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JFE Group

**Financial Results for Third Quarter of
Fiscal Year 2023 ending March 31, 2024**

JFE Holdings, Inc.

February 6, 2024



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This presentation material is for the purpose of publicizing the status of our company's financial results for the third quarter of FY2023. It is not a disclosure material under the Financial Instruments and Exchange Act and does not guarantee the accuracy or completeness of the information. It does not constitute a solicitation to invest in securities in Japan, the United States or any other countries. The forecasts presented are based on information received at the time of the briefing and include uncertainties. Therefore, please refrain from making investment decisions based solely on this document. Our company shall not be liable for any damages arising as a result of the use of this document.



Financial Highlights

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- Amid the challenging business environment of sluggish export markets and persistently high raw material prices, **the business profit in Apr–Dec of FY2023, excluding inventory valuation etc., increased by 130.9 billion yen from the same period of the previous year** due to improvements in domestic sales prices and the effects of structural reforms to reduce fixed costs.
- For fiscal 2023, as previously forecast, we expect **business profit of 290.0 billion yen and annual dividend of 100 yen (year-end dividend of 50 yen)**.

Results for 3Q of FY2023

Business Profit in Apr-Dec of FY2023

¥244.9bn. (Increased by ¥13.9bn. year-on-year)

[Excluding Inventory
Valuation etc.]

¥246.9bn. (Increased by ¥130.9bn. year-on-year)

Forecast of FY2023

Business Profit ¥290.0bn. (As previous announced)

[Excluding Inventory
Valuation etc.]

¥295.0bn. (Increased by ¥5bn. from previous forecast)

Steel business profit per ton : 10,000yen/t (As previous announced)

Crude Steel Production (Standalone) : approx. 23.80Mt (As previous announced)

Dividend 100yen (Year-end dividend 50yen)

**Consolidated Results for
Third Quarter of Fiscal Year 2023
(April 1 to December 31, 2023)**

Financial Results for Third Quarter of Fiscal Year 2023



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➤ **Business profit in Apr-Dec of FY2023 was ¥244.9bn.**

(increased by ¥13.9bn. year-on-year)

* Excluding inventory valuation, increased by ¥130.9bn. year-on-year.

(billion yen)	FY2022 Actual		FY2023 Actual		Change Apr-Dec
	Oct-Dec	Apr-Dec	Oct-Dec	Apr-Dec	
Revenue	1,344.2	3,908.5	1,289.1	3,865.7	(42.8)
Business Profit [Excluding Inventory Valuation etc.]	43.1 [44.1]	231.0 [116.0]	80.6 [81.6]	244.9 [246.9]	13.9 [130.9]
Finance Income/Costs	(4.2)	(10.9)	(5.2)	(14.2)	(3.3)
Segment Profit	38.8	220.0	75.3	230.7	10.7
Exceptional Items	(6.2)	(6.2)	(4.3)	(4.3)	1.9
Profit before Tax	32.5	213.8	70.9	226.3	12.5
Tax Expense and Profit (Loss) Attributable to Non-Controlling Interests	(11.8)	(69.8)	(18.1)	(63.4)	6.4
Profit Attributable to Owners of Parent	20.6	143.9	52.8	162.9	19.0

Business profit is profit before tax excluding financial income and one-time items of a materially significant value.

Segment profit is profit including financial income in business profit.

Inventory Valuation etc. is inventory valuation, carry over and foreign exchange valuation in steel business. Copyright © 2024 JFE Holdings, Inc. All Rights Reserved.



Financial Results for Third Quarter of Fiscal Year 2023 (by Segment)

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(billion yen)	FY2022 Actual		FY2023 Actual		Change
	Oct-Dec	Apr-Dec	Oct-Dec	Apr-Dec	Apr-Dec
Steel Business	986.9	2,905.9	915.6	2,781.4	(124.5)
Engineering Business	130.9	349.9	136.3	384.8	34.9
Trading Business	383.6	1,133.8	368.1	1,110.2	(23.6)
Adjustments	(157.2)	(481.1)	(130.9)	(410.7)	70.4
Revenue	1,344.2	3,908.5	1,289.1	3,865.7	(42.8)
Business Profit (A)	43.1	231.0	80.6	244.9	13.9
Finance Income/Costs (B)	(4.2)	(10.9)	(5.2)	(14.2)	(3.3)
Steel Business	21.8	170.0	48.2	171.0	1.0
Engineering Business	1.7	(2.1)	7.7	16.5	18.6
Trading Business	15.1	55.7	11.7	38.5	(17.2)
Adjustments	0.1	(3.5)	7.7	4.6	8.1
Segment Profit (A+B)	38.8	220.0	75.3	230.7	10.7

¥1.0bn. Increase in JFE Steel's Segment Profit (FY2022 Apr-Dec vs. FY2023 Apr-Dec)

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	Unit	FY2022 Apr-Dec	FY2023 Apr-Dec
Crude Steel (Standalone)	Mt	18.12	17.78
Shipment (Standalone)	Mt	16.11	15.73
Average Sales Price (Standalone)	000 yen/t	133.2	130.3
Exchange Rate	¥/\$	135.7	142.9

	JFE Steel	FY2022 Apr-Dec	FY2023 Apr-Dec	(billion yen) Change
Segment Profit		170.0	171.0	1.0
Excluding Inventory Valuation etc.		55.0	173.0	118.0

1. Cost**+41.0**

- Structural reforms effect+10.0
- Disappearance of blast furnace refurbishment impact+11.0
- Operational improvement etc. + 20.0

2. Volume and Mix**(4.0)**

- Crude steel production 18.12Mt⇒17.78Mt

3. Sales and Raw materials**+130.0**

- Improved spreads due continued sales price improvement efforts

4. Inventory valuation**(117.0)**

- Inventory valuation-95.0 (+97.0→+2.0)
- Carry over -4.0 (+1.0→-3.0)
- Foreign exchange valuation -8.0 (+17.0→+9.0)
- One-time structural reform costs-10.0(+0→-10.0)

5. Others**(49.0)**

- Foreign exchange effects on trade -12.0
- Depreciation cost -11.0

Financial Forecasts for Fiscal Year 2023 (April 1, 2023, to March 31, 2024)

Financial Forecast for Fiscal Year 2023

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- **Full-year business profit is expected to be ¥290.0bn.**
(as previous forecast, increased by ¥54.2bn. year-on-year)
- **Full-year profit attributable to owners of parent is expected to be ¥190.0bn.**
(as previous forecast, increased by ¥27.4bn. year-on-year)

(billion yen)	FY2022 Actual	FY2023 Forecast (Previous)	FY2023 Forecast(Updated)			Change FY2022→ FY2023 (Updated)	Change Previous →Updated
	Full Year	Full Year	1H Actual (Apr-Sep)	2H Forecast (Oct-Mar)	Full Year	Full Year	Full Year
Revenue	5,268.7	5,360.0	2,576.5	2,653.5	5,230.0	(38.7)	(130.0)
Business Profit [Excluding Inventory Valuation etc.]	235.8 [162.8]	290.0 [290.0]	164.3 [165.3]	125.7 [129.7]	290.0 [295.0]	54.2 [132.2]	0 [5.0]
Finance Income/Costs	(14.8)	(20.0)	(8.9)	(11.1)	(20.0)	(5.2)	0
Segment Profit	221.0	270.0	155.3	114.7	270.0	49.0	0
Exceptional Items	(10.7)	–	–	(4.3)	(4.3)	6.4	(4.3)
Profit before Tax	210.2	270.0	155.3	110.4	265.7	55.5	(4.3)
Tax Expense and Profit (Loss) Attributable to Non-Controlling Interests	(47.6)	(80.0)	(45.2)	(30.5)	(75.7)	(28.1)	4.3
Profit Attributable to Owners of Parent	162.6	190.0	110.0	80.0	190.0	27.4	0

Business profit is profit before tax excluding financial income and one-time items of a materially significant value.
Inventory valuation etc. is inventory valuation, carry over and foreign exchange valuation in steel business.
Segment profit is profit including financial income in business profit.



Financial Forecast for Fiscal Year 2023 (by Segment)

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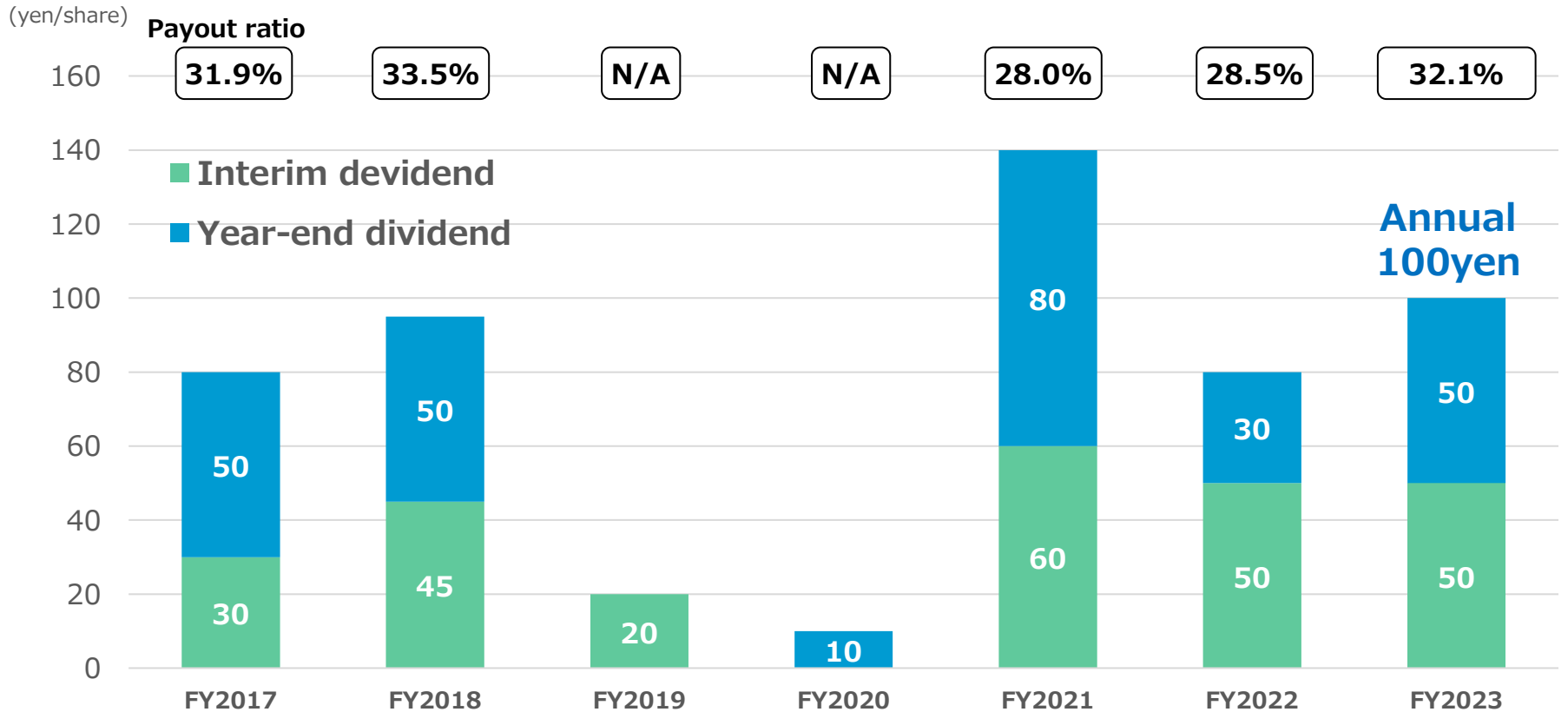
(billion yen)		FY2022 Actual	FY2023 Forecast (Previous)	FY2023 Forecast(Updated)			Change FY2022→ FY2023 (Updated)	Change Previous →Updated
				1H Actual (Apr-Sep)	2H Forecast (Oct-Mar)	Full Year		
		Full Year	Full Year			Full Year	Full Year	
	Steel Business	3,881.1	3,800.0	1,865.8	1,894.2	3,760.0	(121.1)	(40.0)
	Engineering Business	512.5	550.0	248.4	301.6	550.0	37.5	0
	Trading Business	1,514.1	1,580.0	742.0	758.0	1,500.0	(14.1)	(80.0)
	Adjustments	(638.9)	(570.0)	(279.7)	(300.3)	(580.0)	58.9	(10.0)
	Revenue	5,268.7	5,360.0	2,576.5	2,653.5	5,230.0	(38.7)	(130.0)
	Business Profit (A)	235.8	290.0	164.3	125.7	290.0	54.2	0
	Finance Income/Costs (B)	(14.8)	(20.0)	(8.9)	(11.1)	(20.0)	(5.2)	0
	Steel Business	146.8	200.0	122.8	77.2	200.0	53.2	0
	Engineering Business	13.4	25.0	8.7	16.3	25.0	11.6	0
	Trading Business	65.1	48.0	26.8	21.2	48.0	(17.1)	0
	Adjustments	(4.3)	(3.0)	(3.1)	0.1	(3.0)	1.3	0
	Segment Profit (A+B)	221.0	270.0	155.3	114.7	270.0	49.0	0



Dividend

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➤ JFE Holdings has decided to propose at its general meeting of shareholders **a year-end dividend of 50 yen per share**, which would bring the annual dividend of 100 yen per share.



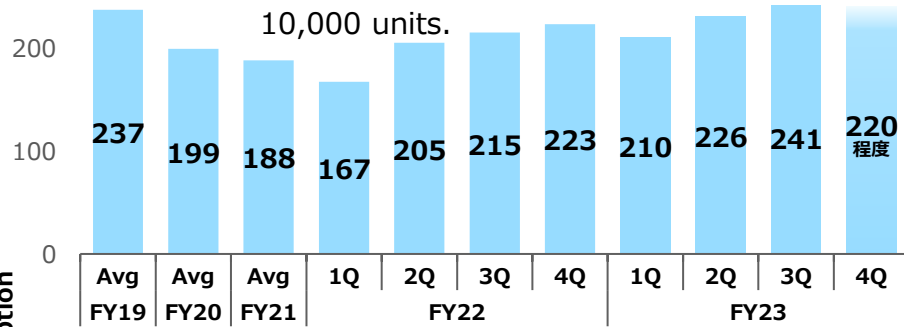
JFE Steel

Financial Forecast for Fiscal Year 2023

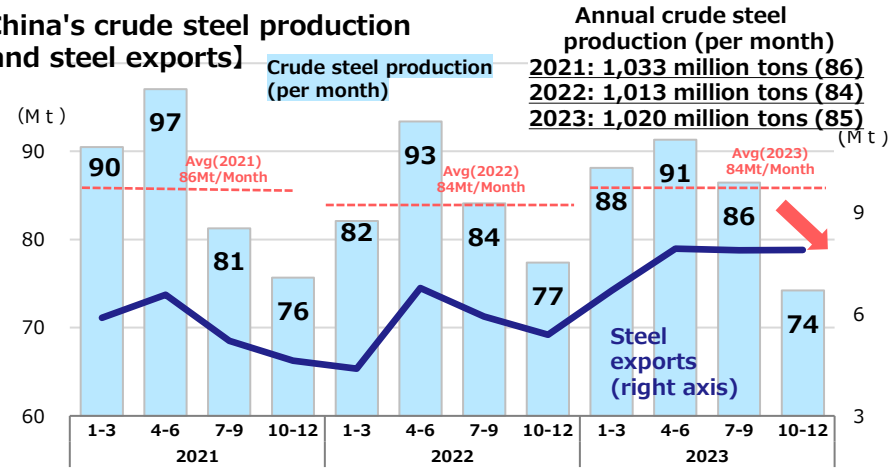
Business environment (Demand for steel)

- Domestic : **The level of activity in the automotive sector is improving.** On the other hand, demand continues to be postponed, particularly in the civil engineering and construction sectors, due to labor shortages and the impact of soaring materials prices.
- Overseas: China's domestic demand continued to slump in 2023, while steel exports were on the rise. Looking ahead, the Chinese steel market is expected to recover due to the effects of crude steel production cuts and economic stimulus measures.

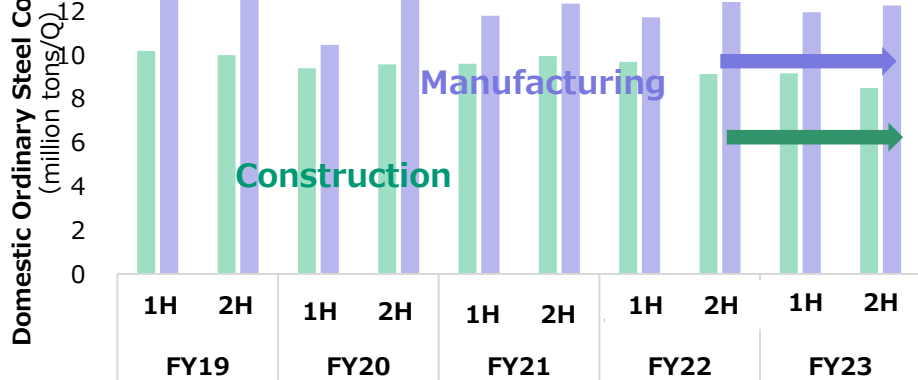
[Outlook for Domestic Auto Production]



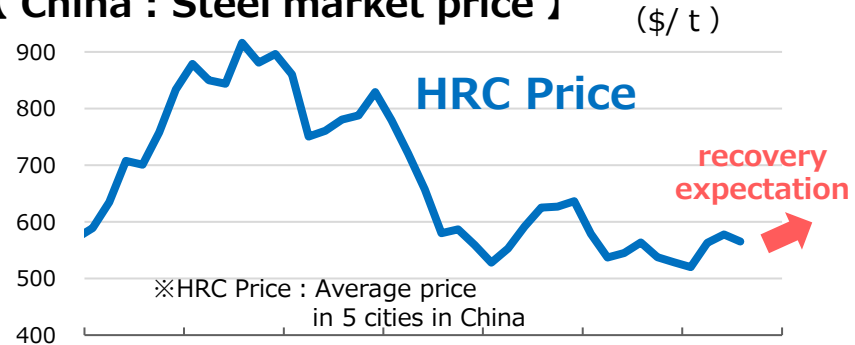
[China's crude steel production and steel exports]



[Outlook for Domestic Ordinary Steel Consumption](quarter basis)



[China : Steel market price]



Source: Ministry of Economy, Trade and Industry, "Outlook for Steel Consumption" 26 Dec. 2023. (FY2023, 1H and after is estimated results)

Financial Forecast for Fiscal Year 2023



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	Unit	FY2022					FY2023(updated)					FY2023 Previous Forecast
		1H	3Q		2H	Full Year	1H	3Q		2H	Full Year	
			4Q					4Q				
Revenue	billion yen	1,918.9	986.9	975.3	1,962.2	3,881.1	1,865.8	915.6	978.6	1,894.2	3,760.0	3,800.0
Segment Profit	billion yen	148.2	21.8	(23.2)	(1.4)	146.8	122.8	48.2	29.0	77.2	200.0	200.0
Excluding Inventory Valuation etc.*	billion yen	32.2	22.8	18.8	41.6	73.8	123.8	49.2	32.0	81.2	205.0	200.0
Crude Steel (Standalone)	Mt	12.64	5.48	5.97	11.45	24.10	12.16	5.62	Approx. 6.00	Approx. 11.60	Approx. 23.80	Approx. 23.80
Crude Steel (Consolidated)	Mt	13.37	5.81	6.29	12.11	25.48	12.85	5.95	Approx. 6.30	Approx. 12.30	Approx. 25.10	
Shipment (Standalone)	Mt	10.86	5.25	5.64	10.88	21.74	10.65	5.08	Approx. 5.40	Approx. 10.50	Approx. 21.10	
Export Ratio on Value Basis (Standalone)	%	46.7	41.0	43.6	42.2	44.5	44.2	41.6	Approx. 42	Approx. 42	Approx. 43	
Average Sales Price (Standalone)	000 yen/t	131.6	136.3	124.0	129.9	130.8	129.3	132.5	Approx. 132	Approx. 132	Approx. 131	
Exchange Rate	¥/\$	131.6	144.0	133.2	138.6	135.1	139.9	148.7	Approx. 144	Approx. 146	Approx. 143	Approx. 145
Exchange Rate (End of Term)	¥/\$	144.8	132.7	133.5	133.5	133.5	149.6	141.8	Approx. 145	Approx. 145	Approx. 145	Approx. 150

No change in JFE Steel's Segment Profit (FY2023 (Previous Forecast) vs. FY2023(Updated Forecast))

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JFE Steel	FY2023 Previous Forecast	FY2023 Updated Forecast	(billion yen) Change
Segment Profit	200.0	200.0	0.0
Excluding Inventory Valuation etc.	200.0	205.0	5.0

1. Cost**±0****2. Volume
and Mix****±0**

- Crude Steel Production
approx.23.80Mt⇒approx.23.80Mt

**3. Sales and
Raw materials****±0****4. Inventory
valuation****(5.0)**

- Inventory valuation+0.0 (+2.0→+2.0)
- Carry over +0.0 (+3.0→+3.0)
- Foreign exchange valuation -5.0 (+15.0→+10.0)
- One-time structural reform costs +0.0(-20.0→-20.0)

5. Others**+5.0**

- Group companies+4.0
- Foreign exchange effects on trade +4.0

¥53.2bn. Increase in JFE Steel's Segment Profit (FY2022 (Actual) vs. FY2023 (Forecast))

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(billion yen)

JFE Steel	FY2022 Actual	FY2023 Forecast	Change
Segment Profit	146.8	200.0	53.2
Excluding Inventory Valuation etc.	73.8	205.0	131.2

1. Cost**+68.0**

- Structural reforms effect +20.0
- Operational improvement +25.0
- Disappearance of blast furnace refurbishment impact +13.0
- Disappearance of production reduction impact +10.0

2. Volume and Mix**+2.0**

- Crude Steel Production 24.10Mt⇒approx. 23.80Mt

3. Sales and Raw materials**+120.0**

- Improved spreads due continued sales price improvement efforts

4. Inventory valuation**(78.0)**

- Inventory valuation -77.0 (+79.0→+2.0)
- Carry over +26.0 (-23.0→+3.0)
- Foreign exchange valuation -7.0 (+17.0→+10.0)
- One-time structural reform costs -20.0(+0.0→-20.0)

5. Others**(58.8)**

- Foreign exchange effects on trade -20.0
- Depreciation cost -10.0

¥45.6bn. Decrease in JFE Steel's Segment Profit (FY2023.1H vs. FY2023.2H)

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JFE Steel	FY2023 Forecast			Change (billion yen)
	1H Actual	2H Forecast	Full Year	
Segment Profit	122.8	77.2	200.0	(45.6)
Excluding Inventory Valuation etc.	123.8	81.2	205.0	(42.6)

- | | | |
|-----------------------------------|---------------|---|
| 1. Cost | + 28.0 | <ul style="list-style-type: none"> • Structural reforms effect + 20.0 • Operational improvement + 8.0 |
| 2. Volume and Mix | (3.0) | <ul style="list-style-type: none"> • Crude Steel Production 12.16Mt⇒approx. 11.60Mt |
| 3. Sales and Raw materials | (50.0) | <ul style="list-style-type: none"> • Deterioration due to the slowdown in overseas market conditions |
| 4. Inventory valuation | (3.0) | <ul style="list-style-type: none"> • Inventory valuation ±0.0 (+1.0→+1.0) • Carry over +37.0 (-17.0→+20.0) • Foreign exchange valuation -20.0 (+15.0→-5.0) • one-time structural reform costs -20.0(+0.0→-20.0) |
| 5. Others | (17.6) | <ul style="list-style-type: none"> • Foreign exchange effects on trade -8.0 etc. |

JFE Engineering

Financial Forecast for Fiscal Year 2023



Financial Forecast for Fiscal Year 2023

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■ Current Business Environment/Overview of Financial Status

Annual segment profit is expected to be **¥25.0 billion**. (As previous forecast)

<Year-on-year>

- Orders: Expect to increase in the field of **“Waste to Resource”** and **“Carbon neutral”**.
- Segment profit: Expect to increase due to increased sales by the progress of ordered projects and price reflecting the impact of soaring prices of materials and equipment.

■ Financial Forecast

(billion yen)	FY2022 Actual		FY2023 Forecast		Change		FY2023 Forecast (Previous)	
	2H	Full Year	2H	Full Year	2H	Full Year	2H	Full Year
	Orders	278.9	564.9	310.3	580.0	31.4	15.1	310.3
Revenue	293.5	512.5	301.6	550.0	8.1	37.5	301.6	550.0
Segment Profit	17.3	13.4	16.3	25.0	(1.0)	11.6	16.3	25.0

JFE Shoji

Financial Forecast for Fiscal Year 2023

Financial Forecast for Fiscal Year 2023



Current Business Environment/Overview of Financial Status

Annual segment profit is expected to be **¥48.0 billion**. (As previous forecast)

<Year-on-year>

- Despite the recovery in automobile production, **profit is expected to decline** due to the slow recovery of the Chinese economy and **the narrowing of domestic and international spreads, particularly in North America**.

(Down ¥17.1 bn. from the previous year and up ¥8.0 bn. from the mid-term plan.)

Financial Forecast

(billion yen)	FY2022 Actual		FY2023 Forecast (Updated)		Change FY2022 →FY2023 (Updated forecast)		FY2023 Forecast (Previous)	
	2H	Full Year	2H	Full Year	2H	Full Year	2H	Full Year
Revenue	763.9	1,514.1	758.0	1,500.0	(5.9)	(14.1)	837.9	1,580.0
Segment Profit	24.5	65.1	21.1	48.0	(3.4)	(17.1)	21.1	48.0

Outlook for Fiscal Year 2024



[Steel Business] FY2024 Outlook

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Business environment Demand for steel products in Japan and overseas is expected to be on par with the current fiscal year.

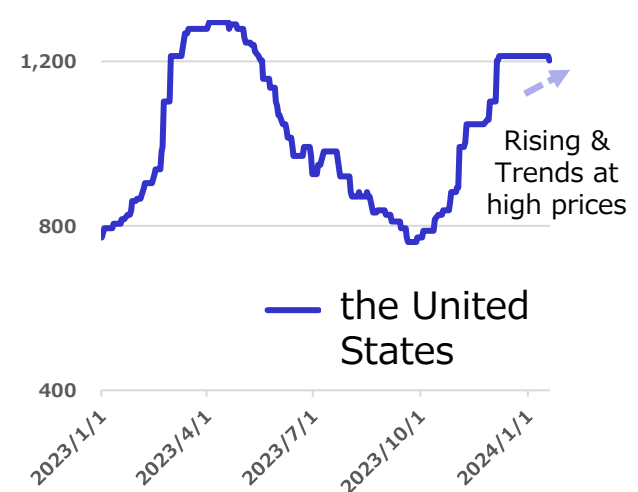
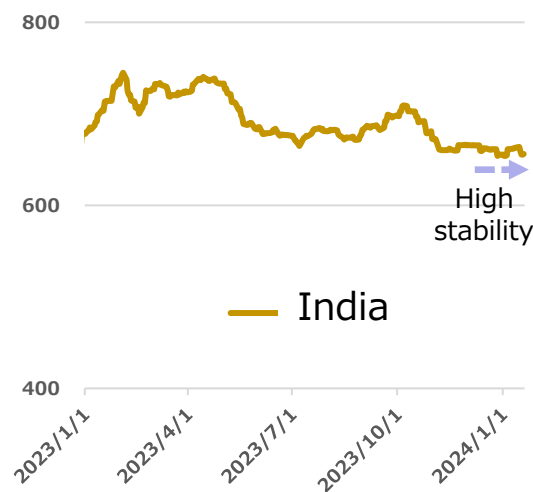
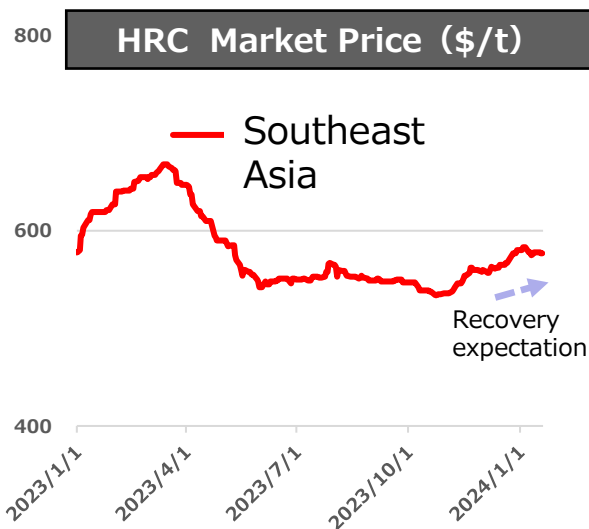
- **The domestic economy is expected to grow moderately.**

The automobile sector remains strong.

Attention should be paid to the impact of labor shortages, soaring materials prices, and fiscal 2024 problems in the logistics and construction industries.

- **Modest global growth (Trends in protectionism and local production for local consumption by region)**

Southeast Asia hopes to recover from slack supply and demand and weak market conditions caused by an increase in Chinese exports. In India, domestic demand remains strong, while in the United States, the steel market remains high despite uncertainty over monetary policy.





[Steel Business] FY2024 Outlook

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Initiatives Promote a shift from quantity to quality to improve profitability.

- **Continuation of sales price improvement activities**
Pursuing sustainable price levels in order to meet cost increases in logistics and labor costs, etc.
- **Expanding sales of high-value-added products (aiming to achieve 50% of the medium-term plan)**
Enhancement of electrical steel sheet facilities in the Kurashiki area (scheduled to start operation in the first half of FY2024)
Double current production capacity about top-grade non-oriented electrical steel sheets used in the main engine motors of electric vehicles.
Large and heavy steel plate "J-TerraPlate™" for wind power generation (Completion of equipment expansion in the second half of FY2023)
Expanding sales including overseas projects.
- **Growth of overseas business (capturing strong high-profit markets)**
India: JSW Steel (Crude steel capacity expansion current 28Mt to 37Mt planned for March 2025)
North America: Joint venture with Nucor (CSI, NJSM)
- **Expanding the solution business**
Aiming to contribute 3 times more profit in FY2024 than in FY2020.
(FY2023 is expected to more than double FY 2020.)
- **Realization of structural reform effects**
The structural reform effect (reduction of fixed costs) is expected to be 45 billion yen/year (up 25 billion yen from FY2023).
The land in Ogimachi, Keihin area, is scheduled to be sold in December 2024.
(Gain on sale +45 billion yen (planned))

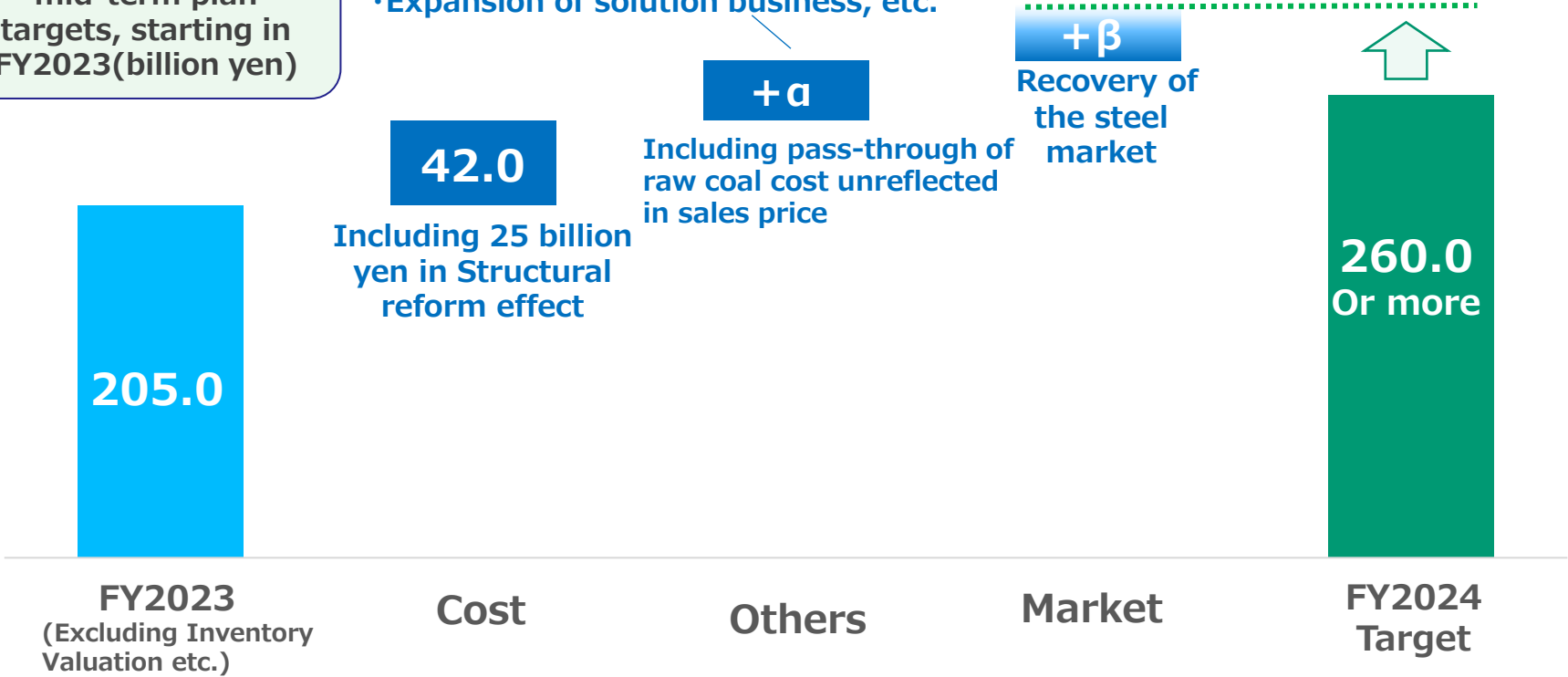


[Steel Business] Paths toward achieving the Seventh Medium-Term Plan

- In FY2023, segment profit excluding Inventory Valuation etc. in the steel business is expected to be **205.0 billion yen.**
- In FY2024, due to steadily implementing various measures, including structural reforms, sales price improvements, and an increase in the ratio of high-value-added products, **we aim to achieve 260 billion yen or more.**

Initiatives to achieve mid-term plan targets, starting in FY2023(billion yen)

- Product-mix enhancements (Electrical steel sheet etc.)
- Improvements in sales prices by pursuing sustainable price levels
- Growth of overseas business
- Expansion of solution business, etc.



[Engineering, Trading] Outlook for Fiscal Year 2024



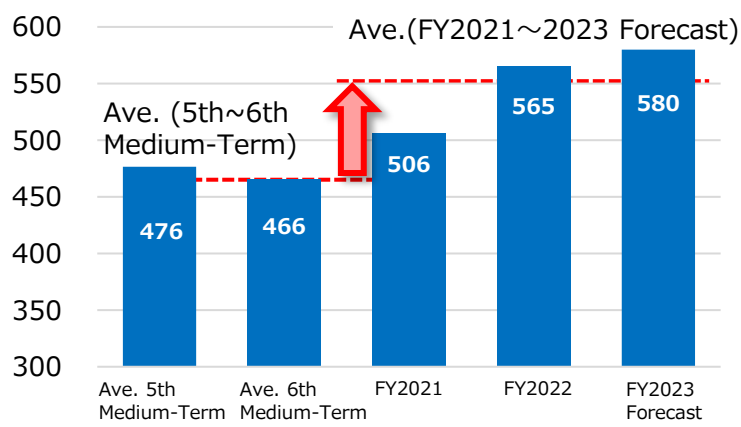
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■ JFE Engineering Segment Profit Target (7th Medium-Term) : ¥35bn.

The company aims to increase orders and profits by **continuous launching of new businesses in the “Waste to Resource” and “Carbon Neutral” sector.**

- Japan's first **offshore wind monopile foundation manufacturing plant** in Kasaoka is scheduled to start operation in April 2024. As the only monopile manufacturer in Japan with an annual production capacity of 80 ~ 100 kt, it will continue to show its advantage.
- The company's first **overseas “Waste to Energy Project” (Bakunin PJ, VN)** is scheduled to start in 2024. We will continue to establish similar PJs and expand this business.
- One of the largest **plastic recycling facility** in the Tokyo metropolitan area is under construction in the coastal area of Kawasaki. Some facilities are scheduled to start operation in advance from October 2024.

[Orders (billion yen)]

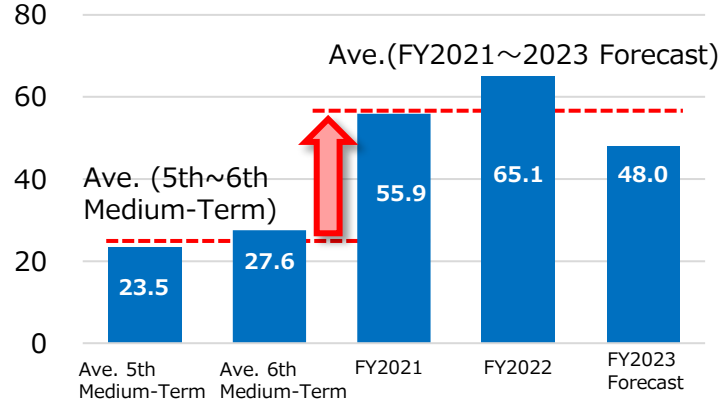


■ JFE Shoji Segment Profit Target (7th Medium-Term) : ¥40bn.

The company **aims to achieve ¥50bn. in segment profit in FY2024, exceeding the medium-term target,** by a balanced profit from **trading and business operations** in Japan and overseas.

- **Expanding the scope of trading:** Building supply chains for offshore wind power businesses. Expanding handling products by other suppliers outside the JFE Group.
- **Expansion of revenue through business operations:**
 - We will expand and stabilize earnings in the four-pillar regions* by expanding our processing and sales business of electrical and automotive steel sheets.
 - *four-pillar regions : JP, US, CN, ASEAN
 - Increase overseas business revenues by the recovery of the North American steel market and by the contribution of revenues from CEMCO (US steel frame manufacturing company acquired in 2022).

[Ordinary profit/Segment profit (billion yen)]



Topics

JFE Steel Launches Website Introducing Solution Business

Released on Jan. 26th, 2024

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- We provide **technology and know-how that we have accumulated through manufacturing steel products** not only to the steel industry but to a wide range of manufacturing customers as solution business.
- 6 solutions* are introduced such as **“Smart maintenance technology for electric substation facilities”**. Promoting the contribution of solution business to the segment profit.

*In the English version of the website.

Solution Business

Advanced monitoring of electric power systems such as electrical substations

Smart maintenance technology for electric substation facilities

Our partial discharge analysis technology constantly monitors various power receiving and distribution facilities to detect signs of failure.

Controlling water in powder such as ore

Technology to prevent the slurring of bulk materials

This technology prevents the slurring of ores, etc. that tend to go into a slurry state due to moisture adhesion, by adding chemicals to modify their properties.

Data Science

Temperature measurement technology that is less affected by emissivity variations

This instrument reduces measurement errors due to emissivity variations, which have plagued the measurement using conventional radiation thermometers.

Metal oxide film deposition for next-generation solar cells

Electron transport layer deposition technology for organic solar cells

The electron transport layer deposition, which previously took several hours, can now be done in a matter of seconds, reducing deposition cost as well.

Negative electrode material for lithium-ion batteries (LiB)

Technology for suppressing negative electrode material swelling during charge and discharge (JFE Chemical Corporation)

Suppresses the negative electrode swelling during charge and discharge, greatly improving the cycle characteristics of LiB.

Visualize compressed air or gas leaks in piping and flanges

Gas Leak Viewer “MK-750ST” (JFE Advantech Co., Ltd.)

The device detects a gas leak in piping, etc., and indicates the leak location on the camera image with a superimposed sound pressure map.



DX Report

JFE

- We have published 「DX report 2023」 to describe JFE's initiatives for DX. Visit our company website.

***English version is coming soon.**

<URL : <https://www.jfe-holdings.co.jp/en/investor/library/dxreport/index.html>>



Table of Contents

1. On the publication of the DX REPORT 2023

~Creating new value by promoting DX strategy~

2. JFE Group's Efforts to Solve Social Issues

- Collaboration among group companies and creation of synergy effect in O&M field of offshore wind-power generation business
- Providing solution technology cultivated through the operation of steel mills
- Contributing to eliminating the issue of logistics in 2024 through Logistics DX

3. Initiatives of each operating company

Steel Business

Development of coke oven digital twin and robotics, etc.

Engineering business

Challenge to fully autonomous operation of waste treatment plants, etc.

Trading business

Noncontact and nondestructive inspection by drone mounted radar, etc.

4. Security management

Digital governance, cybersecurity, etc.



Appendix(1) Profit/Loss Analysis



Main Financial Data

JFE
JAAP
IFRS

	FY15	FY16	FY17	FY18		FY18	FY19	FY20	FY21	FY22	FY23 Forecast
(bn. yen, times)					(bn. yen, times)						
Ordinary Income	64.2	84.7	216.3	221.1	Business profit	232.0	37.8	-12.9	416.4	235.8	290.0
EBITDA	254.4	279.9	388.8	405.9	EBITDA * 1	428.2	269.4	223.4	668.7	505.4	570.0
ROS	1.9%	2.6%	5.9%	5.6%	ROS * 2	6.0%	1.0%	-0.4%	9.5%	4.5%	5.5%
ROE	1.8%	3.7%	7.6%	8.3%	ROE * 3	8.6%	-11.1%	-1.3%	15.7%	7.9%	8.3%
ROA	1.7%	2.3%	5.2%	5.1%	ROA * 4	5.0%	0.8%	-0.3%	8.4%	4.4%	5.2%
Debt Outstanding	1,379	1,375	1,331	1,450	Interest-bearing debt outstanding	1,524	1,814	1,806	1,849	1,863	1,850
Debt/EBITDA Ratio	x5.4	x4.9	x3.4	x3.6	Debt/EBITDA multiple *5	x3.6	x6.7	x8.1	x2.8	x3.7	x3.2
D/E Ratio	56.9%	51.4%	58.1%	62.0%	D/E Ratio * 6	68.2%	96.4%	93.2%	80.8%	67.8%	58.8%
Profit attributable to owners of parent (yen/share)	58	118	251	285	Profit attributable to owners of parent (yen/share)	284	-343	-38	500	281	311
Dividend (yen/share)	30	30	80	95	Dividend (yen/share)	95	20	10	140	80	100
Pay-out Ratio	51.4%	25.5%	31.9%	33.3%	Pay-out Ratio	33.5%	-	-	28.0%	28.5%	32.1%

Notes
[IFRS]

* 1 EBITDA = Business profit + Depreciation and Amortization

* 2 ROS = Business profit / Revenue

* 3 ROE = Profit attributable to owners of parent company / Equity

* 4 ROA = Business profit / Total assets

* 5 Debt/EBITDA ratio = Interest-bearing debt outstanding / EBITDA

* 6 D/E ratio = 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.

Main Performance & Profitability Targets and Results

JFE

		The 7 th mid-term business plan FY2024	FY2021 Actual	FY2022 Actual	FY2023 Forecast
Consolidated	Business Profit [Excluding Inventory Valuation etc.]	¥320.0 bn.	¥ 416.4bn. [¥2,224bn.]	¥ 235.8bn. [¥162.8bn.]	¥290.0bn. [¥295.0bn.]
	Profit attributable to owners of the parent	¥ 220.0 bn.	¥ 288.0bn.	¥162.6bn.	¥190.0bn.
	ROE	10%	15.7%	7.9%	8.3%
Operating companies	Steel Business Profit per ton* [Excluding Inventory Valuation etc.]	10,000 yen/t	14,000yen/t [6,000yen/t]	7,000yen/t [3,000yen/t]	10,000yen/t [10,000yen/t]
	Segment profit [Excluding Inventory Valuation etc.]	¥ 230.0bn.	¥323.7bn. [¥129.7bn.]	¥146.8bn. [¥73.8bn.]	¥200.0bn. [¥205.0bn.]
	Engineering Business Segment profit	¥35.0bn.	¥26.0bn.	¥13.4bn.	¥25.0bn.
	Trading Business Segment profit	¥40.0bn.	¥55.9bn.	¥65.1bn.	¥48.0bn.

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



Cash Flow Improvements, Debt/EBITDA Ratio

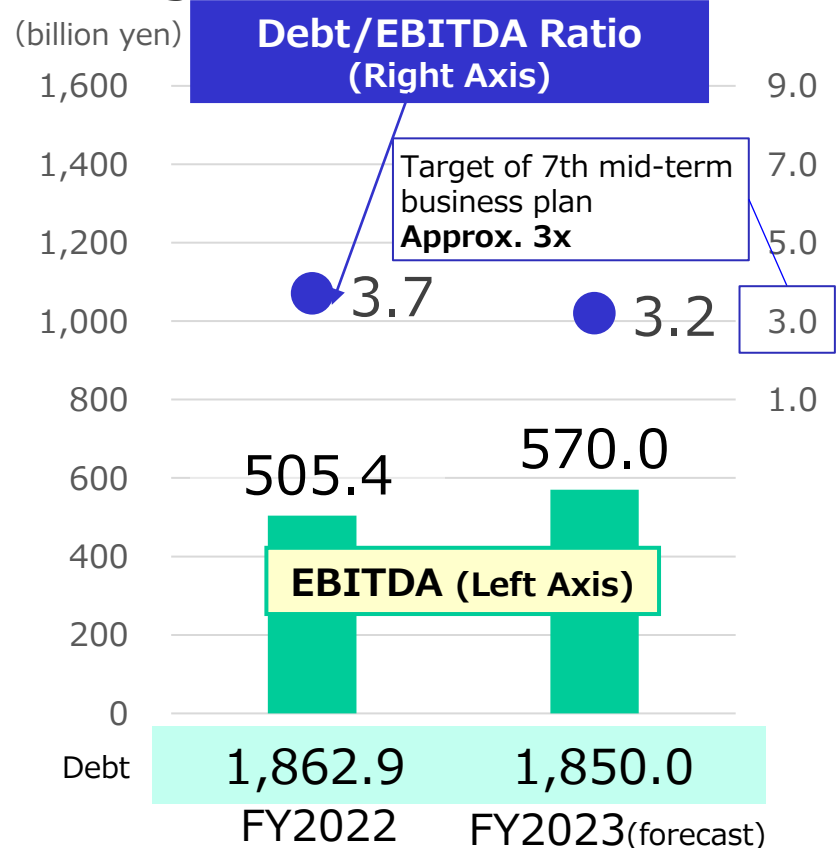
JFE

➤ At the end of FY2023, the Debt/EBITDA ratio is expected to be x3.2.

FY2023 (billion yen)
Consolidated Cash Flow Forecast

Cash-in	Cash-out
Net Profit 190.0	CAPEX & Investments 380.0
Depreciation and Amortization 280.0	Dividend Payment 49.0
Asset Compression 29.0	Working Capital, etc. 111.6
Capital Increase 114.5	Cash and Deposits Increase 60.0
	Decrease in Debt 12.9

Progress of Debt/EBITDA Ratio



- EBITDA = Business profit + Depreciation and Amortization
- Debt/EBITDA Ratio = Interest-bearing debt outstanding/EBITDA

Financial Results for 3Q of Fiscal Year 2023

JFE

	Unit	FY2021					FY2022					FY2023		
		1Q	2Q	3Q	4Q	Full Year	1Q	2Q	3Q	4Q	Full Year	1Q	2Q	3Q
Revenue	billion yen	638.5	771.9	832.8	930.2	3,173.4	932.6	986.3	986.9	975.3	3,881.1	917.2	948.6	915.6
Segment Profit	billion yen	69.7	88.8	93.5	71.7	323.7	93.0	55.2	21.8	(23.2)	146.8	68.1	54.7	48.2
Excluding Inventory Valuation etc.*	billion yen	25.7	42.8	(3.5)	64.7	129.7	(23.0)	55.2	22.8	18.8	73.8	59.1	64.7	49.2

Crude Steel (Standalone)	Mt	6.25	6.45	6.49	6.69	25.88	6.43	6.21	5.48	5.97	24.10	6.05	6.11	5.62
Crude Steel (Consolidated)	Mt	6.59	6.80	6.85	7.02	27.26	6.77	6.59	5.81	6.29	25.48	6.38	6.47	5.95
Shipment (Standalone)	Mt	5.26	5.56	5.63	5.92	22.38	5.54	5.32	5.25	5.64	21.74	5.23	5.42	5.08
Export Ratio on Value Basis (Standalone)	%	43.2	49.3	45.9	43.6	45.5	48.5	45.0	41.0	43.6	44.5	44.2	44.2	41.6
Average Sales Price (Standalone)	000 yen/t	87.6	101.0	107.6	116.7	103.7	126.7	136.7	136.3	124.0	130.8	128.5	130.1	132.5
Exchange Rate	¥/\$	109.8	110.0	113.1	115.3	112.1	126.5	136.6	144.0	133.2	135.1	135.8	144.1	148.7
Exchange Rate (End of Term)	¥/\$	110.6	111.9	115.0	122.4	122.4	136.7	144.8	132.7	133.5	133.5	145.0	149.6	141.8

* Excluding inventory valuation, carry over and foreign exchange valuation from segment profit

¥6.5bn. Decrease in JFE Steel's Segment Profit (FY2023.2Q (Actual) vs. FY2023.3Q (Actual))

JFE

(billion yen)

JFE Steel	FY2023					Change
	1Q (Actual)	2Q (Actual)	3Q (Actual)	4Q (Forecast)	Full Year (Forecast)	
Segment Profit	68.1	54.7	48.2	29.0	200.0	(6.5)
Excluding Inventory Valuation etc.	59.1	64.7	49.2	32.0	205.0	(15.5)

1. Cost**+12.0**

- Structural reforms effect+10.0
- Operational improvement +2.0

**2. Volume
and Mix****(7.0)**

- Crude Steel Production 6.11Mt→5.62Mt

**3. Sales and
Raw materials****(28.0)**

- Deterioration due to the slowdown in overseas market conditions

**4. Inventory
valuation****+9.0**

- Inventory valuation -5.0 (+6.0→+1.0)
- Carry over +36.0 (-22.0→+14.0)
- Foreign exchange valuation -12.0 (+6.0→-6.0)
- one-time structural reform costs -10.0(+0→-10.0)

5. Others**+7.5**

- disposal of fixed assets etc.



¥19.2bn. Decrease in JFE Steel's Segment Profit (FY2023.3Q (Actual) vs. FY2023.4Q (Forecast))

(billion yen)

JFE Steel	FY2023					Change
	1Q (Actual)	2Q (Actual)	3Q (Actual)	4Q (Forecast)	Full Year (Forecast)	
Segment Profit	68.1	54.7	48.2	29.0	200.0	(19.2)
Excluding Inventory Valuation etc.	59.1	64.7	49.2	32.0	205.0	(17.2)

- 1. Cost** **±0.0**
- 2. Volume and Mix** **+ 10.0**
 - Crude Steel Production 5.62Mt→approx. 6.00Mt
- 3. Sales and Raw materials** **(5.0)**
 - charter costs, scrap, etc.
- 4. Inventory valuation** **(2.0)**
 - Inventory valuation -1.0 (+1.0→±0.0)
 - Carry over -8.0 (+14.0→+6.0)
 - Foreign exchange valuation +7.0 (-6.0→+1.0)
 - one-time structural reform costs ±0(-10.0→-10.0)
- 5. Others** **(22.2)**
 - Expenses, disposal of fixed assets, etc.

Appendix(2) Business Environmental Indicators, etc.

Business environment (Trends by sector)



【Domestic】

Auto-mobile	<ul style="list-style-type: none"> • Each company has a backlog of orders and is highly motivated to produce. • Semiconductor supply risks are gradually improving, and production levels are expected to recover moderately.
Ship-building	<ul style="list-style-type: none"> • Despite the effects of soaring materials prices and labor shortages, the company has secured a two-year backlog of orders, which is the standard for stable workload. • The current level is expected to remain stable over the next two to three years.
Other manufacturing	<ul style="list-style-type: none"> • As for construction machinery, demand for mining is strong and stable due to high resource prices, but a decline in external demand is seen in construction and civil engineering. It is necessary to keep an eye on this trend. • Industrial machinery should be closely watched as it is increasingly cautious about investment due to rising interest rates and other economic uncertainties.
Construction	<ul style="list-style-type: none"> • In the non-housing sector, demand for large-scale projects, which had been relatively strong, has been postponed due to rising material prices and labor shortages. • The number of new housing starts has stagnated, and the number of small and medium-sized projects has continued to be in a slump.
Civil engineering	<ul style="list-style-type: none"> • Although budget measures continue to be implemented at a high level, it is expected to be affected by soaring materials prices and labor shortages.

【Overseas】

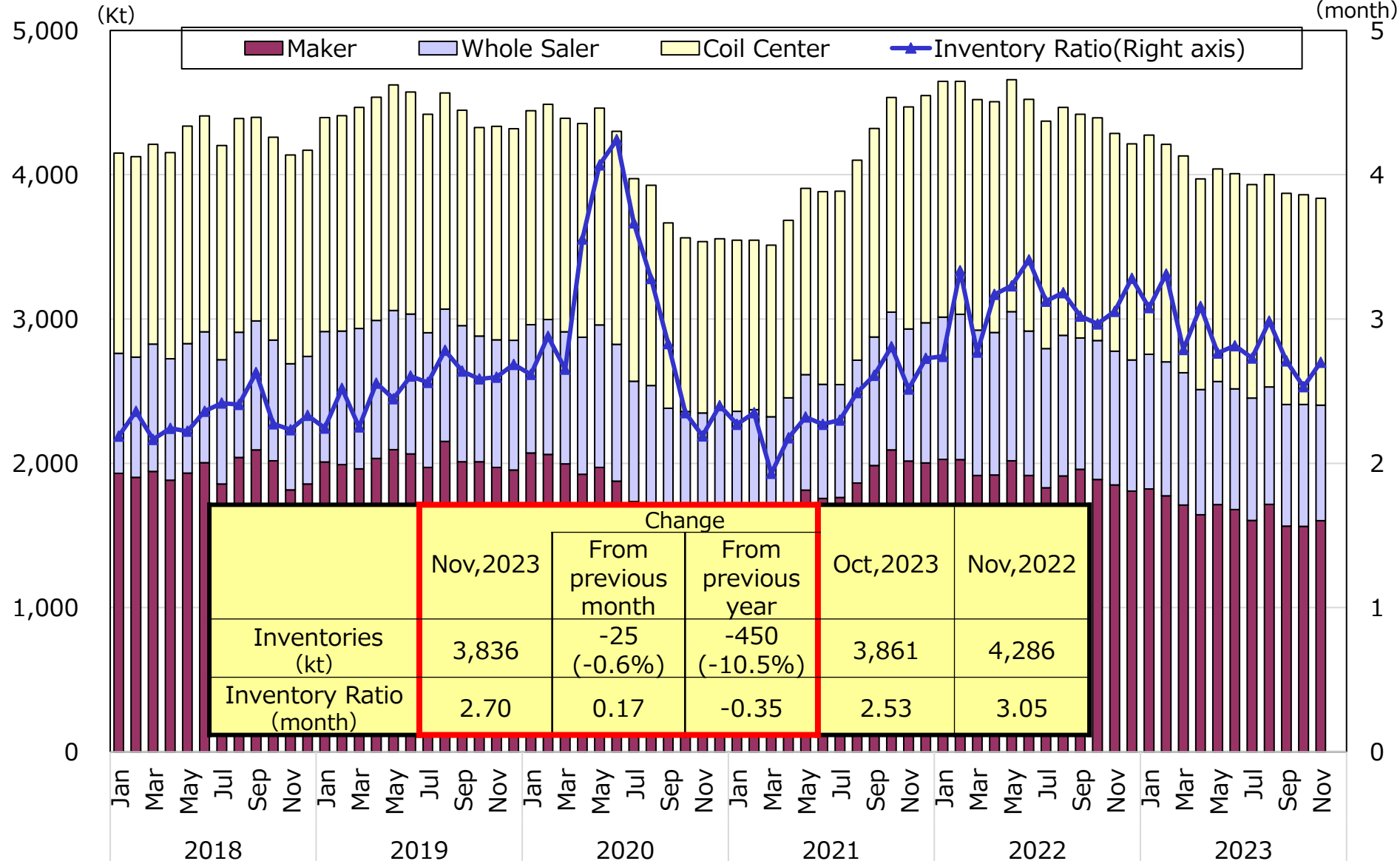
Thin Sheet	<ul style="list-style-type: none"> • In China, domestic demand has slumped due to a slow recovery in the real estate sector. • In Southeast Asia, the steel market continued to stagnate due to an increase in imported materials from China and a decline in external demand.
Auto-mobile	<ul style="list-style-type: none"> • Demand is firm and production levels are expected to recover gradually. • However, the recovery is expected to be moderate compared to the previous year, partly due to stricter loan screening in ASEAN and slower growth in China.
Ship-building	<ul style="list-style-type: none"> • China and South Korea shipbuilders are increasing orders for new construction and securing stable contracts. • Despite the impact of the labor shortage, it is expected to be firm as the labor shortage is gradually being resolved.
Energy	<ul style="list-style-type: none"> • While oil and gas prices has fallen temporarily due to fears of a slowdown in the economy, investment in projects to develop oil and natural gas plants is expected to remain strong.



Domestic Market Environment

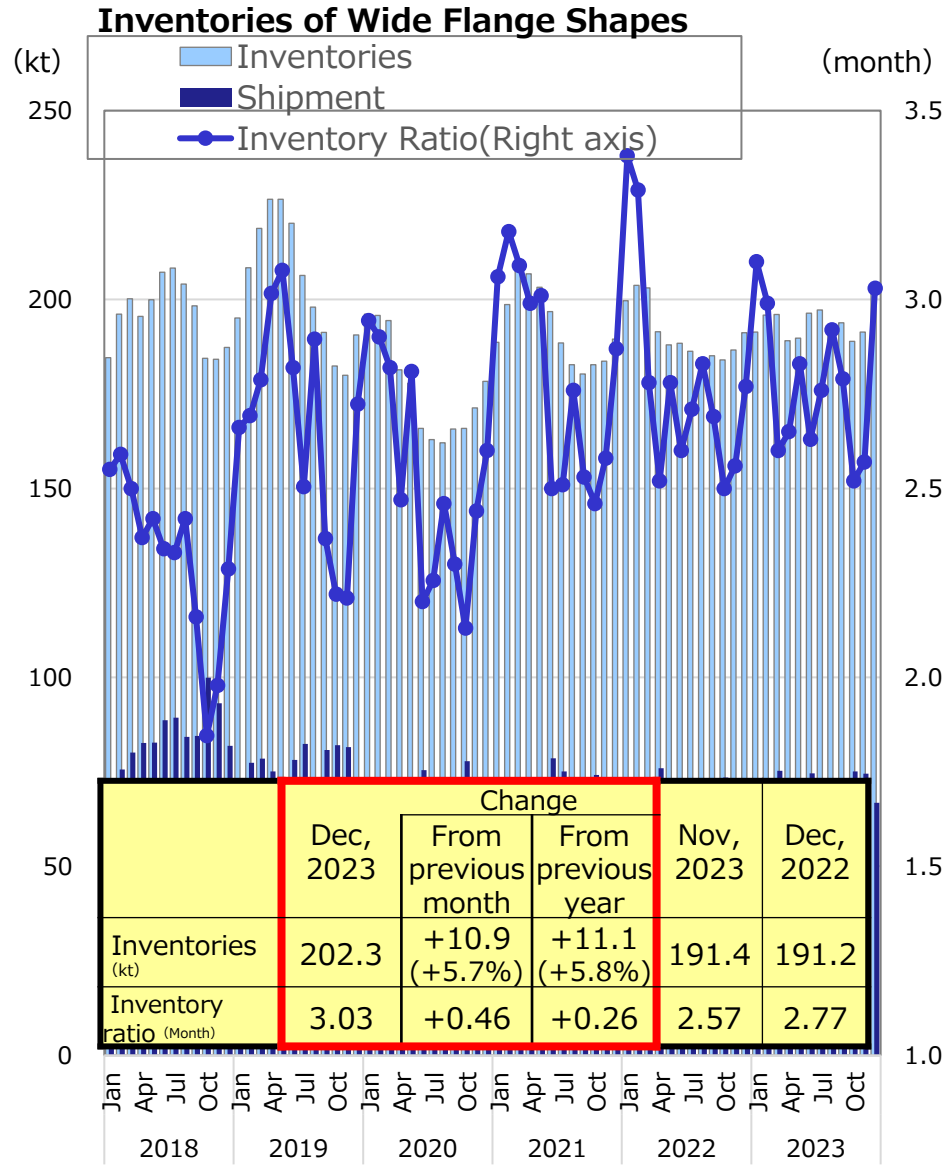
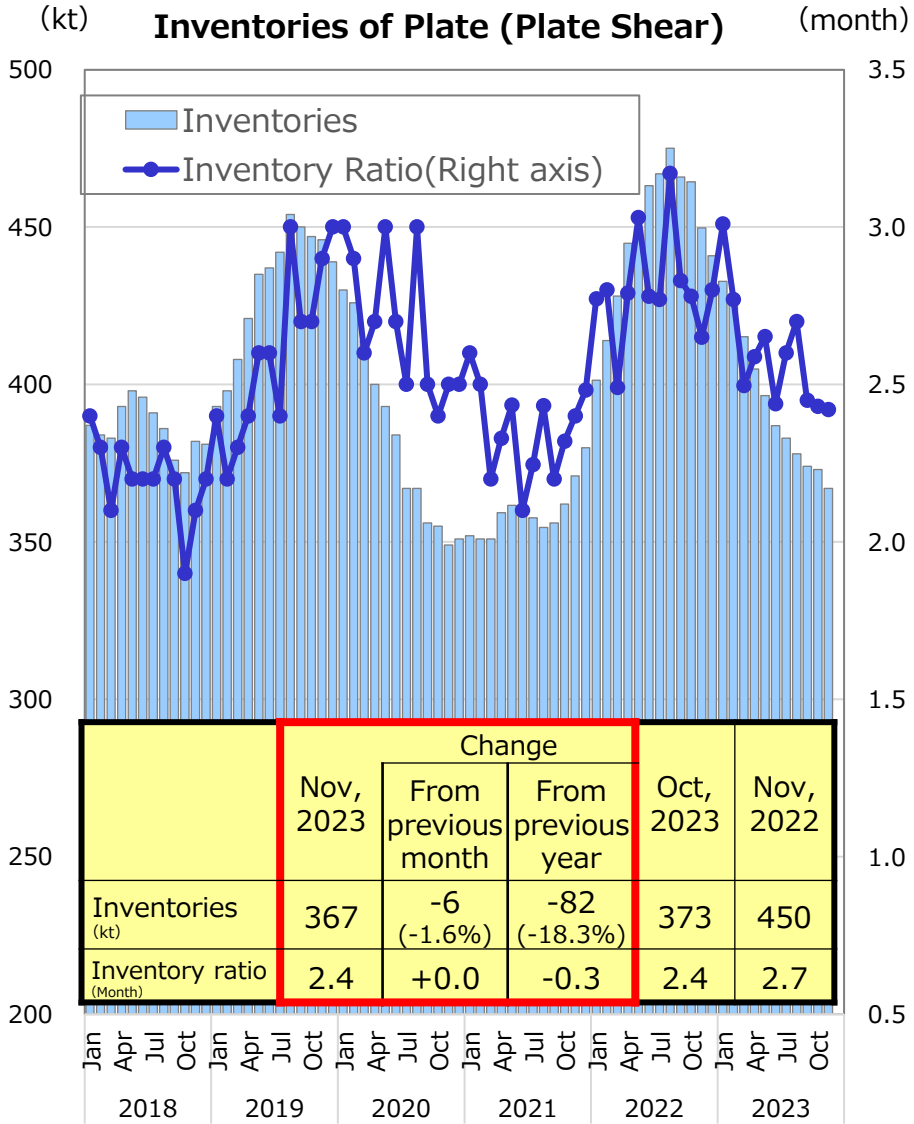
Combined Inventories of HR, CR and Coated Steel Sheet

JFE



Domestic Market Environment

Inventories of Plate (Plate Shear) and Wide Flange Shapes



Domestic Market Environment

Trend of Import Steel (Ordinary Steel)



(kt)

600

500

400

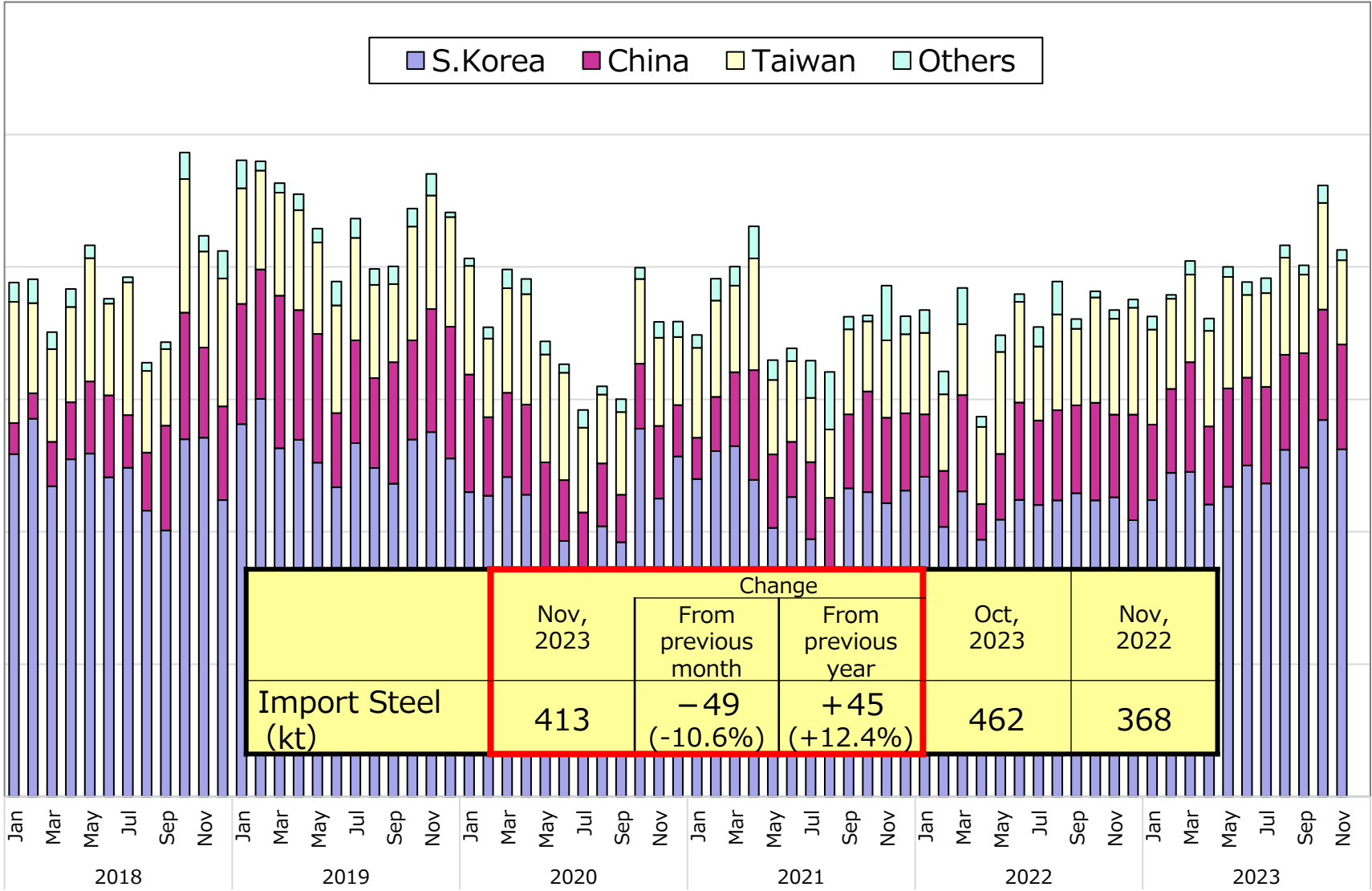
300

200

100

0

■ S.Korea ■ China ■ Taiwan ■ Others



Import Steel (kt)	Change		Oct, 2023	Nov, 2022
	Nov, 2023	From previous month		
413	413	- 49 (-10.6%)	462	368

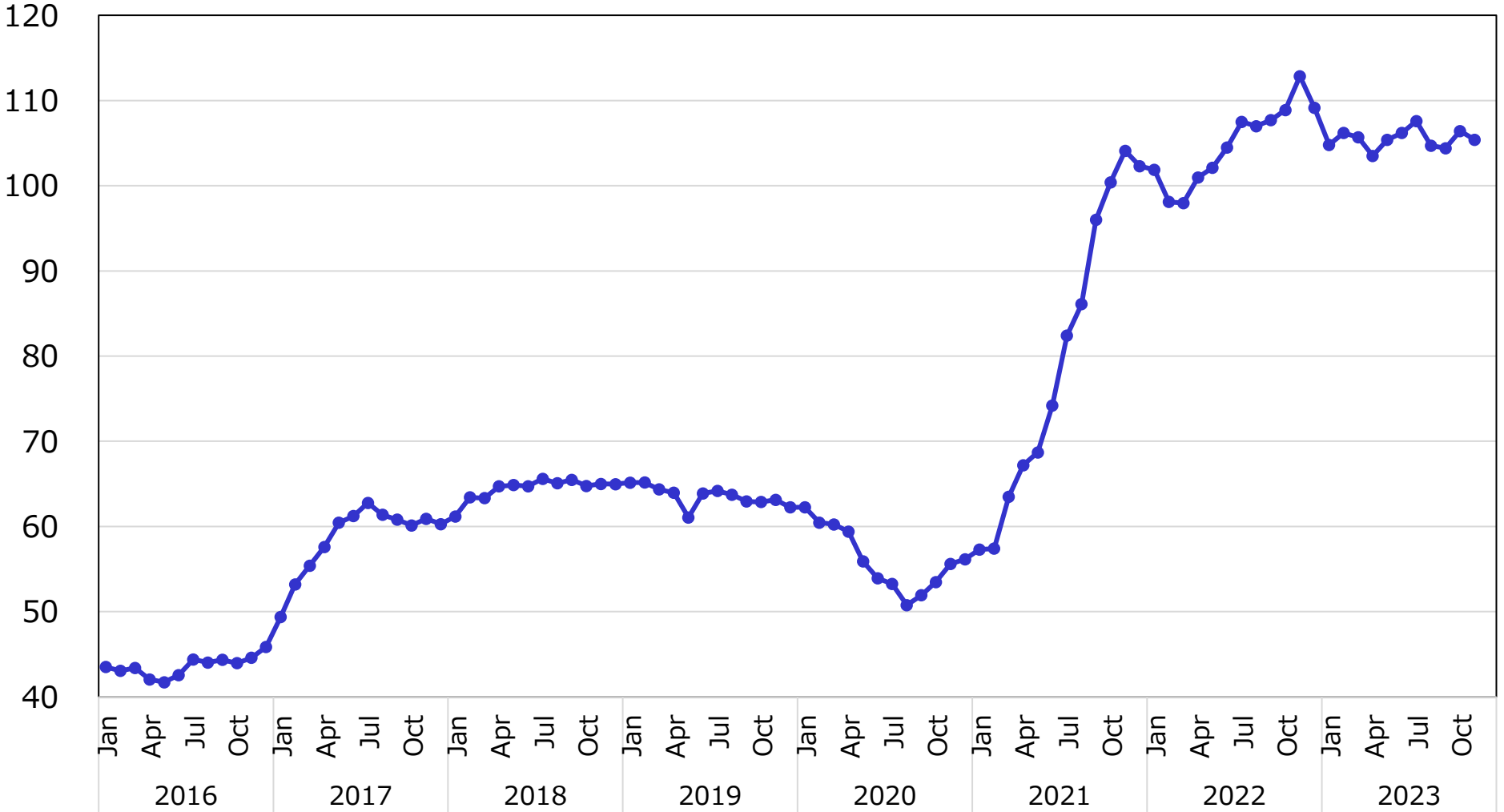


Domestic Market Environment

Price Trend of Import Steel

JFE

(000yen/t)



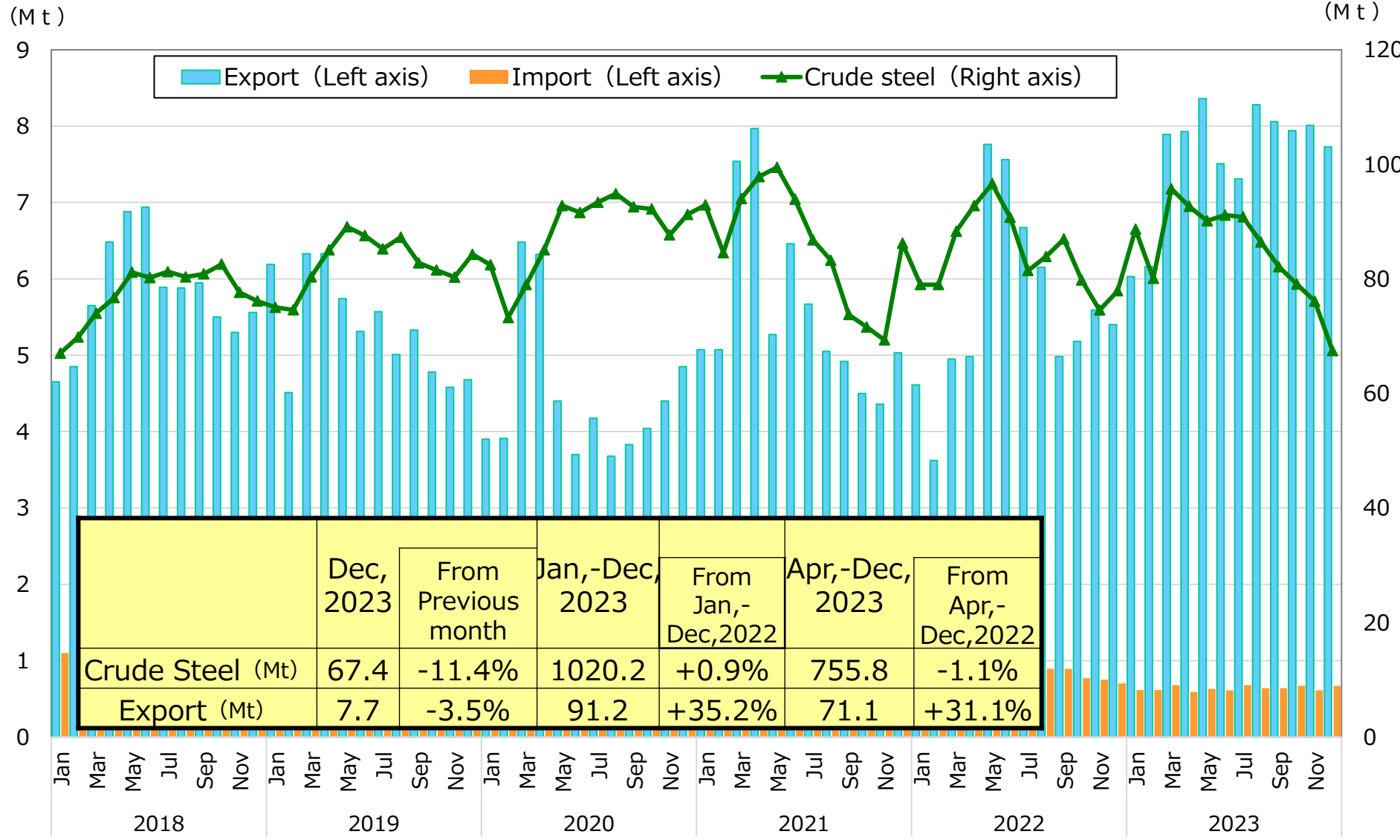
Data: The Japan Iron and Steel Federation Import Steel from S. Korea



Overseas Market Environment

Crude Steel & Im/Export, China

JFE

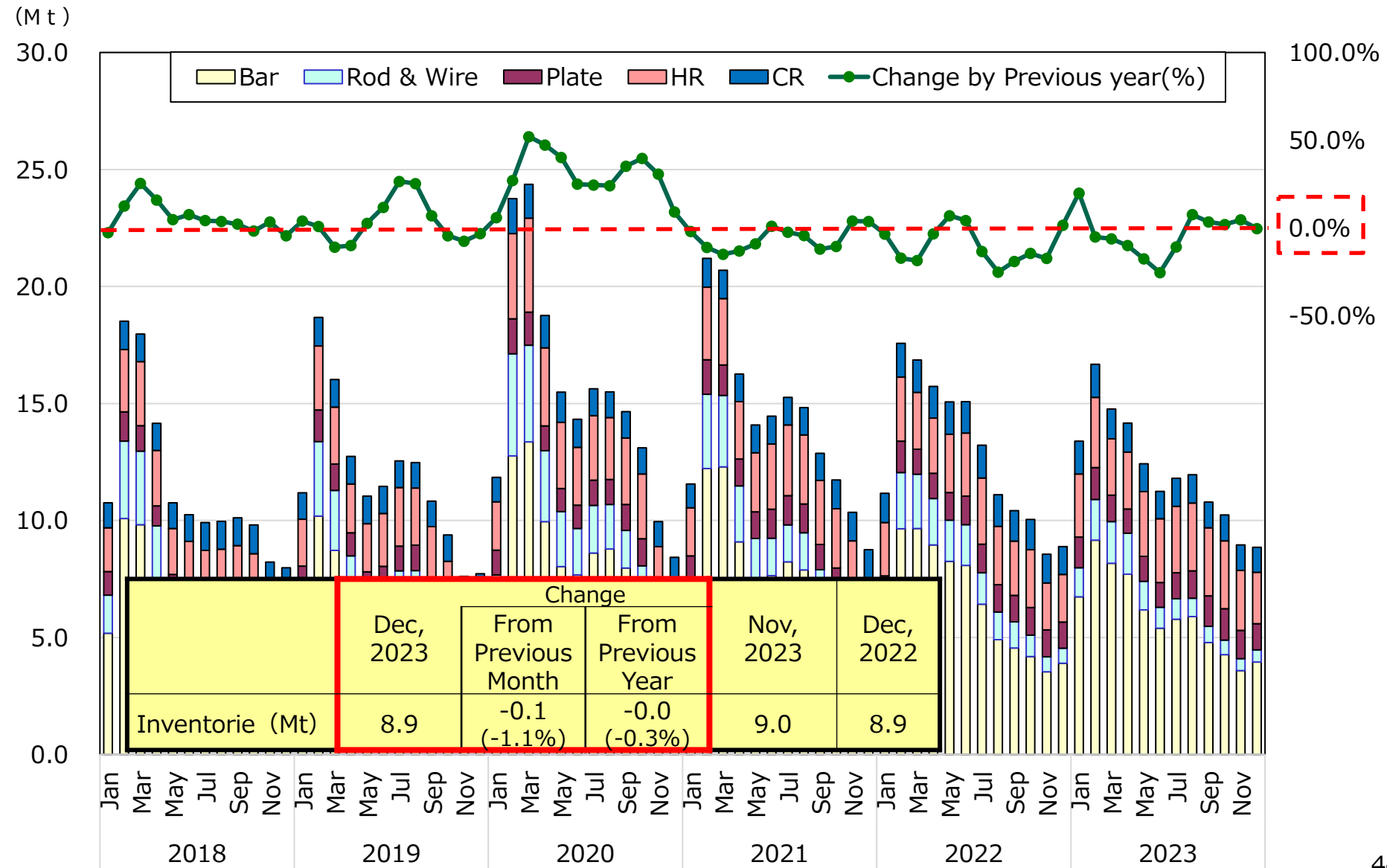




Overseas Market Environment

Crude Steel & Im/Export, China

JFE

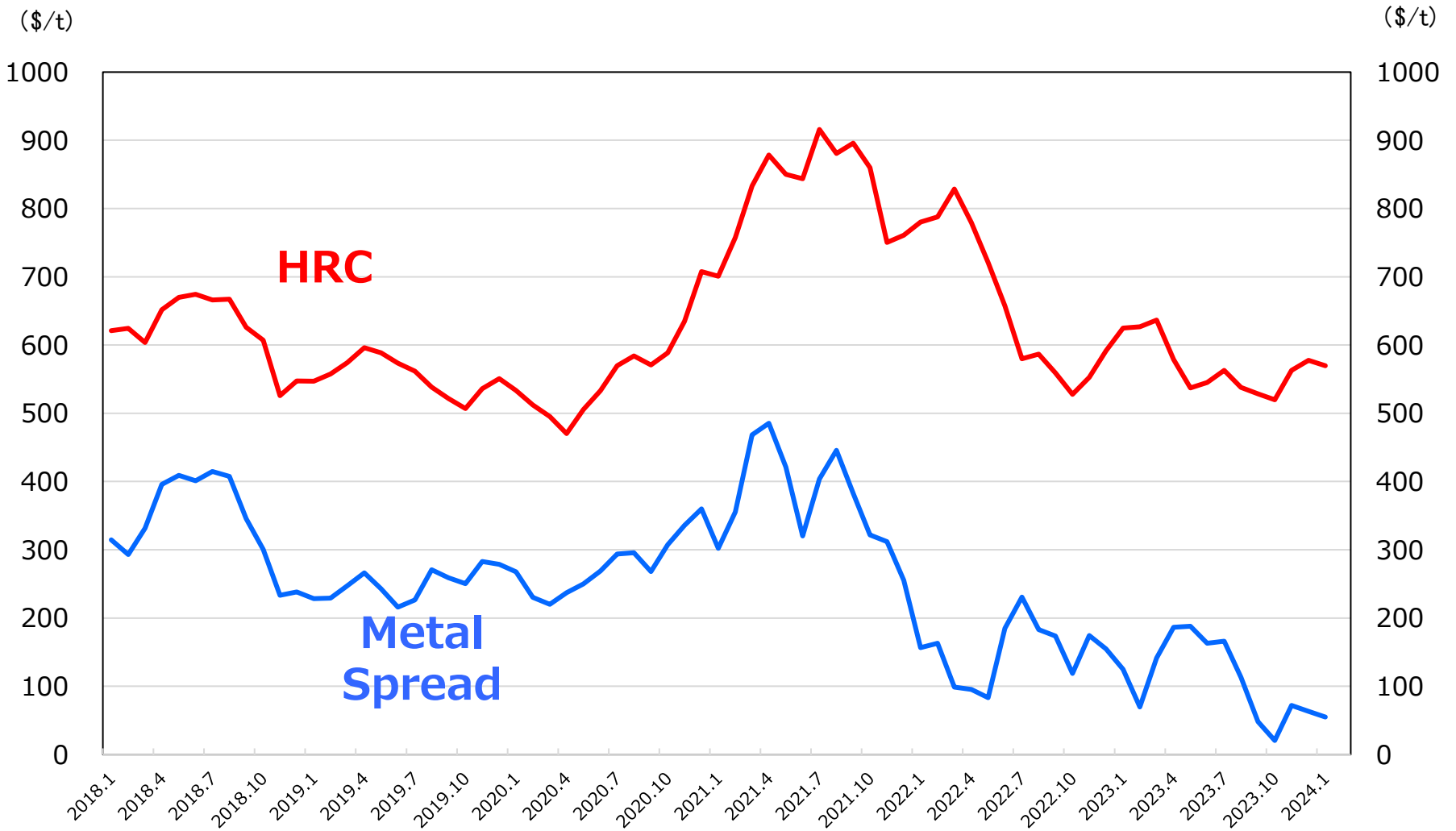


Overseas Market Environment

Metal Spread Trend (Chinese Spot Basis)



JFE



Metal Spread = HRC Price – Raw Materials Cost

*HRC Price : Chinese Spot basis

Raw Materials Cost : Calculated from market price of Iron Ore and Hard Coking Coal



Raw Materials

Raw materials market trends

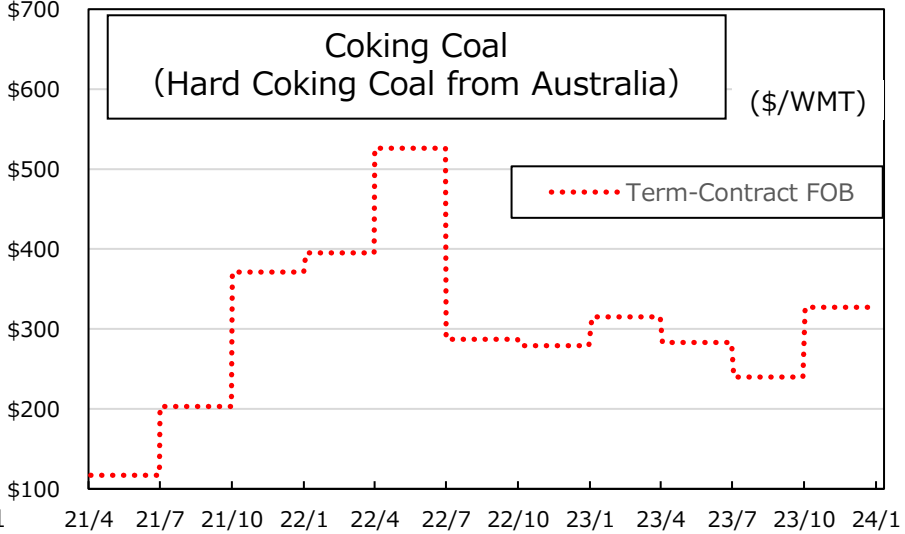
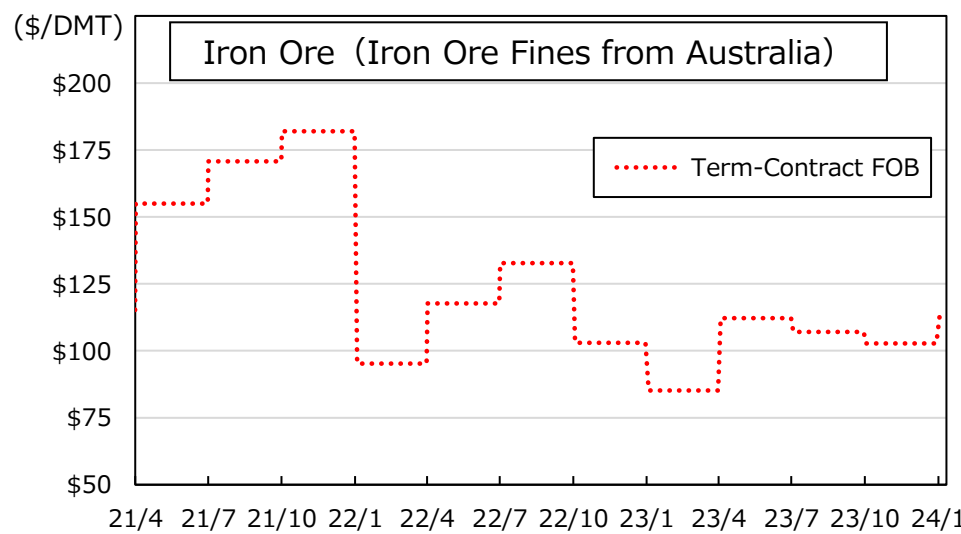
JFE

■ Key raw materials

- Both iron ore and coking coal remain at a high level and are expected to remain at current levels.
(The effect of weather should be carefully observed.)

■ Metals

- Metals markets have been weak due to a weak European economy and a slow recovery in China's economy and steel demand.



Term-Contract FOB	FY2022		FY2023			
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
\$/DMT	103	85	112	107	103	113

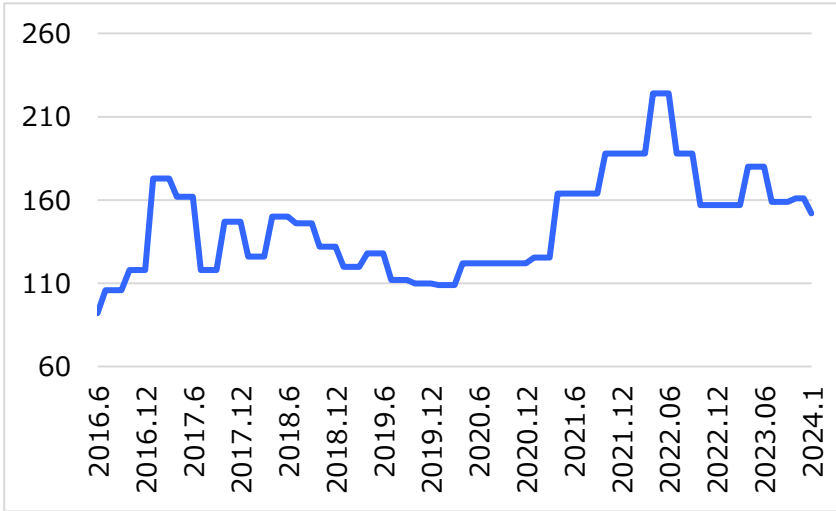
Term-Contract FOB	FY2022		FY2023			
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
\$/WMT	279	315	283	240	327	-

Raw Materials

Trend of Sub Material's Market Price



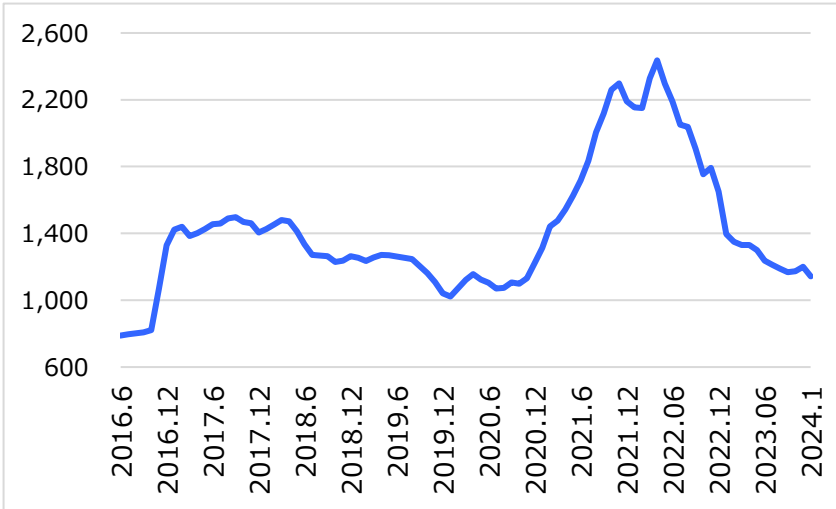
(¢/lb) FeCr



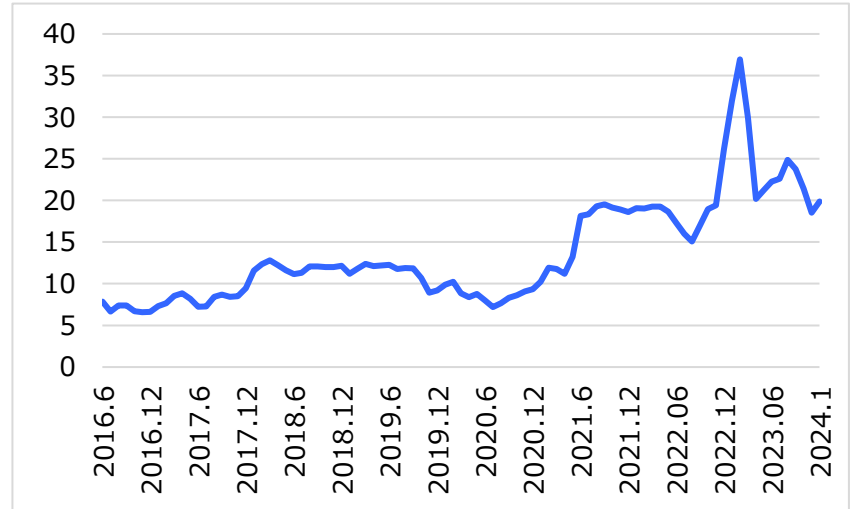
(US\$/t) Zn



(US\$/t) FeMn



(US\$/lb) Mo



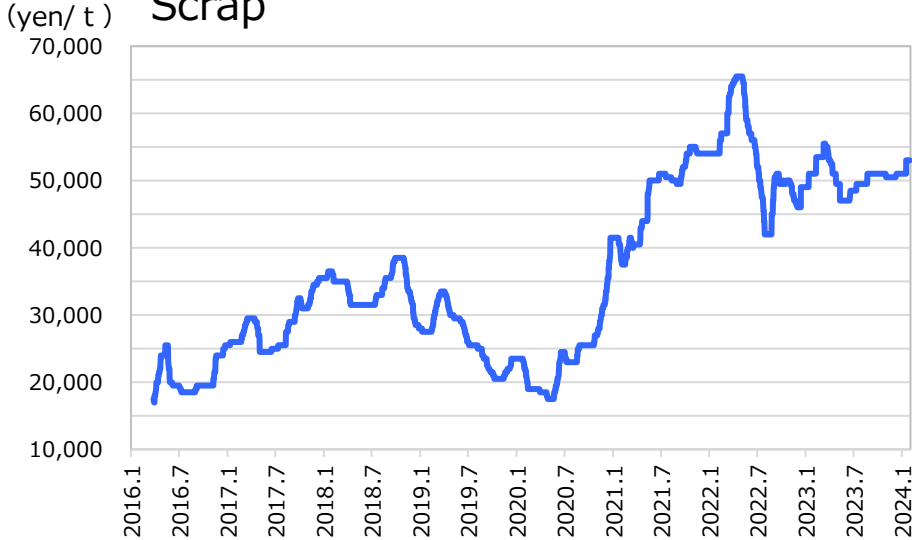


Raw Materials

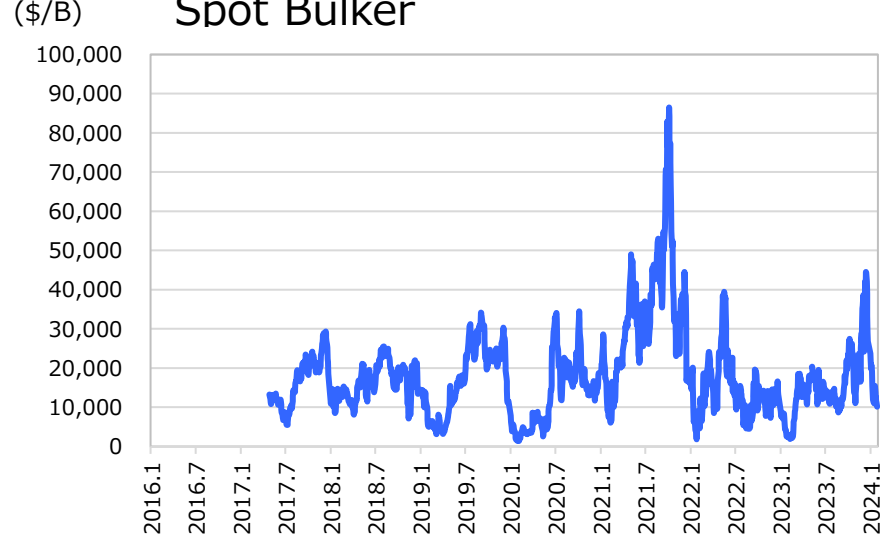
Trend of Sub Material's Market Price

JFE

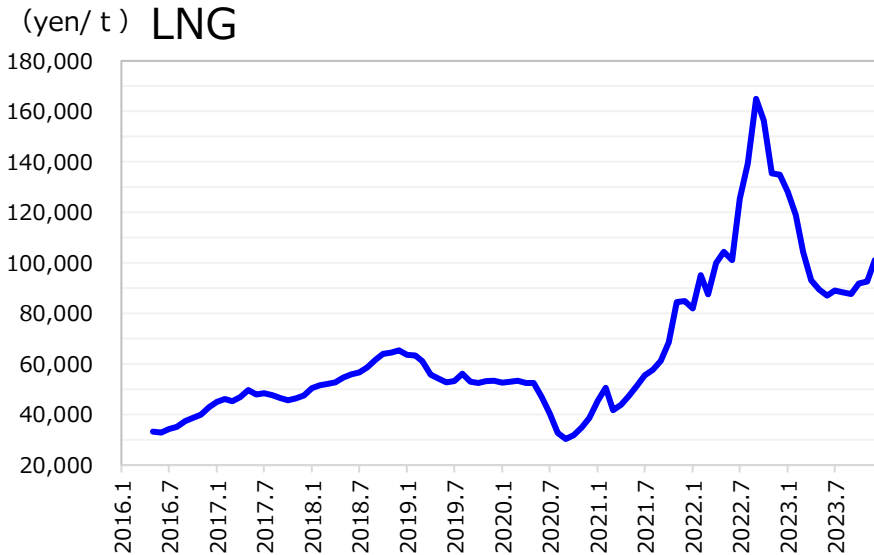
Scrap



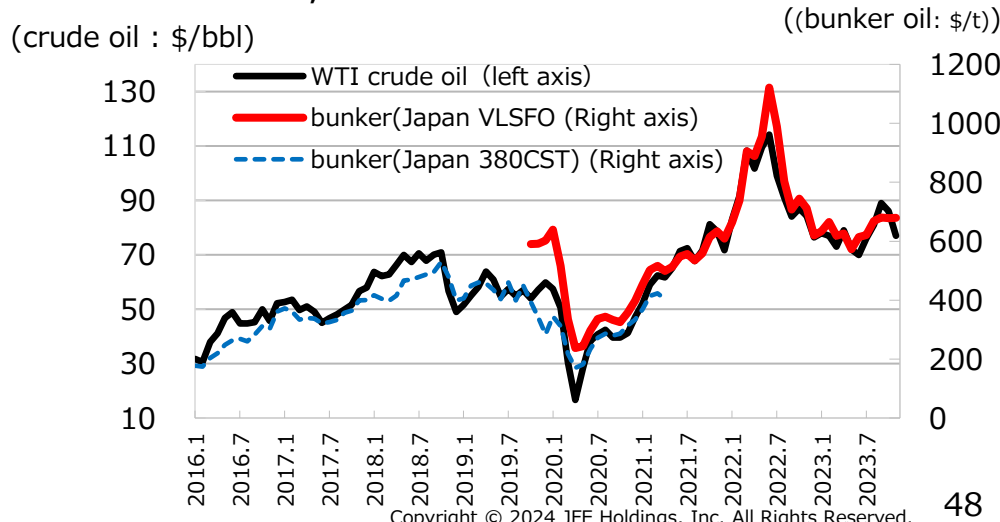
Spot Bulker



LNG



Crude oil, Bunker oil








Orders by Business Field

JFE

(billion yen)

Business Field	FY2022 Actual	FY2023 Outlook	Change	Main orders received in FY2023 ★...New projects received in 3Q of FY2023
Waste to Resource	216.9	247.0	30.1	Construction works of domestic waste treatment facility [Mie, ★Hokkaido] Renewal works of domestic waste treatment facility [Saitama]
Carbon Neutral	57.6	80.0	22.4	
Combined Utility Service	21.1	16.0	(5.1)	
Core Infrastructure	269.3	237.0	(32.3)	Reinforcement work of cable tunnel for domestic telecommunications facilities [Osaka] Construction works of bridge ([TOKAI-KANJO Expressway [Gifu], RINKO Expressway [Kagoshima], ★Kinki Expressway [Wakayama]) Reconstruction works of bridge [Metropolitan Expressway [Tokyo]] Container crane [Oi Pier [Tokyo]] Overseas chemical plant construction work [★Southeast Asia]
Total	564.9	580.0	15.1	

Links to the reports published during FY2023

Report	URL	QR code
JFE Group REPORT 2023	https://www.jfe-holdings.co.jp/en/investor/library/group-report/index.html	
Sustainability REPORT 2023	https://www.jfe-holdings.co.jp/en/sustainability/index.html	
Sustainability REPORT 2023 Environmental Data	https://www.jfe-holdings.co.jp/en/sustainability/pdf/2023/2023_08_01.pdf	
DX REPORT 2023	*English version is coming soon	

Appendix(3) The 7th Medium-Term Business Plan



Mid/long-term directions

Biggest transformation in company's history aimed at achieving global success

JFE

JFE's corporate vision

Contributing to society with the world's most innovative technology

JFE's mission

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

**Environmental & Social
sustainability**
(helping to solve critical issues)



Economic sustainability
(stable earnings power)

Ensuring **environmental & social sustainability** and establishing **economic sustainability** will enable to ensure the **resiliency of JFE's operational foundations** and allow the company to achieve **sustainable growth** and **increased value** over the mid/long-term.



Initiatives to achieve environmental and social sustainability (helping to solve critical issues)

E JFE Group Environmental Vision for 2050

- Aim to realize carbon neutral by 2050, taking climate change as an extremely important business concern for JFE
- Accelerate R&D in new technologies and strive to create super-innovative technologies
- Contribute to the reduction of CO₂ emissions in society and use this as a business opportunity to increase corporate value
- Work systematically to combat climate change under TCFD philosophy

S Solve issues impacting society

- 1. Safety/health management**
- 2. Facilitate employee participation**
(Diversity & Inclusion, Personnel development, Workstyle reforms)
- 3. Contribute to regional societies through engineering**
- 4. Respect human rights throughout supply chain**
(Conduct human-rights due diligence from FY2021)

G Enhance corporate governance

Consider how to apply non-financial metrics in terms of director compensation and investment decisions etc.



JFE Group Environmental Vision for 2050

Toward Carbon Neutrality by 2050 JFE Group Environmental Vision for 2050

(GX Investment during 7th mid-term business plan : **340 billion yen**)

GX : Green transformation

1. Key environmental initiative under 7th mid-term business plan

- **Steel business** : Reduction of CO₂ emissions by 18% by the end of FY2024 (vs. FY2013)

2. Carbon Neutrality by 2050

① Reduce CO₂ emissions at JFE Steel

- Pursue super-innovative technology for carbon-recycling blast furnaces and CCU
- Develop hydrogen-based ironmaking (direct reduction) technology etc.

② Expand contributions to CO₂ emissions reduction in society

- Engineering business : Expand & develop renewable-energy power generation and carbon-recycling technologies. **Targets to contributions to CO₂ emissions reduction**
- Steel business : Develop & market eco-products and eco-solutions.

FY2024	12 Mt
FY2030	25 Mt
- Trading business : Increase trading in biomass fuels, steel scrap, etc. and strengthen business in SCM for eco products.

SCM : Supply Chain Management

③ **Groupwide commercialization of offshore wind-power business**

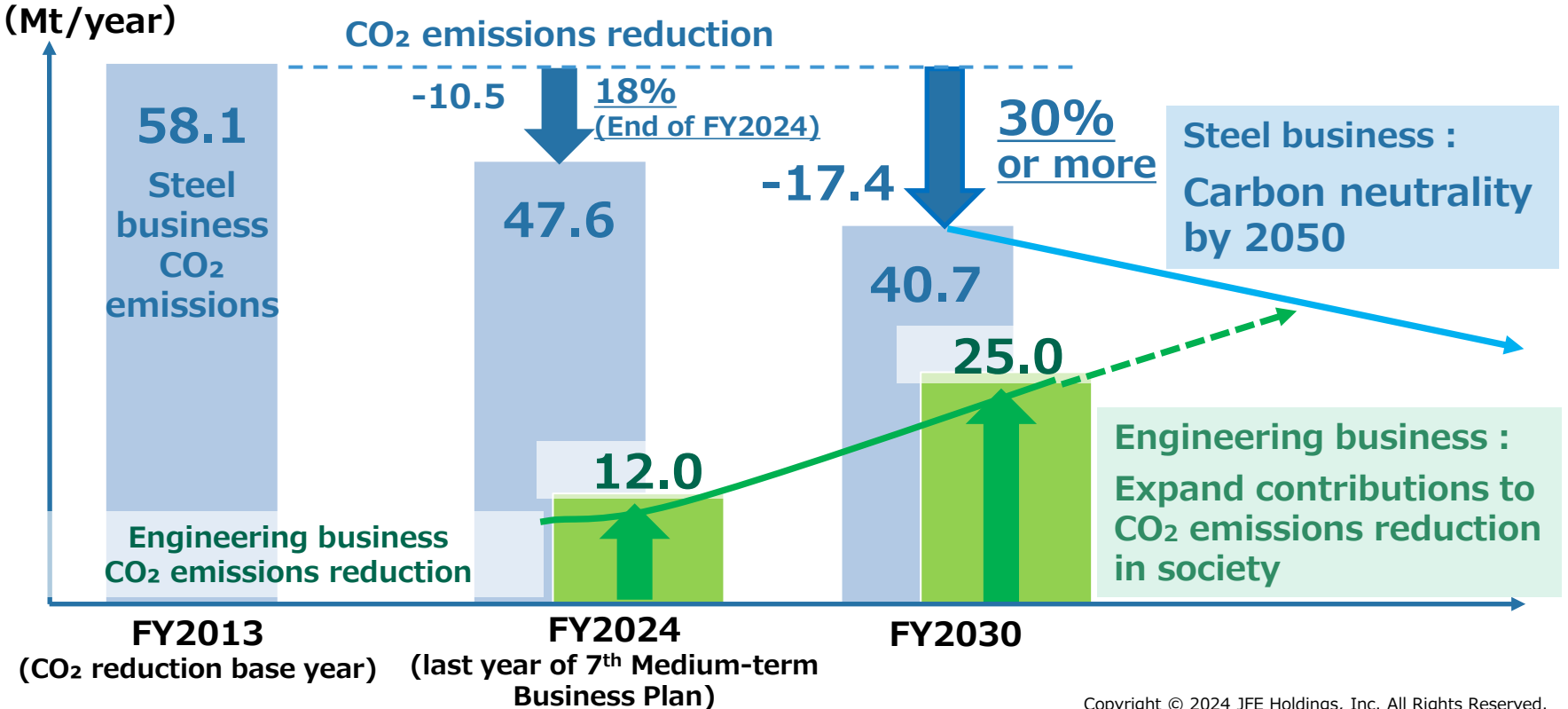


JFE Group's activities for Carbon neutrality

JFE

Steel Business: CO₂ emission reduction by 18% at the end of FY2024 (vs. FY2013)
 Through [decarbonization in steel manufacturing processes](#) etc., JFE Group aims to be carbon neutral.

Engineering Business: Contribute to carbon neutrality in society on the whole by [expanding JFE Engineering's contributions to CO₂ emissions reduction resulting from its business](#) such as development of renewable-energy generation and carbon recycling technologies.





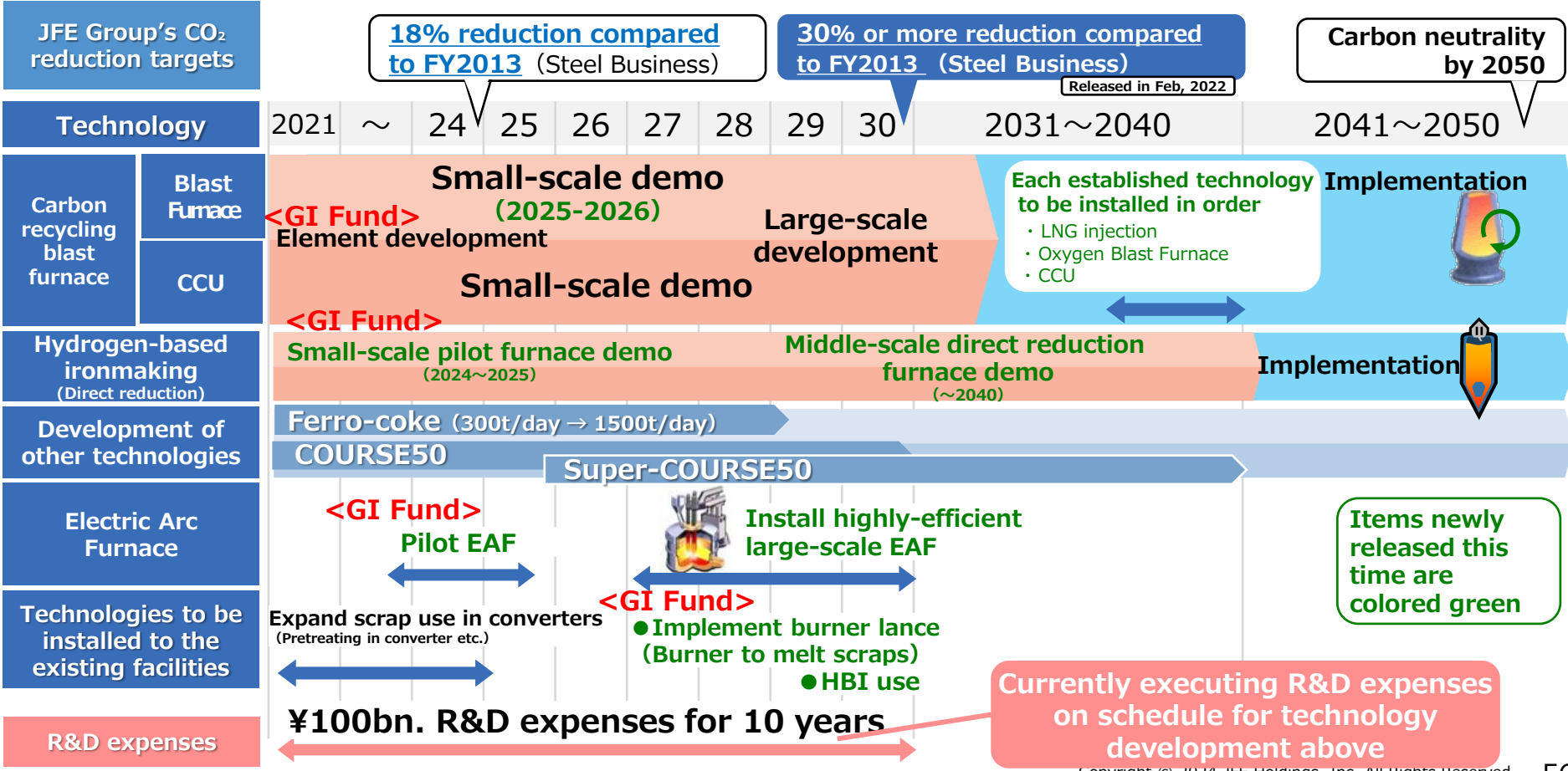
[Steel Business] Roadmap for Carbon Neutrality



JFE

Revised our roadmap for realizing carbon neutrality in 2050, considering installing the technologies below in the concrete:

- Carbon recycling blast furnace: **Each established technology to be installed in order** (late 2030s)
- Hydrogen-based ironmaking:
 - Small-scale pilot furnace demo** (2024~25), **middle-scale direct reduction furnace demo** (~2040)
- EAF: **Install pilot EAF in Chiba** (demo to be started from 2024) → **Install highly efficient large scale EAF** (2027~30)

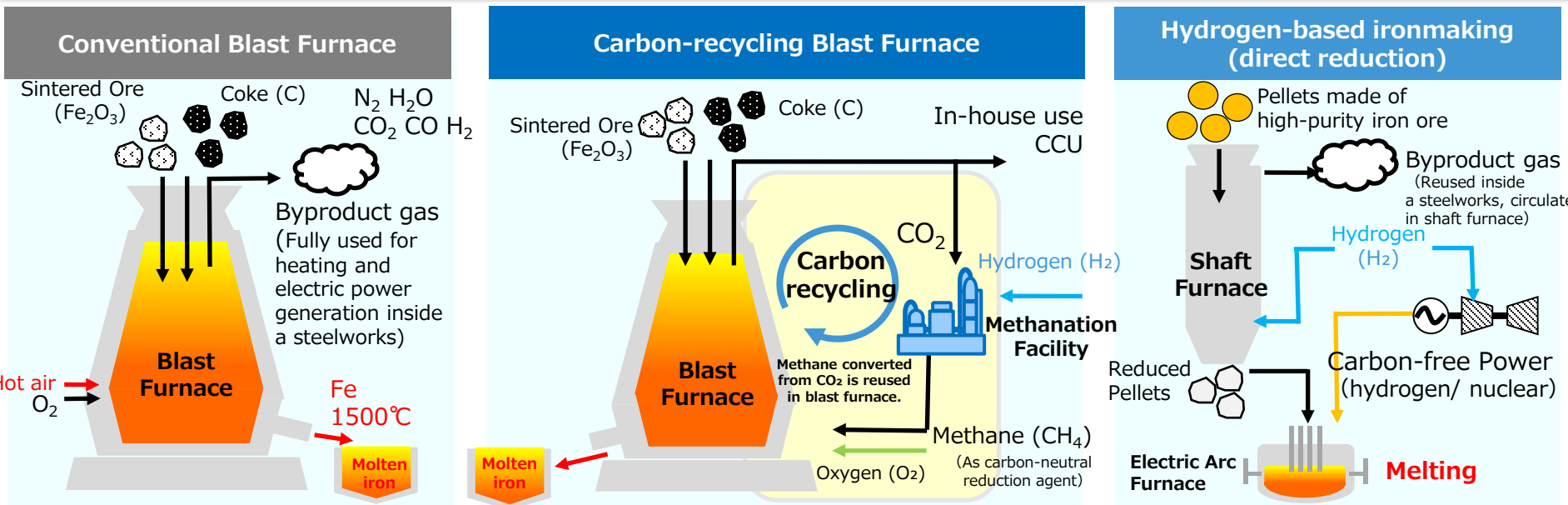




Carbon-recycle Blast Furnace

JFE

- Technologies for reducing CO₂ emissions from blast furnaces are necessary to maximize blast furnaces' advantages such as mass production, high-efficiency production, and high-grade steel production
- Combining carbon-recycling blast furnace with CCU enables to reuse CO₂ inside a steelworks by using raw materials of the same grade as those used in conventional blast furnaces. By doing so, JFE aims to achieve **net zero carbon emissions**.



	Conventional Blast Furnace	Carbon-recycling Blast Furnace	Hydrogen-based ironmaking (direct reduction)
Capacity	4M t / BF-year	4M t / BF-year (on par with Conventional BF)	2M t / Shaft Furnace-year (current direct reduction ironmaking basis)
Reducing Agent	Coke + Pulverized Coal	Coke + Recycled methane (CH ₄)	Hydrogen (H ₂)
Raw Materials	Low-grade raw materials possible.	Low-grade raw materials possible.	Limited (High-grade iron ore)
CO ₂ Emissions	2/t-CO ₂ /1-ton of pig iron	Target: Zero (CO ₂ reduction in BF+CCUS)	Target: Zero (Carbon-free method)



Groupwide commercialization of offshore wind-power business (Study feasibility)

JFE

- Become a pioneer in offshore wind-power generation business by commercializing manufacture of monopile and other seabed-fixed structures.
- Establish groupwide supply-chain such as monopile-structure manufacturing and O&M
- Aim to expand renewable energy business by leveraging group synergy effect, taking JFE Engineering as a main driver.

O&M: Operation and Maintenance. Apply expertise of maintenance and analysis technologies.



JFE Engineering

Manufacture and market monopile and other seabed-fixed structures for offshore wind-power generation

JFE Steel

Increase capacity for heavy, extra-thick steel plate for offshore wind-power applications

Utilizing NO.7 new continuous-casting equipment in Kurashiki district (Start operating in FY2021)

Provide steel products

Provide steel products

Carry out SCM
Provide steel products

Carry out SCM

JFE Shoji

Contribute to groupwide cooperation by carrying out SCM of steel materials and processed products for offshore wind-power generation

Subsidiaries/ Affiliates

JMU : manufacture power-generation floating structures and construct work vessels. **Groupwide**: O&M making maximum use of group resource

Social sustainability : Safety management, HR issues

Safety management

Further increase efforts to prevent accidents not only by using facilities but also through safety education and obedience of rules, in order to achieve top-priority goal of zero major accidents.

Groupwide investment for safety issues : Approx. 10 billion yen/year

Implement multifaceted health/safety management using advanced IT (monitoring, detection, etc.).

Facilitate employee participation

Proceed following initiatives in order to allow employees to maximize performance and enhance groupwide competitive advantages

Diversity & Inclusion	Maximize capabilities of employees with diverse background
Personnel development	Improve individual abilities and develop skills for global competence
Workstyle reforms	Create workplaces and internal structures to maximize employees potential and enable them to work safely and confidently

Social sustainability : Contribution to Regional Societies through Engineering Business

- Expand bases of local production and local consumption business (Food-recycling business and regional PPS business)
- Contribute to the regional society considering to expand combined utility service business in the future.
- Realize circular economy by developing this business

(Example) Local PPS Business : Smart Energy Kumamoto

Points

1. Local production of energy for local consumption (Local generation of renewable-energy power to be consumed in the regional societies)
2. Return economic merits to the city fund. (Investment for renewable energy and energy saving by citizen)
3. Strengthen disaster prevention and energy saving (Establishing self-supporting energy supply line**, using storage battery)

Electricity supply through self-supporting energy supply line



Disaster Prevention Bases (local parks)



Western waste disposal factory (built by JFE Engineering)



Business support



EMS (Energy Management System)

Smart Energy Kumamoto

Electric power

Electric power



Eastern waste disposal factory

Electric power



Public Facilities

Charge/Discharge (optimized control)



Storage battery

- Demand: 226 public facilities in the city
- Energy source
Western waste disposal factory : 5,980kw
Eastern waste disposal factory : 10,500kw

*Regional PPS (Power Producer and Supplier) : Power producers and suppliers engaged in local production of energy for local consumption **Self-supporting energy supply line: Direct energy supply line from power generation plants to the connection points



Establish economic sustainability (stable earnings power)

JFE

Establish sufficient profitability and stable financial base for proactive business operation for the mid/long-term growth

- 1. Shift focus of domestic steel business from quantity to quality** –Pursue world-class earnings power
 - Achieve world-class cost and quality competitiveness
 - Expand margins and achieve stable profit
- 2. Promote growth strategies**
- 3. Significantly enhance competitiveness through DX**
- 4. Balance financial soundness with effective investment based on a “select and concentrate” approach**



7th mid-term business plan <Steel Business>

JFE

Aim to achieve world-class per-ton profit and enhance strategies for global growth
Promote innovation for carbon neutrality

Main initiatives

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

**Targets
FY2024**

Per-ton profit 10,000yen/ton*
(Segment profit ¥230.0bn.)

*Segment profit / unconsolidated sales volume in tons

Cf. 2H of FY2020 (actual)

- Per-ton profit 6,000 yen/ton
- Segment profit ¥70.8bn.

Equipment & Business Investment :
1,080bn. over 4 years

- **40% for GX, DX, equipment modernization and profitability improvements** (6th mid-term actual:20%)
- **30% for maintenance investments** (6th mid-term actual:50%)



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

JFE

Improve per-ton profit by both fixed cost reduction and increase of high value-added products ratio, and enhance earning base.

Achieve world-class cost and quality competitiveness

- Cost reductions: ¥120bn. over 4 years
- Labor productivity: +20%
(13% via structural reform +
1,670→2,000t/person/year via DX etc.
Number of employees: 16,000→13,000)
- Establish profit base that is resilient to changes in economic conditions by completing structural reforms
 - Greatly reducing fixed costs
 - Lowering breakeven points
- Introduce new technologies through DX
 - Improve production efficiency and yields
 - Greatly improve labor productivity
- Ensure quality competitiveness by improving product quality, production efficiency and our delivery

Expand margins and achieve stable profit

- Increase mix of highly value-added products* to an unprecedented 50%
*Products that offer technological advantages, are recognized by customers for their value added and have greater earnings power than commodity products.
- Product-mix enhancements by focusing on selective concentration in priority fields
 - Increase non-oriented electrical steel sheet production capacity
 - Increase capacity for heavy, extra-thick steel plate for offshore wind-power applications
 - Production of high-tensile steel sheet for automotive
- Fully overhaul our sales pricing
Ensure that products offering the type of high value that customers seek are suitably recognized in the market, based on which we aim to fully overhaul our sales pricing




Expand and Accelerate Overseas Business

JFE

- Expand returns from **1. vertical specialization business** such as steel production applied for automobiles
- **Further deepen integrated production in high-demand market (2. "Insider" business)**
- **Expand 3. solution business**, in which we provide cutting-edge technologies, operations and research knowhow **(aim to triple earnings in FY2024 compared to FY2020)**

India **JSW**

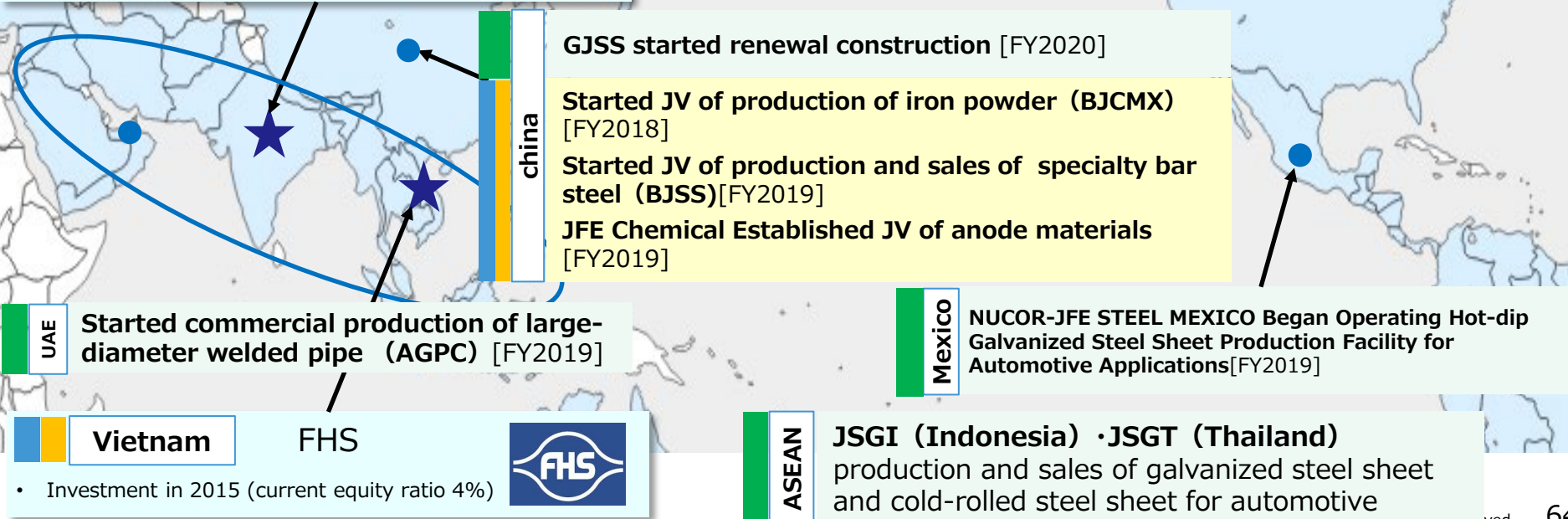


- Investment in 2009 (current equity ratio 15%)
- **Further deepen direct participation** such as beginning FS of establishing a grain-oriented electrical steel sheet manufacturing company

1. Vertical specialization business

2. "Insider" business

3. Solution business




china

- GJSS started renewal construction [FY2020]
- Started JV of production of iron powder (BJCMX) [FY2018]
- Started JV of production and sales of specialty bar steel (BJSS)[FY2019]
- JFE Chemical Established JV of anode materials [FY2019]

UAE Started commercial production of large-diameter welded pipe (AGPC) [FY2019]

Mexico NUCOR-JFE STEEL MEXICO Began Operating Hot-dip Galvanized Steel Sheet Production Facility for Automotive Applications[FY2019]

Vietnam **FHS**



- Investment in 2015 (current equity ratio 4%)

ASEAN JSGI (Indonesia) · JSGT (Thailand) production and sales of galvanized steel sheet and cold-rolled steel sheet for automotive

Examples of Steel Business’s Critical Initiatives: Strategy to Capture Growing Demand for Electrical Steel Sheet



JFE



To expand non-oriented electrical steel sheet (N/O) production capacity
Released April 1, 2021

JFE Steel decided that it would **expand the electrical steel sheet production capacity** of its West Japan Works (Kurashiki District) amid **increasing demand for high-grade N/O** applied for EV and HEV motors.

<Demand forecast of high-grade N/O>

The global movement to tighten and accelerate environmental regulations will rapidly increase demand for high-grade N/O, which are essential for production of motors that drive electric vehicles.

CAPEX	Approx. 49.0bn.
Expected time to start production	1H of FY2024
Expected capacity	Doubling the facility’s existing capacity for producing high-grade non-oriented electrical steel sheet
CO2 reductions	Approx. 1.5Mt-CO ₂ /Year*

*CO₂ reductions effect resulting from expanding EV/HEV



To conduct FS of grain-oriented electrical-steel-sheet JV with JSW in India
Released May 7, 2021

JFE Steel signed a memorandum of understanding to **conduct a feasibility study** with JSW, JFE’s strategic alliance-partner in India, regarding **establishing a G/O manufacturing and sales joint-venture-company in India.**

<Demand forecast of G/O>

Demand for G/O, which are used for the iron cores of power transform, **is expected to grow globally** amid continuous increase in demand for electric power and expansion of reusable energy. (Economic growth in India is estimated to boost its local demand for electric power.)



JFE Group-wide Strategy to Capture Growing Demand for Electrical Steel Sheet (Steel Business and Trading Business)



JFE

JFE Steel

Production of electrical steel sheets

Expand production and supply function of high value-added electrical steel sheets

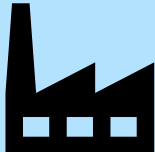
JFE Shoji

Processing and distribution of electric cores

World's No.1 global distribution and processing system



Domestic



Increase electrical steel sheet production capacity

Overseas



Production & sales JV with India's JSW for electrical steel sheets

Synergy



Expand collaboration with alliance partners



Establish SCM in new regions



Expand processing functions in coil centers

Groupwide Strategy: Capture increasing demand for high value-added electrical steel sheets both in domestic and overseas market

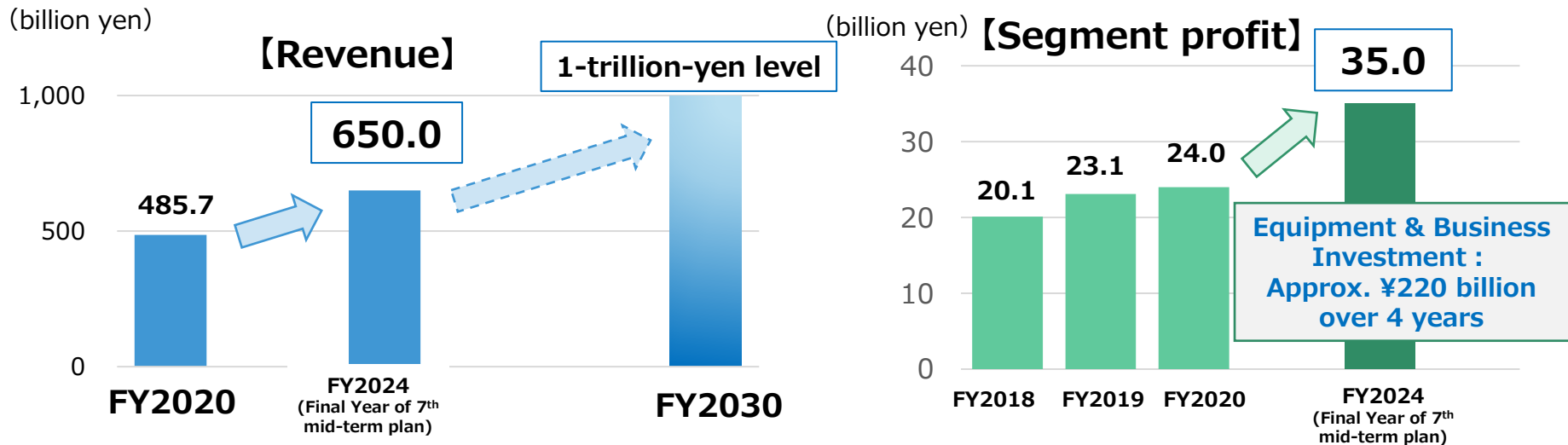
7th mid-term business plan <Engineering Business>

JFE

Expand sales revenue to 1-trillion-yen level in FY2030

Targets FY2024

- Revenue **650.0 billion yen**
- Segment Profit **35.0 billion yen**



Main initiatives

- 1. Enhance mid/long-term priority areas (See next page)**
Waste to Resources, Carbon-neutral business, Combined utility service, Core infrastructure
- 2. Expand overseas business** enhance EPC competitiveness, engage in ODA, pursue M&A synergies in chemical plant field, participation in local business in environmental, water and recycling fields
- 3. Promote DX initiatives**



Engineering Business's Main initiatives

–Enhancing mid/long-term priority areas–

JFE

- Expand engineering business as a growth sector by helping to solve pressing issues in global society, in view of increasing importance of the environmental, recycling and renewable-energy fields.
- Expand revenue and profit by setting the following **four priority areas**:

Waste to Resource

FY2024 revenue target
¥290 billion

- 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

FY2024 revenue target
¥80 billion

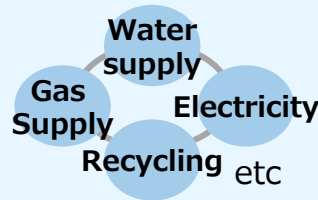
- Put priority in renewable energy (offshore wind-power generation, biomass power plant, solar power plant, geothermal power plant etc.)
- Develop carbon neutral technologies.



Combined utility services

FY2024 revenue target
¥20 billion

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



Core infrastructure

FY2024 revenue target
¥260 billion

- New technologies to address newly arising needs for strengthening and improving life of infrastructure
 - Strengthening of existing infrastructure →install new product and method for construction
 - Improving life of existing infrastructure→install new materials and new products

1. **Waste to Resource** : Recycling and waste-to-power generation etc. 2. **Carbon neutral** : Renewable energy, carbon recycling etc.
 3. **Combines utility services**: contribute to the local-production and local-consumption (circular economy) by mutual combination among various operation and maintenance business such as water, gas, electricity supply and recycling business/
 4. **Core infrastructure** : infrastructure business to establish social foundation such as bridge and pipeline



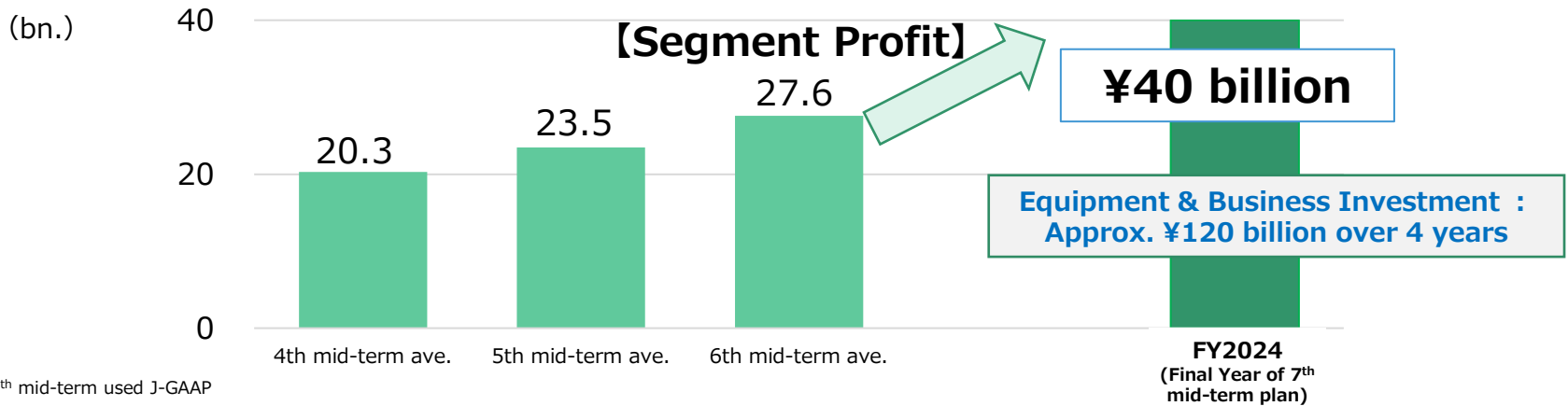
7th mid-term business plan <Trading Business>

JFE

Establish growth foundation by enhancing SCM

Target
FY2024

Segment profit **40bn.**



Main initiatives

- 1. Proceed key strategies for growth**
Establish No.1 position in global processing & distribution of electrical steel sheet, Strengthen SCM of automotive steel composite materials, Accelerate efforts in overseas construction materials business, Fully capture steel demand in Japan
- 2. Strengthen purchasing & sales capabilities** (expand non-JFE Steel business)
Increase sales of both JFE group products and alliance-partner products as well as actively expand business with other suppliers' products
- 3. Seize new business opportunities**
Expand environmental-solutions business, DX initiatives

Trading Business's Main initiatives

—Key Strategies for growth, Strengthen purchasing and sales capabilities—

Strengthen SCM of Automotive steel

Enhance SCM for high-tensile steel both in overseas and domestic market to increase sales of JFE's strategic products

Further collaboration with JFE Steel both in domestic and overseas market

- Along with the EV and HEV promotion and increasing needs for lighter body of automobiles, application volume of high-tensile steel for automotive is expected to increase because of its characteristics and environmental-friendly advantages.



China

Japan

US

ASEAN

Strengthen SCM along with groupwide optimum business across four-pillar regions

Fully Capture steel demand in Japan

Increase earnings by enhancing JFE Group's presence through expansion of function (quality) and additional trading (quantity)

Strengthen processing and distribution in domestic steel business

- **Strengthen SCM** continue to strengthen collaboration beyond group boundaries and establish optimum processing and distribution system
- **Widen processing functions to expand business** expand capabilities including secondary and tertiary processing to build strong foundation to meet various types of clients' needs

Pursue the best sales structure by sharing strategies with JFE Steel in the domestic market, which is the most critical

Accelerate efforts in overseas construction materials business

- In ASEAN and North American regions, expand trading in this sector and collaborate with local companies to strengthen business foundations.

Expand non-JFE Steel business

- **Aim to expand business to meet clients' needs.** Increase sales of both JFE group products and alliance-partner products as well as actively expand business with other suppliers' products



JFE Group's DX strategies

JFE

- Promote DX in every business area such as [advancing productivity through innovation](#), [transforming exiting businesses](#) and [creating new businesses](#).
- Proactively invest money and human resource necessary for DX :
[DX investment approx. 120 billion yen over 4 years](#)

JFE Steel

Use digital technology to streamline production operations and implement new growth strategies

Target

Labor productivity: 20% improve*

*FY2024 structural reform 13%+ DX effects etc.

Investment

**115 billion yen
over 4 years**

JFE Engineering

Digitalize entire business and provide new digital services to customers.

Target

**Design efficiency: 20% increase
in FY2024**

JFE Shoji

Improve customer service, pursue new businesses by leveraging DX

<JFE Steel's initiatives>

- [Enhance competitiveness](#) by introducing cyber-physical systems on all production lines
 - Improve production efficiency, labor productivity and yield ratio etc.
- Utilize digital technologies to [raise customer satisfaction](#) through [quality enhancements and better delivery services](#).
- Actively expand [solutions businesses](#)



Balance Financial Soundness with Effective Investment based on a “select and concentrate” approach

JFE

- Selective maintenance investment, focusing on investments for enhancing competitiveness and establishing stable profit base
- Ensure earning source by asset compression

1. Equipment & Business Investment about **1,450 billion yen** over 4 years

- Equipment investment : Approx. **1,200 billion yen** over 4 years
GX : About ¥340 billion over 4 years*, **DX : About ¥120 billion 4 years**

Execute maintenance investment carefully selected from the perspectives of effectiveness and necessity
 Shift focus on investment for improving profitability and cutting-edge facilities

- Business investment : About **250 billion yen** over 4 years

Steel business : expand overseas insider businesses, Engineering business : expand operation & maintenance business and overseas business

Trading business : business investment including M&A for increasing earnings from processing and distribution business

*Steel Business : ¥160 billion
 Engineering Business : ¥130 billion
 Trading Business : ¥50 billion

2. Ensuring earning source

- Generate cash by asset compression : Approx. **200 billion yen** over 4 years

Assets that contribute little to earnings or are tied to unprofitable businesses**

3. Returns to shareholders

- Dividend payout ratio: Around 30% on par with the target during 6th mid-term business plan

**Regarding development plans for partial area of Keihin district resulting from structural reform (Ogishima area): We will disclose development plans in FY2023, and strive to see some properties put to new use by FY2030.



Main Financial Data and Performance & Profitability Targets

JFE

		7 th mid-term business plan FY2024	FY2020 Actual
Consolidated	Business profit	¥ 320.0 billion	¥ -12.9 billion
	Profit attributable to owners of the parent	¥ 220.0 billion	¥ -21.8 billion
	ROE	10%	-1.3%
	Debt/EBITDA	About 3x	8.1x
	D/E*1	About 70%	93.2%
Operating companies	Steel business Profit per ton*2 Segment profit	10,000 yen/ton ¥ 230.0 billion	-3,000 yen/ ton ¥ -65.4 billion
	Engineering business Segment profit Revenue	¥ 35.0 billion ¥ 650.0 billion	¥ 24.0 billion ¥ 485.7 billion
	Trading Business Segment profit	¥ 40.0 billion	¥ 20.0 billion
	Payout ratio	7th mid-term business plan Around 30%	6 th mid-term business plan Around 30%

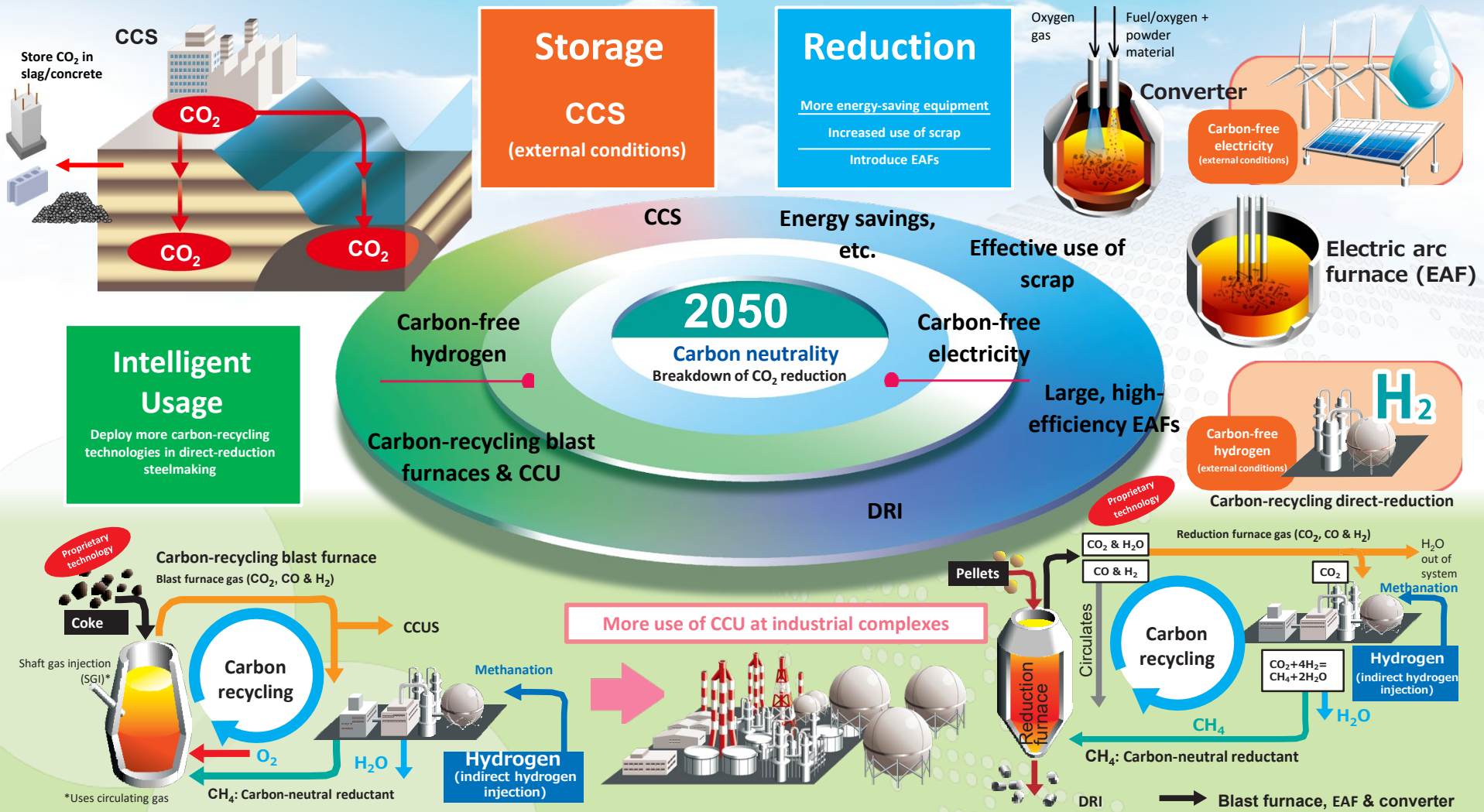
*1 For liabilities with equity subject to credit ratings, these equities reflect the evaluations of rating agencies

*2 Steel business profit per ton (consolidated segment profit / non-consolidated sales volume) Copyright © 2024 JFE Holdings, Inc. All Rights Reserved.

Appendix(4) JFE Steel Carbon Neutral Strategy Briefing

JFE Steel's Carbon Neutrality Vision 2050

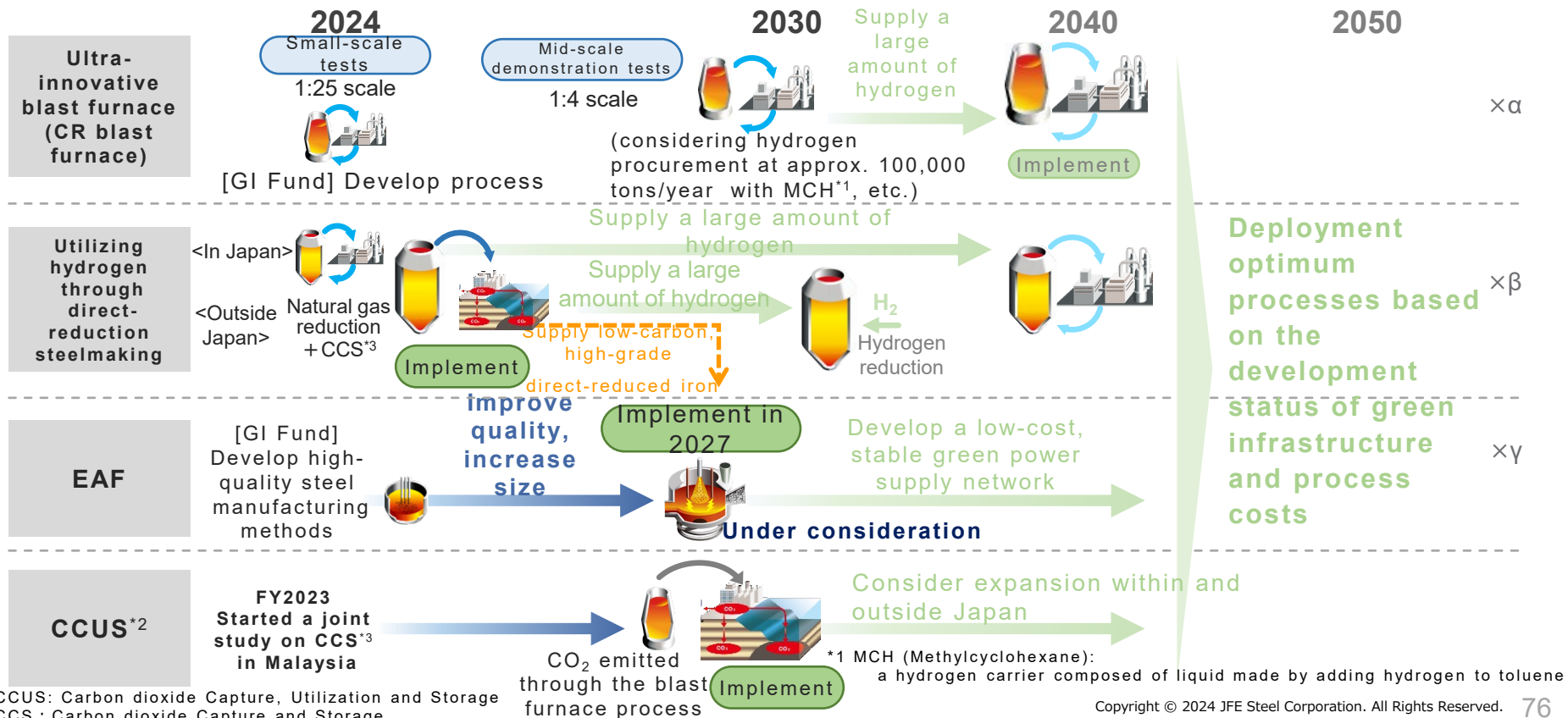
Environmental
Vision 2050



Combine reduction, intelligent usage and CO₂ storage to realize a carbon-neutral steel business by 2050



- ▶ Developing technologies to produce high-quality and high-functional steel in the GI Fund project by using technologies to utilize hydrogen in the blast furnace process and direct-reduction steelmaking as well as EAFs.
- ▶ **Considering the transition of one blast furnace, which is to be refurbished in 2027, to a large, high-efficiency EAF, assuming government support. Aiming for lower CO₂ emissions and business growth.**
- ▶ Policies on the transition after 2030 will be formulated later, taking account of issues such as the development of plentiful, low-cost, and stable supply networks of hydrogen and power as well as demand for green steel.





- ▶ JFE Steel is introducing low-carbon steel processes during its “transition period” to 2030.
- ▶ In its “innovation period” from 2030 to 2050, JFE Steel aims to develop and implement ultra-innovative technologies for carbon neutrality.

Transition period

- Increasingly deploy low-carbon technologies through capital investment to achieve targets such as cutting 2013-level CO₂ emissions by 30% or more by 2030
- Accelerate multitrack R&D targeting ultra-innovative technologies for innovation period
- Create markets for renewable green-steel materials based on actual environmental value
→ Create initial demand

Stimulate demand through government policy

Innovation period

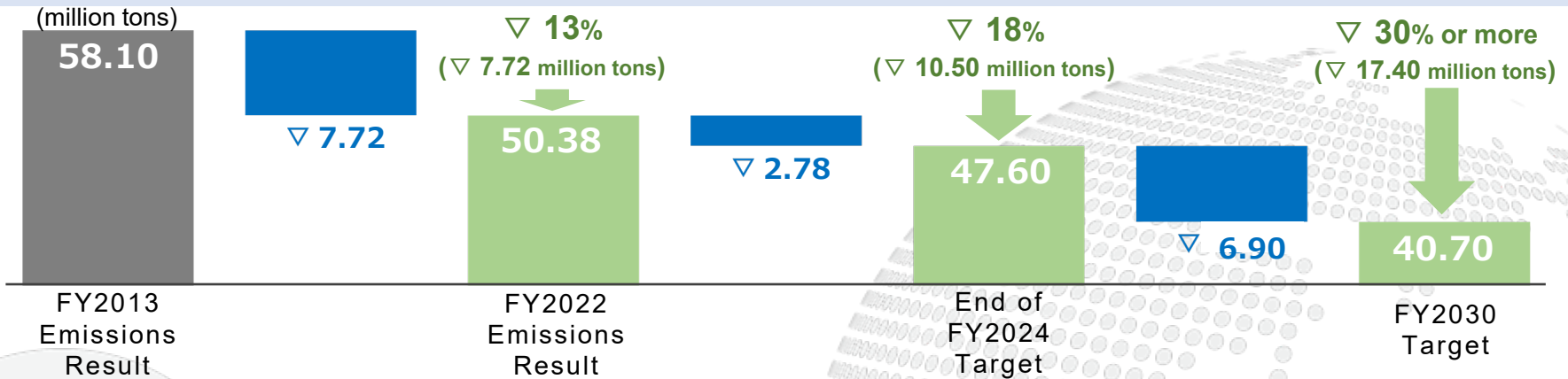
- Swiftly establish and deploy ultra-innovative technologies
- Collaborate with communities and industrial complexes toward carbon neutrality
- Grow markets for sustainable green steel based on actual environmental value
→ Grow demand leading to virtuous cycles

Maintain the competitiveness of Japanese steel through plentiful, low-cost, stable supplies of carbon-free hydrogen and electricity

Behavior must be shifted on both supply and demand sides to create markets for green steel



- ▶ Moving forward according to the FY2022 plan, achieving a 13% reduction. Also expecting to achieve the FY2024 year end target.
- ▶ Making solid progress in investment approval and implementation to achieve the reduction targets. Already approved for approx. 110 billion yen by FY2022.



Aiming for 18% reduction by the end of FY2024 (KPI progress up to FY2022)

■ Capital investment

Completed approval for 90% of total CO₂ reduction in the investment plan against the CO₂ reduction target* through energy savings and technological development

→ **Completed approval for 88% of the total investment plan**

■ Emissions reduction

Achieve 50% of the CO₂ reduction target* through energy savings and technological development

→ **Achieved 58% of the CO₂ reduction target**

* CO₂ reduction through energy savings and technological development: 3.00 million tons

Aiming for 30% or more reduction by FY2030

Energy savings and high efficiency

Low-carbon feedstock & fuel

Utilizing EAFs

- Upgrade to high-efficiency coke ovens in Fukuyama (▽ 16)

- Improve efficiency of power demand facilities

- Leverage AI & DS

- Expand the use of scrap in converters (▽ 150)

- Use reduced iron in blast furnaces and converters (▽ 200)

- Sendai: Upgrade existing EAFs (▽ 10)

- Chiba: Introduce EAFs for SUS (▽ 45)

- Kurashiki: Large, high-efficiency EAFs (▽ 260)

* The projects in blue bold font are already approved. Numbers in parentheses indicate the amount of reduction (10,000 tons/year).



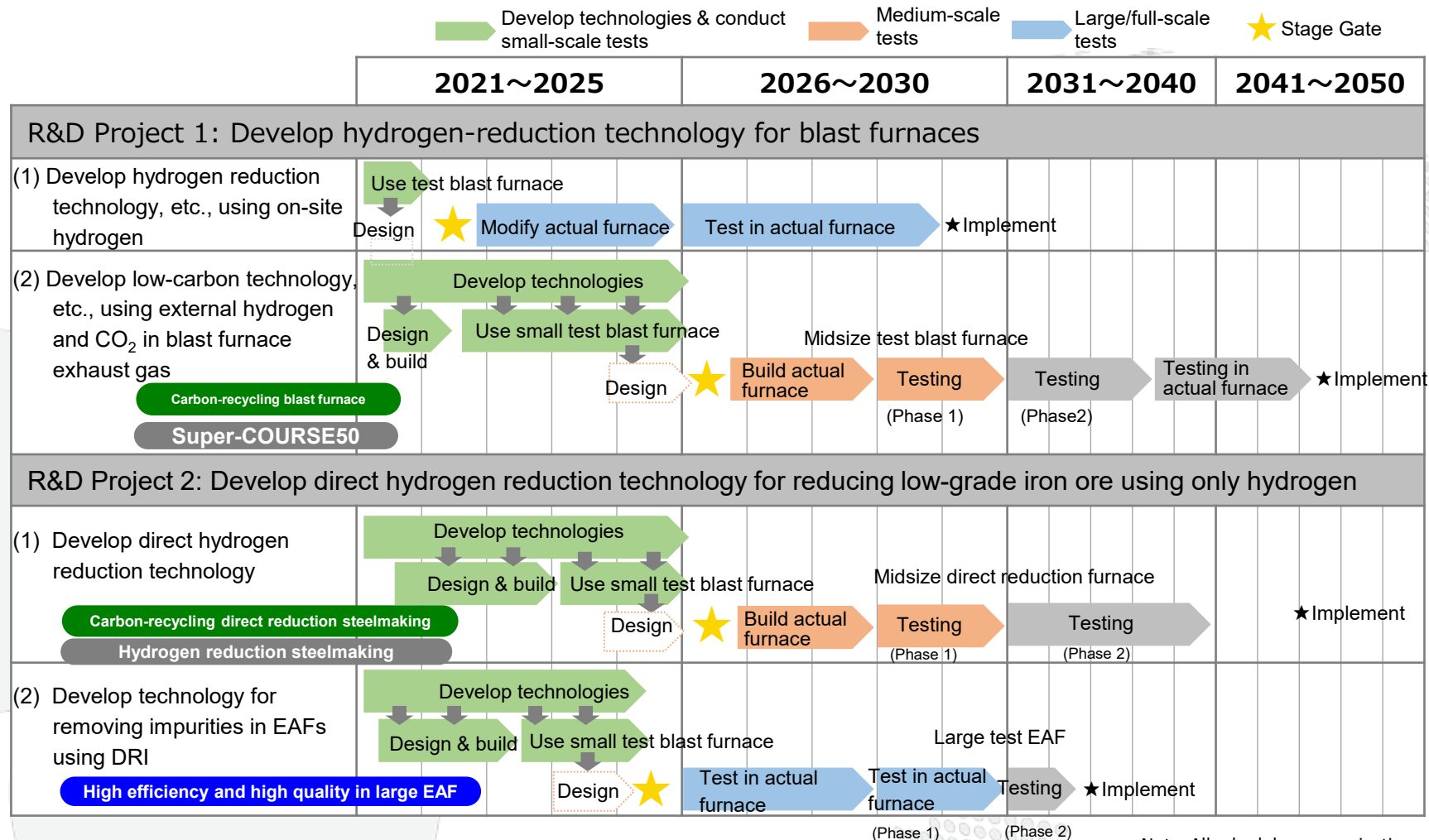
- ▶ Promoting the development of ultra-innovative technologies in the NEDO project on hydrogen utilization in iron and steelmaking processes, financed by the Green Innovation (GI) Fund.
- ▶ Started building a small test blast furnace (150m³) in Chiba District, aiming for swift implementation.

	Ultra-innovative blast furnace (Carbon-recycling blast furnace)	Direct-reduction steelmaking	Large, high-efficiency EAF
Development project	<p>The diagram shows a blast furnace receiving sintered ore (Fe₂O₃) and coke (C). It features a carbon recycling loop where CO₂ is captured and sent to a CCUS facility. Hydrogen is produced from a methanation facility using methane (CH₄) and oxygen (O₂) as reductants. The hydrogen is then used in the blast furnace.</p>	<p>The diagram illustrates a process where low-grade iron ore is fed into a reduction furnace. Hydrogen (H₂) is injected into the furnace. By-product gas is captured and used on-site in a reduction furnace. The resulting DRI (Direct Reduced Iron) is then melted in an EAF (Electric Arc Furnace). The EAF can generate electricity or carbon-free electricity.</p>	<p>The diagram shows a cross-section of an EAF with a burner lance for preheating reduced iron. It includes a cold iron source preheated by exhaust gas, slag, molten steel, and a bottom electrode (+) for stirring.</p>
Target	Reduce CO ₂ emissions by 50% or more (compared to conventional blast furnaces)	Reduce CO ₂ emissions by 50% or more (compared to conventional blast furnaces)	Establish high-quality and high-efficiency melting technologies
Description	<ul style="list-style-type: none"> • Technology to inject a large amount of oxygen and methane • Developing technology for seamless operations between the blast furnace and the methanation facility 	<ul style="list-style-type: none"> • Heat compensation for hydrogen reduction (injection of high-temperature hydrogen and recycled methane) • Optimizing conditions for injecting reduced gas according to the grade of the raw material 	<ul style="list-style-type: none"> • Improving steel quality by facilitating the denitrification with hydrogen gas and dephosphorization with suppress reoxidation • High-efficiency melting through burner lance, preheating of reduced iron, and molten steel stirring
Period	Test scheduled for FY2025-2026	Test scheduled for FY2024-2026	Test scheduled for FY2024-2025

Overall Scale of GI Fund Projects



- ▶ Development toward Stage Gate Reviews scheduled mainly in FY2025–2026
- ▶ Studies also underway with a view to actual implementation in 2030–2040s



Source: METI
(https://www.meti.go.jp/policy/energy_environment/global_warming/gifund/pdf/gif_05_randd.pdf)

Note: All schedules are projections



- ▶ In the EU, green steel is branded and sold using a mass balance approach.
- ▶ Achieving 30% CO₂ reduction by FY2030 will enable JFE Steel to supply up to 5M tons of green steel per year using the same approach.
- ▶ To create a carbon-neutral world, government policies need to encourage behavioral changes in both the supply and demand sides in order to drive changes in society and spark innovation for new industrial competitiveness.

Supply side

- Huge capital investment is needed to introduce low-carbon & ultra-innovative technologies. (1 trillion yen in low-carbon investments by 2030)
- While JFE Steel will strive to minimize R&D cost increases, some increase will be inevitable in the effort to create new environmental value.
- Prospects for appropriate returns on such investments also will be needed.

Demand side

- Green steel products do not directly benefit consumers in terms of better quality, performance, convenience, etc.
- Ethical consumption appears to be on the rise, but in Japan awareness of environmental value is low.
- Incentives are needed to encourage the recognition of environmental value and the purchase of products that significantly reduce carbon.

To support investment in low-carbon technology during the transition period until 2030 and to prepare for further large-scale investment during the innovation period, a green steel market must be created at an early stage (transition period) and government policies must raise the public's awareness as well as encourage steel consumers to change their behavior.



- ▶ While achieving carbon neutrality is a top management priority for JFE Steel, generating environmental value involves large investments and cost increases associated with transitioning, requiring efforts beyond the private company level.
- ▶ Mechanisms are needed so that society, as the beneficiary of green steel, helps to cover the associated cost increases through government support, collaborative initiatives, etc.

Initiatives as a private company

- Solidly execute ultra-innovative technologies and formulate plans to implement them in society
- Raise public awareness of environmental value created through green steel, applying the mass balance approach
<Green steel guidelines and setting international standards>
 (The Japan Iron and Steel Federation, World Steel Association)
- Visualize environmental value and participate in the implementation of the new Global Data Collection Framework agreed upon by the G7
- Formulate a plan to develop infrastructure for the low-cost, stable, large-scale supply of carbon-free hydrogen and electricity
- Formulate a plan to develop CCUS and green infrastructure through collaboration with industrial complexes, corporations, etc.

Achieve economic growth through decarbonization

Build a competitive advantage through government-private collaboration

Necessary government support

- Clarify detailed frameworks and schedules on long-term government support for large-scale R&D costs and capital investments
- Ensure government support comparable to that in Europe and the US (e.g., subsidies, tax mechanisms) and international competitiveness of industrial electricity prices
- Provide support for building a green hydrogen supply chain that will become the new infrastructure
- Take measures to stimulate demand for green steel, which has high environmental value, through procurement support (e.g., public procurement)
- Relax the application of competition laws in order to not hinder the promotion of innovation and joint efforts by companies



JFE