive smoke) ■1.5% reduction per year (total for operating companies)
	1. Rates for female recruits ■Career-track (white-collar position): 45% Career-track (technical position): 3% On-site position: 10% ■Career-track (white-collar position): 41% Career-track (technical position): 15% Production/construction position: 11% ■Career-track position: 37%	△	1. Rates for female recruits ■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
	2. Female in managerial positions: 4.2 times the 2014 August figure	△	2. Female in managerial positions: 10% or more in the position of 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: 89% (total for operating companies)	△	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
	• Training hours per person ■37.6 hours per year ■19.2 hours per year ■19.1 hours per year	△	• Training hours per person ■40 hours or more per year ■20 hours or more per year ■20 hours or more per year
	■Annual leave acquisition rate of 78% (total for operating companies)	○	■Annual leave acquisition rate of at least 75% (total for operating companies)
	• Engagement survey Affirmative response to questions about motivation: 69%	△	• Engagement survey ■Affirmative response to questions about motivation: at least 75% Note: Set as a Groupwide target from FY2022

Material Issues of Corporate Management and KPIs

Areas of Focus		Material Issues	Operating Company	FY2021 KPIs
Activity	Reinforce resilience of production and engineering capabilities (realize world-class earnings power through DX and other measures)	Increase efficiency and enhance cost competitiveness in production and engineering	JFE Steel	1. Improve labor productivity by 20% by the end of FY2024 ‹FY2021 KPI› • Establish investment plans for automation, remote operation and robotics with a focus on DX • Set milestones for investment and number of personnel for each fiscal year • Plan and systemize concrete labor policies to smoothly facilitate structural reform of the Keihin district
				2. 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 0.5% in FY2021 to achieve 2% by FY2024 * Data Science
			JFE Engineering	Increase the efficiency of engineering operations by introducing DX technologies Engineers for big data analysis utilizing Pla'cello*: 1,200 * Pla'cello: Proprietary data analysis platform using AI.
		Raise quality of products and services and ensure reliable supply	JFE Steel	1. Make steady progress on capital investments to improve the level of quality assurance and product testing, and achieve 100% automation from test measurement to mill sheet data entry for the four priority items: tensile test, molten steel analysis, thickness measurement for hot and cold rolled steel sheets, and coating weight measurement. In addition, achieve 100% automation from test instructions, sample collation to test measurement and mill sheet data entry for automotive products.
				2. Strengthen the manufacturing infrastructures using DX Aim to apply to equipment listed below in FY2021 to implement CPS* in all production processes by the end of FY2024. Kurashiki's new continuous casting DS operations, hot rolling CPS (temperature model/Kurashiki), cold rolling CPS (automatic operation/Kurashiki) and integrated quality CPS (galvanizing/Fukuyama) * CPS: Cyber-Physical System
			JFE Engineering	1. Secure a stable number of certificated managing engineers
				2. No major quality problems
			JFE Shoji	1. Make consistent investment in processing and distribution operations
				2. Conduct quality audits at Group companies Continue conducting quality audits at 32 Group manufacturing affiliate companies in Japan and overseas (audit completed: 100%)
	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 FY2021: at least 20 cases (at least 80 cases in total from FY2021 to FY2024) * Automobiles, energy, infrastructure construction materials, DX technology, and green transformation (GX) technology
				2. Increase the mix of high-value-added products* to 50% in FY2024 (sell 10.9 million tons, 50% of sales excluding half-finished products, by FY2024) ‹FY2021 KPIs› Sales of high-value-added products: 9.3 million tons (up 1.5 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, focus efforts on receiving orders for the new solutions business model (utilization of DS, provision of maintenance technologies, etc.) and secure first order. With an eye on receiving continuous orders thereafter, update external sales platform and maintenance know-how.
			JFE Engineering	• Develop technologies in four priority fields of waste to resources, carbon neutrality, combined utility service and DX, and at least 60% of R&D expenses on these four fields. • Number of patent applications: at least 80 per year
		Sales strategies for realizing sustainable growth	JFE Steel	• Expand the earnings difference between high-value-added products (A-rank products) and commodity products to 5,000 yen per tons by FY2024 ‹FY2021 KPI› Aim for 25% of target
			JFE Engineering	Expand the stable earnings base Expand the operating businesses • Sales: 250 billion yen • Expand bases: at least 3 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: at least 5 per year
Basis of activity	Thoroughly enforce compliance	Ensure adherence to corporate ethical standards and 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 (next survey is scheduled for FY2022)
	Respect human rights	Respect human rights across the supply chain		1. 100% attendance from the target audience for human rights awareness training
				2. Implement human rights due diligence

■Groupwide ■JFE Steel ■JFE Engineering ■JFE Shoji

	Initiatives and Results for FY2021	Assessment	FY2022 KPIs
	1. Improve labor productivity • Set milestones and number of personnel for each fiscal year aimed at improving labor productivity by 20% • Established approximately 250 investment plans for automation, remote operation, and robotics during the Seventh Medium-term Business Plan Plan under revision due to issues with the feasibility of a portion of the plans in terms of investment efficiency and other variables • Labor and management reached agreement on a special system designed to achieve structural reform of the Keihin district	△	1. 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. FY2021 Actual yields: 87.8% (+1.7% from FY2020) After taking into consideration changes in the product mix at the end of FY2024: +0.8%	○	2. 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
	Engineers for big data analysis: About 1,500 (FY2020: about 800)	○	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.
	1. Focused investments in four items (tensile test, molten steel analysis, thickness measurement for steel sheets for automobiles, and coating weight measurement) for improving the level of quality assurance and product testing, thereby achieving 100% automation from test measurement to mill sheet data entry for the four items and 100% automation from test instructions to mill sheet data entry for automotive products by the end of FY2021.	○	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. Level of achievement of FY2021 plan Kurashiki's new continuous casting DS … 100% (operated J-dscom® and others) Hot rolling CPS … 90% (completed installation of warp measuring devices, warp prediction model under adjustment) Cold rolling CPS … 100% (completed development of base for automated operation) Integrated quality CPS … 100% (operated an integrated quality system)	△	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
	1. Amid high levels of revenue, secured a stable number of managing engineers	○	1. Secure a stable number of certificated managing engineers
	2. No major quality problems	○	2. No major quality problems
	1. Carried out selective investments necessary for this fiscal year to ensure stable product supply Amount of investment (approved amount) • Reinforcement: 4.4 billion yen • Renewal and safety: 3.7 billion yen • System: 3.5 billion yen Total: 11.6 billion yen	○	1. Make consistent investment in processing and distribution operations
	2. Conducted 32 quality audits (audit completed: 100%) Quality audits at 17 domestic Group companies (including 2 remote audits) and at 15 overseas Group companies (including 14 remote audits)	○	2. Conduct quality audits at Group companies Continue conducting quality audits at 36 Group manufacturing affiliate companies in Japan (expand the scope from the FY2021 level) and overseas (audit completed: 100%)
	1. FY2021: 21 cases (13 new products and 8 new technologies) (total from FY2021 to FY2024: 21 cases)	○	1. Pursue strategic research and development focusing on priority development fields* Develop new products and technologies FY2022: at least 20 cases (at least 80 cases in total from FY2021 to FY2024) * Automobiles, energy, infrastructure construction materials, DX technology, and green transformation (GX) technology
	2. Sold of high-value-added products: 9.74 million tons	○	2. Sales of high-value-added products*: 10.3 million tons (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. Concluded first contract in the field for provision of maintenance technologies as a result of focusing efforts on activities for receiving orders for the new solutions business model; Commercialized a solutions model that provides data science utilization technologies via the cloud and entered detailed discussions with a customer for the first project	○	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 data science 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
	• R&D expenses on these four fields: 64% • Number of patent applications: 67	△	• Develop technologies in four priority fields of waste to resources, carbon-neutrality, combined utility service, and DX, and at least 65% of R&D expenses on these four fields. • Number of patent applications: at least 80 per year
	• Fell slightly short of target, achieving only 20% of target for earnings difference with commodity products In FY2021, earnings for A-rank products and commodity products both improved as prices soared in overseas markets due in part to the recovery from the COVID-19 pandemic; In particular, although earnings improved markedly for commodity products such as mill scale steel, the earning difference did not reach milestone	△	• 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
	• Operating businesses Sales: 250 billion yen • New bases: 3 bases 1 food recycling base, 1 plastics recycling base, and 1 regional electricity retail new power business base	○	Expand the stable earnings base Expand the operating businesses • Sales: 255 billion yen • Expand bases: at least 3 bases Recycling business (food, plastics, electronic appliances, etc.), regional electricity retail new power business, waste processing business, and water and sewage operations business
	• Made 5 investments per year that were necessary to acquire new functions and improve functions in existing businesses	○	• 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: at least 5 per year
	1. 100% attendance (rank-based compliance training, training on different laws and regulations, etc.)	○	1. Steady execution of training to foster and maintain a sense of compliance (100% attendance from the target audience)
	2. Implemented initiatives addressing various issues from the results of the previous survey	—	2. Improve employee awareness of ethics reflected in the Corporate Ethics Awareness Survey (100% attendance from the target audience)
	1. Attendance: 100%	○	1. 100% attendance from the target audience for human rights awareness training
	2. Implemented human rights due diligence for the Company and major Group companies	○	2. Implement human rights due diligence

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

Input

Intellectual capital

R&D expenses (FY2021): 39.6 billion yen
Number of registered patents: Approx. 26,000 patents (about 14,000 in Japan, 12,000 overseas)

Manufacturing capital

Number of blast furnaces (as of April 2022):
West Japan Works: 6, East Japan Works: 2
Number of bases (as of April 2022):
117 locations in 22 countries and regions (Group total)
Capital investment (FY2021): 340.9 billion yen

Natural capital

Steel raw materials (FY2021): 59.3 million tons (iron ore, coal, and limestone)
Recycled raw materials (FY2021): 1.2 million tons (steel scrap)

Social and other related capital

Number of customers (delivery destinations) (FY2021): Approx. 24,000 customers
* Total of JFE Steel, JFE Engineering, and JFE Shoji (FY2021)

Human capital

Number of employees (as of the end of March 2022): 64,295 persons (Group consolidated)
Annual training hours (FY2021):
Approx. 0.7 million hours a year (total of operating companies: approx. 33 hours a year per employee)
Safety investments: 10 billion yen annually

Financial capital

Total equity (IFRS) (as of the end of March 2022): 2,070.7 billion yen

Carbon neutrality

Shift focus from quantity to quality

Advance growth strategies

Greatly improve competitiveness with DX strategy

Steel Business

Comprehensive
in each busi
by world-class

Trading Business

Creation of Group synergies

Important management issues

Business activities

Sustainability of the environment and society

Basics of business activities

Engineering Business

strengths created
ness, backed
technologies

Shipbuilding Business

Selection and concentration

/ Medium-term Business Plan

Establish economic sustainability

DX Strategy P.39
Business Strategies P.41

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 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

FY2021 results

Contributions to resolving climate change

JFE Steel
Reductions in CO_2 emissions: 9% (comparison with FY2013)
JFE Engineering
Contribution of CO_2 emissions reductions: 10.56 million tons
JFE Steel
Recycled water resource usage: 93.0%

Earnings capabilities

JFE Group revenue: 4,365.1 billion yen
JFE Group business profit: 416.4 billion yen

Increase competitiveness

‹DX›
JFE Steel Data scientists: 450

‹World-class technological capabilities›
JFE Steel Ratio of high-value-added products: 45%
JFE Group Domestic patent publications: 1,055
* Total patents published in Japan and patents published under Patent Cooperation Treaty, designated to be transferred to Japan

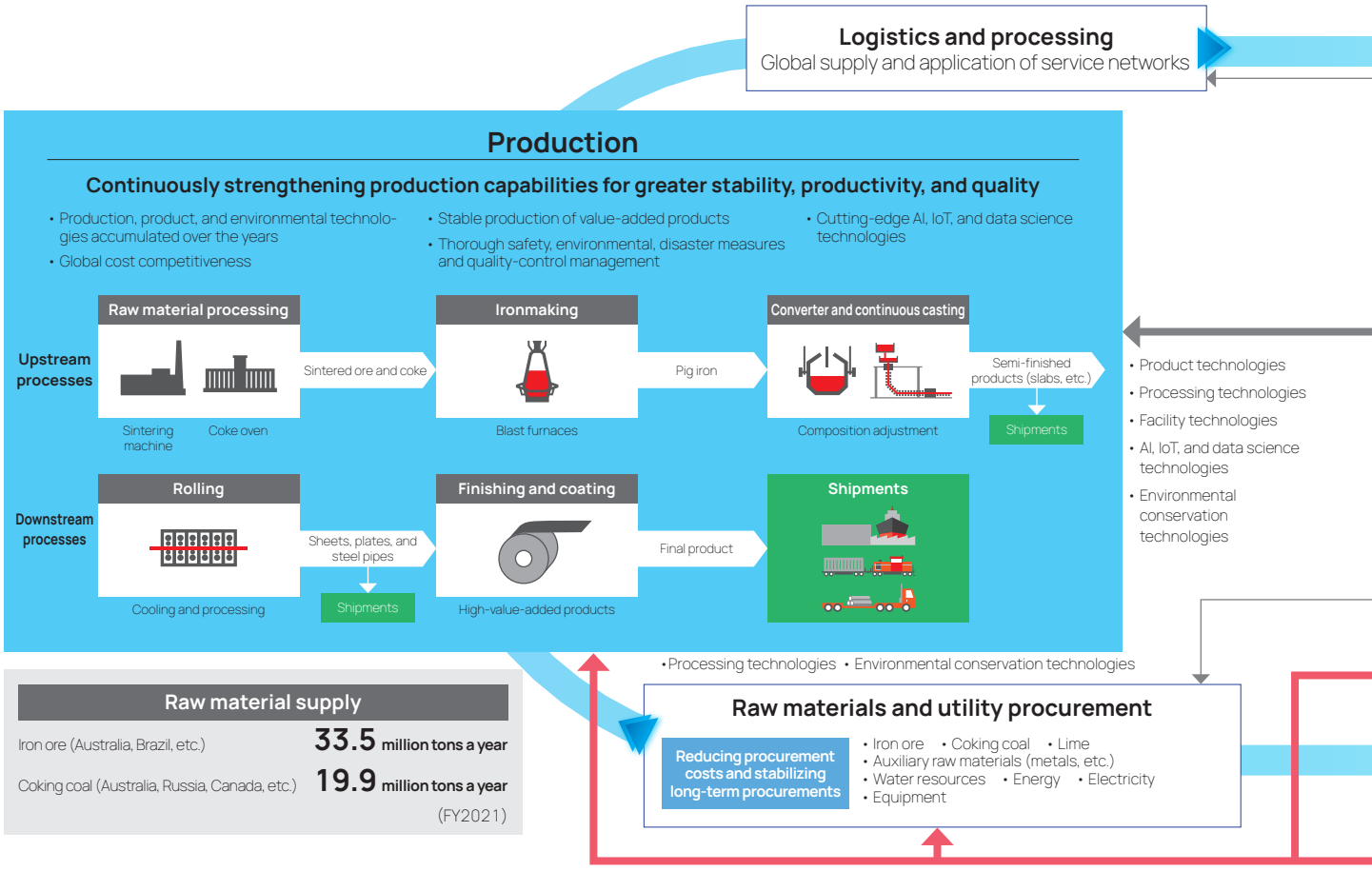
Dividends

JFE Group Dividends per share: 140 yen

Business Model (Steel Business + 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.

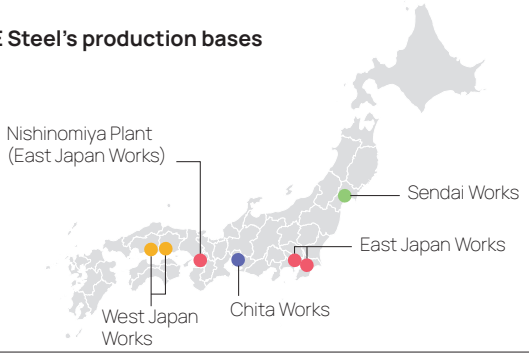


Steel business overview

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 regions where growth is accelerating, we invest in leading partners with local creditability, 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.41 Trading Business P.47

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.

Technology

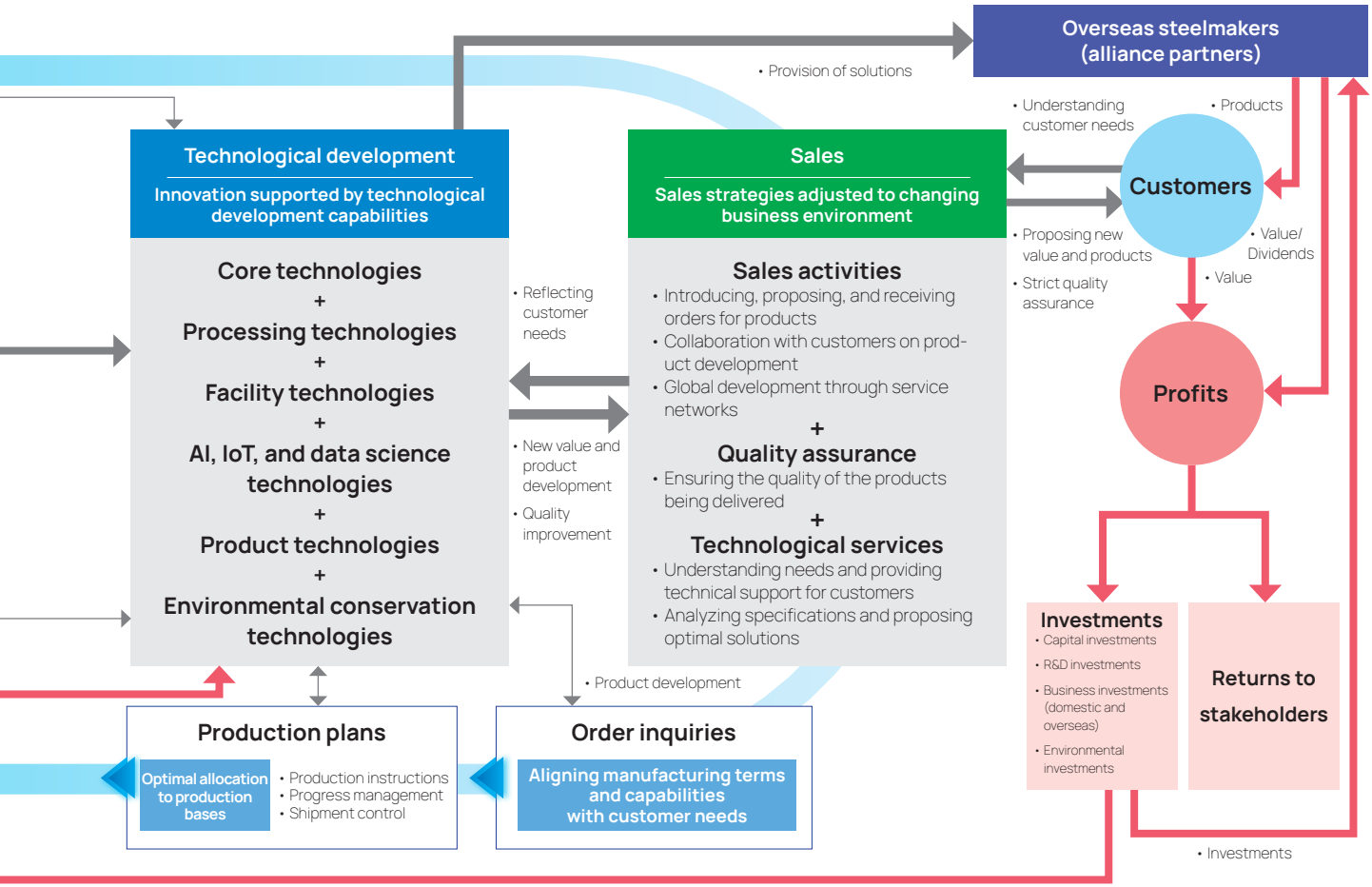
Technological development to realize value creation

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.

Sales

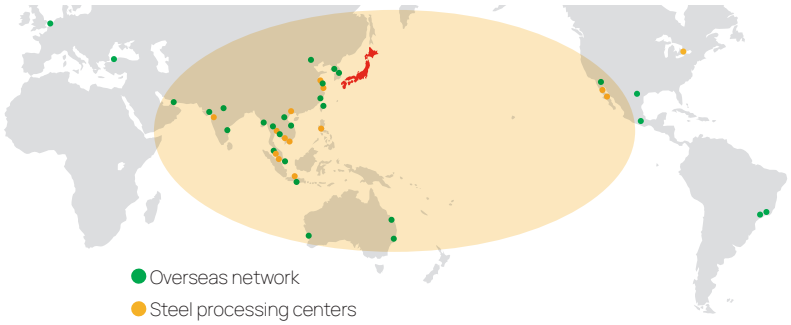
Responding to needs in our stable customer base

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

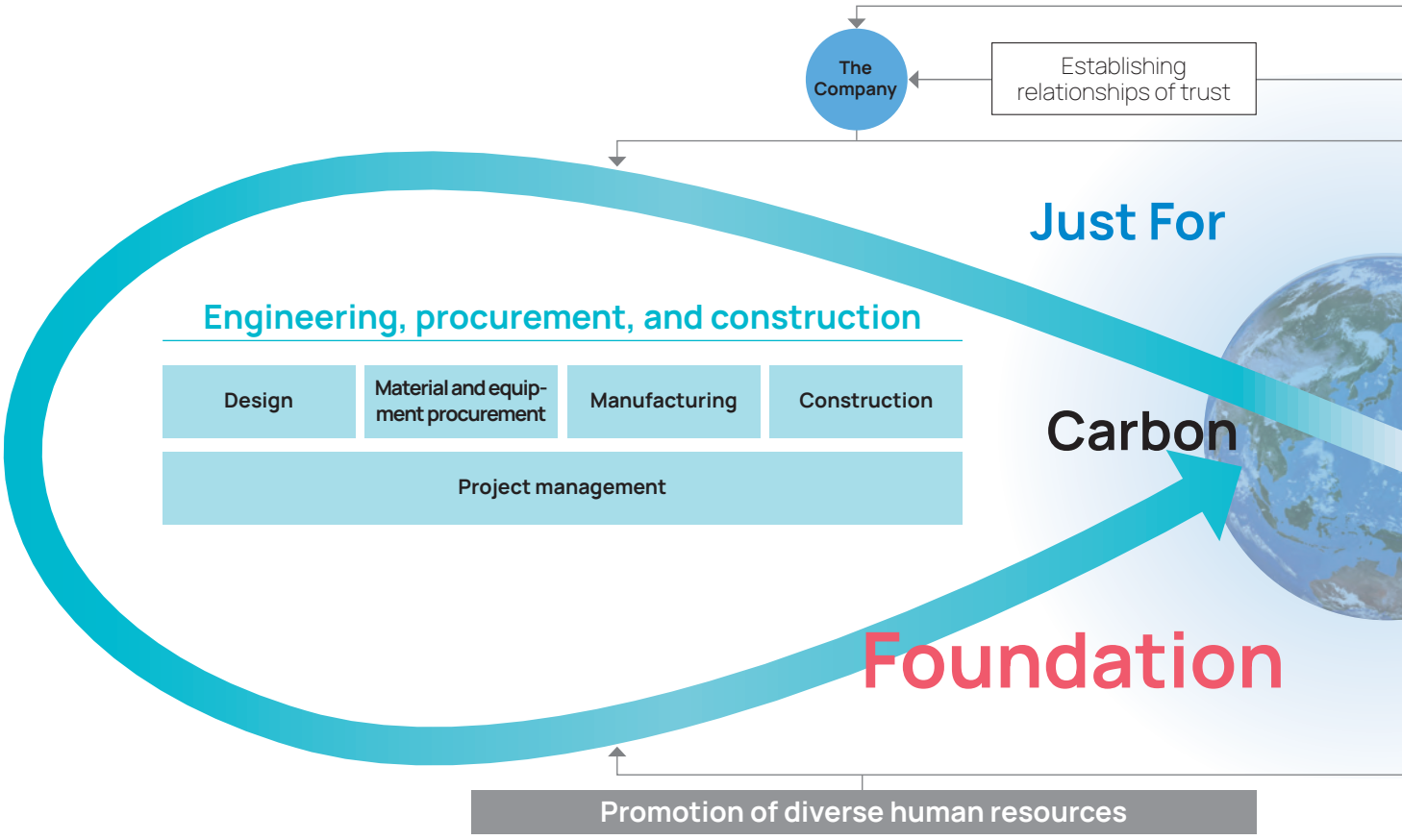
The JFE Shoji Group is engaged in businesses ranging from steel materials, machinery, nonferrous metals, chemicals, biomass fuels, and ships to food and electronics, with an overarching focus on steel products. Through a global network encompassing 96 companies, JFE Shoji provides services that add value to supply chain operations.



Business Model (Engineering Business)

Business model that strongly supports the lives of people

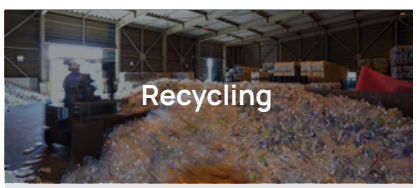
The sources of our competitive edge in the engineering business are **(1) our engineering capabilities (engineering, procurement, and construction (EPC))** centered on building infrastructure that supports industry and human life, and **(2) know-how to operating, maintenance & managing** accumulated 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.



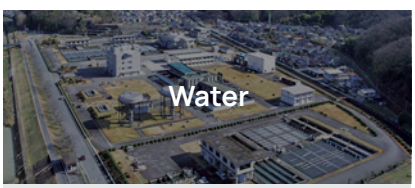
Business overview

By focusing on these business fields, which are needed around the world all the time, we propose integrated services

- Waste-to-energy plants
- Industrial waste processing



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



- Water and sewage treatment plants
- Water and sewerage pipelines

The source of competitive advantages that reinforce our business model

Measures P.44

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

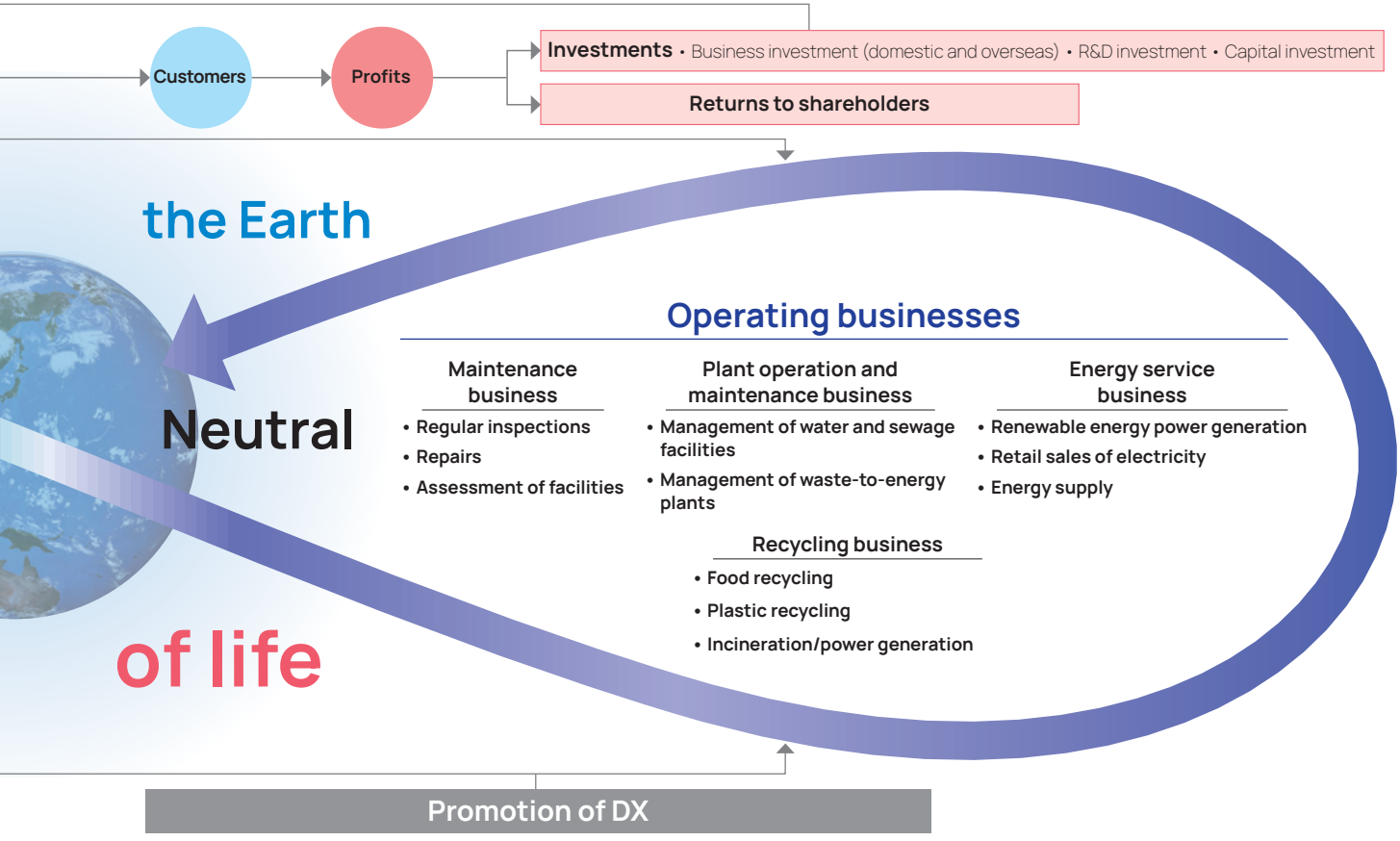
Business management capabilities with strengths in manufacturing expertise

We have accumulated operational know-how in plants in particular, such as waste to-energy power generation and water-works, 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.



from business planning to EPC and operating businesses.

- LNG terminals
- Oil and gas pipelines
- Chemical plants

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

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

Strategy to Create Value

The JFE Group aims to ensure environmental, social, and economic sustainability through its Seventh Medium-term Business Plan and the JFE Group Environmental Vision for 2050. In this section, we introduce our strategies to create further value by providing solutions for sustainability.

JFE Engineering

Foundation of Life

Our mission is to create the foundation for abundance in life by supporting industry and the lives of people in the fields of energy, the environment, and social infrastructure. For future generations and all the people on this planet, we will continue to provide optimal solutions for society.

Message from the CFO

With an eye on becoming carbon neutral, JFE aims to balance financial soundness with the efficient execution of investments, while bringing in ESG money.

Masashi Terahata
Executive Vice President and CFO
JFE Holdings, Inc.

Review of Fiscal 2021

In fiscal 2021, the global economy largely recovered from the impact of the COVID-19 pandemic, with some disparities in the recovery by country and region. In Japan, production activities in several industries were adversely affected by parts supply shortages, but the recovery trend continued.

Against this backdrop, the JFE Group increased selling prices through efforts to rapidly reflect changes in constantly rising primary raw material costs into product prices, and improved productivity while cutting costs through steady capital investments. As a result, business profit totaled 416.4 billion yen and profit attributable to owners of parent was 288.0 billion yen, for strong year-on-year growth as demand for steel rebounded and steel prices rose.

JFE needs to establish a solid financial position that will allow management to go on the offensive and achieve medium- to long-term growth. As of March 31, 2022, the balance of interest-bearing debt outstanding had increased by 43.3 billion yen compared with a year earlier, to 1,849.4 billion yen, as the increase in primary raw material costs had a major impact on growth in operating capital. Investment outlays of 322.5 billion yen and dividend payments of 40.4 billion yen were covered by net income of 288.0 billion yen and depreciation of 252.2 billion yen, and the Company reduced assets by 41.0 billion yen. As a result, the financial targets in the Seventh Medium-term Business Plan, the debt/EBITDA ratio was 2.8x and the D/E ratio was 80.8%, both markedly better than a year ago.

Our initiatives to become carbon neutral will require considerable sums of capital for capital investments and R&D for a long time to come. In January 2022, JFE was the first domestic manufacturer to be selected by the Ministry of Economy, Trade and Industry as a model example for the 2021 Climate Transition Finance Model Projects. A third party has certified that JFE is in compliance with various guidelines, and that the Company's carbon-neutral strategy and green/transition bond framework, a part of the governance structure, conforms with the Paris Agreement. With this certification, JFE issued a 30 billion yen transition bond in June. The funds raised from this bond will be used for capital investments, operating capital, and R&D related to initiatives to conserve energy and increase efficiency, manufacture eco-products, develop ultra-innovative steelmaking processes, and expand renewable energy.

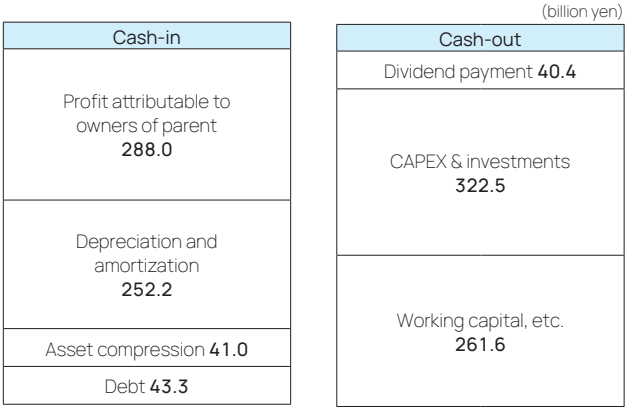
We believe this bond will also lead to the diversification of future fundraising means (i.e., bring in ESG money).

(billion yen)

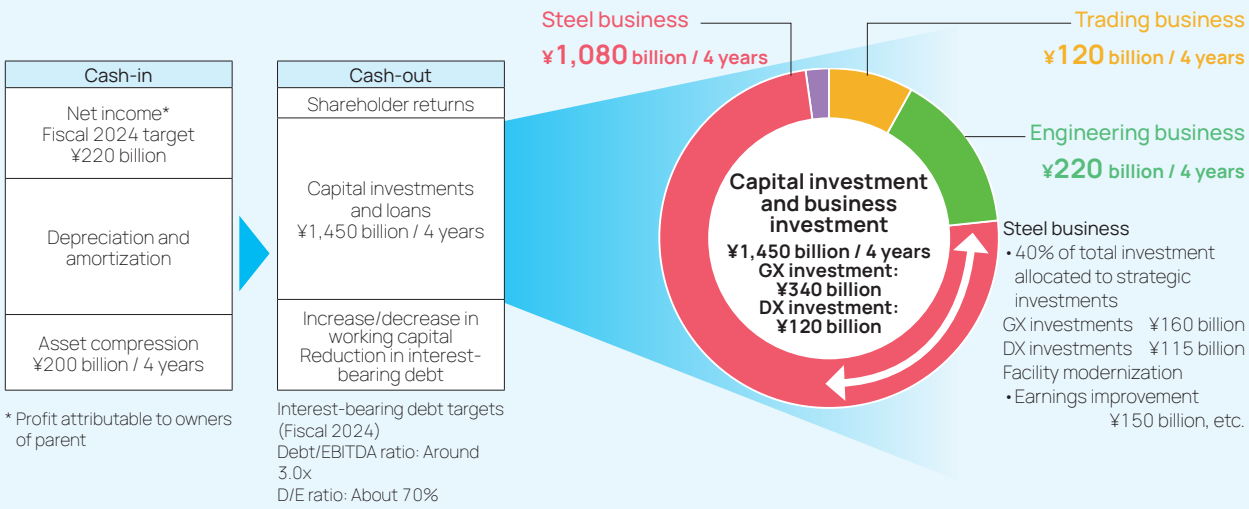
	FY2020	FY2021	Targets in the Seventh Medium-term Business Plan FY2024
Business profit	(12.9)	**416.4**	320.0
Profit attributable to owners of parent	(21.8)	**288.0**	220.0
ROE	(1.3)%	**15.7%**	10%
Debt/EBITDA ratio	8.1x	**2.8x**	Around 3x
D/E ratio	93.2%	**80.8%**	About 70%
Interest-bearing debt outstanding	1,806.1	**1,849.4**	—
Segment profit targets			
Steel business	(65.4)	**323.7**	230.0
Engineering business	24.0	**26.0**	35.0
Trading business	20.0	**55.9**	40.0

FY2021 Consolidated Cash Flow

(billion yen)



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



JFE's financial policy under the Seventh Medium-term Business Plan is to make efficient investments based on selection and concentration while maintaining a healthy financial foundation.

By the final year of the business plan (fiscal 2024), JFE targets 220 billion yen in profit attributable to owners of parent. Adding depreciation to this amount, the Company plans to use these financial resources to fund capital investments and loans (decision-making basis: 1,450 billion yen over four years). Furthermore, JFE will ensure that it has a sound financial foundation by reducing cross-shareholdings and reducing assets by reassessing businesses and assets that contribute little to earnings (200 billion yen over four years). Accordingly, JFE intends to improve the debt/EBITDA ratio to around 3x and the D/E ratio to about 70% by fiscal 2024.

Regarding capital investments and loans, JFE has budgeted 1,080 billion yen for the steel business and a combined 340 billion yen for the engineering and trading businesses. In the steel business, JFE will invest 160 billion yen in green transformation (GX) projects, such as expanding electrical steel production capacity and taking steps toward carbon neutrality, and 115 billion yen in digital transformation (DX) projects to conserve electricity and automate. We have set aside 150 billion yen for modernizing facilities and improving earnings, about 40% of strategic investments. The entire JFE Group intends to spend roughly 340 billion yen on GX investments toward becoming carbon neutral, and approximately 120 billion yen for DX investments.

At JFE, management believes one of its highest priorities is to return profits to shareholders. The Company's basic policy is to target a dividend payout ratio of around 30%. Management is keen to actively pay out dividends while also ensuring a sustainable financial foundation for the entire group.

Outlook for Fiscal 2022

So far in fiscal 2022, the business environment has already deteriorated sharply compared with last year, owing to China's zero-COVID policy and an uncertain outlook for the global economy due in part to the prolonged conflict in Ukraine. In the steel business, we anticipate a moderate recovery in demand for steel in the second half of the fiscal year, as economies around the world recover from the pandemic and the Chinese government moves to stimulate the economy, spurring demand for steel in China. For the full year, JFE estimates profit in the steel business will amount to 150 billion yen, a year-on-year decline that owes to an impact from foreign exchange rates with the yen's rapid depreciation, and valuation differences on inventories, despite management's ongoing measures to improve earnings power, centered on hikes in selling prices in Japan. JFE also forecasts profit of 20 billion yen in the engineering business and 55 billion yen in the trading business. For fiscal 2022, JFE aims for consolidated business profit of 235 billion yen and net income of 140 billion yen. In the steel business, management is strongly pushing forward with initiatives to increase selling prices in order to achieve its medium-term targets (profit of 10,000 yen per ton of steel), despite the tough conditions.

Turning to cash flows, management is keen to secure cash by improving the cash conversion cycle (CCC) through reductions in inventories, in addition to thoroughly reducing assets by reassessing businesses and assets that contribute little to earnings. JFE aims to balance its sound financial position with a flexible and precise approach to making the necessary investments in medium- to long-term growth.

JFE plans to distribute an interim dividend of 40 yen per share in fiscal 2022. It has not decided the annual dividend yet (as of August 2022), and will consider a year-end dividend while monitoring trends in earnings.

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

Ensure Environmental and Social Sustainability

Strategies	FY2021 Results

1 Promotion of the JFE Group Environmental Vision for 2050

In May 2021, we formulated the JFE Group Environmental Vision for 2050, positioning initiatives to address climate change problems as the most important management priority. We have taken specific measures to achieve the goals set forth in this vision. We are now taking a multi-pronged approach to developing ultra-innovative technologies to realize carbon neutrality.

- Review of CO_2 emissions reduction target for fiscal 2030 and results in fiscal 2021
  - Changed the previous target of at least 20% to 30% or more (compared with the fiscal 2013 level), and aim to achieve it by expanding the application of existing technologies, amassing new items for emissions reduction, and building a rapid and efficient promotion structure
  - Made steady progress fiscal 2021 toward our medium-term target in fiscal 2024, reducing CO_2 emissions by 9% (compared with the fiscal 2013 level) in the steel business and by 10.56 million t-CO_2 in the engineering business
- Progress on roadmap to becoming carbon neutral (see page 56 for details)
- Built a promotion structure for becoming carbon neutral (see page 57 for details)
- Selected by NEDO's Green Innovation Fund
- Decided to issue transition bonds (first Japanese manufacturer to be chosen by the Ministry of Economy, Trade and Industry as a model example of a Climate Transition Finance Model Project in fiscal 2021)

	FY2021 results	End of FY2024	FY2030	FY2050
CO_2 emissions reduction (Steel business) (vs. fiscal 2013)	**9%**	18%	30% or more	Carbon neutrality
Contributions to CO_2 emissions reduction in society (Engineering business)	**10.56 million t-CO_2**	12.00 million t-CO_2	25.00 million t-CO_2	–

2 Resolve issues impacting society

■ Safety/health management
- Prioritize investment in safety measures: 10 billion yen annually Groupwide
- Promote multifaceted occupational safety management (supervision, detection, etc.) using advanced IT

■ Facilitate employee participation
- Diversity and inclusion: Maximize the abilities of employees with diverse backgrounds
- Personnel training: Improve the skills of each employee and foster global talent
- Work-style reforms: Maintain work environments and internal systems so that employees can work safely and securely while applying their abilities

■ Respect human rights throughout the supply chain

Safety/health management (see pages 63-64 for details)

Focused efforts on ensuring safety by increasing investment in making equipment truly safer with DX and other new technologies, with the aim of having zero serious injuries

- Investing 10 billion yen annually in safety measures Groupwide, in tandem with the medium-term business plan
- Built a framework to prevent injuries involving equipment by using the latest technologies, such as ICT, AI, and data science, in addition to efforts to enhance activities to prevent various injuries

Facilitate employee participation (see pages 61-62 for details)

Built an environment where diverse employees can utilize their abilities to their utmost and realize our growth strategies while improving competitiveness

- Set a target for at least 10% of management positions filled by women for section head and above by 2030 (at least 20% in management and sales departments)
- Trained 450 data scientists as of the end of fiscal 2021 (aim for 600 by end of fiscal 2024)

Respect human rights throughout the supply chain (see pages 85-86 for details)

In addition to the JFE Group's supply chain, we engage in initiatives to ensure that human rights are respected in all global supply chains. The JFE Group has performed due diligence into human rights since fiscal 2021.

3 Enhance corporate governance

■ The JFE Group will examine the use of non-financial indicators related to the environment and society as management targets, and refer to various indicators when making investment decisions and setting director remuneration.
■ We will reinforce the Groupwide risk management structure, and appropriately deal with various risks that arise in a changing business environment.
■ Further strengthen Group governance

- Introduced indicators for employee safety to determine annual bonuses of executive officers from fiscal 2022
- Plan to introduce indicators related to climate change in the medium-term business plan
- Continued to examine other indicators

Establish Economic Sustainability

Strategies ▶ FY2021 Results

1 Pursue world-class earnings capabilities in transition from quantity to quality in the domestic steel business

Measure	Medium-term Business Plan (FY2024)	FY2021 Results
Cost reductions	¥120 billion	**¥30 billion achieved**
Ratio of high-value-added products	50%	**45% (FY2020: 40%)**
Increase selling prices	• Quickly reflect cost of main raw materials in selling prices • Started extra improvement activities, revised some prices	**Executed as planned**
Finish restructuring	Major cuts in fixed costs, increase labor productivity, improve product mix	**● Consolidated equipment as planned** **● Started to examine collaboration in hydrogen and ammonia supply businesses based along Keihin coastline**
Per-ton profit	10,000 yen/ton	**14,000 yen/ton (actually* 6,000 yen/ton)**

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

2 Promote growth strategies

▶ (see pages 41-49 for details)

Steel business
- Examine 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 three-fold by fiscal 2024 vs. fiscal 2020)

Engineering business
Expand sales revenue to the level of one trillion yen by fiscal 2030

Trading business
Create No. 1 global distribution and processing structure for high-performance electrical steel sheet

Steel business
- Deepened business strategy with more local production, including evaluation of business viability for joint establishment of grain-oriented electrical steel sheet production and sales company with JSW Steel in India
- Focused on order activities and won first contract in maintenance technology provision field. Commenced detailed negotiations with customers for first project after commercializing solutions model for providing data science technologies via the cloud

Engineering business
Expanded recycling business bases nationwide and launched plants, constructed a new plant to manufacture bottom-fixed foundation structures (a first in Japan) for offshore wind power generation, and commercialized one of Japan's largest wood biomass power generation plants

Trading business
Advanced initiatives to tap into demand in Japan and overseas by investing in an EV motor development company in North America

3 Execution of GX and DX investments, advancement of DX strategy

Investment	Medium-term Business Plan (FY2024)	FY2021 Results
GX investment	¥340.0 billion	**Investment adoption under 40%** **Initiatives in offshore wind power generation business** **• 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)**
DX investment	¥120.0 billion	**Investment adoption over 30%** **Updated systems at steelworks (Kurashiki district)**

Progress on DX strategy

Steel business	Increase productivity and strengthen manufacturing base with cyber physical systems (CPS) / roll out of equipment abnormality detection system with data science technology for hot-rolled steel plants in all districts / developed training simulator using MR technology
Engineering business	Advanced digital twin initiatives (sophisticated 3D designs and visualization of plants) / developed AI smoke detection system
Security measures	Took steps to counter increasingly advanced and sophisticated cyberattacks and risk of information leaks / created cybersecurity department in steel business

4 Balance financial soundness with effective investment based on a "select and concentrate" approach

Consolidated	FY2024 Plan	FY2021 Results
Business profit	¥320.0 billion	**¥416.4 billion**
Profit attributable to owners of the parent	¥220.0 billion	**¥288.0 billion**
ROE	10%	**15.7%**
Debt/EBITDA	About 3x	**2.8x**
D/E ratio*1	About 70%	**80.8%**
Payout ratio (DPS)	About 30%	**28% (¥140)**

Operating companies	FY2024 Plan	FY2021 Results
Steel business		
Profit per ton*2	10,000 yen/ton	**14,000 yen/ton*3**
Segment profit	¥230.0 billion	**¥323.7 billion**
Engineering business		
Segment profit	¥35.0 billion	**¥26.0 billion**
Revenue	¥650.0 billion	**¥508.2 billion**
Trading business		
Segment profit	¥40.0 billion	**¥55.9 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 6,000 yen/ton

DX Strategy

DX Strategy as Key to Transformation

Challenging the Next Step: Transformation of Existing Businesses, Creation of New Businesses, and Innovation of Groundbreaking Improvements in Productivity

Our DX strategy in the Seventh Medium-Term Business Plan (hereinafter "the current business plan") is one of the most important strategies that will determine the outcome of our largest transformation since our founding. The data, knowhow and technologies that the Group has accumulated over the years are a source of value creation, precious assets that cannot be imitated by other companies. By combining these DX initiatives, we aim to further improve productivity by increasing production efficiency and strengthening competitiveness, and also **focus efforts on the transformation of existing businesses and the creation of new businesses**.

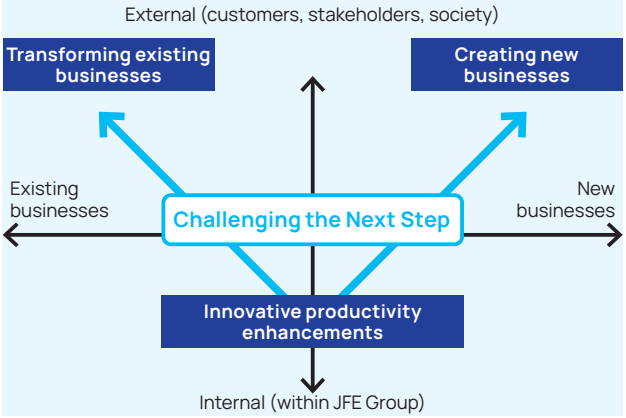
Meanwhile, it is becoming increasingly important to address cyberattacks and the risk of information leaks. It is therefore vital that we strengthen security and governance while advancing our DX strategy.

Groupwide

- Aggressive DX to lead to improve earnings power, realize growth strategy and advance business model
- DX investments: ¥120 billion over four years
  → Fiscal 2021 results
  Over 30% of investments selected

Strategy for Each Business

JFE Steel	Establish competitive advantage through advanced use of data
JFE Engineering	Provide digital services and execute business process re-engineering by using data better
JFE Shoji	Sell DX solutions externally and create businesses by using DX solutions internally



Source: "Digital Transformation Stock Selection (DX Stock) 2020," Secretariat of DX Survey, Ministry of Economy, Trade and Industry

DX Initiatives in Each Business

JFE Group companies are advancing DX strategies. Here, we introduce some leading DX initiatives in each business.

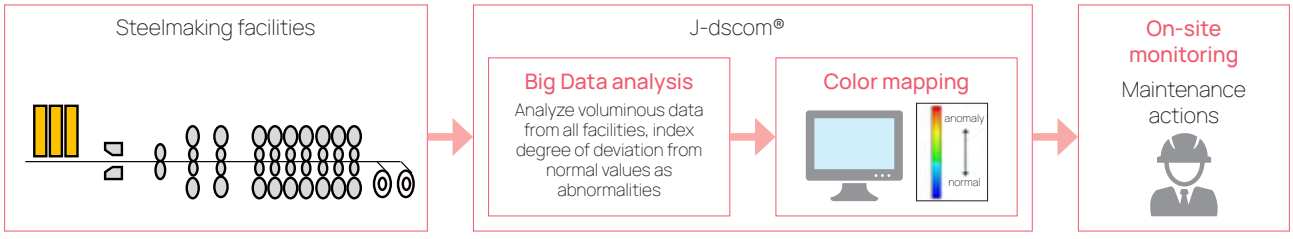
JFE Steel Initiative to Implement CPS in All Processes during the Seventh Medium-term Business Plan

Rollout of System for Detecting Signs of Equipment Anomalies Based on Data Science Technology to All Hot Strip Mills

JFE Steel aims to **create Intelligent Steelworks with an optimal level of autonomy** and implement Cyber Physical Systems (CPS) that encompass steelworks. By the end of the Seventh Medium-Term Business Plan, JFE Steel targets an annual boost of ¥30.0 billion to earnings and at least 20% to labor productivity as a result of remote and automated operations of plants, work and vehicles. We will improve equipment productivity, stabilize operations, and increase quality assurance and control.

As a part of these efforts, JFE Steel is rolling out the J-dscom® system for detecting signs of equipment anomalies at steelworks for its Hot Strip Mills in all districts. Using Big Data analysis technology, this system efficiently and comprehensively analyzes voluminous data on the state of operations. The system maps out the size of changes in abnormalities over time, and quickly identifies the equipment and parts where the abnormality is occurring, thereby facilitating appropriate maintenance actions.

At the Hot Strip Mills at West Japan Works (Kurashiki district), where this system was first introduced in fiscal 2018, we have verified that the system has reduced problems equivalent to more than 50 hours per year (equivalent to more than 30,000 tons of output). JFE Steel aims to improve **productivity further by preventing equipment troubles beforehand** through the rollout of the system to other manufacturing processes.



JFE Steel — Enhancing an Information System Platform for DX Promotion

Transition of all Head Office Mission-critical Systems to an Open Platform Completed

In fiscal 2021, our company completed the transition of all head office mission-critical systems, including the J-Smile® system for sales and orders, to an open platform. This is **the first case in Japan of a complete migration of a large-scale mission-critical system** over 40 million STEP to an open platform. The head office has accumulated a vast amount of data assets, including data on orders and deliveries of steel products, as well as information on the manufacturing history and quality of individual steel products. Based on a flexible IT platform, we will be able to further **accelerate business reforms using data assets**, such as increasing the efficiency of the entire supply chain through comprehensive analysis of these big data. By making the most of the knowledge gained from this project, we will continue to reform the system at each steelworks in order to complete the transition of the systems at all sites in our company to an open platform.

JFE Steel News Release

Transition of all Head Office Mission-critical Systems to Open Platform Completed: Restructuring IT Platforms to Promote DX

https://www.jfe-steel.co.jp/release/2022/03/220315.html (in Japanese only)

JFE Engineering — Opening of 5G Innovation Plant with High-speed Wireless Communications Environment

Start of Verification of Cutting-Edge Technologies, Accelerating Plant DX

In the construction, operation and maintenance of plants, handing down expertise to the next generation and maintaining stable and safe operations has become an issue amid a decline in veteran workers. To solve these issues, JFE Engineering is building remote control systems and automated operation systems. In order to make further advancements on this front, high-speed wireless communications will play a key role because new technologies such as drones need reliable high-speed communications. In March 2022, JFE Engineering opened **the 5G Innovation Plant at the Yokohama Head Office as an experimental plant with the latest 5G communications technologies**. This facility can be used to demonstrate and promote developed products, and allows venture firms to conduct experiments with technologies related to automation and labor-saving measures for plants. Leveraging our accumulated system building technologies and operational know-how in various kinds of plants, we are keen to accelerate the development of solutions for the remote control, automation and labor-saving measures for plants. We are **developing businesses to provide new one-stop digital services**.

Example solutions

Remote assistance using smart eyeglasses

Safety monitoring with AI-implemented equipment(helmet)

JFE Shoji — Non-destructive Inspection with Radar-equipped Drones

Enables Visualization of Risks Unseen with Naked Eye, Enhances Safety of Inspection Work

In recent years, the drone inspection market has grown, mainly for inspecting equipment that is hard for people to inspect, such as aging infrastructure and equipment in high places. With Osaka University, JFE Shoji Electronics is advancing R&D in radar systems that can be installed on drones. Radar waves can be used in phase detection by alternating frequency bands adapted to various objects being inspected, enabling the diagnosis of conditions in the object in a contact-less and non-destructive manner, **shedding light on risks that cannot be seen by the naked eye**. Drones can be used to inspect and maintain equipment in high places inside plants, as well as in a wide range of fields, including construction and infrastructure. We expect drones to help improve efficiency and safety, while helping to solve issues related to worker shortages and the cost of inspections and maintenance. There are some forecasts that the market for inspections with drones will expand from 28 billion yen in 2020 to 170 billion yen in 2025. We will accelerate the development of smaller drones with better accuracy to further commercialize this technology, with the aim of **creating a business for externally selling this solution and using it at Group companies**.

Radar-equipped drones (compatible with 1GHz–1,000GHz frequencies and bands) enable remote inspections of inside objects by exposing its properties

Business Strategies

Steel Business

JFE Steel Corporation

Transformation toward carbon neutrality while shifting from quantity to quality

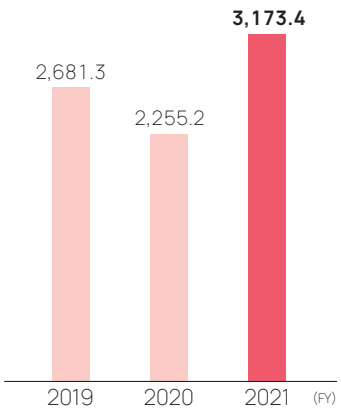
JFE Steel is accelerating the development of technologies for becoming carbon neutral and adapting to structural changes in the business environment. The company is establishing a solid yet lean business structure while shifting from quantity to quality. In order to remain essential to society, JFE Steel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

Yoshihisa Kitano
President and CEO
JFE Steel Corporation

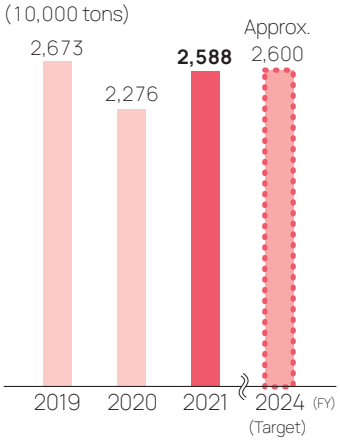
Strengths	Threats and risks	Opportunities
• World-class technologies that reduce environmental load and contribute to carbon neutrality • World-class production technologies for high-value-added products • World-leading R&D capabilities • Abundant technologies and operational/research know-how • Strong alliances forged with steelmakers around the world • Cutting-edge AI, IoT, and data science technologies to evolve the company through digital transformation • Extensive customer base built up over the decades	• Increasing demands for worldwide reduction of CO_2 emissions • Tougher global competition from new rivals in China • 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 U.S.–China trade friction • Impact on the global economy from Russia's invasion of Ukraine • High commodity prices, including for key raw materials • Sharp swings in foreign exchange rates • Another wave of COVID-19 infections	• Stronger demand for eco-products and solutions that help reduce CO_2 emissions • Increasing demand for high-grade steel due to the shift to lighter and electric vehicles and greater safety and durability of ships • Demand for operational and environmental support technologies from steelmakers in emerging countries • Increasing demand for steel materials due to medium- and long-term growth in emerging countries • Increasing demand for infrastructure for natural disaster prevention and replacement to make Japan more resilient • Top global runner in zero-carbon manufacturing processes

Fiscal 2021 results

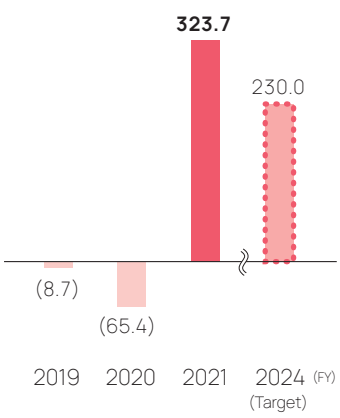
Revenue
(billion yen)



Non-consolidated crude steel output
(10,000 tons)



Segment profit
(billion yen)



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*

10,000 yen/ton

(Target segment profit of 230.0 billion yen)

* Segment profit / unconsolidated sales volume in tons

Initiatives in Fiscal 2021

In fiscal 2021, segment profit totaled 323.7 billion yen, a year-on-year improvement of 389.1 billion yen. Profit was 14,000 yen per ton of steel, higher than our fiscal 2024 target of 10,000 yen per ton. Excluding inventory valuation differences and other factors, however underlying profit was 6,000 yen per ton. JFE Steel will continue activities to improve earnings, such as increasing selling prices and reducing costs. In fiscal 2021, the business environment saw major fluctuations in demand with automakers cutting production volume due to shortages of semiconductors and other parts in the second half, while the global economy recovered from the impact of the COVID-19 pandemic. Costs increased as prices rose for primary raw materials, such as metals, and scrap prices and freight rates also rose. In response, the company increased selling prices to rapidly reflect the rise in primary raw material costs and shored up the earnings foundation further by reducing other costs by 30 billion yen annually. Furthermore, earnings expanded at Group companies within and outside Japan, resulting in higher profits overall. Regarding capital investments, the company steadily implemented major measures that included starting operations of the No. 7 continuous casting machine and renovating the No. 4 blast furnace in the Kurashiki district.

No. 7 continuous casting machine in the Kurashiki district

Medium- to Long-term Strategy and Future Initiatives

In fiscal 2022, the business environment remained challenging in the first half of the year, as domestic automakers continued to restrict production volumes due to semiconductor and other parts shortages, and overseas market conditions remained weak. As the end of the fiscal year approaches, JFE Steel expects supply-demand conditions to tighten again as the automobile industry gradually recovers and business activities in other sectors stay strong while the economy stages a comeback. Global demand for steel is also likely to bounce back. On the other hand, the impact on the global economy from a prolonged Russia–Ukraine war is a major concern. Volatility in prices for key raw materials and rising commodity prices in particular have had a major impact. It is unknown how demand will be affected by turmoil in global supply chains caused by the sharp weakening of the yen and a resurgence in COVID-19 cases. In addition to efforts to rapidly reflect in selling prices the increase in costs for key raw materials, which gained traction in fiscal 2021, JFE Steel is stepping up efforts at reflecting in selling prices the increase in other commodity prices, adding extra surcharges, and working to move prices to sustainable levels.

Regarding initiatives to become carbon neutral, JFE Steel aims to reduce CO_2 emissions by 30% or more by fiscal 2030, compared with the fiscal 2013 level, and is making steady progress on the development and expanded application of low-carbon technologies. For example, JFE Steel has cut CO_2 emissions by introducing at all of its steelworks districts the eco-friendly Double-slag Refining Process (DRP®), a converter-type, molten-iron pretreatment process that makes existing steelmaking processes more environmentally friendly by allowing extra scrap to be used in converters. We are keen to establish a supply structure for green steel by continuing to slash CO_2 emissions.

In order to become carbon neutral by 2050, JFE Steel is taking a multifaceted approach to developing ultra-innovative technologies, such as carbon-recycling blast furnaces, a proprietary technology. In 2023, the company will commence construction on various prototype furnaces, including a carbon-recycling blast furnace, a direct reduction furnace, and an electric arc furnace, that will be facilities for testing the use of hydrogen in the steelmaking process, a project that has been designated by the New Energy and Industrial Technology Development Organization (NEDO) as a Green Innovation Fund project. We will continue to advance R&D into ultra-innovative technologies like these.

In our initiative to transition from quantity to quality, we are steadily implementing structural reforms through selective concentration in a bid to sharpen competitiveness, including the halting of operations at facilities in the Chiba district in fiscal 2022 in order to consolidate operations in steel for cans in the Fukuyama district and the halting of upstream processes and hot-rolled steel facilities in the Keihin district in fiscal 2023. As a result of these moves, management anticipates benefits from a major reduction in fixed costs. While continuing to significantly revise selling prices, the company will improve the product mix. JFE Steel made good progress toward its target for a high-value-added product sales ratio of 45% in fiscal 2021, up from 40% in fiscal 2020 (aiming for 50% in fiscal 2024). With the objective of increasing management efficiency, management decided to integrate JFE Mineral Company, Ltd., JFE Material Co., Ltd., and Mizushima Ferroalloy Co., Ltd. and turn JFE Container Co., Ltd. into a wholly owned subsidiary in fiscal 2022.

Moreover, the company has been steadily implementing DX initiatives to reinforce the manufacturing base. The company decided to update systems at steelworks in the Kurashiki district, detect signs of equipment anomalies at hot-rolled steel sheet plants in all districts, and restructure IT platforms, including the transformation of all head office mission-critical systems to an open platform. The company aims to expand the solutions business that offers its advanced manufacturing technologies and research know-how.

Progress on restructuring and major capital investment plans

Facilities	FY2021	FY2022	FY2023	FY2024–
Blast furnace (BF) revamp	Kurashiki Revamp No. 4 BF (–Dec. 2021)	Chiba Revamp No. 6 BF (Sep. 2022–Jan. 2023)		
Shutdown of tin mills in Chiba		To be shut down (–Sep. 2022) (No. 2 Tandem Mill, No. 4 CAL, TFL)		
Shut down of upstream facilities in Keihin			To be shut down (–Sep. 2023)	
Shutdown of hot rolling facilities in Keihin			To be shut down (–Sep. 2023)	
CAPEX related to improvements of high-value-added product ratio	Kurashiki No. 7 continuous casting machine operations (Jun. 2021–)		At Kurashiki, reinforce extra-heavy steel plate production line for offshore wind power application (Nov. 2023)	At Kurashiki, reinforce non-oriented electrical steel sheet production line (2024–)

TOPICS

Progress on Our Transformation

Initiatives to Realize Carbon Neutrality by 2050

JFE Steel is taking multiple approaches to becoming carbon neutral by 2050, including the development of ultra-innovative technologies. The company has set a target for reducing CO_2 emissions by 18% as of the end of fiscal 2024 and by 30% or more by fiscal 2030, compared with the fiscal 2013 level. The company has defined the period to 2030 as a transition period and the period after 2030 as an innovation period. During the transition period, JFE Steel intends to steadily move toward its targets for reducing CO_2 emissions by fiscal 2030 through the broader application of low-carbon technologies with a focus on ways to reduce emissions. In preparation for the switchover to the innovation period, the company will accelerate R&D in ultra-innovative technologies. During the innovation period, JFE Steel will focus on cleverly deploying carbon-recycling blast furnaces that feature its proprietary carbon-recycling technologies, quickly implementing the direct-reduction steelmaking method, and expanding the application of CCU technology. Moreover, the company intends to fixate CO_2 through CCS with an eye on building a carbon-neutral society in collaboration with local communities and conglomerates. JFE Steel aims to become carbon neutral through these initiatives.

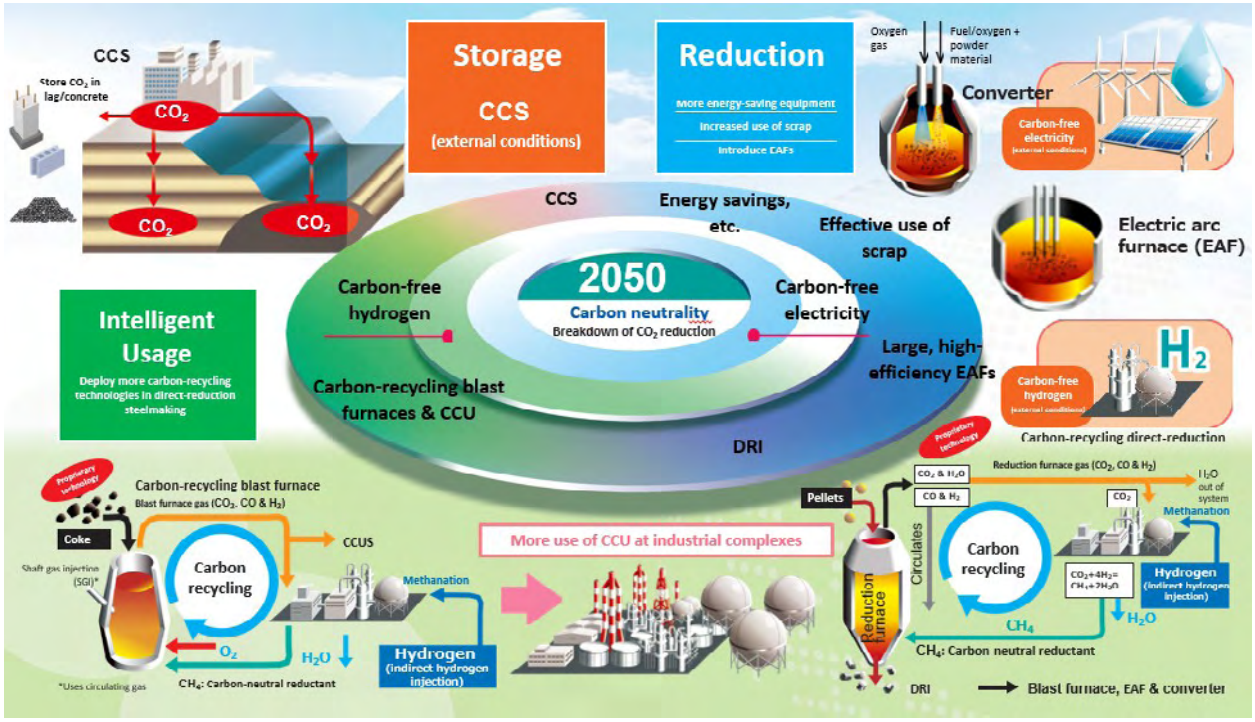
Low-carbon technologies for reducing CO_2 emissions by 30% or more by fiscal 2030

Energy savings and high efficiency	• Upgrade to high-efficiency coke ovens ‹Fukuyama district (2025)› • Improve efficiency of power-demand facilities (Electrify blast-furnace blowers, raise efficiency of oxygen plants, etc.) ‹All districts (under way)› • Leverage AI & DS (companywide CPS, etc.) for energy savings ‹All districts (under way)›
Low-carbon feedstock & fuel	• Expand use of scrap in converter furnaces, use reduced iron (HBI) ‹All districts (under way)› • Securing Scrap and HBI, reinforcing storage depots ‹All districts (under way)› • Bolster LNG supply network
Law-carbon processes	• Upgrade existing EAFs ‹Sendai Works (2024)› • Introduce large, high-efficiency EAFs ‹Kurashiki district (2027–2030)› • Commercialize ferro coke (1,200-ton-per-day plant) ‹Fukuyama district›

Develop ultra-innovative technologies

- Prototype carbon-recycling blast furnace ‹Chiba district, operational in 2025›
- Direct-reduction compact bench prototype furnace ‹Chiba district, operational in 2024›
- Prototype electric arc furnace to develop impurity removal technologies with direct reduction iron ‹Chiba district, operational in 2024›

See page 56 for our roadmap to becoming carbon neutral by 2050.
See page 57 for information about our approach to becoming carbon neutral.



Development of Recycled Steel Cups

As a newly developed application for steel sheet for cans, JFE Steel has been promoting a recycled steel cup for beverages project since October 2021 with the aim of reducing plastic waste. This project is an attempt to propose a new lifestyle through the development of new products, with steelmakers on the "production side" collaborating with consumers on the "user side" to tackle the problem of single-use plastic cups. We intend to roll out various initiatives for using steel cups as a way to eliminate single-use container waste that is generated in large volumes at events. Using the excellent 94% recyclability of steel cans, we will contribute to the attainment of the SDGs while sustaining growth.

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 operation & maintenance business
- Integrated provision of utilities (water, electricity, gas, etc.)

Threats and risks

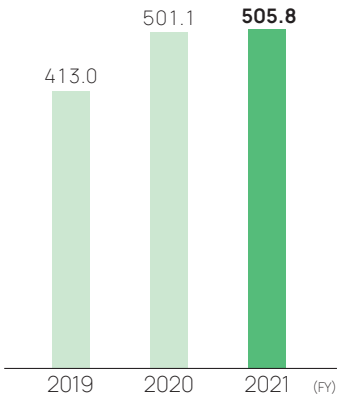
- Contraction in domestic public works projects in line with government aims and policies
- Increase in construction costs due to changes in prices for equipment and materials
- Decline in EPC projects due to fall in private-sector capital investment
- Loss of business opportunities due to COVID-19 and uncertainty in the global economy from Russia's invasion of Ukraine

Opportunities

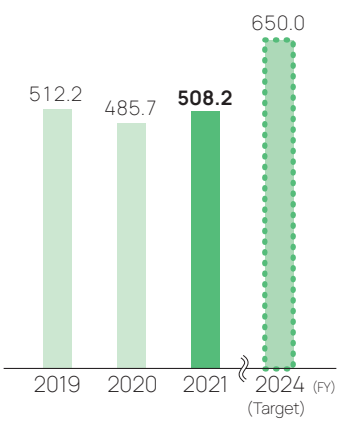
- Greater social expectations for SDGs achievement
- Stronger demand for infrastructure upgrades and service life extension
- Changes in social structure with privatization of public services
- Growing needs for renewable energy

Fiscal 2021 results

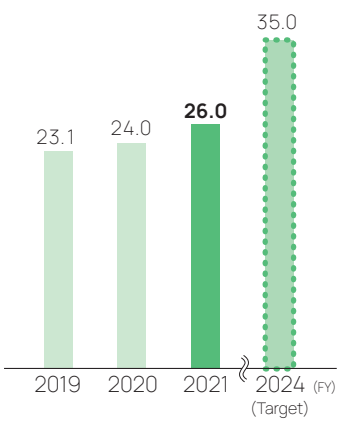
Orders received
(billion yen)



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 2021

JFE Engineering expanded the operation & maintenance 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, JFE Engineering received orders for major projects, mainly in its fields of expertise: waste-to-energy power plants, pipelines, bridges, and other public works projects, marking steady progress in the "creation" business of the foundation of life.

In operation & maintenance businesses, JFE Engineering participates in biomass power generation private finance initiative (PFI) projects and concessions in the water field. In April 2022, operations commenced at a new gas and waterworks project that the company comprehensively manages, a first in Japan. In the electric power field, we expanded our bases in areas where energy is produced for local consumption through regional new electric power companies with connections to local governments. J&T Recycling Corporation, which is in charge of the recycling business, has focused on expanding its food recycling bases while managing projects to recycle PET bottles, demand for which has been growing each year. By expanding our operation & maintenance businesses, we aim to establish a corporate structure with earnings that are less susceptible to fluctuations in orders for projects.

In overseas operations, we are aggressively advancing efforts to set up operation & maintenance businesses with local partners and carry out EPC projects with a focus on Europe and Southeast Asia. We participated in an industrial waste processing project in Malaysia, and a large-scale waste-to-energy power generation project in Vietnam.

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 the previous fiscal year.

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 operation & maintenance 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 works for 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 operation & maintenance 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

Waste to Resources

Commencement of Commercial Operations at West Japan PET Bottle MR Center

Kyoei J&T Recycling Corporation was established in April 2020 as a joint venture of Kyoei Industry Co., Ltd. and J&T Recycling Corporation, a Group company of JFE Engineering. After partial operations were started up in October 2021, the West Japan PET Bottle MR Center, a PET bottle recycling and material production plant that was constructed by Kyoei J&T Recycling Corporation, began full-scale commercial operations in April 2022. This plant features the first bottle-to-bottle integrated production system in the Chubu and Tokai regions with sufficient production capacity to cover demand across these regions. This puts into place a structure for reliably supplying recycled materials.

Carbon Neutral

Decision to Commercialize One of Japan's Largest Woody Biomass Combustion Power Plants

In October 2021, JFE Engineering decided to commercialize one of Japan's largest woody biomass combustion power plants with a rated output of 112,000 kW in Tahara City, Aichi Prefecture. In December 2021, JFE Engineering received an EPC order for this plant. Backed by investors JFE Engineering, Chubu Electric Power Co., Inc., Toho Gas Co., Ltd., and Tokyo Century Corporation, Tahara Biomass Power LLC is in charge of commercializing the power plant, and plans to commence operations in September 2025. The company contributes to the realization of a carbon-neutral and sustainable society through renewable energy power generation projects.

Completed rendering

DX

Opening of 5G Innovation Plant

In March 2022, as part of DX initiatives, JFE Engineering opened the 5G Innovation Plant at its Yokohama Head Office. It is featuring actual plant facilities and next-generation high-speed wireless communications in order to facilitate real-world testing. Venture firms, companies, research groups, and others can bring their cutting-edge technologies and business ideas to the 5G Innovation Plant to test out their innovations. In this way, we contribute to the creation of new value, products, and services for the future of workplace automation and labor-saving technologies in plant construction, operation, and maintenance.

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

- 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

Threats and risks

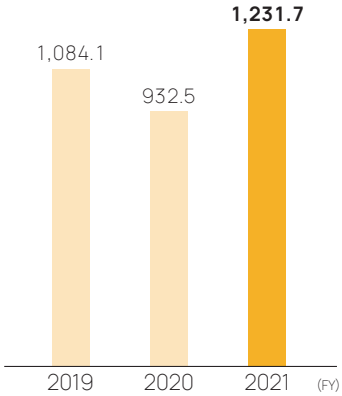
- Uncertainties in the global economy caused by geopolitical risks, such as tensions between the United States and China
- Negative impact on corporate activities and supply chains from restrictions on economic activities caused by the COVID-19 pandemic
- Slower growth in the domestic market and contraction in the manufacturing industry due to declining population
- Changes in market structure and government policy due to a faster movement toward carbon neutrality

Opportunities

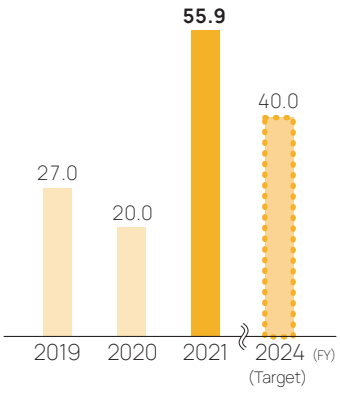
- Revision of customers' supply chains and procurement strategies, in line with changes in the external environment, such as U.S.–China trade friction and the impact of COVID-19
- Stronger demand for steel in the emerging markets of India and the ASEAN region
- Higher demand for eco-products that can help reduce CO_2 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 2021 results

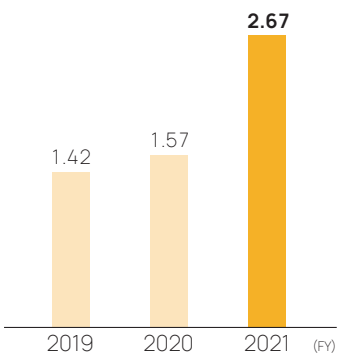
Revenue
(billion yen)



Segment profit
(billion yen)



Ratio of consolidated income to non-consolidated income
(times)



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

1. Initiatives in priority field

- 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 the 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)

Initiatives in Fiscal 2021

Global demand for steel, having weakened during the COVID-19 pandemic, returned in fiscal 2021. Amid tight supply–demand conditions for steel, prices for steel increased and have remained at high levels, owing to rising raw material costs. Serious supply chain problems caused by shortages of semiconductors and other parts have been a drag on the pace of recovery in demand, but overall demand is rebounding from its bottom during the pandemic.

In this environment, under its Seventh Medium-term Business Plan that began in fiscal 2021, JFE Shoji worked to strengthen its supply chain in it four-pronged global structure, based on the basic policy of "solidifying its footing while moving toward the next stage of growth" in its previous medium-term business plan.

In the steel business, earnings expanded considerably owing to higher prices and stronger demand for steel, in addition to measures implemented to reinforce the earnings foundation in the North America business that had been underway since the previous business plan. As measures to stimulate growth, JFE Shoji invested in a North American company developing motors for EVs, and accelerated initiatives to tap into demand for electrical steel used in EV motors. In the automotive steel fields, in addition to launching a new steel processing center in Mexico, JFE Shoji expanded capacity at its steel processing facility in China. JFE Shoji made an additional investment in a major plated and colored steel producer in Vietnam in a bid to expand its procurement and sales capabilities in the steel sheet construction materials field.

In the raw materials & machinery business, JFE Shoji entered into a long-term wooden pallet supply agreement for Tahara Biomass Power LLC at JFE Engineering, in order to ensure a supply of biomass fuel to expand the business, which helps resolve environmental issues. In response to growing demand for steel scrap, we also updated scrap yards and increased sales of blast furnace slag.

In the increasingly important field of DX, Group company JFE Shoji Electronics Corporation collaborated with Osaka University on the development of a system to remotely perform non-destructive inspections inside various objects by attaching radars to drones.

Once commercialized, this system will be useful in a wide range of fields, such as inspections of plants, buildings, and infrastructure.

The JFE Shoji Group continues to provide new value added and services to customers through the creation of new businesses and efforts to evolve existing businesses with DX.

Steel Processing Center in Mexico

TOPICS

Environmental Initiatives

Creation of a New Organization

JFE Shoji created the Environmental Resources Division in a reorganization of the former raw materials departments with the aim of reinforcing the sales structure for environmental resources, such as biomass fuels, including palm kernel shells (PKS) and wooden pallets, blast furnace slag, and iron scrap, in response to global changes in the environment and economy, including the movement toward carbon neutrality. At the same time, JFE Shoji established the Business Development Center for the purpose of exploring and developing new business related to the environment. While coordinating with the Environmental Resource Department, we will accelerate the create of new businesses for the next generation.

Declaration of Support for the UN Global Compact

With operations around the world, through its bases and supply chains in Japan and other countries, JFE Shoji is in a position to become involved in resolutions for social issues in each region. With the aim of realizing a sustainable society, JFE Shoji plans to step up its initiatives after becoming a signatory to the United Nations (UN) Global Compact, the world's largest sustainability initiative.

In April 2021, JFE Shoji became a signatory to the UN Global Compact, declaring its support for these principles. JFE Shoji will comply with the Ten Principles of the Global Compact and endeavor to achieve the SDGs.

United Nations Global Compact
https://www.unglobalcompact.org

Shipbuilding Business

Japan Marine United Corporation (equity-method affiliate)

Contributing to the sustainable development of society and industry through the finest products and services in the ship and offshore field

As a leading company in Japan's shipbuilding industry, Japan Marine United, in its business fields of merchant ships, naval/ government ships, and offshore structures, aims to be a competitive shipyard that drives the maritime industry to realize a decarbonized society on the seas, leveraging its world-class environmental and energy-saving technologies. We also contribute to ensuring maritime defense and marine safety.

Kotaro Chiba
President and CEO
Japan Marine United Corporation

Strengths	Threats and risks	Opportunities
• Advanced environmental and energy-saving technologies • Marshalling of engineering and marketing resources through capital and business alliance with Imabari Shipbuilding Co., Ltd. • Human resources and facilities in R&D that supports only one / No. 1 technologies in ice navigation and fuel saving • High productivity that leverages the unique features of each shipyard	• Tougher international competition against shipbuilders become larger in China and South Korea • Higher prices for raw materials and equipment • Foreign exchange fluctuations	• Progress toward a decarbonized society ▶ Stronger environmental regulations ▶ Faster momentum in new fuel adoption and research ▶ Invigoration of offshore wind power generation markets • National moves in shipbuilding industry ▶ Enactment of Maritime Industry Reinforcement Act (shipbuilding, marine transportation) ▶ Passage of Economic Protection Act

Initiatives in Fiscal 2021

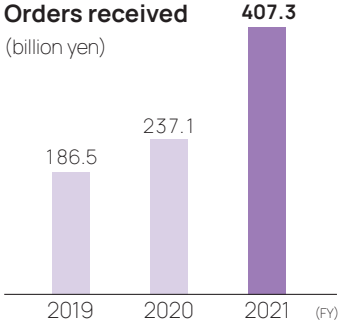
In fiscal 2020, Japan Marine United created a business plan for the next five years, laying out a vision for where it wants to be in that time, which is to be a core player that guides a maritime cluster with world-leading technologies combining the engineering strengths of shipbuilding in Japan.

In the core merchant ships business, Japan Marine United saw results from its measures to improve productivity through DX projects and improvement activities recommended by external consultants. In January 2021, Nihon Shipyard Co., Ltd. (NSY) was established as a sales and design joint venture between Japan Marine United and Imabari Shipbuilding, one of the top two shipbuilders in Japan. NSY has launched full-scale business activities and secured a sufficient amount of orders (Japan Marine United and Imabari Shipbuilding have a 50% market share in Japan). In cooperation with NSY and Imabari Shipbuilding, JMU participated in major projects, collaborating on the construction of ships, including an ammonia-fueled ship, and advancing R&D in technologies to comply with environmental regulations. In the naval ships business, to help maintain and upgrade Japan's naval fleet, Japan Marine United is reinforcing maintenance operations with a focus on naval ships at its five bases at four business locations throughout Japan, the largest in the country. In the marine engineering business, in addition to building SEP* vessels, Japan Marine United is putting more effort into businesses related to offshore wind power generation, a growth field, and a floating offshore wind power generation project in which it participates has been selected by the Green Innovation Fund.

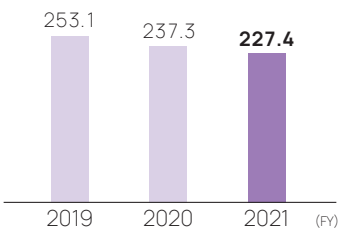
* SEP (self-elevating platform): These work vessels are deployed to construct offshore wind power generation facilities anchored to the seabed.

Fiscal 2021 results

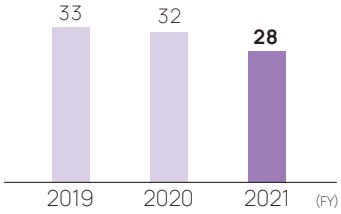
Orders received
(billion yen)



Net sales
(billion yen)



Vessels built
(vessels)



Annual Highlights

JFE Holdings

2021
- May Formulated the JFE Group's Seventh Medium-term Business Plan
- May Held a briefing for the JFE Group Environmental Vision for 2050
- June Selected as Digital Transformation Stock (DX Stock) 2021
- June Held the 19th Ordinary General Meeting of Shareholders
- July Selected for inclusion again in FTSE4Good Index Series and FTSE Blossom Japan Index
- Aug. Held JFE Group DX Strategy briefing
- Oct. Issued JFE Group Report 2021 (integrated report)
- Oct. Issued JFE Group CSR Report 2021

2022
- Jan. Decided to issue transition bonds
- Feb. Raised CO_2 emissions reduction target for the JFE Group
- Feb. Issued JFE Group DX Report 2021
- Mar. Selected as Environmentally Sustainable Company in the 3rd ESG Finance Awards Japan
- Mar. Selected as Health & Productivity Stocks 2022
- Mar. Co-sponsored the 16th All-China Japanese Speech Contest

JFE Steel (Steel Business)

2021
- Apr. Decided to expand production facilities for electrical steel sheet at West Japan Works (Kurashiki district)
- Apr. Won 2021 Commendation for Science and Technology from Minister of Education, Culture, Sports, Science and Technology, Awards for Science and Technology (Development Category) for developing hot dip galvanizing thin steel sheet production technology with novel atmosphere controls
- Apr. Won World Steel Association's 2020 Steel Sustainability Champions Award
- Apr. Received 53rd Ichimura Industry Award for chrome ore smelting reduction process using hydrocarbon fuel burner
- May Developed world's first continuous hot-rolling high-tensile steel production technology
- May Began feasibility study for established of production and sales company for grain-oriented electrical steel sheet in India
- June Won Japan Society for Technology of Plasticity's Academic Conference Award in Fiscal 2021 for the development of the world's fastest intelligent temper rolling control technology
- June Won Special Award for 22nd Logistics Environment Awards for modal shift of steel product transportation from Hiroshima Prefecture to Chiba Prefecture
- June Started operations of No. 7 continuous casting machine in Kurashiki district
- June Won National Commendation for Invention for an eighth year in a row for structural arrest for welded structures that improves safety of ships
- July Developed system for analyzing steel sheet surface textures
- July Ship Carbon Recycling Working Group within Carbon Capture & Reuse (CCR) Study Group verified potential of zero-emission ship fuel based on carbon-recycled methane
- July Signed long-term charter agreement for three LNG-fueled ships to transport steel raw materials
- July Developed low-carbon concrete that can be used in cold climates
- July Participated in conference about ammonia fuel for ships
- Aug. Expanded joint research classes at Hiroshima University for using steel slag onshore and offshore implementing related technologies in society
- Aug. Developed system for optimizing raw material logistics plans
- Sep. Obtained ministry certification for HBL®630 thick steel plate with 780 N/mm^2 and a low yield ratio for building structures
- Sep. Expanded manufacturing bases for HBL®385B-L high-strength thick steel plate for building structures
- Sep. Launched Better Recycle Shonan project to help solve the problem of plastic waste by developing steel beverage containers
- Sep. Obtained ISO 45001 certification for occupational health and safety management systems at Chita Works
- Sep. Installed system for detecting signs of equipment anomalies using data science technology at all hot-rolled steel plants
- Oct. Won Ministry of Economy, Trade and Industry's Industrial Science and Technology Policy and Environment Bureau Director-General Award for Resource Recycling Technologies and Systems in Fiscal 2021 for the establishment of closed-loop recycling technologies for used refractory material
- Oct. Novel processes for manufacturing valuable materials using coal-derived CO_2 selected for NEDO projects
- Oct. Stress Reverse Forming™ process adopted for production of automobile parts using 1.5GPa-grade ultra-high-strength cold-rolled steel
- Nov. Developed FM1300S nickel-free alloyed steel powder
- Nov. JFE Topology Optimization Technology used in battery protection chassis structures
- Dec. Initiated operations at a plant for battery materials (anodes) via a joint venture in China
- Dec. Collaborated with Nucor and CSI in the U.S.
- Dec. Fired up No. 4 blast furnace (fourth operating cycle) in Kurashiki district
- Dec. Obtained ISO 45001 certification for occupational health and safety management systems at Fukuyama
- Dec. Won 56th Machinery Promotion Award, Japan Society for the Promotion of Machine Industry Chairman's Prize for the development of high-efficiency, ultra-narrow gap welding system

2022
- Jan. Use of hydrogen in steelmaking process adopted as NEDO Green Innovation Fund Project
- Jan. Introduced training simulator at Fukuyama district that uses mixed-reality technology
- Jan. Developed Denjiro™ insulation-coated pure-iron powder for soft magnetic composites
- Feb. JFE Steel and Tohoku University set up the Collaborative Research Laboratory for Green Steel
- Mar. Finished transition to open environment for core systems at head office
- Mar. Won 68th (fiscal 2021) Okochi Memorial Foundation Technology Award for HBL® Series of high-strength thick steel plate with low yield ratio for building structures
- Mar. Endorsed the Ministry of Economy, Trade and Industry GX League Basic Concept for Green Transformation

JFE Engineering (Engineering Business)

2021
- Apr. Inaugurated JFE Environment Technology Co., Ltd.
- Apr. Finished construction and launched operations of the Onahama Biomass Power Plant with world-leading power generation efficiency
- June Established and started operations at Mori Binary Power LLC, a geothermal power generation company
- July Entered waste processing business in Malaysia
- Aug. Established Myoko Green Energy Co., Ltd. to comprehensively operate gas and water utilities
- Oct. Started commercial operations of West Japan PET Bottle MR Center (J&T Recycling Corporation)
- Oct. Decided to commercialize a 112,000kW woody biomass single-fuel combustion power plant, one of the largest in Japan, in Tahara, Aichi Prefecture
- Nov. Developed three new types of construction robot
- Nov. Entered into agreement with NTT Docomo, Inc. to jointly study the creation and commercialization of DX solutions
- Nov. Finished construction on the Kelani Bridge in Sri Lanka
- Dec. Establishment of a Promotion Council for Electric Garbage Trucks and Battery Exchange Stations
- Dec. Participated in large-scale waste to energy plant business in Vietnam

2022
- Jan. Entered into business alliance with Ishii Iron Works Co., Ltd.
- Feb. Successfully produced methanol from waste, a first in Japan
- Mar. Opened 5G Innovation Plant testing facility with high-speed wireless communications environment inside an actual large plant
- Mar. Finished new office building at Tsu Works

JFE Shoji (Trading Business)

2021
- May Started operations of JFE Shoji Steel Service Center Bajio, S.A.P.I. de C.V., an automobile service center in Mexico
- June Entered into strategic partnership with Enedym Inc. in Canada
- July Received highest "Eruboshi" certification (three starts) for a company that promotes women's participation and advancement in the workplace

2022
- Jan. Decided to expand processing functions at Kyushu-Tech Corporation
- Mar. Made an additional investment in Ton Dong A Corporation, a steel sheet manufacturer in Vietnam

Japan Marine United (Shipbuilding Business)

2021
- June Obtained Statement of Feasibility from DNV for newly-developed semi-submersible floating platform design for large wind turbines
- Aug. Received order for the Arctic Research Vessel
- Sep. Obtained certification from the Minister of Land, Infrastructure, Transport and Tourism for a new plan to enhance JMU's business foundation based on the Act on Strengthening Maritime Industrial Base

2022
- Jan. NEDO's Green Innovation Fund is granted for the Joint Project for Mass Production and Reduction of Costs of Floating Offshore Wind Farms
- Mar. Successfully demonstrated navigation of automated vessel for the Nippon Foundation MEGURI2040 Autonomous Ship Program (DFFAS) in which Japan Marine United participates
- Mar. Received order for special modification work on the Helicopter Destroyer "*Kaga*"

Special Feature: The JFE Group's Challenge (1)

1 Advancing the Commercialization of the Wind Power Generation Business
Offering a Full Lineup Supply Structure

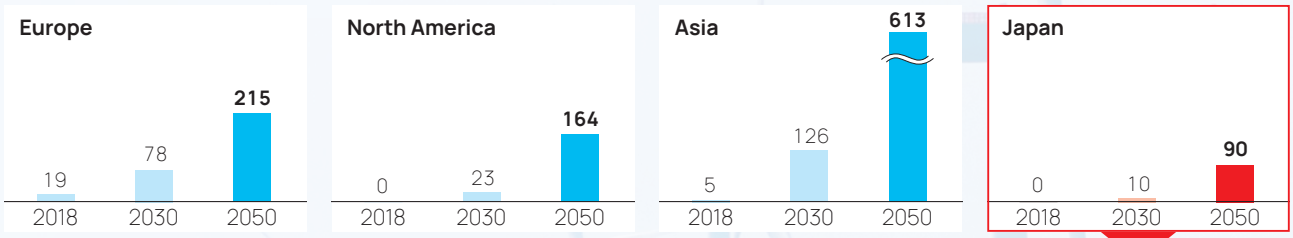
The Japanese government has positioned wind power generation as a key part of its Green Growth Strategy on the way to becoming carbon neutral by 2050. The JFE Group is working to commercialize the offshore wind power generation business by leveraging its comprehensive capabilities, centered on the engineering business.

Market Trends in Offshore Wind Power Generation and Position in Japan

Offshore Wind Power Generation Gaining Momentum in Japan and Globally

Offshore wind power generation has mainly been developed in Europe and China thus far, but is poised to expand in Japan, other Asian countries, and North America. In Japan, the government is targeting projects for offshore wind power generation capacity of 10 million kW (10 GW) by 2030 and 30–45 million kW (30–45 GW) by 2040, signaling strong growth ahead. Bottom-fixed offshore wind power is taking priority over floating platforms, and in the market for bottom-fixed monopiles, demand for steel materials is set to expand to 100,000 tons per year by 2025 and over 200,000 tons per year by the 2030s. There is also strong potential for growth in floating platforms, where technologies are being developed to enable a broad scope of installations.

Offshore wind power generation Total installed capacity forecast (GW)



Source: IRENA "Future of Wind" (2019), Japan Wind Power Association

Outlook for monopile steel demand in Japan (JFE's own forecast)

Steel material volume 2025	Steel material volume 2030s
100,000 tons per year	200,000 tons per year

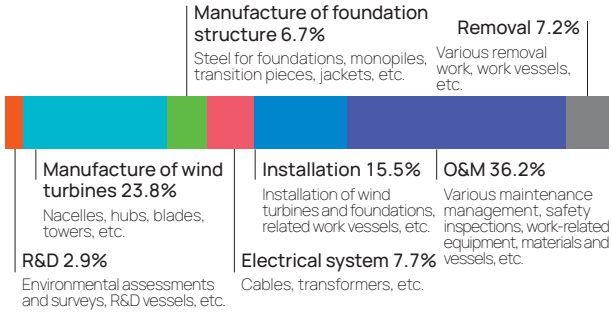
Issues Preventing Expansion of Offshore Wind Power Generation in Japan

Need for Competitive Robust Supply Chains in Japan

As offshore wind power gains traction in Japan, it is likely to have significant economic ripple effects on related industries and boost regional revitalization, considering the tens of thousands of parts required in power generation equipment and business scale on the order of several hundreds of billions of yen. However, a majority of the offshore wind power industry is currently located in foreign countries.

Forming a competitive and robust supply chain in Japan is an extremely important issue from the standpoint of economic security and energy security, including energy self-sufficiency and ensuring a reliable supply of electricity. In order to encourage the formation of this supply chain, the government is encouraging capital investment with subsidies and tax incentives for companies and setting goals for public–private coordination that includes industry players.

Overview of offshore wind power supply chain (for bottom-fixed platforms): Involves a large number of parts across broad swaths of the industry



Three Targets in Government's Vision for Offshore Wind Power Industry (First)

Rollout target	Create projects for 10 million kW by 2030 and 30–45 million kW, including floating-type wind power generation, by 2040
Domestic procurement ratio target	60% domestic procurement ratio by 2040
Cost target	Bottom-fixed wind power generation cost of ¥8–9/kWh by 2030–35

The JFE Group's Initiatives (Functions Only JFE Can Provide)

Provision of Full Lineup Supply Structure That Maximizes Group Business Know-How

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 helping 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.

Material production	JFE Steel	Manufacture of high-quality, extra-heavy steel plates for the fabrication of foundations (establishment of a mass production system in fiscal 2023)
Manufacture of foundation structure	JFE Engineering	Construction of a plant to manufacture monopile foundations, a Japan first (plans to ramp up operations in April 2024)
	JMU	Development and testing of floating platform system (in progress)
Installation	JMU	Construction of work vessels, including self-elevating platform (SEP) vessels
O&M	JFE Engineering	Evaluation of commercialization by relying on knowledge of construction and operations for onshore wind farms and various types of plants
	Group companies	Provision of business know-how
Total	JFE Shoji	Creation of supply chains with know-how accumulated in steel, raw materials, and equipment businesses

Synergies from Diverse Businesses and Group Collaboration

The JFE Group's businesses

Steel business	Engineering business	Trading business	Shipbuilding business	Group companies
(JFE Steel)	(JFE Engineering)	(JFE Shoji)	(JMU)	

Maximize use of Group's business know-how

Provide full lineup supply structure for offshore wind power generation

Material production	Manufacture of foundation structure	Installation	O&M (operations and maintenance)
High-quality, extra-heavy steel plate	Bottom-fixed foundation (monopiles, jackets) Floating platform system (semi-submersed)	Work vessels (SEP vessels) Submarine cables unloading pipe installation	Remote monitoring and control technology Offshore support vessels

Commercialization of Offshore Wind Power Generation Business

Greater contribution to reducing CO_2 in society and solving climate change issues
⇒ Increase corporate value by tapping into business opportunities

Realization of Carbon Neutrality by 2050

Position of offshore wind power

Addressing climate change
Decarbonization
Carbon neutrality

Energy security
Economic security
Energy self-sufficiency
Stable supply of electricity
Russia's invasion of Ukraine

Japanese government's advocacy for renewable energy

Sixth Strategic Energy Plan
(October 2021 Cabinet decision)
Outlook for new energy mix
Improvement of self-sufficiency, reduction of CO_2 emissions, and rising electricity costs

Maximize introduction of renewable energy
Offshore wind power generation key to turning renewable energy into a core power source

Issues with wind power generation

Formation of competitive robust supply chains in Japan

Special Feature: The JFE Group's Challenge (1)

1 Advancing the Commercialization of the Wind Power Generation Business
Offering a Full Lineup Supply Structure

JFE Group companies are generating synergies through collaborative initiatives to commercialize the offshore wind power generation business. Below, we introduce the strengths and initiatives at each company.

JFE Engineering — Bottom-fixed foundation structure manufacturing business

Aiming to build a full lineup supply structure for bottom-fixed foundations

Offshore wind power generation is a promising source of green energy, and offshore wind power projects are ramping up in Japan. Foundation structures that support wind turbines are broadly divided into bottom-fixed type and floating type. Monopiles (MP), one of the bottom-fixed foundations, are economical where sea floors are at shallow depths of up to 30 meters, and jacket foundations can be used on sea floors at depths of up to 60 meters.

JFE Engineering began construction on Japan's first monopile fabrication plant in June 2022. The construction site is located on JFE Steel's West Japan Works (Fukuyama district), and the new plant will be supplied with extra-heavy steel plate from JFE Steel (Kurashiki district). The monopile plant will be able to produce 100,000 tons annually (equivalent to around 50 foundations for 12-MW-class offshore wind turbines) while aiming to increase efficiency in welding volume and assembly processes. The new plant is to be completed by the end of December 2023 and will start full-scale operation from April 2024 after three months of trial operations.

Tsu Works has extensive experience in large-scale steel structures, such as steel bridges and jackets for runway D at Haneda Airport. Tsu Works plans to manufacture and supply jacket foundations and transition pieces, a part that connects monopiles to wind turbine towers.

Using our extensive experience and manufacturing technologies accumulated over more than 50 years, JFE Engineering is carving out a solid position in the foundation structure field for offshore wind power generation and is ready to contribute to Japan's effort to become carbon neutral.

Tetsuo Takahashi

Offshore Wind Power Project Team
Head of Foundation Unit

JFE Engineering — O&M for offshore wind power generation

Entry into O&M business for offshore wind farms with backing of experience and Group resources

For more than 25 years, since 1996, JFE Engineering has engaged in EPC, equipment supply and maintenance business for onshore wind farms (131 wind turbines at 25 sites). Backed by its extensive experience and knowledge of onshore wind power generation and maximizing the technologies at JFE Group companies, JFE Engineering is developing technologies and alliances to enter O&M field for offshore wind farms.

One of the issues in offshore wind farm maintenance is marine transportation to the offshore site. To further reduce the maintenance cost, it is important to be able to minimize the number of marine accesses. To achieve this, in addition to planned preventive maintenance, it is imperative to establish predictive detection technology through the analysis and management of data from various sensors such as image, vibration, and sound, as well as remote monitoring technology that enables fault diagnosis from far away. Moreover, it is necessary to reduce the work performed by people offshore and underwater through the use of drones and autonomous underwater vehicles (ROV/AUV). The development of inexpensive maintenance equipment is also needed for on-site repairs without carrying back to port. The development of these technologies and equipment can be accomplished through collaboration between external companies and JFE Group companies that have knowledge and expertise in the steelmaking business, which could lead to greater business opportunities.

Satoru Aoki

Offshore Wind Power Project Team
Head of O&M Unit

JFE Steel

Production of extra-heavy plates

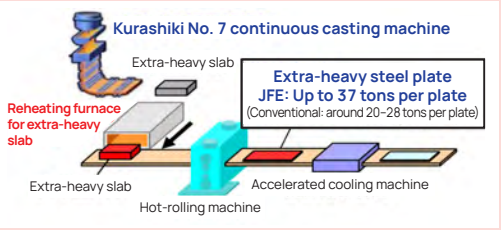
Naoto Hirata

General Manager,
Plate Business Planning
Department

Extra-heavy steel plates support tomorrow's green energy

JFE Steel has been preparing to manufacture extra-heavy steel plates using its No. 7 continuous casting machine (7CCM), which began operating in Kurashiki. In recent years, the size of offshore wind turbines has been increasing, and the foundation structures that support them have also grown larger. When fabricating these large foundation structures, manufacturing efficiency needs to be increased by reducing the amount of welding work on large steel plates. JFE Steel is making capital investment in the steel plate plant (Asia's largest class) in order to supply large volumes of high-quality, extra-heavy steel plate using ultra-large slab produced in 7CCM.

We look forward to the day that the extra-heavy steel plates manufactured by JFE Steel will be used in offshore wind turbines, supporting Japan's future energy demand in the near future.



JFE Shoji

Building a supply chain to contribute to the offshore wind power industry

Akira Satoh

Staff Manager of Business
Development Center, Business
Collaborating Promotion Team

Helping reduce costs and maximize regional economic ripple effects in Japan

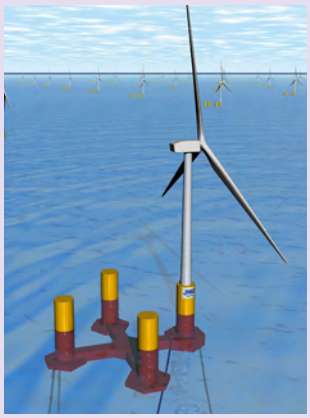
Offshore wind power generation is a final resort to turn renewable energy into a core power supply, and the government's Vision for Offshore Wind Power Industry targets a 60% domestic procurement ratio by 2040 as Industry's target, in a bid to spur the creation of a supply chain in Japan.

JFE Shoji aims to maximize the ripple effects on national and regional economies by proposing optimal solutions to customers and building a supply chain centered on the resources of JFE Group companies and existing partners, which are potential suppliers, while leveraging its accumulated business acumen in the sale of steel, processed products, raw materials, and machinery.

JFE Shoji will contribute to the realization of carbon neutrality and the development of the offshore wind power industry by offering choices from a number of suppliers (including global suppliers) that can help reduce costs.

Japan Marine United

EPCI* of floating platform system for wind turbine and construction/maintenance support vessels for wind farms



Next-generation, semi-submersible floating platform

* Engineering, Procurement, Construction, and Installation

Developing floating platform system while using the Green Innovation (GI) Fund

Japan Marine United Corporation (JMU) has finished obtaining feasibility certification from Det Norske Veritas (DNV) for the development of next-generation, semi-submersible platform ideal for sea condition around Japan, while leveraging its experience from participating in a floating offshore wind farm research project off Fukushima. Since March 2022, as a leading member of the consortium, JMU has been awarded to use NEDO's Green Innovation (GI) Fund to advance R&D toward commercialization. JMU aims to establish mass production and lower the overall costs of floating platform system, including mooring and installation work, in addition to engineering and construction of the floating platform itself. Recently, using GI Fund, JMU finished construction at its Maizuru Works on a one-ninth scale model of a floating platform for the purpose of testing a hybrid mooring system off Akita. JMU is also currently constructing its second and third SEP vessels and is considering the construction of cable-laying vessels, anchor handlers, and service operation vessels for use in construction and O&M of wind farms.

SEP vessels (third vessel under construction)

Masaki Iwamoto

Head of Offshore & Engineering Project Department, Offshore & Engineering Division

Special Feature: The JFE Group's Challenge (2)

2 Contributions to Resolving Climate Change —Aiming for carbon neutrality by 2050

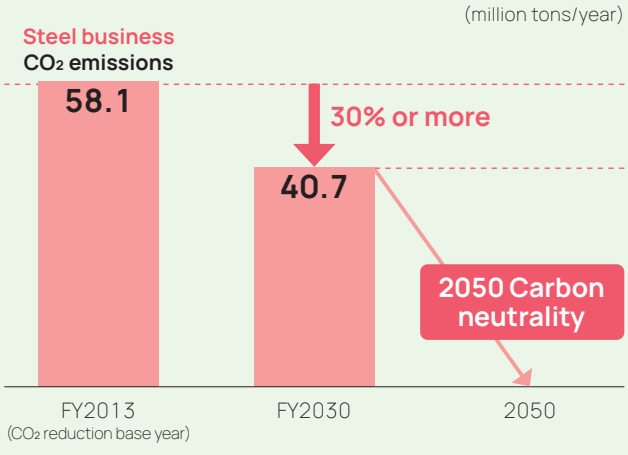
Having become an essential part of the sustained development of society and the safe and comfortable lives of people, the JFE Group believes that climate change is a serious management issue that may affect its ability to sustain growth and improve corporate value over the medium to long term. We will 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

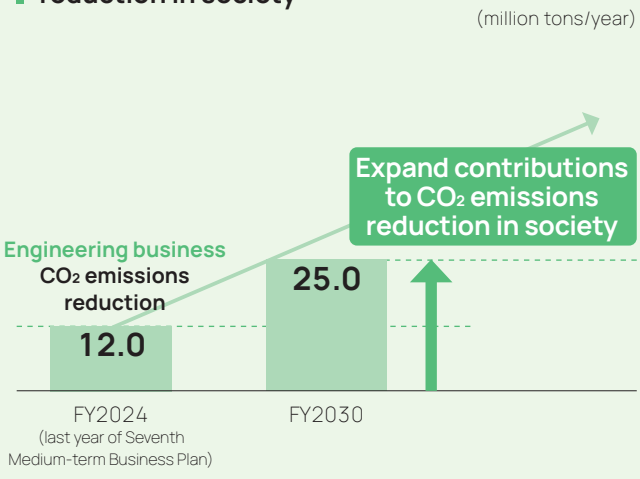
In 2021, the JFE Group formulated the JFE Group Environmental Vision for 2050 with the aim of becoming carbon neutral by 2050, positioning climate change initiatives as one of the most important issues in its Seventh Medium-term Business Plan. In formulating this vision, we will systematically work to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

In the steel business, we aim to cut CO_2 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 CO_2 emissions by the end of 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 CO_2 in society as a whole by expanding and advancing renewable power generation and carbon-recycling technologies, by supplying high-performance steel products, 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



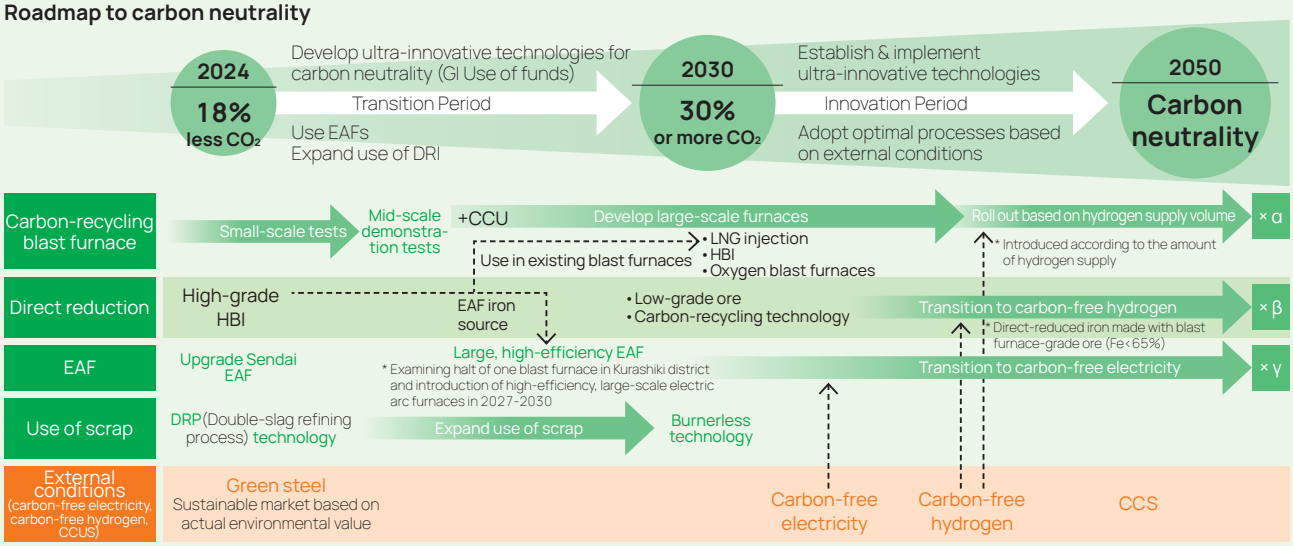
Engineering business
Expand contributions to CO_2 emissions reduction in society



Outline of Process Conversion to Become Carbon Neutral

- Introduce the most proven technologies while pursuing multilayered technology development
- Aim to become carbon neutral by 2050 by applying optimized processes to steelworks

Roadmap to carbon neutrality



Development of Ultra-Innovative Technologies

Experiments related to the project of using hydrogen in ironmaking commissioned and subsidized by NEDO in order to become carbon neutral

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 the New Energy and Industrial Technology Development Organization (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 by constructing development facilities in the same district.

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

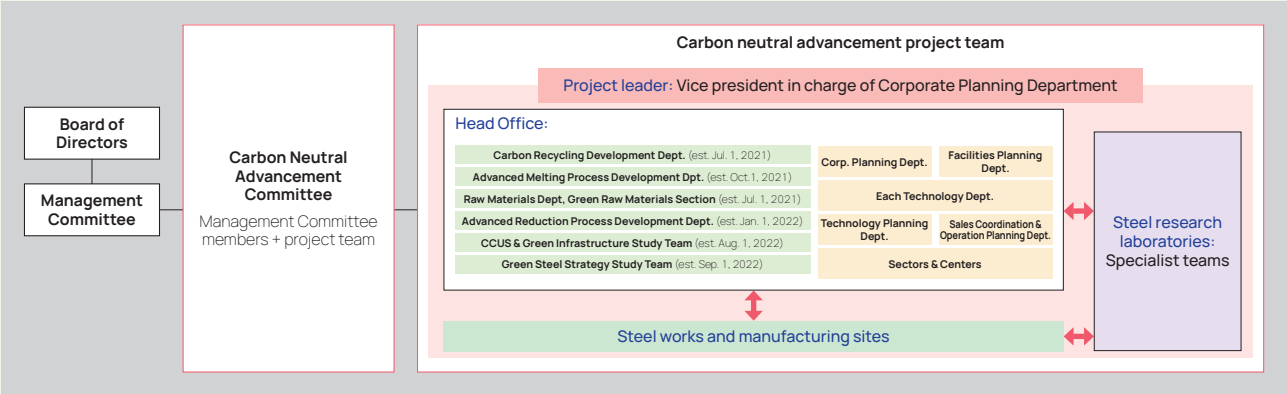
Issuance of Transition Bonds

The JFE Group's Environmental Vision for 2050 requires significant funds for capital investments and R&D. In fiscal 2022, the JFE Group publicly issued 30 billion yen in transition bonds. These bonds were selected as a model example for the Ministry of Economy, Trade and Industry's Climate Transition Finance Model Project for 2021—a first in Japan's manufacturing industry. The raised funds will be allocated to capital investments, operating capital and R&D for initiatives related to conserving energy and increasing efficiency, producing eco-products, developing ultra-innovative ironmaking processes, and promoting renewable energy. We believe these bonds will also lead to the diversification of fundraising methods, and we will pursue the optimal procurement of funds through various means.

2 Contributions to Resolving Climate Change —Aiming for carbon neutrality by 2050

Carbon Neutral Promotion Structure for Steel Business

In October 2020, JFE Steel created a companywide project team that reports directly to the president to guide efforts toward becoming carbon neutral by 2050, including by developing innovative technologies and working to realize practical application. Additional units set up from July 2021 are now helping to reform internal structures and accelerate initiatives to advance toward carbon neutrality.



Takashi Watanabe
Manager, Technology Planning Dept.

Moving from every angle to become carbon neutral

The JFE Group creates and manages short- and medium-term plans for reducing CO_2 emissions, and also creates longer-term roadmaps for becoming carbon neutral by 2050. In the Green Innovation Fund Project, the JFE Group is working closely with NEDO and consortium members to efficiently engage in R&D in carbon neutrality from various perspectives. The challenge of becoming carbon neutral will require painstaking efforts to gradually create new and change existing ironmaking processes. The cost will be sizable, and with no clear solution in sight, we must consider a way forward that includes policy assistance from the national government. Although the issues are daunting, with the cooperation of everyone in relevant departments, I believe we can make steady progress toward becoming carbon neutral in the future.

Aiming to create world's first carbon-recycling blast furnace

Carbon recycling entails the capture of CO_2 as a carbon resource and reusing it in various carbon compounds. To incorporate this initiative in blast furnaces, we are developing carbon-recycling blast furnaces, but face many hurdles because this technology has not been proven anywhere else in the world. In coordination with the ironmaking research department, which is researching technologies for controlling reactions within the carbon-recycling blast furnace, we will move steadily toward the commercialization of carbon-recycling blast furnaces. First, we plan to construct a small-scale pilot blast furnace in the Chiba district and commence trials with the aim of sorting out technical issues. We will develop technologies with the intention of delivering to customers steel produced in carbon-recycling blast furnaces.

Hajime Wakai
Manager, Carbon Recycling Development Dept.

Information Disclosure Based on the TCFD Recommendations

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

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 CO_2 emissions in iron and steelmaking 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 CSR 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 CO_2 emissions by the end of fiscal 2030

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 CO_2 emissions in the steel business, making greater contributions to CO_2 reductions in society, and taking initiatives in the offshore wind power generation business. We are taking steps to reduce CO_2 emissions in the steelmaking process, which has a major impact on the environment, 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 CSR 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 CSR 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 CSR, 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.

2 Contributions to Resolving Climate Change —Aiming for carbon neutrality by 2050

Methods of monitoring issues relating to climate change

The JFE Group CSR Council, the Group Management Strategy Committee, and the Management Committee monitor issues 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-CO_2 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 CO_2 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 JSIF 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 CO_2 emissions on the path toward achieving carbon neutrality by 2050, namely a reduction of at least 20% in CO_2 emissions by the end of fiscal 2030, compared with fiscal 2013.

In May 2021, the JFE Group announced new targets for reducing CO_2 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 end of fiscal 2030 CO_2 emissions reduction target to a 30% or more, compared with fiscal 2013. Moreover, JFE Steel's major domestic group companies set CO_2 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 CO_2 emissions.

TCFD Content Index

TCFD disclosure recommendations	Summary of TCFD recommendations	JFE's disclosure (relevant sections in the CSR 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 greenhouse gas (GHG) emissions, and the related risks	Climate change (Metrics and targets) Environmental data
	c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	Important management issues (materiality) Climate change (JFE Group Environmental Vision for 2050) Climate change (Metrics and 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 CO_2 generating countries in order to achieve the 2°C target. Under the 1.5°C scenario we newly evaluated, 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	
1.5°C /2°C scenario Important factor 1 Decarbonization in steel production processes	Rising societal demands for decarbonization towards steel production processes	Implementation of innovative technologies that achieve large-scale decarbonization	• 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	Opportunities	↗ Development and implementation of innovative technologies on top of existing technologies
		Implementation of carbon pricing		Risks	↗ 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)
1.5°C /2°C scenario Important factor 2 Increase in demand for the effective use of steel scraps	Increased focus on electric arc furnace method, which emits low levels of carbon	Rising expectations toward electric arc furnace steel	• Replacement of converter steel with electric arc furnace steel • Increase in JFE Group's production of electric arc furnace steel	Opportunities	↗ 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
		Increase in scrap generation			
1.5°C /2°C scenario Important factor 3 Change in demand for steel for automobiles and others	Change in automobile needs	Increase of EV motors	• 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	Opportunities	↗ 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-CO_2 steel
		Decrease of internal combustion engines			
		Reduction of weight and the increased use of multi-materials			
	Rising demands for eco-friendly raw materials	Demand for decarbonization and recyclability		Risks	→ Limited impact of the increased use of multi-materials
1.5°C /2°C scenario Important factor 4 Increase in demand for solutions promoting decarbonization	Shifting to decarbonization	Increase in demand for solutions promoting transition toward decarbonization	• Renewable-energy power generation plants • Low-carbon business (Eco Solution) in developing countries using Best Available Technology (BAT) developed and commercialized in Japan	Opportunities	↗ 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
		Overseas development of energy conservation technologies			
4°C scenario Important factor 5 Procurement of raw materials becomes unstable due to increased frequency in climate disasters	Intensifying climate disasters alongside rising temperatures	Procurement of raw materials becomes unstable	• Procurement of raw materials becomes unstable	Risks	→ Undergoing concrete measures "Alternative procurement methods and source distribution" and "Strengthen capabilities of facilities"
4°C scenario Important factor 6 Damages to business bases due to climate disasters	Intensifying climate disasters alongside rising temperatures		• Increased damages due to typhoons and rainstorms • Increased damages due to water shortages • Flood damages due to rising sea levels	Risks	→ Flood and water shortage response measures already in motion → Flood impacts due to rising sea levels can be coped with the current measures
4°C scenario Important factor 7 National resilience	Intensifying climate disasters alongside rising temperatures	Increase in importance of strengthening infrastructure	• Contribution with steel and related products that help strengthen infrastructure	Opportunities	↗ Strengthening infrastructure with steel and related products
		Increased demand for disaster prevention products			

Human Capital

The JFE Group proactively engages in human capital management and aims to enhance corporate value over the medium and long terms by investing in human resources and drawing out the best of their abilities and vitality. In particular, the JFE Group is focusing efforts on ensuring occupational safety and health, the basis for its diverse human resources to work with motivation, and on securing and training diverse human resources through initiatives to hire and train personnel and create workplaces that motivate workers.

Securing and Training Diverse Human Resources

Basic Stance

The JFE Group views the securing and training of diverse human resources as one of its materialities. In order to beat global rivals in an increasingly complex, diversifying and changing business environment, we believe it is essential to invest in human capital. We are updating workplaces so that all personnel can utilize their abilities to their fullest and endeavoring to accumulate and pass down to the next generation the technologies and skills of veterans.

Diversity and inclusion

Positioning the promotion of diversity as an important management issue, the JFE Group is advancing initiatives to draw out all the abilities of its employees of diverse backgrounds, such as gender, nationality, value systems, and varying lifestyles, in order to rapidly and properly respond to quickly changing business conditions.

Management must be committed to diversity to see it flourish. Working in unison, we are formulating and rolling out Companywide policies that include setting up diversity 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 starting in fiscal 2022, set a new target for women to be in at least 10% of management positions (section manager on up) by 2030 (at least 20% in management and sales divisions). At each operating company, we are working to train and promote women to management positions by holding networking events inside and outside their companies, such as social events for female employees, mentoring programs and external training opportunities. At JFE Shoji, for example, we hold joint training for female employees and their managers, and aim to nurture a career support mindset among managers and career development mindset among women.

We strive to employ women at manufacturing sites. Since 2012, JFE Steel has targeted a hiring ratio of at least 10% women for regular positions, and many female employees currently work at steelmaking sites Companywide. JFE Steel has made work environments better for female employees, such as by updating infrastructure in shower and locker rooms, and by enhancing training for entry-level positions. JFE Steel also focuses on measures to balance work with life events, enhancing systems for achieving work–life balance and creating childcare centers at major business locations, so women can pursue careers without worrying about life events.

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.

JFE Group proactively hires and promotes diverse personnel, including experienced workers from different sectors, and its mid-career hires represent one-fourth the total number of hires. At JFE Engineering, approximately 80 local employees of overseas Group companies are constantly rotated to Japan in order to nurture a corporate culture of mutual understanding that bridges differences in cultures and customs. Moreover, we continue to promote cultural reforms inside companies by organizing teams of diverse employees to work across organization boundaries.

Noteworthy examples of successful efforts are shared among operating companies, encouraging further advances in diversity across the entire JFE Group.

Advancement of personnel training

The JFE Group is unified in its efforts to improve the abilities of each and every employee, while placing emphasis on the training of global human resources for expanding overseas businesses.

Accumulation and passing down of technical knowledge and skills

At JFE Steel, we believe improving the technical knowledge and skills of all employees at manufacturing sites is a source of competitiveness for supplying high-quality products. Through our personnel training system, we quantitatively measure, analyze, and deploy the skill levels of each employee. As generations of employees change at worksites, it is important to raise the skill

levels of young employees in particular. By training young employees based on technical data stored in systems, we are able to quickly raise their skillsets to higher levels.

Using mixed reality (MR) and other IT tools, we are training employees with simulations that cannot be experienced in the classroom for a more effective and efficient curriculum. We are thus making improvements toward a more in-depth approach to training even higher-quality personnel.

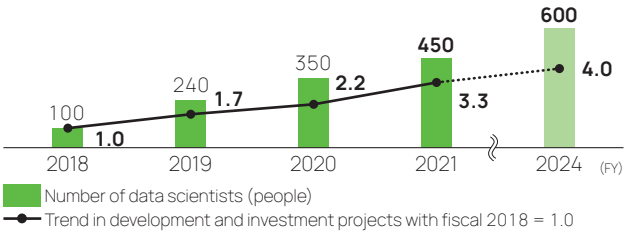
Training of data scientists

The JFE Group is active in securing and developing the human resources necessary to pursue a DX strategy in each business domain.

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 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 2021, we have trained about 450 in-house data scientists, increasing by 3.3 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 2024.

Training of data scientists (JFE Steel)



Securing and developing global human resources

It is essential for the JFE Group to secure and develop global human resources to enhance its competitive strength in the global market.

JFE Steel provides overseas training opportunities for its young clerical employees to work at local offices and subsidiaries, for young engineers to give technical guidance at overseas affiliates, for mid-carrier employees to obtain MBAs overseas, and for managers to study foreign languages overseas, in order to develop the assets required for leading a global business. JFE Steel has provided opportunities for global human resources development to approximately 330 employees since 2014.

JFE Engineering provides training programs for human resources involved in overseas projects according to the skills necessary for each position. Project managers learn quality control, process control, and other project management skills, and administrators learn tax, legal, trade and transportation, personnel administration, risk management, and other skills, both of which are designed to gain the comprehensive skills required to carry out overseas projects.

JFE Shoji creates opportunities for young employees to take training, in addition to dispatching them overseas for training and studying abroad. Talented overseas employees hired at overseas local affiliates and operating companies are provided with overseas staff management training at the head office in Japan, in addition to extended-stay training in Japan to eventually promote them as executives. Through these and other efforts, JFE Shoji is promoting bilateral globalization with overseas Group companies.

Creation of rewarding workplaces

In order to sustain development, the JFE Group is conducting a sweeping review of work styles with the understanding that it is essential to establish work styles where all employees feel proud and motivated about their work, while creating new value with high productivity.

When responding to the state of emergency during the COVID19 pandemic, new lifestyles and work styles became entrenched throughout society. Eyeing these changes, the JFE Group has updated its work environments and internal systems so that its employees can work safely and without worry, while maximizing their abilities.

JFE Steel is promoting a new work style that helps increase employee productivity, maximizes output, and improves engagement. As specific measures, JFE Steel is promoting telework by expanding its work-at-home system, introducing a core-less flextime system, moving to unassigned desks at the head office, rolling out online chat and web conference tools, advancing robotic process automation (RPA), promoting paperless workflows, and removing the use of seals with workflows. Through these initiatives, JFE Steel is shifting to a high-value-added work style while furthering changes in the corporate culture. The company also conducts an employee engagement survey once per year in order to periodically understand employee awareness, identify issues related to work motivation, and examine related measures. These measures are also being undertaken at operating companies.

JFE Engineering has created flexible work styles through a remote work system introduced in fiscal 2021, which allows employees to choose to work at home or at shared office spaces in approximately 400 locations across Japan, in addition to initiatives in steel centered on the Smart Work Promotion Office.

JFE Shoji is examining what the new office will look like in the future with a robust communications environment, launching a project team to examine new work styles with the aim of realizing more efficient and flexible ways to work.

Ensuring Occupational Safety and Health

Basic Stance

The JFE Group has identified ensuring occupational health and safety as a material issue. 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

In its varied business activities, the JFE Group has worksites where work carries with it a relatively high risk of accidents and injuries, such as work performed in high places, under high temperatures, and with heavy objects being carried around. With diverse employees working on-site, including older people and women, our basic requirement is that each and every employee can work without worrying about their health and safety, by maintaining safe work environments and preventing workplace accidents.

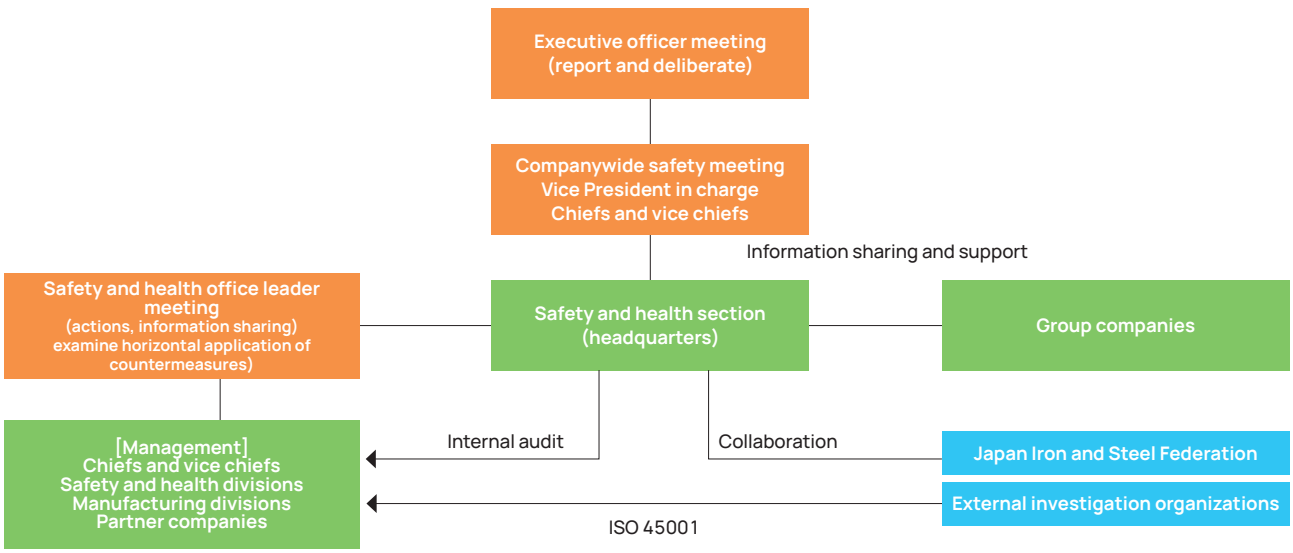
Management structure for health and safety

JFE Steel conducts risk assessments as an activity to reduce the risk of accidents. By assessing risks at the planning stages of equipment installations and before scheduled and unscheduled equipment maintenance, JFE Steel prevents and reduces the risk of accidents. We aim to lower the risk of injury caused by the actions of workers by pursuing the safest measures for operating equipment.

In the event that an occupational injury occurs despite these efforts, JFE Steel spares no effort in investigating the cause of the accident and preventing a reoccurrence. A committee to investigate the accident is rapidly established to delve into the causes of the accident in the relevant department and proposes countermeasures, following through until completion of the process. The results of the investigation are shared by the committee with the relevant department and the labor union, while steps are taken to prevent a similar accident from occurring. Moreover, for serious accidents, countermeasures are applied horizontally across the entire company, and the Board of Directors is kept abreast of progress until the countermeasures are fully implemented across the Company. This framework is described and thoroughly operated in accordance with Companywide rules.

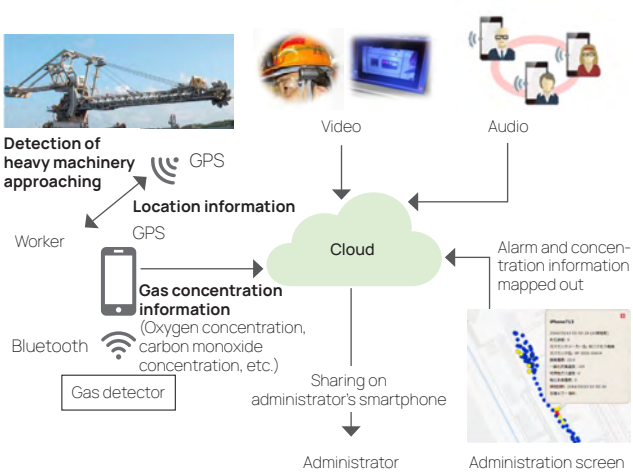
When an occupational injury occurs, the Company immediately reports it to the JISF. After the cause of the accident is determined and countermeasures are decided, the Company follows up with another report. When a serious accident occurs, the Company immediately submits a report on safety, disaster preparedness, and environmental conditions to the Ministry of Economy, Trade and Industry, the Ministry of Health, Labour and Welfare, and the JISF. The JFE Group also endeavors to prevent accidents throughout the entire steel industry.

JFE Steel's Management Structure for Health and Safety



Securing the safety of employees using AI

In the steel business, 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. We will continue to strive to secure the safety of workers using the latest technology.



Activities of Group companies

JFE Steel	JFE Engineering	JFE Shoji
JFE Steel has set the objective of achieving an industry-leading safety record, and is putting into practice self-guided safety activities. Management is also creating an occupational health and safety management system based on the ISO 45001 international standard. Four business sites have already obtained this certification, and JFE Steel is working toward getting all domestic business sites certified during fiscal 2022.	JFE Engineering has set shared Company-wide 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. As a new initiative, JFE Engineering is taking a multi-faceted approach to occupational health and safety management with the use of IT for the surveillance and detection of risks.	JFE Shoji aims to achieve zero serious injuries at 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.
Lost-work injuries rate (FY2021) KPI: −0.10 Results: 0.10	Lost-work injuries rate (FY2021) KPI: −0.25 Results: 0.10	Lost-work injuries rate (FY2021) KPI: −0.45 Results: 0.60

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. We are focusing our efforts on helping employees and their families maintain and improve their health, such as preventing passive smoking by reducing the ratio of smokers at work. In fiscal 2021, the JFE Group achieved its KPI target of reducing the percentage of smokers (total at operating companies) by 1.5% annually.

External recognition

We believe that health and productivity management will be greatly facilitated not only by the individual actions of Group companies but also by recognition from outside. Accordingly, we actively cooperate with outside surveys.

Name of SRI index, etc.	Description of selection criteria, etc.	Evaluation, etc.
Health & Productivity Stock Selection Program Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500)	JFE Holdings was designated as a Health & Productivity Stock 2022 by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange. The Health & Productivity Stock Selection Program choses companies from among stocks listed on the Tokyo Stock Exchange that have excelled at strategically implementing employee health management from a business management viewpoint. These stocks are presented as attractive companies to investors that emphasize improvements in corporate value over the long term. Additionally, JFE Holdings and Group companies (JFE Steel and JFE Engineering) were selected in 2022 for the Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500), which certifies organizations that implement outstanding health management in collaboration with health insurance society members. This marks the second time, after a four year hiatus, that JFE Holdings has been selected as both a Health & Productivity Stock and a Health & Productivity Management Outstanding Organization.	2022 ホワイト500 2022 健康経営銘柄
DBJ Employees' Health Management Rated Loan Program	This is the first financing option in the world to incorporate special health management ratings, which uses the unique screening system developed by the Development Bank of Japan (DBJ) to evaluate and select companies with excellent health management initiatives for employees, whereby setting financing terms and conditions according to the evaluation result. The Company was rated as a top-ranking company with excellent advanced initiatives for employees' health management in 2018 in recognition of our advanced health management so far.	DBJ健康格付 2018

Management Foundation

The JFE Group is strengthening its responsiveness to changes in the business environment in order to realize sustained growth in corporate value. In this section, we introduce the system behind this and our initiatives on this front.

Creating the Future with Steel

Steel, a supporter of everyone's lives, still has potential to grow. Our greatest strength is that we engage in all steel-related trading, from upstream to downstream. To create new value, we will continue our journey with steel into the future.

Management Organization

Executive Structure (as of July 1, 2022)

Directors

Nomination Committee Member
Remuneration Committee Member

Koji Kakigi
Representative Director

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.

Nomination Committee Member

Yoshihisa Kitano
Representative Director

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 steel works and overseas business, corporate planning, and IT in JFE Steel Corporation.

Remuneration Committee Member

Masashi Terahata
Representative Director

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.

New appointment

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, 2022)

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 Sansei Technologies, Inc.

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 (current post)
Jun. 2018	Audit & Supervisory Board Member of JFE Holdings, Inc. (current post)

Significant concurrent posts

Professor of Graduate School of Business Administration of Hitotsubashi University
Outside Director of Tokyo Century Corporation

Independent Executive
Nomination Committee Member
New appointment

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 management and development
- Sustainability/Environment
- Finance/Accounting
- Legal/Compliance
- Sales/Marketing

Dialogue with Outside Executives

Outside executives talk about progress of Seventh Medium-term Business Plan and improvements in corporate value

Profile

Masami Yamamoto

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 director of Mizuho Financial Group, Inc. He has been a director of JFE Holdings since June 2017.

Nobumasa Kemori

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

Yoshiko Ando

Ms. Ando joined the Ministry of Health, Labour and Welfare in 1982 and retired in 2018 after serving as Director-General of Policy Planning and Evaluation and Director-General for 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.

Isao Saiki

Mr. Saiki was admitted to the Japanese 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.

Tsuyoshi Numagami

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

In fiscal 2021, the first year of our Seventh Medium-term Business Plan, JFE Holdings' financial results achieved a V-shaped recovery after two consecutive annual losses. However, changes in the external environment, such as COVID-19 and the war in Ukraine, significantly impacted the Company. Please describe the current business environment and any related risks as well as issues to closely follow.

Yamamoto JFE achieved the final-year earnings targets of its current three-year plan in just the first year, fiscal 2021, thanks largely to one-time factors such as improved inventory valuations and spreads for steel materials. However, the current business environment is difficult to forecast for the near future due to volatility in raw material prices, the risk of economic stagnation caused by prolonged fighting in Ukraine and energy issues. By the final year of the plan, the Company's new structure must be able to achieve targets stably regardless of changes, such as those that we've seen recently, in the business environment. The steel business needs to make steady progress with the two major tasks set forth in the plan: shift from quantity to quality and reduce CO_2 emissions to support a low-carbon society. The trading business also has a major role to play in enhancing the value of JFE by providing high-value-added products to global customers as the Company shifts from quantity to quality. Also, the engineering business must evolve beyond 'steel as a material' to focus on creating steel-based structures and providing operation and maintenance services. The strength of the engineering business will become even more apparent from a five- to ten-year perspective, for example, when the offshore wind-power generation business will offer JFE opportunities to further expand by integrating its three businesses as a trinity.

Kemori I am concerned about the external risks of high inflation and global economic recession. In the medium term, JFE plans to make capital and business investments totaling 1.45 trillion yen over four years. If inflation increases, the amount of capital investments will have to be increased, and then if an economic recession were to occur there would be a risk of returns on these investments being delayed, thereby increasing liabilities. So it is important to prioritize our investments. I also would like the Company to be aware that whatever it decides to do, it must be done promptly, at low cost, and with the prospect of enhanced benefit. To this end, it is important to increase productivity and yield per employee by completing the Company's structural reforms and adding to its core strengths. In the engineering business, we have an ambitious plan to achieve sales revenue of 650 billion yen in fiscal 2024 and as much as 1 trillion yen in fiscal 2030, making large-scale M&A essential to achieve these goals. The trading business must also make effective use of M&A, so I would like to see it accelerate its development through excellent deals that contribute to the growth of the Group and enhance synergistic effects.

Numagami It is important to always watch the global political and economic situations and be prepared to respond to the level of risk anticipated. The other key is the trend toward electric vehicles (EVs), which is expected to be a tailwind for JFE in the medium to long term. Electrical steel sheets will be an extremely important product in terms of expanding Company earnings as well as contributing to the global environment. For the time being, battery capacity will remain a bottleneck for EV expansion, so one of the key points will be how to make highly efficient motors, meaning that electromagnetic steel sheets are sure to be profitable. I believe that the technical capabilities of our steel business as well as the global supply chain of our trading business will play major roles.

On the environmental front, JFE has launched various initiatives and policies, including upwardly revising its steel business CO_2 emissions reduction target for fiscal 2030 to 30% or more, up from the previous 20% target. It also adopted an updated roadmap. How do you assess the progress of these initiatives, and what areas do you plan to focus on in your supervision capacity?

Kemori Good progress is being made. We appreciate the fact that the 2030 emissions-reduction target for the steel business was set as 20% or more in September 2020, the earliest in the industry, and then revised to 30% or more in February 2022, earlier than originally planned in the current medium-term period ending March 2025. Going forward, we will focus our supervision on three key points: The first is progress in developing new technologies for carbon-recycling blast furnaces, hydrogen steelmaking, and electric arc furnaces, which the Company is pursuing simultaneously. The second key point is progress in developing, both domestically and overseas, CCUS, green power, and green hydrogen, which are prerequisites for developing the other technologies I just mentioned. The last point is the production costs of each potential new steelmaking method, including in view of possible changes in the external environment. It is impossible to make appropriate decisions without clarifying how much costs will increase compared to the costs of the existing blast-furnace method.

Saiki I understand that huge efforts are being made to achieve carbon neutrality, but as Mr. Kemori has mentioned, the external environment will have an extremely large impact. The market

Dialogue with Outside Executives

has not been very responsive to the uncertain costs of green hydrogen and green electricity, so efforts to gain public appreciation for JFE's efforts will depend on our ability to effectively inform the market about the feasibility of our efforts, including with regard to prospects in the external environment. The currently focus is on technology, but we must consider how also to link this to the Company's business sustainability. Of course, future steelmaking will not be solved by individual companies alone, so we need to work closely with government and industry. We also need to consider our overseas strategy in the context of decarbonization, an remain very conscious of the messages we convey.

Numagami In raising the Company's fiscal 2030 emissions reduction target, the review process maximized the use of available technologies. We appreciate that the Company set an aggressive target. Among the various ultra-innovative steelmaking technologies, I am most interested in the carbon-recycling blast furnace. The fact that it can utilize existing facilities and is expected to use existing raw materials makes it more attractive than hydrogen steelmaking, which is expected to be introduced at an earlier stage. It is important for the world to quickly establish technology to reduce CO_2 emissions from

blast furnaces in Asia, and it is no exaggeration to say that the success or failure of the carbon-recycling blast furnace will depend on it. Therefore, rather than taking time to pursue the best possible technology, there is an argument for prioritizing methods that can be put into to practical use as quickly as possible anyway. But on the whole this is be a highly challenging task that requires a long-term viewpoint, so we will try to balance both perspectives.

With the revision of the Corporate Governance Code and other changes, the roles of outside officers are attracting attention. How do you view your roles as outside directors and what is your perspective at Board meetings, given the knowledge and experiences you have acquired at other companies?

Ando Outside directors need to enhance corporate value by taking the broad view of stakeholders and then adding their perspectives. Also, we always try to step back and look at things objectively. JFE is characterized by its steel, engineering, and trading businesses, each of which has strengths that can be combined synergistically. I consciously try to emphasize Holdings' comprehensive strengths, even in the case of projects involving individual operating companies. In addition, from my experience as a government official involved in labor, I am particularly conscious of issues related to people and organizations. I pay attention to ensuring that work environments allow employees to work with peace of mind, pride, and growth prospects, and ensure that employees can embrace the Company's vision of how it wants to evolve.

Saiki I am very conscious of supervising the Company so that its explanations are truly convincing and its messages are well conveyed when ordinary shareholders and institutional investors learn about its policies and initiatives. JFE runs a serious business, so when we start talking about technical matters we often are aware of not implying too much, particularly beyond the boundaries of current technological limits. But even in such situations, we are always thinking about how we would like situations to develop ideally. This is why I would like to see the Company's future aspirations be incorporated into its press releases and other materials.

Yamamoto Compared to other companies I have experienced as an outside director, JFE's Board of Directors runs smoothly, both functionally and operationally. At our meetings, both directors and corporate auditors are able to discuss issues without distinction, and there is a free and vigorous culture that allows everyone to raise issues and make proposals to the executive side. The executive officers' explanations are to the point and easy to understand, which allows us to efficiently discuss critical issues, including the best directions for the Company to take. In addition, these days the Board must go one step beyond executive management to additionally supervise business strategy itself.

A new skills matrix was published in December 2021. What discussions were held by the Nomination Committee and the Board of Directors in this regard?

Yamamoto We discussed this mainly at the Nomination Committee meeting, so as the chairperson of that committee please let me explain. We first discussed the skills required of Board members, especially outside directors, based on what the Company should be and wants to be. We then identified and defined eight essential skills. As a result, we have reaffirmed that the current members of the Board represent a good balance of skills for our company. I believe that the appointment of foreign nationals to the Board will be an issue for future consideration.

Ando We discussed essential skills mainly in regard to Board members who can respond to key issues faced by JFE. For example, we emphasized sustainability and environment as well as technology and digital transformation (DX) as they will become increasingly important issues in the future. These might seem rather basic, but they are especially important in the case of large organizations. In addition, since Holdings oversees three operating companies, I have included issues on the need for internal directors with respective expertise in these areas to provide a foundation for balanced discussions. We understand, however, that our skill matrix is not a definitive list and that it may need to be revised if changes in the external environment create needs for directors with different skills or a Board with different characteristics.

Numagami As knowledge becomes increasingly sophisticated and specialized, it is important for top management to bring together diverse perspectives, information, and knowledge for comprehensive decision-making that can unite diverse business areas. Each Board member has their own network of daily contacts encompassing various fields of business, government, law, and academia, and what is considered to be obvious and accepted as fact can vary greatly from network to network. Board meetings must bring together a diverse group of people from different networks to hold discussions without concern for what each person's network considers to be common knowledge.

With respect to diversity and inclusion, both key issues, the Company has reviewed its KPIs for the promotion of women to managerial positions. What kind of discussion did the Board have about this?

Ando For KPIs related to female managers and recruitment, we reviewed not only target values but also target categories, such as setting targets by job type and operating company. Since employment environments and job descriptions differ by operating company, we developed KPIs after sorting out the actual conditions and issues at each company. It is regrettable that the KPIs for female managers (10% or more at the section manager level and above, of which 20% or more in management and sales divisions) resulted in a level that is far below the government target,* but the process clearly shows JFE's seriousness, and we hope that people outside the Company will understand our strong commitment to achieving these KPIs. Nevertheless, it is my frank impression that we have not taken sufficient action to date, given the fact that the absolute number of female employees and the number of female executives is low, and the fact that the turnover rate of female employees far exceeds that of male employees over the length of their service. We must seriously investigate the causes of this situation and then make necessary changes, including to the employment management system and corporate culture. I also hope that the discussion will lead to an organizational structure that maximizes the abilities of all employees, including male employees. In addition to KPIs, I would like this review to proceed in the future and each operating company to understand that this is an important part of their overall strategy.

*The Japanese government target is a 30% ratio for women in positions of leadership as early as possible in the 2020s.

Kemori There are two major factors contributing to the low number of female managers at JFE. The first is the small number of women hired. For administrative positions, the KPI for the ratio for women hired is about the same number of men and women, but for engineering positions, the number of women hired is low, which reflects the small percentage of female students in science-related fields. We need to promote our company to increase the number of women who want to join JFE. Second, as Ms. Ando mentioned, the turnover rate for women is high, which reduces the number of potential female managers and thus the number of females in management positions. Currently, we have not set any KPI related to turnover, but it is important to take measures in order to secure candidates for

managerial positions. For example, in addition to confirming the reasons for quitting, it would be helpful to ask female employees if they had wanted to quit in the past and why they decided to remain with the Company, then use such learnings to create more attractive workplaces for women.

Saiki The Equal Employment Opportunity Law came into effect around the time I entered the workforce, and women in career-track positions indeed joined steelmaking companies, but the fact that there are still few women in management positions nearly 40 years later suggests that there is some reason why they cannot stay with these companies for long. On the other hand, there are female executives who are still active despite marriage, childbirth, and child rearing, so I think it is important to communicate their experiences both inside and outside the Company. I also would like to see the executive side of the Company put more effort into promoting women in positions close to the top and then share these success stories.

In CEO Kakigi's message at the beginning of this report, he says that it is important to increase the share price now as well corporate value over the medium to long term. In light of your own knowledge and experience, how can JFE increase its corporate value and remain essential to society?

Numagami Empirical studies have shown that the factors determining total shareholder return (TSR), including stock price and dividends, vary in the short term, but over the long term the key factors are mainly profit and sales growth. In other words, it is important for companies to demonstrate to society and capital markets not only their short-term margin increases and cost reductions, but also how they plan to sustain profitable growth. We have created many scenarios for profitable growth over the current medium term, such as developing carbon-recycling blast furnaces and a solutions-business platform, so I very much look forward to seeing how we can communicate these scenarios to the public. In addition, the profit-per-ton target that we have set for the steel business is an important indicator for internal use, but it needs to be rephrased in a way that is easier to understand for external audiences. For example, if we tell employees to raise ROE they may not know what to do, but if we ask them to raise profit per ton it is easy to understand and a good way to motivate initiatives such as changing the product mix or selling at higher prices. So, when communicating with society and the capital market, we must communicate that if we increase profit per ton by a certain amount, ROE will increase by a corresponding amount and strengthen the Company in the long run.

Saiki It is quite difficult to determine the share price because in fact it is determined by the market. Our current dividend is quite high relative to our share price, and we support society with products that are indispensable to industry and daily life. Despite this, the main reason why the share price has not risen is that there is still a great deal of uncertainty about the future.

At the same time, to ensure that this current medium term ends successfully, we must explain in concrete terms our plans for achieving decarbonization by 2050. Given the major challenges of green hydrogen and green electricity supply, I believe that JFE would be more appreciated if it could clarify the story of how it plans to achieve carbon neutrality in Japan and how it will approach overseas markets, including governments and industries.

Ando In order to enhance our corporate value over the medium to long term, we need to follow our corporate philosophy of 'contributing to society with the world's most innovative technology,' and contribute to society, including the environment, by leveraging our advanced technologies and the synergies among our three businesses. In order for society and the market to properly evaluate this, as others mentioned, it is important to communicate our future strategy in an easy-to-understand manner with stories. We would like to see the Company do a better job of clearly presenting whatever it publicizes and for what purpose, and how and to whom it is being communicated. In the future, companies will increasingly disclose nonfinancial information, such as environmental, human capital, and intellectual property information, but we should not disclose information simply because we are obligated to do so. I hope that the Company will devise ways to use this as an opportunity to demonstrate to the outside world why JFE is indispensable both now and going forward.

Kemori Our basic goal is to increase our corporate value and earnings over the medium to long term, but in addition, we need to improve our reputation relative to other top companies in the industry. To this end, I would like to see the Company reassess its strengths in each area, including raw materials procurement,

product manufacturing, and sales, and then pursue a business model that differs from that of the top companies in terms of production volume and sales revenue, with a particular focus on securing large profits in each field.

Yamamoto There is no doubt that our stock price is an important theme, and to that end, our top priority is to steadily carry out the current medium-term business plan as promised. In addition, JFE also must remain constantly aware of it contributions to the world. Steel, like semiconductors, is the rice of industry, and without steel and semiconductors, today's industry would not exist. In order to build a sustainable society, we must thoroughly enhance the added value of steel and continue to provide stable supplies of high-quality, environmentally friendly steel. I would like to see JFE demonstrate its role in Japan by bringing to bear the quality and variety of its products, rather than quantity.

Message from New Outside Audit & Supervisory Board Member

In 1980, I joined Asahi Glass Co., Ltd., which was founded in 1907 and was the forerunner to AGC Inc. After being appointed CEO in 2015, I focused on 'ambidextrous management,' or the launch of new businesses while evolving our existing business portfolio. At the same time, we changed our corporate culture to enable the company to respond autonomously to changes in the operating environment, with skilled personnel leading the way. We also changed the company name from Asahi Glass to AGC.

Looking back at the environment surrounding the Japanese manufacturing sector over the past 50 years, we have seen a series of major challenges, including the oil shocks of the 1970s and the Plaza Accord of the 1980s. Many companies survived by (1) always taking a long-term perspective, (2) implementing reforms without bias, and (3) never forgetting the significance of their roles in society. Today, in this new era of volatility, uncertainty, complexity and ambiguity (VUCA), infectious diseases and geopolitical turmoil have created a situation in which past success stories are no longer applicable.

On the other hand, the growing importance of stakeholder capitalism in light of the SDGs, especially carbon neutrality, may be linked to the ancient Japanese management philosophy of '*sampo yoshi*,' [in modern terms: good for sellers, buyers and societies]. Companies must strive for sustainable growth in corporate value under all circumstances. It is time to return to the starting point of companies serving as institutions of society and to view profits as being the result of creating social value.

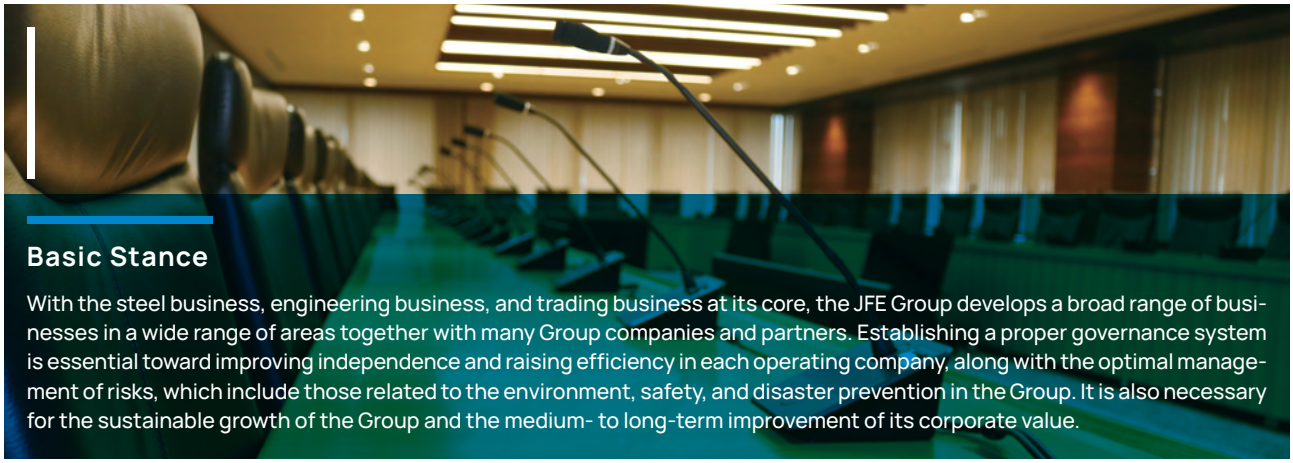
JFE is committed to contributing to society with the world's most innovative technology under its corporate philosophy of Challenging Spirit. Flexibility. Sincerity. I have assumed this position as a corporate auditor with great empathy for this philosophy. While I feel the weight of my responsibility, I will also make use of my experience as an materials industry executive and make every effort to help JFE create sustainable corporate value by providing further social value.

Takuya Shimamura

Outside Audit & Supervisory Board Member

Mr. Shimamura joined Asahi Glass Co., Ltd. (current AGC Inc. in 1980. After serving as representative director, president & CEO, and then chairman, he became director and chairman of AGC in March 2021 (current post). He is also an outside director at EBARA CORPORATION. In June 2022, he became an outside Audit & Supervisory Board member of JFE Holdings.

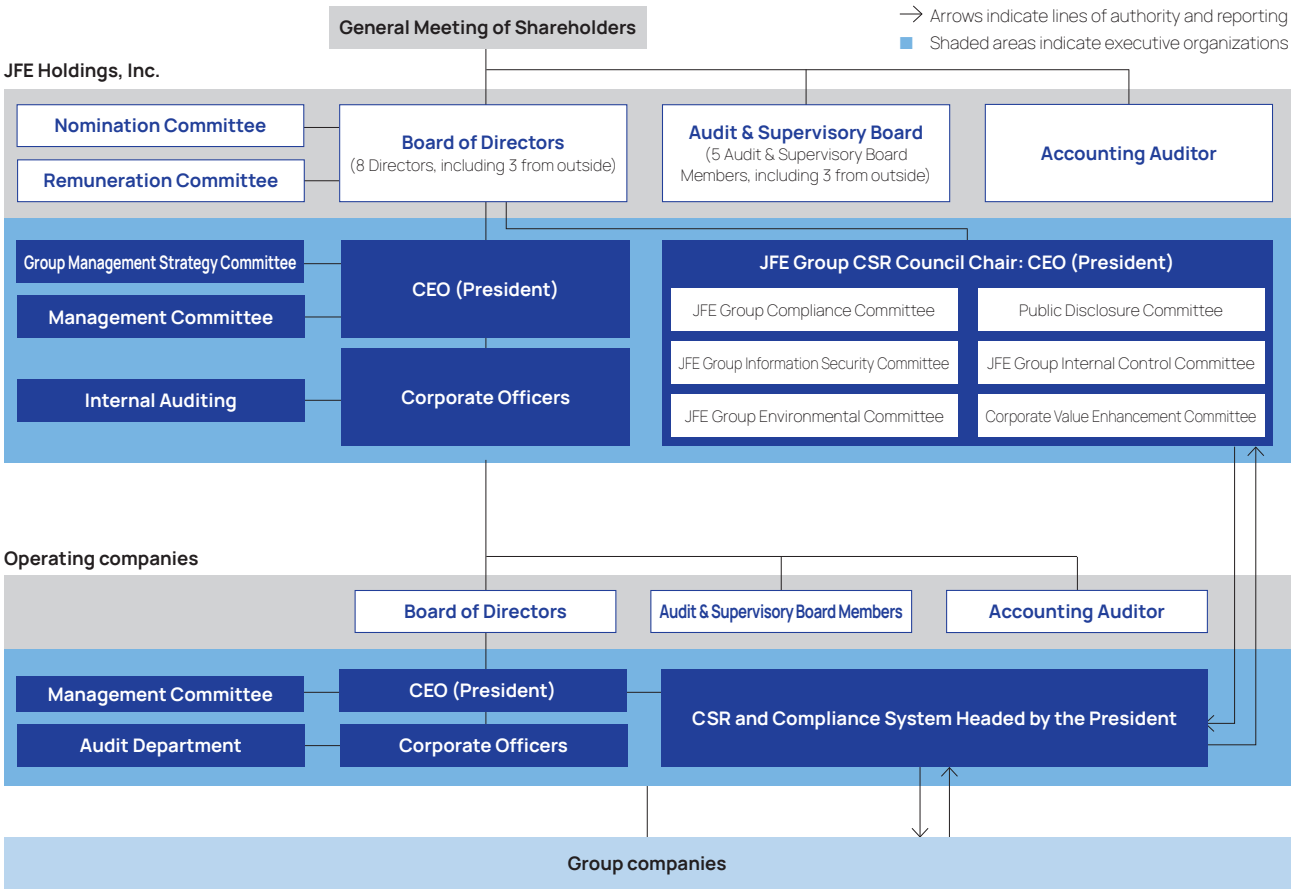
Corporate Governance



Basic Stance

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

Major topics discussed at the fiscal 2021 Board of Directors' meeting

- Seventh Medium-term Business Plan
- Large-scale capital investment (Steelworks system refresh (Kurashiki), construction of wind power monopile foundation production plant, etc.)
- JFE Group initiatives in the offshore wind power generation business
- Initiatives to address ESG issues (carbon-neutral efforts, assessment and review of KPIs for important management issues, etc.)

Governance system

JFE Holdings and each operating company have their respective Audit & Supervisory Board Members. The companies are cross-checked 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.

Major initiatives to strengthen the governance system

September 2002 — Established JFE Holdings

June 2007 — Added two outside directors and shortened the term of directors from two years to one year

October 2015 — Established JFE Holdings, Inc. Basic Policy on Corporate Governance, Nomination Committee, and Remuneration Committee

FY2015 — Initiated analysis and evaluation of Board of Directors' effectiveness

June 2017 — Reorganized the Board of Directors and the Audit & Supervisory Board based on results of their effectiveness analysis and evaluation

- Added the presidents of JFE Engineering and JFE Shoji to the Board of Directors, along with an increase of two outside members (Director and Audit & Supervisory Board Member)

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.

Independent Outside Audit & Supervisory Board Members

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, 2022)

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	FY2021 Board of Directors' attendees	FY2021 Audit & Supervisory Board attendees
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				12/12 (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%)	20/20 (100%)
Audit & Supervisory Board Member **Nakaba Akimoto**					○	○			Steel Business / Engineering Business / Trading Business				—	—
Audit & Supervisory Board Member **Isao Saiki**					○	○	○		—	○		Member	15/15 (100%)	20/20 (100%)
Audit & Supervisory Board Member **Tsuyoshi Numagami**	○			○	○			○	—	○	Member	Member	15/15 (100%)	20/20 (100%)
Audit & Supervisory Board Member **Takuya Shimamura**	○	○			○			○	—	○	Member		—	—

* Mr. Toshinori Kobayashi was newly appointed as director as of the General Meeting of Shareholders held on June 25, 2021, so the number of Board of Directors' meetings attended is different.
* Ms. Nakaba Akimoto and Mr. Takuya Shimamura were newly appointed as Audit & Supervisory Board members as of the General Meeting of Shareholders held on June 24, 2022.

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 and Outside Audit & Supervisory Board Members. Five meetings were held in fiscal 2021. 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. Seven meetings were held in fiscal 2021. All committee meetings had 100% attendance rates.

Nomination Committee and Remuneration Committee structure (as of July 1, 2022)

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

Based on the Basic Policy on Corporate Governance, the effectiveness of the Board of Directors has been evaluated since fiscal 2015, and starting in fiscal 2018, a third party organization has analyzed and assessed its effectiveness from an objective standpoint independent from the Company. In fiscal 2021, all Directors and Audit & Supervisory Board Members answered a revised questionnaire with some new questions regarding the revisions to the Corporate Governance Code.

In addition, the outcome of initiatives in fiscal 2021 were examined while referencing the opinions and suggestions received from the fiscal 2020 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 2021 Initiatives Based on Effectiveness Evaluation Results through fiscal 2020

- As for specific initiatives undertaken to address sustainability issues, JFE worked to improve discussions and report to the Board of Directors about Groupwide efforts to become carbon neutral, diversity and inclusion, important management issues, and revisions to KPIs.
- Meetings with outside executives were held as a preliminary reporting mechanism for the Board of Directors in order to invigorate discussions. A decision was also made to periodically hold meetings attended only by the outside executives in order to increase opportunities for outside executives to freely exchange opinions.
- Regarding Group governance, JFE has put into place a system for monitoring Groupwide risk management, such as by having the Board of Directors receive reports on and discuss the activities and plans of the Group CSR Council. As a specific initiative in fiscal 2021, the Board of Directors received a report on the outcome of audits of initiatives to ensure information security, prevent corruption and enhance compliance at Group companies. We intend to continuously improve Groupwide risk management based on discussions held by the Board of Directors.

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

- Need to further enhance supervisory functions of the Board of Directors by working to improve details of reports related to Group risk management and sustainability issues.
- As Board of Directors, need to properly supervise the execution of measures to emphasize compliance and instill awareness of compliance among employees

In fiscal 2022, while continuing to monitor the COVID-19 pandemic, JFE aims to increase opportunities to exchange opinions with managers of operating companies, examine the implementation of supervision of business sites inside and outside Japan, and hold 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 (FY2021)

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)	351,377	203,765	89,540	44,408	13,664	6
Audit & Supervisory Board Members (excluding Outside Audit & Supervisory Board Members)	78,335	78,335	–	–	–	2
Outside Directors/Outside Audit & Supervisory Board Members	91,847	91,847	–	–	–	6

Officers whose consolidated remuneration exceeded 100 million yen (FY2021)

Name	Position	Company	Total (thousand yen)	Per company (thousand yen)	Total by type of remuneration (thousand yen)			
					Basic remuneration	Bonuses	Stock remuneration	
							Performance-linked portion	Service length portion
Koji Kakigi	Director	JFE Holdings	208,357	208,357	110,207	56,670	31,720	9,760
Yoshihisa Kitano	Director	JFE Holdings	209,957	12,000	12,000	–	–	–
	Director	JFE Steel		197,957	98,207	58,270	31,720	9,760
Masashi Terahata	Director	JFE Holdings	114,219	114,219	64,757	32,870	12,688	3,904
Hajime Oshita	Director	JFE Holdings	110,708	8,400	8,400	–	–	–
	Director	JFE Engineering		102,308	60,768	20,800	15,860	4,880
Toshinori Kobayashi	Director	JFE Holdings	112,890	6,300	6,300	–	–	–
	Director	JFE Shoji		106,590	57,900	27,950	15,860	4,880

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 (zero fatal accidents and lost-work injuries rate), as a performance-linked indicator, by the degree of achievement of the indicator and a preset coefficient for each position.

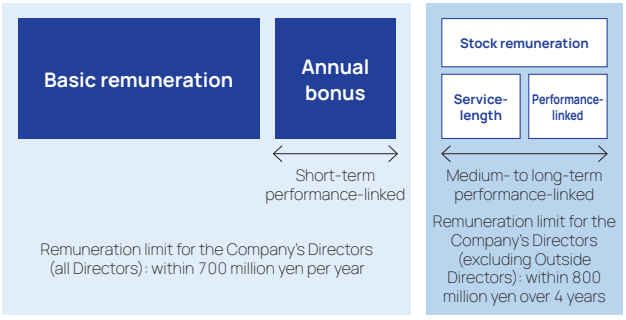
Stock remuneration

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 the parent company 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.

Starting in fiscal 2022, the Company uses non-financial indicators in addition to financial indicators, as before, to determine performance-linked remuneration. For executive remuneration based on non-financial indicators, the Company plans to use a combination of multiple indicators related to the environment and society. In fiscal 2022, the Company will introduce an annual bonus based on employee safety indicators. The Company will also introduce an executive remuneration system during the Seventh Medium-Term Business Plan based on indicators related to climate change, the most important management issue. The Company continues to examine the introduction of other indicators for the executive remuneration system.

Composition of remuneration for the Company's Directors

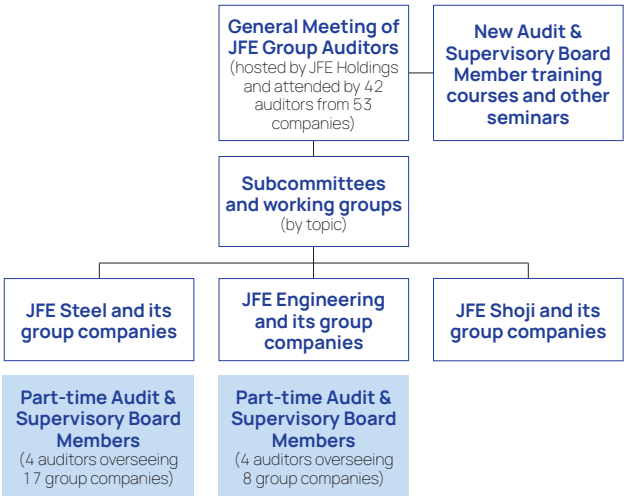


Internal control

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 CSR 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. In April 2021, this Basic Stance was revised. With the objective of strengthening the effectiveness and supervisory functions of the Board of Directors with regard to risk management, the Group CSR Council, headed by the CEO (President) of JFE Holdings, uniformly manages risk for the entire Group and reports important matters to the Board of Directors, which gives instructions and supervises actions. 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

Structure of JFE Group Board of Auditors



Strengthening internal control

Internal audits

JFE Holdings, the operating companies, and key Group companies had internal audit organizations comprising 169 people as of April 1, 2022. These organizations share information to enhance overall auditing within the Group.

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 CSR Council, as well as other important meetings. 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. Eight absentee Audit & Supervisory Board Members served 25 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.

Cooperation between Audit & Supervisory Board Members and the Accounting Auditor

In fiscal 2021, the Audit & Supervisory Board Members held eight 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 2021, the Audit & Supervisory Board Members held six 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.

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.

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.

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 companies while securing their independent decision-making, so as to implement risk management as a member of the Group companies.

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 2022.

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 line with this policy, in fiscal 2019, the Company decided to eliminate strategic shareholdings in domestic listed shares in principle. From fiscal 2019 to fiscal 2020, the Company sold 145.9 billion yen (on a market value basis) worth of all or parts of 143 stocks. In fiscal 2021, the Company sold 41.9 billion yen (on a market value basis) worth of all or parts of 61 stocks. Furthermore, at a meeting held in August 2021, 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
Number of issues	219	171	146
Total balance sheet amount (billion yen)	166.1	96.0	71.2

Thorough Compliance

Basic Stance

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

The JFE Group has 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 phoneline, 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	FY2018	FY2019	FY2020	FY2021
JFE Holdings and operating companies	80	101	87	**133**

Antimonopoly Act compliance

The JFE Group views past violations of the Antimonopoly Act seriously and continues to implement thorough measures to eliminate the possibility of future infringements.

Prevention of bribery

The JFE Group does 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 resorts to these illegal activities to gain profit or resolve problems. Based on these thoughts, the Group issued the JFE Group's Basic Stance 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

The JFE Group declares in its Standards of Business Conduct that it will firmly resist all antisocial forces, and has 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

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

Lawsuit Against an Employee of the JFE Group

In March 2022, an employee of JFE Engineering was indicted of obstructing bidding on a project contracted with Taketomi Town, Okinawa.

We deeply regret that this incident occurred, and apologize for the inconvenience and concern this has caused our stakeholders. Taking this incident to heart, we will make every effort to strengthen compliance and work to restore trust in the JFE Group as quickly as possible.

Risk Management

Basic Stance

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.

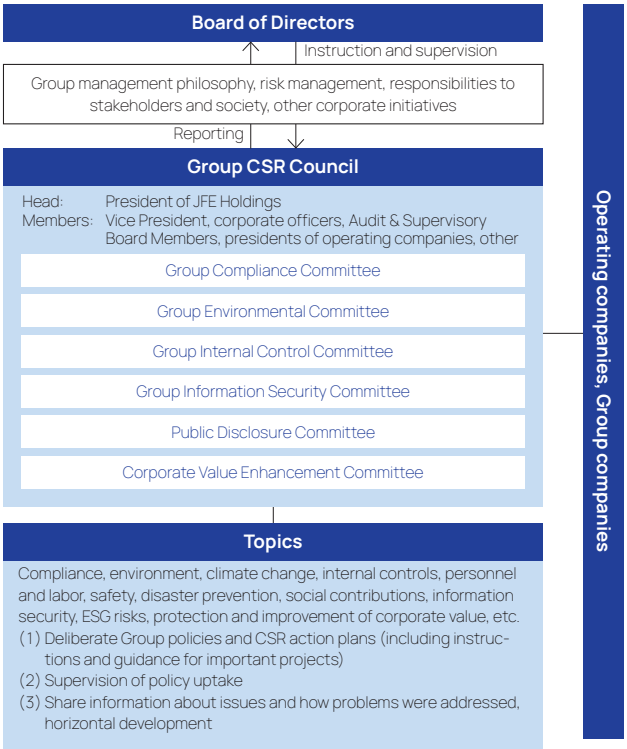
The JFE Group CSR Council, chaired by the President of JFE Holdings, verifies, evaluates, deliberates, and decides issues related to policy and actions plans for risk management. Specifically, adherence to Company policies and rules are monitored, such as for business activities, compliance (compliance with the Antimonopoly Act, as well as laws and regulations preventing corruption, including bribery, of civil servants), the corporate vision, and the JFE Group's Standards of Business Conduct. 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

CSR 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 CO_2 emissions by approximately 18% versus the fiscal 2013 level by the end of fiscal 2024 in the steel business, and reducing CO_2 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.

Intellectual property management

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

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

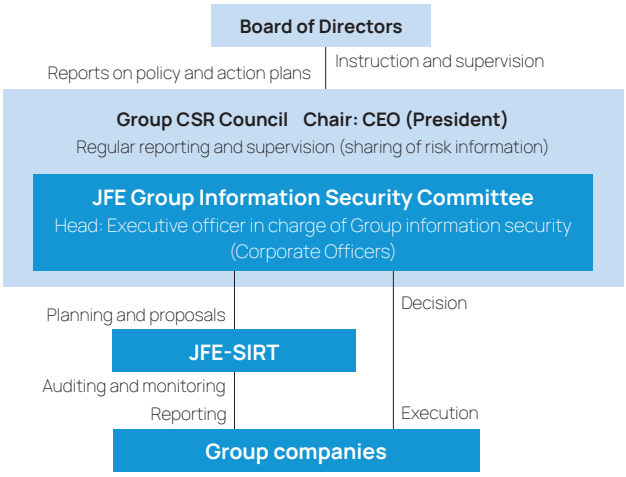
The JFE Group formulates various rules on information security management to prevent information leakage and system failures due to cyberattacks and improper system use. Efforts are made to enhance information security knowledge and awareness of rules among employees through training and education. Additionally, 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, the JFE Group has 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.

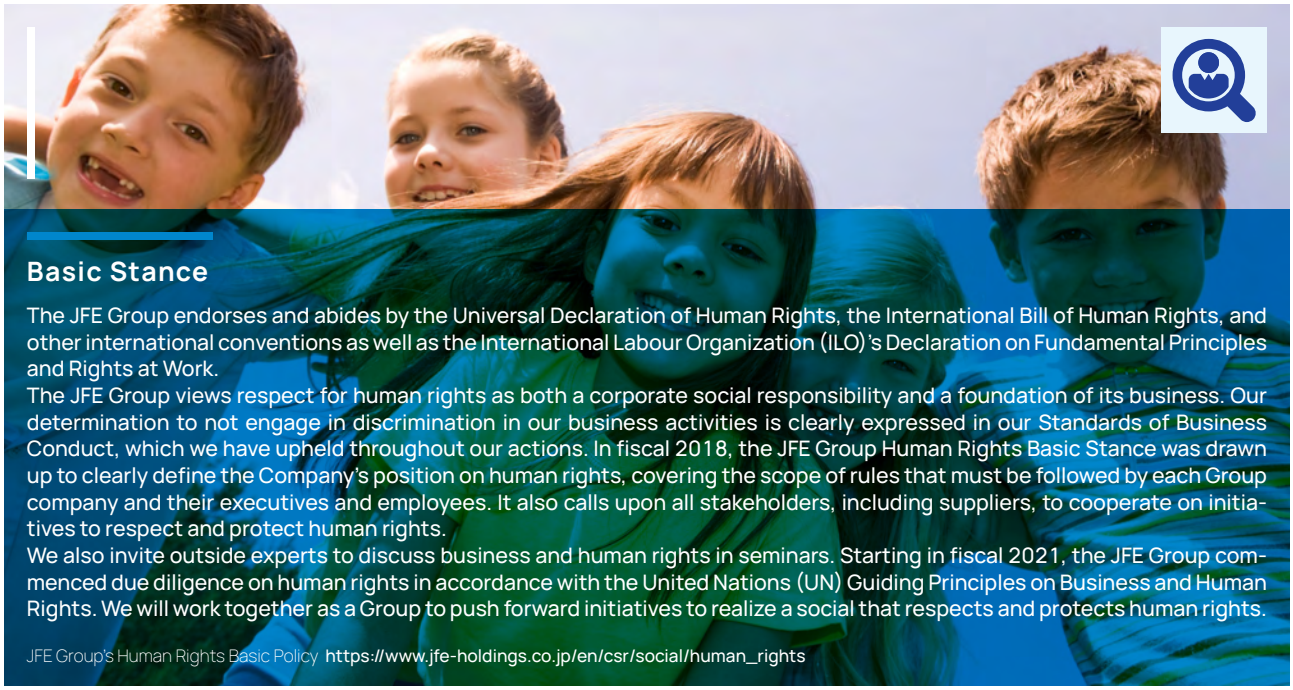
Response to COVID-19

Our response to the COVID-19 pandemic has entailed the rapid formation of a countermeasure examination team in accordance with our response policy based on scenarios for outbreaks of new types of influenza, and this team has taken various measures to counter COVID-19. We have eased employment system requirements and encouraged employees to work from home, while discouraging them from commuting to work. Even when employees come to work, they arrive and leave at different times of the day, partitions have been installed in offices, and meetings have only been held online in an attempt to reduce the risk of infection as much as possible. We have updated work environments to that employees can work from home without impediment, such as going paperless and using digital approval and signature technology. Through these initiatives, we aim to create more flexible work styles and improve labor productivity.

JFE Steel revised its BCP, which had envisioned a novel influenza outbreak, and kept 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. Above all, we thoroughly managed occupational health and safety measures, in addition to updates to infrastructure for remote work environments. As well, we have increased vaccinations in workplaces.

We will continue to engage in business operations while placing the highest priority on the health and safety of our employees and partners.

Respect for Human Rights



Basic Stance

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 JFE 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 Business Conduct, which we have upheld throughout our actions. In fiscal 2018, the JFE Group Human Rights Basic Stance was drawn up to clearly define the Company's position on human rights, covering the scope of rules that must be followed by each Group company and their executives and employees. It also calls upon all stakeholders, including suppliers, to cooperate on initiatives to respect and protect human rights.
We also invite outside experts to discuss business and human rights in seminars. Starting in fiscal 2021, the JFE Group commenced due diligence on human rights in accordance with the United Nations (UN) Guiding Principles on Business and Human Rights. We will work together as a Group to push forward initiatives to realize a social that respects and protects human rights.

JFE Group's Human Rights Basic Policy https://www.jfe-holdings.co.jp/en/csr/social/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 an 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 each operating company 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 CSR 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 promoting activities

Respecting the rights of workers

The JFE Group adheres to the laws and regulations of various countries as well as collective agreements. It also respects the rights to freedom of association as well as their right to collective bargaining.

Upper management, including the president and the representative of the union, meets regularly to discuss matters such as management issues, work-life balance, working environments, and working conditions. By conducting earnest labor-management consultations, we strive to create a vigorous workplace while working to maintain healthy and sound labor-management relations.

Respect for freedom of expression

The JFE Group upholds basic human rights in its JFE Group's Human Rights Basic Policy and is committed to respecting and protecting the human rights of each individual throughout its corporate activities. We pay due care to prevent violations of freedom of expression, as recognized by the International Covenant on Human Rights and other international conventions, and to fully protect the right to privacy

Respect for children's rights

The JFE Group supports the Convention on the Rights of the Child and Children's Rights and Business Principles, and will seek to eliminate child labor and respect every child's right to survival, right to development, right to protection, and right to participation, the four pillars of the Convention on the Rights of the Child.

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.

Due diligence into human rights, which began in fiscal 2021, centers on JFE Holdings, JFE Steel, JFE Engineering, JFE Shoji, and other major Group companies, and entails the identification of risks to human rights, and the examination and execution of corrective actions. While taking corrective actions to reduce identified risks from fiscal 2022, we are expanding our management structure for human rights risks at suppliers, and rolling out due diligence processes for human rights at Group companies. We take these and other measures to respect human rights throughout the supply chain.

Initiatives in fiscal 2021

(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 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
- Supplier management (create human rights risk management system for entire supply chain)

(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 examined 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. Regarding the human rights risk management structure for all suppliers, we are examining the creation of a management structure for human rights risks at suppliers from fiscal 2022 with the aim of building a sustainable and robust supply chain.

Future initiatives

(1) Examine and revise JFE Group Human Rights Basic Stance

The JFE Group Human Rights Basic Stance was created in fiscal 2018 to clearly express the Group's stance on initiatives for respecting human rights. In fiscal 2021, we identified new human rights issues that warrant the Group's attention, and we will examine and made necessary revisions to the JFE Group Human Rights Basic Stance.

(2) Create human rights risk management structure for suppliers

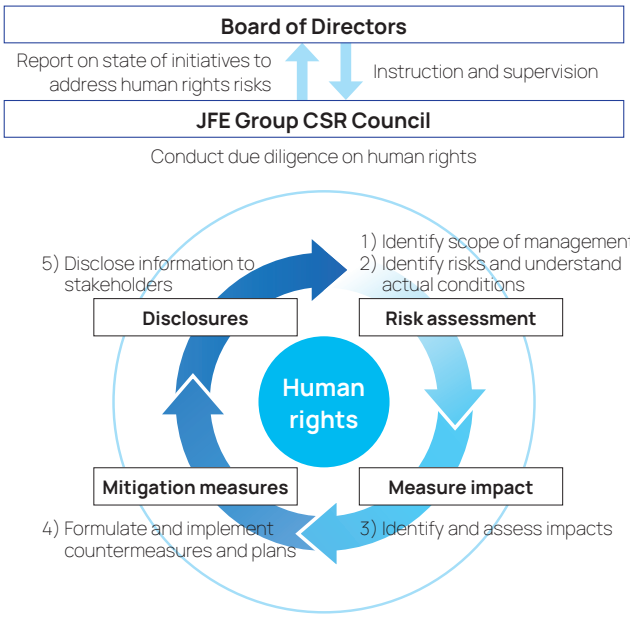
Based on our revised JFE Group Human Rights Basic Stance, we will examine and revise the basic policies and guidelines for procurement that had been formulated at JFE Steel, JFE Engineering, and JFE Shoji. We will then ask our suppliers to follow these revised basic policies and guidelines, and work with them to build systems for managing human rights risks.

(3) Introduce human rights due diligence processes at major Group companies in Japan and overseas

In stages, we are introducing processes for human rights due diligence after deciding scope, priorities and audit methods. We will examine actual conditions through documentation and take any necessary corrective actions.

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 CSR Council and the Board of Directors, we will evaluate these initiatives to respect human rights and work to improve them and increase their effectiveness.

Human rights due diligence process



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	Major communication methods, etc.	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 (convocation notices, notices of resolutions, etc.)	1	Approx. 150,000 persons (Unit shareholders)
		Investors meeting (financial results, medium-term business plans, etc.) and ESG briefings	7	Approx. 1,000 persons in total
		Individual meetings (financial results, medium-term business plans, etc.)	As needed	Approx. 380 persons in total
		Company briefings for individual investors (online)	2	Approx. 10,000 plays
		Plant tours for shareholders (steel, engineering, shipbuilding bases, etc.) (* Results shown are for FY2019, suspended in FY2020 due to the COVID-19 pandemic. In fiscal 2021, the plant tours were was held online (twice for about 1,400 people).	23	Approx. 1,800 persons
		Publishing shareholder newsletters (JFE Dayori)	2 (Mid-year and annual)	Approx. 280,000 copies/issue
		Various reports, including integrated reports and CSR reports (* Number of copies for integrated report; CSR report only available on the Company's website)	1	Approx. 24,000 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 Stance 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	133 calls in FY2021
		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	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, JFE Steel, and JFE Shoji
		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	Approx. 270,000 persons a year 100,000 or more persons a year * Suspended or scaled down in FY2020 and FY2021 due to the COVID-19 pandemic; results shown are for FY2019 Awards for technology and product development, etc.
		Events at manufacturing bases (festivals, etc.)	Approx. once in each region	
		Plant tours	As needed	
		Clean-up activities (vicinity of manufacturing bases, regional cleaning, etc.)	As needed	
		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	

Awards for technology and product development, etc. (FY2021)

JFE Steel

Award name	Description	Sponsor
FY2022 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 resource-conserving Si gradient steel sheet that contributes to energy conservation of electrical equipment	Ministry of Education, Culture, Sports, Science and Technology
68th (Fiscal 2021) Okochi Memorial Foundation Technology Award	Development of environmentally friendly high-strength steel plate with strong anti-seismic properties that help improve resilience of Japan	Okochi Memorial Foundation
56th Machinery Promotion Award, Japan Society for the Promotion of Machine Industry Chairman's Prize	Development of high-efficiency ultra-narrow groove welding system	Japan Society for the Promotion of Machine Industry
Fiscal 2021 National Invention Award: Japan Business Federation (JBF) Chairman Award	Invention of structural arrest for welded structures that improves safety of ships	Japan Institute of Invention and Innovation
Fiscal 2021 Japan Society of Civil Engineers Environment Award (Group II)	Joint research project to create abundant oceans through public-private collaboration: demonstration of improvement in marine environments with steel slag products and initiatives in environmental training	Japan Society of Civil Engineers (JSCE)
Fiscal 2021 Resource Recirculation Technologies and Systems Award Director-General Award for Industrial Technology and Environment, Ministry of Economy, Trade and Industry	Establishment of closed-loop recycling technology for used refractory materials	Japan Environmental Management Association for Industry (JEMAI)
Fiscal 2021 Japan Society for Technology of Plasticity: Conference Award	Development of intelligent control technology to achieve world's fastest temper rolling	Japan Society for Technology of Plasticity
22nd Logistics Environment Award: Special Award	Modal shift of steel transportation from Hiroshima Prefecture to Chiba Prefecture	Japan Association for Logistics and Transport
IT Japan Award 2021 Semi-Grand Prix	Development of digital twin blast furnace that avoided problems that could have led to losses of several hundred million yen	Nikkei Computer
Keidanren Endorsed Internal Newsletter Recommendation Award	JFE Steel Magazine (company newsletter)	Keidanren Business Services, Internal Newsletter Center

JFE Engineering

Award name	Description	Sponsor
Fiscal 2021 New Energy Award Director-General's Prize, the Agency for Natural Resources and Energy (Products and Services)	BRA-ING® AI system for autonomous operations of incinerators at waste processing facilities	New Energy Foundation
Fiscal 2021 New Technology Promotion Engineer Award	Initiative to use image recognition AI to increase sophistication of bar arrangement inspection	Ministry of Land, Infrastructure and Transport, Kanto Regional Development Bureau

External recognition in recent years

Selected for inclusion in the FTSE Blossom Japan Index (invested by GPIF)	JFE Holdings was selected for the third straight year as a constituent of the FTSE Blossom Japan Index, which is investment indices provided by FTSE Russell. This index comprises companies that are demonstrating strong environmental, social, and governance (ESG) practices. It is used widely to create and evaluate sustainable investment funds and other financial instruments.	FTSE Blossom Japan
Initial selection Selected for inclusion in the FTSE Blossom Japan Sector Relative Index (invested in by GPIF)	JFE Holdings was selected for inclusion in FTSE Russell's FTSE Blossom Japan Sector Relative Index. In March 2022, GPIF began to invest in this index as an ESG index. Based on FTSE Russell's ESG assessment, some companies with high carbon intensity (emissions of greenhouse gases per unit of sales) are included in this index in light of their approach to addressing climate change risks and opportunities.	FTSE Blossom Japan Sector Relative Index
Initial selection Selected for inclusion in the MSCI Japan ESG Select Leaders Index (invested in by GPIF)	JFE Holdings was selected for inclusion in MSCI's MSCI Japan ESG Select Leaders Index. This comprehensive ESG index reflects a comprehensive market portfolio of various ESG risks, created based on MSCI's ESG research into more than 1,000 companies around the world. The index includes stocks with relatively high ESG scores in each sector.	2022 CONSTITUENT MSCI JAPAN ESG SELECT LEADERS INDEX
Selected for inclusion in the MSCI Japan Empowering Women Index (WIN) (invested in by GPIF)	For two consecutive years, JFE Holdings has been included in the MSCI Japan Empowering Women Index (WIN) managed by MSCI. The index consists of companies selected based on multifaceted scores for gender diversity from among constituents of the MSCI Japan IMI Top 700 Index. The index selects companies with the highest scores in each sector.	2022 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)
Selected for inclusion in the S&P/JPX Carbon Efficient Index (invested in by GPIF)	JFE Holdings has been selected for inclusion in the S&P/JPX Carbon Efficient Index, which is developed jointly by S&P Dow Jones Index and Japan Exchange Group. This index decides the weighting of constituent stocks based on their levels of environmental information disclosure and carbon efficiency (carbon emissions per unit of sales).	S&P/JPX Carbon Efficient Index
Selected for inclusion in the FTSE4Good Index Series	JFE Holdings was selected for the third straight year as a constituent of the FTSE4Good Index Series, which is investment indices provided by FTSE Russell. The index uses an ESG scoring system that is basically the same as the FTSE Blossom Japan Index. It is a comprehensive ESG index that screens for stocks with high ESG scores from among major global stocks.	FTSE4Good
Selected for inclusion in MSCI ESG Leaders Indexes	Since 2018, JFE Holdings has been a constituent stock in MSCI's MSCI ESG Leaders Indexes. This index consists of stocks with high ESG scores in each sector based on MSCI's ESG research, from among major stocks around the world.	2022 MSCI ESG Leaders Indexes Constituent
Evaluation by CDP 2021	Established in Britain in 2000, the CDP is a nongovernmental organization (NGO) that conducts ESG evaluations. It calls on companies to disclose ESG-related information by responding to CDP questionnaires to facilitate the ESG investment decisions of institutional investors. Currently, the CDP covers three environmental areas: climate change, water security, and forests, and companies are rated on an eight-point scale (from A to D-) for each area. The volume of information collected by the CDP has become one of the largest in the world, with currently over 350 companies responding to the questionnaires, which are widely used in various indexes by institutional investors and for socially responsible investment. The JFE Group proactively participates in CDP's activities as a member of CDP Reporter Services. The Group responds to climate change and water security questionnaires every year. We made sure to disclose appropriate information for the CDP 2021 questionnaire, and as a result we received a high rating.	[CDP 2021 scores] Climate change: A- Water security: A- Supplier/Engagement: A-
Inclusion in the Sompo Sustainability Index	JFE Holdings has been chosen for the 11th consecutive year as a constituent of the Sompo Sustainability Index (former SNAM Sustainability Index), which is operated by Sompo Asset Management. The index, which encompasses companies with highly evaluated ESG ratings, contributes to investor asset formation by evaluating corporate value from a long-term perspective.	2022 Sompo Sustainability Index
Acquisition of Quality Excellence Certification from Caterpillar	JFE Steel West Japan Works (Kurashiki) and JFE Shoji were named as Gold Level SQEP suppliers for the Supplier Quality Excellence Process, a quality certification of the U.S.-based construction equipment manufacturer Caterpillar Inc. for six consecutive years in 2022, having successfully updated its certification through an online audit during the pandemic. The program ranks suppliers for compliance with ISO 9001 standards and Caterpillar's own specifications and certifies the top firms as Platinum, Gold, Silver, or Bronze level. Only a few companies in Japan have received Gold Level certification, and JFE Steel is the world's first blast furnace company to be certified.	

* THE INCLUSION OF JFE HOLDINGS, INC. IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF JFE HOLDINGS, INC. BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

Major external awards (FY2021)

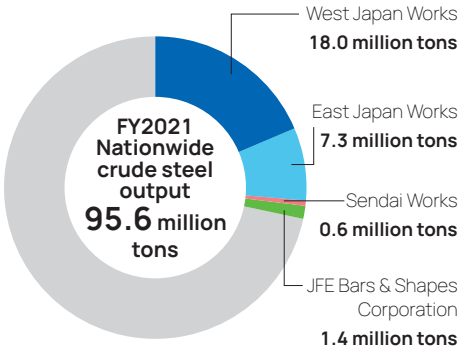
Received 3rd ESG Finance Awards Japan's Special Prize in the Environment Sustainable Company Category	JFE Holdings was selected as an environmentally sustainable company in the environmentally sustainable company category of the 3rd ESG Finance Awards Japan sponsored by the Ministry of the Environment. ESG Finance Awards Japan is an awards system created with the objective of promoting and expanding ESG financing throughout society of advanced initiatives by institutional investors, financial institutions, intermediaries, and corporations to have a positive impact on the environment and society through aggressive initiatives at ESG finance and environmental and social operations. An environmentally sustainable company is one that takes action to address issues based on medium- and long-term strategies while disclosing adequate information about important environmental issues, such as risks, business opportunities and strategies, as well as corporate governance. Companies chosen for this designation have proper governance and management processes in place. We believe JFE Holdings was selected as an environmentally sustainable company in light of the level of ESG-related information disclosure and proactive stance on stakeholder engagement.
Received Silver Award for Sustainability Site Awards 2022	JFE Holdings received the Silver Award for Sustainability Site Awards 2022 from the Association for Sustainability Communication (formerly CSR Communication Association). The Sustainability Site Award has been awarded every year since 2017 based on a comprehensive assessment and ranking of the websites of listed corporations in Japan. Evaluations of only the published information on websites are conducted by analysts with special knowledge, and scored in eight categories (more than 280 evaluation criteria) that are essential for websites. Evaluation criteria are reassessed every year to reflect changes in society, with a focus on GRI Standard: 2016, in order to conform more closely to global trends in sustainability evaluations. We believe JFE Holdings was honored with this award due to the highly comprehensive level of information disclosed on its website.
World Steel Association's 2022 Steel Sustainability Champions Award	JFE Steel has been selected by the World Steel Association for the 2022 Steel Sustainability Champions award. Steel Sustainability Champions is an award presented once a year by the World Steel Association to member companies that have shown noteworthy outcomes in improving sustainability by leading the way toward a sustainable steel industry and a better society. Since the JFE Group Environmental Vision for 2050 was created in 2021, JFE Steel has been developing ultra-innovative technologies that will help reduce environmental load. JFE Steel has formulated basic policies for sustainability and discloses data for various fields, such as the environment and occupational health and safety. JFE Steel has identified material issues for management, set key performance indicators (KPIs), and continues to reassess issues and the appropriateness of these KPIs. In light of these initiatives, JFE Steel has been recognized as a Steel Sustainability Champion for two consecutive years.

Data

Japan Marine United

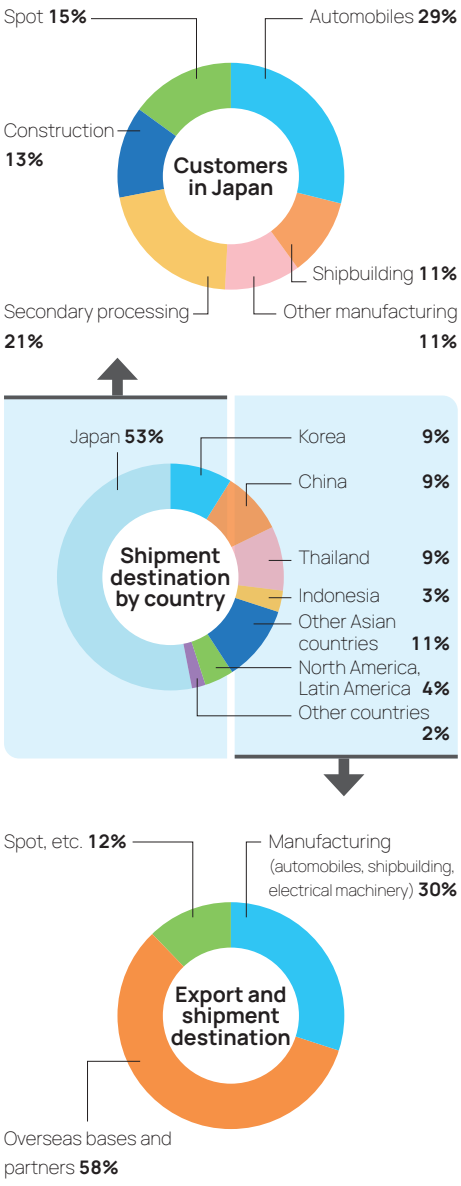
Main Domestic Bases

Domestic production volume
(Steel business)



About 29%
of domestic crude steel output

Shipment destination
(Steel business)



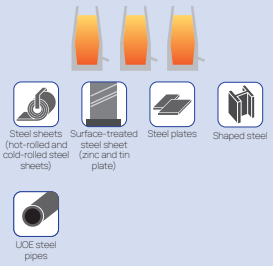
Main domestic bases

Blast furnace Electric arc furnace

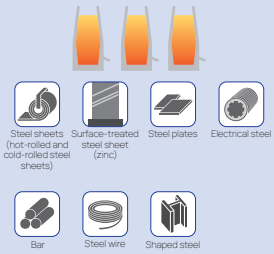
West Japan Works (A)

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

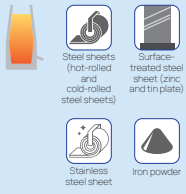


East Japan Works (B)

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



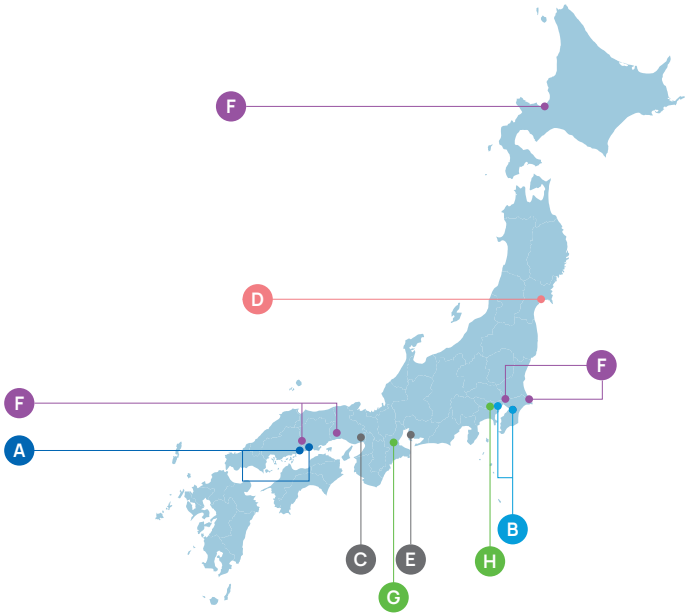
Nishinomiya Plant (C)

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	Keihin district	Fukuyama district
Customer Solutions Lab (CSL)	**Steel Structural Materials Solutions Center (THiNK SMART)**	**Customer Center Fukuyama (CCF)**
Early vendor involvement (EVI) base for customers in the automobile field	Joint research with customers, universities, and corporate research institutions in the structural steel field	EVI base for customers in the automobile and steel materials fields

Main Overseas Bases

117 bases in **22** countries and regions

China

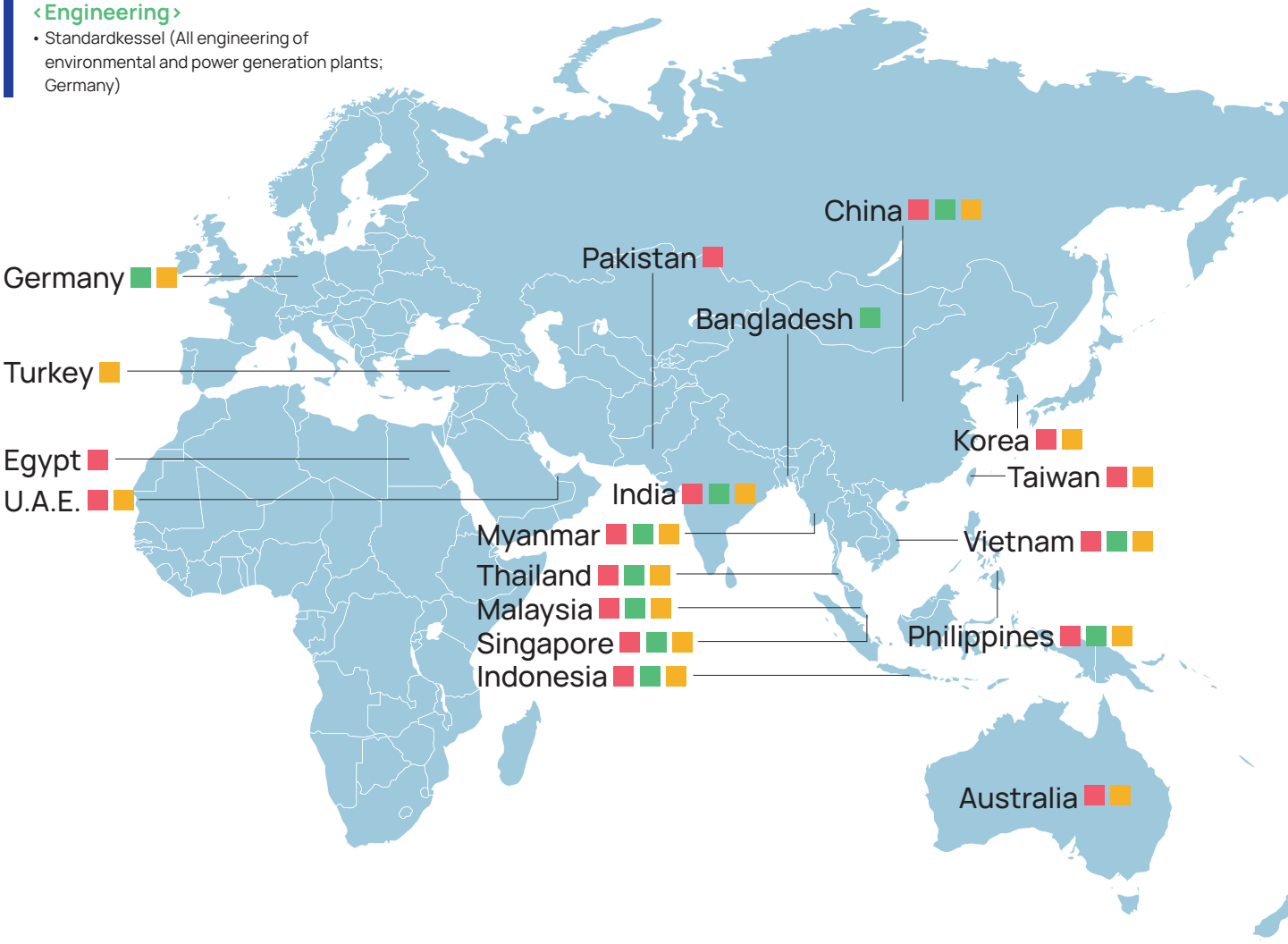
‹Steel›
- Fujian Sino-Japan Metal (Manufacture and sale of steel sheet (tin plate) for cans)
- BHNK (Processing and welding of tool joints for drill pipes, sale of drill pipe)
- GJSS (Manufacture and sale of steel sheet for automobiles)
- ERDOS (Manufacture and sale of silicon manganese)
- JJP (Manufacture 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)

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)



Steel business
41 bases in
18 countries and regions

Engineering business
19 bases in
12 countries

Trading business
57 bases in
19 countries and regions

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.)
- JFE Shoji Power Canada (Processing and sale of electrical steel; Canada)
- JSSB (Processing and sale of steel sheet for automobiles; Mexico)

Asia/Oceania

‹Steel›
- JSGI (Manufacture and sale of steel sheet for automobiles; Indonesia)
- JSGT (Manufacture and sale of steel sheet for automobiles; Thailand)
- JSW Steel (Overseas integrated steelworks; India)
- FHS (Overseas integrated steelworks; Vietnam)
- Dongkuk Steel (Manufacture and sale of shaped steel, rebar, thick steel plates, and cold-rolled products; Korea)
- TCR (Manufacture and sale of cold-rolled steel sheet; Thailand)
- TCS (Manufacture and sale of electrogalvanized steel sheet; 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)
- PSC (Manufacture and sale of sintered ore; Philippines)
- JFE-STAR (Investments in resource projects; Australia)

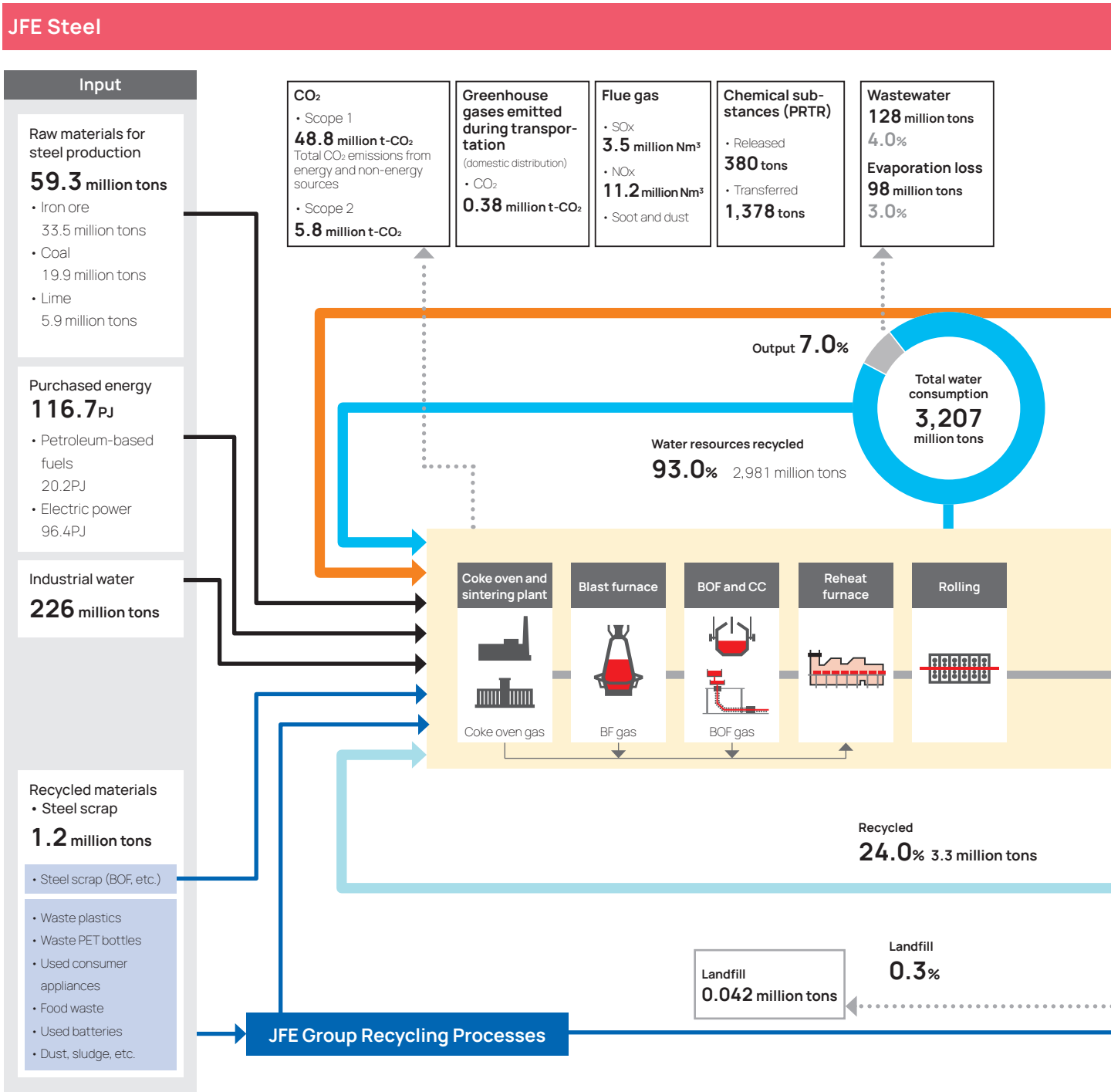
‹Engineering›
- JFETM (Planning, design, and project management; Philippines)
- JFEE Pune Engineering Centre (Planning and design of environmental and power generation plants; India)

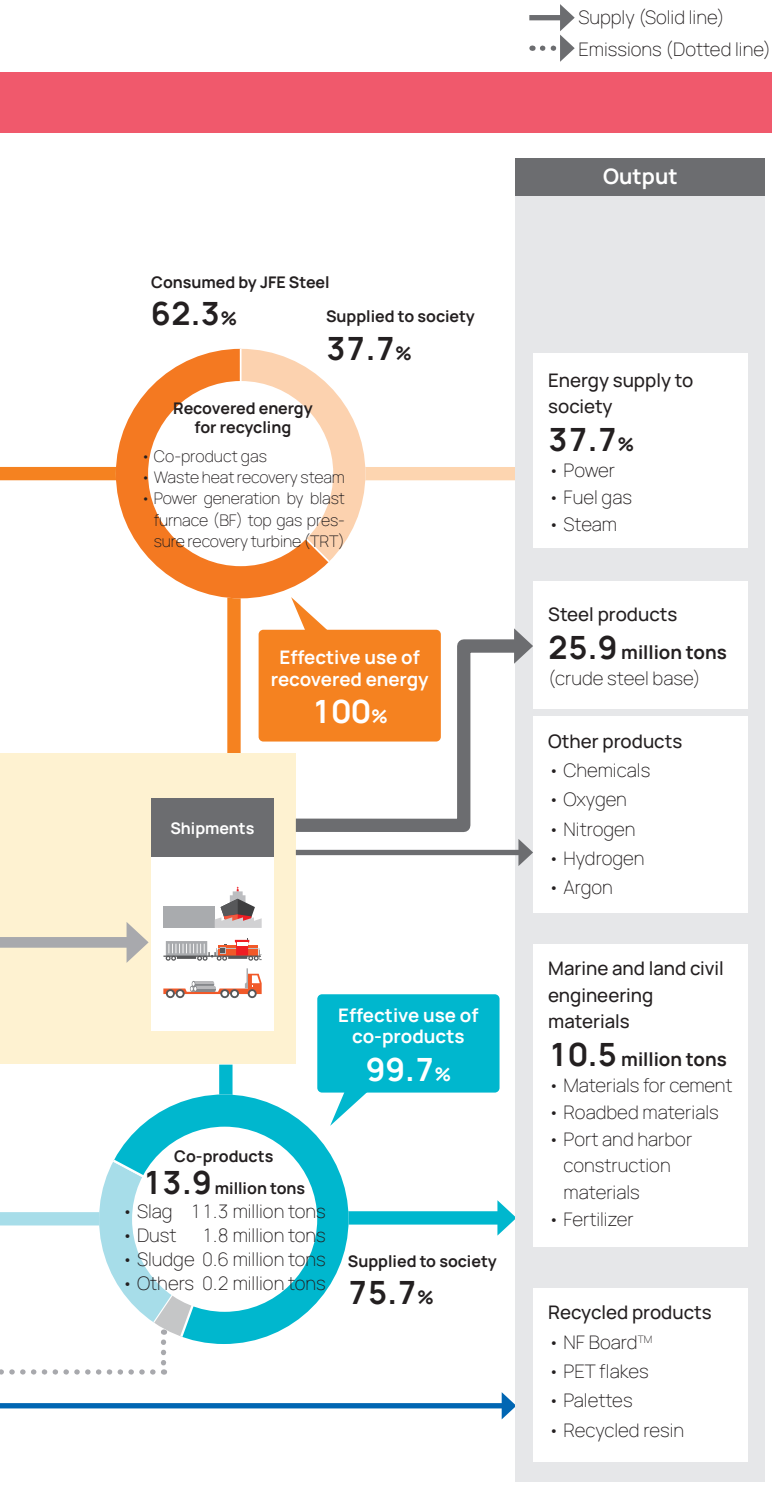
‹Shoji›
- JSSI (Processing and sale of electrical steel; Indonesia)
- JSSV (Processing and sale of electrical steel; Vietnam)
- CMT (Processing and sale of steel sheet for automobiles; Thailand)
- SASC (Processing and sale of steel sheet for automobiles; Thailand)

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 93.0% of the water it uses for production and uses 99.7% 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.

FY2021 results





JFE Engineering (Head Office and Works)

Input

Steel	38,600 tons
Energy	
• Electric power purchased	25.0 GWh
• Class A heavy oil	53.7 kl
• Kerosene	4.8 kl
• Light oi	220 kl
• Gasoline	13.6 kl
• City gas	294,000 Nm³
• LPG	85.2 tons
Water	62,900 tons

JFE Engineering

- Tsurumi Engineering and Manufacturing Center
- Tsu Works

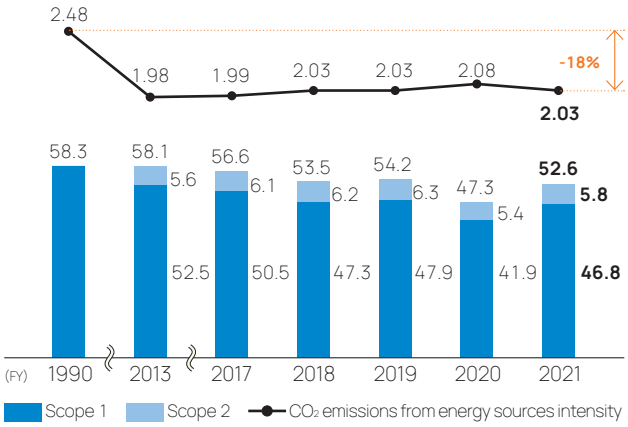
Output and Emissions

Products	37,400 tons
CO_2	8,100 t-CO_2
• Scope 1	1,700 t-CO_2
• Scope 2	6,400 t-CO_2
Waste generated	999 tons
• Industrial wastes	803 tons
• General wastes	196 tons
Wastewater (ocean only)	132,000 tons
Others (PRTR)	146 tons

Non-financial Highlights

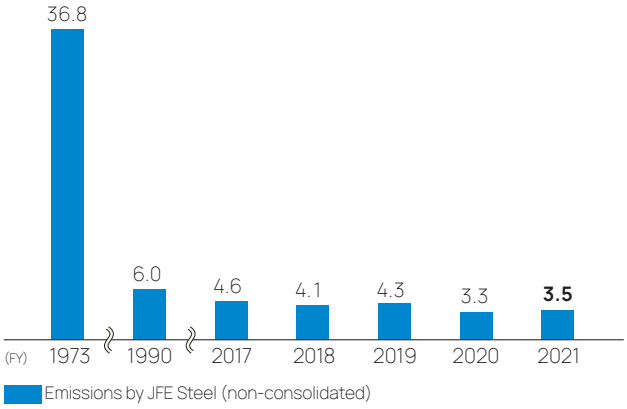
Environmental Indicators

CO_2 emissions from energy sources (million t-CO_2) and CO_2 emission intensity (t-CO_2/t-s) of JFE Steel

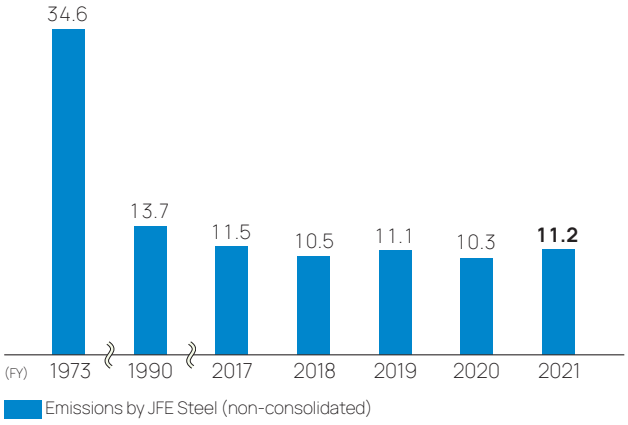


*1 The CO_2 coefficient for electricity purchased in FY2021 is that of FY2020 on the Japan Iron and Steel Federation's Commitment to a Low Carbon Society.
*2 The figures in FY2020 have been updated as the CO_2 coefficient for electricity purchased in FY2020 on the Japan Iron and Steel Federation's Commitment to a Low Carbon Society was applied.
*3 Data of JFE Bars & Shapes Corporation Sendai Works is included in the figures FY2013.

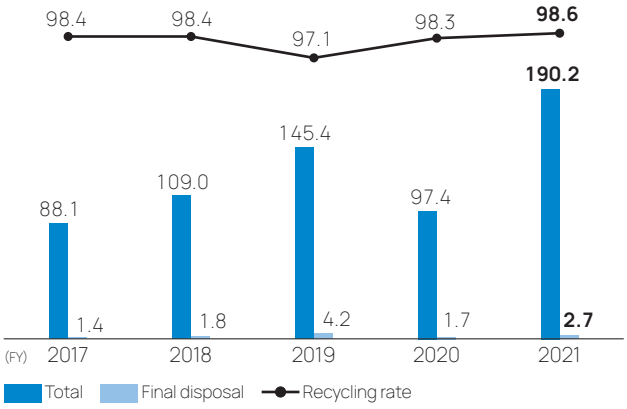
SOx emissions by JFE Steel (million Nm³)



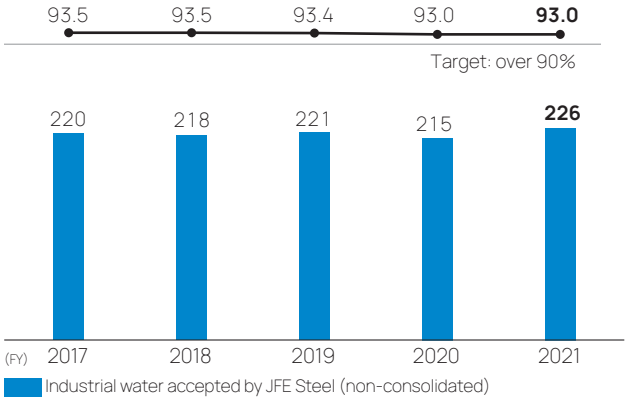
NOx emissions by JFE Steel (million Nm³)



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

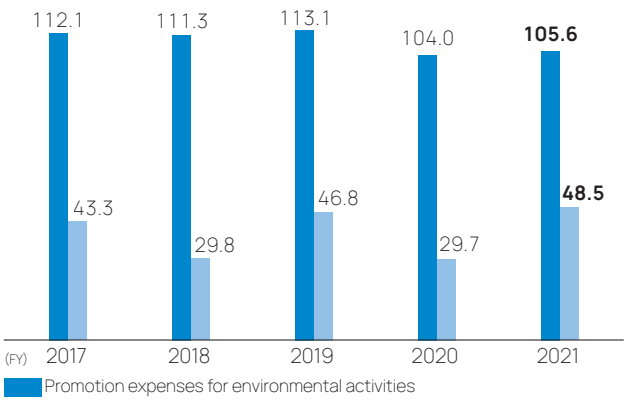


Industrial water accepted (million tons) and circulated (%) by JFE Steel



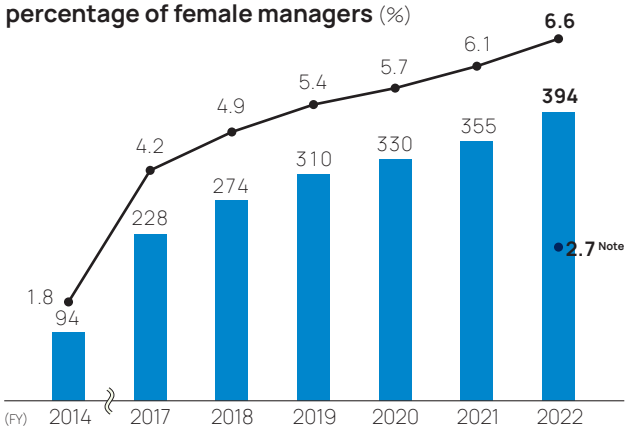
* Industrial water circulated (%) = (Total amount - industrial water accepted) / total amount × 100

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



Societal Indicators

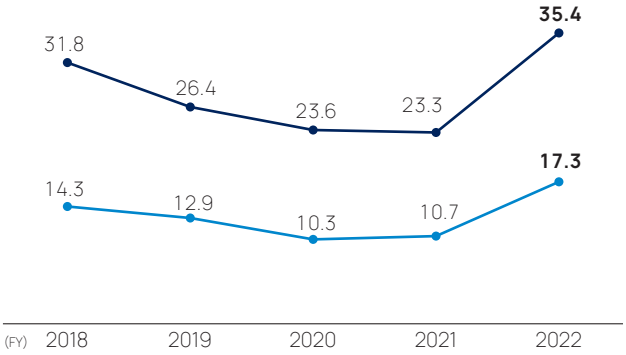
Number of female managers (persons) and percentage of female managers (%)



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

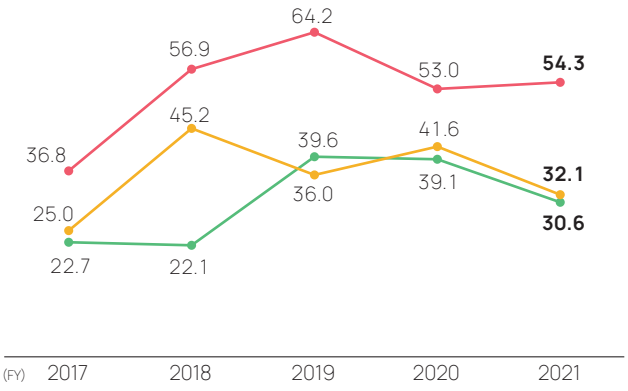
* Scope of calculation: JFE Holdings and operating companies

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



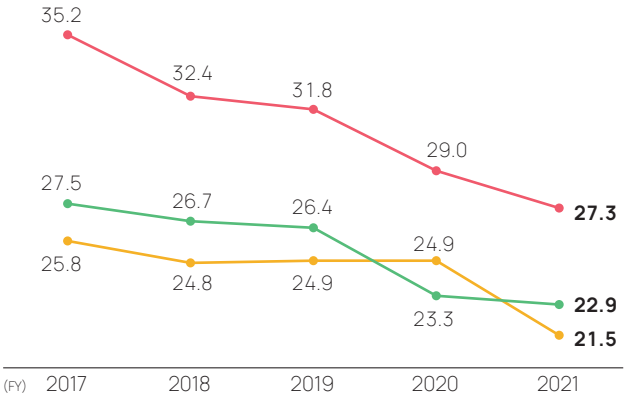
* Scope of calculation: total of three operating companies

Provision rates of health guidance (%)



* Preliminary figures shown for FY2021

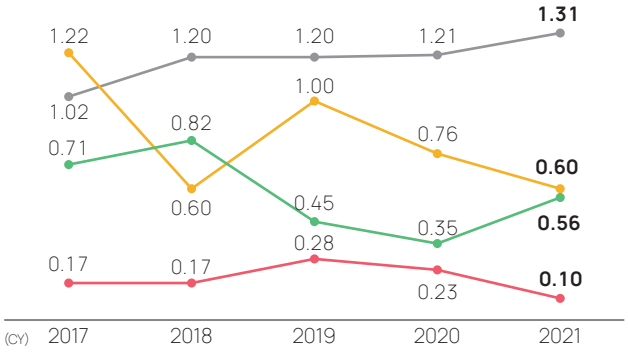
Ratio of smokers (%)



* JFE Steel counts ratio of smokers on a calendar year basis

* JFE Shoji's ratio of smokers (FY2017 and FY2018) reflects employees at least 40 years old

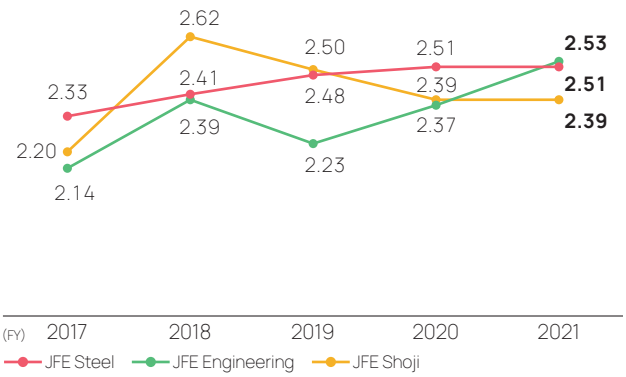
Lost-work Injuries



* 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) (%)



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			
	FY2011	FY2012	FY2013	FY2014
Operating results				
Net sales (JGAAP) / Revenue (IFRS)	3,166	3,189	3,666	3,850
Ordinary income (JGAAP) / Business profit*1 (IFRS)	52	52	173	231
Income before income taxes (JGAAP) / Profit before tax (IFRS)	(71)	75	160	226
EBITDA*2 (JGAAP) / EBITDA*3 (IFRS)	306	260	368	421
Profit attributable to owners of parent	(36)	39	102	139
Capital expenditures (construction basis)	197	179	175	225
Depreciation and amortization	238	194	181	176
Research and development expenses	34	33	31	32
Financial position				
Total assets	4,007	4,107	4,241	4,639
Property, plant and equipment	1,644	1,606	1,599	1,629
Shareholders' equity (JGAAP) / Equity attributable to owners of parent (IFRS)	1,414	1,558	1,702	1,938
Net assets (JGAAP) / Equity (IFRS)	1,456	1,596	1,745	1,990
Debt outstanding (JGAAP) / Interest-bearing debt outstanding (IFRS)	1,593	1,596	1,534	1,501
Cash flows				
Cash flows from operating activities	110	287	254	297
Cash flows from investing activities	(205)	(163)	(164)	(216)
Free cash flow*4	(95)	123	90	81
Cash flows from financing activities	96	(147)	(105)	(78)
Per share data				
Profit attributable to owners of parent (yen/share)	(69)	71	177	242
Net assets (JGAAP) / Equity attributable to owners of parent (IFRS) (yen/share)	2,628	2,701	2,951	3,362
Dividends (yen/share)	20	20	40	60
Payout ratio (%)	—	28.1	22.5	24.8
Financial indicators				
Debt/EBITDA ratio*5 (JGAAP) / Debt/EBITDA ratio*6 (IFRS) (times)	5.2	6.1	4.2	3.6
ROE*7 (JGAAP) / ROE*8 (IFRS) (%)	(2.6)	2.7	6.3	7.7
ROA*9 (JGAAP) / ROA*10 (IFRS) (%)	1.7	1.6	4.5	5.5
Equity ratio (%)	35.3	37.9	40.1	41.8
D/E ratio*11 (JGAAP) / D/E ratio*12 (IFRS) (%)	83.5	76.9	67.9	59.0
Year-end share price (yen/share)	1,778	1,767	1,943	2,654
Segment information				
Net sales (JGAAP) / Revenue (IFRS)				
Steel business	2,714	2,499	2,691	2,873
Engineering business	278	267	284	367
Trading business		785	1,781	1,934
Ordinary income (JGAAP) / Segment profit*13 (IFRS)				
Steel business	25	15	126	188
Engineering business	14	16	18	18
Trading business		7	21	24
Others				
Crude steel production (JFE Steel on a non-consolidated basis) (million t)	26.9	28.0	28.7	28.4
Crude steel production (JFE Steel on a consolidated basis) (million t)	29.2	30.7	31.6	31.0
Shipment (JFE Steel on a non-consolidated basis) (million t)	24.7	25.2	25.5	26.1
Average selling price (JFE Steel on a non-consolidated basis) (thousand yen/t)	82.0	70.6	75.7	77.1
Export ratio on a value basis (JFE Steel on a non-consolidated basis) (%)	45.0	49.9	48.4	48.1
Employees (JFE Holdings on a consolidated basis) (persons)	54,133	57,044	57,210	58,856

*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 of yen)

				IFRS			
FY2015	FY2016	FY2017	FY2018	FY2018	FY2019	FY2020	**FY2021**
3,431	3,308	3,678	3,961	3,873	3,729	3,227	**4,365**
64	84	216	221	232	37	(12)	**416**
74	105	213	209	209	(213)	(4)	**388**
254	279	388	405	428	269	223	**668**
33	67	144	164	163	(197)	(21)	**288**
212	234	257	287	329	391	342	**340**
177	182	159	172	196	231	236	**252**
35	35	34	37	37	38	36	**39**
4,234	4,336	4,440	4,648	4,709	4,646	4,654	**5,287**
1,627	1,650	1,702	1,782	1,835	1,717	1,772	**1,850**
1,804	1,865	1,949	2,012	1,926	1,627	1,679	**1,988**
1,857	1,921	2,009	2,079	1,991	1,706	1,760	**2,070**
1,379	1,375	1,330	1,449	1,523	1,814	1,806	**1,849**
267	185	298	235	268	261	247	**298**
(137)	(163)	(194)	(284)	(313)	(358)	164	**(288)**
129	21	103	(48)	(45)	(97)	83	**10**
(144)	(18)	(90)	56	51	103	(30)	**(57)**
58	118	251	285	284	(343)	(38)	**500**
3,128	3,236	3,382	3,495	3,345	2,826	2,916	**3,453**
30	30	80	95	95	20	10	**140**
51.4	25.5	31.9	33.3	33.5	—	—	**28.0**
5.4	4.9	3.4	3.6	3.6	6.7	8.1	**2.8**
1.8	3.7	7.6	8.3	8.6	(11.1)	(1.3)	**15.7**
1.7	2.3	5.2	5.1	5.0	0.8	(0.3)	**8.4**
42.6	43.0	43.9	43.3	40.9	35.0	36.1	**37.6**
56.9	51.4	58.1	62.0	68.2	96.4	93.2	**80.8**
1,516	1,909	2,144	1,879	1,879	703	1,363	**1,723**
2,445	2,349	2,715	2,808	2,830	2,681	2,255	**3,173**
397	426	391	485	485	512	485	**508**
1,756	1,671	1,907	2,060	1,125	1,084	932	**1,231**
27	40	198	164	161	(8)	(65)	**323**
20	26	19	20	20	23	24	**26**
15	21	33	35	35	27	20	**55**
27.4	28.1	28.5	26.3	26.3	26.7	22.8	**25.9**
29.8	30.4	30.1	27.9	27.9	28.1	24.0	**27.3**
25.4	25.7	25.3	23.8	23.8	23.5	20.5	**22.4**
66.8	62.8	75.3	81.5	81.5	78.8	74.8	**103.7**
45.8	44.0	44.4	41.7	41.7	41.5	42.3	**45.5**
59,460	60,439	61,234	62,076	62,083	64,009	64,371	**64,295**

*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, 2021	As of March 31, 2022
Assets		
Current assets		
Cash and cash equivalents	142,416	101,773
Trade and other receivables	751,824	796,955
Contract assets	101,282	123,888
Inventories	785,632	1,227,935
Income taxes receivable	14,748	1,009
Other financial assets	13,359	22,830
Other current assets	79,430	118,235
Total current assets	1,888,694	2,392,629
Non-current assets		
Property, plant and equipment	1,772,303	1,850,779
Goodwill	6,200	8,174
Intangible assets	95,055	108,547
Right-of-use asset	111,938	98,417
Investment property	58,310	57,660
Investments accounted for using equity method	355,242	454,642
Retirement benefit asset	22,159	24,079
Deferred tax assets	86,014	60,372
Other financial assets	244,505	217,217
Other non-current assets	14,547	15,388
Total non-current assets	2,766,278	2,895,280
Total assets	4,654,972	5,287,909
Liabilities and equity		
Liabilities		
Current liabilities		
Trade and other payables	496,995	678,377
Bonds payable, borrowings, and lease liabilities	277,027	339,726
Contract liabilities	43,038	32,580
Income taxes payable, etc.	15,090	50,547
Provisions	11,518	12,345
Other financial liabilities	86,836	143,406
Other current liabilities	208,510	236,856
Total current liabilities	1,139,017	1,493,840
Non-current liabilities		
Bonds payable, borrowings, and lease liabilities	1,529,112	1,509,739
Retirement benefit liability	141,186	125,927
Provisions	24,105	22,663
Deferred tax liabilities	7,591	12,065
Other financial liabilities	45,417	43,976
Other non-current liabilities	8,387	8,957
Total non-current liabilities	1,755,800	1,723,330
Total liabilities	2,894,818	3,217,170
Equity		
Share capital	147,143	147,143
Capital surplus	652,465	652,233
Retained earnings	1,029,976	1,294,875
Treasury shares	(180,639)	(180,580)
Other components of equity	30,278	74,596
Equity attributable to owners of parent	1,679,223	1,988,268
Non-controlling interests	80,930	82,470
Total equity	1,760,154	2,070,739
Total liabilities and equity	4,654,972	5,287,909

Consolidated Statement of Profit or Loss

(million yen)

	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2022
Revenue	3,227,285	4,365,145
Cost of sales	(2,912,766)	(3,694,690)
Gross profit	314,519	670,454
Selling, general and administrative expense	(324,057)	(360,415)
Share of profit of investments accounted for using equity method	14,239	99,730
Other income	25,782	37,524
Other expenses	(43,394)	(30,828)
Business profit (loss)	(12,911)	416,466
Profit on sales of fixed assets	28,021	—
Impairment losses	(7,544)	(11,355)
Loss on liquidation of subsidiaries and associates	—	(4,918)
Operating profit	7,566	400,192
Finance income	1,686	1,549
Finance costs	(14,184)	(13,205)
Profit (loss) before tax	(4,930)	388,535
Income tax expense	(14,133)	(98,741)
Net profit (loss)	(19,063)	289,793
Profit (loss) attributable to:		
Owners of parent	(21,868)	288,058
Non-controlling interests	2,804	1,734
Net profit (loss)	(19,063)	289,793
Earnings per share		
Basic earnings (loss) per share (yen)	(37.98)	500.28
Diluted earnings (loss) per share (yen)	(37.98)	500.12

Consolidated Statement of Comprehensive Income

(million yen)

	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2022
Net profit (loss)	(19,063)	289,793
Other comprehensive income		
Items that will not be reclassified to profit or loss		
Remeasurements of defined benefit plans	12,020	8,978
Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income	46,751	5,984
Share of other comprehensive income of investments accounted for using equity method	13,284	(3,954)
Total of items that will not be reclassified to profit or loss	72,056	11,007
Items that may be reclassified to profit or loss		
Exchange differences on translation of foreign operations	(609)	16,707
Effective portion of cash flow hedges	11,673	4,931
Share of other comprehensive income of investments accounted for using equity method	(825)	32,808
Total of items that may be reclassified to profit or loss	10,238	54,447
Total other comprehensive income	82,295	65,455
Comprehensive income	63,231	355,249
Comprehensive income attributable to:		
Owners of parent	60,036	352,318
Non-controlling interests	3,195	2,930
Comprehensive income	63,231	355,249

Consolidated Statement of Changes in Equity

Fiscal year ended March 31, 2021

(million yen)

	Equity attributable to owners of parent											
					Other components of equity							
	Share capital	Capital surplus	Retained earnings	Treasury shares	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	Total	Total	Non-controlling interests	Total equity
Balance as of April 1, 2020	147,143	652,430	1,002,076	(180,637)	—	39,768	(31,941)	(1,813)	6,012	1,627,026	79,526	1,706,552
Net profit (loss)	—	—	(21,868)	—	—	—	—	—	—	(21,868)	2,804	(19,063)
Other comprehensive income	—	—	—	—	12,186	59,433	(314)	10,599	81,904	81,904	390	82,295
Comprehensive income	—	—	(21,868)	—	12,186	59,433	(314)	10,599	81,904	60,036	3,195	63,231
Purchase of treasury shares	—	—	—	(65)	—	—	—	—	—	(65)	—	(65)
Disposal of treasury shares	—	(22)	—	26	—	—	—	—	—	4	—	4
Dividends	—	—	—	—	—	—	—	—	—	—	(1,743)	(1,743)
Share-based payment transactions	—	(23)	—	37	—	—	—	—	—	13	—	13
Changes in scope of consolidation	—	—	—	—	—	—	—	—	—	—	694	694
Changes in ownership interest in subsidiaries	—	80	—	—	—	—	—	—	—	80	(854)	(774)
Transfer from other components of equity to retained earnings	—	—	49,768	—	(12,186)	(37,581)	—	—	(49,768)	—	—	—
Transfer to non-financial assets	—	—	—	—	—	—	—	(7,871)	(7,871)	(7,871)	—	(7,871)
Other	—	—	—	—	—	—	—	—	—	—	112	112
Total transactions with owners	—	34	49,768	(1)	(12,186)	(37,581)	—	(7,871)	(57,639)	(7,838)	(1,791)	(9,629)
Balance as of March 31, 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

Fiscal year ended March 31, 2022

(million yen)

	Equity attributable to owners of parent											
					Other components of equity							
	Share capital	Capital surplus	Retained earnings	Treasury shares	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	Total	Total	Non-controlling interests	Total equity
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 (loss)	—	—	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

Consolidated Statement of Cash Flow

(million yen)

	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2022
Cash flows from operating activities		
Profit (loss) before tax	(4,930)	**388,535**
Depreciation and amortization	236,354	**252,283**
Changes in allowance	(2,696)	**(2,917)**
Interest and dividend income	(7,179)	**(5,417)**
Interest expenses	13,844	**12,652**
Share of loss (profit) of investments accounted for using equity method	(14,239)	**(99,730)**
Changes in trade and other receivables	(71,111)	**(23,333)**
Changes in inventories	86,569	**(431,449)**
Changes in trade and other payables	(42,479)	**174,808**
Other	61,619	**39,122**
Subtotal	255,751	**304,554**
Interest and dividends received	14,857	**35,450**
Interest paid	(12,362)	**(11,559)**
Income taxes paid	(10,972)	**(29,706)**
Net cash from operating activities	247,274	**298,738**
Cash flows from investing activities		
Purchase of property, plant and equipment, intangible assets, and investment property	(308,123)	**(313,328)**
Proceeds from sale of property, plant and equipment, intangible assets, and investment property	29,547	**2,711**
Purchase of investments	(5,731)	**(5,557)**
Proceeds from sale of investments	128,898	**33,449**
Other	(8,812)	**(5,309)**
Net cash from investing activities	(164,221)	**(288,034)**
Cash flows from financing activities		
Changes in short-term borrowings	3,396	**13,834**
Changes in commercial papers	(88,999)	**—**
Proceeds from long-term borrowings	224,077	**122,422**
Repayments of long-term borrowings	(214,826)	**(103,959)**
Proceeds from issuance of bonds	60,000	**35,000**
Payments for redemption of bonds	—	**(30,000)**
Payments for purchase of treasury shares	(65)	**(65)**
Dividends paid to owners of parent	—	**(40,355)**
Other	(13,674)	**(54,303)**
Net cash from financing activities	(30,092)	**(57,427)**
Effect of exchange rate change on cash and cash equivalents	2,752	**6,080**
Changes in cash and cash equivalents	55,712	**(40,643)**
Cash and cash equivalents at beginning of period	86,704	**142,416**
Cash and cash equivalents at end of period	142,416	**101,773**

Operating and Main Group Companies (As of April 1, 2022)

Notes: 1. Net sales/Revenue: Results for FY2021
2. Number of employees: As of March 31, 2022 (Consolidated)
* Equity method affiliates

Steel Business | JFE Steel

Head office Chiyoda-ku, Tokyo **Revenue** 3,173.4 billion yen **Number of employees** 44,999 (male: 39,241; female: 5,758)

Domestic group companies

- JFE Mineral Company, Ltd.
- Mizushima Ferroalloy Co., Ltd.
- JFE Material Co., 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 Pipe Fitting Mfg. Co., Ltd.
- 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. *
- Setouchi Joint Thermal Power Co., Ltd. *
- Mizushima Eco-Works Co., Ltd. *
- NKK Seamless Steel Pipe K.K. *

Engineering Business | JFE Engineering

Head office Chiyoda-ku, Tokyo **Yokohama head office** Yokohama, Kanagawa Prefecture **Revenue** 508.2 billion yen
Number of employees 11,205 (male: 9,698; female: 1,507)

Domestic group companies

- Asukasoken Co., Ltd.
- Urban Energy Corporation
- AnyTech Inc.
- 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 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** 1,231.7 billion yen **Number of employees** 8,040 (male: 5,731; female: 2,309)

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
- Mitsuwa 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** 227.4 billion yen **Number of employees** 4,884 (male: 4,592; female: 292)

Domestic group companies

- JMU AMTEC Co., Ltd.
- IMC Co., Ltd.
- JMU Defense Systems Co., Ltd.

Employee Data (Non-consolidated: Actual figures for FY2021)

JFE Steel

Number of employees (April 1, 2022)	15,600 (Male 14,294, Female 1,306)
Number of managers	1,722 (Male 1,697, Female 25)
Ratio of female managers	1.5%
Number of recruits	276 (Male 248, Female 28) (New graduates 256, Mid-career 20)
Average years employed	15.1 (Male 14.8, Female 17.8)
Turnover rate	3.5%
Number of rehired employees	598
Number of annual leave days taken (average)	15.9 days/year
Overtime working hours (average)	22.2 hours/month
Number of employees working shorter hours for childcare (total number of persons)	101
Number of dispatched employees	164

JFE Engineering

Number of employees (April 1, 2022)	3,875 (Male 3,327, Female 548)
Number of managers	1,590 (Male 1,550, Female 40)
Ratio of female managers	2.5%
Number of recruits	169 (Male 138, Female 31) (New graduates 89, Mid-career 80)
Average years employed	14.9 (Male 14.9, Female 15.2)
Turnover rate	1.8%
Number of rehired employees	43
Number of annual leave days taken (average)	17.9 days/year
Overtime working hours (average)	26.1 hours/month
Number of employees working shorter hours for childcare (total number of persons)	60
Number of dispatched employees	686

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.*
- P.T. 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
- DongJie Environmental Technology Co., Ltd.*

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
- 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, 2022)	1,016 (Male 611, Female 405)
Number of managers	629 (Male 591, Female 38)
Ratio of female managers	6.0%
Number of recruits	81 (Male 49, Female 32) (New graduates 62, Mid-career 19)
Average years employed	14.2 (Male 14.7, Female 13.2)
Turnover rate	5.2%
Number of rehired employees	30
Number of annual leave days taken (average)	12.1 days/year
Overtime working hours (average)	32.8 hours/month
Number of employees working shorter hours for childcare (total number of persons)	63
Number of dispatched employees	17

Company Profile / Share Information

Company Profile (As of March 31, 2022)

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:	64,295 (Consolidated) Male: 54,700 / Female: 9,595

Share Data (As of March 31, 2022)

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	283,027 persons

Share Information (As of March 31, 2022)

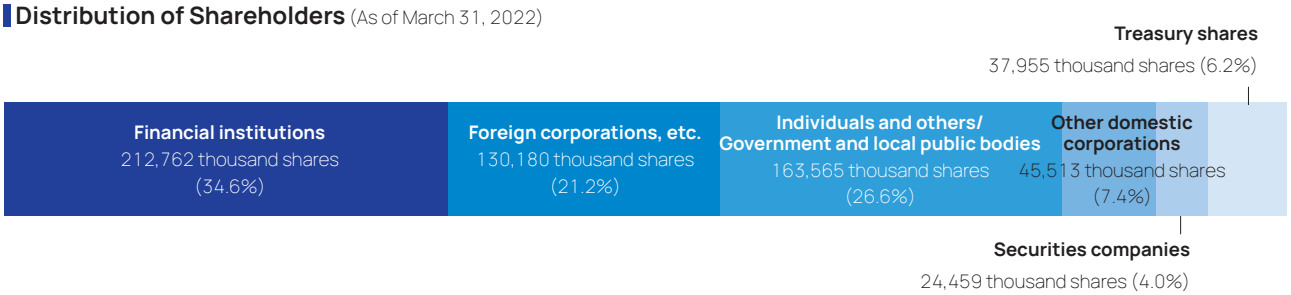
Minimum Trading Unit	100 shares
Fiscal Year-End	March 31 of each year
Stock Exchange Listing	Tokyo Stock Exchange, Inc.
Security Code	5411
Shareholder Registry Administrator	Mizuho Trust & Banking Co., Ltd. 1-3-3 Marunouchi, Chiyoda-ku, Tokyo 100-8241, Japan

Major Shareholders (As of March 31, 2022)

Name	Number of shares held (Thousand shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (trust account)	84,171	14.60
Custody Bank of Japan, Ltd. (trust account)	31,841	5.52
Nippon Life Insurance Company	17,697	3.07
The Dai-ichi Life Insurance Company, Limited	13,127	2.28
Mizuho Bank, Ltd.	12,138	2.11
JFE Employees Stock Ownership Plan	10,775	1.87
STATE STREET BANK WEST CLIENT - TREATY	9,356	1.62
JFE Business Partners Stock Ownership Plan	8,642	1.50
JP Morgan Securities Japan Co., Ltd.	7,831	1.36
Tokio Marine & Nichido Fire Insurance Co., Ltd.	7,435	1.29

Note: In addition to the above, the Company retains 37,955 thousand shares as treasury shares. The treasury shares are not included in the shareholding ratio calculation.

Distribution of Shareholders (As of March 31, 2022)



Changes in Share Prices, Trading Volume, and Dividends

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Share price (Yen) (As of year-end)	1,778	1,767	1,943	2,654	1,516	1,909	2,144	1,879	703	1,363	1,723
Trading volume (Million shares) (Fiscal year)	722	1,206	1,113	799	1,080	1,141	896	685	823	1,077	2,708
Annual dividends per share (Yen)	20	20	40	60	30	30	80	95	20	10	140

Tool map

JFE GROUP REPORT 2022
(Integrated Report)

Non-financial Information

- JFE Group CSR REPORT
- Corporate Governance Report
- DX REPORT

CSR Report
https://www.jfe-holdings.co.jp/en/csr/

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

DX REPORT
https://www.jfe-holdings.co.jp/en/investor/library/dxreport/index.html

Financial Information

- Financial results
  Investors' meeting documents
- Securities report

IR Library
https://www.jfe-holdings.co.jp/en/investor/library/index.html

The JFE GROUP REPORT and JFE GROUP CSR REPORT can also be viewed on smartphones.

▶ JFE GROUP REPORT

▶ JFE Group CSR REPORT

JFE Holdings, Inc.

2-2-3 Uchisaiwaicho, Chiyoda-ku, Tokyo 100-0011, Japan
URL: https://www.jfe-holdings.co.jp/en/