JFE

JFE GROUP REPORT 2021

Integrated Report

JFE GROUP REPORT 2021

Corporate Vision

The JFE Group will contribute 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

Koji Kakigi

President and CEO
JFE Holdings, Inc.

Publication of JFE GROUP REPORT 2021

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

Fiscal 2021, the first year of the Seventh Medium-term Business Plan, is a pivotal year for JFE Holdings, marking the formulation of the JFE Group Environmental Vision for 2050 that aims for carbon neutrality by 2050 and stronger efforts to address climate change. 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 2021 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›
FY2020 (April 1, 2020, to March 31, 2021). 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
Online: December 2021; (Next issue (planned): November 2022)

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 forecast 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.

Tool map

JFE GROUP REPORT 2021
(Integrated Report)

Non-financial Information
- JFE Group CSR REPORT
- Corporate Governance Report
- DX REPORT

CSR Report 2021
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

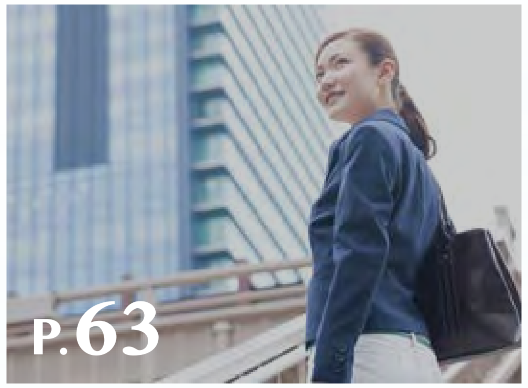
CONTENTS

JFE Group's Value Creation Story

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 its history, and touch upon its future aims.

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.



Sustainability Management

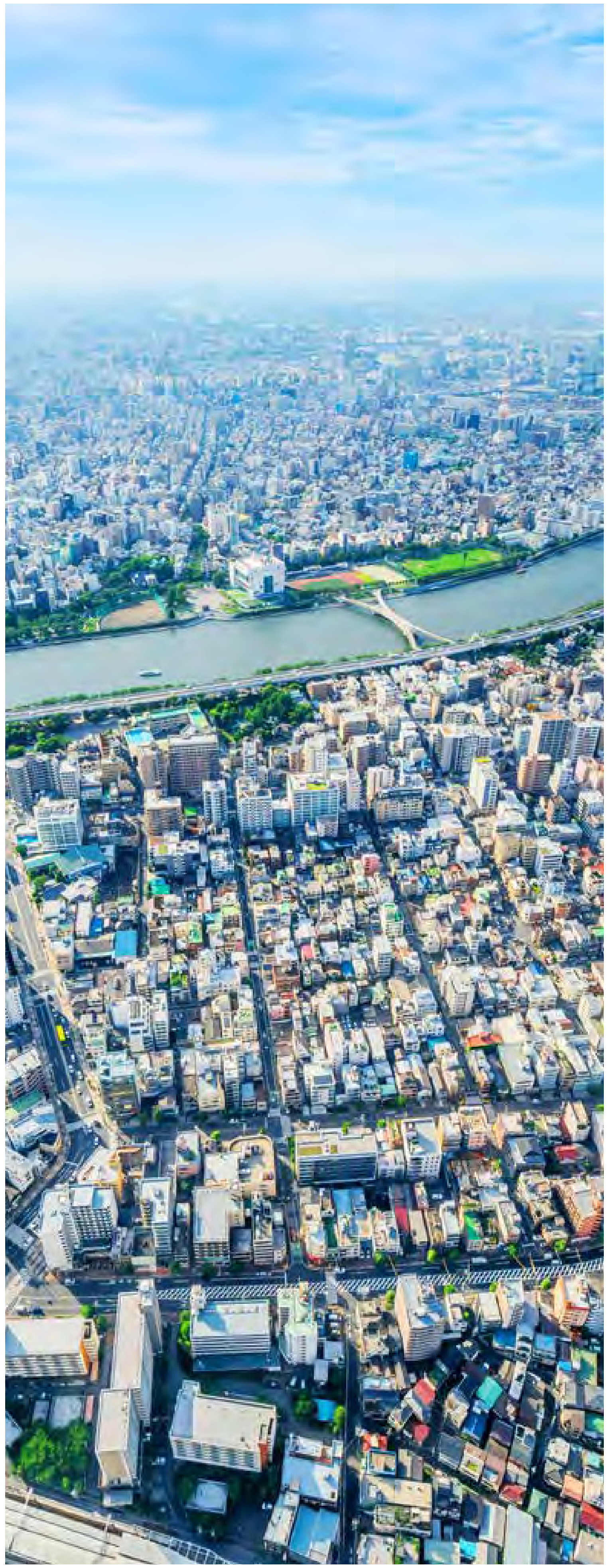
The JFE Group is strengthening its responsiveness to changes in the business environment in order to realize sustained growth in corporate value. In this section, we introduce the system behind this and our initiatives on this front.

Financial and Corporate Information

Here, we present a compilation of financial and non-financial data, as well as corporate information.

JFE GROUP REPORT 2021

1. JFE Group's Value Creation Story



JFE GROUP REPORT 2021

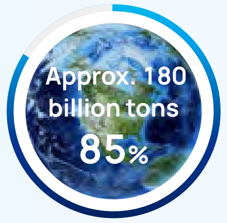
Steel supports safe and comfortable lives for an abundant world in the future

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* 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 furnace steelmakers, including JFE Steel, that compile and disclose average data for life cycle inventory (LCI) for each steel product.

* ISO 20915: Life Cycle Inventory Calculation Methodology for Steel Products (2018.11)
JISQ 20915: Life Cycle Inventory Calculation Methodology for Steel Products (2019.6)

Iron ore makes up 85% (approx. 180 billion tons) of the earth's metal resources



Source: Mineral Commodity Summaries (2021)

Steel scrap used
2015: 0.56 billion tons a year → 2050: 1.55 billion tons a year

PRODUCE

Steel can be recycled over and over again

Steelworks

Pig iron production (Blast furnace)
2015: 1.22 billion tons a year → 2050: 1.40 billion tons a year

Crude steel production
2015: 1.62 billion tons a year → 2050: 2.68 billion tons a year

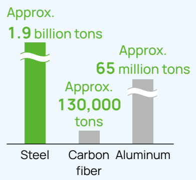
High economic efficiency and low environmental impact

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.

■Global demand (2020)



Internal investigation

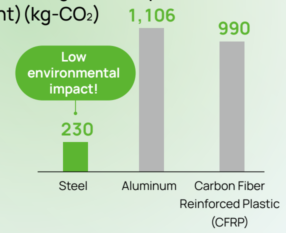
■Price*

Internal investigation
* Comparisons with other materials' prices per unit weight, with steel as 1

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 during material production (CO_2 equivalent) (kg-CO_2)



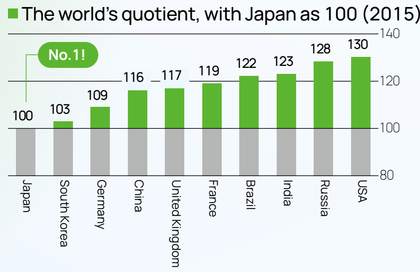
	Steel	Aluminum	Carbon Fiber Reinforced Plastic (CFRP)
GHG emissions per unit of weight (CO_2 equivalent) (kg-CO_2/kg)	2.3	16.5	22.0
Functionally equivalent weight (kg)	100	67	45

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.

■The world's quotient, with Japan as 100 (2015)



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

RECYCLE

Efficient separation and retrieval of steel using its magnetic property

Dismantle and collect

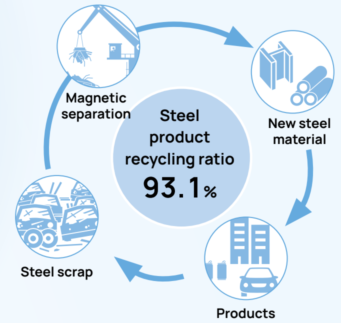
Excellent recyclability

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

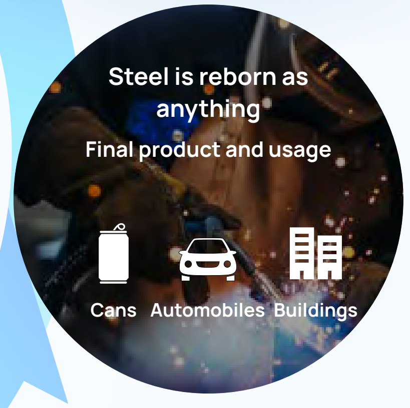
Steel can be recycled many times as the raw material of products made in the same steel material while maintaining the original properties of the iron material itself. Closed-loop recycling is superior to open-loop recycling* that recycles other materials in terms of sustainability. This is due to the 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.

* 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.



Source: Japan Iron and Steel Federation

Steel can be reborn as anything over and over again



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

USE

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

Processing and different manufacturing

Automobiles, construction materials, etc.

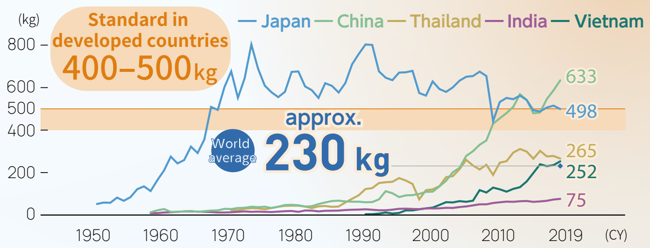
Foundation for life and society

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

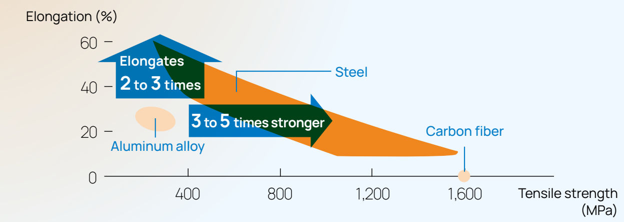


Source: World Steel Association

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

JFE GROUP REPORT 2021

History of Value Creation

■ JFE Holdings ■ JFE Steel ■ JFE Engineering ■ JFE Shoji ■ Japan Marine United

2002 JFE Group launched — 1896– Kawasaki Steel 1912– NKK (Nippon Kokan)

Seventh Medium-term Business Plan 2021–2024

For details, please refer to page 25.

First Medium-term Business Plan 2003–2005

Realizing our merger's full potential

The primary aim behind the establishment of JFE was to secure stable profitability early on and to strengthen its business foundation through active investment and financing. We consolidated facilities, and reorganized and integrated Group companies to build a strong business structure by strengthening the competitiveness of our core businesses in steel and engineering.

Second Medium-term Business Plan 2006–2008

Expanding high-value-added products

JFE shifted to establishing a highly profitable business structure based on the production and sale of high-quality, high-value-added products and the provision of sophisticated services. We also invested actively to establish systems for stable production and expanded sales of high-value-added products.

Third Medium-term Business Plan 2009–2011

Targeting future-oriented technological development

Despite a harsh business environment brought on by events including the global financial crisis in 2008 and the Great East Japan Earthquake in 2011, we pursued development of innovative technologies to accelerate our leap forward into the future, with a focus on envisioned developments in the following 10 years. We also reinforced our corporate structure to increase profitability as the No. 1 supplier of high-value-added products.

Fourth Medium-term Business Plan 2012–2014

Expanding into growing markets overseas

We further strengthened our profit base for growth by investing overseas and developing innovative new products. Corporate resources were allocated intensively in emerging markets where significant growth was expected over the medium to long term. We also reinforced production abroad and strengthened overseas sales and technical functions for further growth.

Fifth Medium-term Business Plan 2015–2017

Capturing global demand to the fullest extent

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

Sixth Medium-term Business Plan 2018–2020

Boosting competitiveness with advanced technology

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

Corporate restructuring and establishment

2002 (Establishment)–

September 2002
■ Established JFE Holdings
■ Listed on Tokyo Stock Exchange, Osaka Securities Exchange, and Nagoya Stock Exchange

January 2003
■ Corporate split agreement for NKK and Kawasaki Steel approved

April 2003
■ Established JFE Steel, JFE Engineering, JFE Urban Development, and JFE R&D
■ Kawasaki Microelectronics, Inc. became a wholly owned subsidiary

December 2003
■ Guangzhou JFE Steel Sheet Co., Ltd. established as joint venture with Guangzhou Iron and Steel Enterprises Holdings Ltd., in China

2005–

March 2008
■ Turned Universal Shipbuilding Corporation into a subsidiary through acquisition of shares owned by Hitachi Zosen Corporation and JFE Engineering

November 2008
■ Established JFE Steel Galvanizing (Thailand) Ltd.

April 2009
■ JFE R&D merged with JFE Steel

2010–

July 2010
■ Capital participation in JSW Steel Ltd. in India

April 2011
■ Absorption merger with JFE Urban Development

April 2012
■ Restructured electric furnace steelmaking operations and launched new JFE Bars & Shapes Corporation

July 2012
■ Transferred all shares issued by Kawasaki Microelectronics to MegaChips Corporation

October 2012
■ Turned JFE Shoji into a wholly owned subsidiary through share exchange

January 2013
■ Established Japan Marine United Corporation through the business integration with IHI Marine United Inc. and Universal Shipbuilding Corporation

May 2013
■ Established PT. JFE Steel Galvanizing Indonesia

December 2014
■ Acquired Kelly Pipe Co., LLC, a U.S. steel pipe wholesaler

December 2014
■ Acquired Standardkessel Power Systems Holding GmbH

April 2015
■ Established AL GHARBIA PIPE COMPANY LLC in the United Arab Emirates (UAE)

September 2015
■ Capital participation in Formosa Ha Tinh Steel Corporation (FHS) of the Formosa Plastic Group

August 2016
■ Established NUCOR-JFE STEEL MEXICO in Mexico
■ Established J Bio Food Recycle with the JR East Group

February 2017
■ Established joint venture AGRIMECO & JFE STEEL PRODUCTS CO., LTD. with AGRIMECO to sell processed construction materials in Vietnam

March 2017
■ Established joint venture in steel powder business with the BaoWu Steel Group in China

September 2019
■ Acquired Cogent Power Inc., an electrical steel sheet processor in Canada

2020–

March 2020
■ Completed acquisition of shares in Mitsui E&S Plant Engineering Inc. (inaugurated JFE Project One Co., Ltd.)
■ Started joint venture with Guangdong Shaoguan Iron and Steel Songshan Co., Ltd., an affiliate of the BaoWu Steel Group

January 2021
■ Established Nihon Shipyard Co., Ltd. as joint venture with Imabari Shipbuilding

April 2021
■ Completed acquisition of shares in Mitsui E&S Environmental Engineering Inc. (inaugurated JFE Environment Technology Co., Ltd.)

Production facilities

November 2003
■ Fired up No. 2 blast furnace in Kurashiki district

March 2004
■ Fired up No. 2 blast furnace in Keihin district

June 2004
■ Halted operations at No. 5 blast furnace in Chiba district

March 2005
■ Fired up No. 5 blast furnace in Fukuyama district

March 2006
■ Started up No. 5 coke oven (Battery D) in Fukuyama district

April 2006
■ Fired up No. 4 blast furnace in Fukuyama district

February 2010
■ Fired up No. 3 blast furnace in Kurashiki district

December 2010
■ Started up No. 6 coke oven (Battery B) in Kurashiki district

May 2011
■ Fired up No. 3 blast furnace in Fukuyama district

September 2011
■ Launched operations of incinerator for earthquake-related waste for Sendai City

December 2014
■ Started up No. 3 converter furnace at No. 3 steelmaking plant in Fukuyama district

July 2015
■ Operated No. 2 production facilities for Clean Mix® high-performance steel powder products in Chiba district

May 2017
■ Affiliate FHS fired up No. 1 blast furnace

December 2017
■ Launched operations of recycled plastic pallet production plant in western Japan

November 2018
■ J Bio Food Recycle started operations at food recycling plant

November 2019
■ Operated No. 3 coke oven (Battery A) in Fukuyama district

December 2019
■ Operated No. 3 sintering machine in Fukuyama district

March 2020
■ Decided to restructure and build optimized domestic production system

April 2020
■ Banked* No. 4 blast furnace in Kurashiki district (plan to finish upgrade work on blast furnace in December 2022)

June 2020
■ Banked* No. 4 blast furnace in Fukuyama district (resumed operations in September 2020)

* Suspend operations in a restart-capable state by stopping air blast flow

June 2021
■ Operated No. 7 continuous casting machine in Kurashiki district
■ Operated No. 3 coke oven (Battery B) in Fukuyama district

R&D, DX, etc.

2002 (Establishment)–

April 2004
■ Launched new integration system (business management)

2005–

August 2005
■ Opened Customer Solutions Lab (CSL) at Steel Research Laboratory

November 2005
■ Opened THiNK SMART at Steel Research Laboratory

March 2006
■ Started operation of new integration system J-Smile

September 2008
■ Launched companywide video conference system

2010–

February 2010
■ Operated J-Flessa optimal production and sales planning system

October 2014
■ Steel Research Laboratory opened Customize Center Fukuyama in Fukuyama district

2015–

August 2016
■ Launched system to identify fraudulent inspection certificates for steel products

December 2016
■ Launched One JFE® system to integrate shipment and delivery operations in all regions

June 2017
■ Launched operations of JFE integrated product database as basis for SCM

March 2018
■ Established Global Remote Center (GRC) (integrated monitoring of product plants, including overseas ones)

September 2018
■ Introduced J-mAIster® on all production lines as a control failure repair support system that uses IBM Japan's IBM® Watson technology

November 2018
■ Developed and started operations of Pla'cello® data analysis tool that does not require expert IT knowledge

December 2018
■ Introduced safe behavior support technology using AI image recognition

February 2019
■ Opened one of the world's largest centers for evaluating major breakdowns and fatigue in the steel field

July 2019
■ Started fully automated operations of waste incinerator

October 2019
■ Built a rank-based, systematic education system to train employees into data scientists

November 2019
■ Introduced data science technology (blast furnace CPS) at all blast furnaces
■ Companywide rollout of J-dscom® system for detecting signs of equipment anomalies

2020–

July 2020
■ Opened JFE Digital Transformation Center as base to promote DX

July 2020
■ Started to offer BRA-ING fully automated system for operating waste incinerators

October 2020
■ Introduced training simulator using mixed reality (MR) technology

ESG (governance structure, climate change, main policies)

June 2004
■ Opened JFE College as curriculum for training young employees

March 2006
■ Introduced policy for addressing large-scale purchases of the Company's shares
■ Established special committee

June 2007
■ Appointed two outside directors
■ Shortened terms of directors from two years to one year

2011–
■ Started to gift desks, chairs, and canned foods to educational authorities in Ghana and Nigeria

November 2011
■ Launched ferro-coke production pilot plant in Keihin district

September 2012
■ Opened corporate childcare center at JR Tsurumi station building

March 2014
■ Selected as Nadeshiko Brand Stock by Tokyo Stock Exchange

Fiscal 2015
■ Began to evaluate effectiveness of Board of Directors

October 2015
■ Formulated JFE Holdings' Basic Policy on Corporate Governance
■ Established Nomination Committee and Remuneration Committee

April 2017
■ Opened childcare center in Chiba district at East Japan Works (childcare centers were opened in other districts later)

June 2017
■ Presidents of JFE Engineering and JFE Shoji appointed as directors
■ Increased number of outside directors and outside Audit & Supervisory Board Members by one each

April 2018
■ Formulated JFE Group's Human Rights Basic Policy

August 2018
■ Formulated JFE Group's Declaration of Cybersecurity Management

November 2018
■ Obtained qualification for DBJ Employees' Health Management Rated Loan Program from the Development Bank of Japan

February 2019
■ Formulated the Raw Materials Purchasing Policy and Action Guidelines

May 2019
■ Declared agreement with Task Force on Climate-related Financial Disclosures (TCFD) recommendations

June 2019
■ Appointed first female Audit & Supervisory Board Member

June 2020
■ Appointed first female outside director

July 2020
■ Initially selected for inclusion in FTSE4Good Index Series and FTSE Blossom Japan Index, leading indexes for ESG investment

September 2020
■ Disclosed JFE Group's targets for reducing CO_2 emissions

October 2020
■ Commenced testing of medium-size facilities for producing ferro coke in Fukuyama district

February 2021
■ Signed memorandum of understanding with BHP about initiatives to reduce carbon in steelmaking processes

May 2021
■ Formulated JFE Group Environmental Vision for 2050

May 2021
■ Discontinued policy to prevent large-scale purchases of the Company's shares (anti-takeover measures)

JFE Holdings

JFE Steel

Steel business

JFE Steel provides high-value-added products that meet the diverse needs of its customers with its world-class technologies and product development capabilities, backed by a highly internationally competitive system based on two major integrated steelworks in Japan.

JFE Engineering

Engineering business

JFE Engineering provides technologies to effectively utilize diverse resources as green energy in the environmental and energy fields, and proactively engages in plant operation as well. It globally operates social infrastructure business, such as constructing bridges.

JFE Shoji

Trading business

JFE Shoji operates globally through supply chain networks across Japan and the world, handling a wide range of products with a focus on steel products, including steel raw materials, nonferrous metals, chemicals, fuel, equipment, ships, foods, and electronics.

Japan Marine United (equity-method affiliate)

Shipbuilding business

Backed by its top-class capabilities in construction and technologies in Japan, Japan Marine United manufactures large-scale ships including tankers, containerships, and dry bulkers, in addition to merchant ships and defense ships, such as escort ships, mine sweepers, and naval ice breakers.

Overview of External Conditions and Initiatives at Operating Companies

Steel business and Trading business

Competition with rivals has heated up in product markets and regional markets. Domestic sales of steel are for a broad range of demand fields, including building construction, civil engineering, automobiles, industrial machinery, and electrical machinery, with diverse coverage of sales formats. With a shrinking domestic market due to a falling birthrate and an aging population, and given global economic conditions in Japan and Asia, trends in the supply–demand balance for steel in Japan and around the world may have an impact on the sales volume and prices for steel produced by the JFE Group. In overseas markets, competition might intensify as a result of structural changes, namely an increase in exports as domestic demand declines in China and expansion in steel production capacity in emerging countries.

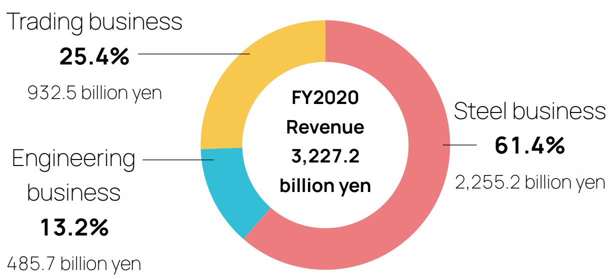
In the steel business, JFE aims to optimize production volume to match changes in the balance of supply and demand for steel products within and outside Japan, and to create an optimal production structure through the integration of facilities with an eye on long-term trends in supply–demand conditions for steel. JFE Steel will strategically invest in the West Japan Works, its core steelworks, to increase cost competitiveness and put in place a structure able to generate profits in a changing market environment. The Company aims to stabilize the earnings foundation by increasing the sales ratio of technologically advanced products to counter steel mills in emerging countries. By producing more steel locally through investments in overseas steelmakers and a vertically integrated structure overseas, JFE is keen to establish a global supply structure able to flexibly adapt to changes in international market conditions.

In the trading business, we are strengthening our sales capabilities in Japan through a restructuring of distribution functions, and making timely upgrades to equipment necessary to reinforce the foundation. Overseas, we are aggressively moving to strengthen distribution and processing functions in our four-pronged global structure, and to increase sales of JFE Steel's products in high-value-added fields. Furthermore, we aim to maintain and enhance our presence with customers overseas by utilizing products made by the JFE Group (including alliances) and other suppliers.

Engineering business

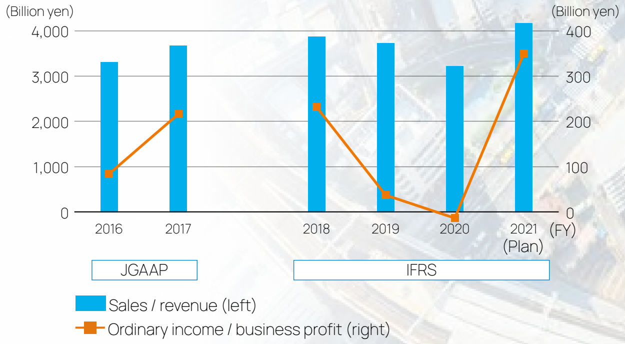
In the engineering business, JFE engages in engineering, procurement, and construction (EPC) projects for equipment, centered on bridges and environmental facilities, such as energy plants and waste incinerators. We also take on operation and maintenance contracts for facilities in design, build, and operate (DBO) projects, and operate our own recycling, power generation, and electricity retail sales businesses. The portfolio in this business is dominated by public infrastructure projects, such as waste incinerators and bridges. We aim to stabilize earnings and reinforce self-managed businesses as long-term sources of reliable earnings, due to the possibility of orders being influenced by domestic economic conditions, and the aims and policies of national and local governments.

Revenue



* Revenue of 3,227.2 billion yen includes adjustments of −446.1 billion yen

Revenue / business profit



Strength 1. Competitiveness of steelworks: Large-scale consolidated steelworks

Main bases of JFE Steel

West Japan Works

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: Steel sheets (hot-rolled and cold-rolled steel sheets), Surface-treated steel sheet (zinc and tin plate), Steel plates, Shaped steel, UOE steel pipes

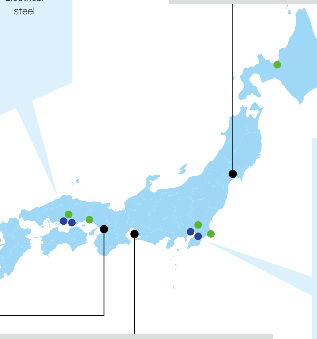
Kurashiki district: Steel sheets (hot-rolled and cold-rolled steel sheets), Surface-treated steel sheet (zinc), Steel plates, Electrical steel, Bar, Steel wire, Shaped steel

JFE Bars & Shapes Corporation

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

Shaped steel, Deformed bar

Production bases of JFE Bars & Shapes



Nishinomiya Plant (East Japan Works)

Stainless steel sheet

Chita Works

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.

Seamless steel pipe, welded steel pipe

Sendai Works

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.

Bar, Steel wire

Steel Research Laboratory

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

Joint development facilities with customers

Chiba district

Customer Solutions Lab (CSL)

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

Keihin district

Steel Structural Materials Solutions Center (THiNK SMART)

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

Fukuyama district

Customer Center Fukuyama (CCF)

EVI base for customers in the automobile and steel materials fields

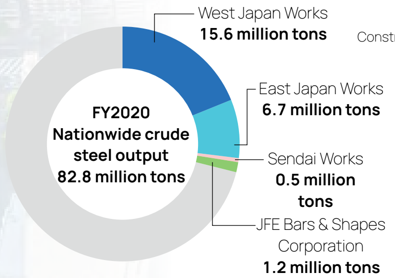
East Japan Works

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: Steel sheets (hot-rolled and cold-rolled steel sheets), Surface-treated steel sheet (zinc), Steel plates, Welded steel pipe

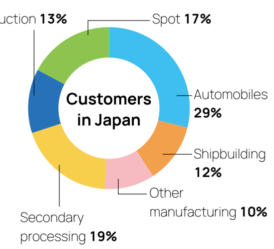
Chiba district: Steel sheets (hot-rolled and cold-rolled steel sheets), Surface-treated steel sheet (zinc and tin plate), Stainless steel sheet, Iron powder

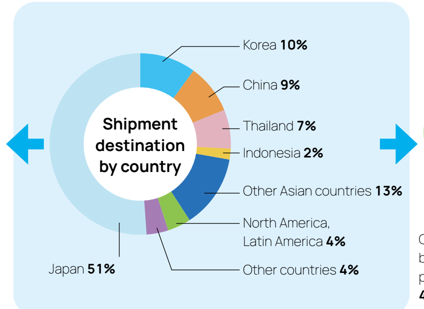
Domestic production volume

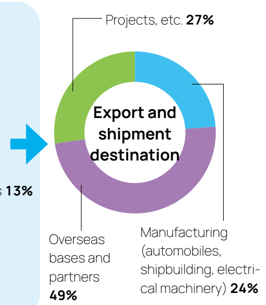


About **29%** of domestic crude steel output

Strength 2. Stable customer base







Process of Value Creation

External conditions

- Climate change
- Labor shortages due to falling birthrate and aging population
- Population growth in emerging countries
- Stronger demand for resources and energy
- Aging of infrastructure and equipment
- Advances in AI and IoT
- Transition to a mobility society

To be essential to society's sustainable development and to create safe, comfortable lives for people everywhere

Our Vision

Creation of 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

Creation of economic value

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

Outcome

Input → Business model → Output

Input

Intellectual capital

- R&D expenses (FY2020)
  36.2 billion yen
- Number of registered patents (as of September 2021)
  14,173 patents

* Number of domestic patents registered to the JFE Group

Social and other related capital

- Number of customers (delivery destinations) (FY2020)
  Approx. **24,000** customers

* Total of JFE Steel, JFE Engineering, and JFE Shoji (FY2020)

Manufacturing capital

- Number of blast furnaces (as of April 2021)
  West Japan Works: **6**
  East Japan Works: **2**
- Number of bases (as of April 2021)
  109 locations in **22** countries and regions (Group total)

Human capital

- Number of employees (as of the end of March 2021)
  64,371 persons (Group consolidated)
- Annual training hours (FY2020)
  Approx. **0.67** million hours a year (total of operating companies: approx. 32 hours a year per employee)

Natural capital

- Steel raw materials (FY2020)
  58.7 million tons (iron ore, coal, and limestone)
- Recycled raw materials (FY2020)
  0.8 million tons (steel scrap)

Financial capital

- Total equity (IFRS) (as of the end of March 2021)
  1,760.1 billion yen

Business model

JFE Holdings
Comprehensive strengths backed by world-class technologies created in each business,

Steel Business (JFE Steel)	Engineering Business (JFE Engineering)	Trading Business (JFE Shoji)	Shipbuilding Business (Japan Marine United) (equity-method affiliate)

- A business model that creates a JFE brand associated with high-added value (Steel Business, Trading Business) ▶P.35
- Business model that strongly supports the lives of people (Engineering Business) ▶P.37

Growth strategy

Seventh Medium-term Business Plan ▶P.25

Sustainability of the environment and society

Establish economic sustainability

JFE Group Environmental Vision for 2050 ▶P.29

Important management issues (materiality) ▶P.15, 57

Basics of business activities

- Compliance ▶P.77
- Respect for human rights ▶P.75
- Corporate governance ▶P.78

Promotion of materiality

Output

Output into market (FY2020 revenue: 3,227.2 billion yen)


Steel sheets for automobiles


Steel sheets for tableware and kitchenware


Biomass power generation facilities


Bridges and steel for bridges


Urban environmental plants


Very large crude oil carrier (VLCC)

FY2020 results

Contributions to resolving climate change

JFE Steel
Reductions in CO_2 emissions:
10.8 million tons (comparison with FY2013)

JFE Engineering
Contribution of CO_2 emissions reductions:
9.65 million tons

JFE Steel
Recycled water resource usage:
93.0%

Increase competitiveness with DX

JFE Steel
Data scientists: **350** employees

World-class technological capabilities that meet customer needs

Domestic patent publications:
1,113 patents

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

Ratio of high-value-added products:
Approx. **40%**

Emergency measures during the pandemic

Cost reductions: **100** billion yen
Asset reductions: **180** billion yen

Material Issues of JFE Group Corporate Management

Identification of material issues of corporate management

The JFE Group has identified material issues and set KPIs to address these issues with the objective of maximizing the creation of social value and minimizing its negative impact on society as Group capital is deployed to satisfy the needs of diverse stakeholders. The material CSR issues that we identified in 2016 were comprehensively selected from 35 CSR-related issues in light of the expectations of society, while considering the unique nature of the Group's operations. Priorities were assigned to the identified material issues based on (1) the expectations of stakeholders and (2) correlation with operations (impact on society). We identified 13 issues in five focus areas.

In fiscal 2021, we formulated the Seventh Medium-term Business Plan, recognizing that ensuring environmental and social sustainability (helping to solve critical issues) and establishing economic sustainability (stable earnings power) are key to the JFE Group's sustainable development. Accordingly, we reorganized our materiality by adding economic issues to our existing CSR issues to identify all **our material issues of corporate management**. We will demonstrate the Group's vision of "contributing to society with the world's most innovative technology" by working in concert to address these issues.

Material CSR issues

+

Material economic issues

↓

Material issues of corporate management

Process for identifying material issues

FY2016: Identifying material CSR issues

STEP 1 Identification

By measuring the businesses of the JFE Group against the following yardsticks, we have identified 35 core issues for our CSR initiatives:

- GRI G4 Sustainability Reporting Guidelines
- ISO 26000
- Sustainable Development Goals (SDGs)
- ESG survey via external assessment
- Internal documents on employee satisfaction surveys, etc.
- Benchmark surveys on the three business areas

STEP 2 Prioritization (Groupwide Meeting)

We prioritized the above 35 issues in two ways: stakeholder expectations and relevance to business societal impact, and identified 13 issues in five focus areas.

▶ Groupwide meeting

Managers from each operating company discussed the prioritization from the perspectives of group management and their respective operating companies' interests.

STEP 3 Validation

The following process validated the material CSR issues identified:

- Confirmation and examination by each operating company
- Examination and approval by JFE Group CSR Council*

* Participants included the President of JFE Holdings (chairperson), executive vice president, Corporate Officers, full-time Audit & Supervisory Board Members, and the presidents of operating companies, etc.

FY2021: Identifying material issues of corporate management

STEP 1 Reevaluate existing material CSR issues

The material CSR issues identified in 2016 were reassessed for their importance in terms of relating to current operations, stakeholder expectations, and achievement of KPIs.

STEP 2 Set material economic issues

Based on discussions at each operating company, major strategies in the Seventh Medium-term Business Plan were grouped together with sources of competitive advantages in the JFE Group's business model, and economic-related issues were clarified for the economic sustainability of the Group.

▶ Sources of competitive advantages

Steel and trading businesses: Production, sales, and technological development

Engineering business: Engineering, procurement, construction, sales, and technological development

STEP 3 Select 20 material issue candidates

Economic-related issues were added to the list of reassessed material CSR issues, and their appropriateness as issues for the JFE Group was 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 20 material issue candidates, and narrowed them down by identifying the most important for the JFE Group, as 13 material issues of corporate management.

KPIs for material issues

The JFE Group has set and worked toward achieving KPIs in initiatives for the identified material issues. In fiscal 2020, 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 KPIs for **material issues of corporate management** that we identified for fiscal 2021 were set following examination by operating companies, discussion at management meetings, and deliberations by the Group Management Strategy Committee and Board of Directors.

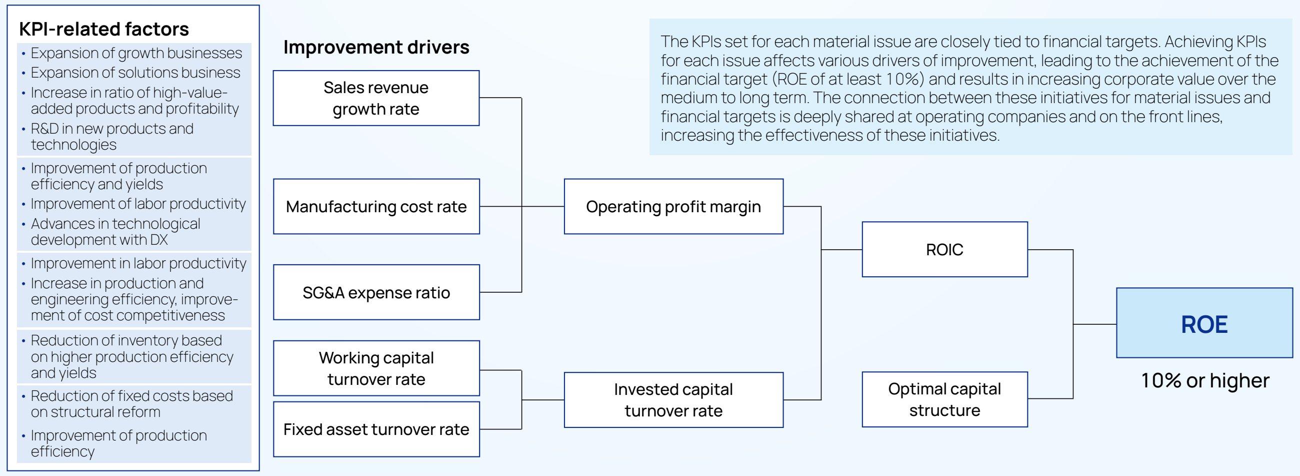
▶ Please see page 57 for information about our initiatives in fiscal 2020 and KPIs for fiscal 2021.

	Areas of Focus	Details	Material Issues	Relevant SDGs
Activity	Contribute to resolving climate change issues (initiatives for achieving carbon neutrality by 2050) → P.29, 65	● 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	6, 7, 9, 12, 13, 14
Activity	Ensure occupational safety and health →P.71	● 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	3, 8
Activity	Recruit and nurture diverse human resources → P.73	● 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	4, 5, 8, 9, 10
Activity	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	9, 10, 11, 12
Activity	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	7, 9, 11, 12, 13, 17
Basis of activity	Thoroughly enforce compliance → P.77		• Ensure adherence to corporate ethical standards and compliance	10, 16
Basis of activity	Respect human rights → P.75		• Respect human rights across the supply chain	

Please see page 57 for KPIs for each priority issue.

Improvement in ROE by achieving KPIs

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.



2. Strategy to Create Value

JFE GROUP REPORT 2021

MESSAGE FROM THE CEO

Aiming to change itself for the sake of our planet's future, JFE is taking on the greatest challenge since its founding.

JFE is engaged in worldwide business centered around the production of steel. It is also involved in engineering activities for the construction of safer and more convenient world with steel, and global trading activities to create value in diverse ways.

What I would like to tell our stakeholders at first is that steel products will support human life and will continue to be an indispensable material for industrial and social development in the future. As economies expand in emerging countries, especially in Asia, demand will continue to strengthen for automobiles, buildings, infrastructure, cargo ships, and containers. There is no substitute for steel. Also, considering the growing concern for climate change, the environmental load of steel is lower than that of many other materials. Furthermore, it can be easily recycled and endlessly turned into new products while maintaining high quality. I am confident that the superiority of steel as a material will remain unchallenged long into the future.

People expect JFE to contribute to industrial and societal development with high-performance materials that help the world become carbon neutral as well as support human life. Such materials include high-tensile steel for extra-light automobiles, high-performance electrical steel for electric vehicle (EV) motors, and high-strength steel plate for large container ships.

Meanwhile, societal and economic conditions are changing faster than ever before, including competition from emerging Chinese steelmakers, the necessity to address climate change, and the seemingly unending COVID-19 pandemic.

Our mission is to become an indispensable company for a sustainable development of society and the assurance of safe and comfortable human life by adapting to these changes. To fulfill this mission, we aim to improve our corporate value and sustain our growth over the medium to long term by securing our own sustainability (stable earnings power) as well as the sustainable development of society and the environment.

Koji Kakigi
President and CEO
JFE Holdings, Inc.

Review of the Sixth Medium-term Business Plan

During our Sixth Medium-term Business Plan (fiscal 2018–2020) we experienced extreme change in our business environment, well beyond what was anticipated when we formulated the plan, including the global pandemic and intense trade friction between the U.S. and China.

In the first half of fiscal 2020, the global pandemic sharply curtailed the production activities of major customers. The demand for steel products fell an unprecedented 30% between April and June. Even a 10% drop in production volume is extremely serious, so the degree of decline this time was even worse than what we experienced during the 2008 financial crisis. Thanks to our emergency measures and a global economic rebound in the second half, our earnings returned to the black, but it was not enough to fully offset our first-half loss. As a result, we were unable to turn a profit for the full year.

Losses in both fiscal 2019 and 2020 prevented JFE from achieving its key financial and earnings targets under the Sixth Medium-term Business Plan, for which I express my deepest apologies to our stakeholders. In fiscal 2021, however, we expect to see major improvement in earnings in our steel business and year-on-year profit growth in our engineering and trading businesses. We now expect consolidated business profit to greatly exceed our initial forecast.

The business environment was very challenging during the period of our previous plan. Our steel business responded with advanced digital transformation (DX) initiatives and capital investments to upgrade production bases, which led to fewer production problems and smoother repairs. Due to structural changes in the business, in March 2020 we decided to strategically restructure and consolidate the steel business as the first step toward creating a more robust corporate structure. Meanwhile, the engineering business continued to generate stable earnings despite the pandemic, demonstrating its resilience. Initiatives and outcomes realized under the previous plan now form a vital foundation for our sustained growth into the future.

Seventh Medium-term Business Plan: Stable Earnings Foundation and Carbon Neutrality

Strong Efforts to Become Carbon Neutral

At a time when the business environment is undergoing sudden and significant change, there is a rapidly growing sense of crisis regarding global climate change. It is imperative that we take collective action to protect our environment for future generations.

Making steel in blast furnaces is best suited to producing large volumes of high-quality, high-performance products, but this results in CO_2 emissions. JFE views climate change as a crucial issue of its business continuity, so in September 2020, ahead of the Japanese government, we announced our 2030 and 2050 targets for reducing CO_2 emissions.

Our new Seventh Medium-term Business Plan includes the JFE Group Environmental Vision for 2050, which outlines specific initiatives to reduce CO_2 emissions in an effort to become carbon neutral—the end goal—by 2050. We have formulated practical steps aimed at cutting CO_2 emissions by 18% in our steel business as of fiscal 2024, the final year of the current plan. This would put us within reach of achieving our goal of reducing CO_2 emissions by 20% or more by fiscal 2030, as announced last year. During the current plan, we expect to announce updated initiatives for attaining our fiscal 2030 target, including our development of advanced new technologies.

To become carbon neutral by 2050, we aim to establish ultra-innovative technologies as quickly as possible, ahead of competitors. This will include proprietary technology for carbon recycling blast furnaces, which would allow us to convert existing production facilities into carbon-recycling facilities. If this technology is commercialized, we expect that it will reduce CO_2 emissions by at least 30% in individual single blast furnaces, and carbon neutrality can be realized by combining with Carbon Capture, Utilization and Storage (CCUS). We aim to complete proof-of-principle process by 2027 to ensure the feasibility of this technology. But since no single proven method for becoming carbon neutral has been discovered yet, we plan to explore a range of potential technologies, such as hydrogen-based steelmaking (direct reduction), ferro coke, and the combined use of technologies including electric furnaces.

The development of steelmaking technologies that do not emit CO_2 during production would be a difficult task for a single private company to achieve, in my opinion. This is why we believe that government assistance and collaboration with society will be necessary, including the creation of a framework for society to bear the projected huge increases in costs for R&D, investment in prototypes, and procuring green hydrogen and electricity. Through enhanced coordination with society we hope to achieve carbon neutrality by 2050.

▶ For details, please refer to page 29.

Carbon Neutrality as a Business Opportunity

As we develop diverse businesses and leverage our unique technologies, we intend to expand operations in unique ways based on the view that the accelerating worldwide movement toward carbon neutrality is a business opportunity.

For example, in the engineering business, we will expand our business to construct environmental plants such as renewable energy plants with expectation of contributing to lowering CO_2 emissions in the society by 12 million tons as of fiscal 2024 and 25 million tons as of fiscal 2030.

JFE was the first company in Japan to commercialize the production of monopiles needed to secure offshore wind power turbines to the seabed. I have long sought to expand JFE businesses that maximize our group synergies, and the monopile business is one such example. JFE Engineering will produce the monopiles, JFE Steel will supply the heaviest steel plate available in Asia, and JFE Shoji will handle distribution and steel processing. Furthermore, other companies in our group will help to maintain structural components and our equity-method affiliate, Japan Marine United, is looking for a business opportunity to build the required work vessels and floating wind power plants.

Offshore wind power generation will be a key to expanding renewable energy in Japan, which is why the Japanese government has set medium- and long-term targets for rolling out wind power and raising the domestic procurement ratio. After solidifying our operational base in Japan, we aim to expand this business throughout Asia.

▶ For details, please refer to page 34.

Pursuing World-class Earnings Power

The medium- to long-term outlook for JFE's core steel business is inevitably impacted by conditions in Japan, traditionally JFE's main market, where the domestic population is continuing to decline in size. Overseas, meanwhile, it will be hard to expand export volume without sacrificing profitability in light of increasing price competition for commodity steel products and the shift to local production for local consumption. To give JFE the best chance to achieve sustainable growth, overcome global competition, and suitably address climate change, our current plan dramatically repositions our business focus by pivoting toward quality (profit per ton of steel shipment) and away from quantity (tons of steel produced).

We have focused on producing high value-added products for many years, and at the same time, we aimed to increase production and sales volume of between 40 million and 50 million tons under the JFE brand in the previous medium-term business plan. The thinking was that it would be impossible to generate earnings reliably unless we were among the world's top 10 steelmakers in terms of output. But the fact is that companies with large production capacity are not necessarily profitable. I think business model has been changed due to structural changes in the business environment. Therefore, for our new business plan, I decided that creating a business structure capable of reliably generating profits was more important than expanding our output.

During the current plan, JFE will concentrate strategically on priority fields (automobiles, energy, construction materials, and infrastructure) and reducing fixed costs through structural reforms, rather than attempt to grow earnings by increasing domestic production. We also aim to reconstitute prices for steel by overhauling our selling prices and by talking with our customers about appropriate pricing. Additionally, we plan to offer a more advanced product mix and will continue to cut costs through our application of new DX technology.

The phrase "the most transformative period in company's history" contained in the current plan expresses our strong determination to achieve world-class earnings power by pivoting away from our previous pursuit of volume-based growth. Ultimately, we aim to establish a robust earnings foundation to lock in a profit of 10,000 yen per ton of steel through our disciplined pursuit of quality.

▶ For details, please refer to page 41.

Growth Strategy Centering on Overseas Steel Business and Engineering Business

To drive the overall growth of our entire group, we aim to expand the scale of our overseas steel business and also our engineering business in the environmental and recycling fields.

We have two main business models for our overseas steel business. The first one, our vertically integrated business model, entails supplying semi-processed steel sheets from Japan and providing processed materials to the local customers in overseas markets. The second one, our "insider business" model, calls for investing in leading, reliable partners in growth markets to provide steel products by using our partners' material. We especially hope to increase earnings by deepening partnerships through this second model during the current plan.

As a part of this effort, we are looking closely at jointly establishing a production and sales company for grain-oriented electrical steel sheet with JSW Steel Ltd., our strategic alliance partner in India. The demand for electricity is projected to increase strongly as India's economy expands, resulting in more demand for grain-oriented electrical steel needed to produce transformers. Our growing involvement with highly value-added electrical steel sheet is expected to help us pivot from quantity to quality as we grow our earnings.

We also aim to develop new revenue-generating businesses by providing overseas companies with advanced solutions. This will involve leveraging the technologies and knowledge we have accumulated over the years not only inside our domestic production basis but also to the outside of our company globally. The initiative is in line with our new strategy to find new applications for our advanced technologies and knowledge within the global steel industry.

In engineering, we will focus on the environmental and recycling fields, our greatest strengths, and the carbon-neutral field centered on renewable energy. We have set ambitious targets including 1 trillion yen in revenue and a profit margin of 8% (segment profit 80 billion yen) by fiscal 2030, roughly double the current levels. Although achieving these targets will not be easy, we plan to execute capital and business investments amounting to an unprecedented 220 billion yen over the first four years, the period in which we intend to build a foundation for growth to 2030. In our core fields of waste-to-energy power generation, food recycling, and plastic recycling, we expect to significantly increase alliances, M&A and our use of DX. Moreover, we will aggressively invest in the promising field of renewable energy, including offshore wind power and geothermal power plants.

In our trading business, plans call for M&A and other investments to establish a leading global system for processing and distributing electrical steel and also to reinforce supply chain management (SCM) systems for automotive steel.

Establishment of a Robust Financial Foundation

Under our previous plan, investments to modernize aging facilities and update our production base reached a peak. Going forward, investments will be focused more strategically, aiming to enhance our competitiveness and establish a more stable earnings base. Investments will target high-growth and high-return projects, such as green transformation (GX) and DX, in addition to further facility upgrades. Funds for such these investments will be secured as required by selling assets and businesses that are contributing little to earnings.

We will emphasize financial soundness as a means to secure funds for investments in growth and to become more carbon neutral. Our development and implementation of ultra-innovative technologies by 2050 will require huge investments, so we are keen to improve our profitability and reinforce our financial position in order to prepare for the necessary R&D, verification, and then implementation of these ultra-innovative technologies.

▶ For details, please refer to page 27.

Improving Our Responsiveness to Change

The business environment has changed dramatically in several ways since I became CEO. The international political situation has evolved at a dizzying pace over the past few years, affecting not only our production activities but also our customers and other corporations in unpredictable ways. In some ways it is no longer possible to envision future risks and then create detailed responses in advance. Instead, I believe it is more appropriate to identify unanticipated events as soon as possible and then flexibly change course to address them as required. In other words, we need to improve JFE's responsiveness to change.

Under our current plan, we are strengthening our groupwide governance by having the Group CSR Council improve our cross-organizational risk management structure. The committee is also creating a comprehensive system to identify and address risks and changes in business conditions. Furthermore, we have added important economic matters to our list of material CSR issues, based on which we are following up on our execution of KPIs for each priority issue.

Our Board of Directors is spending significantly more time looking into ESG issues, such as climate change and human rights. We intend to enhance governance by using non-financial indicators related to the environment and society in order to help guide our decision-making and determine compensation for executive officers.

Human Resources Strategy for Sustaining Business Activities

JFE's human resources strategy for hiring and training employees has a major impact on corporate activities over the medium to long term. While hiring and training employees does not boost earnings immediately, I believe we must have a sound system for securing talented and diverse personnel if we wish to remain resilient to change. JFE gladly hires women and mid-career personnel and makes concerted efforts to create workplaces that further the abilities and motivations of our employees.

Since middle-aged employees in our steel business are in decline, we have been achieving measurable progress in passing technical know-how down to younger workers since the previous plan, supported with our use of DX technology. During our current plan, we are expanding the scope of this project to train data scientists and upgrade other necessary employee skills.

▶ For details, please refer to page 73.

Safety Measures to Eliminate Serious Accidents

We take very seriously the fact that we have not eliminated serious accidents, which remains a top priority.

Based on the basic philosophy that safety must be prioritized over everything else, JFE has concentrated on ensuring perfect safety by modifying facilities so that accidents cannot happen, and by thoroughly training employees and updating rules on safety. Our first and foremost priority is to operate continuously safe environments in workplaces where everyone can work without worry. For example, we plan to install systems so that when an employee enters a restricted zone, they will be detected by sensors and the production line will stop automatically. In safety education, we will expand training techniques to include hands-on training and virtual reality (VR) training on how to avoid accidents involving falls or getting wedged between equipment.

Under the current plan, JFE has earmarked 10 billion yen for annual investments in groupwide safety. We will push forward with measures to truly improve the safety of our equipment and our work, including through deployment of safety-support tools built with IT and data-science technologies.

Based on our strong conviction that it is possible to prevent all accidents, we will make every effort to promote safety.

▶ For details, please refer to page 71.

To Our Stakeholders

Our mission is to remain a company capable of developing and providing products and services that benefit the world regardless of the current operating environment.

The movement toward carbon neutrality is gaining momentum worldwide and the need to realize this goal is increasing at an accelerating pace. JFE is responsible for continuing its business by achieving carbon neutrality of steelmaking process earlier than other steelmakers, as an indispensable company for supporting social and industrial development and human life.

I am driven by a strong sense of crisis that our company may become irrelevant if we cannot establish a process for producing steel without emitting CO_2. Steelmakers worldwide are working to develop such technologies, but JFE is in position to lead the world and become the first company to make this a reality.

Our Seventh Medium-term Business Plan calls on employees to be proud, not to be afraid of failure when taking on bold challenges, and to make sure that we remain essential to society and humankind as we grow.

The four years of our Seventh Medium-term Business Plan are positioned as a period for transitioning to a new stage of growth, signaling the beginning of the most transformative period in our history. I humbly ask for everyone's understanding and support as we set about achieving our goals.

Koji Kakigi

President and CEO

Seventh Medium-term Business Plan (FY2021–2024)

Key Measure 1 **Ensure Environmental and Social Sustainability**

(1) Promotion of the JFE Group Environmental Vision for 2050

In May 2021, we formulated the JFE Group Environmental Vision for 2050 with the aim of becoming carbon neutral by 2050, positioning initiatives to address climate change as the highest priority issue for management.

To attain the ambitious goal of becoming carbon neutral by 2050, JFE intends to establish as early as possible the necessary technologies for decarbonization ahead of its global competitors, while assuming this global movement will progress on equal footing and decarbonization infrastructure will be put into place.

▶ Please refer to the Special Feature on page 29 for details about the JFE Group Environmental Vision for 2050.

Initiatives in the Seventh Medium-term Business Plan

Reduction of CO_2 emissions by 18% by the end of fiscal 2024 vs. fiscal 2013

Initiatives for Carbon Neutrality by 2050

1. Reduce CO_2 emissions at JFE Steel
2. Expand contributions to CO_2 emissions reduction in society
3. Groupwide commercialization of offshore wind power business

(2) Resolve issues impacting society

Safety/health management

Management takes seriously the fact that it has been unable to achieve its most important target of zero serious accidents. The Company is concentrating efforts on ensuring 100% safety by modifying equipment so that accidents cannot occur.

→ Prioritize investment in safety measures: **10 billion yen** annually Groupwide
→ Promote multifaceted occupational safety management (supervision, detection, etc.) using advanced IT

Facilitate employee participation

As business becomes more global and complex, JFE endeavors to hire personnel necessary for realizing its growth strategy while sharpening its competitiveness, and to provide environments where employees can work to the fullest of their abilities.

→ 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

Contribute to regional societies through the engineering business

JFE contributes to the circular economy through a combination of its businesses in renewable energy power generation in each region, regional power producers and suppliers*, as well as gas, waterworks, and other utility services, in addition to food recycling and waste-to-energy power generation.

* Electricity is generated and supplied within a region to promote the local production and consumption of energy.

Respect human rights throughout the supply chain

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, and will continue to expand its efforts on this front.

▶ For details, please refer to page 75.

(3) Enhance corporate governance

In addition to corporate governance initiatives in the past, during the time frame of the plan, 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, appropriately deal with various risks that arise in a changing business environment, and further strengthen Group governance.

▶ For details, please refer to page 78.

Key Measure 2 **Establish Economic Sustainability**

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

It has become vital to ensure strong earnings capabilities that are resilient to changes in business and market conditions, as it is likely to become more challenging to expand exports while maintaining margins, and as the domestic market contracts. Accordingly, in the medium-term plan, the JFE Group is pivoting from volume to quality as its source of earnings, seeking a profit of 10,000 yen per ton of steel products.

Achieve world-class cost and quality competitiveness

Cost reductions **120** billion yen (Steel business)

Expand margins and achieve stable profit

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

(2) Promote growth strategies

Steel business
Examine establishment of a joint company with JSW in India for the production and sales of grain-oriented electrical steel sheet

Steel business
Expand solutions business
Increase earnings **threefold** by fiscal 2024 vs. fiscal 2020

▶ Steel Business P.39

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

▶ Engineering Business P.43

Trading business
Expand overseas processing supply chain management for high-performance electrical steel sheet
Create No. 1 global distribution and processing structure

▶ Trading Business P.47

(3) Significantly enhance competitiveness through DX

JFE aims to enhance its business model, realize its growth strategy, and improve earnings capabilities while advancing DX projects.

Groundbreaking improvements in productivity
JFE aims to optimize overall operations by utilizing cutting-edge digital technologies.

Transform existing businesses
JFE will strengthen relationships with customers and improve products and services with DX.

Create new businesses
JFE aims to expand the solutions business and launch disaster prevention and preservation businesses with digital services.

Along with expansion of its DX strategy, it has become more important for the Company to address cybersecurity risks, such as cyberattacks and system intrusions. Management is strengthening governance and security measures, centered on JFE-SIRT*.

* JFE Security Integration and Response Team

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

With regard to investments for maintaining the functionality of aging facilities in the steel business, the Company takes a disciplined approach to selecting projects based on returns on investment and necessity. Our priorities are being shifted to investments for improving earnings, modernizing facilities, and GX and DX projects.

Furthermore, JFE aims to achieve both financial soundness and returns on investments with sustainable financial management, securing the funds necessary for investments while reducing assets through reviews of assets and businesses that contribute little to earnings.

▶ Please refer to the Message from the CFO on page 28 for information about plans for investments and reducing assets.

Financial and earnings targets

Consolidated	FY2020 Actual	FY2024 Plan
Business profit	¥(12.9) billion	**¥320 billion**
Profit attributable to owners of the parent	¥(21.8) billion	**¥220 billion**
ROE	(1.3)%	**10%**
Debt/EBITDA	8.1x	**About 3x**
D/E ratio*1	93.2%	**About 70%**

*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)

Operating companies	FY2020 Actual	FY2024 Plan
Steel business		
Profit per ton*2	(3,000) yen/ton	**10,000 yen/ton**
Segment profit	¥(65.4) billion	**¥230 billion**
Engineering business		
Segment profit	¥24.0 billion	**¥35 billion**
Revenue	¥485.7 billion	**¥650 billion**
Trading business		
Segment profit	¥20.0 billion	**¥40 billion**

We will establish a robust financial and earnings foundation during the Seventh Medium-term Business Plan while eyeing future investments to become carbon neutral.

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

Review of the Sixth Medium-term Business Plan

JFE fell far short of its medium-term target for business profit, owing to sudden changes in the business environment stemming from U.S.–China trade friction and the COVID-19 pandemic. We reduced capital investment as we took emergency steps to shore up earnings and cash flow, mainly in the steel business. Meanwhile, operating companies continued to invest in medium- to long-term growth. To fund these investments, we generated 215 billion yen in cash over the three years of the plan by selling cross-held shares and land, as well as by reducing inventories. As a result, we were able to slightly reduce the balance of interest-bearing debt in fiscal 2020. During the Sixth Medium-term Business Plan, JFE issued a total of 210 billion yen in corporate bonds, while stabilizing and diversifying its procurement of funds.

Financial and earnings targets and results in the Sixth Medium-term Business Plan

(billion yen)

	Targets in the Sixth Medium-term Business Plan (Average)	Results in the Sixth Medium-term Business Plan FY2018	FY2019	FY2020
Business profit	290.0 / year	232.0	37.8	(12.9)
Profit attributable to owners of parent	220.0 / year	163.5	(197.7)*1	(21.8)
Debt/EBITDA ratio	About 3x	3.6x	6.7x	8.1x
Interest-bearing debt outstanding	–	1,523.8	1,814.3*2	1,806.1

*1 Impairment losses of 238.8 billion yen were booked as an exceptional item.
*2 Fiscal 2019 reflects an impact of 105.7 billion yen (increase at the start of the fiscal year) from the application of IFRS 16 Leases.

Initiatives in the Seventh Medium-term Business Plan

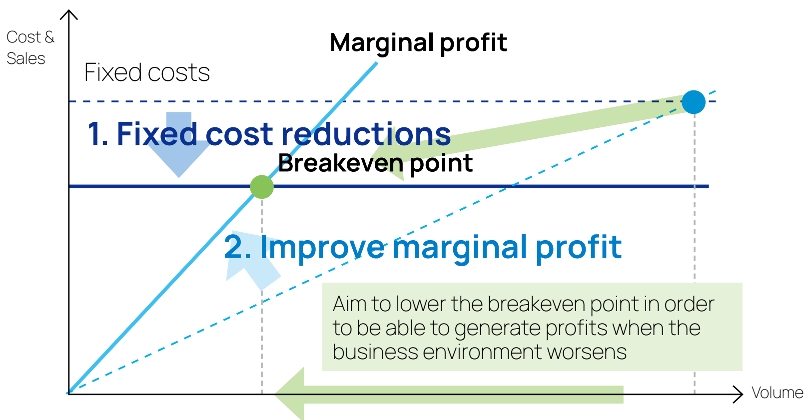
Review earnings structure of steel business and advance Group growth strategy

In the Company's main steel business, we will halt upstream processes at East Japan Works (Keihin) and deploy DX technology to improve labor productivity, resulting in lower fixed costs (see 1 in the breakeven chart below). In addition, JFE aims to increase the ratio of high-value-added products and overhaul its selling prices, driving improvement in the marginal profit ratio (see 2 in the breakeven chart below). These initiatives will make our earnings base more robust.

As for our growth strategy, we intend to expand the solution business of providing technological, operational, and research know-how in the steel business, and accelerate growth and expand the overseas business by deepening the overseas "insider" business. We aim for 230 billion yen in segment profit by fiscal 2024, the final year of the business plan.

In the engineering business, we are aiming for segment profit of 35 billion yen by the final year of the plan through earnings growth in the environment & recycling field and the renewable energy field. In the trading business, our target is segment profit of 40 billion yen, by expanding the supply chain through M&A and advancing processing functions. As a result of these initiatives at operating companies, JFE targets business profit of 320 billion yen by the last year of the Seventh Medium-term Business Plan.

Breakeven point chart for the steel business



1. Fixed cost reductions
- Halt upstream operations at East Japan Works (Keihin)
- Improve labor productivity

+

2. Improve marginal profit
- Raise ratio of high-value-added products
- Overhaul sales prices
- Reduce variable costs

Establish a robust earnings foundation by slimming down and pivoting from quantity to quality

Shareholder return policy and balancing investments and financial soundness

Under the Seventh Medium-term Business Plan, JFE has earmarked approximately 1,450 billion yen for a high level of investment but in line with plans to keep spending within depreciation and after-tax and after-dividend profits. Of this investment amount, 1,080 billion yen is allocated to the steel business, 220 billion yen to the engineering business, and 120 billion yen to the trading business. Compared with the previous medium-term business plan, in the steel business we will reduce the ratio of investment for maintaining functions and redirect these funds toward growth investments, such as in GX, DX, and facility modernization, as well as investments in overseas business. In the engineering business, we will increase investments in line with the goal of achieving revenue of 1 trillion yen by fiscal 2030.

Regarding our financial soundness, we aim to improve the D/E ratio to around 70% by the final year of the plan in order to facilitate the flexible and stable procurement of funds, with an eye on investing in growth and taking steps toward becoming carbon neutral. To this end, JFE will continue to unwind cross shareholdings and generate 200 billion yen in cash by reviewing assets and businesses that do not contribute much to earnings.

Regarding shareholder returns, one of the most important issues for management, our basic dividend policy is to target a dividend payout ratio of approximately 30%, unchanged from the previous medium-term business plan.

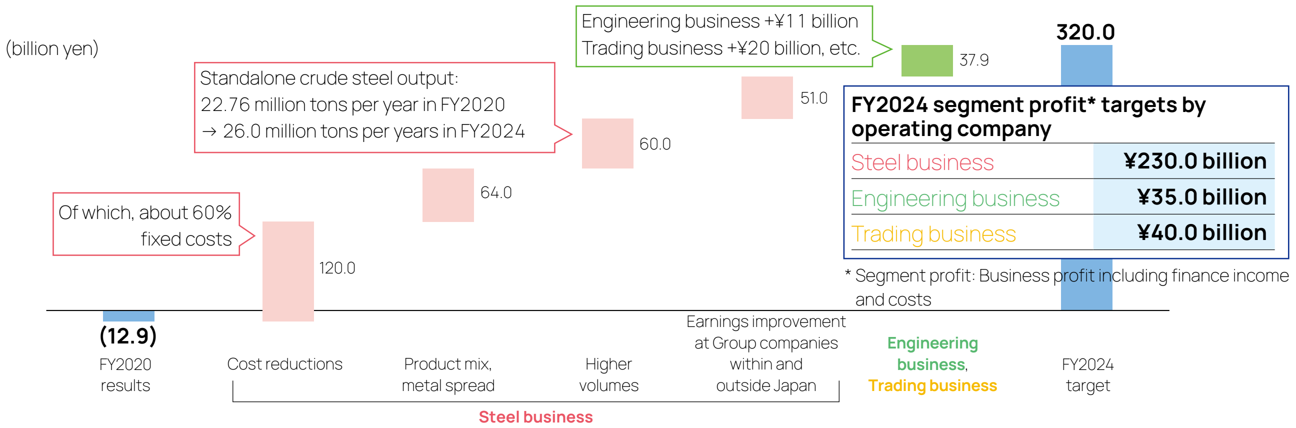
Total investment (four years, decided basis)

	Group total
Total investment*	About ¥1,450 billion
Of which, GX investment	¥340 billion
Of which, DX investment	¥120 billion

* Capital investment 1,200 billion yen, business investment 250 billion yen

Asset compression plan	¥200 billion

Changes in earnings toward business profit target for fiscal 2024



Outlook for Fiscal 2021 Earnings

In FY2021, in the steel business, JFE expects demand for steel products to gradually recover as economies regain their footing in Japan and overseas. For the full year, we estimate segment profit will be 280 billion yen, reflecting the steady and rapid incorporation of rising raw material costs into prices for steel products, higher selling prices alongside improving market prices, especially for exports, improvement at subsidiary companies around the world, and one-off gains from inventory valuation differences. In total for the engineering business and the trading business, we expect profit to improve by 19 billion yen. We estimate segment profit of 25 billion yen for the engineering business and 38 billion yen for the trading business. For the current fiscal year, we forecast consolidated business profit of 350 billion yen and profit attributable to owners of parent of 240 billion yen, a strong step toward realizing our targets in the medium-term business plan. In the steel business, profits for this fiscal year include one-off gains on valuations, and we are still in the process of moving toward an earnings structure able to reliably generate this level of profit. By undertaking the measures outlined in the plan, we will make progress on strengthening our earnings structure.

For fiscal 2021, management plans to distribute an interim dividend of 60 yen per share. As of August 2021, we have not yet decided on the year-end dividend, as we are watching trends in earnings.

Special Feature

JFE Group Environmental Vision for 2050

Toward Carbon Neutrality by 2050

Background to formulation of vision and its aims

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 believe that climate change, which is happening on a global scale, needs to be urgently addressed. To this end, we are working to cut CO_2 emissions, marking 2020 as a pivotal year for countering climate change. Ahead of other domestic steelmakers, the JFE Group declared in September 2020 that it targets a reduction in CO_2 emissions of at least 20% in its steel business by fiscal 2030, compared with the fiscal 2013 level, with the objective of becoming carbon neutral as quickly as possible around 2050.

In May 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 as it moves to a new stage of growth.

JFE Group Environmental Vision for 2050

The JFE Group is vigorously advancing initiatives to deal with climate change as a part of its aim to become carbon neutral by 2050.

- We recognize climate change as a serious management issue and aim to become carbon neutral by 2050.
- We intend to develop super-innovative technologies by accelerating R&D in new technologies.
- We aim to improve corporate value, and view reductions in CO_2 emissions across society as a whole as a business opportunity.
- We will systematically work to resolve climate change problems while reflecting TCFD concepts in our management strategies.

1. Initiatives in the Seventh Medium-term Business Plan

- Steel business: **Reduce steel business CO_2 emissions by 18% in FY2024 vs. FY2013**

Groupwide GX investment under the Seventh Medium-term Business Plan: ¥340 billion

Steel business:	¥160 billion
Engineering business:	¥130 billion
Trading business:	¥50 billion

2. Initiatives for carbon neutrality by 2050

1) Reduce CO_2 emissions at JFE Steel

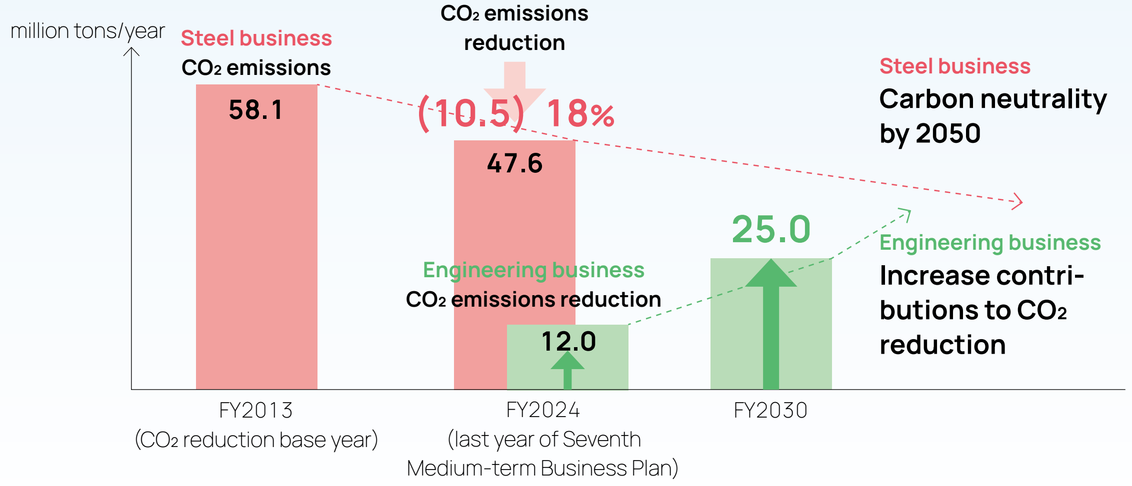
- **Pursue super-innovative technologies** mainly for **carbon-recycling blast furnaces and Carbon Capture and Utilization (CCU)**
- Develop hydrogen-based ironmaking (direct-reduction) technology, maximize use of electric arc furnace technology, etc.

2) Expand contributions to CO_2 emissions reduction in society

- Engineering business: Expand and develop renewable energy power generation and carbon-recycling technologies
- Steel business: Develop and market eco-products and eco-solutions
- Trading business: Increase trading in biomass fuels, steel scrap, etc. and strengthen supply chain management (SCM) for eco-products

Targets for CO_2 emissions reductions
12 million tons by FY2024
25 million tons by FY2030

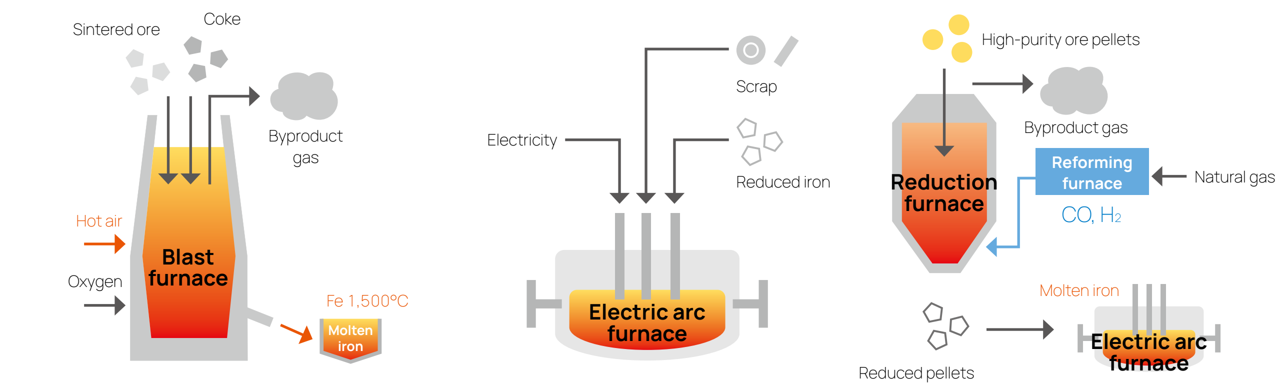
3) Accelerate Groupwide commercialization of offshore wind power business



Carbon neutrality initiatives in the steel business

Advantages and disadvantages on the path to carbon-neutral steelmaking

Steel is an essential material that is key to an abundant planet in the future, and demand for steel will never go away. Achieving a carbon-neutral process for steelmaking is necessary for the future of the planet, but the technologies for this have not yet been established. Steelmaking processes currently include blast furnace steelmaking, electric furnace steelmaking, and direct-reduction steelmaking methods. Each process has advantages and disadvantages with respect to the objective of attaining carbon neutrality. We believe it will be important to take a multi-track approach to innovation for overcoming these disadvantages. The JFE Group is working to create super-innovative technologies by accelerating R&D in new technologies with the aim of becoming carbon neutral by 2050. We are moving strongly toward the ultimate goal of carbon neutrality while going through a technology transition and advancing innovation.

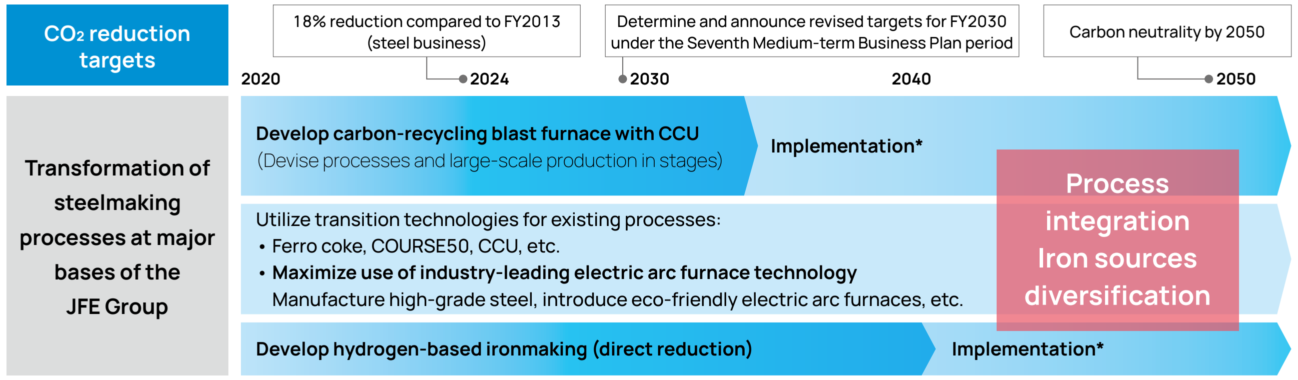


	Blast furnace	Electric arc furnace	Direct reduction
Advantages	• Stable mass production • Can use existing equipment • Can use low- and medium-grade ore • Can manufacture high-grade steel	• CO_2 emissions are low	• CO_2 emissions are low • Carbon neutrality once 100% hydrogen reduction is possible
Disadvantages	• Requires replacement of coke and other materials with carbon-neutral reducing materials • Use of CCUS* is essential • Yet-unestablished method needed to prevent temperature drop in furnace during hydrogen reduction • Hydrogen cost is high	• Low productivity • Manufacturing high-grade steel is difficult • Scrap alone is insufficient iron source • Requires a carbon-neutral power source • High cost of electricity (Japan)	• Only high-grade ores can be used • New measures needed to prevent temperature drop in furnace during hydrogen reduction • Hydrogen cost is high • Capital investment cost is high

* CCUS: Carbon Capture, Utilization and Storage

Roadmap for carbon neutrality

As an initiative in the Seventh Medium-term Business Plan, the JFE Group aims to reduce CO_2 emissions in the steel business by 18% in fiscal 2024, compared with the fiscal 2013 level. With an eye on becoming carbon neutral by 2050, the Company is keen to develop super-innovative technologies centered on carbon-recycling blast furnaces, CCU, and hydrogen-based ironmaking (direct reduction). By maximizing the use of industry-leading electric furnace steelmaking technologies, the JFE Group is proactively working to apply transition technologies to existing processes. We aim to establish as quickly as possible the decarbonization technologies required to achieve our goal of being carbon neutral by 2050.



* Assumes development of infrastructure for supplying large, inexpensive quantities of hydrogen and a system for sharing the costs throughout society

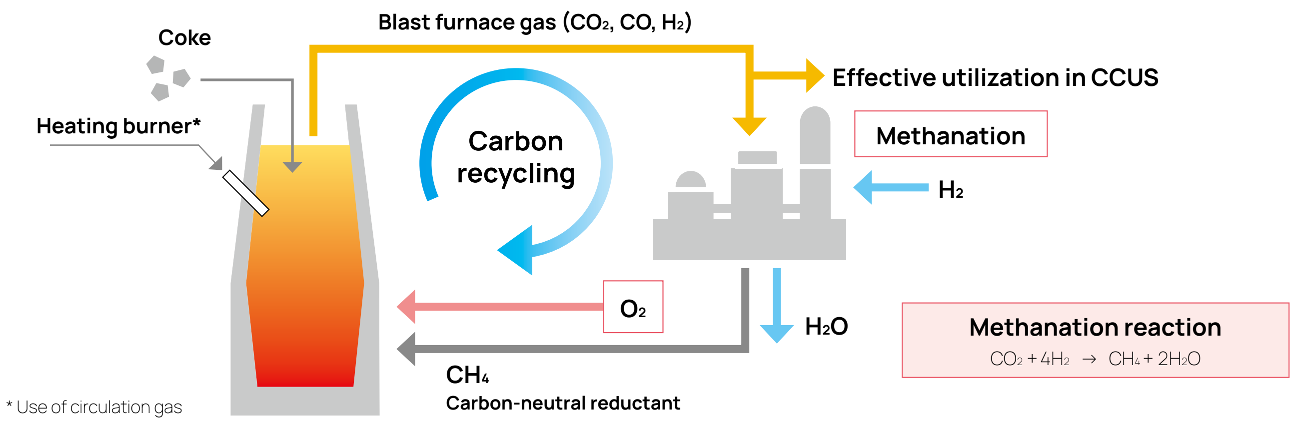
Technological development 1

Carbon-recycling blast furnaces

What are carbon-recycling blast furnaces?

Carbon-recycling blast furnaces are a super-innovative technology that reuses carbon, by turning the CO_2 emitted during the steelmaking process into methane with methanation technology, and then using this methane as an input in the blast furnace steelmaking process. The aim is to reduce CO_2 emissions by 30% on a single blast furnace unit basis. By converting air sucked in by normal blast furnaces into pure oxygen, the energy used to heat nitrogen contained in the air can be used to heat methane, increasing the thermal efficiency of the overall process. Adding CCUS (CCU) to carbon-recycling blast furnaces will enable to production of basic chemicals such as methanol from the excess CO_2, moving one step closer to net zero CO_2 emissions.

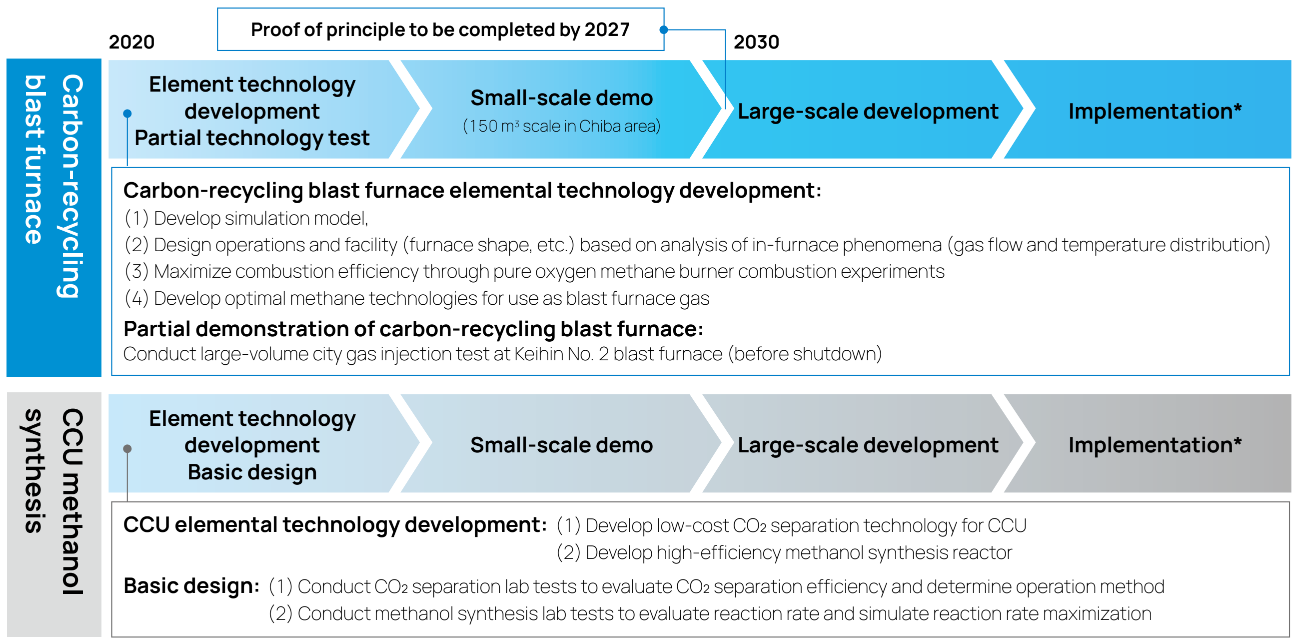
CO_2 reduction target of 30% in blast furnace, aiming at carbon neutrality through CCUS utilization



* Use of circulation gas

Technology development roadmap

Regarding the development of technologies for carbon-recycling blast furnaces and CCU, the JFE Group will first develop basic technologies and conduct small-scale trials with the objective of completing verification work of the fundamental process by 2027. On developing technologies for carbon-recycling blast furnaces, the Company will develop basic technologies, including simulation models, and conduct a city gas intake experiment at the Keihin district as a stepstone experiment. We will also evaluate a small-scale prototype carbon-recycling blast furnace with 150 m³ of capacity. We are advancing the development of low-cost CO_2 separation technology and high-efficiency methanol synthesis reactors as basic technologies for CCU methanol synthesis.

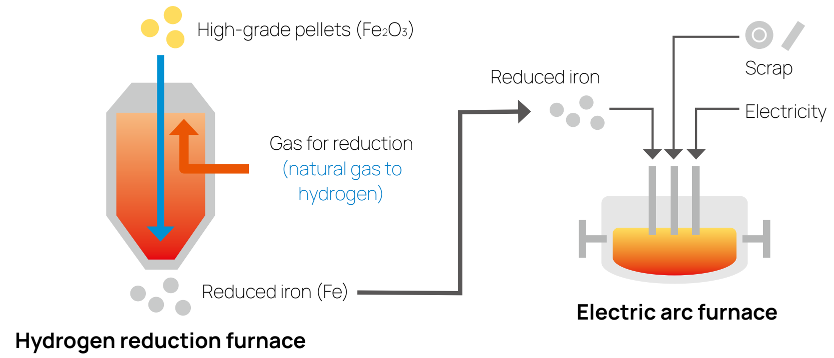


* Pursuant to development of infrastructure for cheap, high-volume hydrogen supply and system for sharing related costs throughout society

Technological development 2

Hydrogen-based ironmaking (direct reduction)

Hydrogen-based ironmaking technologies entails using CO_2-free hydrogen gas instead of natural gas, which is now used in the direct-reduction steelmaking process that has recently become practical. However, there are still some problems, namely that only high-grade iron ore can be used as a raw material in direct-reduction steelmaking, in addition to the challenges of endothermic reactions for reduction with hydrogen. High-grade iron ore is produced in relatively little quantity, and as the direct-reduction steelmaking process gains momentum worldwide, high-grade iron ore may become harder to obtain. To address this problem, JFE has partnered with BHP, one of the world's largest iron ore suppliers, to expand production volume and develop new processing technologies for low- and medium-grade iron ore that is currently used in blast furnaces. Through this partnership, we aim to expand sources of raw materials and increase the competitiveness of direct-reduction steelmaking with the use of low- and medium-grade iron ore as inputs.



Technological development 3

Leverage electric furnace technologies to their maximum (high-grade steel production, greater efficiency)

Electric furnace steelmaking produces steel products by melting steel scrap and direct-reduction iron. This process emits one fourth the amount of CO_2 than blast furnaces and converter furnaces. Steel scrap, a raw material, contains impurities that cannot be removed in the electric furnace steelmaking process, and the amount of these impurities is expected to increase in the future, even in direct-reduction iron. With the electric furnace steelmaking process, it is therefore hard to produce high-grade steel of the same quality as blast furnace or converter furnace methods. Technologies must be developed for removing these impurities or making these impurities harmless in steel, in order to produce high-grade steel. The JFE Group is also striving to improve the productivity of electric furnaces by utilizing its industry-leading technologies for electric furnaces.

Eco-Products

Expansion of supply structure for high-value-added electrical steel

Electrical steel is a key material that determines the performance of electrical equipment, and it is also widely used as iron core materials in motors, transformers and other electrical machinery. By supplying high-performance electrical steel, JFE Steel contributes to the reduction of CO_2 emissions around the world from a materials perspective.

Domestic Strategy

Expand manufacturing facilities for non-oriented (N/O) electrical steel sheet

As demands increase for addressing global climate change, the electrification of automobiles has advanced, which has translated into rapid growth in demand for essential high-grade N/O electrical steel sheet. JFE forecasts demand will more than triple by fiscal 2024. Management has therefore decided to invest roughly 49 billion yen, double the current level of investment, by the first half of fiscal 2024 in expanding production capacity for high-grade N/O electrical steel sheet at its West Japan Works (Kurashiki district).

Overseas Strategy

Business feasibility study for establishment of oriented electrical steel production and sales company in India (jointly with JSW)

Demand for oriented electrical steel sheet used in transformers is projected to grow on the back of increasing demand for electricity and expanding installations of renewable energy around the world. Demand for oriented electrical steel sheet in India is forecast to increase by 1.7 times the 2019 level by 2030. The Company has decided to examine the business feasibility of establishing a production and sales joint venture with JSW, a strategic alliance partner, for oriented electrical steel sheet in India.

Contributions to carbon neutrality in the engineering business

In the engineering business, the Company is developing and commercializing carbon recycling technologies while striving to further expand the renewable energy business, with the intention of helping all of society become carbon neutral.

Renewable energy

- Biomass, geothermal, solar power, wind power generation
- Waste-to-energy power generation

The engineering business is engaged in the engineering, procurement, construction and operation of biomass, geothermal, solar, and wind power plants. We aim to diversify power sources into offshore wind, geothermal and hydroelectric power. We are also keen to increase electricity generation at waste-to-energy power plants from a resource recycling and effective use standpoint. The generated electricity is supplied through JFE Engineering's subsidiary Urban Energy as renewable energy in a zero emissions plan, promoting the local generation and local consumption of energy via regional power companies.

Carbon recycling

- Conversion of CO_2 into synthetic gas and chemicals
- CO_2 separation and collection

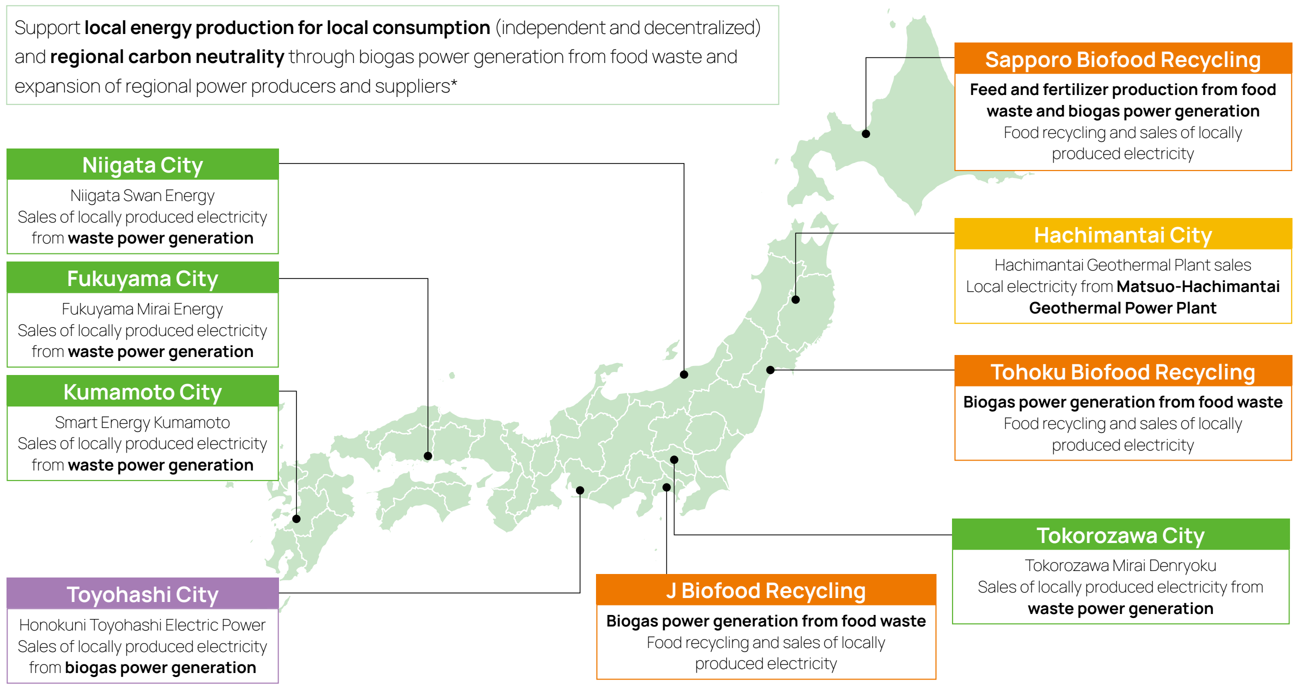
The JFE Engineering Group has worked to turn plastic waste into usable resources, such as bottle-to-bottle recycling with the reuse of PET bottles. Leveraging this knowledge, we are developing technologies for the carbon recycling of CO_2 and the chemical recycling of waste plastic. The JFE Group is contributing to the realization of a low-carbon, resource-recycling society through the development and commercialization of technologies for producing chemicals with collected CO_2, as well as technologies for the separation and collection of CO_2 emitted from incinerators and power generation facilities.

Public-private initiatives for regional energy business

JFE Engineering has established regional power producers and suppliers with the cooperation of local governments around Japan, as a part of its regional energy business that focuses on supplying renewable energy. Electricity generated at waste-to-energy power plants constructed by JFE Engineering is supplied to local public institutions in line with the concept for local production for local consumption of energy. We aim to improve local industrial infrastructure and lower administrative costs for governments, while moving toward low-carbon localities through the greater use of renewable energy.

Group company J&T Recycling is involved in the food recycling business, where food waste is collected and fermented to produce methane gas a fuel for power generation. We will facilitate the expansion of renewable energy supply while advancing the food recycling business.

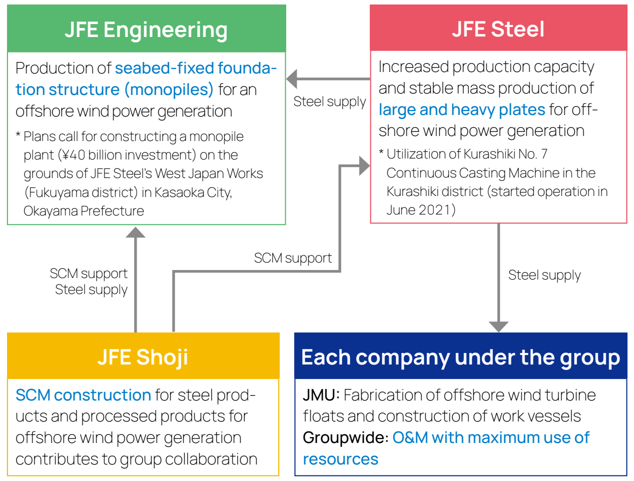
JFE Engineering's Support of Local Production for Local Consumption



* Electricity is generated and supplied within a region to promote the local production and consumption of energy

Advancing commercialization of offshore wind power generation business

The Japanese government is backing offshore wind power plants as a pillar of its Green Growth Strategy to realize carbon neutrality by 2050. Against this backdrop, the JFE Group is leveraging its comprehensive capabilities, mainly in the engineering business, to commercialize the offshore wind power plant business. As a pioneer in this area, the JFE Group is building a supply chain, including basic production and operations and maintenance (O&M), through the commercialization of production for monopiles (basic structures attached to the seabed) that form the foundations of offshore wind power plants.



Monopile market trends

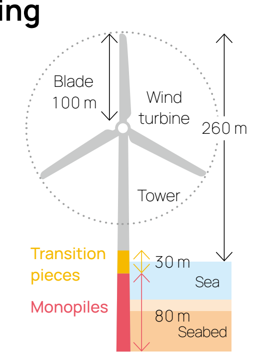
Offshore wind power plants have been constructed mainly in Europe and China. In light of the recent growth trend in renewable energy, offshore wind power plants are poised to see major growth in North America and Asia, including Japan. In Japan, last year, the government set targets for installing offshore wind power plants. The market for monopiles looks likely to exceed 200,000 tons annually from 2030 onward.

	Expected power generation (GW)		Steel consumption (million tons)
As of 2030	10	Public and private sector adoption targets	1.5
As of 2040	30–45		4.5–6.75
As of 2050	90		13.5

Source: Japan Wind Power Association
* Cumulative totals for installed volume and steel materials

Initiatives at JFE Engineering

Monopile foundations support massive wind turbines that rise more than 200 meters above the sea, and consist of monopiles and transition pieces anchored to bearing ground on the seabed. Monopiles are ultra-large offshore structures. JFE Engineering aims to start producing monopiles in 2024 while leveraging its engineering and production know-how accumulated from the construction of large offshore structures near Japan, as well as its thick steel plate processing and welding technologies.



Initiatives at JFE Steel

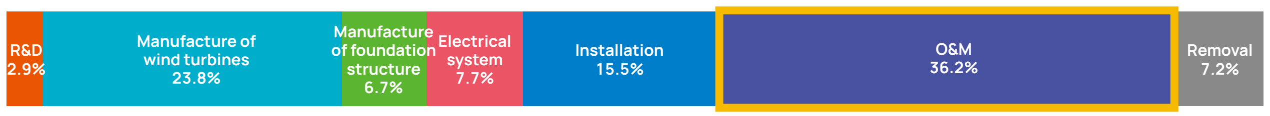
In offshore wind power generation, wind turbines and basic foundations (monopiles, etc.) have become larger in size in order to reduce the cost of electricity. In fiscal 2021, JFE Steel started operating a new continuous steelmaking plant in the Kurashiki district, and expanded production capacity at its steel plate plant in order to reliably mass produce the heavy steel plate for monopiles. Through these measures, we aim to cut costs and shorten production times by reducing welding volume and the number of assembly steps, and help advance the rollout of offshore wind power plants.

	Weld lines	Tube length
A tube for monopiles made with large-size plates	Little	Long
A tube made with conventional-size steel plates	Lots	Short

O&M utilizing Group resources

A pioneer in the offshore wind power plant field, the JFE Group is building out a supply chain with its comprehensive capabilities in O&M, which covers the operation, management, and maintenance of facilities that are essential for reliable operations of facilities. The JFE Group is contributing to the O&M field in offshore wind power by leveraging its maintenance technologies accumulated over many years in onshore wind power generation, as well as its knowledge of marine structure construction.

Life cycle cost structure for seabed-fixed offshore wind turbines (European case)



Source: Mitsubishi Research Institute

Business Model (Steel Business and Trading Business)

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

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

Leveraging competitive advantages through our business model

Measures Steel Business P.39 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

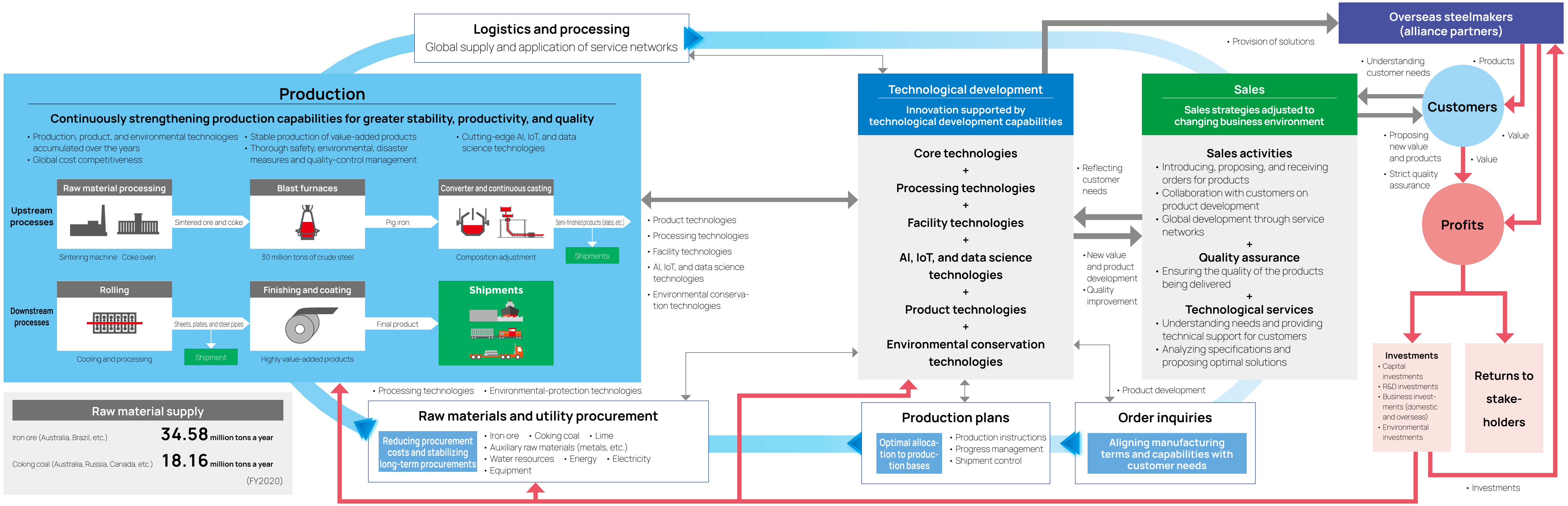
Technological development to realize value creation

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

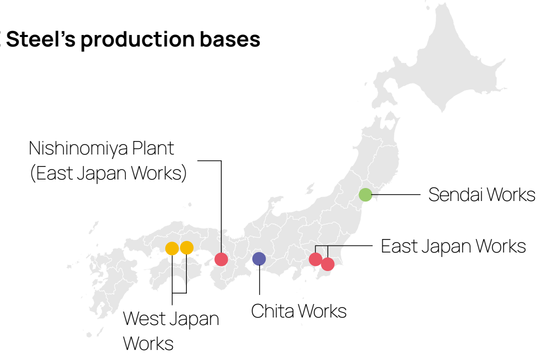
JFE has built a solid and highly stable global customer base – one that cannot be easily matched by rivals – thanks to its practice of collaborating from the early development stage to accurately address the exacting needs of its many customers.



Steel business overview

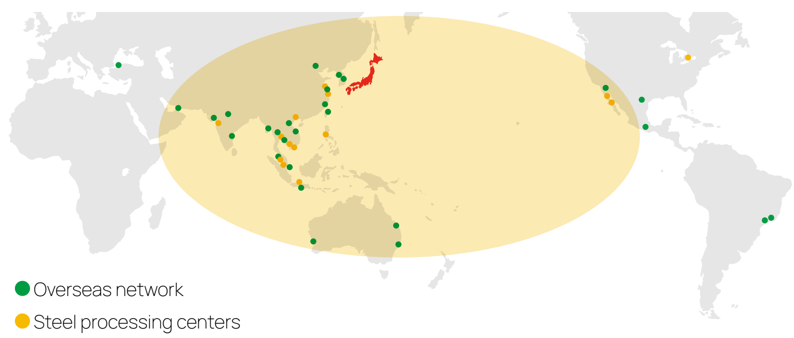
JFE provides highly functional steel products to customers worldwide as a blast-furnace steelmaker with operations of the integrated steelworks, where it can produce final products from iron ore as raw materials. For global growth, JFE is expanding businesses with local partners and solutions-related businesses, starting with alliance-partner steelmakers overseas.

JFE Steel's production bases



Trading business overview

JFE Shoji Group is engaged in businesses ranging from steel materials, machinery, nonferrous metals, chemicals, 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.



JFE GROUP REPORT 2021

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.

The source of competitive advantages that reinforce our business model

Measures P.43

Engineering, procurement, and construction

Project execution capabilities with abundant experience and global structure

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

Operating business

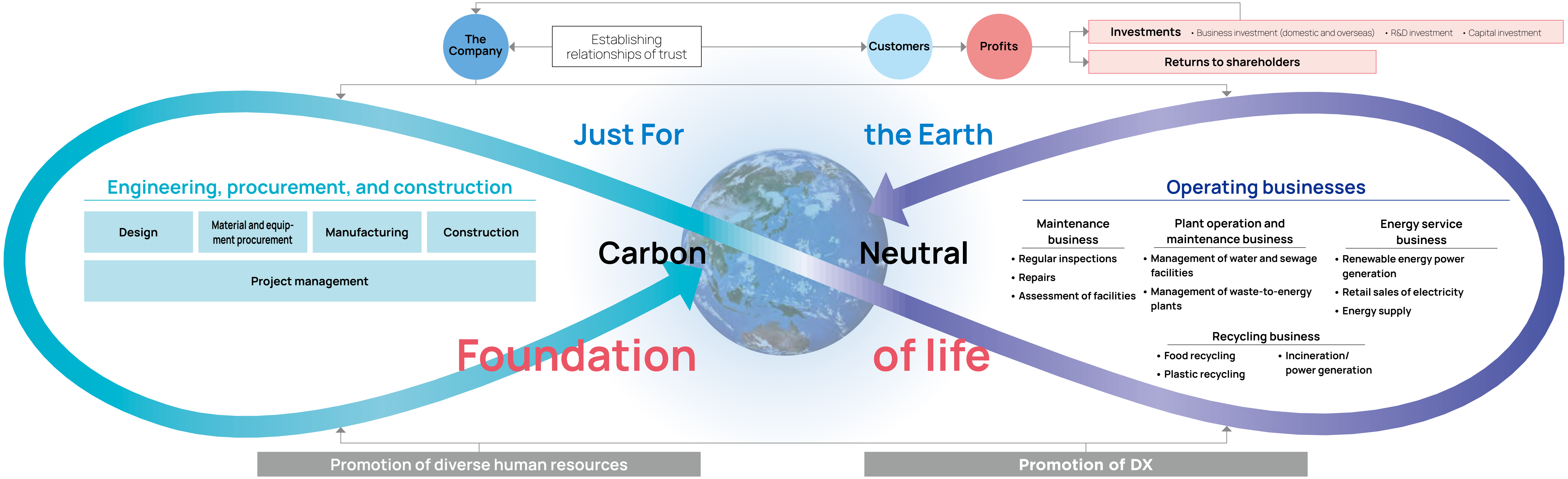
Business management capabilities with strengths in manufacturing expertise

We have accumulated operational know-how in plants in particular, such as waste-to-energy power generation and waterworks, and in the public services field, the Company has an extensive track record in public–private projects. We also engages in our own recycling operations and renewable energy power generation business, and is expanding its 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

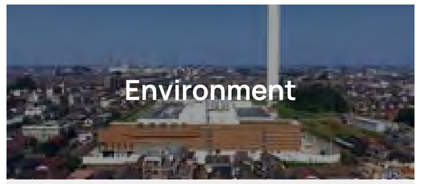
Approximately 40% of our employees have diverse backgrounds, such as women, foreign nationals, and career hires. We also strive to create work environments that draw out the best abilities of each and every employee. We support the advancement of "creation" and "responsibility" while digitalizing operations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



JFE GROUP REPORT 2021

Business overview

By focusing on these business fields, which are needed around the world all the time, we propose integrated services from business planning to EPC and operating businesses.



- Waste-to-energy plants
- Industrial waste processing

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

- Water and sewage treatment plants
- Water and sewerage pipelines

- 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)

Steel Business | JFE Steel Corporation

Shifting from quantity to quality and evolving to become carbon neutral

JFE Steel has established a solid yet lean business structure by restructuring its operations to adapt to structural changes in the business environment. While shifting from quantity (tons of steel) to quality (profit per ton of steel), JFE Steel also is accelerating its technological development to become carbon neutral and to realize sustainable growth as a company that remains essential to society.

Yoshihisa Kitano
President and CEO
JFE Steel Corporation

Strengths

- World-class technologies that reduce environmental load and contribute to carbon neutrality
- World-class production technologies for highly 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

Threats and risks

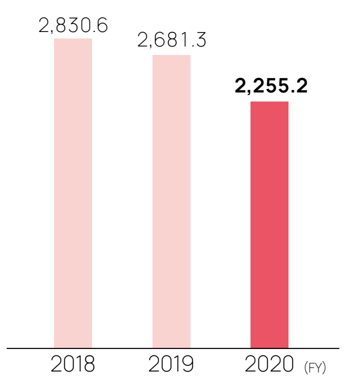
- Increasing demands for worldwide reduction of CO_2 emissions
- Tougher global competition from new rivals in China
- Long-term decline in domestic steel demand
- Uncertain outlook for global economy due to U.S.–China trade friction
- Another wave of COVID-19 infections

Opportunities

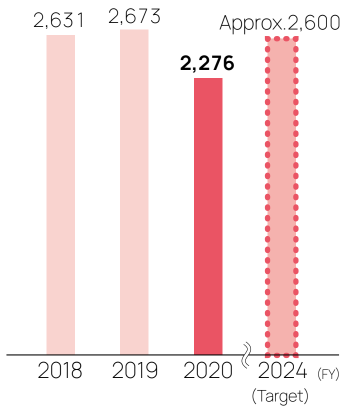
- Stronger demand for eco-products and solutions that help reduce CO_2 emissions
- Increasing demand for high-grade steel due to shift to lighter and electric vehicles
- Demand for operational and environmental support technologies from steelmakers in emerging countries
- Increasing demand for steel 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

Fiscal 2020 results

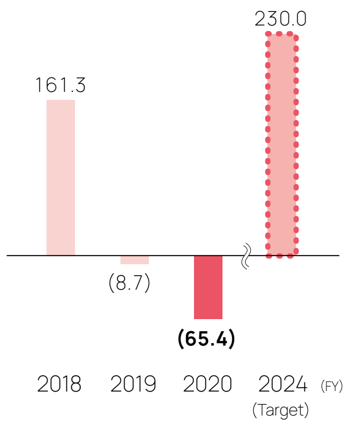
Revenue
(billion yen)



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



Segment profit
(billion yen)



Initiatives in Fiscal 2020

In the first half of fiscal2020, the COVID-19 pandemic caused a rapid deceleration in global economic activity and brought domestic economic activity to a near halt. As a result, demand for steel plummeted. JFE Steel brought forward planned maintenance of its No. 4 blast furnace in the Kurashiki district and temporarily suspended (banked) its No. 4 blast furnace in the Fukuyama district. When demand started to pick back up, JFE Steel was the first steelmaker in the world to quickly restart a major blast furnace that had been banked, and tool other measures to minimize costs in operations. JFE Steel was able to quickly restore production and meet demand for steel. In addition, costs were reduced 100 billion yen by reducing maintenance and repairs and taking emergency measures to reduce labor costs. JFE Steel also reduced capital investment by 130 billion yen from 1 trillion yen during the Sixth Medium-term Business Plan, but still made key investments in facilities to maintain the company's production foundation as well as in safety, the environment, and disaster prevention in order to fulfill the company's corporate social responsibilities. JFE Steel also did not scale back its planned strategic investments in digital transformation.

In the fiscal 2020 second half, steel demand began to recover, mainly for automobiles, and prices started to improve. Although JFE's steel segment posted a full-year loss in fiscal 2020, a profit was secured in the second half.

In fiscal 2021, JFE Steel forecasts segment profit of 280 billion yen under the expectation that steel prices will remain favorable. Profit will be boosted through cost reductions realized by newly operating the No. 7 continuous casting facility in the Kurashiki district and the No. 3 coke oven (Battery B) in the Fukuyama district. Output will be strengthened by quickly relaunching the No. 4 blast furnace at Kurashiki after maintenance is completed.

Medium- to Long-term Strategy and Future Initiatives

The company is facing structural changes in its business environment. Japan, the most important market for JFE Steel, is poised to shrink due to population decline. Overseas, in view of increasing production in local markets to handle local consumption, it could become challenging to expand the volume exports with sufficient margins. Meanwhile, JFE Steel is coming under increasing pressure to address climate change and become carbon neutral.

For JFE Steel to grow sustainably as a steelmaker over the long term, we certainly must work toward becoming carbon neutral. However, technology for producing steel without emitting CO_2 has not been established yet and the technical hurdles are quite high. It will be crucial to secure the needed technological capabilities and the financial means to invest in technological development. The Seventh Medium-term Business Plan (FY2021–2024) represents the biggest transformation in JFE's history. During this period, it will be absolutely essential to establish a robust earnings foundation and take bold steps toward becoming carbon neutral.

On the earnings front, JFE Steel is pivoting from quantity (tons of steel) to quality (profit per ton of steel) while also advancing its growth strategies and transitioning to a leaner, stronger business structure. Management is keen to create a foundation for reliably generating 10,000 yen in profit per ton of steel for a target profit of 230 billion yen. Accordingly, JFE Steel is restructuring operations by shifting production to high-value-added products, which will include cutting annual crude steel production capacity by some four million tons in Japan.

Through digital transformation and other measures, we aim to reduce costs by 120 billion yen and raise labor productivity by 20% or more over the next four years. To increase margins and secure earnings, JFE Steel is conducting a sweeping review of its selling prices, aiming to increase prices to levels commensurate with the high value demanded by customers.

Regarding its growth strategy, JFE Steel will deepen its overseas business and achieve higher earnings by increasing corporate values of our allied companies. The company also will expand its solutions-based businesses, leveraging its know-how in technology, operations, and research to help customers produce value-added products and lower their environmental impacts.

In the field of carbon neutrality, JFE Steel intends to reduce CO_2 emissions by 18% in fiscal 2024, compared with the fiscal 2013 level, with the intention of becoming carbon neutral by 2050. Under the direction of a project team that was launched in October 2020 and reports directly to the president, initiatives to reduce CO_2 emissions are steadily advancing (see diagram in Key Measure 2 on page 41). In fiscal 2024, we will update our fiscal 2030 targets for reducing CO_2 emissions to reflect our state of progress in developing new technologies. In addition to steadily reducing CO_2 emissions through fiscal 2030, JFE Steel aims to develop groundbreaking carbon-neutral technologies by 2050. Right now, existing candidate technologies all offer advantages as well as disadvantages, so the plan is to continue pursuing various possible technologies from multiple angles.

Key measures in 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

Key Measures in the Seventh Medium-term Business Plan

Key Measure 1 Transition to a lean, robust business structure by shifting focus from quantity to quality

Improve per-ton profit by reducing fixed costs and increasing the ratio of highly value-added products for enhanced earnings

Achieve world-class cost and quality competitiveness

Targets

Cost reductions	Labor productivity
120 billion yen over four years	Up **20**% or more*

* 13% via structural reforms and the rest via initiatives such as digital transformation to increase labor productivity (1,670 → 2,000 tons per person per year) resulting in reducing employees from 16,000 to 13,000

Initiatives

(1) **Establish profit base that is resilient to changes in economic conditions** by completing structural reforms
- Greatly reduce fixed costs
- Lower breakeven points

(2) **Promote digital transformation** with new technologies
- Raise production efficiency and yields
- Greatly improve labor productivity

(3) **Ensure quality competitiveness** by improving product quality, production efficiency, and deliveries

Expand margins and achieve stable profit

Target

Increase mix of highly value-added products* to an unprecedented 50%

* Offer technological advantages that are recognized by customers for their value added, and have greater earnings power than commodity-type products

Initiatives

(1) **Enhance product mix** by strategically focusing production on priority fields
- Increase high-grade non-oriented electrical steel sheet production capacity
- Increase capacity for heavy, extra-thick steel plate used in offshore wind power applications
- Produce high-tensile steel sheet for automobiles

(2) **Fully overhaul product pricing**
- Facilitate more suitable pricing by ensuring that JFE products offering the high value sought by customers are recognized accordingly by the market

Key Measure 2 Pursue innovation to achieve carbon neutrality

Achieve carbon neutrality by developing groundbreaking technologies in multiple areas and by accelerating R&D in traditional technological fields, including blast furnaces, direct reduction, and electric furnaces

CO_2 emission reductions targets	FY2024	FY2030	2050
	18% reduction vs. FY2013 (steel business)	20% or more reduction vs. FY2013 (Adjust FY2030 targets under this medium-term plan)	Carbon neutrality

Technology	Initiatives
Blast furnace technology	Blast furnace • **Carbon-recycling blast furnace with CCU** • **COURSE50 and Super-COURSE50** • **Ferro coke**
Direct-reduction technology	Reduction furnace • **Hydrogen-based ironmaking (direct reduction)** Measures for hydrogen endothermic reaction and restriction of raw materials
Electric arc furnace technology	Electric arc furnace • **Electric arc furnace** Measures to improve productivity, lower electricity costs, manufacture high-grade steel, and expand usage of hard-to-use scrap, etc.
Conventional technology	Converter furnace • **Expanded use of scrap in converters, etc.** Development of high-efficiency, heat-transfer burner

Green hydrogen and green electricity

Low-cost, stable, and mass supply

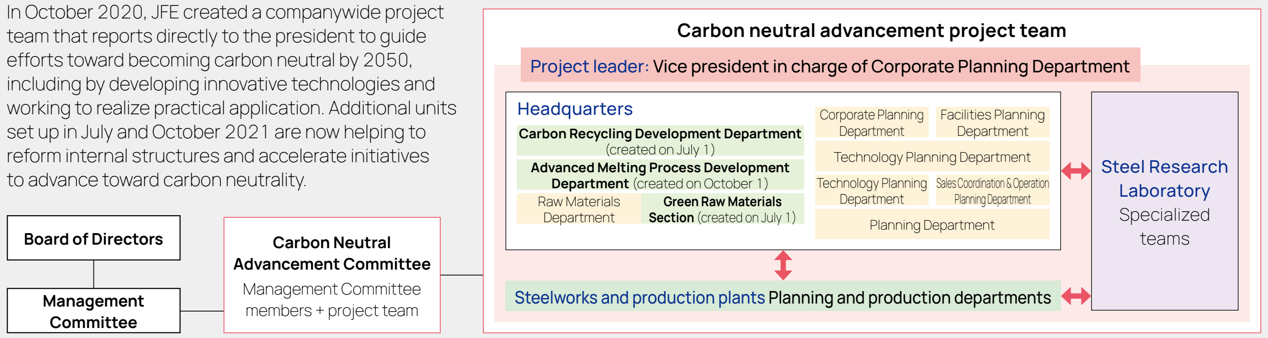
Carbon neutrality

* CCUS: Carbon Capture, Utilization and Storage

For details about each technology, please see pages 30–32.

Framework for becoming carbon neutral

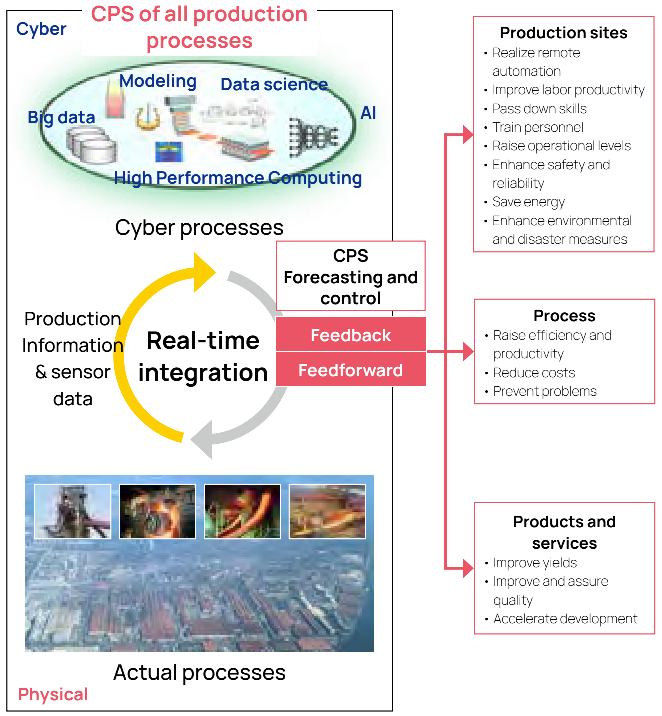
In October 2020, JFE created a companywide project team that reports directly to the president to guide efforts toward becoming carbon neutral by 2050, including by developing innovative technologies and working to realize practical application. Additional units set up in July and October 2021 are now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

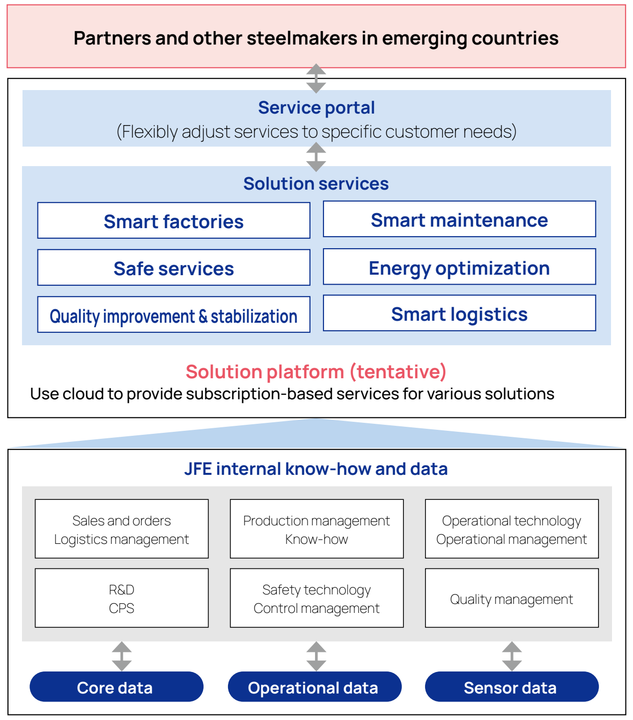


Key Measure 3 Use digital technology to strengthen production bases and achieve new growth

- **Complete the installation of cyber physical systems (CPS)* in all production processes** during the Seventh Medium-term Business Plan and thereby realize more stable operations while greatly improving productivity through the **creation of integrated CPS at steelworks and across the entire company**
- **Expand solutions-based businesses by building a platform to provide technologies and operational and research know-how** that help to produce highly value-added products and reduce environmental impacts

* Systems that create value by gathering data (big data) from diverse sensors installed in equipment and products, and then assemble the data in cyberspace to perform data analysis before feeding back the results to the physical realm in real time

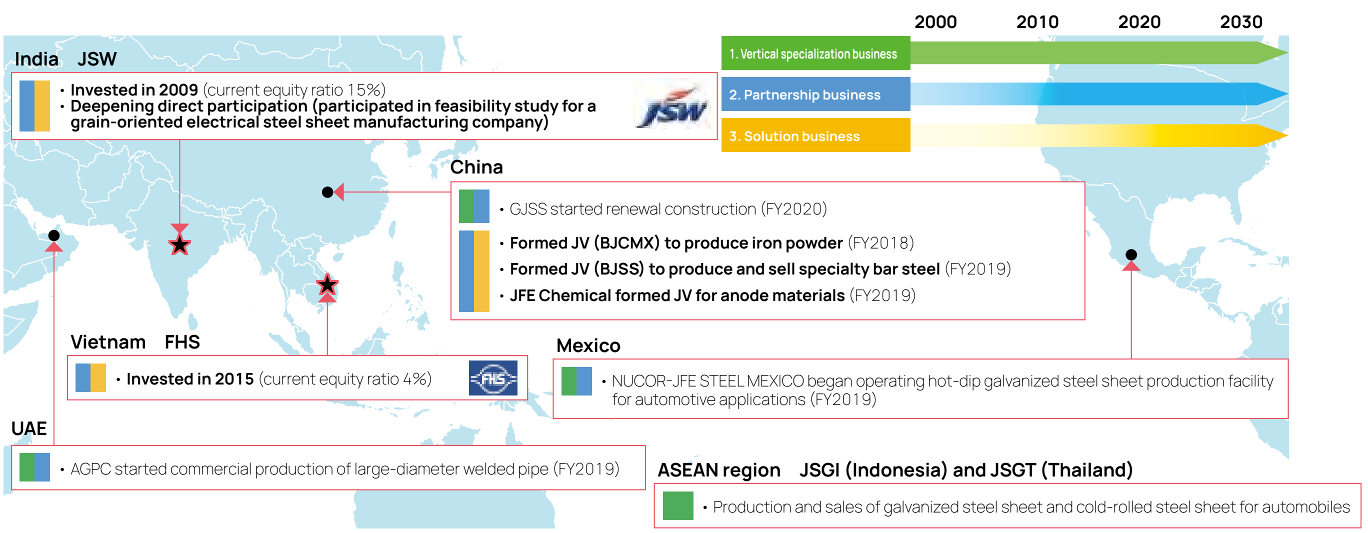




Key Measure 4 Expand and accelerate overseas business via solutions based on knowledge, skills, and data

- Expand returns from 1 vertical specialization businesses, such as steel production for automobiles
- Further deepen 2 business with partners to tap into expanding demand in growth markets
- Expand 3 solution businesses to provide cutting-edge technologies, operations and research know-how

→ **Triple earnings in FY2024 compared to FY2020**



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.

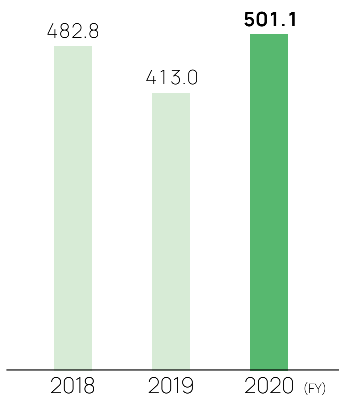
Hajime Oshita
President and CEO
JFE Engineering Corporation

Strengths	Threats and risks	Opportunities
• 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.)	• 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	• 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 2020 results

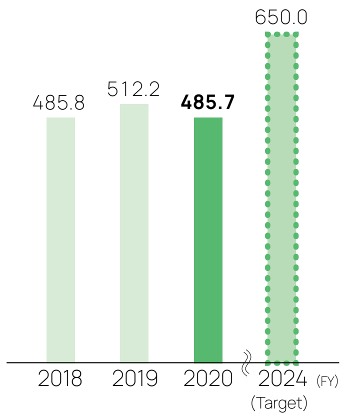
Orders received

(billion yen)



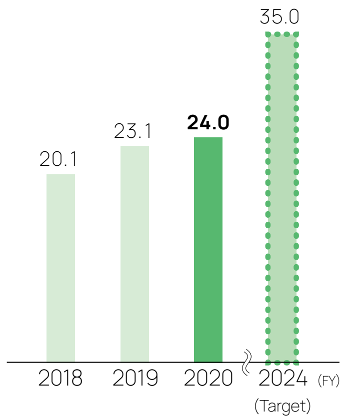
Revenue

(billion yen)



Segment profit

(billion yen)



Initiatives in Fiscal 2020

JFE Engineering expanded its operation & maintenance business that is responsible for upholding the cornerstone of our life in public-private partnership (PPP) operations, power generation and electricity business, and the recycling business, in addition to its 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 cornerstone of life. In continuation from fiscal 2019, JFE Engineering expanded its customer base and offerings of products and services through M&A deals, endeavoring to improve corporate value further.

In operation & maintenance businesses, JFE Engineering participates in biomass power generation private finance initiative (PFI) projects and concessions in the water field, in addition to the comprehensive management of new gas and waterworks projects, while currently preparing to launch operations of these projects. 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 participating in 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 are making steady progress toward stabilizing operations overseas.

JFE Engineering is concentrating on digital reforms in the development of new technologies. Regarding waste-to-energy power plants, we are implementing digital technologies that will lead to more stable operations and higher output of electricity with the operation of fully automated waste incinerators and the deployment of AI coupled with voluminous data accumulated from operations.

Leveraging our accumulated technologies and know-how, we have expanded and advanced business domains related to the "creation" and "responsibility" cornerstones 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.

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 enhance our production structure 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" cornerstone in our 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 like 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 twins and digital services that utilize AI and IoT, such as adding new functionality to products and services.

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

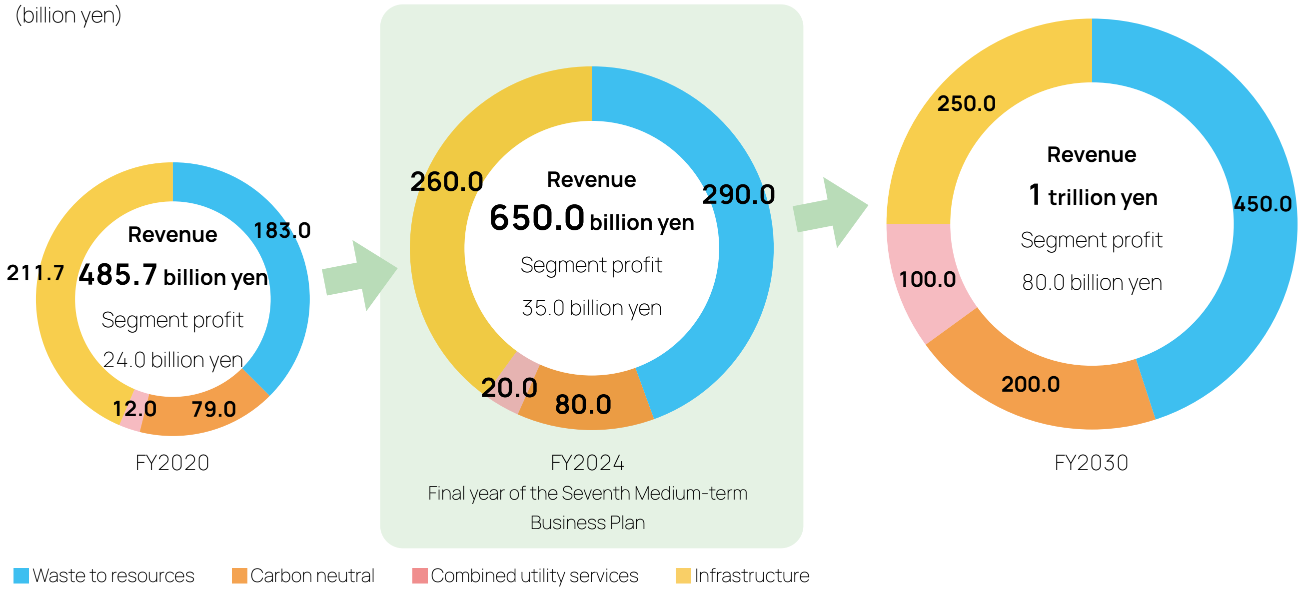
1. Enhance medium- to long-term priority areas as growth fields
- **Waste to resources**
- **Carbon neutral**
- **Combined utility services**
- **Infrastructure**

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)

Seventh Medium-term Business Plan　Business Strategy

Expand sales revenue to the level of one trillion yen in fiscal 2030



Key Measure 1 Enhance medium- to long-term priority areas as growth fields

With our ambitious target for revenue of one trillion yen by fiscal 2030, we are creating a foundation for growth by setting revenue targets for fiscal 2024 in the four fields of waste to resources, carbon neutral, combined utility services, and infrastructure.

Waste to Resources

290 billion yen

- **Establish stable profit base** in domestic environment business
- **Priority investment** and expansion of domestic market in recycling business*

* Food, plastic, incineration, and power generation

Carbon neutral

80 billion yen

- **Put priority in renewable energy** (offshore wind power generation, biomass power plant, solar power plant, geothermal power plant, etc.)
- Develop carbon neutral technologies

Combined utility services

20 billion yen

Shift to **comprehensive business model**, including for efficient operation of facilities to contribute to energy savings and decarbonization

Infrastructure

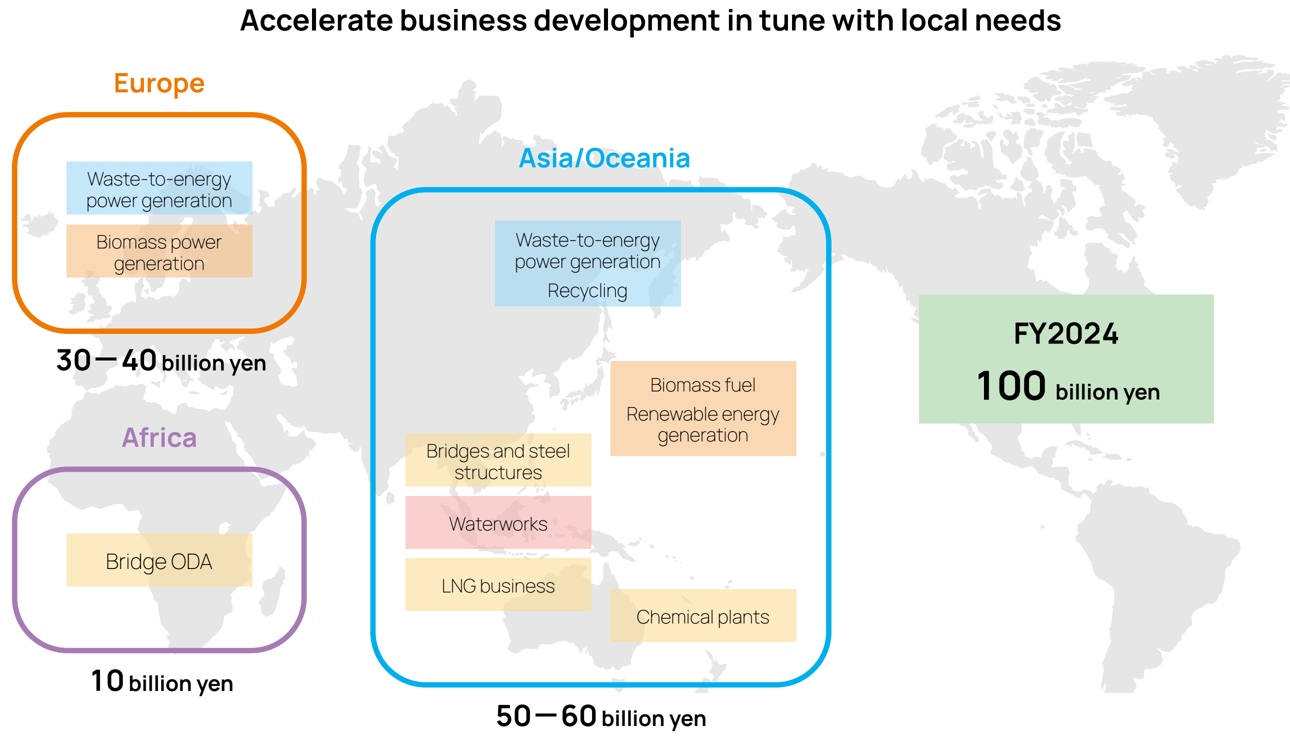
260 billion yen

New technologies (new products, construction methods, and materials) to address newly arising needs for strengthening and improving life of infrastructure

Key Measure 2 Expand overseas operations by developing business in tune with local needs

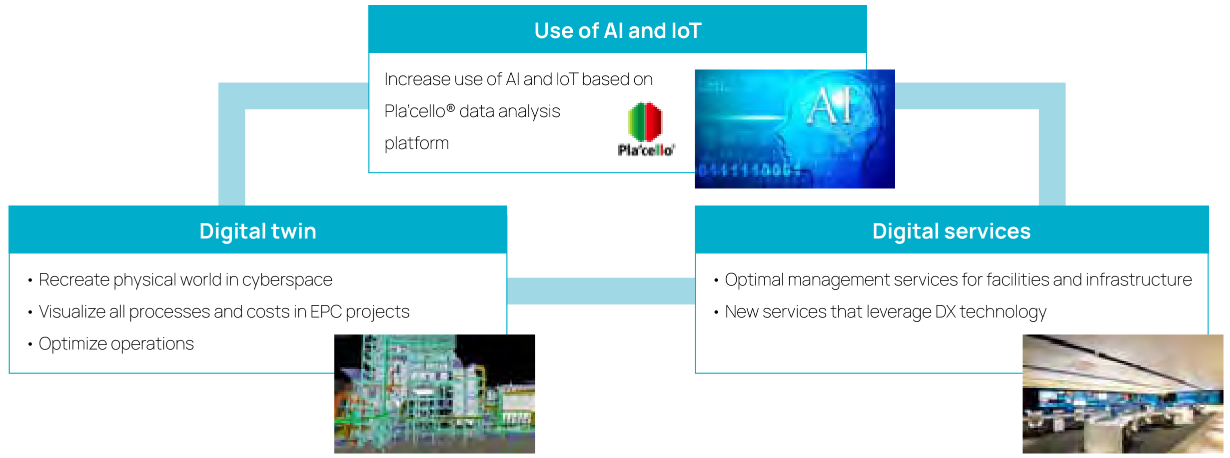
In Asia and Oceania, the JFE Group is pursuing synergies through M&A and enhancing its competitiveness in EPC projects, mainly related to the environment and energy plants. In Europe, the JFE Group will build an earnings foundation in EPC projects for environmental plants and biomass power plants. In Africa, we are keen to make inroads into new markets with bridge ODA projects. Through these initiatives, we aim to increase revenue to 100 billion yen.

Priority fields by area in overseas operations



Key Measure 3 Advance DX projects for all engineering work

To digitalize overall work, we aim to advance our AI and IoT technologies, and optimize operations while improving engineering efficiency with next-generation EPC using digital twin technology. We also aim to provide new kinds of digital services to customers.



JFE Engineering is undertaking reforms with DX technology focused on three angles: AI and IoT, digital twin, and digital services, in order to remain a front-runner in the engineering world.

JFE GROUP REPORT 2021

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. Furthermore, we seek to increase our abilities to offer proposals and convey information, growing sustainably with our customers to be a company with a strong market presence.

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

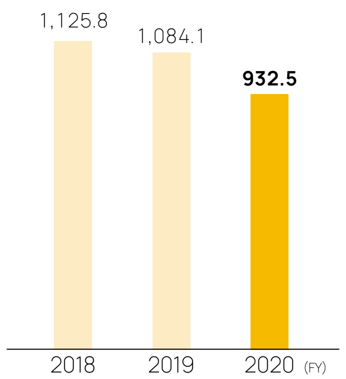
- Uncertainties in global economy caused by geopolitical risks, such as tensions between the United States and China
- Negative impact on corporate activities from uncertainties surrounding the COVID-19 pandemic
- Slower growth in domestic market and contraction in manufacturing industry due to declining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

Opportunities

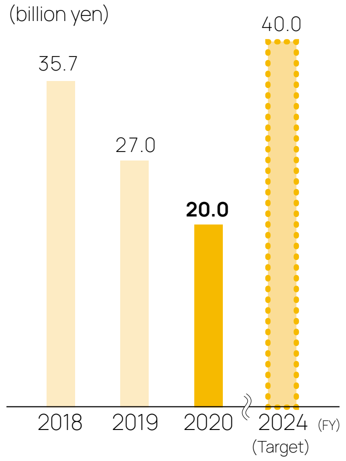
- Revision of customers' supply chains and procurement strategies, in line with changes in the external environment, such as U.S.–China trade friction and the impact of COVID-19
- Stronger demand for steel in emerging markets of India and the ASEAN region
- Higher demand for eco-products that can help 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 2020 results

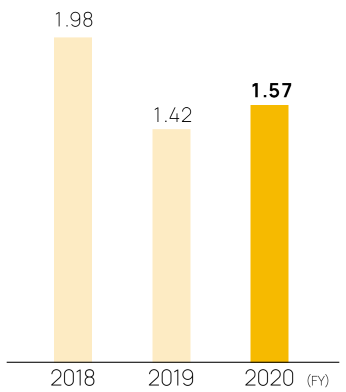
Revenue
(billion yen)



Segment profit
(billion yen)



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



Initiatives in Fiscal 2020

In the second half of fiscal 2019, the world economy slowed down due to trade friction between the United States and China, and then in fiscal 2020 global economic activity was dulled by the COVID-19 pandemic, which still lingers today. Under these circumstances, JFE Shoji maintained and expanded trading revenue while expanding our business revenue as one of the basic policies of the Sixth Medium-term Business Plan, and strengthened its four global key regions (Japan, the Americas, China, and ASEAN).

In response to the pandemic, JFE Shoji reduced assets and applied stricter criteria for investments and loans in order to secure cash flow. JFE Shoji also focused on maintaining its supply chain by managing inventory and checking creditworthiness. From a medium- to long-term perspective of increasing competitiveness, JFE Shoji continued to reinforce its global supply chain.

More specifically, in the domestic steel business, JFE Shoji strengthened processing and distribution functions through collaboration across the Group and beyond, building alliances and investing in independent processing centers while considering the long-term decline in demand. Overseas, JFE Shoji stabilized the management of an electrical steel processing company it acquired in Canada in 2019. At the same time, JFE Shoji expanded its network by launching a new service center for automotive steel in Mexico.

In the raw materials business, JFE Shoji strove to increase customers by maximizing the utilization of Group resources, and focused on growing sales of biomass fuel, demand for which should increase as renewable energy expands. In the machinery and materials business, JFE Shoji leveraged its accumulated know-how in steel-related businesses to engage in new transactions involving solutions for electric power companies.

Medium- to Long-term Strategy and Future Initiatives

Under the Seventh Medium-term Business Plan, in continuation of the basic policies of the previous plan, JFE Shoji will build a foundation for growth for the Group in the growth fields such as electrical steel, steel for automobiles, and overseas construction, while expanding its supply chain. Moreover, JFE Shoji will pair its advantage in high specializations with its proposal capabilities to expand transactions involving companies other than JFE Steel, while further enhancing its purchase and sales capabilities. Moreover, JFE Shoji is striving to contribute to the activities of the whole JFE Group in the increasingly important areas of ESG management and the promotion of DX, while utilizing the information networks and management resources of the JFE Shoji Group more than before.

JFE Shoji plans to invest 120 billion yen (including 50 billion yen in GX investments) with the objective of expanding business earnings and reinforcing the supply chain through M&A and investments in other companies. By steadily implementing this growth strategy, JFE Shoji targets segment profit of 40 billion yen in fiscal 2024.

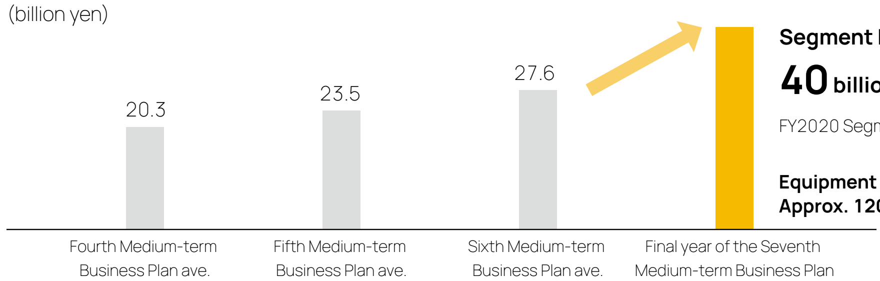
Key measures in the Seventh Medium-term Business Plan and fiscal 2024 earnings targets

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 targets (Comparisons with past medium-term business plans)
(billion yen)



Segment Profit
40 billion yen
FY2020 Segment Profit: 20 billion yen

Equipment and Business Investment: Approx. 120 billion yen over four years

* The Fourth and Fifth Medium-term Business Plans used JGAAP.

Seventh Medium-term Business Plan Business Strategy

Key Measure 1 Initiatives in Priority Field

• Electrical steel: Establish No.1 position in global processing and distribution

JFE Shoji is building a best-in-class processing and distribution network for electrical steel through M&A and alliances, while developing overseas processing centers over the long term. During the medium-term plan, JFE Shoji aims to be No. 1 in global electrical steel processing and distribution by expanding cooperation with alliance firms, deepening its processing functions, and building supply chains in new regions.

• Strengthen supply chain management of automotive steel composite materials

Amid increasing needs for lighter vehicles to improve fuel economy, we expect more vehicles to use high-tensile steel, one of JFE Steel's strategic products. JFE Shoji will deepen its collaboration with JFE Steel's automotive steel production bases around the world. In addition, it aims to be more sensitive to trends in high-tensile steel in the supply chain, and accelerate the global development of the Group's automotive steel products.

• Accelerate activities overseas in construction materials business

JFE Shoji is keen to tap into growing demand for construction materials in North America and the ASEAN region. In North America, we are examining opportunities to expand business domains through M&A. In the ASEAN region, we aim to increase transactions with local general contractors and fabs, while exploring collaborations with local companies to latch onto strengthening demand.

• Fully capture steel demand in Japan

While enhancing the presence of the JFE Group in the domestic market, its most important market, JFE Shoji will maintain and expand earnings by increasing new sales through the synchronization of strategies with JFE Steel. Moreover, we will expand functions to secondary and tertiary processing through collaboration across the Group and beyond, and reinforce functions through deeper connections within the Group.

Key Measure 2 Strengthen purchasing and sales capabilities

• Expand our presence in the steel; raw materials, machinery and materials

In the steel products field, JFE Shoji is meeting the needs of customers in Japan and around the world, while aiming to build an even more stable purchasing structure and strengthening relationships with alliance partners and other steel mills, in addition to JFE Steel's products. In the raw materials and machinery and materials field, we are accelerating growth in businesses unrelated to the Group, leveraging our insight, know-how, and purchasing network that has been built up in transactions with the JFE Group.

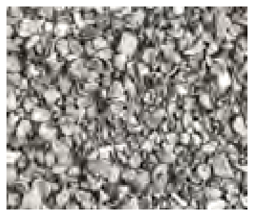
Key Measure 3 Initiatives for new business opportunities

• Expand environmental-solution businesses

Viewing growing social expectations on ESG matters as an opportunity, JFE Shoji is focusing on the following initiatives.

(1) Enhance the processing and distribution of eco-products, such as high-tensile steel for automobiles, and electrical steel for improving energy efficiency, while building a supply chain for steel used to construct offshore wind power plants

(2) Help reduce CO_2 emissions across society through global resource recycling, in light of the greater volumes of steel scrap being handled, and expand transactions in biomass fuel, such as palm kernel shells (PKS) and wood pallets



Palm kernel shells (PKS)

• Promotion of DX

Though DX projects, we aim to increase the competitiveness of our products and services in the supply chain, focusing on the creation of new businesses that utilize digital technologies, and changing existing businesses while greatly increasing productivity.

In April 2021, JFE Shoji became a signatory to the United Nations 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.

Kotaro Chiba
President and CEO
Japan Marine United Corporation

Strengths	Threats and risks	Opportunities
• Advanced environmental and energy-saving technologies • Planning & Development capabilities for design of superior product, that leverage its abundant R&D and design/engineering resources • High productivity that leverages the unique features of each shipyard.	• Tougher international competition against shipbuilders become larger in China and South Korea • Impact of U.S.-China trade friction on seaborne trade and cargo movement • Higher prices for raw materials and equipment • Foreign exchange fluctuations (yen appreciation)	• Progress toward a decarbonized society ▶ Stronger environmental regulations ▶ Faster momentum in new fuel adoption and research ▶ Invigoration of offshore wind power generation markets • Growth picking back up in cargo movement and recovery in market conditions once economic activity returns to normal after the pandemic ends

Initiatives in Fiscal 2020

In fiscal 2020, Nihon Shipyard Co., Ltd. (NSY) was established as a sales and design joint venture between Japan Marine United and Imabari Shipbuilding, as their capital and business alliance came into effect.

While utilizing the strengthened marketing, design, and sales force of both companies, NSY aims to develop outstanding performance design and launch them timely to market, in order to fit to increasingly strict environmental regulations on the path to decarbonization.

The alliance between Japan Marine United and Imabari Shipbuilding enables both companies to receive a lot-order and construct ultra-large container ships in series, which had been difficult for a single company in terms of building capacity to accomplish to date.

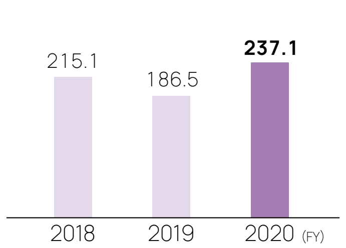
Medium- to Long-term Strategy and Future Initiatives

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 five years, which is to be a core player that guides a maritime cluster with world-leading technologies combining the engineering strengths of shipbuilding in Japan.

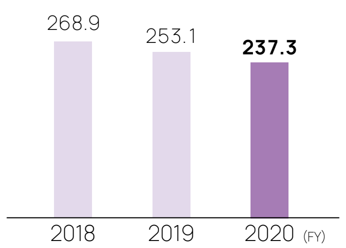
In the core merchant ships business, Japan Marine United aims to develop ships that constantly outperform the competition by pioneering leading-edge environmental technologies with NSY at the center. While improving the productivity of manufacturing facilities, production systems, and human resources, we will reinforce the business foundation by sharpening our global competitiveness and moving toward our vision for the future. We will contribute to the sustainable growth of an environment-friendly society, updating our business structure for growing market, floating-type offshore wind power generation.

Fiscal 2020 results

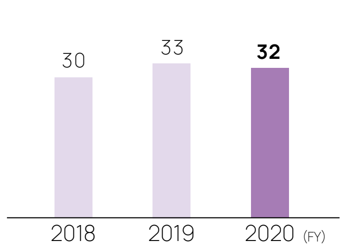
Orders received
(billion yen)



Net sales
(billion yen)



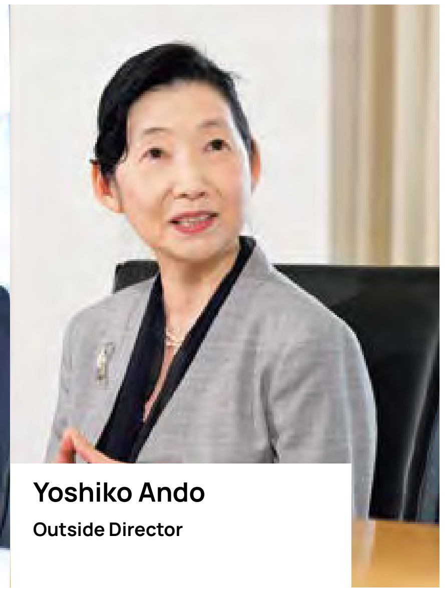
Vessels built
(vessels)



Outside executives talk about the Seventh Medium-term Business Plan and JFE's future vision

Nobumasa Kemori
Outside Director

Masami Yamamoto
Outside Director



Yoshiko Ando
Outside Director

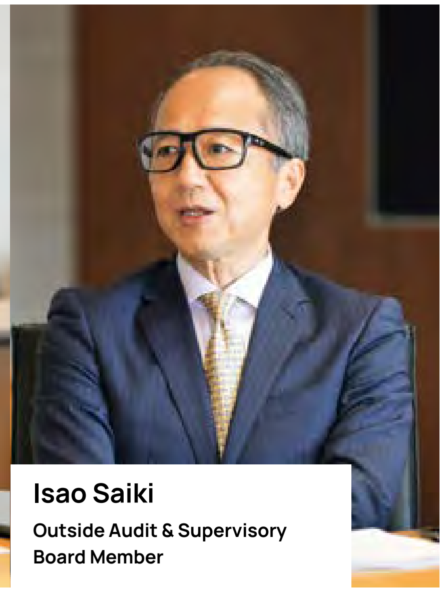
Mr. Kemori joined Sumitomo Metal Mining in 1980 and served as president, chairman, and advisor before being appointed honorary advisor in June 2021. He is also an outside director of NAGASE & CO., LTD. and Sumitomo Realty & Development Co., Ltd. He has been a director of JFE Holdings since June 2018.

Mr. Yamamoto joined Fujitsu 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.

Ms. Ando joined the Ministry of Health, Labour and Welfare in 1982 and retired in 2018 after serving as director-general of Labour Policy and Director-General for Human Resources Development. She currently is 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.

Shigeo Ohyagi
Outside Audit & Supervisory Board Member

Tsuyoshi Numagami
Outside Audit & Supervisory Board Member



Isao Saiki
Outside Audit & Supervisory Board Member

Mr. Ohyagi joined Teijin in 1971 and assumed his present post as senior advisor in June 2018 after serving as president and then chairman. He is also an outside director of KDDI CORPORATION, MUFG Bank, Ltd., and Tokyo Electric Power Company Holdings, Incorporated. He became an Audit & Supervisory Board Member of JFE Holdings in June 2014.

Mr. Numagami became a professor in 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 became an Audit & Supervisory Board Member of JFE Holdings in June 2018.

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 became an Audit & Supervisory Board Member of JFE Holdings in June 2017.

What is your opinion of the Board of Directors' activities as well as its responses to the pandemic and other sudden changes in the business environment over the past year?

Kemori In the first half of fiscal 2020, the Board of Directors mainly discussed two topics. The first was how to reduce production in response to a sharp, steep drop in the demand for steel products. A decision was made to temporarily halt operations at two blast furnaces and keep six blast furnaces operating, instead of scaling back output uniformly across all eight furnaces. The Board of Directors made a proper decision after President Kitano of JFE Steel explained the situation to us, including technical aspects in ways that we all could understand.

The second topic was how to reduce losses and control interest-bearing debt in the face of substantial losses forecasted due to a deteriorating metal spread,* a source of earnings for the Company. It was extremely challenging to reduce costs while significantly cutting back production volume. Emergency measures were implemented and the Company sold off assets, which kept interest-bearing debt within the parameters set by management.

Overall, I feel the Board of Directors handled the situation appropriately. However, I strongly believe that management needs to maintain constant awareness of the equity ratio (equity attributable to owners of parent ratio) to remain prepared for any rapid or unforeseeable change in the business environment.

* Product sales price – Raw material procurement price

Ohyagi Japan's steel industry is strongly affected by trends in the macroeconomic environment. JFE Steel has a high export ratio of over 40% for steel products, so both trade friction between the U.S. and China and the pandemic have had big impacts. Moreover, under the Sixth Medium-term Business Plan from fiscal 2018 to fiscal 2020, the Company invested large amounts of capital to strengthen its production capacity, resulting in increased interest-bearing debt and a decrease in the equity ratio. At the Board of Directors' meetings, as an Audit & Supervisory Board Member, I voiced my opinion regarding the risks involved in concentrating capital investments and the importance of preparing for a possibly steeper economic downturn.

Another important topic is the deployment of digital technology to facilitate new workstyles. The Board of Directors discussed how the pandemic has accelerated related reforms and, as a result, JFE has kept up with other progressive Japanese companies in shifting paper-based and face-to-face work to digital processes.

Ando I was appointed to this position in June 2020, during the pandemic, so I have not had the opportunity to visit the front-lines and talk with people there. At JFE, Board of Directors' meetings are opportunities for participants to voice opinions frankly and exchange ideas freely. All participants, including Audit & Supervisory Board Members, engage actively in dialogue with no distinction made between 'insiders' and 'outsiders.' As the chair, President Kakigi supports deliberations with information as needed, but he makes a full effort to guide discussions toward conclusions that consider the opinions of outside Board members. From this perspective, I believe an inside director is better able to perform the role of the JFE chair, although outside directors are often placed in charge of corporate governance matters.

Right before my appointment, the Company announced emergency measures to counter COVID-19 and the Board of Directors discussed how to follow up on these measures at every meeting thereafter. Outside Board members brought up various problems and clearly conveyed their awareness of the crisis, even when the meetings were held by phone.

What do you think of the process used to formulate the Seventh Medium-term Business Plan?

Yamamoto Discussions about the Seventh Medium-term Business Plan began with a strong sense of crisis shared by both the Board of Directors and Company executives regarding what the Company must do to survive a challenging business environment, given that substantial losses were incurred in both fiscal 2019 and the first half of fiscal 2020. Compared with the Sixth Medium-term Business Plan, triple the amount of time was spent on formulating the new plan. Schedules were set up so that our deliberations could concentrate separately on the steel, engineering and trading business segments. I think it is rare for a company to allocate this much time for discussion about a medium-term business plan.

Whereas the previous plan sought growth in volume terms, this seventh plan focuses on quality-based growth. It also sets out a clear policy for sustainability. While we must wait to see the actual outcome, I am confident that this plan has been well considered down to the last detail.

Numagami Overall, I think the process for formulating the seventh plan was excellent. In particular, two forums were created for discussing Companywide efforts involving offshore wind power generation. Executives carefully explained the initiatives being taken at each operating company and ample time was set aside for discussions, which ended up being quite thorough.

Furthermore, Japanese politics and economics are becoming increasingly linked to global politics, so the plan reflects deep discussions by the Board of Directors about global matters. I believe the plan will be impactful in the sense that JFE is taking on the biggest transformation since its founding.

Saiki When we evaluated the previous plan, we thought it would be better to examine the accumulated measures undertaken by each operating company within the broader context of what JFE aims to accomplish overall. Similarly, we initially considered setting targets for only fiscal 2021 under a special single-year plan for emergency measures during the pandemic, and then launch the Seventh Medium-term Business Plan from fiscal 2022. However, once we finally decided to launch the new plan in fiscal 2021, I was concerned there would not be enough time to discuss broader outlines. But despite my concerns we were able to hold thorough discussions, so I believe the process turned out to be quite good. I think the business plan is well put together, despite the time constraints and rapid changes in the operating environment.

Ando When groups of companies are managed within a holding company structure, overall business control can be challenging depending on how the holding company is positioned. I had thought that discussions about the JFE Group would be framed in terms of its operating companies engaged in steel, engineering and trading, but during the plan's formulation a broad framework was first established for the entire group and then details about each individual part were added to the framework. I believe this improved the visibility of how each company generates synergy within the Group. A fair amount of time was spent discussing offshore wind power generation, which I feel has the potential to become a promising business capable of leveraging group synergies.

Which measures outlined in the Seventh Medium-term Business Plan do you find the most intriguing?

Kemori I am interested in the pivot from quantity to quality. The steel business is basically a cash cow for JFE because it generates a large percentage of total sales revenue. Among companies that use large-scale equipment, it is common to pursue competitive advantage by increasing volume. At first glance, turning the focus away from volume seems to run counter to this common practice. However, competitiveness in manufacturing is defined not by the Company as a whole, but by the production capacity of individual plants, or blast furnaces in this case. Also, the production capacity of blast furnaces can be described as the amount of output per on-site employee.

The first key, production capacity per blast furnace, is greatly affected by the volume of the blast furnace itself. By maximizing the operating rates of blast furnaces using a digital technology called cyber physical systems (CPS), it is possible to further boost capacity. This idea, which is unique to JFE, aligns with the company's vision of 'contributing to society with the world's most innovative technology.'

The second key, improving production capacity per employee, requires the establishment of KPIs. Using one of my ideas, JFE now analyzes and compares its current productivity to that of sector peers that are globally competitive. As a result, JFE has set KPI targets of 2,000 tons of annual output per employee and profit of 10,000 yen per ton of steel shipment. To achieve these targets, I am confident that JFE will do its utmost to attain world-class profitability as a steelmaker.

Numagami I think an important shift introduced in the new plan is the Company's intention to sell various steel solutions to overseas corporations. This could act as a springboard for transforming JFE from a manufacturer into a platformer. In platformer business, unlike general manufacturing, business development skills can be more crucial than technology types/levels. This will place great emphasis on the seamless sharing of internal know-how, something that is already well under way in the engineering business.

I am also interested in the Company's carbon-recycling blast furnaces and offshore wind power plants. While JFE has an opportunity to lead the world in carbon-recycling technology, European companies already have first-mover advantages in the field of offshore wind power plants. But considering the cost and time required to transport plant materials and equipment from Europe to Japan, I believe JFE may have a competitive advantage. Going forward, I see the Company accumulating the know-how and expertise it needs to gradually enhance its productivity in this field.

Saiki My main interest is the project to commercialize offshore wind power business. The fulcrum of this project will be the realization of synergies through cooperation among the three businesses. JFE's basic stance in the past has been to put an operating company in charge of a single business, with JFE Holdings serving as a pure holding company, but in this case it will act as a hub. I expect this to lead to changes in governance and business methods throughout the Group.

The Board of Directors has received reports about this project on numerous occasions and posed tough questions to operating company executives about its outlook and feasibility. I believe the initial concept has been brushed up significantly as a result of these discussions.

Yamamoto Under the Seventh Medium-term Business Plan, the Company's first step is to clear the very high hurdle of becoming carbon neutral by 2050. The steel industry currently emits more than 10% of CO_2 emissions in Japan as a whole. To achieve net zero emissions, next-generation technologies such as carbon-recycling blast furnaces are needed to completely makeover traditional steelmaking processes. This will require the use of data control combined with DX technologies. A massive undertaking to solve the technological issues for carbon neutrality has begun, aiming ultimately at generating profits as well as innovating technology.

Measures outlined in the new plan lean heavily on the input of executives, so I believe it is our duty to back them up as much as possible. The success of this initiative over the next four years will determine the future direction of JFE over the next decade or two, in my opinion.

Ohyagi Medium-term business plans typically have goals that can be achieved within their time frames, but the Seventh Medium-term Business Plan looks more like a vision with long-term objectives set 10 or 20 years into the future. For such a visionary plan, ensuring there is executive capacity to carry it out will be crucial.

Measures in the plan include a significant amount of forward-looking investment, but earnings in the steel industry are broadly exposed to trends in the economic environment. There may well be situations where the Company will have to discuss how much progress can be made depending on external conditions. In this case, it may be necessary for the Company to change its approach while flexibly deploying people, equipment, funding, and information. I believe it is my responsibility as an Audit & Supervisory Board Member to make sure the Company will be able to follow through with its plans.

The history of any company is one of constant change, but now we are also approaching pivotal transformations in society and the market. Implementing change under the Seventh Medium-term Business Plan will require constant awareness of the Company's market positioning. So far, JFE has provided supply chains with upstream raw materials, but now it must focus on developing more nimble businesses as a platformer. We must think carefully about where to position the Company while keeping a close eye on society's evolution.

Ando The Seventh Medium-term Business Plan's targets for CO_2 reduction (by the end of fiscal 2024) are realistic in view of current conditions, but I think future objectives will require backcasting from the Company's targets for 2050. I believe, as Mr. Ohyagi said earlier, the visionary nature of the new plan reflects this viewpoint.

Initiatives to achieve monumental targets naturally require the input of more than just one company working on its own. While monitoring progress in R&D, government policy objectives, and global trends, we will continue to oversee the Company's progress from an objective viewpoint, one step removed from the action.

JFE GROUP REPORT 2021

What risks and issues do you envision materializing and possibly impacting the implementation of company plans?

Saiki In the steel business, changes in the external environment could tighten the metal spread and tilt operations into the red. While the Seventh Medium-term Business Plan incorporates lessons learned from the previous plan, risks could still materialize under similar situations. As an outside director, I am constantly thinking about what management should do with its major investments in the event that risks appear.

Yamamoto Initiatives to become carbon neutral will require large investments that JFE would have trouble funding on its own. A business model that involves all industries and the government too probably will be needed. Under such a scenario, it is unclear what kind of leadership role JFE could assume within an industry consortium. The chance that investment plans could differ from past objectives is something greater than zero. Since stakeholder interests can sometimes be at odds with each other, I think the first challenge, and risk, will be the proper management of projects.

Furthermore, initiatives to become carbon neutral, even if successful, could well increase production costs. Also, rival steelmakers overseas will probably manufacture cheaper products that are not carbon neutral. Basically, moves to decarbonize have inherent risks in terms of price competition for steel products. To compensate for this, JFE must promote the environmental value of its carbon-free steel and ultimately prevail on the basis of its total value proposition. We envision needs for sweeping changes in sales methods and sales channels to enable the Company to realize selling prices commensurate with the value of its products.

Numagami Assuming JFE develops a solutions business as a platformer, a certain degree of openness will become necessary so that other steelmakers can participate in the platform. To provide various solutions overseas over the long term, some technologies probably will have to be opened up. If the Company resorts to the standard practice in the Japanese manufacturing industry of holding back its proprietary technologies that could wind up being a mistake.

Another point to note is the pace of growth in the engineering business, which at some point will require more business managers. If a company or business grows too fast, personnel hiring and training might not be able to keep pace. An ironclad rule of management is to prioritize the allocation of resources, starting with upper management. The pace of future growth will hinge on the JFE Group's ability to develop necessary human resources internally as well as acquire such personnel from outside.

Kemori On top of the external risks that everyone has identified, I would like to add that internal risks may also increase. The Seventh Medium-term Business Plan accepts the challenge of dealing with major changes, but changes can occur throughout business processes. Issues related to safety, the environment, and quality could arise if such changes occur one after another. Focusing too much on external risks might result in the Company losing its footing due to unforeseen circumstances. I hope the executives are well aware of the internal risks.

Lastly, what are your thoughts on the JFE group's greatest strengths for supporting sustained growth? As outside directors, what are your expectations and hopes?

Kemori I believe JFE's greatest strength is its willingness to take on the challenge of resolving issues in the modern world by applying its technological capabilities. The company's corporate vision and Seventh Medium-term Business Plan embody this willingness.

During the formulation of the Seventh Medium-term Business Plan, I was deeply impressed by the deliberations about targets for reducing CO_2 emissions. Carbon neutrality by 2050 has been set as the ultimate objective, beginning with reduction targets for fiscal 2024. Perhaps midway targets for fiscal 2030 also could have been set, but the executives were adamant that numerical targets disclosed to the public had to be backed up by technologies capable of achieving them. So the Company will draw up targets after monitoring its progress in developing the needed technologies. I think JFE's high expectations and pride regarding technology are the sources of its competitive advantage.

Yamamoto I can feel everyone's passion for the steel business at JFE. For example, at the Intercity Baseball Tournament held in 2019, when JFE East Japan won its first game, the enthusiasm of the employees was incredible.

The mindset of overcoming hardships and taking on challenges until objectives are achieved has been instilled from the top down to each and every employee. I believe this is JFE's greatest strength. JFE continues to take on challenges with a positive attitude, so I have great hopes for its coming accomplishments.

Saiki Like everyone has said, I also feel that JFE's strength is its unwavering spirit of taking on new challenges. JFE's concepts for carbon-recycling blast furnaces and offshore wind power generation are examples of its will to develop strengths unlike those of other domestic steelmakers. I strongly hope that the Company will continue to evolve in this direction.

JFE ranks second in terms of crude steel output in the Japanese steel industry. If the Company does not disclose information adequately, the world will not know about its ambitious plans. JFE is taking on some amazing challenges, so to ensure that the world appreciates these efforts I hope the Company will step up its dissemination of information.

Numagami Global developments regarding carbon neutrality and hydrogen-based societies could turn into promising businesses, but this will depend on governments playing crucially important roles. JFE has many technological strengths, but beyond its technical and on-site capabilities, the ability to comprehensively read the international situation and government trends will become increasingly crucial. The Board of Directors examines issues from multifaceted viewpoints by freely discussing everything from daily issues to international situations. Continually building on such wisdom is one of JFE's greatest strengths.

Ando I believe JFE's strength is derived from the growth engine and potential of each of its three relatively independent operating companies. Under the Seventh Medium-term Business Plan, the Company has plotted a course for generating new synergies in each business, centered on the environment.

Another strength of JFE is its human organizational capabilities that encompass the individual talents of employees. This is evident in how well the administrative office responds to our opinions and requests, and in the activities being undertaken by employees, which are reported in the group's internal newsletters. JFE's respect for individuals will translate into stronger organizational capabilities, in my view.

Another point to watch is the Company's promotion of women in the workplace. JFE has been setting up childcare centers next to its main offices and taking other forward-looking initiatives, but some of these efforts still feel like they lack direction. Female employees have increased, and now many are approaching eventful stages in their lives, so the Company's responsiveness will be tested. I wish to visit workplaces to talk one-on-one with these employees. Regarding the promotion of women to managerial positions, the Company has set targets as a priority issue. I have hopes for ongoing efforts to groom women for executive positions in the operating companies, but for now I am looking forward to the day when female employees will attend Board of Directors' meetings to provide briefings.

Ohyagi I think JFE needs to put more effort into developing innovative technologies and producing products that are superior to those of its competitors. Frontline employees at JFE research labs and plants will be key in this endeavor. Given that employees come to work for 7–8 hours a day, they must be given opportunities to feel joy, motivation and growth in their jobs. A 'good company' must have an open organizational culture in which fair decisions are made in a controlled and transparent environment. In this sense, as an Audit & Supervisory Board member, I believe JFE is a very good company. I want to help make sure that this excellent corporate culture, the foundation for all activities, is passed on to future generations.

Fiscal 2021 Key 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.

Groupwide JFE Steel JFE Engineering JFE Shoji

	Areas of Focus	Details	Material Issues	Operating Company	2021 KPIs
Activity	Contribute to resolving climate change issues (initiatives for achieving carbon neutrality by 2050)	● 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**	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)
			Contribute to reduction of CO_2 emissions 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 tonnes 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	● Prioritize safety first ● Maintain the physical and mental health of employees and their families	**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) Turn off equipment, machines, and tools while non-standard operations (4) Multifaceted management of occupational safety and health • 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% (FY2023 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	● Maintain work environments where all personnel can maximize their abilities ● Accumulate and hand down technologies and skills	**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		• 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		Annual leave acquisition rate of at least 75% (total for operating companies)
				JFE Steel	• Engagement survey Affirmative response to questions about motivation: 75%
	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**	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 1,200 engineers for big data analysis utilizing 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. 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) * 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)	● 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**	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 tonnes, 50% of sales excluding half-finished products, by FY2024) ▶ **FY2021 KPIs** 9.3 million tonnes in sales of high value-added products (up 1.5 million tonnes 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	1. 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. 2. 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 tonnes by FY2024 ▶ **FY2021 KPI:** Aim for 25% of target
				JFE Engineering	Expand the stable earnings base Expand the operating businesses 1. Sales: 250 billion yen 2. Expand bases: at least 3 bases • Recycling business (food, plastics, electronic appliances, etc.) • Regional electricity retail new power business • Waste processing business • 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

Fiscal 2020 KPI Outcomes and Evaluations for Priority CSR Issues

Since fiscal 2017, the Company has set KPIs for priority CSR issues it identified in fiscal 2016, and engaged in initiatives to resolve these issues. In fiscal 2020, JFE evaluated the results of the previous fiscal year, and set KPIs while considering the unique nature of each operating company, advancing CSR management while going through a PDCA cycle. The results and evaluation of KPIs for priority CSR issues in fiscal 2020 are reflected in initiatives to address key issues for management in fiscal 2021.

■ 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.

Areas of Focus		Material CSR Issues	Operating Company	Targets/KPIs	Initiatives and Results for FY2020	Assessment
Activity	Provide quality products (customer satisfaction)	Stably supply products	JFE Steel	1. Flexibly respond to changes in demand arising from environmental changes and maintain stable operations to ensure stable product supply 2. Make steady progress on strengthening the manufacturing base, including measures to stabilize blast furnace operation	• Improved facility operations at each steelwork and district by steady progress in strengthening the manufacturing infrastructures • Flexible operation of blast furnaces to match changes in demand during COVID-19 (introduction of CPS to blast furnace operations) • Maintained previous fiscal year's delivery achievement rate in FY2020, despite sharp swings in demand	○
			JFE Engineering	• Secure a stable number of certificated managing engineers	• Stable number of managing engineers was secured while achieving high sales revenue	○
			JFE Shoji	• Make consistent investment in processing and distribution operations	• Carried out selective investments necessary for this fiscal year to ensure stable product supply under COVID-19 Amount of investment (approved amount): • Reinforcement: 7.3 billion yen • Renewal and safety 2.7 billion yen • System: 0.6 billion yen	○
		Ensure quality	JFE Steel	• Make steady progress on capital investments to improve the level of quality assurance and product testing, and achieve full automation of the four critical items: tensile test, molten steel analysis, steel sheet thickness measurement, and coating weight measurement	• Steadily invest in automation to finish all approved investments during FY2020 for reaching 100% automation of four priority areas from test measurements to mill sheet descriptions (Automation achievement rate tensile test: 93.9%, molten steel analysis: 99.9%, automobile steel sheet thickness measurement: 98.7%, and coating weight measurement: 99.9%)	○
			JFE Engineering	• No major quality problems	• Major quality problems: None (examples: legal violations, failure to fulfill customer requirements)	○
			JFE Shoji	• Conduct quality audits at Group companies and continue conducting quality audits at 32 Group companies in Japan and overseas (expanded target companies from 30 to 32)	• Began considering quality audits by remote due to the difficulty of conducting on-site audits under COVID-19; determined procedures and methods based on preliminary check sheets and remote conferences in January 2021 • Completed quality audits for all 17 domestic Group companies (including remote audits for six companies)	○
		Pursue research and development	JFE Steel	1. Pursue strategic research and development By developing DS*1 application technology, in FY2020 aim to inaugurate the JFE Digital Transformation Center (JDXC*2), promote an AI application at blast furnaces, promote a DS application at three sintering plants in Fukuyama, and apply J-dscom*3 to all hot strip lines *1: Data Science *2: JFE Digital Transformation Center *3: JFE Detecting-anomaly-Signs & Color-Mapping system	1. Pursued strategic research and development JDXC opened in July 2020, applied AI to blast furnaces, applied DS to three sintering plants in Fukuyama, and finished application of J-dscom to all hot strip lines	○
				2. Develop new products and technologies FY2020: 20 cases or more (achieve the cumulative total of 135 cases from FY2015 to FY2020)	2. Developed new products and technologies FY2020: 13 cases (3 new products, 10 new technologies) (total from FY2015 to FY2020: 152 cases) Note: Missed numerical target in FY2020 due to slowdown in economic activity associated with COVID-19. Achieved the target for cumulative total cases encompassing the Fifth and Sixth Medium-Term Business Plans.	△
			JFE Engineering	• Pursue technological development in three critical areas: leveraging ICT, climate change, and recycling plastics Numerical target: Ratio of R&D expenses for the three critical areas: 30% or more	• Ratio of R&D expenses for the three priority fields: 36% Total costs in FY2020 R&D: 4.07 billion yen, including 1.48 billion yen for three priority fields	○
		Respond to customer needs	JFE Steel	1. All sales personnel are to take rank-based training for the sales department within two years of being posted to the department 2. Conduct CS survey and ensure feedback of results	1. All office heads, managers, and newly appointed employees took the course within two years 2. Implemented feedback on CS survey results	○
			JFE Engineering	• Use data collected from customer surveys to enhance customer satisfaction	• Collected construction completion evaluation forms for public-sector projects and customer surveys about quality management system (QMS) for private-sector projects (total: 322 projects) • Conveyed customer feedback to sector heads, divisions managers, and others	○
			JFE Shoji	• Invest in the development of strong sales personnel All target employees are required to meet the goal of human resource development through skill training and participation of overseas employees in joint training held in Japan	• Fully achieved the target of human resource development through skill training; skill training: 4 courses, 125 participants	○
	Protect the global environment	Develop and provide ecofriendly products	JFE Steel	• Expand eco-friendly products and technological offerings: 15 or more in FY2020 (target accumulated total of 105 for the period from FY2015 to FY2020)	• FY2020: 10 cases (2 new products, 8 new technologies) (total from FY2015 to FY2018: 107 cases) Note: Missed numerical target in FY2020 due to slowdown in economic activity associated with COVID-19. Achieved the target for cumulative total cases encompassing the Fifth and Sixth Medium-Term Business Plans.	△
			JFE Engineering	• Create new business or products that contribute to environmental protection or expand business: at least one applicable case per year ▶ Promote plastic recycling business ▶ Promote food waste recycling business ▶ Promote home electronic appliance and fluorescent light recycling business ▶ Promote renewable energy-generated power supply business ▶ Develop and offer eco-friendly products	• Implemented 3 cases of new business and business expansion ▶ Established a Bottle-to-Bottle joint venture (Kyoei J&T Recycling) ▶ Launched a joint venture with three companies for biogas power generation from food waste (Tohoku Biofood Recycling) ▶ Inherited the refuse-derived fuel (RDF) gasifying power generation business (Omuta Recycle Electric Generation)	○
		Mitigate climate change	JFE Steel	• Aim to reduce our CO_2 emissions by at least 20% in FY2030 from FY2013 level • Establish project team and formulate and implement a scenario by the end of FY2020 to realize the above • Participate in technological development led by the New Energy and Industrial Technology Development Organization (NEDO) to realize zero-carbon steel; develop a long-term road map in 2020 to 2021 for technological development • Begin actual operation testing with a ferro-coke pilot plant	• Disclosed the FY2030 target for reducing CO_2 emissions by at least 20% from FY2013 level • Project team launched for CO_2 reduction and formulated a scenario for achieving carbon neutrality • Participated in the NEDO technological development project for making zero-carbon steel a reality • Began verification tests at the ferro-coke production pilot plant (NEDO project)	○
			JFE Engineering	1. Two or more offerings per year of products/services that contribute to climate change mitigation ▶ Promote waste-fueled power generation ▶ Promote biomass power generation ▶ Promote a digestion gas power generation plant ▶ Promote geothermal, solar photovoltaic, and wind power generation 2. At least 1% y-o-y reduction of carbon footprint of factories and offices	1. Delivered two biomass power generation plants and two large-scale solar power generation plants 2. Achieved 16% reduction (FY2019: 16,800 t/year, FY2020: 14,100 t/year)	○

JFE GROUP REPORT 2021

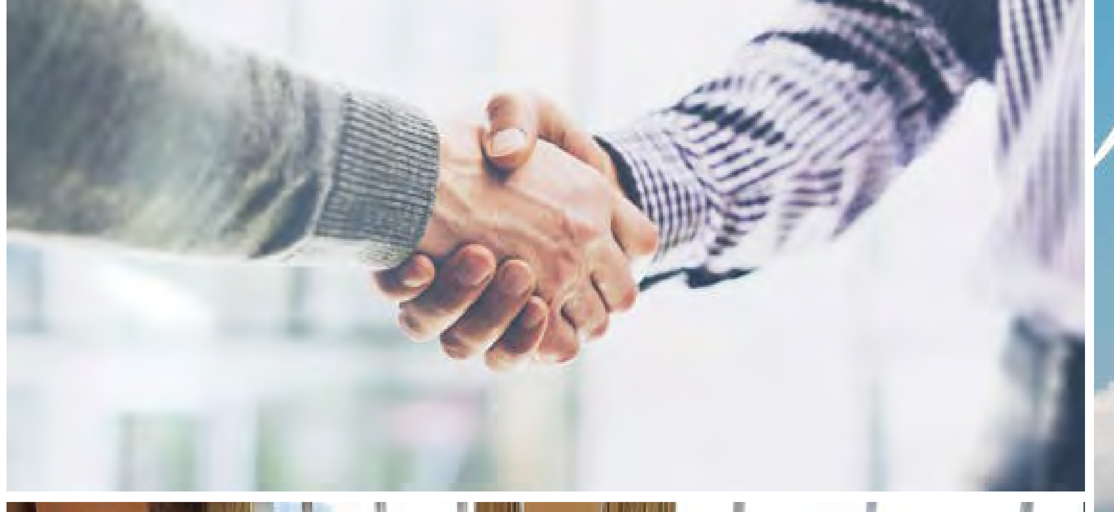
Fiscal 2020 KPI Outcomes and Evaluations for Priority CSR Issues

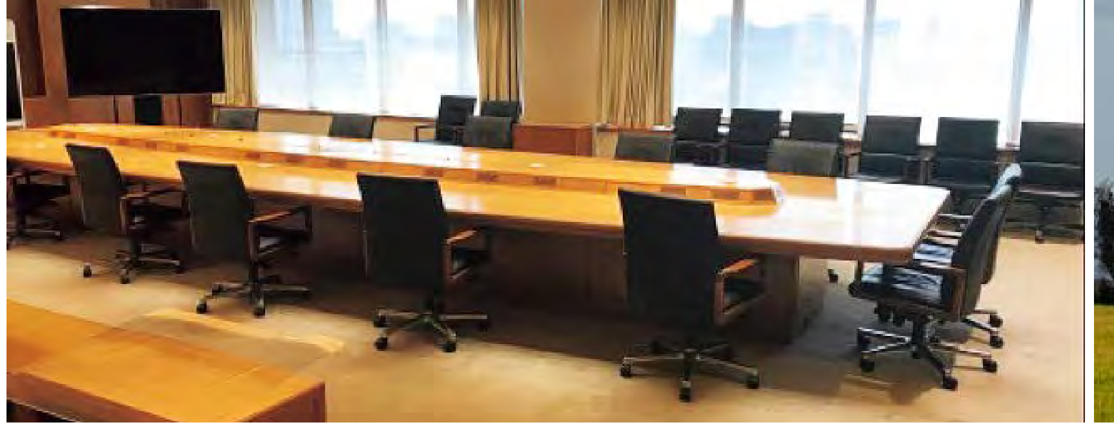
🟦 Groupwide 🟥 JFE Steel 🟩 JFE Engineering 🟨 JFE Shoji

Areas of Focus		Material CSR Issues	Operating Company	Targets/KPIs	Initiatives and Results for FY2020	Assessment
Activity	Protect the global environment	Protect the global atmosphere	JFE Steel	1. Continue work on keeping NOx and SOx emissions at low levels 2. VOC emissions: maintain a low level (30% decrease compared to FY2000) 3. Benzene emissions: maintain a low level (80% decrease compared to FY1999) 4. Dichloromethane emissions: maintain a low level (40% decrease compared to FY1999)	1. Continued work on keeping NOx and SOx emissions at low levels 2. VOC emissions: 66% decrease 3. Benzene emissions: 94% decrease 4. Dichloromethane emissions: 71% decrease	○
			JFE Engineering	• Continue work on keeping NOx and SOx emissions at low levels	• Successfully maintained low emissions as it was significantly less than the value equivalent to the total annual volume restriction: NOx: 124Nm^3 (18,000Nm^3), SOx: 42Nm^3 (100Nm^3) Note: The amount in parenthesis represents the value equivalent to the total volume restriction.	○
		Pursue resource recycling	JFE Steel	1. Maintain the efficient use of water Recirculated water usage rate: 90% or more 2. Recycling rate of co-products: 99% or more	1. Recirculated water usage rate: 93.0% 2. Recycling rate of co-products: 99.7%	○
			JFE Engineering	1. Recycling rate at construction sites ▶ Recycle at least 99.5% of rubble ▶ Recycle at least 95.0% of sludge ▶ Recycle at least 85.0% of industrial waste	1. Recycling rates ▶ Rubble: 99.4% ▶ Sludge: 98.9% ▶ Industrial waste: 85.4%	△
				2. Recycle at least 98.0% of recyclable wastes generated at the Yokohama head office	2. 99.1%	○
			JFE Shoji	• Global recycling of steel scrap: Increase scrap transactions to exceed the volume for FY2017 (FY2020 target: +3% from FY2017)	• Contributed to the expansion of a recycling-oriented society by steadily increasing scrap transactions since FY2017 • Domestic transactions volume decreased in FY2020 to levels lower than in FY2017 due to COVID-19, failing to meet the target (−1.7% from FY2017)	×
	Ensure occupational safety and health	Prevent workplace accidents	Groupwide	1. Workplace fatalities: zero occurrences 2. 🟥 Lost-work injuries rate for ST: up to 0.10 [Key measures] (1) Strengthen safety activities at each business unit to cover weak areas (2) Restructure the safety and health management system (introduce ISO) (3) Implement safety activities that utilize ICT (specific initiatives: introduce safety monitoring system, support for safe work using AI image analysis, etc.) 🟩 Lost-work injuries rate for EN: up to 0.25 [Key measures] (1) Build a floor or hand rail for work in high places and wear safety belt (2) Restrict people from areas near hoisted objects or heavy machinery in operation (3) Turn off equipment, machines, and tools when not in use (4) Verbal communication on safety awareness during site patrol and implementing corrective measures [Example of advanced initiative] ▶ Safety training by experiencing dangerous situations using VR and special vehicles designed to instill an understanding of the sense of safety 🟨 [Key measures] ▶ Improve equipment (promoting installation of safety sensors, etc.) to prevent contact between people and objects in motion	1. Workplace fatalities: 1 occurrence 2. 🟥 Lost-work injuries rate: 0.23 [Key measures] (1) Lost work injuries rate: Improved from 0.28 in the first half to 0.18 in the latter half (2) Restructure the safety and health management system: started implementing the system in all districts (3) Safety monitoring system: Completed companywide deployment (users: about 2,400) 🟩 Lost-work injuries rate: 0.35 [Key measures] (1) Prioritized the following actions to prevent workplace fatalities. • Installed working platforms / handrails and ensured wearing safety belts for work in high places • Ensured people remained at a safe distance from hoisted objects and heavy machinery in operation • Turn off equipment, machines, and tools while non-standard operations (2) Made a focused effort on verbal communication during site patrols and implemented corrective measures to prevent unsafe behavior by relevant employees (3) Promoted safety training based on a simulated experience of accidents using special vehicles and VR to increase the sensitivity for safety 🟨 [Key measures] • 81% of the installations by the end of FY2020 Note: Installations to be completed by end of November 2021 • Continued "100% adherence activities" • Promoted fixed-point patrols (patrols for closely observing and understanding tasks) and eliminated tasks unknown to managers and supervisors)	×
		Ensure the health of employees and their families	Groupwide	• Provision rates of health guidance: 🟥 60% (by FY2023) 🟩 35% (by FY2020) 🟨 40% (FY2020)	• Provision rates of health guidance: 🟥 53.0% 🟩 39.1% 🟨 41.6%	△
				• Rate of health examination for spouses: 60% (by FY2020)	• Rate of health examination for spouses: 🟥 48.0% 🟩 47.2% 🟨 53.2%	△
	Recruit and nurture diverse human resources	Pursue diversity and inclusion	Groupwide	• Ratios 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): 20% or more Production/construction position (technical): 5% or more 🟨 Career-track (white-collar position): 25% or more	• Ratios for female recruits 🟥 Career-track (white-collar position): 28% Career-track (technical position): 7% On-site position: 7% 🟩 Career-track (white-collar position): 18% Production/construction position (technical): 0% 🟨 Career-track (white-collar position): 26.7%	×
				• Females in managerial positions: five times the 2014 August figure by 2025	• Female in managerial positions: 3.6 times the 2014 August figure	△
		Strengthen human resources development	Groupwide	• Training hours per person 🟥 Over 40 each year 🟩 Over 20 each year 🟨 Over 20 each year	• Training hours per person 🟥 38.5 hours per year 🟩 19.0 hours per year 🟨 17.5 hours per year	△
				• 100% attendance from the target audience for human rights awareness training	• Rate of attendance for human rights awareness training: 100%	○
Basis of activity	Thoroughly enforce compliance	Ensure adherence to corporate ethical standards and compliance	Groupwide	• Steady execution of training to foster and maintain a sense of compliance (100% achievement)	• Steadily executed training to foster and maintain a sense of compliance (100% achievement)	○
				• Improve employee awareness of ethics reflected in the Corporate Ethics Awareness Survey	• Improved employee awareness of ethics reflected in the Corporate Ethics Awareness Survey (next survey is scheduled in FY2022)	–

JFE GROUP REPORT 2021

3. Sustainability Management





JFE GROUP REPORT 2021

Our Contributions to Resolving Climate Change

Basic Stance

The JFE Group's business involves steel manufacturing. That is why climate change issues are serious management issues from the viewpoint of business continuity. The steel business accounts for 99.9% of the Group's CO_2 emissions. The JFE Group is able to manufacture steel with the lowest CO_2 emission intensity among all the integrated steel mills in the world through developing diverse technologies that enable energy saving and CO_2 emissions reduction, and by applying them to our iron and steelmaking processes we help to alleviate risks.

In addition, the JFE Group develops and possesses many environmentally friendly products and technologies which help customers save energy at the stage of consumption, such as high-performance steel materials and power generation using renewable energy.

Viewing initiatives to address climate change as an opportunity, the JFE Group will further develop and spread technologies for these processes and products. We aim to help resolve issues related to climate change by globally providing our various accumulated technologies.

JFE Group Environmental Vision for 2050

The JFE Group aims to improve sustainability by helping to resolve issues related to climate change on a global scale, while restructuring operations to adapt to changes in the business environment for steel. We are aggressively taking measures to reduce CO_2 emissions, positioning 2020 as a pivotal year for strengthening our response to climate change.

In May 2021, the JFE Group formulated 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. To realize a sustainable society, the JFE Group intends to reduce CO_2 emissions with its own technologies, thereby helping society as a whole cut back CO_2 emissions, while aiming to improve corporate value. Reflecting the concepts behind the Task Force on Climate-related Financial Disclosures (TCFD) recommendations in its business strategies, the Company is taking systematic steps to mitigate climate change.

The development of processes that can produce high-performance steel in large volumes without emitting CO_2 will have to be undertaken for the sake of the sustainable development of society. Implementing various measures on the path to carbon neutrality will entail massive costs for R&D and upgrading to newly developed facilities. It is therefore important to consider how these costs can be spread across society, and government assistance will also be necessary.

To reach the ambitious goal of carbon neutrality by 2050, the JFE Group aims to establish the essential technologies for decarbonization as quickly as possible, before global competitors, assuming infrastructure is upgraded to move away from carbon and that initiatives will be taken on equal footing worldwide.

JFE Group's CO_2 emissions reductions / contributions to lowering CO_2 emissions across society

Information disclosure based on the TCFD recommendations

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

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

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

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

Governance

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

In fiscal 2016, we designated "mitigating climate change" as our CSR materiality in order to pursue a steady plan–do–check–act (PDCA) cycle and appropriate management of our ongoing initiatives to reduce CO_2 emissions in iron and steelmaking processes and to develop and provide environmentally friendly products.

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

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.

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 steel-making process development, which are the main pillars of the Low-Carbon Society Implementation Plan formulated by the JISF. Under this plan, the JISF targets the reduction of three million t-CO_2 by fiscal 2020 compared to BAU (Business As Usual: the estimated emissions based on production output without special measures), and the further reduction of nine million t-CO_2 by fiscal 2030. JFE Steel is also actively pursuing action to attain the targets of the Low-Carbon Society Implementation Plan.

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 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. 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 have set two scenarios.

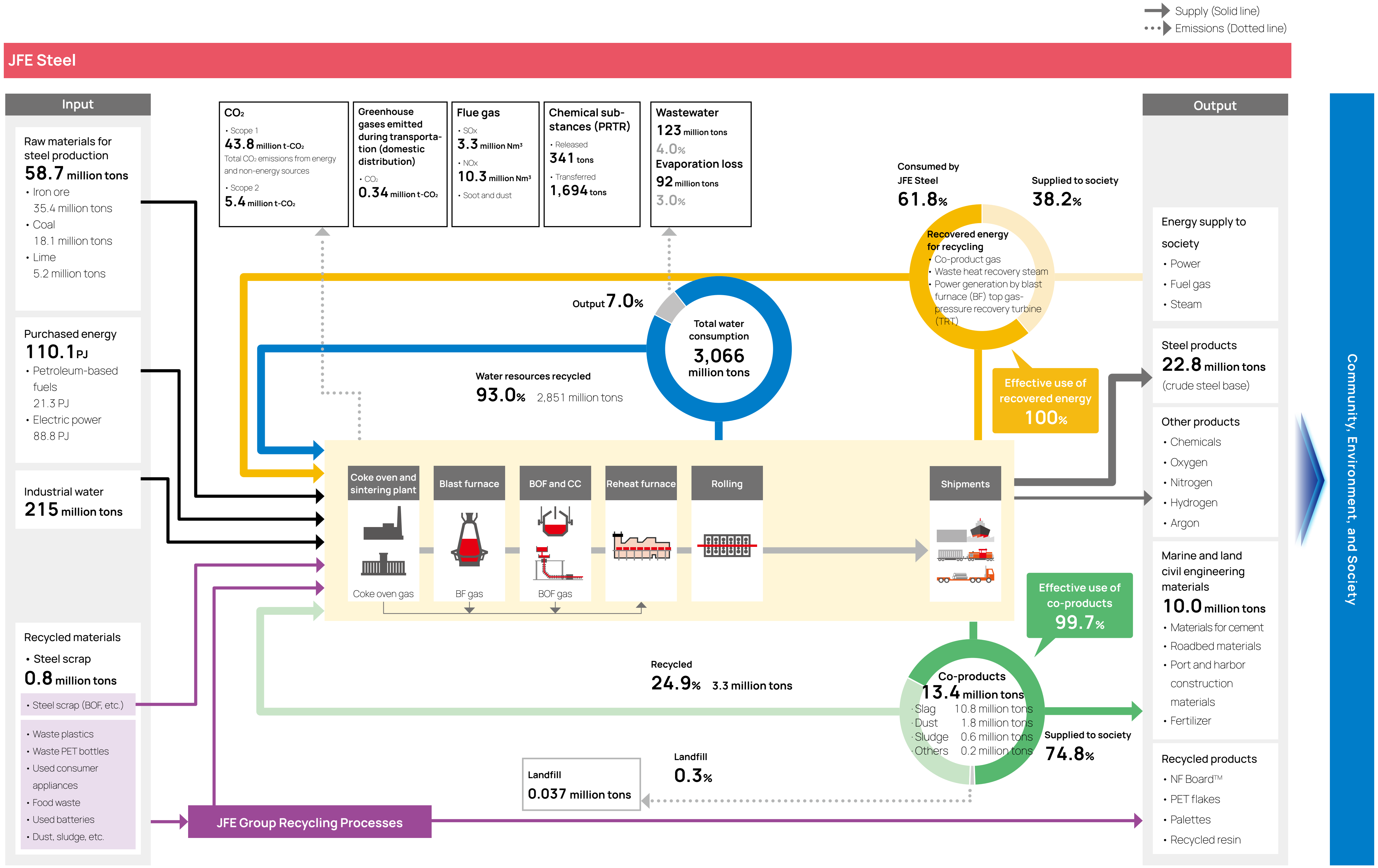
Both scenarios are based on the scenarios announced by the International Energy Agency (IEA). The analysis was performed under the assumption that carbon pricing would be introduced into major CO_2 generating countries in order to achieve the 2°C target.

	Societal changes and responses to changes		Expectations and concerns of stakeholders towards the JFE Group	Evaluation results	
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 Implementation of carbon pricing	• 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
				Risks	Investment in the implementation of innovative technologies is possible Cost competitiveness is maintained when carbon pricing is implemented worldwide Increase in operational costs (if not introduced in an appropriate manner)
2°C scenario Important factor 2 Increase in demand for the effective use of steel scraps	Increased focus on electric furnace method, which emits low levels of carbon	Rising expectations toward electric furnace steel Increase in scrap generation	• Replacement of converter steel with electric furnace steel • Increase in JFE Group's production of electric furnace steel	Opportunities	Restrictions on the amount of scrap provided, increase in production of converter steel Increase in production of electric furnace steel and the need for electric furnace engineering Expansion of the scrap logistics business
2°C scenario Important factor 3 Change in demand for steel for automobiles and others	Change in automobile needs Rising demands for eco-friendly raw materials	Increase of EV motors Decrease of internal combustion engines Reduction of weight and the increased use of multi-materials Demand for decarbonization and recyclability	• 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
				Risks	Limited impact of the increased use of multi-materials
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 Overseas development of energy conservation technologies	• 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
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"
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 Increased demand for disaster prevention products	• Contribution with steel and related products that help strengthen infrastructure	Opportunities	Strengthening infrastructure with steel and related products

JFE GROUP REPORT 2021

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.



JFE Engineering (Head Office and Works)

Input

Steel	36,900 tons
Energy	
• Electric power purchased	26.0 GWh
• Class A heavy oil	84.4 kl
• Kerosene	6.6 kl
• Light oil	214 kl
• Gasoline	12.4 kl
• City gas	330,000 Nm³
• LPG	83.1 tons
Water	72,400 tons

JFE Engineering

- Tsurumi Engineering and Manufacturing Center
- Tsu Works

Output and Emissions

Products	34,700 tons
CO_2	9,000 t-CO_2
• Scope 1	1,800 t-CO_2
• Scope 2	7,200 t-CO_2
Waste generated	1,400 tons
• Industrial wastes	1,100 tons
• General wastes	277 tons
Wastewater (ocean only)	157,000 tons
Others (PRTR)	147 tons

JFE GROUP REPORT 2021

Ensuring Occupational Safety and Health

Basic Stance

The JFE Group engages in an extremely broad and diverse range of businesses, centered on the steel business; a massive equipment industry; the engineering business, which has an extensive track record in construction work; and the trading business, which ranges from raw materials to processing and distribution. Safe and healthy workplaces are essential to sustaining these business activities, and a core facet of remaining a viable company. With the idea that all accidents are preventable, we promote self-driven safety activities where each and every employee checks their own surroundings for safety. We also take action to ensure the health of employees and their families based on the three pillars of workplace health, mental health, and physical health. We aim to be a company that is safe, healthy, and motivates employees.

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.

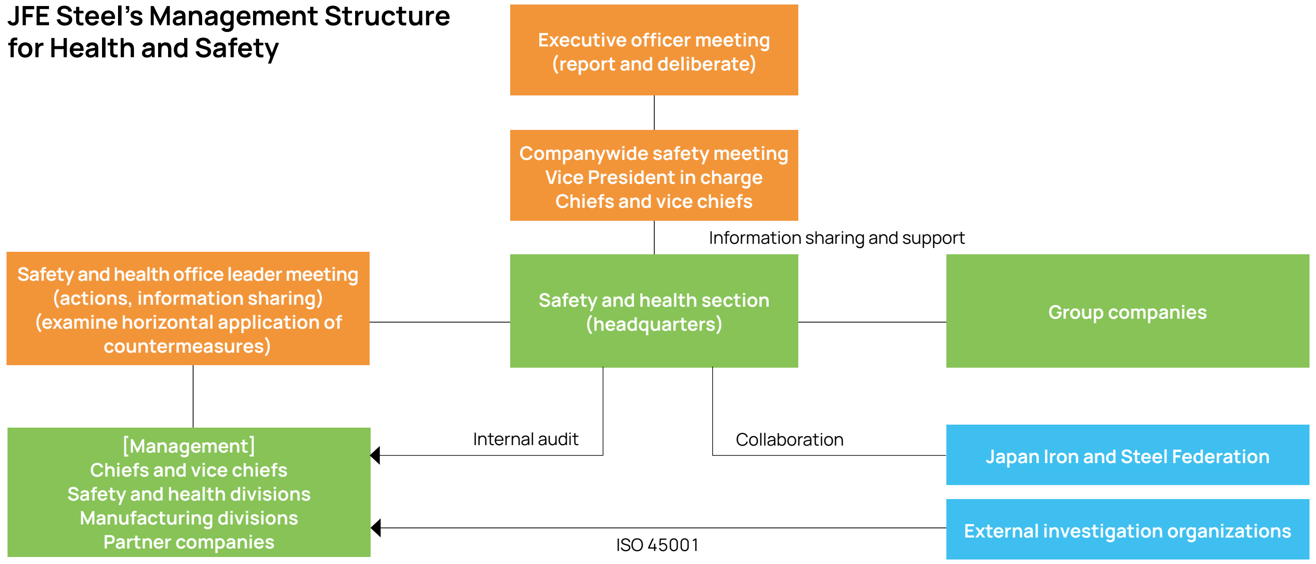
Management structure for health and safety

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 strives to prevent and reduce the risk of accidents. We aim to lower the level of risk for 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.

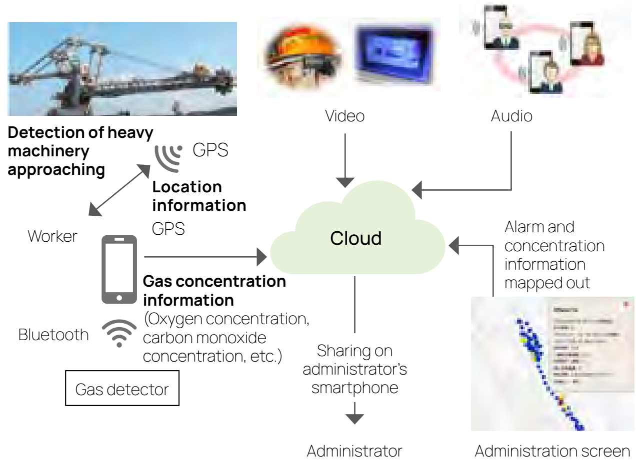
When an occupational injury occurs, the Company immediately reports it to the JISF. After the cause of the accident is determined and countermeasures are decided, the Company follows up with another report. When a serious accident occurs, the Company immediately submits a report on safety, disaster preparedness, 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.



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.

In addition to employees, we encourage them to work with health insurance associations to have their dependents get health checkups, with the aim of helping families maintain and improve their health. The ratio of dependents (aged 40 or older) receiving health checkups has steadily risen, reaching 46.3% in fiscal 2020, an 8.7 point improvement from 37.6% six years ago in fiscal 2014.

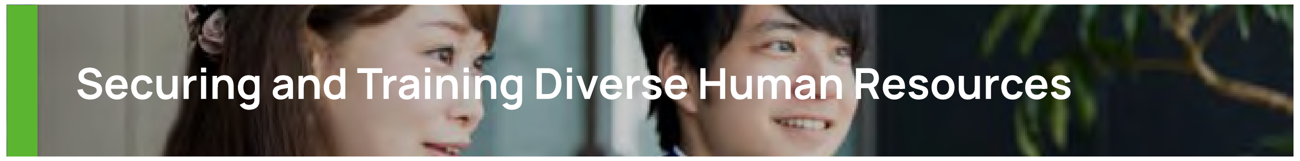
Activities of Group companies

JFE Steel	JFE Engineering	JFE Shoji
JFE Steel business sites offer the Active Exercise program, which the West Japan Works designed to help people increase their physical strength and prevent injuries due to falling. The program's effectiveness in preventing occupational accidents and improving health has even attracted attention outside the Company, so it is being shared as a contribution to society.	JFE Engineering has identified health-related issues at the Company using data from past health examinations, and introduced from fiscal 2019 a series of self-care training sessions to address the risk of falling asleep. Since fiscal 2020, we have continued efforts to improve health literacy in an attempt to get employees to be more active and be more selective in what they eat in order to address weight issues.	JFE Shoji provides helicobacter pylori (blood) tests as part of regular health examinations for prevention and early detection of cancer, as well as subsidies to cover expenses for women's cancer examinations. In November 2019, we started subsidizing the costs of smoking cessation outpatient services, to lower the risk of lung cancer and stroke due to smoking. We also provide e-learning with the aim of raising health awareness among our employees.

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)	Under the Health & Productivity Stock Selection Program, the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange cooperate to select companies that have been strategically implementing employee health management from a business management viewpoint. JFE was selected for the Health & Productivity Stock Selection for the first time in 2018. Additionally, the Company was selected for the Certified Health & Productivity Management Outstanding Organizations Recognition Program, which certifies organizations that implement outstanding health management in collaboration with health insurance society members.	
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.	



Securing and Training Diverse Human Resources

Basic Stance

As stated in the Seventh Medium-term Business Plan, the JFE Group must retain diverse and talented personnel, growing together as a company and maximizing their abilities in order to remain essential in the sustainable development of society and the safe and comfortable lives of people. To this end, the JFE Group is marshaling its efforts to promote diversity and inclusion, personnel training, and workplaces that are rewarding for all employees.

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.

With regard to empowering women, the JFE Group has achieved ahead of schedule its target for tripling the number of women in management positions by 2020, compared with August 2014 as the starting point. We have set a new target of increasing the number of women in management positions by five times the August 2014 number by 2025, in a proactive bid to promote women to management positions.

Since 2012, JFE Steel has targeted a hiring ratio of at least 10% women for regular positions, and approximately 400 female employees currently work at steelmaking sites Companywide. JFE Steel has make 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.

JFE Steel proactively hires diverse personnel, including experienced workers from different sectors, and its mid-career hires represent one-sixth 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, before revisions to the Act on Childcare Leave came into effect, we encouraged male employees to take time off for childrearing and use their allotted vacation days. A target shared among operating companies is to have at least 90% of male employees take time off for childrearing or related activities.

The promotion of diversity requires a solid commitment by management. For example, JFE Engineering has set up the Diversity Committee that reports directly to the President, and management guides the promotion of diversity. Such initiatives are shared among operating companies, which leads to greater diversity across the 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.

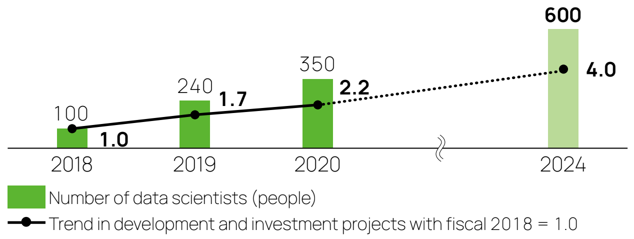
Training of data scientists

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 2020, we have trained over 350 in-house data scientists, increasing by 2.2 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 holds overseas staff management training in Tokyo each year for talented local employees employed in overseas local subsidiaries and offices. In addition, the company also invites overseas staff to the head office in Japan for an extended-stay training to improve their skills still further, with the aim of eventually promoting 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 COVID-19 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 called Smart Work JFE that helps increase employee productivity, maximizes output, and improves engagement. As specific measures, JFE Steel is systemizing telework by expanding its work-at-home system, introducing Microsoft Teams software and robotic process automation (RPA), promoting paperless workflows, removing the use of seals with workflows, and introducing a core-less flex-time system in a shift to a high-value-added work style while furthering changes in the corporate culture. These measures are also being undertaken at operating companies.

JFE Engineering has created flexible work styles by enabling work at home and shared office spaces in approximately 400 locations across Japan, permanently systemizing remote work from fiscal 2021 in addition to initiatives in steel centered on the Smart Work Promotion Office.

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

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. 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
https://www.jfe-holdings.co.jp/en/csr/social/human_rights/index.html

Human rights promoting activities

We conduct human rights training courses, offer guaranteed employment opportunities, promote fair human resource management, and work to prevent workplace harassment. Our training courses encourage employees to develop a thorough understanding of the JFE Group's Human Rights Basic Policy and the respect for human rights expected of a company in the international community. To this end, we continuously monitor and follow up on seminars by designating 100% attendance as a KPI.

Human rights initiatives for the supply chain

JFE Steel recognizes that human rights violations and environmental issues pose actual business risks in procuring raw materials. We therefore established the Raw Materials Purchasing Policy to develop and operate a sustainable procurement system for sourcing raw materials and practice purchasing with due respect for human rights, regulatory compliance, and environmental protection. We also established Business Conduct Guidelines, asking suppliers to comply with this initiative, and seek to publicize the guidelines across the supply chain via our corporate website.

With regard to conflict minerals, we have clearly stated our policy to avoid purchasing them in our Business Conduct Guidelines. Conflict minerals are natural resources thought to be controlled by militias responsible for human rights violations and environmental destruction (tantalum, tin, tungsten, and gold produced in certain regions, such as the Democratic Republic of the Congo, are defined as conflict minerals under the U.S. Wall Street Reform and Consumer Protection Act). We comply with Japanese and overseas regulations, as well as international rules, governing the responsible procurement of minerals, and investigate and confirm with suppliers that they are not selling conflict minerals.

Raw Materials Purchasing Policy Business Conduct Guidelines
https://www.jfe-steel.co.jp/en/company/purchase_policy.html

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 began to conduct due diligence on human rights in fiscal 2021. Due diligence into human rights was conducted in fiscal 2021, centered on JFE Holdings, JFE Steel, and other major Group companies. The JFE Group identifies risks to human rights, examines and executes corrective actions, and discloses information in an ongoing process to respect human rights throughout the supply chain.

Initiatives in Fiscal 2021

Already implemented

Identification of human rights risks
In addition to referring to international rules and guidelines, such as the International Bill of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work, the JFE Group identifies human rights risks specific to its industry, and screens for human rights risks in Group supply chains, such as those related to occupational health and safety, prevention of discrimination, and human rights violations in the supply chain.

Understanding actual conditions
The JFE Group verified the state of initiatives and the current management structure for dealing with risks to human rights, conducting audits of human rights initiatives, systems, rules, and regulations at other companies within and outside Japan. This entails checking the disclosure of policies for human rights risks, including for child labor and forced labor in raw materials purchasing policies, reporting systems as a means for people to seek help, and the state of compliance to prevent corruption.

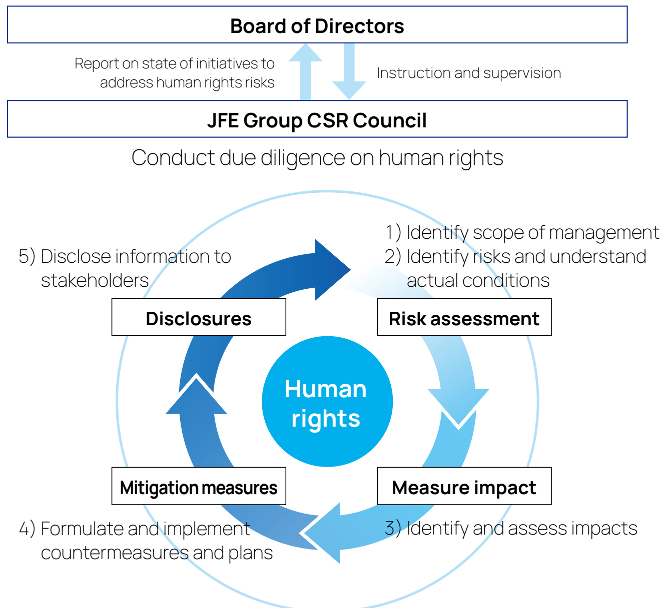
Implementation schedule

Risk assessment and measurement of impact
The JFE Group assesses identified risks to human rights by measuring their seriousness and potential for materializing. To more accurately reflect actual conditions, audits of the state of initiatives to respect human rights are conducted on paper and by interview. During the risk assessment process, human rights issues that will have a negative impact on the JFE Group and its stakeholders are identified.

Examine mitigation measures
Measures to mitigate critical risks that may have a major impact are examined, such as responses, preventive and corrective measures, and promotion structures.

Future initiatives

The JFE Group will build systems for reducing the risk of human rights violations through an ongoing process of implementing measures to mitigate human rights risks identified in fiscal 2021, and disclosing information about these countermeasures. Starting with supervision by the JFE Group CSR Council and the Board of Directors, we will evaluate these initiatives and work to improve them and increase their effectiveness.



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.

To encourage the active sharing of information, confidentiality is strictly respected and the hotline is operated under rules and regulations that protect people who report information or seek consultation from retaliation. Whistleblowing and requests for consultation are regularly reported to full-time Audit & Supervisory Board Members. Moreover, the operational status of the system is reviewed by the Board of Directors.

Cases handled by the Corporate Ethics Hotline

Company	FY2017	FY2018	FY2019	FY2020
JFE Holdings and operating companies	89	80	101	**87**

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.

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.

Employee ethics awareness surveys

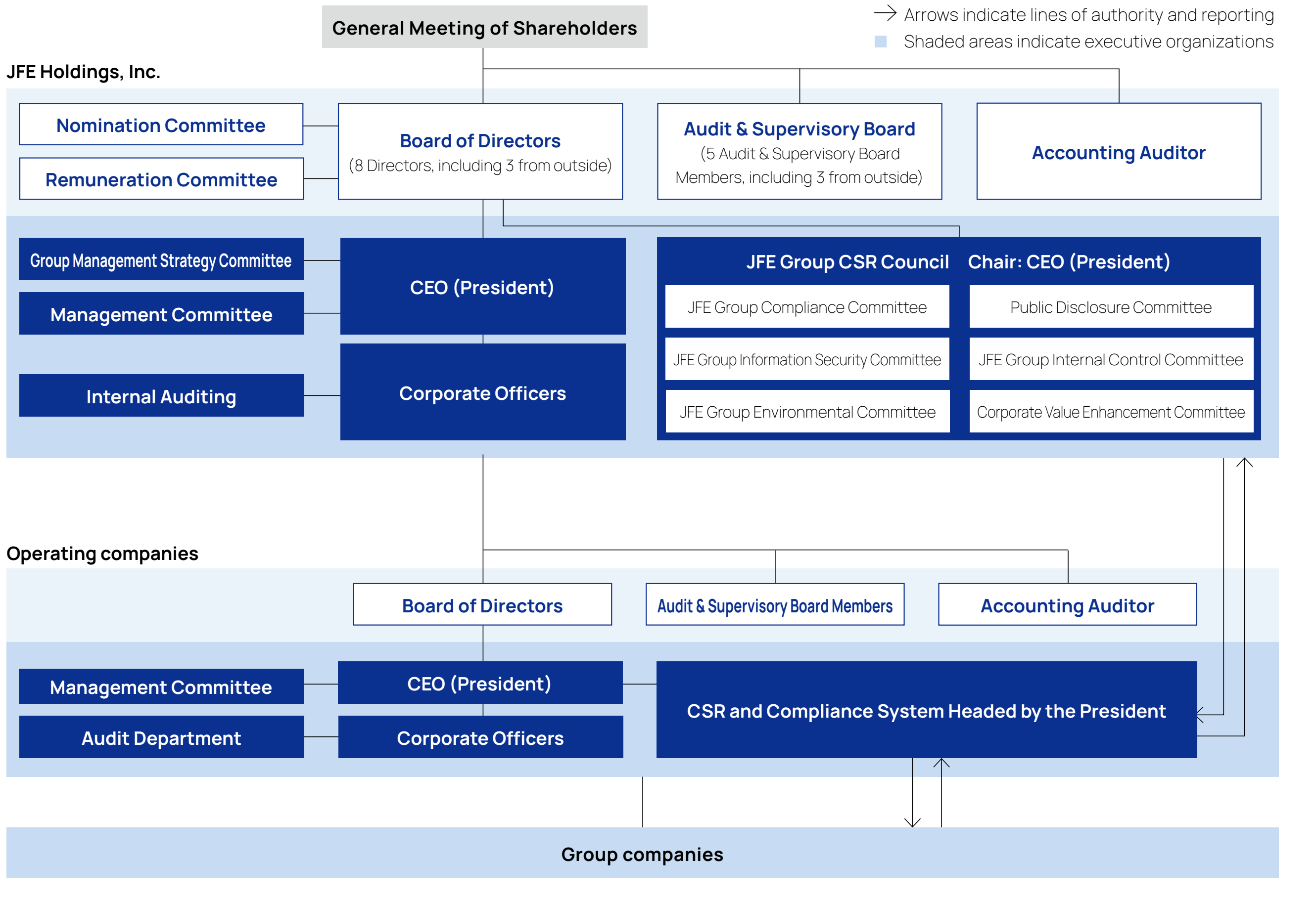
The JFE Group regularly conducts Corporate Ethics Awareness Surveys of executives and employees of JFE Holdings and its operating companies for the purpose of identifying latent risks and assessing the degree of understanding in the Group's Corporate Vision, Corporate Values, and Standards of Conduct.

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 (Of which, the number of Independent Outside Directors)	8 members (3 members)
Number of Audit & Supervisory Board Members (Of which, the number of Independent Outside Audit & Supervisory Board Members)	5 members (3 members)
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 2020 Board of Directors' meeting

- Seventh Medium-term Business Plan
- Large-scale capital investment (Revamping of the No. 6 blast furnace of West Japan Works (Chiba), strengthening of electrical steel production facilities of West Japan Works (Kurashiki), etc.)
- M&A (acquisition of Mitsui E&S Plant Engineering Inc.)
- Initiatives to address ESG issues (carbon-neutral efforts, assessment and review of KPIs for material CSR 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

JFE Holdings' Outside Directors and Outside Audit & Supervisory Board Members (as of July 1, 2021)

Position / Name	Major concurrent positions	Independent executive	Expertise and background: Corporate management/ Management strategy	Engineering	Global management	Finance and accounting	Legal	Academic	Public administration and public policy	FY2020 Board of Directors' attendees	FY2020 Audit & Supervisory Board attendees	Nomination Committee	Remuneration Committee
Outside Director **Masami Yamamoto**	Director and Senior Advisor of Fujitsu Limited Outside Director of Mizuho Financial Group, Inc.	○	○	○	○					15/15 (100%)	–	Chair	Member
Outside Director **Nobumasa Kemori**	Honorary Advisor of Sumitomo Metal Mining Co., Ltd. Outside Director of NAGASE & CO., LTD. Outside Director of Sumitomo Realty & Development Co., Ltd.	○	○	○	○					15/15 (100%)	–		Chair
Outside Director **Yoshiko Ando**	Audit & Supervisory Board Member of Kirin Holdings Company, Limited Outside Director of Sansei Technologies, Inc.	○					○		○	12/12 (100%)	–	Member	
Outside Audit & Supervisory Board Member **Shigeo Ohyagi**	Senior Advisor of Teijin Limited Outside Director of KDDI CORPORATION Outside Director of MUFG Bank, Ltd. Outside Director of Tokyo Electric Power Company Holdings, Incorporated	○	○		○					15/15 (100%)	18/18 (100%)	Member	
Outside Audit & Supervisory Board Member **Isao Saiki**	Partner Lawyer of Abe, Ikubo & Katayama Law Firm	○					○			15/15 (100%)	18/18 (100%)		Member
Outside Audit & Supervisory Board Member **Tsuyoshi Numagami**	Professor, Graduate School of Business Administration, Department of Business Administration of Hitotsubashi University	○	○			○		○		15/15 (100%)	18/18 (100%)	Member	Member

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.

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. Four meetings were held in fiscal 2020. 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. Five meetings were held in fiscal 2020. All committee meetings had 100% attendance rates.

Nomination Committee and Remuneration Committee structure (as of July 1, 2021)

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 2020, all Directors and Audit & Supervisory Board Members answered a revised questionnaire with some new questions regarding practical guidelines for Outside Directors.

In addition, the outcome of initiatives in fiscal 2020 were examined while referencing the opinions and suggestions received from the fiscal 2019 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.

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.

This questionnaire raised issues for further improving its effectiveness, such as strengthening the supervisory functions of the Board of Directors for Group risk management and addressing sustainability issues, and creating more opportunities for the exchange of opinions among only Outside Directors through meetings of Outside Directors.

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.

Fiscal 2020 Initiatives Based on Effectiveness Evaluation Results through fiscal 2019

- Emergency measures were taken to counter COVID-19 infections and respond to rapid changes in the operating environment, as companies are increasingly expected to help combat COVID-19 and climate change, and improved discussions were held in formulating the Seventh Medium-term Business Plan.
- Deliberations of the Board of Directors were improved thanks to greater diversity of Outside Directors, including the new appointment of a female director who is an expert in labor administration, in addition to her management experience and specialist knowledge of law and business administration.
- Regarding specific initiatives to address sustainability issues, discussion was augmented by report topics concerning Groupwide efforts to become carbon neutral, in addition to reports on the results of surveys of safety activities and employee awareness, as well as the state of operations for corporate ethics internal reporting systems.
- Regarding corporate governance, in April 2021 the Group CSR Council, headed by the CEO, uniformly managed Groupwide risks, and important matters were reported to the Board of Directors, which gave instructions for and supervised the updating of related systems. Based on the deliberations of the Board of Directors, the Company will continue to improve risk management for the entire 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 (FY2020)

Position	Total remuneration, etc. (thousand yen)	Number of executives
Directors (excluding Outside Directors)	199,166	5
Audit & Supervisory Board Members (excluding Outside Audit & Supervisory Board Members)	78,335	2
Outside Directors/Outside Audit & Supervisory Board Members	91,847	7

Officers whose consolidated remuneration exceeded 100 million yen (FY2020)

Name	Position	Company	Per company (thousand yen)	Total (thousand yen)
Koji Kakigi	Director	JFE Holdings	106,847	106,847
Yoshihisa Kitano	Director	JFE Holdings	12,000	106,847
	Director	JFE Steel	94,847	

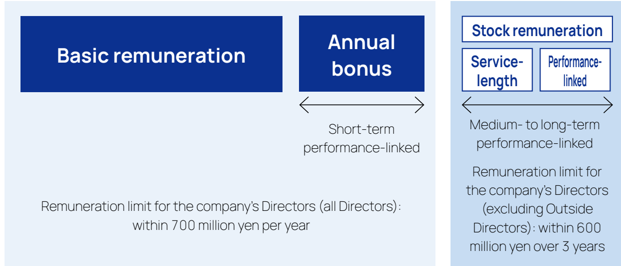
Basic Policy on Remuneration for Directors and Corporate Officers

- 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 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%."

Composition of remuneration for the Company's Directors



Annual bonus

The annual bonus is calculated by multiplying the total amount of segment profit in a single fiscal year, 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 billion yen per year, set under the Seventh Medium-term Business Plan. Furthermore, 5% or more ROE is the minimal requirement for the payment.

The Seventh Medium-Term Business Plan includes a provision for applying non-financial metrics in management targets. In this regard, we will consider an optimal remuneration system that will further enhance corporate value.

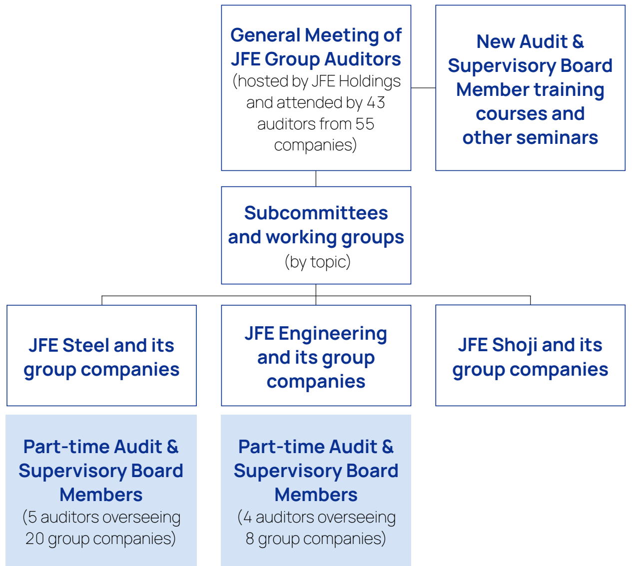
The Company pays only basic remuneration to Outside Directors and Outside Audit & Supervisory Board Members given their respective roles of supervising and auditing management from an independent and objective standpoint. Annual bonuses and stock remuneration are not paid by the Company to Directors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

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 174 people as of April 1, 2021. 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. Nine absentee Audit & Supervisory Board Members served 28 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 2020, the Audit & Supervisory Board Members held seven 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 2020, 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 three listed subsidiaries, described below.

GECOSS CORPORATION
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 Container Co., Ltd.
JFE Container is mainly engaged in the manufacture and sale of steel drums and high-pressure gas containers. JFE Container provides products that meet customer needs primarily in the chemical, petroleum, automobile, and gas industries by partnering with JFE Steel and Group companies. The Company believes that managing JFE Container as a subsidiary will help to maximize the value of JFE Container and the JFE Group through various collaborative initiatives with JFE Steel in areas such as personnel exchange and R&D. JFE Container 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.
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 three aforementioned companies are subject to rules different from those applicable to other consolidated subsidiaries, 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 the three companies while securing their independent decision-making, so as to implement risk management as a member of the Group companies.

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 2021.

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 April 2016, the Company decided to reduce its strategic shareholdings by approximately 100 billion yen and sold its strategic shareholdings in the amount of approximately 140 billion yen (on a market value basis) by fiscal 2018. In November 2019, the Company decided on a policy to further sell its strategic shareholdings in the amount of 100 billion yen and sold all or part of 143 stocks in fiscal 2019 and fiscal 2020. (Total sales amount: approximately 145.9 billion yen (on a market value basis)). Furthermore, at a meeting held in December 2020, 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 FY2018	End of FY2019	End of FY2020
Number of issues	238	219	171
Total balance sheet amount (billion yen)	2,410	1,661	960

Risk Management

Basic Policy

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

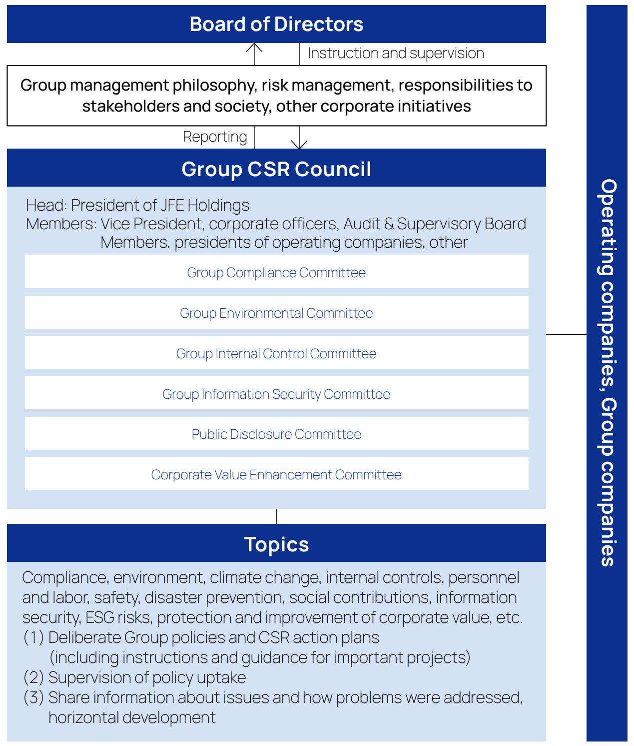
JFE Holdings is responsible for comprehensive risk management in accordance with its Basic Stance for Building an Internal Control System. A structure has been put into place for the Board of Directors to supervise risk management and verify its effectiveness.

The JFE Group CSR Council, chaired by the President of JFE Holdings, verifies, evaluates, 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 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, 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

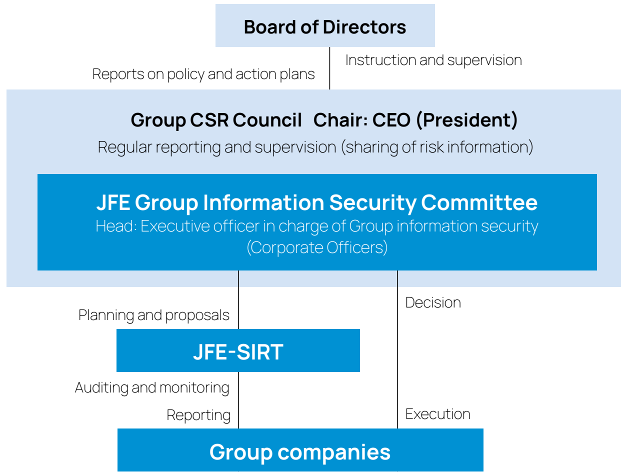
The JFE Group formulates various rules on information security management to prevent information leakage and system failures due to cyberattacks and improper system use. Efforts are made to enhance information security knowledge and awareness of rules among employees through training and education. Additionally,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

Through these initiatives, we are examining even more flexible work styles in a bid to improve labor productivity further.

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)	Others: 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	5	Approx. 600 persons in total
		Individual meetings (financial results, medium-term business plans, etc.)	As needed	Approx. 300 persons in total
		Company briefings for individual investors	4	Approx. 1,500 persons
		Plant tours for shareholders (steel, engineering, shipbuilding bases, etc.) (* Results shown are for FY2019, suspended in FY2020 due to the COVID-19 pandemic)	23	Approx. 1,800 persons
		Publishing shareholder newsletters (JFE Dayori)	2 (Mid-year and annual)	Approx. 220,000 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. 25,000 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	87 calls in FY2020
		Various training sessions	As needed	Position-specific, compliance, human rights, etc.
		Family days (visits by employee families, lunch at employees' cafeterias, etc.)	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 and JFE Steel
		Management feedback (360-degree diagnosis) * Corporate Officers and top managers evaluate their peers and subordinates, providing feedback to individuals	1	At the Company and JFE Steel
Local communities	To ensure business continuity at manufacturing bases where steelworks are located and elsewhere, constructing a relationship of trust with citizens in local communities and realizing coexistence and prosperity are crucial. We will pursue various activities with the aim of realizing sustainable growth and regional development, including continued initiatives toward ensuring safety and reducing our environmental impact.	Communication through local residents' associations, events, etc.	As needed	
		Events at manufacturing bases (festivals, etc.)	Approx. once in each region	Approx. 270,000 persons a year
		Plant tours	As needed	100,000 or more persons a year
		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	

* Suspended in FY2020 due to the COVID-19 pandemic; results shown are for FY2019 Awards for technology and product development, etc.

Awards for technology and product development, etc. (FY2020)

JFE Steel

Award name	Description	Sponsor
Steelie Awards 2020	Development of resource saving type Si gradient steel sheet for high-speed motors	World Steel Association
FY2021 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 production technology for hot-dip galvanized steel sheets by control of atmospheric conditions	Ministry of Education, Culture, Sports, Science and Technology
53rd (FY2020) The Ichimura Prize in Industry for Outstanding Achievement	Chromium Ore Smelting Reduction Process Using Hydrocarbon Fuel Burner	Ichimura Foundation for New Technology
FY2020 Energy Conservation Grand Prize Award in Energy Conservation Category	Development of energy supply and demand guidance utilizing data science	Energy Conservation Center, Japan
FY2020 Keidanren Best Internal Newsletter Award	JFE Steel Magazine	Keidanren Business Services, Internal Newsletter Center
55th Machinery Promotion Award, Japan Society for the Promotion of Machine Industry Chairman's Prize	Surface inspection equipment based on twin-illumination and subtraction technique	Japan Society for the Promotion of Machine Industry
FY2020 National Commendation for Invention, Japan Institute of Invention and Innovation Chairman's Award	Discovery of minute surface defect detection equipment based on the magnetic leakage flux tester	Japan Institute of Invention and Innovation
Selected as Global Niche Top Companies Selection 100	High brittle crack arrest steel plate for super-large container ships	Ministry of Economy, Trade and Industry

JFE Engineering

Award name	Description	Sponsor
46th Distinguished Environmental System Award, Ministry of Economy, Trade and Industry's Industrial Science and Technology Policy and Environment Bureau's Director-General Award	Automated incinerator for general waste incorporating AI and data analysis technology	Japan Society of Industrial Machinery Manufacturers
FY2020 (38th) IT Award, IT Excellence Award	JFE Engineering's DX promotion initiative: Aiming for normalization of change with digital technology	Japan Institute of Information Technology

External recognition in recent years

Selected for inclusion in the FTSE4Good Index Series and the FTSE Blossom Japan Index	JFE Holdings was selected for the second straight year as a constituent of the FTSE4Good Index Series and the FTSE Blossom Japan Index, which are investment indices provided by FTSE Russell, a subsidiary of the London Stock Exchange Group. Both indexes comprise 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. The FTSE Blossom Japan Index is one of the ESG investment indices used by Japan's Government Pension Investment Fund (GPIF), one of the world's largest pension management entities.	FTSE Blossom Japan / FTSE4Good
Selected for inclusion in the MSCI Japan Empowering Women Index (WIN)	JFE Holdings has been included in the MSCI Japan Empowering Women Index (WIN) managed by MSCI in the U.S. The index consists of companies selected for their excellent approaches to ESG, based on multifaceted scores for gender diversity from among constituents of the MSCI Japan IMI Top 700 Index. The top half of stocks in each sector are selected for inclusion. This index is one of the ESG investment indexes used by Japan's Government Pension Investment Fund (GPIF).	2021 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)
Selected for inclusion in the S&P/JPX Carbon Efficient Index	JFE Holdings has been selected for inclusion in the S&P/JPX Carbon Efficient Index, which is developed, calculated, and published jointly by S&P Dow Jones Index in the U.S. 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). This is one of the ESG investment indexes used by Japan's GPIF.	S&P/JPX Carbon Efficient Index
Evaluation by CDP 2020	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 300 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 2020 questionnaire, and as a result we received a high rating.	[CDP 2020 scores] Climate change: B Water security: A- Supplier/Engagement: A-
DBJ Environmentally Rated Loan Program	The DBJ Environmentally Rated Loan Program is the first financing system in the world to incorporate special environmental ratings, which uses a screening system developed by the Development Bank of Japan (DBJ) to evaluate environmental management levels and select outstanding companies with three interest stages according to evaluation points. In March 2016, JFE Holdings was rated as a top-ranking company that pursues excellent and advanced environmental initiatives in recognition of its advanced environmental management, and we received a loan under the program.	
Inclusion in the Sompo Sustainability Index	JFE Holdings has been chosen for the 10th 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.	2021
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 five consecutive years in 2021, 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.	
Inclusion in DX Stock 2021	JFE Holdings has been selected as a Digital Transformation Stock Selection (DX Stock) 2021 for its proactive advancement of DX projects. JFE Holdings has also been selected as a Competitive IT Strategy Company Stock, jointly announced by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange, for five consecutive years. This index has been part of the initiatives to promote strategic IT investments that will lead to medium- to long-term increase in corporate value and reinforced competitive strength. From this year, the program has been changed to Digital Transformation Stock Selection (DX Stock) with a focus on digital transformation (DX) that fundamentally changes business models based on digital technology, and leads to new growth and enhanced competitiveness. The Company has been selected as a DX Stock since 2020.	DX銘柄2021 Digital Transformation

Major external awards

Evaluation Committee's Special Award in the 24th Environmental Communication Awards	The JFE Group has received the Evaluation Committee's Special Award at the 24th Environmental Communication Awards, sponsored by the Ministry of the Environment and the Global Environmental Forum, for its CSR Report 2020, published in September 2020. This is the second year in a row the JFE Group has received this award. The Environmental Communication Awards is a program designed to promote environmental communication with stakeholders surrounding the business operator and further invigorate environmental activities by commending outstanding environmental reports and communications for multiple stakeholders among various media such as CSR reports, integrated reports, and environmental management reports. In this year's competition, 147 entries were submitted in the environmental report category and 114 in the environmental management report category, and the Group was selected as one of the four winners of the Evaluation Committee's Special Award in the environmental report category. The award ceremony was held online on February 17, 2021.	
Received 2nd ESG Finance Awards Japan's Special Prize in the Environment Sustainable Company Category	The JFE Group's CSR Report 2020, published in September 2020, has received the Special Prize in the Environment Sustainable Company Category of the 2nd ESG Finance Awards Japan, sponsored by the Ministry of the Environment. This is the first time JFE has won the award. ESG Finance Awards Japan is an awards system created with the objective of promoting and expanding ESG financing by sharing awareness broadly 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. The Environment Sustainable Company Category was established to promote the disclosure of corporate management efforts to improve the environment, while advocating that investment decisions be based on an understanding of how environmental issues affect corporate value. The Special Prize is an award created to recognize companies that have made exemplary efforts in the context of their corporate size and business nature. The award ceremony was held online on February 24, 2021.	ESG FINANCE AWARDS JAPAN
World Steel Association's 2020 Steel Sustainability Champions Award	JFE Steel has been selected by the World Steel Association for the 2020 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. Last year, JFE Steel won the World Steel Association's Steelie Awards for Innovation of the Year, a first for Japan's steel industry, in recognition of its development of innovative technologies that help reduce environmental burdens. Furthermore, through the JFE Group's CSR Report 2020, the Company is proactively disclosing to stakeholders measured data and its basic stance on sustainability in various fields, including the environment and occupational health and safety. These initiatives have also been recognized.	Sustainability CHAMPIONS worldsteel

Management Organization

Executive Structure (as of July 1, 2021)

Directors

Nomination Committee Member

Remuneration Committee Member

Koji Kakigi

Representative Director

Data 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

Data 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

Data 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

Data 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

Data 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

Data 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.

Kumiko Baba

Audit & Supervisory Board Member

Data of birth: October 10, 1965

1989	Joined Toshiba Corporation
2014	Joined JFE Engineering Corporation
2018	Vice President of JFE Engineering Corporation
2019	Audit & Supervisory Board Member of JFE Holdings, Inc. (current post)

Ms. Baba had engaged in operations such as contract negotiation with overseas parties and business alliances and launches of new business in Toshiba Corporation. Since joining JFE Engineering Corporation, she has executed duties as Corporate Officer in the Company in addition to supervision of overseas businesses and accounting and finance-related operations and thus she has abundant experience and knowledge about finance and accounting.

Outside Executive Structure (as of July 1, 2021)

Independent Executive

Chairperson Nomination Committee

Remuneration Committee Member

Masami Yamamoto

Director

Data 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. 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

Data 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 the Board 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 NAGASE & CO., LTD.

Outside Director of Sumitomo Realty & Development Co., Ltd.

Independent Executive

Nomination Committee Member

Yoshiko Ando

Director

Data 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 of 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

Nomination Committee Member

Shigeo Ohyagi

Audit & Supervisory Board Member

Data of birth: May 17, 1947

Mar. 1971	Joined Teijin Limited
Jun. 2006	Senior Managing Director of Teijin Limited
Jun. 2008	Representative Director, President, CEO of Teijin Limited
Jun. 2010	Representative Director, President, CEO of Teijin Limited
Apr. 2014	Chairman of the Board of Teijin Limited
Jun. 2014	Audit & Supervisory Board Member of JFE Holdings, Inc. (current post)
Jun. 2018	Senior Advisor, Teijin Limited (current post)

Significant concurrent posts

Senior Advisor of Teijin Limited

Outside Director of KDDI CORPORATION

Outside Member of the Board of Directors of MUFG Bank, Ltd.

Outside Director of Tokyo Electric Power Company Holdings, Incorporated

Independent Executive

Remuneration Committee Member

Isao Saiki

Audit & Supervisory Board Member

Data 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

Data 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 post

Professor of Graduate School of Business Administration of Hitotsubashi University

Expertise and background

Corporate management/ Management strategy · Engineering · Global management · Finance and accounting · Legal · Academic · Public administration and public policy

JFE GROUP REPORT 2021

Financial Highlights

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

(billion of yen)

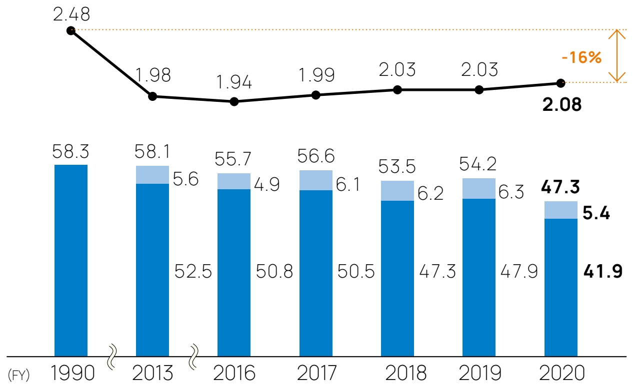
	JGAAP									IFRS		
	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2018	FY2019	**FY2020**
Operating results												
Net sales (JGAAP) / Revenue (IFRS)	3,195	3,166	3,189	3,666	3,850	3,431	3,308	3,678	3,961	3,873	3,729	**3,227**
Ordinary income (JGAAP) / Business profit*1 (IFRS)	165	52	52	173	231	64	84	216	221	232	37	**(12)**
Income before income taxes (JGAAP) / Profit before tax (IFRS)	115	(71)	75	160	226	74	105	213	209	209	(213)	**(4)**
EBITDA*2 (JGAAP) / EBITDA*3 (IFRS)	428	306	260	368	421	254	279	388	405	428	269	**223**
Profit attributable to owners of parent	58	(36)	39	102	139	33	67	144	164	163	(197)	**(21)**
Capital expenditures (construction basis)	180	197	179	175	225	212	234	257	287	329	391	**342**
Depreciation and amortization	246	238	194	181	176	177	182	159	172	196	231	**236**
Research and development expenses	33	34	33	31	32	35	35	34	37	37	38	**36**
Financial position												
Total assets	3,976	4,007	4,107	4,241	4,639	4,234	4,336	4,440	4,648	4,709	4,646	**4,654**
Property, plant and equipment	1,712	1,644	1,606	1,599	1,629	1,627	1,650	1,702	1,782	1,835	1,717	**1,772**
Shareholders' equity (JGAAP) / Equity attributable to owners of parent (IFRS)	1,437	1,414	1,558	1,702	1,938	1,804	1,865	1,949	2,012	1,926	1,627	**1,679**
Net assets (JGAAP) / Equity (IFRS)	1,478	1,456	1,596	1,745	1,990	1,857	1,921	2,009	2,079	1,991	1,706	**1,760**
Debt outstanding (JGAAP) / Interest-bearing debt outstanding (IFRS)	1,496	1,593	1,596	1,534	1,501	1,379	1,375	1,330	1,449	1,523	1,814	**1,806**
Cash flows												
Cash flows from operating activities	302	110	287	254	297	267	185	298	235	268	261	**247**
Cash flows from investing activities	(302)	(205)	(163)	(164)	(216)	(137)	(163)	(194)	(284)	(313)	(358)	**(164)**
Free cash flow*4	0	(95)	123	90	81	129	21	103	(48)	(45)	(97)	**83**
Cash flows from financing activities	23	96	(147)	(105)	(78)	(144)	(18)	(90)	56	51	103	**(30)**
Per share data												
Profit attributable to owners of parent (yen/share)	111	(69)	71	177	242	58	118	251	285	284	(343)	**(38)**
Net assets (JGAAP) / Equity attributable to owners of parent (IFRS) (yen/share)	2,709	2,628	2,701	2,951	3,362	3,128	3,236	3,382	3,608	3,345	2,826	**2,916**
Dividends (yen/share)	35	20	20	40	60	30	30	80	95	95	20	**10**
Payout ratio (%)	31.6	—	28.1	22.5	24.8	51.4	25.5	31.9	33.3	33.5	—	**—**
Financial indicators												
Debt/EBITDA ratio*5 (JGAAP) / Debt/EBITDA ratio*6 (IFRS) (times)	3.5	5.2	6.1	4.2	3.6	5.4	4.9	3.4	3.6	3.6	6.7	**8.1**
ROE*7 (JGAAP) / ROE*8 (IFRS) (%)	4.1	(2.6)	2.7	6.3	7.7	1.8	3.7	7.6	8.3	8.6	(11.1)	**(1.3)**
ROA*9 (JGAAP) / ROA*10 (IFRS) (%)	4.6	1.7	1.6	4.5	5.5	1.7	2.3	5.2	5.1	5.0	0.8	**(0.3)**
Equity ratio (%)	36.2	35.3	37.9	40.1	41.8	42.6	43.0	43.9	43.3	40.9	35.0	**36.1**
D/E ratio*11 (JGAAP) / D/E ratio*12 (IFRS) (%)	76.5	83.5	76.9	67.9	59.0	56.9	51.4	58.1	62.0	68.2	96.4	**93.2**
Year-end share price (yen/share)	2,434	1778	1,767	1,943	2,654	1,516	1909	2144	1879	1,879	703	**1,363**
Segment information												
Net sales (JGAAP) / Revenue (IFRS)												
Steel business	2,747	2,714	2,499	2,691	2,873	2,445	2,349	2,715	2,808	2,830	2,681	**2,255**
Engineering business	265	278	267	284	367	397	426	391	485	485	512	**485**
Trading business			785	1,781	1,934	1,756	1,671	1,907	2,060	1,125	1,084	**932**
Ordinary income (JGAAP) / Segment profit*13 (IFRS)												
Steel business	134	25	15	126	188	27	40	198	164	161	(8)	**(65)**
Engineering business	12	14	16	18	18	20	26	19	20	20	23	**24**
Trading business			7	21	24	15	21	33	35	35	27	**20**
Others												
Crude steel production (JFE Steel on a non-consolidated basis) (million t)	28.8	26.9	28.0	28.7	28.4	27.4	28.1	28.5	26.3	26.3	26.7	**22.8**
Crude steel production (JFE Steel on a consolidated basis) (million t)	31.5	29.2	30.7	31.6	31.0	29.8	30.4	30.1	27.9	27.9	28.1	**24.0**
Shipment (JFE Steel on a non-consolidated basis) (million t)	26.3	24.7	25.2	25.5	26.1	25.4	25.7	25.3	23.8	23.8	23.5	**20.5**
Average selling price (JFE Steel on a non-consolidated basis) (thousand yen/t)	77.9	82.0	70.6	75.7	77.1	66.8	62.8	75.3	81.5	81.5	78.8	**74.8**
Export ratio on a value basis (JFE Steel on a non-consolidated basis) (%)	46.5	45.0	49.9	48.4	48.1	45.8	44.0	44.4	41.7	41.7	41.5	**42.3**
Employees (JFE Holdings on a consolidated basis) (persons)	54,400	54,133	57,044	57,210	58,856	59,460	60,439	61,234	62,076	62,083	64,009	**64,371**

*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
* 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

Non-financial Highlights

Environmental Indicators

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



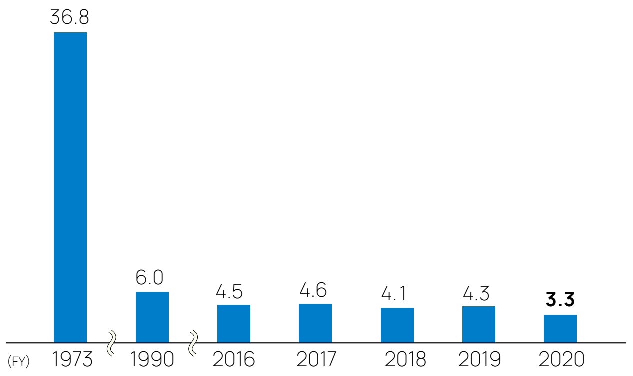
Scope 1 Scope 2 CO₂ emissions from energy sources intensity

*1 The CO₂ coefficient for electricity purchased in FY2020 is that of FY2019 on the Japan Iron and Steel Federation's Commitment to a Low Carbon Society.

*2 The figures in FY2018 have been updated as the CO₂ coefficient for electricity purchased in FY2019 on the Japan Iron and Steel Federation's Commitment to a Low Carbon Society was applied.

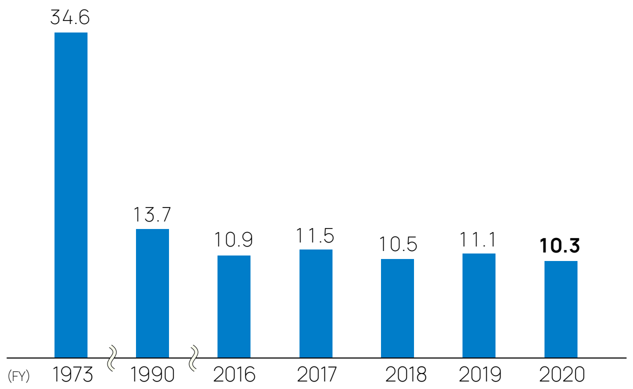
*3 Data of JFE Bars & Shapes Corporation Sendai Works is included in the figures from FY2013 to FY2016.

SOx emissions by JFE Steel (million Nm³)



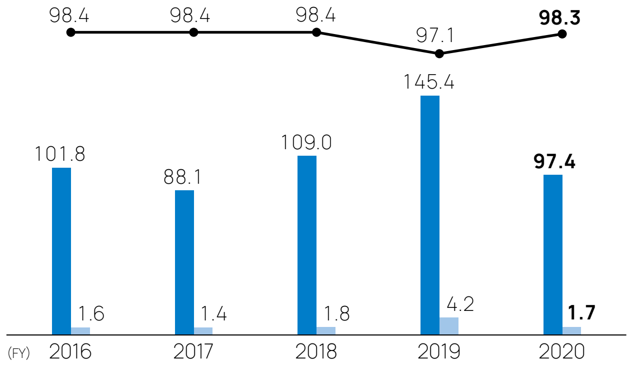
Emissions by JFE Steel (non-consolidated)

NOx emissions by JFE Steel (million Nm³)



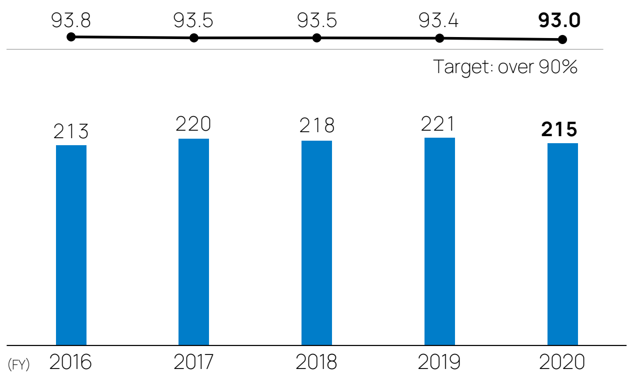
Emission by JFE Steel (non-consolidated)

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



Total Final disposal Recycling rate

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

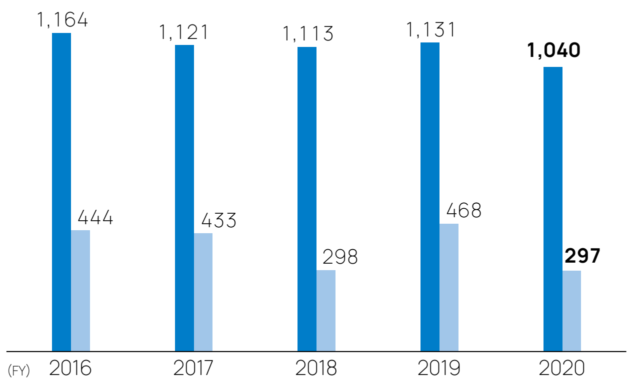


Industrial water accepted by JFE Steel (non-consolidated)

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

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

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

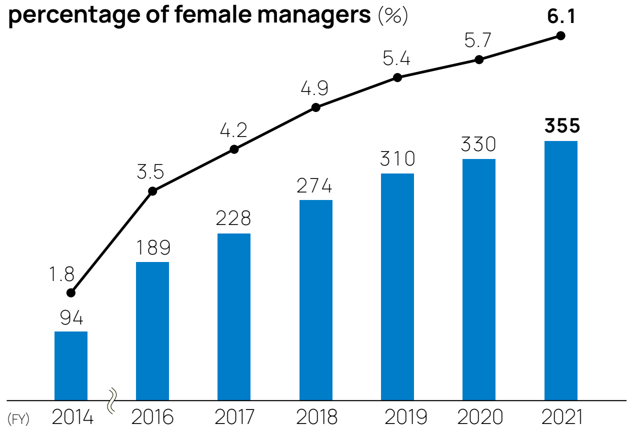


Promotion expenses for environmental activities

Environmental capital investment

Societal Indicators

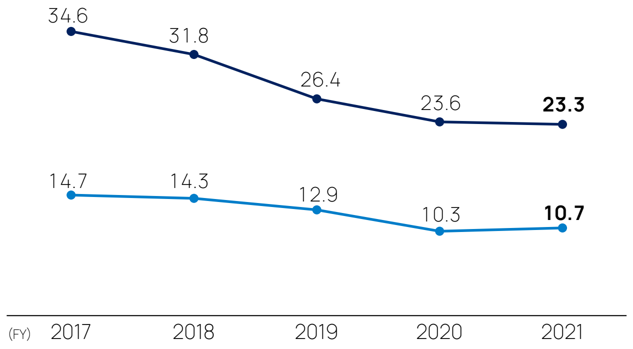
Number of female managers (persons) and percentage of female managers (%)



Number of female managers Percentage of female managers

* Scope of calculation: JFE Holdings and operating companies

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

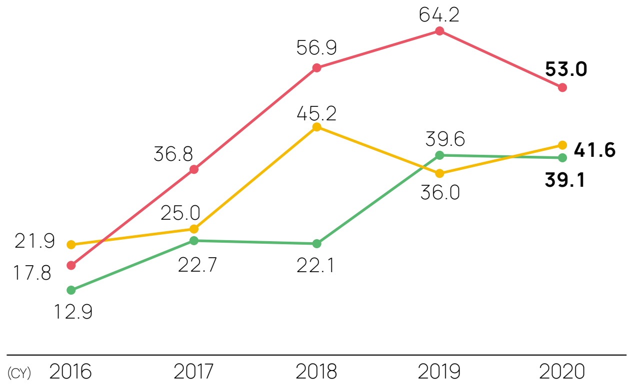


Percentage of female recruits (total)

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

* Scope of calculation: total of three operating companies

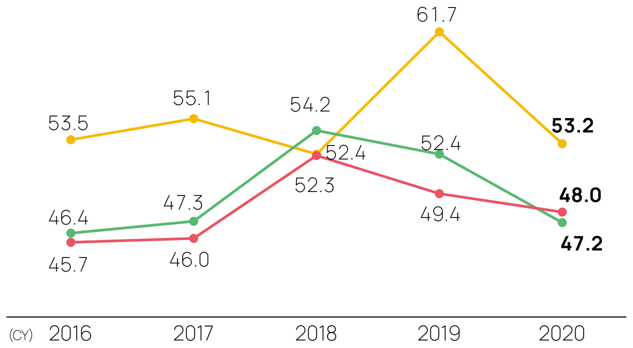
Provision rates of health guidance (%)



JFE Steel JFE Engineering JFE Shoji

* Results for 2019 have been changed from preliminary to confirmed figures.

Rate of health examination for dependents (%)

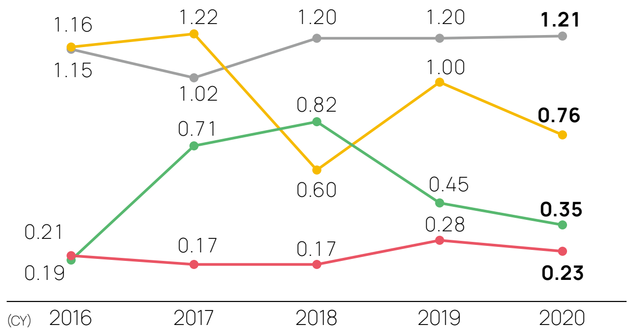


JFE Steel JFE Engineering JFE Shoji

* Target: dependents aged 40 or older (including dependents other than spouses)

* Results for 2019 have been changed from preliminary to confirmed figures.

Lost-work Injuries



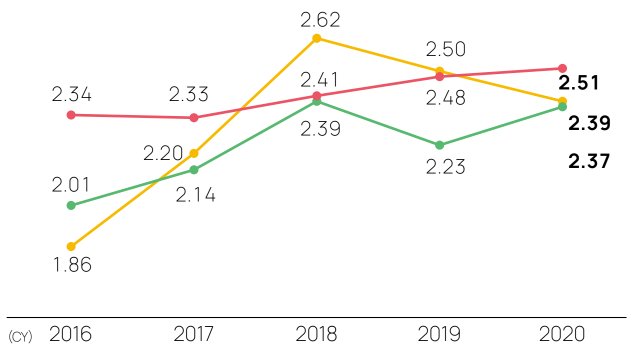
JFE Steel JFE Engineering JFE Shoji Group

Manufacturing industry average

* JFE Steel and JFE Engineering: parent company, business associates and contractors; JFE Shoji Group: domestic parent and group companies, business associates and contractors

* Lost-work injuries = Number of lost-time injuries / number of hours worked × 1,000,000

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



JFE Steel JFE Engineering JFE Shoji

Company Profile / Share Information

Company Profile (As of March 31, 2021)

Company Name (Trade Name):	JFE Holdings, Inc.
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:	64,371 (Consolidated) Male: 54,983 / Female: 9,388

Share Data (As of March 31, 2021)

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	215,592 persons

Share Information (As of March 31, 2021)

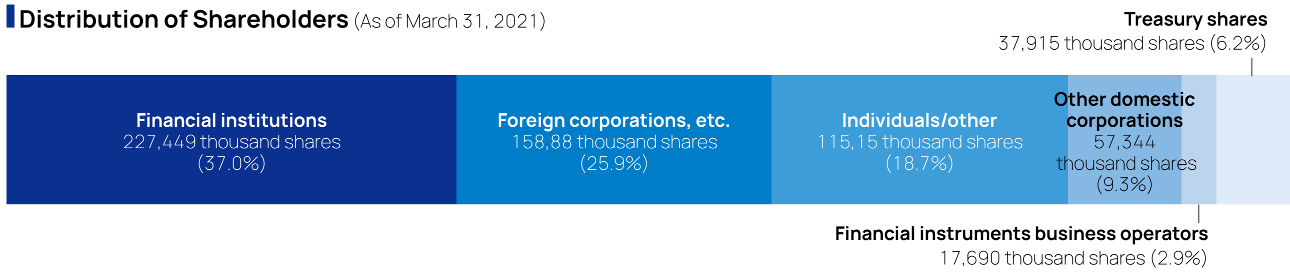
Minimum Trading Unit	100 shares
Fiscal Year-End	March 31 of each year
Stock Exchange Listing	Tokyo Stock Exchange, Inc. and Nagoya Stock Exchange, Inc.
Security Code	5411
Shareholder Registry Administrator	Mizuho Trust & Banking Co., Ltd. 1-2-1 Yaesu, Chuo-ku, Tokyo 103-8670, Japan

Major Shareholders (As of March 31, 2021)

Name	Number of shares held (Thousand shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (trust account)	53,606	9.30
Custody Bank of Japan, Ltd. (trust account)	31,127	5.40
Nippon Life Insurance Company	20,821	3.61
The Dai-ichi Life Insurance Company, Limited	13,127	2.28
Mizuho Bank, Ltd.	12,138	2.11
JFE Employees Stock Ownership Plan	10,266	1.78
Custody Bank of Japan, Ltd. (trust account 5)	8,774	1.52
STATE STREET BANK WEST CLIENT - TREATY 505234	8,471	1.47
JFE Business Partners Stock Ownership Plan	8,144	1.41
Tokio Marine & Nichido Fire Insurance Co., Ltd.	7,827	1.36

Note: In addition to the above, the Company retains 37,915 thousand shares as treasury shares. The treasury shares are not included in the shareholding ratio calculation.

Distribution of Shareholders (As of March 31, 2021)



Changes in Share Prices, Trading Volume and Dividends

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Share price (Yen) (As of year-end)	2,434	1,778	1,767	1,943	2,654	1,516	1,909	2,144	1,879	703	1,363
Trading volume (Million shares) (Fiscal year)	760	722	1,206	1,113	799	1,080	1,141	896	685	823	1,077
Annual dividends per share (Yen)	35	20	20	40	60	30	30	80	95	20	10

Annual Highlights

JFE Holdings

2020

- June Held the 18th Ordinary General Meeting of Shareholders
- July Selected for inclusion in FTSE4Good Index Series and FTSE Blossom Japan Index for the first time
- Aug. Selected for inclusion in DX Stocks 2020 (sixth year running, including Competitive IT Strategy Company Stock)
- Sep. Announced CO_2 emission reduction target for the JFE Group
- Sep. Issued JFE Group Report 2020 (integrated report)
- Sep. Issued JFE Group CSR Report 2020 (online only instead of a publication)
- Oct. Held the first JFE Group ESG Briefing

2021

- Feb. Issued JFE Group DX Report 2020
- Feb. JFE Group CSR Report 2020 won the Excellence Award in the 24th Environmental Communication Award
- Feb. Won the Environmentally Sustainable Companies Special Award in the 2nd ESG Finance Awards Japan
- Mar. Co-sponsored the 15th All-China Japanese Speech Contest

JFE Steel (Steel business)

2020

- Apr. Won 2020 Commendation for Science and Technology from Minister of Education, Culture, Sports, Science and Technology, Awards for Science and Technology (Development Category) for developing environmentally friendly high-quality stainless-steel smelting process
- Apr. Collaborated with Taiheiyo Cement and Research Institute of Innovative Technology for the Earth (RITE) in establishing group to research technologies to fixate CO_2 in carbonate
- May Collaborated with Tohoku University in establishing department to research advanced analysis technologies for steelmaking processes
- June Received Field Innovation Award from The Japanese Society for Artificial Intelligence for developing safety support system using human-behavior analysis software
- June Named by Ministry of Economy, Trade and Industry to Global Niche Top Companies Selection 100 for ARRESTEX heavy-crack-arrest steel plate for super-large container vessels
- June Opened JFE Digital Transformation Center (JDXC®) to pursue DX initiatives
- July Completed rollout of steel sheet non-contact control technology for hot dip galvanizing process in all production bases worldwide
- July Nine companies including Nihon Shipyard (then "JMU") launched Ship Carbon Recycling Working Group within Carbon Capture & Reuse (CCR) Study Group to pursue zero-emission ship fuel based on methane
- Sep. Won seventh straight annual National Commendation for Invention for T-eye® system that uses magnetic flux leakage method to measure minute concave-convex defects in steel sheets
- Sep. Developed 100% chromate-free hot dip galvanized steel sheets
- Oct. Introduced training simulator that uses mixed-reality technology
- Oct. Started demonstration testing of medium-sized facility to produce ferro coke
- Oct. Won Steelie Awards 2020 from World Steel Association for development of resource-conserving silicon-gradient magnetic steel sheet for high-speed motors
- Nov. Commenced companywide deployment of automated smart cranes for coil warehouses
- Nov. Launched Super-RQ quenching facility at Keihin steel plate mill
- Dec. Developed JNRF™ silicon-gradient magnetic steel sheet for high-speed motors
- Dec. Received Prize of the Chairman from Energy Conservation Center, Japan (ECCJ) for Energy Conservation Best Practices at Workplaces, Energy Conservation Grand Prize Award for developing energy-supply demand-guidance system based on data science
- Dec. Received Chairman's Prize in 55th JSPMI Prize for surface inspection system using twin-illumination and subtraction technique
- Dec. 1.5 GPa-grade high-tensile strength cold-rolled steel sheets adopted for first time in vehicle body structural parts
- Dec. Started testing Type 2 pressure accumulator for JFE-made hydrogen stations at commercial locations

2021

- Feb. Signed agreement with BHP to develop methods for reducing carbon in steelmaking
- Feb. Launched curriculum at Vietnamese university to train steel-structure engineers
- Mar. Developed world's first ultrasonic robots for inspecting steel plate
- Mar. Developed energy-absorption structure made with ultra-high-strength steel incorporating resins
- Mar. Greatly expanded processing landslide prevention piles with JFE Nejiru® threaded joints
- Mar. Received 53rd Ichimura Industry Award for chrome ore smelting reduction process using hydrocarbon fuel burner

JFE Engineering (Engineering business)

2020

- Apr. Established Kyoei J&T Recycling Corporation (J&T Recycling Corporation)
- July Started to provide "BRA-ING", a high-performance fully automated operating system for waste incinerators
- Sep. Acceptance of operation and maintenance order for waste-to-energy plants in Fukuyama and Kurashiki
- Oct. Turned food biogas power generation business company Bios Komaki into a subsidiary (J&T Recycling Corporation)
- Oct. Held the 50th anniversary ceremony of Tsu-Works
- Oct. Constructed new LUCANT™ plant for Mitsui Chemicals (JFE Project One)
- Nov. Received order for one of the world's largest waste-to-energy plants in Stapelfeld, Germany (SBG)
- Dec. Signed share transfer agreement to acquire shares of Mitsui E&S Plant Engineering Inc.

2021

- Jan. Kesennuma Wan Oudan Kyo Bridge completed
- Feb. Nagoya Nishi JCT (NAGOYA-DAINI-KANJO EXPRESSWAY) completed
- Mar. Appointed as joint preferential negotiation right holder for transfer of gas business and comprehensive consign of waterworks and sewage businesses by Myoko City, Niigata Prefecture
- Mar. Ibaraki Trunk Line, one of the longest gas pipelines in Japan, completed

JFE Shoji (Trading business)

2020

- Apr. Merger of JFE Shoji Steel Construction Materials and JFE Shoji Usuitakenzai
- July Established Renewable Energy Steel Products Team in Steel Overseas Division
- Oct. Formed alliance with Niigata Steel and Fujita Metal to optimize steel sheet processing businesses
- Oct. Invested in Sankyo Noritake Steel

2021

- Feb. Launched operations at second plant of JFE Shoji Steel Hai Phong, a coil center in northern Vietnam

Japan Marine United (Shipbuilding business)

2020

- June Participated in the Designing the Future of Full Autonomous Ship Project (DFFAS Project) sponsored by the Joint Technological Development Program for the Demonstration of Unmanned Ships under the administration of the Nippon Foundation
- Aug. Launched joint R&D program for transporting liquefied ammonia and using it as a marine fuel
- Oct. Participated in newly established Planning and Design Center for Green Ships

2021

- Jan. Launched Nihon Shipyard as joint venture in marketing, sales, and design with Imabari Shipbuilding as part of capital and business alliance
- Jan. Received lot of 12 container ships by 3,000 TEU type from abroad
- Mar. Delivered Aegis destroyer *Haguro* to Japan's Ministry of Defense

Operating and Main Group Companies (As of April 1, 2021)

Notes 1: Net sales/Revenue: Results for FY2020
2: Number of employees: As of March 31, 2020 (Consolidated)
* Equity method affiliates

JFE Steel
Steel Business

Head office Chiyoda-ku, Tokyo **Revenue** 2,255.2 billion yen **Number of employees** 45,797 (male: 40,054; female: 5,743)

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.*

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. Der. L. Dec.V.* ■California Steel Industries, Inc.*
■Hojalata Y Laminados S.A.* ■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* ■JFE MERANTI MYANMAR Co., Ltd. ■JFE Connections America, Inc.
■GECOSS VIETNAM COMPANY LIMITED

JFE Engineering
Engineering Business

Head office Chiyoda-ku, Tokyo **Yokohama head office** Yokohama, Kanagawa Prefecture **Revenue** 485.7 billion yen
Number of employees 10,612 (male: 9,141; female: 1,471)

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 Company, Limited
■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.

Overseas group companies
■JFE Techno Manila, Inc. ■JFE Engineering (M) SDN. Bhd. ■PT. JFE Engineering Indonesia ■JFE Engineering India Private Limited
■Mitr Project Sevices Co., Ltd. ■Standardkessel Baumgarte Holding GmbH ■J&M Steel Solutions Company Limited
■DongJie Environmental Technology Co., Ltd.*

JFE Shoji
Trading Business

Head office Chiyoda-ku, Tokyo **Revenue** 932.5 billion yen **Number of employees** 7,910 (male: 5,757; female: 2,153)

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 ■Aichi Kanzai Kogyo Corporation ■Hoshi Kinzoku Corporation
■Showa Kigyo 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.*

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. ■Cogent Power Inc. ■Marushin Canneries(Malaysia)Sdn. Bhd.
■JY Steel Processing Co., Ltd. ■Kawarin Enterprise Pte. Ltd.* ■r. bourgeois JFE Shoji Magnetic Lamination, Inc.*

Japan Marine United
Shipbuilding Business

Head office Yokohama, Kanagawa Prefecture **Net sales** 237.3 billion yen **Number of employees** 5,309 (male: 5,054; female: 255)

Domestic group companies
■JMU AMTEC Co., Ltd. ■IMC Co., Ltd. ■JMU Defense Systems Co., Ltd.

Employee Data (Non-consolidated: Actual figures for FY2020)

JFE Steel

Number of employees (March 31, 2021)	16,089 (Male 14,718, Female 1,371)
Number of managers	2,781 (Male 2,616, Female 165)
Ratio of female managers	5.9%
Number of recruits	489 (Male 452, Female 37) (New graduates 448, Mid-career 41)
Average years employed	15.8 (Male 15.4, Female 18.2)
Turnover rate	3.1%
Number of rehired employees	626
Number of annual leave days taken (average)	13.2 days/year
Overtime working hours (average)	15.0 hours/month
Number of employees working shorter hours for childcare (total number of persons)	81
Number of dispatched employees	169

JFE Engineering

Number of employees (March 31, 2021)	3,866 (Male 3,324, Female 542)
Number of managers	2,401 (Male 2,257, Female 144)
Ratio of female managers	6.0%
Number of recruits	138 (Male 122, Female 16) (New graduates 77, Mid-career 61)
Average years employed	14.4 (Male 14.4, Female 14.5)
Turnover rate	1.5%
Number of rehired employees	44
Number of annual leave days taken (average)	17.2 days/year
Overtime working hours (average)	24.3 hours/month
Number of employees working shorter hours for childcare (total number of persons)	70
Number of dispatched employees	652

JFE Shoji

Number of employees (March 31, 2021)	1,003 (Male 598, Female 405)
Number of managers	629 (Male 592, Female 37)
Ratio of female managers	5.9%
Number of recruits	43 (Male 24, Female 19) (New graduates 40, Mid-career 3)
Average years employed	14.0 (Male 14.7, Female 12.8)
Turnover rate	3.7%
Number of rehired employees	31
Number of annual leave days taken (average)	10.4 days/year
Overtime working hours (average)	29.8 hours/month
Number of employees working shorter hours for childcare (total number of persons)	62
Number of dispatched employees	16

JFE GROUP REPORT 2021

FINANCIAL INFORMATION

Note: Fiscal Year (FY) 2020 in the following pages refers to the period beginning April 1, 2020 and ended March 31, 2021

1. Preparation Policy of the Consolidated Financial Statements

The consolidated financial statements of the Company are prepared in accordance with International Financial Reporting Standards (hereinafter referred to as "IFRS") pursuant to the provisions of Article 93 of the Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements (Ordinance of the Ministry of Finance No. 28 of 1976; hereinafter referred to as the "Ordinance on Consolidated Financial Statements").

2. Audit Certification

In accordance with the provisions of Article 193-2, paragraph 1 of the Financial Instruments and Exchange Act, the consolidated financial statements of the Company for the fiscal year ended March 31, 2021 were audited by Ernst & Young ShinNihon LLC.

3. Particular Efforts to Secure the Appropriateness of Consolidated Financial Statements, etc.

The Company is making particular efforts to ensure the appropriateness of consolidated financial statements, etc. Specifically, in order to establish a system for gaining proper understanding of the details and revisions of accounting standards and relevant guidance and responding accordingly, the Company has joined the Financial Accounting Standards Foundation and attends seminars and workshops held by the foundation.

4. Development of a System for Fair Preparation of Consolidated Financial Statements, etc., in Accordance with IFRS

In order to prepare appropriate consolidated financial statements under IFRS, the Company keeps up to date with the latest accounting standards and assesses their impact by obtaining press releases and standards issued by the International Accounting Standards Board as necessary. The Company has also formulated the Group Accounting Policies in compliance with IFRS and conducts its accounting based on those policies. In addition, the Company attends seminars and workshops held by the Financial Accounting Standards Foundation, audit firms, and other organizations, thereby accumulating expertise within the Company.

JFE GROUP REPORT 2021

Consolidated Financial Statements

Consolidated Statement of Financial Position

(million yen)

	Notes	As of March 31, 2020	As of March 31, 2021
Assets			
Current assets			
Cash and cash equivalents	7, 21	86,704	142,416
Trade and other receivables	8, 21, 38	678,098	751,824
Contract assets	27	142,075	101,282
Inventories	9	872,602	785,632
Income taxes receivable		20,946	14,748
Other financial assets	10, 38	6,307	13,359
Other current assets	11	108,410	79,430
Total current assets		1,915,146	1,888,694
Non-current assets			
Property, plant and equipment	12, 21	1,717,751	1,772,303
Goodwill	13	6,497	6,200
Intangible assets	13	88,802	95,055
Right-of-use asset	14, 21	102,322	111,938
Investment property	15	58,158	58,310
Investments accounted for using equity method	6, 18, 21	336,040	355,242
Retirement benefit asset	24	15,520	22,159
Deferred tax assets	19	94,930	86,014
Other financial assets	10, 21, 38	296,004	244,505
Other non-current assets	11, 21	14,946	14,547
Total non-current assets		2,730,974	2,766,278
Total assets	6	4,646,120	4,654,972

(million yen)

	Notes	As of March 31, 2020	As of March 31, 2021
Liabilities and equity			
Liabilities			
Current liabilities			
Trade and other payables	20, 21, 38	557,252	496,995
Bonds payable, borrowings, and lease liabilities	21, 37, 38	376,473	277,027
Contract liabilities	27	44,813	43,038
Income taxes payable, etc.		13,249	15,090
Provisions	23	12,507	11,518
Other financial liabilities	22, 38	89,465	86,836
Other current liabilities	11	210,543	208,510
Total current liabilities		1,304,306	1,139,017
Non-current liabilities			
Bonds payable, borrowings, and lease liabilities	21, 37, 38	1,437,835	1,529,112
Retirement benefit liability	24	143,316	141,186
Provisions	23	25,740	24,105
Deferred tax liabilities	19	3,723	7,591
Other financial liabilities	22, 38	16,246	45,417
Other non-current liabilities	11	8,398	8,387
Total non-current liabilities		1,635,261	1,755,800
Total liabilities		2,939,568	2,894,818
Equity			
Share capital	25	147,143	147,143
Capital surplus	25	652,430	652,465
Retained earnings	25	1,002,076	1,029,976
Treasury shares	25	(180,637)	(180,639)
Other components of equity		6,012	30,278
Equity attributable to owners of parent		1,627,026	1,679,223
Non-controlling interests		79,526	80,930
Total equity		1,706,552	1,760,154
Total liabilities and equity		4,646,120	4,654,972

Consolidated Statement of Profit or Loss

(million yen)

	Notes	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Revenue	27	3,729,717	3,227,285
Cost of sales	12, 13, 29	(3,334,103)	(2,912,766)
Gross profit		395,614	314,519
Selling, general and administrative expenses	12, 13, 28, 29, 30	(356,992)	(324,057)
Share of profit of investments accounted for using equity method	6, 18	8,782	14,239
Other income	31	30,818	25,782
Other expenses	32	(40,323)	(43,394)
Business profit (loss)		37,899	(12,911)
Profit on sales of fixed assets	6, 33	–	28,021
Impairment losses	6, 16	(238,826)	(7,544)
Operating profit (loss)		(200,927)	7,566
Finance income	6, 34	2,727	1,686
Finance costs	6, 34	(15,273)	(14,184)
Loss before tax		(213,473)	(4,930)
Income tax expense	19	20,183	(14,133)
Net loss		(193,290)	(19,063)
Loss attributable to			
Owners of parent		(197,744)	(21,868)
Non-controlling interests		4,454	2,804
Net loss		(193,290)	(19,063)
Earnings per share			
Basic losses per share (yen)	36	(343.39)	(37.98)
Diluted losses per share (yen)	36	(343.39)	(37.98)

Consolidated Statement of Comprehensive Income

(million yen)

	Notes	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Net loss		(193,290)	(19,063)
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurements of defined benefit plans	24, 35	(4,975)	12,020
Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income	35, 38	(49,143)	46,751
Share of other comprehensive income of investments accounted for using equity method	18, 35	3,148	13,284
Total of items that will not be reclassified to profit or loss		(50,971)	72,056
Items that may be reclassified to profit or loss			
Exchange differences on translation of foreign operations	35	(3,080)	(609)
Effective portion of cash flow hedges	35	(44)	11,673
Share of other comprehensive income of investments accounted for using equity method	18, 35	(11,786)	(825)
Total of items that may be reclassified to profit or loss		(14,911)	10,238
Total other comprehensive income		(65,882)	82,295
Comprehensive income		(259,172)	63,231
Comprehensive income attributable to			
Owners of parent		(263,243)	60,036
Non-controlling interests		4,070	3,195
Comprehensive income		(259,172)	63,231

Consolidated Statement of Changes in Equity

(million yen)

	Notes	Equity attributable to owners of parent					
						Other components of equity	
		Share capital	Capital surplus	Retained earnings	Treasury shares	Remeasurements of defined benefit plans	Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income
Balance as of April 1, 2019		147,143	646,793	1,241,420	(180,670)	–	90,730
Cumulative effects of changes in accounting policies		–	–	(1,302)	–	–	–
Retroactively adjusted balance		147,143	646,793	1,240,117	(180,670)	–	90,730
Net loss		–	–	(197,744)	–	–	–
Other comprehensive income		–	–	–	–	(4,765)	(46,129)
Comprehensive income		–	–	(197,744)	–	(4,765)	(46,129)
Purchase of treasury shares		–	–	–	(73)	–	–
Disposal of treasury shares		–	(12)	–	17	–	–
Dividends	26	–	–	(40,363)	–	–	–
Share-based payment transactions	30	–	(34)	–	88	–	–
Changes in ownership interest in subsidiaries		–	5,684	–	–	–	–
Transfer from other components of equity to retained earnings		–	–	67	–	4,765	(4,832)
Transfer to non-financial assets	38	–	–	–	–	–	–
Other		–	–	–	–	–	–
Total transactions with owners		–	5,637	(40,296)	33	4,765	(4,832)
Balance as of March 31, 2020		147,143	652,430	1,002,076	(180,637)	–	39,768

	Notes	Equity attributable to owners of parent				Non-controlling interests	Total equity
		Other components of equity					
		Exchange differences on translation of foreign operations	Effective portion of cash flow hedges	Total	Total		
Balance as of April 1, 2019		(16,547)	(2,532)	71,650	1,926,337	65,422	1,991,759
Cumulative effects of changes in accounting policies		–	–	–	(1,302)	–	(1,302)
Retroactively adjusted balance		(16,547)	(2,532)	71,650	1,925,034	65,422	1,990,456
Net loss		–	–	–	(197,744)	4,454	(193,290)
Other comprehensive income		(15,393)	790	(65,498)	(65,498)	(384)	(65,882)
Comprehensive income		(15,393)	790	(65,498)	(263,243)	4,070	(259,172)
Purchase of treasury shares		–	–	–	(73)	–	(73)
Disposal of treasury shares		–	–	–	5	–	5
Dividends	26	–	–	–	(40,363)	(2,559)	(42,922)
Share-based payment transactions	30	–	–	–	54	–	54
Changes in ownership interest in subsidiaries		–	–	–	5,684	12,287	17,971
Transfer from other components of equity to retained earnings		–	–	(67)	–	–	–
Transfer to non-financial assets	38	–	(71)	(71)	(71)	–	(71)
Other		–	–	–	–	306	306
Total transactions with owners		–	(71)	(138)	(34,764)	10,034	(24,730)
Balance as of March 31, 2020		(31,941)	(1,813)	6,012	1,627,026	79,526	1,706,552

(million yen)

	Notes	Equity attributable to owners of parent					
						Other components of equity	
		Share capital	Capital surplus	Retained earnings	Treasury shares	Remeasurements of defined benefit plans	Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income
Balance as of April 1, 2020		147,143	652,430	1,002,076	(180,637)	–	39,768
Net loss		–	–	(21,868)	–	–	–
Other comprehensive income		–	–	–	–	12,186	59,433
Comprehensive income		–	–	(21,868)	–	12,186	59,433
Purchase of treasury shares		–	–	–	(65)	–	–
Disposal of treasury shares		–	(22)	–	26	–	–
Dividends	26	–	–	–	–	–	–
Share-based payment transactions	30	–	(23)	–	37	–	–
Change in scope of consolidation		–	–	–	–	–	–
Changes in ownership interest in subsidiaries		–	80	–	–	–	–
Transfer from other components of equity to retained earnings		–	–	49,768	–	(12,186)	(37,581)
Transfer to non-financial assets	38	–	–	–	–	–	–
Other		–	–	–	–	–	–
Total transactions with owners		–	34	49,768	(1)	(12,186)	(37,581)
Balance as of March 31, 2021		147,143	652,465	1,029,976	(180,639)	–	61,620

	Notes	Equity attributable to owners of parent				Non-controlling interests	Total equity
		Other components of equity					
		Exchange differences on translation of foreign operations	Effective portion of cash flow hedges	Total	Total		
Balance as of April 1, 2020		(31,941)	(1,813)	6,012	1,627,026	79,526	1,706,552
Net loss		–	–	–	(21,868)	2,804	(19,063)
Other comprehensive income		(314)	10,599	81,904	81,904	390	82,295
Comprehensive income		(314)	10,599	81,904	60,036	3,195	63,231
Purchase of treasury shares		–	–	–	(65)	–	(65)
Disposal of treasury shares		–	–	–	4	–	4
Dividends	26	–	–	–	–	(1,743)	(1,743)
Share-based payment transactions	30	–	–	–	13	–	13
Change in scope of consolidation		–	–	–	–	694	694
Changes in ownership interest in subsidiaries		–	–	–	80	(854)	(774)
Transfer from other components of equity to retained earnings		–	–	(49,768)	–	–	–
Transfer to non-financial assets	38	–	(7,871)	(7,871)	(7,871)	–	(7,871)
Other		–	–	–	–	112	112
Total transactions with owners		–	(7,871)	(57,639)	(7,838)	(1,791)	(9,629)
Balance as of March 31, 2021		(32,256)	914	30,278	1,679,223	80,930	1,760,154

Consolidated Statement of Cash Flow

(million yen)

	Notes	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Cash flows from operating activities			
Loss before tax		(213,473)	(4,930)
Depreciation and amortization		231,577	236,353
Changes in allowance		(6,601)	(2,696)
Interest and dividend income		(12,205)	(7,179)
Interest expenses		14,486	13,844
Changes in trade and other receivables		86,357	(71,111)
Change in inventories		42,559	86,569
Change in trade and other payables		(52,338)	(42,479)
Other		184,494	47,381
Subtotal		274,856	255,751
Interest and dividends received		24,192	14,857
Interest paid		(13,241)	(12,362)
Income taxes paid		(24,736)	(10,972)
Net cash from operating activities		261,070	247,274
Cash flows from investing activities			
Purchase of property, plant and equipment, intangible assets, and investment property		(352,842)	(308,123)
Proceeds from sale of property, plant and equipment, intangible assets, and investment property		3,357	29,547
Purchase of investments		(35,299)	(5,731)
Proceeds from sale of investments		23,530	128,898
Other		2,875	(8,812)
Net cash from investing activities		(358,378)	(164,221)
Cash flows from financing activities			
Change in short-term borrowings	37	(11,500)	3,396
Change in commercial papers	37	5,999	(88,999)
Proceeds from long-term borrowings	37	183,529	224,077
Repayments of long-term borrowings	37	(104,825)	(214,826)
Proceeds from issuance of bonds	37	120,000	60,000
Payments for purchase of treasury shares		(73)	(65)
Dividends paid to owners of parent	26	(40,363)	–
Other	37	(48,865)	(13,674)
Net cash provided from financing activities		103,900	(30,092)
Effect of exchange rate change on cash and cash equivalents		(2,176)	2,752
Changes in cash and cash equivalents		4,416	55,712
Cash and cash equivalents at beginning of period		82,288	86,704
Cash and cash equivalents at end of period	7	86,704	142,416

Notes to Consolidated Financial Statements

1. Reporting Entity

JFE Holdings, Inc. (the "Company") is an incorporated company established under Japan's Companies Act and is located in Japan. The consolidated financial statements of the Company, as of March 31, 2021, encompass the Company and its subsidiaries (the "Group") and its interests in affiliates and joint arrangements of the Company.

Details of the Group's business are described in Note "6. Segment Information."

2. Basis of Presentation

(1) Statement of compliance with IFRS

The Company meets the requirements of a "specified company complying with designated international accounting standards" as stipulated in Article 1-2 of the Ordinance on Consolidated Financial Statements, and the Company therefore prepares its consolidated financial statements in accordance with IFRS, in accordance with Article 93 of the Ordinance on Consolidated Financial Statements.

The Group's consolidated financial statements for the fiscal year ended March 31, 2021 were authorized for issue on June 25, 2021 by the Board of Directors.

(2) Basis of measurement

The Group's consolidated financial statements have been prepared on a historical cost basis, with the exception of financial instruments, etc., described in Note "3. Significant Accounting Policies."

(3) Functional currency and reporting currency

The Group's consolidated financial statements are presented in Japanese yen, which is the Company's functional currency. Amounts less than one million yen are rounded down.

3. Significant Accounting Policies

(1) Basis of consolidation

(i) Subsidiaries

Subsidiaries are those companies over which the Company has control. If the Group has an exposure or right to variable returns from involvement in the investee, and has the ability to use its power over the investee to affect the amount of returns, then it is regarded as controlling the investee.

The financial statements of subsidiaries are included in the consolidated financial statements of the Group from the date of acquisition of control to the date of loss of control.

If there is a change in equity interest in a subsidiary without loss of control, it is accounted for as a capital transaction. If there is a change in equity interest in a subsidiary accompanied by a loss of control, the subsidiary's assets and liabilities, non-controlling interests related to the subsidiary, and other components of equity are derecognized, with any gain or loss resulting therefrom recognized in profit or loss.

For subsidiaries whose reporting periods end on a date that differs from that of the parent entity, provisional financial statements as of the consolidated reporting date are used.

(ii) Associates and joint arrangements

Associates: An entity in which the Group owns at least 20% and at most 50% of the voting rights is considered an associate unless it can be clearly demonstrated that the Company cannot exercise influence over financial and operating policy decisions of the entity. An entity in which the Group owns less than 20% of the voting rights is considered an associate if the Company can exercise influence over financial and operating policy decisions of the entity. Investments in associates are accounted for using the equity accounting method.

A joint arrangement is an arrangement in which two or more parties have joint control such that decisions about the relevant activities of the arrangement require the unanimous consent of the parties sharing control. If the parties that share joint control have rights to the assets and obligations for the liabilities relating to the arrangement, it is called a joint operation. If the parties that share joint control have rights to the net assets of the arrangement, it is called a joint venture. In relation to its interest in a joint operation, the Group recognizes its share of assets, liabilities, revenue, and expenses. Joint ventures are accounted for using the equity accounting method.

For associates whose reporting periods end on a date that differs from that of the parent entity, provisional financial statements as of the consolidated reporting date are prepared.

For JSW Steel Limited provisional financial statements are prepared based on December 31 as the reporting date because local legislation imposes restrictions on when certain information becomes available to the Company. Necessary adjustments have been made for material transactions or events disclosed between JSW Steel's provisional reporting date and the consolidated reporting date.

JFE GROUP REPORT 2021

(iii) Consolidation eliminations

The balances of receivables and payables and transactions within the Group, and unrealized gains and losses arising from transactions within the Group, have been eliminated when preparing consolidated financial statements.

(2) Business combinations

Business combinations are accounted for using the acquisition method.

Identifiable assets acquired through business combinations, liabilities assumed, non-controlling interests of the acquiree, and goodwill are recognized on the acquisition date (the date on which the acquirer obtains control of the acquiree). As a general rule, identifiable assets acquired and liabilities assumed are measured at fair value.

If the total value of the fair value of consideration (including contingent consideration) transferred in the business combination, the amount of any non-controlling interests of the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree ("Value A") exceeds the net value (usually the fair value) of the acquiree's identifiable assets and liabilities assumed ("Value B"), the excess is recognized as goodwill. If, on the other hand, Value A is less than Value B, the difference is recognized in profit or loss as of the acquisition date.

Acquisition costs incurred are recognized as expenses when incurred.

For each individual transaction, the Company chooses to measure non-controlling interests at fair value or as a proportionate share of the fair value of identifiable net assets of the acquiree.

(3) Foreign currency translation

(i) Translation of foreign currency transactions

Foreign currency transactions are translated into the functional currency of each company using the exchange rate or similar rate prevailing on the transaction date. Monetary items denominated in foreign currencies at the end of the reporting period are translated into the functional currency at the exchange rate prevailing at the end of the reporting period, and the resulting exchange differences are recognized in profit or loss. When the valuation difference of a non-monetary item is recognized in other comprehensive income, any exchange component is recognized in other comprehensive income, and when a non-monetary item is recognized in profit or loss, any exchange component is recognized in profit or loss.

(ii) Translation of foreign operations

Assets and liabilities of foreign operations are translated at the exchange rates prevailing at the end of the reporting period. In addition, revenues and expenses of foreign operations are translated at the average exchange rates for the reporting period unless exchange rates fluctuated significantly during the period. Exchange differences arising from translation are recognized in other comprehensive income, and the accumulated amount is included in other components of equity.

When disposing of foreign operations, the cumulative amount of exchange differences related to the foreign operations is recognized in profit or loss at the time of disposal.

(4) Financial instruments

(i) Financial assets

a. Initial recognition and measurement

Financial assets are classified either as financial assets measured at amortized cost or as financial assets measured at fair value at the time of initial recognition. The Group recognizes a financial asset on the transaction date on which it becomes a party to the contractual provisions of the financial asset.

Financial assets that meet the following conditions are classified as financial assets measured at amortized cost:

- The asset is held in a business model of which the objective is to hold the asset in order to collect its contractual cash flows
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

Financial assets other than financial assets measured at amortized cost are classified as financial assets measured at fair value.

With the exception of equity financial assets held for trading purposes that must be measured at fair value through profit or loss, equity financial assets measured at fair value are individually classified either as measured at fair value through profit or loss or as measured at fair value through other comprehensive income, with that classification being made when the asset is initially recognized and applying continuously thereafter.

With the exception of financial assets measured at fair value through profit or loss, financial assets are measured at fair value at initial recognition plus transaction costs directly attributable to the acquisition. Financial assets measured at fair value through profit or loss are measured at fair value at initial recognition, and transaction costs directly attributable to the transaction are recognized in profit or loss.

b. Measurement subsequent to initial recognition

(a) Financial assets measured at amortized cost
After initial recognition, measurement is the amortized cost using the effective interest method.

(b) Financial assets measured at fair value through profit or loss
After initial recognition, measurement is the fair value with subsequent changes recognized in profit or loss.

(c) Equity financial assets measured at fair value through other comprehensive income
After initial recognition, measurement is the fair value with subsequent changes recognized in other comprehensive income.

Amounts recognized in other comprehensive income are transferred to retained earnings when an asset is derecognized or its fair value declines significantly (except when recovery is deemed probable); they are not transferred to profit or loss. Dividends derived from such financial assets are recognized as profit or loss.

c. Derecognition

Financial assets are derecognized when the contractual rights to receive cash flows have extinguished or when the contractual rights to receive cash flows have been transferred and substantially all risks and rewards of ownership of the financial asset are transferred to another entity.

d. Impairment

For financial assets measured at amortized cost, the Company recognizes allowances for doubtful accounts based on expected credit losses.

Allowances for doubtful accounts are calculated as the present value of the difference between the contractual cash flows due to the Group and the cash flows that the Group expects to receive.

The Group determines whether the credit risk on each financial asset has increased significantly since initial recognition on each reporting date, and if the credit risk has not increased significantly since initial recognition, the amount of the allowance for doubtful accounts is assessed based on the expected credit losses (expected credit losses over 12 months) resulting from default events that may occur within 12 months. If, on the reporting date, credit risk on a financial asset has increased significantly since initial recognition, the amount of the allowance for doubtful accounts is assessed based on the expected credit losses arising from all possible default events over the expected lifetime of the financial asset (expected credit losses over full lifetime). However, in the case of trade receivables, contract assets, and lease receivables that do not contain a significant financing component, regardless of the above, the amount of the allowance for doubtful accounts is always measured using the expected credit losses for the instrument's full lifetime.

A receivable is determined to be credit-impaired when a fact such as the commencement of legal liquidation proceedings due to the obligor's bankruptcy, etc., or the significant deterioration of the obligor's financial condition occurs. When it becomes apparent that a receivable will be unrecoverable in the future due to a write-off under the provisions of the Corporate Reorganization Act, etc., the carrying amount of the receivable is directly reduced.

Provisions of allowances for doubtful accounts on financial assets are recognized in profit or loss. In the case of events that reduce the allowance for doubtful accounts, reversals of allowances for doubtful accounts are recognized in profit or loss.

Estimates of allowances for doubtful accounts relating to financial assets reflect the following.

- Unbiased probability-weighted amounts calculated by evaluating a range of possible outcomes
- Time value of money
- Rational and supportable information about past events, current conditions, and forecasts of future economic conditions, available at the reporting date without undue cost or effort

(ii) Financial liabilities

a. Initial recognition and measurement

Financial liabilities are classified either as financial liabilities measured at amortized cost or as financial liabilities measured at fair value through profit or loss at the time of initial recognition. The Group initially recognizes issued debt securities on the date of issue, and other financial liabilities are initially recognized on the transaction date on which the Group becomes a party to the contractual provisions of the financial liability.

Financial liabilities measured at amortized cost are measured at fair value minus transaction costs directly attributable to the issue of the instruments at the time of initial recognition. However, financial liabilities measured at fair value through profit or loss are measured at fair value at the time of initial recognition.

b. Measurement subsequent to initial recognition

(a) Financial liabilities measured at amortized cost
After initial recognition, measurement is the amortized cost using the effective interest method.

(b) Financial liabilities measured at fair value through profit or loss
After initial recognition, measurement is the fair value with subsequent changes recognized in profit or loss.

c. Derecognition

Financial liabilities are derecognized when the financial liabilities extinguish; that is, when the liabilities are discharged, are canceled, or expire.

(iii) Derivative and hedge accounting

The Group enters into derivative transactions such as forward exchange contracts and interest rate swaps in order to hedge foreign exchange risk, interest rate risk, and the like.

At the inception of the hedge, the Group formally designates and documents the risk management purpose and strategy for the hedging relationship and the implementation of the hedge. This documentation identifies the hedging instrument, the item or transaction being hedged, the nature of the risk being hedged, and the method of evaluating the effectiveness of the hedging instrument in offsetting the exposure to changes in the fair value or cash flows of the hedged item due to the risk being hedged. Moreover, the Group assesses at the inception of the hedging relationship, and on an ongoing basis, whether a hedging relationship meets the hedge effectiveness requirements.

Derivatives are initially recognized at fair value. After initial recognition, fair value is measured and subsequent changes are treated as shown immediately below.

a. Fair value hedges

Changes in the fair value of derivatives used as hedging instruments are recognized in profit or loss or other comprehensive income. Changes in the fair value of the hedged item corresponding to the hedged risk are recognized in profit or loss or other comprehensive income, with the carrying amount of the hedged item being adjusted.

b. Cash flow hedges

The portion of the change in the fair value of derivatives used as hedging instruments that is determined to be an effective hedge is recognized in other comprehensive income, and the cumulative amount is included in other components of equity. The portion of hedges that is ineffective is recognized in profit or loss. Amounts accumulated in other components of equity are reclassified from other components of equity to profit or loss in the accounting period in which the transaction being hedged affects profit or loss. However, if the forecast transaction being hedged subsequently results in the recognition of a non-financial asset or non-financial liability, the amount accumulated in other components of equity is treated as an adjustment to the initial book value of that non-financial asset or non-financial liability.

Hedge accounting is discontinued prospectively when the hedging instrument expires, is sold, or is terminated or exercised, or if the derivative no longer meets the requirements for hedge accounting. When the forecast transaction is no longer expected to occur, the amount accumulated in other components of equity is immediately reclassified from other components of equity to profit or loss.

c. Derivatives not designated as hedges

Changes in the fair value of such derivatives are recognized in profit or loss.

(iv) Offsetting financial assets and financial liabilities

Financial assets and financial liabilities are offset and presented at net when the Group has a legally enforceable right to offset the recognized amounts and intends to settle on a net basis or intends to realize the asset and settle the liability simultaneously.

(5) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand, readily available deposits, and short-term investments maturing within three months that are readily convertible to cash and subject to an insignificant risk of changes in value.

(6) Inventories

Inventories are measured at the lower of cost and net realizable value. Cost consists of material costs, direct labor costs, other direct costs, and an appropriate allocation of related manufacturing overhead costs. Net realizable value is calculated by deducting the estimated selling costs from the estimated selling price. Cost is mainly calculated based on the weighted average method.

(7) Property, plant and equipment

The Group uses the cost model to measure the carrying value of property, plant and equipment subsequent to its recognition. Under this model, property, plant and equipment are carried at their cost less any accumulated depreciation and any accumulated impairment losses.

Property, plant and equipment other than land and construction in progress are mainly depreciated using the straight-line method.

The estimated useful lives of major asset items are as follows:

- Buildings and structures: 2–75 years
- Machinery and vehicles: 2–27 years

The estimated useful lives, depreciation methods, and residual values of property, plant and equipment are reviewed at the end of each fiscal year.

(8) Goodwill and intangible assets

(i) Goodwill

Goodwill is not amortized; it is tested for impairment annually or whenever an indication of impairment exists. Impairment losses on goodwill are recognized in the consolidated statement of profit or loss and are not subsequently reversed.

Goodwill is carried at book value less accumulated impairment losses.

(ii) Intangible assets

Intangible assets acquired separately are measured at cost at the time of initial recognition. Intangible assets acquired in business combinations are measured at fair value as of the acquisition date.

The Group uses the cost model to measure the carrying value of intangible assets subsequent to their recognition. Under this model, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

Intangible assets whose useful lives can be determined are amortized using the straight-line method over their estimated useful lives. Intangible assets mainly comprise software for internal use and have estimated useful lives of 2–10 years.

(9) Leases

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. If the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration, the contract is, or contains, a lease.

(i) Leases as a lessee

At the commencement date, the Group recognizes right-of-use assets and lease liabilities. At the commencement date, right-of-use assets are initially measured at the amount of the initial measurement of lease liabilities adjusted for any initial direct costs, costs for restoration as required pursuant to the contract, and other costs. After the commencement date, the Group uses the cost model to measure right-of-use assets. Under this model, right-of-use assets are measured at cost, less any accumulated depreciation and any accumulated impairment losses. Right-of-use assets are depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term, unless it is reasonably certain that the Group will acquire ownership of the leased assets at the end of the lease term. The lease term is determined as the non-cancelable period of leased assets, together with periods covered by an option to extend the lease if the Group is reasonably certain to exercise that option, and periods covered by an option to terminate the lease if the Group is reasonably certain not to exercise that option.

Lease liabilities are measured at the present value of the lease payments that are not paid at the commencement date, discounted using the lessee's incremental borrowing rate. After the commencement date, the Group measures the lease liability by increasing the carrying amount to reflect interest on the lease liability and reducing the carrying amount to reflect the lease payments made. In case of lease modifications, the Group remeasures the lease liability. For a lease modification that is not accounted for as a separate lease and decreases the scope of the lease, the Group decreases the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease, and recognizes in profit or loss any gain or loss relating to the partial or full termination of the lease. The Group makes a corresponding adjustment to the right-of-use asset for all other lease modifications.

However, the Group uses the exemption for short-term leases and leases of low-value assets; instead of recognizing right-of-use assets and lease liabilities for such leases, it expenses the lease payments on a straight-line basis over the lease term.

(ii) Leases as a lessor

Leases entered into as a lessor are classified as either finance leases or operating leases according to the substance of the transaction rather than the form of the contract. Assets held under finance leases are presented as receivables in an amount equal to the net investment in the lease.

In the case of subleases, the intermediate lessor classifies the sublease with reference to the right-of-use asset arising from the head lease.

In the case of operating leases, the Group records the leased assets on the consolidated statement of financial position and recognizes lease payments as income on a straight-line basis over the lease term.

(10) Investment property

Investment property is real estate held for the purpose of earning rental income, capital gains, or both.

The Group uses the cost model to measure the carrying value of investment property subsequent to its recognition. Under this model, investment property is carried at cost less any accumulated depreciation and any accumulated impairment losses.

Investment property other than land is depreciated mainly using the straight-line method over the estimated useful life. The estimated useful life of the Company's main investment properties is 26 years.

The estimated useful lives, depreciation methods, and residual values of investment properties are reviewed at the end of each fiscal year.

(11) Impairment of non-financial assets

For property, plant and equipment and intangible assets, if there is any indication at the end of each reporting period that an asset may be impaired, the asset is assessed based on its recoverable value, being the higher of fair value less costs to sell and its value in use; if the carrying value of the asset exceeds its recoverable value, then the asset is impaired and is written down to its recoverable value.

Goodwill, intangible assets with indefinite useful lives, and intangible assets not yet available for use are tested for impairment annually or whenever an indication of impairment exists.

Impairment losses recognized on assets other than goodwill in previous years are assessed at the end of each reporting period to determine whether there is any indication that the recognized impairment loss may no longer exist or may have decreased. If any such indication exists, the recoverable amount is estimated, and if the recoverable amount exceeds the carrying amount of the asset or the cash-generating unit to which the asset belongs, an impairment reversal is recognized and the carrying amount is increased to the recoverable amount subject to the condition that the carrying amount of the asset may not exceed the carrying amount (net of accumulated depreciation or accumulated amortization) that would have been determined had no impairment loss been previously recognized. Impairment losses recognized on goodwill are not reversed in subsequent periods.

(12) Post-employment benefits

(i) Defined benefit plans

Defined benefit plans are any retirement benefit plans other than defined contribution plans. For each separate plan, the defined benefit obligation is calculated by estimating the future benefits earned as compensation for services provided by employees in previous and current fiscal years, and discounting that amount to the present value. The fair value of plan assets is deducted from the result of that calculation. The discount rate is determined with reference to the market yields of high-quality corporate bonds that are denominated in the same currency as the expected benefit payment and that have approximately the same maturity as the Group's defined benefit obligation.

If a retirement benefit plan is revised, costs related to the variable portion of benefits related to employees' past service are immediately recognized in profit or loss.

The Group recognizes changes in net defined benefit liability (asset) due to remeasurement in other comprehensive income and immediately transfers the amounts to retained earnings.

(ii) Defined contribution plans

Expenses related to defined contribution plans are recognized as expenses in the period in which the employees provide the services.

(13) Share-based payment

The Company has instituted share-based payment plans through which a portion of the compensation of directors (excluding outside directors) and executive officers (excluding non-residents under income tax law) of the Company and its operating companies is provided in the form of cash-settled share-based payments and equity-settled share-based payments through employee stock ownership plans. The Group's objective is to establish a clear link between compensation and the Group's operating performance and equity value and encourage the sharing of value with shareholders, thereby creating a greater incentive to contribute toward enhancing shareholder value over the medium and long term.

For equity-settled share-based payments, compensation for services received is measured with reference to the fair value of Company shares granted. The calculated consideration for services is recognized as an expense, and the same amount is recognized as an increase in equity.

For cash-settled share-based payments, the fair value of the amount paid is recognized as a liability, and changes in the fair value of the liability are recognized in profit or loss over the period up until an unconditional right to compensation is established.

(14) Provisions

Provisions are recognized when the Company has a present obligation (legal obligation or constructive obligation) resulting from past events, it is likely that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

If the impact of the time value of money is material, provisions are measured at a discounted amount calculated using a discount rate that reflects the risks specific to the liability.

(15) Revenue

With the exception of interest, dividend income, etc., under IFRS 9 Financial Instruments, the Group uses the following five-step approach in recognizing revenue that reflects the amount of consideration to which the Company expects to be entitled in exchange for the transfer of goods and services to customers:

Step 1: Identify the contract with the customer
Step 2: Identify the performance obligations in the contract
Step 3: Determine the transaction price
Step 4: Allocate the transaction price to a distinct performance obligation of the contract
Step 5: Recognize revenue when the performance obligation is fulfilled (or as it is fulfilled).

With respect to sales of steel products, etc., in the steel business, revenues are mainly recognized at the point of shipment, when the customer assumes the significant risk and economic value of ownership of the product being physically transferred and the right to receive payment is confirmed. Consideration for transactions is received mainly within one year from the fulfillment of performance obligations and includes no significant financing components.

With regard to construction contracts, etc., in the engineering business, the Group mainly estimates the progress of fulfilling performance obligations, and revenue is recognized over a fixed period based on the degree of progress. Consideration for transactions is mainly received in phases during the contract term separately from the fulfillment of performance obligations, and the remaining amount is received after a fixed period from the fulfillment of all performance obligations. Consideration for certain transactions includes significant financing components. A cost-based input method is used for performance obligations fulfilled over time in order to recognize revenue. The cost-based input method excludes the effects of any inputs that do not depict the Group's performance in transferring control of goods or services to the customer. When a cost incurred is not proportionate to progress, the Group's performance is faithfully depicted by adjusting the input method to recognize revenue only to the extent of that cost incurred.

With respect to sales of steel products, etc., in the trading business, revenues are mainly recognized at the point of delivery to the customer, when ownership rights and physical ownership of the product are physically transferred to the customer and the significant risk and economic value associated with ownership and the right to receive payment is confirmed. In addition, for certain transactions in the trading business, the Company has the responsibility to carry out work as an agent. Consideration for transactions is received mainly within one year from the fulfillment of performance obligations and includes no significant financing components.

Revenue is measured at the amount that deducts price reduction and rebates, etc., from the promised value in the contract with the customer.

When the Group is engaged in a transaction as a party to the transaction, revenue is presented as the total consideration received from the customer. When the Group is engaged in transactions as an agent for a third party, revenue is presented as a fee, calculated as the total amount of consideration received from the customer minus the amount collected for the third party.

(16) Business profit

Business profit is profit before income taxes excluding financial income and one-time items of materially significant value. It is a benchmark indicator of the Company's consolidated earnings.

(17) Finance income and costs

Finance income consists mainly of interest income, and finance costs consist mainly of interest expenses. Interest income is recognized as income when incurred using the effective interest method. Interest expense is recognized as an expense when incurred using the effective interest method.

(18) Dividend income

Dividend income is recognized in profit or loss when the right to receive the dividend is established.

Of the shares and investments held by the Group, dividends received on those held for the purpose of facilitating business transactions are included in other income.

(19) Income taxes

Income tax expense consists of current tax expense and deferred tax expense. These items are recognized in profit or loss except when they arise from items that are directly recognized in other comprehensive income or equity and when they arise from business combinations.

Current tax expense is measured in an amount that reflects the amount the Company expects the tax authorities to refund or expects to pay to the tax authorities. The tax rate and tax law used to calculate the amount of tax are those that are enacted or substantively enacted at the end of the reporting period.

Deferred tax assets and deferred tax liabilities are recognized for temporary differences, which are the differences between the carrying amounts and tax bases of assets and liabilities, and for unused tax losses carryforwards and unused tax credits. They are determined at the tax rate estimated for the period when the asset is realized or the liability is settled, based on the tax rate and tax law that are enacted or substantively enacted at the end of the reporting period.

Deferred tax liabilities are recognized for taxable temporary differences excluding the following:

- Temporary differences arising from initial recognition of goodwill
- Temporary differences resulting from the initial recognition of an asset or liability in a transaction that is not a business combination and does not affect accounting income or taxable income

at the time of the transaction

- Taxable temporary differences arising from investments in subsidiaries and associates, and interests in joint arrangements, when the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognized for deductible temporary differences, unused tax losses carryforwards, and unused tax credits, but only to the extent that it is probable that future taxable income will be available against which the deductible temporary difference, etc., can be utilized, except when the deductible temporary difference, etc., results from the initial recognition of an asset or liability in a transaction that is not a business combination and does not affect accounting income or taxable income at the time of the transaction.

Deferred tax assets are recognized for deductible temporary differences arising from investments in subsidiaries and associates, and interests in joint arrangements, only when it is probable that the temporary difference will reverse in the foreseeable future and it is probable that taxable income will be available against which the deductible temporary difference can be utilized.

Deferred tax assets and deferred tax liabilities are offset only when there is a legally enforceable right to offset income taxes payable and income taxes receivable and either of the following criteria is met:

- The deferred tax assets and the deferred tax liabilities relate to income tax levied on the same taxable entity by the same tax authority
- The deferred tax assets and deferred tax liabilities relate to income tax levied on separate taxable entities by the same tax authority, and the taxable entities intend to settle income taxes receivable and income taxes payable on a net basis or realize the assets and settle the liabilities simultaneously.

The Company has applied consolidated tax reporting.

(20) Equity

(i) Share capital and capital surplus

Capital paid in by shareholders is recognized in share capital or capital surplus.

(ii) Treasury shares

When treasury shares are acquired, the consideration paid, including direct transaction costs, is recognized as contra equity.

(21) Earnings per share

Basic earnings per share are calculated by dividing profit attributable to owners of parent by the weighted average number of common shares on issue during the fiscal year.

Diluted earnings per share are calculated by adjusting for the impact of all dilutive potential shares.

4. Significant Judgements, Accounting Estimates, and Assumptions

In preparing the consolidated financial statements, the Group makes judgments, accounting estimates, and assumptions that affect the application of accounting policies and the amounts of assets, liabilities, income, and expenses. These estimates and assumptions are based on management's best judgments reflecting historical experiences and various factors that are believed to be reasonable under the circumstances. By their nature, however, actual results may differ from the estimates and assumptions.

The estimates and underlying assumptions are reviewed on an ongoing basis. The effects resulting from revisions of these estimates are recognized in the period in which the estimates are revised and in future periods affected by the revision.

Additionally, while performance for the fiscal year ended March 31, 2021 was affected by COVID-19, accounting estimates were made on the assumption that impact on the fiscal year ending March 31, 2022 will be limited.

Judgments made in applying accounting policies that have a significant effect on the consolidated financial statements are mainly as follows:

- Scope of subsidiaries, associates, and joint arrangements (Note "3. Significant Accounting Policies")
- Revenue recognition (Note "3. Significant Accounting Policies")
- Leases (Note "3. Significant Accounting Policies")

Information on accounting estimates and assumptions that may have a significant effect on the consolidated financial statements is as follows:

- Valuation of inventories (Note "3. Significant Accounting Policies" and Note "9. Inventories")
  Inventories are measured at cost. However, if net realizable value is lower than cost at the end of the reporting period, inventories are measured at the net realizable value and the difference between cost is recognized in cost of sales in principle. Furthermore, for idle inventories outside the operating cycle, net realizable value and other items are determined by reflecting future demand and market trends. A significant decline in net realizable value due to worse-than-forecast market environment may cause losses.

- Impairment of non-financial assets (Note "3. Significant Accounting Policies" and Note "16. Impairment of Non-financial Assets")
  The Group tests property, plant and equipment, goodwill, and intangible assets for impairment in accordance with Note "3. Significant Accounting Policies." In determining recoverable amounts in impairment tests, assumptions are made for future cash flows, discount rates, and other items. Although these assumptions are determined based on management's best estimates and judgments, they may be affected by uncertain changes in economic conditions in the future and other factors. If a revision is necessary, it may have a significant effect on the consolidated financial statements.

- Recoverability of deferred tax assets (Note "3. Significant Accounting Policies" and Note "19. Income Taxes")
  Deferred tax assets are recognized only to the extent that it is probable that future taxable income will be available against which the deductible temporary differences can be utilized. In judging the probability of taxable income, the timing and amount of taxable income are estimated based on the business plan. Although such estimates are made based on management's best estimates, they may differ from actual results due to uncertain changes in economic conditions in the future and other factors.

- Valuation and accounting for provisions (Note "3. Significant Accounting Policies" and Note "23. Provisions")
  Provisions are measured based on the best estimates of the expenditures expected to be required to settle the obligations in the future on the reporting date. The expenditures expected to be required to settle the obligations in the future are determined by comprehensively taking into account future possible results. Since assumptions which are used for measuring these provisions may be affected by uncertain changes in economic conditions in the future and other factors, they involve the risk of causing a significant modification on the measurement of provisions prospectively.

- Measurement of defined benefit obligations (Note "3. Significant Accounting Policies" and Note "24. Post-employment Benefits")
  With respect to defined benefit corporate pension plans, the net amount of defined benefit obligations and fair values of plan assets are recognized as liabilities or assets. Defined benefit obligations are determined based on actuarial assumptions which include the estimates of discount, retirement, mortality, and salary increase rates. These assumptions are determined by comprehensively taking into account all available information, such as market trends in interest rate fluctuations. Since these actuarial assumptions may be affected by uncertain changes in the economic environment in the future, social trends, and other factors, they involve the risk of causing a significant modification on the measurement of defined benefit obligations prospectively.

- Matters related to financial instruments (Note "3. Significant Accounting Policies" and Note "38. Financial Instruments")
  The Group uses significant unobservable inputs for measuring the fair values of specified financial instruments. Unobservable inputs may be affected by future uncertain changes in economic conditions and other factors. If a revision is necessary, it may have a significant effect on the consolidated financial statements.

- Contingencies (Note "41. Contingent Liabilities")
  For contingencies, items that may have a significant effect on future businesses are disclosed after taking into account all available evidence as of the reporting date and considering the possibility and financial effect of the contingencies.

5. New IFRS Standards Not Yet Adopted

There are no IFRS standards and interpretations newly established or amended by the approval date of the consolidated financial statements that the Group has not yet adopted and that have a significant effect.

6. Segment Information

(1) Overview of reportable segments

The Group organized under JFE Holdings executes commercial activities through three operating companies—JFE Steel Corporation, JFE Engineering Corporation, and JFE Shoji Trade Corporation—in accordance with the characteristics of their respective businesses.

Consolidated reportable segments, one for each operating company, are characterized by their constituent products and services. There are no business segments which were consolidated for reporting.

Each segment has its own respective products and services. The steel business produces and sells various steel products, processed steel products, and raw materials, and provides transportation and other related businesses such as facility maintenance and construction. The engineering business handles engineering for energy, urban environment, steel structures and industrial machines, recycling, and electricity retailing. The trading business purchases, processes, and distributes steel products, raw materials for steel production, nonferrous metal products, and food, etc.

(2) Information on reportable segments

The accounting treatments for the Group's reportable segments are the same as those described in Note "3. Significant Accounting Policies."

The Group assesses segment performance on the basis of segment profit. Segment profit is profit before tax excluding one-time items of a materially significant value.

Intersegment transactions are based on market prices and the like.

Fiscal year ended March 31, 2020

(million yen)

	Steel	Engineering	Trading	Total	Adjustments (Note)	Amount recorded in consolidated financial statements
Revenue						
Revenue from external customers	2,311,251	498,629	919,836	3,729,717	–	3,729,717
Intersegment revenue	370,098	13,666	164,301	548,065	(548,065)	–
Total	2,681,350	512,295	1,084,137	4,277,783	(548,065)	3,729,717
Segment profit (loss)	(8,783)	23,118	27,016	41,351	(15,998)	25,353
Impairment losses						(238,826)
Profit before tax						(213,473)
Segment assets	3,836,847	465,734	756,141	5,058,723	(412,602)	4,646,120
Other items						
Depreciation and amortization	209,031	13,302	10,244	232,578	(1,000)	231,577
Impairment losses	(233,144)	(356)	(5,325)	(238,826)	–	(238,826)
Finance income	1,437	140	1,354	2,932	(205)	2,727
Finance costs	(11,721)	(697)	(3,492)	(15,910)	636	(15,273)
Share of profit of investments accounted for using equity method	25,518	477	558	26,554	(17,772)	8,782
Investments accounted for using equity method	289,406	11,562	14,909	315,878	20,162	336,040
Capital expenditures	362,741	11,892	17,986	392,621	(1,265)	391,356

Note: Adjustments are as follows:
- Adjustments to segment profit (loss) include corporate profit not allocated to a reportable segment: 48,548 million yen, elimination of dividend income from each reportable segment: (48,365) million yen, and share of profit of investments accounted for using equity method related to Japan Marine United Corporation: (17,995) million yen; elimination of other intersegment transactions: 1,813 million yen. Corporate profit is profit of the Company.
- Adjustments to segment assets: Corporate assets not allocated to a reportable segment: 49,450 million yen and elimination of intersegment receivables and payables, etc.: (462,053) million yen. Corporate assets are assets of the Company.

Fiscal year ended March 31, 2021

(million yen)

	Steel	Engineering	Trading	Total	Adjustments (Note)	Amount recorded in consolidated financial statements
Revenue						
Revenue from external customers	1,938,933	474,908	813,443	3,227,285	–	3,227,285
Intersegment revenue	316,283	10,842	119,066	446,192	(446,192)	–
Total	2,255,216	485,750	932,510	3,673,477	(446,192)	3,227,285
Segment profit (loss)	(65,461)	24,073	20,098	(21,289)	(4,118)	(25,408)
Profit on sales of fixed assets						28,021
Impairment losses						(7,544)
Loss before tax						(4,930)
Segment assets	3,864,262	478,146	717,270	5,059,679	(404,707)	4,654,972
Other items						
Depreciation and amortization	211,645	14,629	11,065	237,340	(987)	236,353
Impairment losses	(6,351)	(59)	(1,133)	(7,544)	–	(7,544)
Finance income	689	171	1,000	1,861	(174)	1,686
Finance costs	(11,880)	(838)	(2,053)	(14,772)	588	(14,184)
Share of profit of investments accounted f or using equity method	16,873	277	671	17,822	(3,582)	14,239
Investments accounted for using equity method	312,476	11,903	17,144	341,525	13,717	355,242
Capital expenditures	308,384	22,358	12,798	343,540	(1,145)	342,395

Note: Adjustments are as follows:
- Adjustments to segment profit (loss) include corporate profit not allocated to a reportable segment: 9,334 million yen, elimination of dividend income from each reportable segment: (8,847) million yen, and share of loss of investments accounted for using equity method related to Japan Marine United Corporation: (4,136) million yen; elimination of other intersegment transactions: (469) million yen. Corporate profit is profit of the Company.
- Adjustments to segment assets: Corporate assets not allocated to a reportable segment: 103,726 million yen and elimination of intersegment receivables and payables, etc.: (508,433) million yen. Corporate assets are assets of the Company.

(3) Information about the categories of products and services

The information is the same as information on reportable segments.

(4) Information about revenue from external customers by geographical areas

The information is provided in Note "27. Revenue."

(5) Information about non-current assets (excluding financial assets, retirement benefit asset, and deferred tax assets) by geographical areas

(million yen)

	As of March 31, 2020	As of March 31, 2021
Japan	1,828,061	1,898,718
Other	160,416	159,636
Total	1,988,478	2,058,355

Note: Non-current assets are based on the geographical location of each company of the Group.

(6) Information about major customers

The information is not provided as there is no external customer that accounts for 10% or more of consolidated revenue of the Group.

7. Cash and Cash Equivalents

The breakdown of cash and cash equivalents is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Cash and bank deposits with maturities of three months or less	86,679	142,404
Deposits paid	25	12
Total	86,704	142,416

Cash and cash equivalents are classified as financial assets measured at amortized cost.

The balance of cash and cash equivalents reported in the consolidated statement of financial position as of March 31, 2020 and 2021 is consistent with that reported in the consolidated statement of cash flows.

8. Trade and Other Receivables

The breakdown of trade and other receivables is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Notes and accounts receivable–trade	639,997	716,893
Other	39,672	37,012
Allowance for doubtful accounts	(1,570)	(2,080)
Total	678,098	751,824

Trade and other receivables are stated as net of allowance for doubtful accounts in the consolidated statement of financial position.

Trade and other receivables are classified as financial assets measured at amortized cost.

9. Inventories

The breakdown of inventories is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Merchandise and finished goods	442,257	378,785
Work in progress	47,419	39,436
Raw materials and supplies	382,925	367,409
Total	872,602	785,632

Inventories recognized as an expense in cost of sales for the fiscal years ended March 31, 2020 and 2021 amounted to 2,800,612 million yen and 2,396,972 million yen, respectively.

10. Other Financial Assets

(1) The breakdown of other financial assets is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Financial assets measured at amortized cost		
Lease receivables (non-current)	25,021	24,135
Other	21,068	35,580
Allowance for doubtful accounts	(552)	(655)
Subtotal	45,537	59,059
Financial assets measured at fair value through profit or loss		
Derivative assets	26,843	28,238
Other	3,874	3,871
Subtotal	30,718	32,109
Equity financial assets measured at fair value through other comprehensive income		
Equity securities	219,561	160,405
Investments in capital	6,494	6,290
Subtotal	226,055	166,696
Total	302,311	257,865
Current assets	6,307	13,359
Non-current assets	296,004	244,505
Total	302,311	257,865

Other financial assets are stated as net of allowance for doubtful accounts in the consolidated statement of financial position.

(2) Equity financial assets measured at fair value through other comprehensive income

The issuers and fair values of major equity financial assets measured at fair value through other comprehensive income are as follows:

(million yen)

Issuers	As of March 31, 2020
TAIYO NIPPON SANSO CORPORATION	17,814
Central Japan Railway Company	14,316
Toyota Motor Corporation	11,193
Isuzu Motors Limited	10,325
Formosa Ha Tinh (Cayman) Limited	9,213

(million yen)

Issuers	As of March 31, 2021
Formosa Ha Tinh (Cayman) Limited	17,218
Central Japan Railway Company	13,680
Dongkuk Steel Mill Co., Ltd.	11,124
Isuzu Motors Limited	10,297
Sumitomo Realty & Development Co., Ltd.	6,210

Equity securities and investments in capital are held mainly for the purpose of maintaining and developing the Group's business. Therefore, they are designated as equity financial assets measured at fair value through other comprehensive income.

In order to promote the efficiency of held assets and to use them effectively, the Group has sold (derecognized) equity financial assets measured at fair value through other comprehensive income.

The fair value and accumulated gains or losses recognized in other comprehensive income at the time of sale are as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Fair value	23,502	128,281
Accumulated gains or losses recognized in other comprehensive income	8,188	38,010

11. Other Assets and Liabilities

The breakdown of other current assets, other non-current assets, other current liabilities, and other non-current liabilities is as follows:

(1) Other current assets and other non-current assets

(million yen)

	As of March 31, 2020	As of March 31, 2021
Construction scaffolding materials	22,676	21,964
Other	100,680	72,012
Total	123,357	93,977
Current assets	108,410	79,430
Non-current assets	14,946	14,547
Total	123,357	93,977

(2) Other current liabilities and other non-current liabilities

(million yen)

	As of March 31, 2020	As of March 31, 2021
Accrued expenses	156,906	153,613
Other	62,035	63,284
Total	218,941	216,897
Current liabilities	210,543	208,510
Non-current liabilities	8,398	8,387
Total	218,941	216,897

JFE GROUP REPORT 2021

12. Property, Plant and Equipment

The movement of carrying amount for property, plant and equipment during the year is as follows:

Fiscal year ended March 31, 2020

(million yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Other	Total
Balance at the beginning of the year	385,098	843,715	49,209	380,524	122,185	54,496	1,835,229
Adjustments due to application of IFRS 16	–	–	–	–	–	(47,819)	(47,819)
Balance at the beginning of the year (modified)	385,098	843,715	49,209	380,524	122,185	6,676	1,787,409
Acquisition	48,308	250,184	19,537	5,569	10,480	2,559	336,639
Sale or disposal	(1,125)	(3,959)	(148)	(1,298)	(2,645)	(3)	(9,181)
Depreciation	(27,040)	(136,832)	(17,559)	(24)	–	(1,877)	(183,334)
Impairment losses	(67,196)	(145,517)	(5,453)	(37)	(10,055)	(76)	(228,336)
Exchange differences on translation of foreign operations, etc.	688	5,758	555	3,925	3,604	22	14,553
Balance at the end of the year	338,734	813,348	46,141	388,658	123,568	7,300	1,717,751

Fiscal year ended March 31, 2021

(million yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Other	Total
Balance at the beginning of the year	338,734	813,348	46,141	388,658	123,568	7,300	1,717,751
Acquisition	38,611	219,469	16,827	1,174	(2,341)	1,872	275,612
Sale or disposal	(642)	(2,477)	(221)	(964)	(1,798)	(13)	(6,118)
Depreciation	(27,346)	(139,298)	(16,487)	(25)	–	(1,894)	(185,051)
Impairment losses	(1,434)	(5,232)	(220)	(526)	(29)	–	(7,442)
Exchange differences on translation of foreign operations, etc.	(3,107)	(16,599)	503	(726)	(1,917)	(600)	(22,447)
Balance at the end of the year	344,815	869,209	46,542	387,590	117,481	6,663	1,772,303

Notes: 1. Depreciation of property, plant and equipment is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.
2. Acquisition of construction in progress represents an increase due to new acquisition, net of transfers to each item of property, plant and equipment.

The cost, accumulated depreciation, accumulated impairment losses, and carrying amount of property, plant and equipment are as follows:

(million yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Other	Total
As of March 31, 2020							
Cost	1,861,064	6,177,132	198,409	412,364	135,450	16,950	8,801,372
Accumulated depreciation and accumulated impairment losses	(1,522,330)	(5,363,784)	(152,268)	(23,706)	(11,882)	(9,649)	(7,083,621)
Carrying amount	338,734	813,348	46,141	388,658	123,568	7,300	1,717,751
As of March 31, 2021							
Cost	1,890,019	6,286,086	202,399	410,263	122,588	17,901	8,929,258
Accumulated depreciation and accumulated impairment losses	(1,545,203)	(5,416,876)	(155,857)	(22,672)	(5,106)	(11,238)	(7,156,954)
Carrying amount	344,815	869,209	46,542	387,590	117,481	6,663	1,772,303

13. Goodwill and Intangible Assets

(1) Movement of goodwill and intangible assets

The movement of carrying amount for goodwill and intangible assets during the year is as follows:

Fiscal year ended March 31, 2020

(million yen)

	Goodwill	Software	Other	Total
Balance at the beginning of the year	4,445	74,052	8,514	87,012
Adjustments due to application of IFRS 16	–	–	(30)	(30)
Balance at the beginning of the year (modified)	4,445	74,052	8,484	86,982
Acquisition	6,209	32,427	1,073	39,711
Sale or disposal	–	(1,475)	(5)	(1,481)
Amortization	–	(20,281)	(355)	(20,636)
Impairment losses	(4,043)	(4,946)	(1,302)	(10,292)
Exchange differences on translation of foreign operations, etc.	(114)	1,276	(146)	1,016
Balance at the end of the year	6,497	81,054	7,747	95,299

Fiscal year ended March 31, 2021

(million yen)

	Goodwill	Software	Other	Total
Balance at the beginning of the year	6,497	81,054	7,747	95,299
Acquisition	–	29,048	414	29,463
Sale or disposal	–	(1,300)	(3)	(1,303)
Amortization	–	(21,866)	(355)	(22,221)
Impairment losses	–	(34)	(61)	(95)
Exchange differences on translation of foreign operations, etc.	(296)	442	(31)	114
Balance at the end of the year	6,200	87,344	7,711	101,256

Note: Amortization of intangible assets is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

The cost, accumulated amortization, accumulated impairment losses, and carrying amount of goodwill and intangible assets are as follows:

(million yen)

	Goodwill	Software	Other	Total
As of March 31, 2020				
Cost	10,540	364,810	23,970	399,321
Accumulated amortization and accumulated impairment losses	(4,043)	(283,756)	(16,222)	(304,022)
Carrying amount	6,497	81,054	7,747	95,299
As of March 31, 2021				
Cost	10,244	389,962	25,051	425,258
Accumulated amortization and accumulated impairment losses	(4,043)	(302,618)	(17,340)	(324,002)
Carrying amount	6,200	87,344	7,711	101,256

(2) Research and development expenses

Research and development expenses recorded in "Cost of sales" and "Selling, general and administrative expenses" for the fiscal years ended March 31, 2020 and 2021 amounted to 38,716 million yen and 36,205 million yen, respectively.

14. Lease Transactions

(1) Lease transactions as a lessee

The Group leases machinery, ships, buildings, and other assets as a lessee. Certain lease arrangements include renewal options, but no significant lease arrangements include escalation clauses. In addition, there are no material restrictions (such as restrictions related to additional borrowings and additional leases) imposed by the lease arrangements.

(i) Disclosure on profit or loss and cash outflow for leases

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Depreciation of right-of-use assets		
Buildings and structures	10,848	11,174
Machinery and vehicles	11,577	11,999
Tools, furniture and fixtures	2,105	2,631
Land	1,155	1,256
Other	948	1,029
Total	26,635	28,090
Interest on lease liabilities	639	583
Expense relating to short-term leases	4,034	4,316
Expense relating to leases of low-value assets	835	769
Income from subleasing right-of-use assets	1,388	1,587
Total cash outflow for leases	48,113	50,597

(ii) Disclosure on the breakdown of the carrying amounts of right-of-use assets

(million yen)

	As of March 31, 2020	As of March 31, 2021
Buildings and structures	32,775	40,711
Machinery and vehicles	52,139	51,824
Tools, furniture and fixtures	3,528	5,554
Land	11,145	11,271
Other	2,732	2,576
Total	102,322	111,938

Right-of-use assets for the fiscal years ended March 31, 2020 and 2021 increased by 20,944 million yen and 36,591 million yen, respectively.

(2) Lease transactions as a lessor

The Group leases buildings and other assets as a lessor and receives security deposits as a risk management strategy.

(i) Income from operating leases

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Lease income	10,698	11,355

(ii) Maturity analysis of non-cancelable operating lease payments

(million yen)

	As of March 31, 2020	As of March 31, 2021
Within one year	1,179	1,238
Later than one year and within two years	976	1,225
Later than two years and within three years	963	1,225
Later than three years and within four years	963	1,159
Later than four years and within five years	896	961
Later than five years	2,658	1,828
Total	7,636	7,638

(iii) Income from finance leases

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Finance income on the net investment in the lease	984	919

(iv) Maturity analysis of lease payments receivable

(million yen)

	As of March 31, 2020	As of March 31, 2021
Within one year	7,565	6,951
Later than one year and within two years	5,622	5,885
Later than two years and within three years	3,749	4,111
Later than three years and within four years	3,364	5,276
Later than four years and within five years	4,832	7,839
Later than five years	16,404	10,389
Total	41,538	40,453
Unearned finance income	5,813	6,407
Net investment in the lease	35,724	34,045

15. Investment Properties

(1) Movement of investment properties

The movement of carrying amount for investment properties is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Balance at the beginning of the year	59,425	58,158
Acquisition	251	728
Reclassification from property, plant and equipment	451	982
Reclassification to property, plant and equipment	(265)	(155)
Depreciation	(971)	(989)
Impairment losses	(4)	(5)
Sale or disposal	(728)	(409)
Balance at the end of the year	58,158	58,310
Cost (balance at the beginning of the year)	132,849	127,821
Accumulated depreciation and accumulated impairment losses (balance at the beginning of the year)	(73,424)	(69,662)
Cost (balance at the end of the year)	127,821	128,205
Accumulated depreciation and accumulated impairment losses (balance at the end of the year)	(69,662)	(69,894)

(2) Fair values

The carrying amount and fair value of investment properties are as follows:

(million yen)

	As of March 31, 2020		As of March 31, 2021	
	Carrying amount	Fair value	Carrying amount	Fair value
Investment properties	58,158	136,545	58,310	137,251

The fair value of investment properties is principally based on the real estate appraisal values provided by independent licensed real estate appraisers.

The fair value hierarchy of investment properties is categorized within Level 3 because unobservable inputs are included.

Fair value hierarchy is described in Note "38. Financial Instruments."

JFE GROUP REPORT 2021

(3) Income and expenses arising from investment properties

Rental income and direct sales expenses arising from investment properties are as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Rental income	10,698	11,355
Direct sales expenses arising from investment properties which generated income	3,223	3,104
Direct sales expenses arising from investment properties which did not generate income	40	20

16. Impairment of Non-financial Assets

When the Group assesses whether there is an indication that non-financial assets may be impaired, in principle, the assets are classified as idle assets, leased assets, assets for various projects and assets for business use, and then those classified assets are grouped by the smallest unit that generates independent cash flows.

Fiscal year ended March 31, 2020
Major impairment losses are as follows:
JFE Steel Corporation, a consolidated subsidiary of the Company engaged in the steel business, faces an unprecedented difficult business environment including a decline in demand for steel primarily in the manufacturing sector caused by the U.S.–China trade friction, soaring material prices due to China's growing crude steel output, and increases in auxiliary and other materials and logistics costs. Over the medium to long term, a decline in demand is anticipated in the Japanese market against the backdrop of the decreasing population. Moreover, overseas markets will become increasingly competitive due to expansion in steel production capacity in emerging nations and an increase in exports from China given a decline in domestic demand. In such a climate, JFE Steel has endeavored to improve its works and manufacturing bases in Japan and strengthen manufacturing capabilities by positioning them as key measures under the Medium-Term Business Plan. However, it is expected that a significant amount of investment must be made to renovate aged facilities over a long period.

In consideration of these structural changes in the environment, JFE Steel strives to focus business resources thoroughly and selectively on products and areas that are competitive with a view to maintaining and increasing its competitive advantage in the global market and aiming to become a streamlined, resilient company. For that purpose, JFE Steel decided to shut down a blast furnace at the East Japan Works which is heavily burdened with fixed costs and implement structural reforms toward establishing an optimal production system in Japan. On the premise of the structural reforms to be implemented at Chiba and Keihin under the East Japan Works, JFE Steel calculated future cash flows of both sites in light of the current difficult business climate. As a result, the recoverable amounts were lower than the carrying amount of business assets owned by the East Japan Works. Therefore, the carrying amount was reduced to the present value of future cash flows of 350,983 million yen (Chiba: 131,151 million yen, Keihin: 219,831 million yen), and the amount of decrease of 232,418 million yen (Chiba: 146,652 million yen, Keihin: 85,766 million yen) was recorded as impairment losses.

Major assets for which impairment losses were recognized are as follows:

(million yen)

Segment	Cash-generating unit	Type	Amount
Steel business	East Japan Works (Chiba)	Machinery and vehicles	90,243
		Buildings and structures	42,813
		Construction in progress and other	13,595
		Total	146,652
	East Japan Works (Keihin)	Machinery and vehicles	55,565
		Buildings and structures	24,260
		Construction in progress and other	5,941
		Total	85,766

The recoverable amount is determined at value in use, and the value in use is determined by discounting future cash flows based on a management-approved five-year-or-less business plan and a subsequent growth rate to the present value at a pre-tax discount rate. Major assumptions used for calculating the value in use include crude steel production, shipments, selling price, iron ore and coking coal prices, future capital expenditures, pre-tax discount rate, and growth rate. The crude steel production, shipments, selling price, iron ore and coking coal prices, future capital expenditures, and other items are estimated based on observable market prices, past trends, and management's forecasts, and reflect the risks specific to the cash-generating unit. The growth rate is determined at 0.0% by taking into account the long-term average growth rate of the market or country to which the cash-generating unit belongs. Moreover, the pre-tax discount rate is determined at 4.6% and 4.3% for Chiba and Keihin under the East Japan Works, respectively, based on the weighted-average cost of capital of the cash-generating unit.

Additionally, due to an economic slowdown caused by COVID-19, a significant decline in demand for steel materials was anticipated in Japan and overseas at the end of the fiscal year ended March 31, 2020. Accordingly, future cash flows were calculated on the assumption that such effect will continue for approximately six months.

Fiscal year ended March 31, 2021
The carrying amount was reduced to the recoverable amount mainly for idle assets, and the reduction was recorded as an impairment loss. Impairment losses in the consolidated statement of profit or loss totaled 7,544 million yen, consisting of 5,232 million yen of machinery and vehicles and 2,311 million yen of buildings and structures. The recoverable amount of the business assets was primarily determined at their expected disposal price.

17. Subsidiaries

Name	Address	Paid-In Capital (Millions of yen)	Main Business Operations	Voting shares (%)	Details of Relationship: Concurrent holding of director position, etc.	Details of Relationship: Business loans	Details of Relationship: Other
(Consolidated subsidiaries)							
[Steel business]							
JFE Steel Corporation*[1, 3]	Chiyoda-ku, Tokyo	239,644	Manufacture and sale of steel products	100.0	Yes	Yes	Conclusion of contract related to business management. Lease of buildings from the company
JFE Bars & Shapes Corporation*[1]	Minato-ku, Tokyo	30,000	Manufacture and sale of shaped steel and rebar products	100.0 (100.0)	–	–	–
JFE Chemical Corporation	Taito-ku, Tokyo	6,000	Manufacture and sale of chemical products	100.0 (100.0)	Yes	–	–
JFE Metal Products & Engineering, Inc.	Minato-ku, Tokyo	5,000	Manufacture, processing, and sale of secondary steel products	97.4 (97.4)	–	–	–
JFE Galvanizing & Coating Co., Ltd.	Shinagawa-ku, Tokyo	5,000	Manufacture, processing, and sale of secondary steel products	100.0 (100.0)	–	–	–
GECOSS Corporation*[2]	Chuo-ku, Tokyo	4,397	Rental and sale of temporary construction materials	62.0 (62.0)	–	–	–
JFE Logistics Corporation	Chiyoda-ku, Tokyo	4,000	Various transportation and warehousing businesses	89.2 (89.2)	–	–	–
JFE Container Co., Ltd.*[2]	Chiyoda-ku, Tokyo	2,365	Various transportation and warehousing businesses	59.6 (59.6)	–	–	–
JFE Civil Engineering & Construction Corporation	Taito-ku, Tokyo	2,300	Contracting for civil engineering and construction works	100.0 (100.0)	Yes	–	–
JFE Mineral Company, Ltd.	Minato-ku, Tokyo	2,000	Manufacture, processing, and sale of mineral products, and manufacture and sale of iron and steel slag and functional materials	100.0 (100.0)	–	–	–
JFE Life Corporation	Taito-ku, Tokyo	2,000	Real estate, insurance agency and various service businesses	100.0 (100.0)	–	Yes	–
JFE Plant Engineering Co., Ltd.	Taito-ku, Tokyo	1,700	Manufacture and sale of machinery and equipment, and contracting for electrical construction, telecommunications construction, equipment management, and construction works	100.0 (100.0)	–	–	–
JFE Systems, Inc. *[2]	Minato-ku, Tokyo	1,390	Development and sale of various computer systems	67.7 (67.7)	–	–	–
Mizushima Ferroalloy Co., Ltd.	Kurashiki, Okayama	1,257	Manufacture and sale of ferroalloy	100.0 (100.0)	–	–	–
JFE Pipe Fitting Mfg. Co., Ltd.	Kishiwada, Osaka	958	Manufacture and sale of steel pipe joints	86.6 (86.6)	–	Yes	–
JFE Kozai Corporation	Chuo-ku, Tokyo	488	Shearing and fusing of steel plates/sheets, and sale of steel materials	100.0 (100.0)	–	Yes	–
JFE Welded Pipe Manufacturing Co., Ltd.	Chuo-ku, Tokyo	450	Manufacture and sales of electric resistance welded steel pipes	100.0 (100.0)	–	Yes	–
JFE Material Co., Ltd.	Imizu, Toyama	450	Manufacture and sale of ferroalloy	100.0 (100.0)	–	Yes	–

Name	Address	Paid-In Capital (Millions of yen)	Main Business Operations	Voting shares (%)	Details of Relationship		
					Concurrent holding of director position, etc.	Business loans	Other
JFE Precisions Co., Ltd.	Higashi-ku, Niigata	450	Manufacture and sale of formed and fabricated materials	100.0 (100.0)	–	Yes	–
JFE Techno-Research Corporation	Chiyoda-ku, Tokyo	100	Material analysis, environmental research, technical information surveys and support for intellectual properties	100.0 (100.0)	–	–	–
JFE East Japan GS Co., Ltd.	Kawasaki-ku, Kawasaki	50	Various service businesses	100.0 (100.0)	–	–	–
JFE Steel Australia Resources Pty. Ltd. *1	Brisbane, Australia	Millions of AUD 460	Investments in coal mines and the iron ore mining business in Australia	100.0 (100.0)	–	–	–
Philippine Sinter Corporation*1	Manila, The Philippines	Millions of PHP 1,881	Manufacture and sale of sintered ore	100.0 (100.0)	–	–	–
PT. JFE Steel Galvanizing Indonesia	Bekasi, Indonesia	Millions of USD 139	Manufacture and sale of cold-rolled and hot-dip zinc galvanized steel products	100.0 (100.0)	–	–	–
JFE Steel Galvanizing (Thailand) Ltd.	Rayong, Thailand	Millions of THB 4,362	Manufacture and sale of hot-dip zinc galvanized steel products	100.0 (100.0)	–	–	–
Thai Coated Steel Sheet Co., Ltd.	Bangkok, Thailand	Millions of THB 2,206	Manufacture and sales of electro-galvanized steel products	81.4 (81.4)	–	–	–
Nova Era Silicon S.A.	Belo Horizonte, Brazil	Millions of BRL 137	Manufacture and sale of ferroalloy	100.0 (100.0)	–	–	–
126 other companies							
[Engineering business]							
JFE Engineering Corporation*1	Chiyoda-ku, Tokyo	10,000	Engineering business	100.0	Yes	Yes	Conclusion of contract related to business management
J&T Recycling Corporation	Tsurumi-ku, Yokohama	650	Total recycling business	64.0 (64.0)	–	–	–
JFE Project One Co., Ltd.	Mihama-ku, Chiba	450	Design, construction, and maintenance of oil refining, petrochemical, and energy-related plants	100.0 (100.0)	–	–	–
Asukasoken Co., Ltd.	Shinagawa-ku, Tokyo	356	Gas pipe burial and gas facility construction works	57.2 (57.2)	–	–	–
JFE Technos Co., Ltd.	Tsurumi-ku, Yokohama	301	Machinery and facility maintenance	100.0 (100.0)	–	–	–
JFE Environmental Service Corporation	Tsurumi-ku, Yokohama	97	Operation, maintenance, and management of waste processing facilities, water treatment facilities, etc.	100.0 (100.0)	–	–	–
Urban Energy Corporation AnyTech	Tsurumi-ku, Yokohama	50	Electricity retailing business	100.0 (100.0)	–	–	–
Standardkessel Baumgarte Holding GmbH	Duisburg, Germany	Thousands of EUR 1,300	Construction and maintenance of waste power plants, biomass power plants, waste heat recovery power plants, etc.	100.0 (100.0)	–	–	–
64 other companies							
[Trading business]							
JFE Shoji Corporation*1, 4	Chiyoda-ku, Tokyo	14,539	Domestic and export/import trade of steel products, raw materials for ironmaking/steelmaking; non-ferrous metal products; chemical products; petroleum products; and various equipment and materials, etc.	100.0	Yes	Yes	Conclusion of contract related to business management
JFE Shoji Steel Construction Materials Corporation	Chiyoda-ku, Tokyo	1,500	Sale of construction material products and equipment and materials for civil engineering; metallic processing business; civil engineering/construction works; and various other works	100.0 (100.0)	–	–	–
JFE Shoji Electronics Corporation	Chiyoda-ku, Tokyo	1,000	Sale of semiconductor products and sale, installation, and maintenance of device assembling and inspection equipment for electronic components, etc.	100.0 (100.0)	–	Yes	–
Kawasho Foods Corporation	Chiyoda-ku, Tokyo	1,000	Domestic and import/export trade of various foods	100.0 (100.0)	–	–	–
JFE Shoji Pipe & Fitting Corporation	Chiyoda-ku, Tokyo	500	Sale of steel pipe and pipe material products	100.0 (100.0)	–	Yes	–
JFE Shoji Electrical Steel Co., Ltd.	Kita-ku, Osaka	400	Processing and sale of electromagnetic steel sheets	100.0 (100.0)	–	–	–
JFE Shoji Kohnan Steel Center Co., Ltd.	Higashinada-ku, kobe	250	Processing and sale of steel sheets	100.0 (100.0)	–	–	–
JFE Shoji Coil Center Corporation	Kanazawa-ku, Yokohama	230	Processing and sale of steel sheets	85.7 (85.7)	–	Yes	–
K&I Tubular Corporation	Chiyoda-ku, Tokyo	50	Export/overseas trade of specialty pipes/tubes	60.0 (60.0)	–	–	–
Zhejiang JFE Shoji Steel Products Co., Ltd.	Pinghu, China	Millions of CNY 181	Processing and sale of steel sheets	97.9 (97.9)	–	–	–
VEST Inc.	Los Angeles, United States	Millions of USD 5	Sale and manufacture of welded steel pipes	100.0 (100.0)	–	–	–
Dongguan JFE Shoji Steel Products Co., Ltd.	Dongguan, China	Millions of CNY 90	Processing and sale of steel sheets	100.0 (100.0)	–	–	–
JFE Shoji Steel America, Inc.	Los Angeles, United States	Millions of USD 6	Processing and sale of steel sheets	100.0 (100.0)	–	–	–
Central Metals (Thailand) Ltd.	Samut Prakan, Thailand	Millions of THB 240	Processing and sale of steel sheets	100.0 (100.0)	–	–	–
JFE Shoji (Hong Kong) Ltd.	Hong Kong, China	Millions of USD 1	Export/import and domestic trade of steel products, chemical products, etc.	100.0 (100.0)	–	–	–
JFE Shoji (Thailand) Ltd.	Bangkok, Thailand	Millions of THB 20	Export/import and domestic trade of steel products, raw materials for ironmaking/steelmaking, various equipment and materials, etc.	100.0 (100.0)	–	–	–
JFE Shoji (Shanghai) Co., Ltd.	Shanghai, China	Millions of CNY 3	Export/import and domestic trade of steel products, raw materials for ironmaking/steelmaking, non-ferrous metal products, chemical products, etc.	100.0 (100.0)	–	–	–
Cogent Power Inc.	Burlington, Canada	Millions of CAD 0	Processing and sale of electromagnetic steel sheets	100.0 (100.0)	–	–	–
JFE Shoji America Holdings Inc.	Los Angeles, United States	Millions of USD 0	Business management, etc. of subsidiaries in the United States	100.0 (100.0)	–	–	–
JFE Shoji America, LLC	Los Angeles, United States	–	Export/import and domestic trade of steel products and raw materials for ironmaking/steelmaking	100.0 (100.0)	–	–	–
Kelly Pipe Co., LLC	San Francisco, United States	–	Sale of steel pipes	100.0 (100.0)	–	–	–
81 other companies							
(Equity-method affiliates, etc.)							
[Steel business]							
Japan-Brazil Niobium Corporation	Chiyoda-ku, Tokyo	37,272	Investment in niobium mining in Brazil	25.0 (25.0)	–	–	–
Setouchi Joint Thermal Power Co., Ltd.	Fukuyama, Hiroshima	5,000	Thermal power generation business	50.0 (50.0)	–	–	–
Shinagawa Refractories Co., Ltd.*2	Chiyoda-ku, Tokyo	3,300	Manufacture and sale of various refractories, and contracting for furnace construction work	34.1 (34.1)	–	–	–
Nippon Chuzo K.K.*2	Kawasaki-ku, Kawasaki	2,627	Manufacture and sale of cast steel products, etc.	34.0 (34.0)	–	–	–
Nippon Chutetsukan K.K. *2	Kuki, Saitama	1,855	Manufacture and sale of cast-iron pipes, etc.	30.0 (30.0)	Yes	–	–
NKK Seamless Steel Pipe K.K.	Kawasaki-ku, Kawasaki	1,595	Manufacture and sale of seamless steel pipes	49.0 (49.0)	Yes	–	–
EXA Corporation	Nishi-ku, Yokohama	1,250	Development and sales of various computer systems	49.0 (49.0)	–	–	–
K.K. JFE Sanso Center	Fukuyama, Hiroshima	90	Manufacture and sale of oxygen gas, nitrogen gas, argon gas, etc.	40.0 (40.0)	–	–	–
Guangzhou JFE Steel Sheet Co., Ltd.	Guangzhou, China	Millions of CNY 3,191	Manufacture and sale of cold-rolled and hot-dip zinc galvanized steel sheets	50.0 (50.0)	–	–	–

JFE GROUP REPORT 2021

Name	Address	Paid-In Capital (Millions of yen)	Main Business Operations	Voting shares (%)	Details of Relationship: Concurrent holding of director position, etc.	Details of Relationship: Business loans	Details of Relationship: Other
Nucor-JFE Steel Mexico, S. Der. L. Dec.V.	Silao, Mexico	Millions of USD 361	Manufacture and sale of hot-dip zinc galvanized steel sheets	50.0 (50.0)	–	–	–
BaoWu JFE Special Steel Co., Ltd.	Shaoguan, China	Millions of CNY 1,372	Manufacture and sale of specialty steel rods	50.0 (50.0)	–	–	–
Thai Cold Rolled Steel Sheet Public Company Limited.	Bangkok, Thailand	Millions of THB 4,816	Manufacture and sale of cold-rolled steel sheets	36.0 (36.0)	–	–	–
California Steel Industries, Inc.	Fontana, United States	Millions of USD 40	Manufacture and sale of steel products	50.0 (50.0)	–	–	–
JSW Steel Ltd.	Mumbai, India	Ten millions of INR 301	Manufacture and sale of steel products	15.0 (15.0)	–	–	–
Inner Mongolia Erdos EJM Manganese Alloys Co., Ltd.	Ordos, China	Millions of CNY 232	Manufacture and sale of ferroalloy	24.5 (24.5)	–	–	–
Bohai NKK Drill Pipe Co., Ltd.	Cangzhou, China	Millions of CNY 129	Processing, manufacture, and sale of drill pipes and drill pipe accessories	28.3 (28.3)	–	–	–
28 other companies							
[Engineering business]							
Iwate Geothermal Power Co., Ltd.	Hachimandaira, Iwate	2,626	Geothermal power generation business	29.9 (29.9)	–	–	–
JP Steel Plantech Co.	Kohoku-ku, Yokohama	1,995	Design, manufacture, and installation of steelmaking machinery, etc.	34.0 (34.0)	–	–	–
9 other companies							
[Trading business]							
Hanwa Kozai Co., Ltd.	Yodogawa-ku, Osaka	1,076	Processing and sale of stainless [steel] products	47.9 (47.9)	–	–	–
MOBY Corporation	Ichikawa, Chiba	211	Processing and sale steel plates for containers	20.0 (20.0)	–	–	–
Ohmi sangyo Co., Ltd.	Taisho-ku, Osaka	100	Processing and sale of steel sheets	35.7 (35.7)	–	–	–
OSAKA KOWAZ Inc.	Taisho-ku, Osaka	60	Processing and sale of steel sheets	30.7 (30.7)	–	–	–
20 other companies*5							
[Other business]							
Japan Marine United	Nishi-ku, Yokohama	57,500	Design, manufacture, sale, installation, repair, and maintenance of ships, naval vessels, and marine structures, etc.	35.0	Yes	–	–

Notes:
1. *1 Falls under category of a specified subsidiary
2. *2 A securities report has been submitted
3. The figures in parentheses of "voting shares" are voting shares that are indirectly held and are included in the percentage of voting rights.
4. *3 Net sales of JFE Steel Corporation account for over 10% of the Group's consolidated revenue.
   Principal information on profits and losses, etc. (JGAAP)
   Net sales ¥1,557,031 million
   Ordinary loss ¥94,209 million
   Net loss ¥33,130 million
   Net assets ¥741,454 million
   Total assets ¥2,875,872 million
5. *4 Net sales of JFE Shoji Corporation account for over 10% of the Group's consolidated revenue.
   Principal information on profits and losses, etc. (JGAAP)
   Net sales ¥1,024,895 million
   Ordinary income ¥12,763 million
   Net income ¥11,653 million
   Net assets ¥130,747 million
   Total assets ¥365,543 million
6. Equity-method affiliates includes joint operations.
7. Changes in affiliate companies
   - Baosteel Special Steel Shaoguan Co., Ltd. changed its corporate name to Baosteel Special Steel Shaoguan Co., LTD. on December 10, 2020.
   - Iwate Geothermal Power Co., Ltd. is listed as an important equity-method affiliate from the consolidated fiscal year under review.
   - JFE Shoji Usuitakenzai Corporation merged with JFE Shoji Steel Construction Materials Corporation on April 1, 2020, with JFE Shoji Steel Construction Materials Corporation as the surviving company.ss
   - JFE Shoji Trade (Hong Kong) Ltd., changed its corporate name to JFE Shoji (Hong Kong) Ltd. on April 1, 2020.
   - JFE Shoji Trade America LLC changed its corporate name to JFE Shoji America LLC on April 1, 2020.
   - JFE Shoji Trade Thailand Ltd. changed its corporate name to JFE Thailand Ltd. on May 5, 2020.
   - VEST Inc. is listed as an important subsidiary from the consolidated fiscal year under review.
   - Mitsui E&S Plant Engineering Inc. became a consolidated subsidiary of JFE Engineering Corporation via the acquisition of shares on April 1, 2021. On the same date,
   - Mitsui E&S Plant Engineering Inc. changed its corporate name to JFE Environment Technology Co., Ltd.
8. *5 The other 20 equity-method affiliates in the trading business include three consolidated subsidiaries and one equity-method affiliate of the steel business.

18. Investments Accounted for Using Equity Method

(1) Material associates

JSW Steel Limited

JSW Steel, located in Mumbai, India, engages primarily in manufacture and sales of steel products.

The condensed consolidated financial statements of JSW Steel are as follows.

For JSW Steel, provisional financial statements are prepared based on December 31 as the reporting date because local legislation imposes restrictions on when certain information becomes available to the Company.

However, in the accompanying notes, the condensed consolidated financial statements of JSW Steel that were already released at the end of each fiscal year are disclosed. Accordingly, financial information as of September 30 is stated in the statement of financial position, and financial information for the first nine months of the reporting period ended December 31 is stated in the statement of profit or loss and the statement of comprehensive income.

(million yen)

	As of March 31, 2020	As of March 31, 2021
Current assets	572,156	426,411
Non-current assets	1,362,946	1,393,517
Total assets	1,935,102	1,819,928
Current liabilities	773,634	576,718
Non-current liabilities	600,415	717,355
Total liabilities	1,374,049	1,294,074
Total equity	561,052	525,854
Equity attributable to owners of parent	568,768	534,047
Non-controlling interests	(7,715)	(8,193)

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Revenue	864,848	767,122
Profit	58,203	53,389
Other comprehensive income	(4,071)	8,859
Comprehensive income	54,132	62,248

An adjustment between the amount of equity attributable to owners of parent in the above condensed consolidated financial statements and the carrying amount of interests in JSW Steel Limited and the fair value of interests in JSW Steel Limited are as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Equity attributable to owners of parent	568,768	534,047
Ownership interest (%)	15.0	15.0
Equity attributable to the Group	85,315	80,107
Consolidation adjustment	1,920	6,408
Carrying amount of interests in JSW Steel Limited	87,235	86,515
Fair value of interests in JSW Steel Limited	77,420	258,175

Dividends received from JSW Steel for the fiscal years ended March 31, 2020 and 2021 were 2,335 million yen and 1,062 million yen, respectively.

JFE GROUP REPORT 2021

(2) Immaterial associates and joint ventures

The carrying amount of investments in immaterial associates and joint ventures is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Associates	114,017	128,887
Joint ventures	134,787	139,840

Financial information on immaterial associates and joint ventures is as follows, which represents the amounts attributable to the Group based on the Group's interest in those associates and joint ventures.

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Associates		
Profit	(9,193)	(45)
Other comprehensive income	4,110	13,750
Comprehensive income	(5,083)	13,705
Joint ventures		
Profit	4,725	4,963
Other comprehensive income	(17)	46
Comprehensive income	4,707	5,009

19. Income Taxes

(1) Deferred tax assets and deferred tax liabilities

The breakdown of deferred tax assets and deferred tax liabilities by major cause of accrual is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Deferred tax assets		
Impairment losses	37,137	36,676
Retirement benefit liability	38,510	36,295
Unused tax loss carryforwards	11,942	13,878
Accrued bonuses	13,454	13,426
Accrued expenses	10,326	9,989
Other	47,431	36,441
Total deferred tax assets	158,803	146,708
Deferred tax liabilities		
Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income	28,921	23,403
Retained earnings of subsidiaries and associates	14,223	18,670
Reserve for tax purpose reduction entry of non-current assets	6,605	6,526
Other	17,846	19,684
Total deferred tax liabilities	67,596	68,285
Net deferred tax assets	91,207	78,422

The breakdown of changes in net deferred tax assets (liabilities) is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Balance at the beginning of the year	33,059	91,207
Adjustments due to application of IFRS 16	558	–
Balance at the beginning of the year (modified)	33,617	91,207
Deferred tax expense	39,747	4,552
Deferred taxes on items of other comprehensive income		
Effective portion of cash flow hedges	19	(1,316)
Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income	13,799	(11,470)
Remeasurements of defined benefit plans	2,070	(5,089)
Other	1,953	538
Balance at the end of the year	91,207	78,422

Deductible temporary differences and unused tax loss carryforwards for which deferred tax assets are not recognized in the consolidated statement of financial position are as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Deductible temporary differences	340,667	347,458
Unused tax loss carryforwards	366,250	414,328

Unrecognized deferred tax assets for the above deductible temporary differences were 104,328 million yen and 106,425 million yen as of March 31, 2020 and 2021, respectively. Unrecognized deferred tax assets for the above unused tax loss carryforwards were 16,243 million yen and 21,709 million yen as of March 31, 2020 and 2021, respectively.

The breakdown by expiration date of unused tax loss carryforwards for which deferred tax assets are not recognized in the consolidated statement of financial position is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Year one	109,540	108,151
Year two to year five	115,379	76,886
Later than five years	140,447	226,774
No specified expiration date	882	2,515
Total	366,250	414,328

Taxable temporary differences arising from investments in subsidiaries and associates for which deferred tax liabilities were not recognized as of March 31, 2020 and 2021 amounted to 50,023 million yen and 62,727 million yen, respectively.

Deferred tax liabilities are not recognized for such temporary differences, where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets of 131,818 million yen and 124,021 million yen were recognized as of March 31, 2020 and 2021, respectively, for taxable entities that incurred net loss in the current or previous period, and whose recoverability of deferred tax assets depends on future taxable income.

In assessing the recoverability of deferred tax assets, the Group considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies.

(2) Income tax expense

The breakdown of income tax expense is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Current tax expense	19,564	18,685
Deferred tax expense	(39,747)	(4,552)
Total	(20,183)	14,133

(3) Reconciliation of effective tax rate

The breakdown by major cause of a difference between the effective statutory tax rate and the burden ratio of corporation tax, etc., after application of tax effect accounting is as follows:

(%)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Effective statutory tax rate	30.0	30.0
(Reconciliation)		
Items permanently not tax-deductible, such as entertainment expenses	(0.6)	(9.9)
Items permanently not taxable, such as dividend income	0.3	6.7
Changes in valuation allowance	(21.8)	(242.7)
Share of profit (loss) of investments accounted for using equity method	1.2	86.6
Retained earnings of subsidiaries and associates	(1.4)	(90.2)
Other	1.8	(67.2)
Burden ratio of corporation tax, etc., after application of tax effect accounting	9.5	(286.6)

20. Trade and Other Payables

The breakdown of trade and other payables is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Notes and accounts payable–trade	477,048	436,211
Accounts payable–other	80,204	60,784
Total	557,252	496,995

Trade and other payables are classified as financial liabilities measured at amortized cost.

21. Bonds Payable, Borrowings, and Lease Liabilities

(1) The breakdown of bonds payable, borrowings, and lease liabilities is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Short-term borrowings (Note 1)	123,505	125,816
Current portion of long-term borrowings (Note 1)	122,846	72,151
Bonds due within one year (Note 2)	–	30,183
Commercial papers	88,999	–
Bonds payable (Note 2)	230,066	259,401
Long-term borrowings (Note 1)	1,097,012	1,159,012
Lease liabilities	151,877	159,573
Total	1,814,308	1,806,139
Current liabilities	376,473	277,027
Non-current liabilities	1,437,835	1,529,112
Total	1,814,308	1,806,139

Bonds payable, borrowings, and lease liabilities are classified as financial liabilities measured at amortized cost.

Bonds payable and borrowings are not subject to financial covenants that have significant effects on the financing activities of the Group.

(Note 1) The weighted average interest rate and repayment date for the balance of borrowings as of March 31, 2021 are as follows:

	(%)	Repayment date
Short-term borrowings	1.30	–
Current portion of long-term borrowings	0.54	–
Long-term borrowings	0.71	April 2, 2022 to March 22, 2078

(Note 2) Terms and conditions of issuance of bonds are summarized as follows:

(million yen)

Company name	Issue	Date of issuance	As of March 31, 2020	As of March 31, 2021	Interest rate (%)	Collateral	Redemption date
The Company	The 17th unsecured bond	June 8, 2011	30,524	30,183	1.326	None	June 8, 2021
The Company	The 21st unsecured bond	March 13, 2014	9,978	9,983	0.804	None	March 13, 2024
The Company	The 22nd unsecured bond	September 19, 2014	19,955	19,965	0.703	None	September 19, 2024
The Company	The 23rd unsecured bond	May 23, 2017	9,980	9,989	0.090	None	May 23, 2022
The Company	The 24th unsecured bond	March 1, 2018	9,972	9,982	0.110	None	March 1, 2023
The Company	The 25th unsecured bond	May 21, 2018	20,168	20,117	0.260	None	May 21, 2025
The Company	The 26th unsecured bond	November 22, 2018	9,966	9,975	0.150	None	November 22, 2023
The Company	The 27th unsecured bond	May 27, 2019	29,899	29,923	0.170	None	May 27, 2024
The Company	The 28th unsecured bond	May 27, 2019	9,959	9,965	0.260	None	May 27, 2026
The Company	The 29th unsecured bond	May 27, 2019	19,909	19,919	0.365	None	May 25, 2029
The Company	The 30th unsecured bond	September 20, 2019	9,959	9,968	0.120	None	September 20, 2024
The Company	The 31st unsecured bond	September 20, 2019	29,886	29,904	0.250	None	September 18, 2026
The Company	The 32nd unsecured bond	September 20, 2019	19,906	19,916	0.320	None	September 20, 2029
The Company	The 33rd unsecured bond	July 14, 2020	–	19,943	0.050	None	July 14, 2023
The Company	The 34th unsecured bond	July 14, 2020	–	29,895	0.250	None	July 14, 2025
The Company	The 35th unsecured bond	July 14, 2020	–	9,950	0.470	None	July 12, 2030
Total	–	–	230,066	289,584	–	–	–

(2) Assets pledged as collateral and corresponding secured obligations

Assets pledged as collateral

(million yen)

	As of March 31, 2020	As of March 31, 2021
Cash and cash equivalents	852	842
Trade and other receivables	10,300	7,921
Property, plant and equipment	12,644	10,783
Right-of-use assets	161	159
Investments accounted for using equity method	2,332	2,307
Other financial assets (non-current)	679	802
Total	26,970	22,815

Note: Industrial foundation's assets of property, plant and equipment as mortgage

(million yen)

	As of March 31, 2020	As of March 31, 2021
Property, plant and equipment	10,351	9,434

JFE GROUP REPORT 2021

In addition, shares of consolidated subsidiaries have been pledged as collateral.

(million yen)

	As of March 31, 2020	As of March 31, 2021
Shares of consolidated subsidiaries (book value posted on the non-consolidated financial statements of the consolidated subsidiaries)	553	649

Corresponding secured obligations

(million yen)

	As of March 31, 2020	As of March 31, 2021
Trade and other payables	164	128
Bonds payable, borrowings, and lease liabilities (current)	960	1,006
Bonds payable, borrowings, and lease liabilities (non-current)	12,427	12,309
Total	13,552	13,444

Note: Those corresponding to the industrial foundation's assets in the above obligations

(million yen)

	As of March 31, 2020	As of March 31, 2021
Bonds payable, borrowings, and lease liabilities (current)	559	559
Bonds payable, borrowings, and lease liabilities (non-current)	5,574	5,014
Total	6,133	5,574

22. Other Financial Liabilities

The breakdown of other financial liabilities is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Financial liabilities measured at amortized cost		
Deposits received	85,377	81,320
Other	14,713	48,218
Subtotal	100,090	129,538
Financial liabilities measured at fair value through profit or loss		
Derivative liabilities	5,621	2,715
Total	105,712	132,253
Current liabilities	89,465	86,836
Non-current liabilities	16,246	45,417
Total	105,712	132,253

23. Provisions

The breakdown and movement of provisions are as follows:
Fiscal year ended March 31, 2021

(million yen)

	Provision for loss on specified business	Other provisions	Total
Balance at the beginning of the year	10,161	28,087	38,248
Increase during the year	604	10,808	11,412
Interest expense incurred over the discount period	144	(0)	143
Decrease due to intended use	(2,729)	(8,431)	(11,160)
Decrease due to reversal	–	(3,078)	(3,078)
Exchange differences on translation of foreign operations, etc.	–	59	59
Balance at the end of the year	8,180	27,444	35,624
Current liabilities	–	11,518	11,518
Non-current liabilities	8,180	15,925	24,105
Total	8,180	27,444	35,624

Provision for loss on specified business

A provision for loss on specified business is provided for possible losses on a certain specific business of industrial waste disposal at an estimated amount of losses to be incurred from the following fiscal year onwards.

These expenses are expected to be paid primarily after one year; however, the timing of the payment is subject to change due to future business plans and other factors.

24. Post-employment Benefits

The Group has adopted mainly retirement lump-sum payment plans, defined benefit pension plans, and defined contribution pension plans. Retirement lump-sum payment plans and defined benefit pension plans are exposed to general investment risk, interest rate risk, inflation risk, and other risks. However, the Group determines that those risks are immaterial.

The defined benefit pension plans are operated by corporate pension funds legally separated from the Group. The corporate pension funds and pension fund trustees are required by laws and regulations to act in the best interests of the plan participants, and are responsible for managing the plan assets in accordance with the designated policies.

(1) Reconciliation of defined benefit obligations and plan assets

The reconciliation of the defined benefit obligations and plan assets to the retirement benefit liability and asset recognized in the consolidated statement of financial position is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Funded defined benefit obligations	197,765	190,721
Plan assets	(125,241)	(133,600)
Subtotal	72,524	57,120
Unfunded defined benefit obligations	55,272	61,906
Total	127,796	119,027
Amounts recognized in the consolidated statement of financial position		
Retirement benefit liability	143,316	141,186
Retirement benefit asset	(15,520)	(22,159)
Net defined benefit liability (asset) recognized in the consolidated statement of financial position	127,796	119,027

(2) Reconciliation of defined benefit obligations

The movement of defined benefit obligations is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Balance at the beginning of the year	254,878	253,037
Current service cost	14,842	15,344
Interest expense	1,502	1,545
Remeasurements		
Actuarial losses arising from changes in demographic assumptions	615	(1,311)
Actuarial losses arising from changes in financial assumptions	(2,215)	(2,240)
Experience adjustments	540	3,808
Past service cost	70	(1,228)
Benefits paid	(18,605)	(16,309)
Exchange differences on translation of foreign operations, etc.	1,408	(19)
Balance at the end of the year	253,037	252,627

The weighted average duration of defined benefit obligations is as follows:

(years)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Weighted average duration	11.0	10.9

(3) Reconciliation of plan assets

The movement of plan assets is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Balance at the beginning of the year	137,259	125,241
Interest income	758	747
Remeasurements		
Return on plan assets (excluding interest income)	(8,055)	17,467
Contribution to the plan by employer	2,201	2,297
Benefits paid	(8,809)	(12,010)
Effects of business combinations and disposals	2,025	–
Exchange differences on translation of foreign operations, etc.	(138)	(143)
Balance at the end of the year	125,241	133,600

The Group expects to contribute 2,221 million yen to its defined benefit plans in the fiscal year ending March 31, 2022.

(4) Major breakdown of plan assets

The breakdown of the total plan assets by major category is as follows:

(million yen)

	As of March 31, 2020			As of March 31, 2021		
	With quoted market price in an active market	With no quoted market price in an active market	Total	With quoted market price in an active market	With no quoted market price in an active market	Total
Equity instruments						
Domestic stocks	47,741	268	48,009	53,241	378	53,620
Foreign stocks	6,017	698	6,715	8,490	1,024	9,515
Debt instruments						
Domestic bonds	16,043	3,003	19,047	13,610	3,685	17,295
Foreign bonds	2,965	2,218	5,184	3,082	2,265	5,347
Cash and deposits	5,185	–	5,185	9,356	–	9,356
Life insurance general accounts	–	39,431	39,431	–	36,759	36,759
Other	–	1,667	1,667	–	1,705	1,705
Total	77,953	47,288	125,241	87,781	45,818	133,600

The Group's management policy for the plan assets is to secure stable returns in the medium and long term for ensuring future payments of defined benefit obligations pursuant to internal regulations. Specifically, the target rate of returns and the asset mix ratio by investment asset class are determined within the acceptable risk range every fiscal year, and the plan assets are managed with the asset mix ratio maintained.

(5) Actuarial assumptions

Major actuarial assumptions are as follows:

(%)

	As of March 31, 2020	As of March 31, 2021
Discount rate	Mainly 0.6	Mainly 0.6
Anticipated rate of salary increase	Mainly 0.9 to 3.0	Mainly 0.8 to 2.8

Note: The sensitivities of defined benefit obligations due to changes in the discount rate as of each fiscal year are as follows. Each of these sensitivities assumes that other variables are held constant; however, they do not always change independently. Negative figures indicate a decrease in defined benefit obligations, while positive figures indicate an increase.
The Group does not expect any significant changes in the anticipated rate of salary increase.

(%)

	Change in assumptions	As of March 31, 2020	As of March 31, 2021
Discount rate	Increase by 0.5%	(12,580)	(11,827)
	Decrease by 0.5%	13,616	12,769

(6) Defined contribution pension plans

Contributions to the defined contribution pension plans are as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Contributions to the defined contribution pension plans	36,203	35,998

The above amounts include contributions to employees' pension insurance based on Japan's Employees' Pension Insurance Act.

25. Equity and Other Equity Items

(1) Share capital

(i) Authorized shares

The number of authorized shares as of April 1, 2019, March 31, 2020, and March 31, 2021 was 2,298,000 thousand common shares.

(ii) Fully paid and issued shares

The movement of the number of issued shares is as follows:

	Number of issued common shares (thousand shares)
As of April 1, 2019	614,438
Increase (decrease)	–
As of March 31, 2020	614,438
Increase (decrease)	–
As of March 31, 2021	614,438

Note: All the shares issued by the Company are non-par value common shares that have no restrictions on the rights.

(2) Treasury shares

The movement of the number of treasury shares is as follows:

	Number of shares (thousand shares)
As of April 1, 2019	38,590
As of March 31, 2020	38,601
As of March 31, 2021	38,646

Note: Treasury shares as of March 31, 2020 and 2021 include the Company shares held in trust accounts for employee stock ownership plans.

(3) Capital surplus and retained earnings

Under the Companies Act of Japan, at least one-half of the proceeds from issuance of shares shall be credited to share capital, while the remainder of the proceeds shall be credited to capital reserves included in capital surplus. In addition, the Companies Act of Japan provides that one-tenth of the dividends of retained earnings shall be appropriated as capital reserves or as retained earnings reserves until their aggregate amount equals one-quarter of share capital.

26. Dividends

(1) Amounts of dividends paid

Fiscal year ended March 31, 2020

Date of resolution	Type of share	Total amount of dividends (million yen)	Dividend per share (yen)	Record date	Effective date
Ordinary General Meeting of Shareholders held on June 21, 2019	Common stock	28,831	50	March 31, 2019	June 24, 2019

Note: The total amount of dividends of 28,831 million yen includes dividends of the Company shares held in trust accounts for employee stock ownership plans of 30 million yen.

Date of resolution	Type of share	Total amount of dividends (million yen)	Dividend per share (yen)	Record date	Effective date
Board of Directors' Meeting held on November 12, 2019	Common stock	11,532	20	September 30, 2019	December 6, 2019

Note: The total amount of dividends of 11,532 million yen includes dividends of the Company shares held in trust accounts for employee stock ownership plans of 11 million yen.

Fiscal year ended March 31, 2021

There is no applicable item.

(2) Of the dividends for which the record date belongs to the fiscal year, those dividends for which the effective date will be after the end of the fiscal year

Fiscal year ended March 31, 2020

There is no applicable item.

Fiscal year ended March 31, 2021

Date of resolution	Type of share	Total amount of dividends (million yen)	Source of funds for dividends	Dividend per share (yen)	Record date	Effective date
Ordinary General Meeting of Shareholders held on June 25, 2021	Common stock	5,765	Retained earnings	10	March 31, 2021	June 28, 2021

Note: The total amount of dividends of 5,765 million yen includes dividends of the Company shares held in trust accounts for employee stock ownership plans of 5 million yen.

27. Revenue

(1) Disaggregation of revenue

Fiscal year ended March 31, 2020

(million yen)

	Steel Business	Engineering Business	Trading Business	Elimination of intersegment revenue	Total
Region					
Japan	1,780,582	473,539	504,159	(231,157)	2,527,123
Other	900,767	38,756	579,977	(316,908)	1,202,594
Total	2,681,350	512,295	1,084,137	(548,065)	3,729,717
Transfer of goods or services					
At a point in time	2,456,287	4,205	1,084,075	(521,463)	3,023,105
Over time	225,062	508,090	62	(26,602)	706,612
Total	2,681,350	512,295	1,084,137	(548,065)	3,729,717

Fiscal year ended March 31, 2021

(million yen)

	Steel Business	Engineering Business	Trading Business	Elimination of intersegment revenue	Total
Region					
Japan	1,500,177	439,083	424,070	(193,350)	2,169,980
Other	755,039	46,667	508,440	(252,842)	1,057,304
Total	2,255,216	485,750	932,510	(446,192)	3,227,285
Transfer of goods or services					
At a point in time	2,050,372	4,046	932,477	(426,091)	2,560,804
Over time	204,844	481,704	32	(20,100)	666,480
Total	2,255,216	485,750	932,510	(446,192)	3,227,285

(2) Contract balances

(million yen)

	As of March 31, 2019	As of March 31, 2020	As of March 31, 2021
Receivables from contracts with customers	718,931	639,997	716,893
Contract assets	124,039	142,075	101,282
Contract liabilities	59,060	44,813	43,038

The amount recognized as receivables that was included in the opening balance of contract assets was 85,824 million yen and 110,985 million yen as of March 31, 2020 and 2021, respectively.

The amount recognized as revenue that was included in the opening balance of contract liabilities was 45,878 million yen and 37,770 million yen as of March 31, 2020 and 2021, respectively.

(3) Remaining performance obligations

(million yen)

	As of March 31, 2020	As of March 31, 2021
Transaction price allocated to performance obligations that are unsatisfied or partially unsatisfied as of the end of the fiscal year	932,447	959,342
Expected timing of revenue recognition		
Within one year	377,370	345,029
Over one year	555,076	614,313

JFE GROUP REPORT 2021

28. Selling, General and Administrative Expenses

The breakdown of selling, general and administrative expenses is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Employee benefit expenses	136,824	133,846
Product shipping-related expenses	92,056	75,387
Provision of allowance for doubtful accounts	120	463
Other	127,991	114,359
Total	356,992	324,057

29. Employee Benefit Expenses

Employee benefit expenses are as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Employee benefit expenses	492,785	480,417

Employee benefit expenses include salaries, bonuses, legal welfare expenses, and retirement benefit expenses, and are recorded in "Cost of sales" and "Selling, general and administrative expenses."

30. Share-based Payment

The Company has instituted a share-based payment plan through which a portion of the compensation of directors (excluding outside directors) and executive officers (excluding non-residents under income tax law) (hereinafter referred to collectively as the "Directors/Officers") of the Company and its operating companies is provided in the form of employee stock ownership plans. The Group's objective is to establish a clear link between compensation and the Group's operating performance and equity value and encourage the sharing of value with shareholders, thereby creating a greater incentive to contribute toward enhancing shareholder value over the medium and long term.

The plan is a compensation plan whereby shares in the Company are acquired through a trust funded by cash contributed by the Company, and the Company's shares and an amount of cash equivalent to the market price of the Company's shares (hereinafter referred to as the "Company's Shares") are provided through the trust to the Directors/Officers, pursuant to the Stock Grant Regulations for Officers established by the Company and its operating companies.

The Company's Shares are granted to the Directors/Officers, in principle, upon their retirement.

Compensation under the plan is granted to the Directors/Officers as consideration for their execution period of duties, provided the Directors/Officers have been in office for at least a month during the period specified as follows (the "Execution Period"):

- Directors of the Company: From the date of the Ordinary General Meeting of Shareholders of the Company for the respective year to the date of the Ordinary General Meeting of Shareholders of the Company for the following year
- Others: From April 1 of the respective year to March 31 of the following year

The Company and its operating companies calculate points equivalent to the performance-linked portion and the service-length portion for each Execution Period and grant them to the Directors/Officers.

The points granted for each Execution Period are accumulated until retirement, and the number of the Company's Shares is calculated by converting the accumulated points as "one point = one share."

Part of the plan that provides the Company's Shares is accounted for an equity-settled share-based payment transaction while part of the plan that provides cash is accounted for a cash-settled share-based payment transaction.

Expenses recognized for the plan as "Selling, general and administrative expenses" in the consolidated statement of profit or loss are as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal ear ended March 31, 2021
Equity-settled	54	13
Cash-settled	(16)	28
Total	37	41

The carrying amount of liabilities for the plan is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Other non-current liabilities	21	44

The number of points granted and the weighted-average fair value of points at the grant date for the equity-settled portion of the plan are as follows:

	Fiscal year ended March 31, 2020	Fiscal ear ended March 31, 2021
Number of points granted (points)	29,880	18,900
Weighted average fair value of points at the grant date (yen)	1,867	743

Note: The fair value of points granted approximates the share price at the grant date, and thus represents the share price at the grant date.

31. Other Income

The breakdown of other income is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal ear ended March 31, 2021
Dividend income		
Equity financial assets measured at fair value through other comprehensive income	9,478	5,492
Rental income	6,765	6,727
Gain on sale of investments in subsidiaries	80	–
Other	14,493	13,562
Total	30,818	25,782

The breakdown of dividend income from equity financial assets measured at fair value through other comprehensive income is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal ear ended March 31, 2021
Financial assets derecognized during the year	650	2,976
Financial assets held as of the reporting date	8,828	2,515

32. Other Expenses

The breakdown of other expenses is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Loss on retirement of fixed assets	20,251	20,760
Other	20,072	22,633
Total	40,323	43,394

33. Profit on Sales of Fixed Assets

Fiscal year ended March 31, 2021

Profit on sales of fixed assets resulted primarily from the sale of land and buildings in Aiko-gun, Kanagawa Prefecture.

34. Finance Income and Finance Costs

(1) Finance income

The breakdown of finance income is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Interest income		
Financial assets measured at amortized cost	2,727	1,686
Total	2,727	1,686

(2) Finance costs

The breakdown of finance costs is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Interest expenses		
Financial liabilities measured at amortized cost	14,325	13,701
Other	161	143
Other	786	339
Total	15,273	14,184

35. Other Comprehensive Income

The amount arising during the year, reclassification adjustments to profit or loss, and tax effects for each component of other comprehensive income are as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Remeasurements of defined benefit plans		
Amount arising during the year	(7,045)	17,109
Before tax effects	(7,045)	17,109
Tax effects	2,070	(5,089)
Remeasurements of defined benefit plans	(4,975)	12,020
Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income		
Amount arising during the year	(62,943)	58,221
Before tax effects	(62,943)	58,221
Tax effects	13,799	(11,470)
Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income	(49,143)	46,751
Exchange differences on translation of foreign operations		
Amount arising during the year	(3,080)	(607)
Reclassification adjustments	–	(1)
Before tax effects	(3,080)	(609)
Tax effects	–	–
Exchange differences on translation of foreign operations	(3,080)	(609)
Effective portion of cash flow hedges		
Amount arising during the year	286	15,966
Reclassification adjustments	(350)	(2,977)
Before tax effects	(63)	12,989
Tax effects	19	(1,316)
Effective portion of cash flow hedges	(44)	11,673
Share of other comprehensive income of investments accounted for using equity method		
Amount arising during the year	(8,659)	13,773
Reclassification adjustments	20	(1,314)
Share of other comprehensive income of investments accounted for using equity method	(8,638)	12,459
Total other comprehensive income	(65,882)	82,295

36. Earnings per Share

(1) Basic earnings per share and diluted earnings per share

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Basic losses per share (yen)	(343.39)	(37.98)
Diluted losses per share (yen)	(343.39)	(37.98)

(2) Basis for calculation of basic earnings per share and diluted earnings per share

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Loss attributable to owners of parent (million yen)	(197,744)	(21,868)
Amount not attributable to common shareholders of parent (million yen)	–	–
Loss used in calculation of basic earnings per share (million yen)	(197,744)	(21,868)
Profit adjustments (million yen)	–	–
Loss used in calculation of diluted earnings per share (million yen)	(197,744)	(21,868)
Weighted average number of common shares used in calculation of basic earnings per share (thousand shares)	575,854	575,829
Impact of dilutive potential common shares		
Share–based payments (thousand shares)	–	–
Weighted average number of common shares used in calculation of diluted earnings per share (thousand shares)	575,854	575,829

Notes: 1. The Company shares held in trust accounts for employee stock ownership plans are included in treasury shares, which are excluded from the calculation of the weighted average number of shares used in the calculation of basic earnings per share. The weighted average number of treasury shares excluded from the calculation of basic earnings per share for the fiscal years ended March 31, 2020 and 2021 is 589,000 and 567,000, respectively.

2. Share-based payments for the fiscal years ended March 31, 2020 and 2021 (118,000 and 107,000 shares, respectively) have a reverse dilution effect and are not included in the calculation of diluted earnings per share for these fiscal years.

37. Supplemental Information to the Consolidated Statement of Cash Flows

Movement of liabilities arising from financing activities

Fiscal year ended March 31, 2020

(million yen)

Liabilities arising from financing activities	Opening balance	Changes from financing cash flows	Non-cash changes: Increase due to new leases	Non-cash changes: Other	Closing balance
Short-term borrowings	135,601	(11,500)	–	(595)	123,505
Current portion of long-term borrowings	103,371	(102,865)	–	122,340	122,846
Commercial papers	83,000	5,999	–	–	88,999
Bonds payable	109,706	120,000	–	360	230,066
Long-term borrowings	1,040,824	181,569	–	(125,380)	1,097,012
Lease liabilities	157,087	(42,603)	36,377	1,016	151,877
Total	1,629,591	150,599	36,377	(2,259)	1,814,308

Note: "Other" in non-cash changes mainly includes the transfer of long-term borrowings due within one year to current portion of long-term borrowings due within one year to current portion of bonds.

Fiscal year ended March 31, 2021

(million yen)

Liabilities arising from financing activities	Opening balance	Changes from financing cash flows	Non-cash changes		Closing balance
			Increase due to new leases	Other	
Short-term borrowings	123,505	3,396	–	(1,084)	125,816
Current portion of long-term borrowings	122,846	(123,234)	–	72,539	72,151
Current portion of bonds	–	–	–	30,183	30,183
Commercial papers	88,999	(88,999)	–	–	–
Bonds payable	230,066	60,000	–	(30,665)	259,401
Long-term borrowings	1,097,012	132,486	–	(70,486)	1,159,012
Lease liabilities	151,877	(44,927)	51,942	681	159,573
Total	1,814,308	(61,279)	51,942	1,168	1,806,139

Note: "Other" in non-cash changes mainly includes the transfer of long-term borrowings due within one year to current portion of long-term borrowings and the transfer of bonds payable due within one year to current portion of bonds.

38. Financial Instruments

(1) Capital management

The Group's capital management principle is to enhance capital efficiency and ensure sound financial conditions in order to achieve sustainable growth and the medium- to long-term improvement of corporate value.

The Group's major indicators for capital management are as follows:

	As of March 31, 2020	As of March 31, 2021
ROE *1	(11.1)%	(1.3)%
D/E ratio *2	96.4%	93.2%
Debt / EBITDA multiple *4	6.7x	8.1 x

Notes: 1. *1 ROE = Profit attributable to owners of parent / Equity attributable to owners of parent
2. *2 D/E ratio = Bonds payable, borrowings, and lease liabilities / Equity attributable to owners of parent
For debt with an equity component*3, a portion of its issue price is deemed to be equity attributable to owners of parent, as assessed by rating agencies.
3. *3 Debt with an equity component (subordinated loans)

(million yen)

Borrowing date	Amount borrowed	Assessment of equity content	Amount deemed to be equity
June 30, 2016	200,000	25%	50,000
March 19, 2018	300,000	25%	75,000

4. *4 Debt / EBITDA multiple = Bonds payable, borrowings, and lease liabilities / EBITDA
EBITDA: Business income + Depreciation and amortization

These indicators are monitored as necessary and appropriate.

The Group is not subject to material capital regulation.

(2) Basic policy on financial risk management

The Group is exposed to financial risks (credit risk, liquidity risk, foreign exchange risk, interest rate risk, and market price fluctuation risk) in the course of business activities. In order to mitigate these risks, the Group conducts risk management under certain policies. The Group uses derivative transactions to avoid or mitigate the risks described later and does not use them for speculative purposes.

(3) Credit risk

(i) Credit risk management

Trade receivables held by the Group are exposed to the credit risks of customers. To manage such risks, each company of the Group conducts regular reassessments of the financial standing of business partners.

The Group does not have excessive concentration of credit risk on any particular counterparty.

(ii) Maximum exposure to credit risk

Other than undrawn loan commitments and guaranteed obligations, the Group's maximum exposure to credit risk is the carrying amount of financial assets less impairment losses in the consolidated statement of financial position.

The maximum exposure to the credit risk of loan commitments and financial guarantee contracts is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Loan commitments	1,456	3,215
Financial guarantee contracts	52,275	53,061

(iii) Movement of allowance for doubtful accounts

(million yen)

	Fiscal year ended March 31, 2020		
		Lifetime expected credit losses	
	Allowance for doubtful accounts measured at an amount equal to 12-month expected credit losses	Allowance for doubtful accounts for trade receivables, contract assets, and lease receivables	Allowance for doubtful accounts for credit-impaired financial assets
Balance at the beginning of the year	81	894	1,089
Increase during the year	46	282	229
Decrease during the year (intended use)	(0)	(2)	(102)
Decrease during the year (reversal)	(58)	(328)	(76)
Other	(6)	52	22
Balance at the end of the year	62	898	1,161

(million yen)

	Fiscal year ended March 31, 2021		
		Lifetime expected credit losses	
	Allowance for doubtful accounts measured at an amount equal to 12-month expected credit losses	Allowance for doubtful accounts for trade receivables, contract assets, and lease receivables	Allowance for doubtful accounts for credit-impaired financial assets
Balance at the beginning of the year	62	898	1,161
Increase during the year	82	270	1,421
Decrease during the year (intended use)	–	(17)	(105)
Decrease during the year (reversal)	(48)	(340)	(652)
Other	0	(0)	3
Balance at the end of the year	96	810	1,828

Note: An increase during the year and decrease during the year (reversal) in allowance for doubtful accounts for trade receivables, contract assets, and lease receivables (lifetime expected credit losses) resulted from an increase and decrease in trade and other receivables mainly due to sale and collection.

(iv) Carrying amounts (before deducting allowance for doubtful accounts) of financial assets and receivables for which allowance for doubtful accounts is provided

(million yen)

	As of March 31, 2020	As of March 31, 2021
Financial assets with allowance for doubtful accounts measured at an amount equal to 12-month expected credit losses	33,649	40,427
Trade receivables, contract assets, and lease receivables	817,203	851,091
Credit-impaired financial assets	1,180	1,840

(v) Analysis of credit risk

Credit risk ratings are almost similar among financial assets with allowance for doubtful accounts measured at an amount equal to 12-month expected credit losses.

Past due information on trade receivables, contract assets, and lease receivables is as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Not past due	800,830	842,435
Past due within 30 days	8,351	5,674
Past due between 30 days and 90 days	3,703	1,356
Past due over 90 days	4,318	1,625
Total	817,203	851,091

JFE GROUP REPORT 2021

(4) Liquidity risk

(i) Liquidity risk management

Liquidity risk is the risk that the Group may become unable to meet its payment obligations on their due date, including for trade payables and borrowings, owing to deterioration in the financing environment and other factors.

The Group raises the necessary funds mainly through bank loans and the issuance of commercial papers and bonds, taking into consideration the stability and cost of funds, while the due dates of those obligations are managed so as to avoid concentration of payments in view of the liquidity risk. In addition, the Group manages the funds of the domestic Group companies intensively and efficiently in an attempt to mitigate the liquidity risk.

The Group is also maintaining sufficient liquidity by setting commitment lines with financial institutions (500,000 million yen at the end of the fiscal year ended March 31, 2021).

(ii) Financial liabilities (including derivative financial instruments) by maturity date

As of March 31, 2020

(million yen)

	Carrying amount	Contractual cash flows	Within one year	Between one year and two years	Between two years and three years	Between three years and four years	Between four years and five years	Over five years
Non-derivative financial liabilities								
Trade and other payables	557,252	557,252	557,252	–	–	–	–	–
Bonds payable and borrowings	1,662,431	1,740,217	368,367	195,499	315,113	92,323	133,332	635,581
Installment payables	4,000	4,018	1,509	1,506	1,002	–	–	–
Lease liabilities	151,877	157,373	41,914	39,226	17,286	11,413	10,745	36,787
Subtotal	2,375,561	2,458,862	969,045	236,232	333,401	103,736	144,077	672,368
Derivative financial liabilities	5,621	(125)	1,590	(319)	(308)	(336)	(386)	(365)
Total	2,381,183	2,458,736	970,635	235,913	333,093	103,399	143,691	672,003

As of March 31, 2021

(million yen)

	Carrying amount	Contractual cash flows	Within one year	Between one year and two years	Between two years and three years	Between three years and four years	Between four years and five years	Over five years
Non—derivative financial liabilities								
Trade and other payables	496,995	496,995	496,995	–	–	–	–	–
Bonds payable and borrowings	1,646,565	1,694,217	271,388	353,890	137,342	145,019	117,459	669,117
Installment payables	37,500	38,048	4,199	3,716	15,991	2,072	12,067	–
Lease liabilities	159,573	162,465	49,484	33,043	21,209	16,668	16,790	25,268
Subtotal	2,340,635	2,391,727	822,068	390,650	174,544	163,760	146,316	694,386
Derivative financial liabilities	2,715	2,104	1,376	291	70	143	221	1
Total	2,343,351	2,393,831	823,445	390,942	174,614	163,903	146,538	694,387

(5) Foreign exchange risk

(i) Foreign exchange risk management

Financial instruments denominated in foreign currencies held by the Group are exposed to foreign exchange rate fluctuation risk. Hedge transactions, including forward exchange contracts, are entered into as necessary for the net balance of foreign currencies received from exports of products, etc., and foreign currencies paid for imports of raw materials, etc., under transactions denominated in the relevant foreign currencies.

(ii) Foreign exchange sensitivity analysis

The financial impact on profit before tax in the case of a 1% appreciation of Japanese yen against foreign currencies for financial instruments held by the Group at the end of each fiscal year is as follows. The analysis is based on the assumption that all other variables are held constant.

The sensitivity does not include the effects of translating financial instruments and the assets and liabilities of foreign operations denominated in the functional currency into the presentation currency.

(million yen)

	Currency	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Impact on profit before tax	U.S. dollar	(496)	(462)

(6) Interest rate risk

(i) Interest rate risk management

Bonds payable and borrowings with floating interest rates held by the Group are exposed to interest rate fluctuation risk. Hedge transactions, including interest rate swaps, are entered into for certain bonds payable and borrowings to cope with interest rate fluctuations and to reduce interest rate payments.

(ii) Interest rate sensitivity analysis

The financial impact on profit before tax in the case of a 1% increase in interest rate for financial liabilities with floating interest rates held by the Group at the end of each fiscal year is as follows. The analysis is based on the assumption that all other variables are held constant.

The sensitivity does not include borrowings with floating interest rates which are converted to fixed rates by derivative transactions, including interest rate swap agreements.

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Impact on profit before tax	(6,783)	(6,435)

(7) Share price fluctuation risk

(i) Share price fluctuation risk management

Equity instruments (stock) held by the Group are exposed to market price fluctuation risk. Most of the equity instruments are equities of the companies with which business relationships are maintained, and the fair values of such equities are regularly monitored.

(ii) Share price fluctuation sensitivity analysis

The financial impact on other comprehensive income (before tax) in the case of a 1% decrease in quoted price for each financial instrument (stock) with an active market held by the Group at the end of each fiscal year is as follows.

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Impact on other comprehensive income (before tax)	(1,694)	(974)

(8) Carrying amounts and fair values of financial instruments

(million yen)

	As of March 31, 2020		As of March 31, 2021	
	Carrying amount	Fair value	Carrying amount	Fair value
Long-term borrowings	1,097,012	1,104,809	1,159,012	1,164,546
Bonds due within one year	–	–	30,183	30,069
Bonds payable	230,066	229,226	259,401	259,748

The fair value of financial assets and financial liabilities measured at amortized cost excluding long-term borrowings, bonds due within one year, and bonds payable are not included as they are close to their carrying amount.

Financial instruments measured at fair value on a recurring basis are also not included as the fair value and the carrying amount are equal.

The fair value of long-term borrowings is determined by discounting the total of principal and interest to present value with the estimated interest rate on a similar new loan.

The fair value of bonds due within one year and bonds payable is based on market prices.

Long-term borrowings, bonds due within one year, and bonds payable are categorized as Level 2 within the fair value hierarchy.

(9) Fair value hierarchy of financial instruments

The fair value hierarchy of financial instruments measured at fair value on a recurring basis after initial recognition is categorized into the following three levels depending on the observability and materiality of inputs used in the measurement.

Level 1: Fair value measured using market prices in active markets for identical assets or liabilities

Level 2: Fair value measured using observable inputs other than those categorized within Level 1, either directly or indirectly

Level 3: Fair value measured using significant unobservable inputs.

When two or more inputs are used for the measurement of fair value, the level of fair value measurement is determined based on the lowest level input that is significant to the entire measurement.

Transfers between levels of the fair value hierarchy are determined at the end of each fiscal year.

There were no transfers between Level 1 and Level 2 for the fiscal years ended March 31, 2020 and 2021.

As of March 31, 2020

(million yen)

	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through profit or loss				
Derivative assets	–	26,843	–	26,843
Other	–	3,874	–	3,874
Equity financial assets measured at fair value through other comprehensive income				
Equity securities	169,472	–	50,089	219,561
Investments	–	–	6,494	6,494
Total	169,472	30,718	56,583	256,774
Financial liabilities				
Financial liabilities measured at fair value through profit or loss				
Derivative liabilities	–	5,621	–	5,621
Total	–	5,621	–	5,621

As of March 31, 2021

	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through profit or loss				
Derivative assets	–	28,238	–	28,238
Other	–	3,871	–	3,871
Equity financial assets measured at fair value through other comprehensive income				
Equity securities	97,475	–	62,929	160,405
Investments	–	–	6,290	6,290
Total	97,475	32,109	69,220	198,805
Financial liabilities				
Financial liabilities measured at fair value through profit or loss				
Derivative liabilities	–	2,715	–	2,715
Total	–	2,715	–	2,715

• Equity securities and investments

Listed equity securities are categorized within Level 1 as their fair value is determined based on the market price.

Unlisted equity securities and investments in capital are categorized within Level 3 as their fair value is determined using the comparable peer company analysis or other appropriate valuation techniques, where one or more significant inputs are not based on observable market data. The major significant unobservable input is a discount for illiquidity. The fair value decreases as a discount for illiquidity due to unlisted nature increases. A 30% illiquidity discount has been applied.

• Derivative assets and derivative liabilities

Derivative transactions, such as forward exchange contracts and interest rate swaps, are categorized within Level 2 as their fair value is determined based on the quoted prices from counterparty financial institutions.

The fair value of financial instruments categorized within Level 3 is determined by each Group company which directly holds the relevant equity securities and other instruments, in accordance with the valuation policy and procedures for fair value measurements established by the Group. The results of fair value measurements are approved by an appropriate responsible person.

The movement of financial instruments measured at fair value on a recurring basis that are categorized within Level 3 for the fiscal years ended March 31, 2020 and 2021 is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Balance at the beginning of the year	64,201	56,583
Other comprehensive income (Note)	(8,229)	10,043
Acquisition	1,722	2,733
Sale	(79)	(68)
Other	(1,031)	(72)
Balance at the end of the year	56,583	69,220

Note: The amount is included in "Net change in fair value of equity instruments designated as measured at fair value through other comprehensive income" in the consolidated statement of comprehensive income.

JFE GROUP REPORT 2021

(10) Derivative transactions and hedging activities

Derivative transactions used by the Group carry risks of market price fluctuations in the future, including that of currencies, interest rates, etc. The Group uses derivatives that are only based on actual demand, such as export and import transactions, and bonds payable and borrowings. Accordingly, these risks are limited within the scope of loss of opportunity gains. Furthermore, as the Group only conducts derivative transactions primarily with financial institutions with high credit ratings, the risk of failure to perform contracts due to bankruptcy of the counterparty, etc., is considered to be close to non-existent. The Company has established the internal rule on derivative transactions, and conducts transactions related to derivatives pursuant to the rule. On each actual transaction, the Company conducts a transaction upon authority by the Corporate Officer for Finance pursuant to the rule stated above. Balances, market prices, and losses/gains on valuation of derivatives are to be reported to the management council regularly. The consolidated subsidiaries also conduct derivative transactions pursuant to the respective internal rules.

If the risk management objective for a hedging relationship is altered, the application of hedge accounting is discontinued.

(i) Fair value hedges

The Group uses interest rate swaps primarily to hedge the fluctuation risk of the fair value of bonds payable and borrowings, and designates those interest rate swaps as fair value hedges.

The amount recognized in profit or loss for the hedge ineffectiveness portion and the portion excluded from the assessment of hedge effectiveness was immaterial for the fiscal years ended March 31, 2020 and 2021.

(ii) Cash flow hedges

The Group uses forward exchange contracts and interest rate swaps primarily to hedge the fluctuation risk of the cash flows associated with foreign exchange fluctuations in foreign currency-denominated transactions and interest rate fluctuations in borrowings, and designates such derivative transactions as cash flow hedges.

The amount recognized in profit or loss for the hedge ineffectiveness portion and the portion excluded from the assessment of hedge effectiveness was immaterial for the fiscal years ended March 31, 2020 and 2021.

(iii) Fair value of hedging instruments to which hedge accounting is applied

(million yen)

	As of March 31, 2020		As of March 31, 2021	
	Assets	Liabilities	Assets	Liabilities
Fair value hedges				
Interest rate swap transactions	1,035	–	355	–
Option contracts	15,265	–	9,702	–
Subtotal	16,301	–	10,058	–
Cash flow hedges				
Forward exchange transactions	516	1,198	2,944	318
Interest rate swap transactions	–	1,341	389	850
Cross-currency interest rate swap transactions	9,348	2,965	9,535	802
Commodity futures transactions	215	43	5,088	–
Subtotal	10,081	5,549	17,958	1,971
Total	26,382	5,549	28,016	1,971

The fair value of the hedging instrument as an asset is recognized in "Other financial assets (current assets)" and "Other financial assets (non-current assets)" in the consolidated statement of financial position. The fair value of the hedging instrument as a liability is recognized in "Other financial liabilities (current liabilities)" and "Other financial liabilities (non-current liabilities)" in the consolidated statement of financial position.

(iv) Notional amount and average price of hedging instruments to which hedge accounting is applied

The notional amount of hedging instruments to which hedge accounting is applied

(million yen)

	As of March 31, 2020		As of March 31, 2021	
	Within one year	Over one year	Within one year	Over one year
Fair value hedges				
Interest rate swap transactions	20,000	50,000	30,000	20,000
Option contracts	–	27,265	–	27,265
Cash flow hedges				
Forward exchange transactions	99,028	7,366	119,626	3,121
Interest rate swap transactions	12,993	123,734	11,987	117,749
Cross-currency interest rate swap transactions	22,868	89,626	7,727	81,899
Commodity futures transactions	6,066	–	23,908	–

The average forward exchange rate of major currencies under forward exchange transactions and the average paid interest rate under interest rate swap transactions and cross-currency interest rate swap transactions are as follows:

	As of March 31, 2020	As of March 31, 2021
Cash flow hedges		
Forward exchange transactions		
U.S. dollar	109.02 yen	107.75 yen
Euro	124.09 yen	123.55 yen
Interest rate swap transactions		
Receive floating / pay fixed	0.29%	0.25%
Cross-currency interest rate swap transactions		
U.S. dollar	101.88 yen	100.94 yen
Receive floating / pay fixed	0.28%	0.38%

(v) Carrying amount of hedged items in fair value hedges and accumulated amount of fair value hedge adjustments

As of March 31, 2020

(million yen)

	Line item of the consolidated statement of financial position	Carrying amount		Including accumulated amount of fair value hedge adjustments	
		Assets	Liabilities	Assets	Liabilities
Interest rate swap transactions	Bonds payable, borrowings, and lease liabilities	–	71,035	–	1,035
Option contracts	Other financial assets	9,213	–	(18,052)	–

As of March 31, 2021

(million yen)

	Line item of the consolidated statement of financial position	Carrying amount		Including accumulated amount of fair value hedge adjustments	
		Assets	Liabilities	Assets	Liabilities
Interest rate swap transactions	Bonds payable, borrowings, and lease liabilities	–	50,355	–	355
Option contracts	Other financial assets	17,218	–	(10,047)	–

(vi) Other components of equity and gains or losses on hedging instruments of cash flow hedges

Fiscal year ended March 31, 2020

(million yen)

	Forward exchange transactions	Interest rate swap transactions	Cross-currency interest rate swap transactions	Commodity futures transactions	Commodity collar transactions	Total
Balance at the beginning of the year	58	(1,424)	(386)	–	(2)	(1,755)
Hedging gains or losses recognized in other comprehensive income	(104)	331	48	(73)	(1)	200
Reclassification adjustments to profit (Note)	162	154	(562)	–	–	(245)
Reclassification amount to cost of non-financial assets	(118)	–	–	43	3	(71)
Balance at the end of the year	(2)	(938)	(900)	(30)	–	(1,871)

Fiscal year ended March 31, 2021

(million yen)

	Forward exchange transactions	Interest rate swap transactions	Cross-currency interest rate swap transactions	Commodity futures transactions	Commodity collar transactions	Total
Balance at the beginning of the year	(2)	(938)	(900)	(30)	–	(1,871)
Hedging gains or losses recognized in other comprehensive income	2,429	226	2,499	8,602	–	13,757
Reclassification adjustments to profit (Note)	(647)	118	(1,555)	–	–	(2,084)
Reclassification amount to cost of n on-financial assets	(619)	–	–	(7,251)	–	(7,871)
Balance at the end of the year	1,160	(592)	42	1,319	–	1,930

Note: Major line items for reclassification adjustments in the consolidated statement of profit or loss for the fiscal year ended March 31, 2020 are "Other expenses" for forward exchange transactions and "Finance costs" for interest rate swap transactions and cross-currency interest rate swap transactions.

Major line items for reclassification adjustments in the consolidated statement of profit or loss for the fiscal year ended March 31, 2021 are "Other income" for forward exchange transactions and "Finance costs" for interest rate swap transactions and cross-currency interest rate swap transactions.

(11) Transfer of financial assets

As of March 31, 2020 and 2021, trade receivables transferred without satisfying conditions for derecognition of financial assets of 6,241 million yen and 6,150 million yen were recognized in "Trade and other receivables," respectively, and the amounts received due to the transfer of 6,241 million yen and 6,150 million yen were recognized in "Bonds payable, borrowings, and lease liabilities," respectively.

With regard to these trade and other receivables, the Group will assume the payment obligations in case the drawer of the notes or the debtor fails to make payment. For this reason, it has been determined that the Group holds almost all of the risks and rewards related to ownership of the transferred assets.

39. Related Parties

Compensation for key management personnel is as follows:

(million yen)

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Compensation and bonuses	1,523	1,452
Share-based payment	41	24
Post-employment benefits	3	–
Total	1,569	1,476

40. Commitments

Commitments for the acquisition of assets after the reporting date are as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Acquisition of property, plant and equipment	239,716	209,761

41. Contingent Liabilities

(1) Guarantees of obligations

Guarantees for borrowings from financial institutions to companies other than subsidiaries are as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Joint ventures	15,146	18,274
Associates	938	900
Other	26,869	23,673
Total	42,953	42,848

In addition to the above, guarantees of obligations that may arise in the future for associates are as follows:

(million yen)

	As of March 31, 2020	As of March 31, 2021
Guarantee limit for associates	9,322	10,213

(2) Litigation, etc.

There is no applicable item.

42. Subsequent Events

There is no applicable item.

JFE GROUP REPORT 2021

Other

(Significant lawsuits, etc.)
There is no applicable item.

(Quarterly information for the fiscal year ended March 31, 2021)

(Cumulative period)	Three months ended June 30, 2020	Six months ended September 30, 2020	Nine months ended December 31, 2020	Fiscal year ended March 31, 2021
Revenue (million yen)	743,900	1,492,294	2,318,467	3,227,285
Loss before taxes (million yen)	(50,440)	(120,788)	(70,655)	(4,930)
Loss attributable to owners of parent (million yen)	(39,197)	(105,712)	(69,677)	(21,868)
Basic losses per share (million yen)	(68.07)	(183.58)	(121.00)	(37.98)

(Accounting period)	Three months ended June 30, 2020	Three months ended September 30, 2020	Three months ended December 31, 2020	Three months ended March 31, 2021
Basic earnings (losses) per share (yen)	(68.07)	(115.51)	62.58	83.03

EY
Building a better working world

Ernst & Young ShinNihon LLC
Hibiya Mitsui Tower, Tokyo Midtown Hibiya
1-1-2 Yuraku-cho, Chiyoda-ku
Tokyo 100-0006, Japan

Tel: +81 3 3503 1100
Fax: +81 3 3503 1197
www.eyjapan.jp

Independent Auditor's Report

The Board of Directors
JFE Holdings, Inc.

Opinion

We have audited the accompanying consolidated financial statements of JFE Holdings, Inc. and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at March 31, 2021, and the consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended, and notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at March 31, 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of the audit of the consolidated financial statements as a whole, and in forming the auditor's opinion thereon, and we do not provide a separate opinion on these matters.

EY
Building a better working world

Valuation of non-financial assets in the Steel Business segment	
Description of Key Audit Matter	Auditor's Response
JFE Steel Corporation, a consolidated subsidiary in the Steel Business segment, recognized property, plant and equipment of 1,192,220 million yen. In the event the Company determines that any indications of impairment exist on an asset or cash-generating unit related to non-financial assets as of the end of each reporting period, the Company measures the recoverable amount of the cash-generating unit at the higher of its fair value less costs of disposal or its value in use. Furthermore, the Company reduces the carrying amount of the asset to its recoverable amount, if the carrying amount exceeds the recoverable amount. In the Steel Business, the Company supplies various industries with steel products with sales volumes and selling prices highly affected by supply and demand conditions in domestic and overseas markets, especially the Asian steel market. The prices of key raw materials such as iron ore and coking coal are highly volatile, due to global market dynamics including crude steel production in China, as well as possible natural disasters or accidents in sourcing countries. Moreover, the Company's projected cost reduction or sales promotion may not be achieved due to potential delay of a facility launch or unexpected changes in demand for steel products, while the Company executes significant capital investments. In order to determine whether indications of impairment exist on non-financial assets, the Company needs to consider not only its past performance results, but also multiple factors such as the current business environment, analysis of financial impact due to temporary factors such as large-scale refurbishment of manufacturing facilities, crude steel production, shipment volume, selling prices, iron ore and coking coal prices. Given that these are subject to significant uncertainty and require management's judgement, we determined the Company's judgement regarding indications of impairment on non-financial assets to be a key audit matter.	We performed following audit procedures to assess the appropriateness of the Company's judgement regarding indications of impairment on non-financial assets of JFE Steel Corporation, among others. In order to assess the effectiveness of the estimation process by the management, we compared business plans in the past years with actual results. In addition, we reviewed relevant documents and materials including analysis of actual results of executed capital investments. In order to understand the business environment and analysis of financial impact due to temporary factors, such as large-scale refurbishment of a manufacturing facility, we discussed with the management and examined the management response by reviewing relevant documents and materials, and by comparing it with available external data. In order to examine whether any significant changes that could decrease the recoverable amount of the assets are expected to occur, we performed following procedures. · We discussed crude steel production and shipment volume with the management and examined the management response by reviewing relevant documents and materials, and by comparing it with available external data. · We inquired of the management regarding metal spreads (selling prices of steel products minus costs of key raw materials) and compared the management response with historical market data in the past years. · We inquired of the management regarding analysis of expecting effects from planned or capital investments in progress. In addition, we examined the management response by reviewing relevant documents and materials.

EY
Building a better working world

Valuation of deferred tax assets	
Description of Key Audit Matter	Auditor's Response
As described in Note 19, "Income Taxes" to the consolidated financial statements, the Company recognized deferred tax assets of 146,708 million yen as of March 31, 2021, which includes 13,878 million yen with respect to its unused tax loss carryforwards. In addition to deductible temporary differences, the deferred tax assets pertaining to the unused tax loss carry forward, mainly comprised of those from JFE Steel Corporation, were recognized to the extent that it is probable that future taxable income will be available. The valuation of deferred tax assets is primarily based on the estimate of future taxable income by the management. The estimate of future taxable income is based on the business plan including significant assumptions such as crude steel production, shipment volume, selling prices, iron ore and coking coal prices, and cost reductions. They are affected by the management judgement involving uncertainties such as changes in the market conditions caused by domestic and overseas demand trends, and volatile prices of iron ore and coking coal. Therefore, we determined this to be a key audit matter.	We performed following audit procedures to assess the valuation of deferred tax assets, among others. We recalculated the balance of temporary differences and evaluated its consistency with relevant documents and materials, by involving our tax specialists from our network firm. In addition, we examined the temporary differences reversal and expiration schedule by evaluating its consistency with relevant documents and materials, and by also performing recalculations. With regard to temporary differences of depreciable assets, which were subject to impairment in the previous year, we evaluated the consistency with the calculation results for tax depreciation. In order to assess the management's estimate of future taxable income, we obtained an understanding of policies and procedures for the design and approval of the business plan, which is basis of future taxable income. Furthermore, we evaluated operating effectiveness of the controls. We discussed with the management significant assumptions used in the business plan such as crude steel production, shipment volume, selling prices, iron ore and coking coal prices, and cost reductions. We then reviewed relevant documents and materials, as well as comparing these significant assumptions with market trends and available external data. In order to evaluate the management's assessment of estimation uncertainties in the business plan, we compared business plans in the past years with actual results, as well as considering the current business environment.

Responsibilities of Management, the Corporate Auditor and the Board of Corporate Auditors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

EY
Building a better working world

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern and disclosing, as required by IFRSs, matters related to going concern.

The Corporate Auditor and the Board of Corporate Auditors are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
- Consider internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances for our risk assessments, while the purpose of the audit of the consolidated financial statements is not expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation in accordance with IFRSs.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Corporate Auditor and the Board of Corporate Auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Corporate Auditor and the Board of Corporate Auditors with a statement that we have complied with the ethical requirements regarding independence that are relevant to our audit of the consolidated financial statements in Japan, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

EY
Building a better working world

From the matters communicated with the Corporate Auditor and the Board of Corporate Auditors, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan

Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

Convenience Translation

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 2021 are presented solely for convenience. Our audit also included the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 3 to the consolidated financial statements.

Ernst & Young ShinNihon LLC
Tokyo, Japan

June 25, 2021

Yusuke Nakamura
Designated Engagement Partner
Certified Public Accountant

Yoshihiro Shibata
Designated Engagement Partner
Certified Public Accountant

Tetsuya Yoshida
Designated Engagement Partner
Certified Public Accountant

Keiichi Wakimoto
Designated Engagement Partner
Certified Public Accountant

A member firm of Ernst & Young Global Limited

JFE Holdings, Inc.

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

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

JFE GROUP REPORT

JFE GROUP CSR REPORT