



JFE Group

**Financial Results for First Quarter of
Fiscal Year 2024 ending March 31, 2025**

JFE Holdings, Inc.

August 5, 2024

A table of contents

- **Financial Highlights**
- **JFE Holdings' Financial Results for First Quarter of Fiscal Year 2024 (April 1 to June 30, 2024) and Financial Forecast for Fiscal Year 2024 (April 1, 2024, to March 31, 2025)**
- **Dividends**
- **Financial Forecast for Fiscal Year 2024 by Segment**
- **Topics**

Appendix 1: Profit/Loss Analysis, etc.

Appendix 2: Business Environmental Indicators, etc.

Appendix 3: The 7th Medium-Term Business Plan

Appendix 4: JFE Steel Carbon Neutrality Strategy Briefing (Excerpted)

This presentation material is for the purpose of publicizing the status of our company's financial results for the first quarter of FY2024. 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

JFE

- Mainly due to the **lower sales for automobiles** and **lower profits at overseas group companies (JSW, etc.)** in the first half of the year, **business profit* for FY2024 is expected to be ¥308.0bn., down ¥27.0bn. from the previous forecast.**
- **Profit per ton of steel business* of ¥10,000 is expected to be achieved**, although business profit is expected to fall below the targets of the 7th mid-term plan.
- Profit attributable to owners of parent is expected to be **¥205.0bn.** (increased by ¥7.6bn. year-on-year, decreased by ¥15.0bn. from the previous forecast).
- JFE Holdings agreed to pay an **interim dividend of 50 yen. Annual dividend is 110 yen** (as previously announced, increased by 10 yen year-on-year).

*Excluding Inventory Valuation etc.

Results for 1Q of FY2024

Business Profit in Apr-Jun of FY2024

¥56.9bn. (decreased by ¥27.9bn. year-on-year)

[Excluding Inventory
Valuation etc.]

¥61.9bn. (decreased by ¥13.9bn. year-on-year)

Forecast of FY2024

Business Profit ¥260.0bn.

(decreased by ¥38.2bn. year-on-year,
decreased by ¥40.0bn. from previous forecast)

[Excluding Inventory
Valuation etc.]

¥308.0bn.

(increased by ¥11.8bn. year-on-year,
decreased by ¥27.0bn. from previous forecast)

Profit attributable to owners of parent ¥205.0bn.

(increased by ¥7.6bn. year-on-year, decreased by ¥15.0bn. from previous forecast)

Steel business profit per ton : 10,000yen/t (decreased by ¥1,000/t from
previous forecast)

Crude Steel Production

(Standalone) : approx. 23.00Mt

(decreased by 0.45Mt year-
on-year, decreased by 0.40Mt
from previous forecast)


7th Mid-term plan

- Business profit: ¥320.0bn.
- Steel business profit per ton:
10,000yen/t

Dividend 110yen (As previously announced, increased by 10 yen year-on-year),

Interim dividend 50yen

Consolidated Results for First Quarter of Fiscal Year 2024 (April 1 to June 30, 2024)



Financial Results for 1Q of Fiscal Year 2024

- **Business profit in 1Q of FY2024 was ¥56.9bn.**
(decreased by ¥27.9bn. year-on-year)

(billion yen)	FY2023 Actual 1Q (Apr-Jun)	FY2024 Actual 1Q (Apr-Jun)	Change
Revenue	1,262.0	1211.1	(50.9)
Business Profit [Excluding Inventory Valuation etc.]	84.8 [75.8]	56.9 [61.9]	(27.9) [(13.9)]
Finance Income/Costs	(4.9)	(5.1)	(0.2)
Segment Profit	79.8	51.7	(28.1)
Exceptional Items	—	(12.2)*	(12.2)
Profit before Tax	79.8	39.5	(40.3)
Tax Expense and Profit (Loss) Attributable to Non-Controlling Interests	(20.2)	(12.0)	8.2
Profit Attributable to Owners of Parent	59.6	27.5	(32.1)

* A loss regarding the share transfer of GECOSS Corporation.

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 Results for 1Q of Fiscal Year 2024 (by Segment)

(billion yen)		FY2023 Actual 1Q (Apr-Jun)	FY2024 Actual 1Q (Apr-Jun)	Change	Contents
	Steel Business	917.2	860.6	(56.6)	
	Engineering Business	111.1	123.8	12.7	
	Trading Business	370.3	358.3	(12.0)	
	Adjustments	(136.7)	(131.6)	5.1	
Revenue		1,262.0	1,211.1	(50.9)	
Business Profit (A)		84.8	56.9	(27.9)	
Finance Income/Costs (B)		(4.9)	(5.1)	(0.2)	
	Steel Business	68.1	31.5	(36.6)	Explanation on the next page
	Engineering Business	(0.1)	4.0	4.1	Increase in sales revenue and profit margin difference by project
	Trading Business	14.7	11.5	(3.2)	Profit decline in North America and domestic construction materials
	Adjustments	(2.9)	4.7	7.6	
Segment Profit (A+B)		79.8	51.7	(28.1)	

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.



¥36.6bn. Decrease in JFE Steel's Segment Profit^{JFE Steel} (FY2023 1Q(Actual) vs. FY2024 1Q(Actual))

JFE

				(billion yen)			
	Unit	FY2023 1Q	FY2024 1Q	JFE Steel	FY2023 1Q	FY2024 1Q	Change
Crude Steel (Standalone)	Mt	6.05	5.48	Segment Profit	68.1	31.5	(36.6)
Shipment (Standalone)	Mt	5.23	4.70				
Average Sales Price (Standalone)	000yen /t	128.5	139.2				
Exchange Rate	yen/\$	135.8	155.0	Excluding Inventory Valuation etc.	59.1	36.5	(22.6)

1. Cost	+18.0	<ul style="list-style-type: none"> Structural reforms effect + 11.0 Operational improvement + 7.0
2. Volume and Mix	(8.0)	<ul style="list-style-type: none"> Crude steel Production 6.05Mt→5.48Mt
3. Spreads*	(8.0)	<ul style="list-style-type: none"> Deterioration due to the slowdown in overseas market conditions
4. Inventory Valuation	(14.0)	<ul style="list-style-type: none"> Inventory valuation + 5.0 (-5.0→±0) Carry over -18.0 (+5.0→-13.0) Foreign exchange valuation -1.0 (+9.0→+8.0)
5. Others	(24.6)	<ul style="list-style-type: none"> Group companies -15.0

*Spreads including various prices (metals, energy, materials, logistics, labor costs, foreign exchange effects, etc.) Copyright © 2024 JFE Holdings, Inc. All Rights Reserved.

Financial Forecasts for Fiscal Year 2024 (April 1, 2024, to March 31, 2025)



Financial Forecast for Fiscal Year 2024

JFE

- **Full-year business profit is expected to be ¥260.0bn.**
(decrease by ¥40.0bn. from the previous forecast, decreased by ¥38.2bn. year-on-year)
- **Full-year profit attributable to owners of parent is expected to be ¥205.0bn.**
(decrease by ¥15.0bn. from the previous forecast, increased by ¥7.6bn. year-on-year)

(billion yen)	FY2023 Actual		FY2024 Forecast (Previous)	FY2024 Forecast(Updated)		Change FY2023 →FY2024	Change Previous →Updated
	1H	Full year	Full year	1H	Full year	Full year	Full year
Revenue	2,576.5	5,174.6	5,390.0	2,460.0	5,240.0	65.4	(150.0)
Business Profit [Excluding Inventory Valuation etc.]	164.3 [165.3]	298.2 [296.2]	300.0 [335.0]	85.0 [113.0]	260.0 [308.0]	(38.2) [11.8]	(40.0) [(27.0)]
Finance Income/Costs	(8.9)	(18.6)	(20.0)	(10.0)	(20.0)	(1.4)	0
Segment Profit	155.3	279.6	280.0	75.0	240.0	(39.6)	(40.0)
Exceptional Items	-	(11.2)	30.0	(10.0)*	35.0*	46.2	5.0
Profit before Tax	155.3	268.3	310.0	65.0	275.0	6.7	(35.0)
Tax Expense and Profit (Loss) Attributable to Non-Controlling Interests	(45.2)	(70.9)	(90.0)	(20.0)	(70.0)	0.9	20.0
Profit Attributable to Owners of Parent	110.0	197.4	220.0	45.0	205.0	7.6	(15.0)

*A loss from the share transfer of GECOSS Corporation and a profit from sales of lands, etc.

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 2024

(by Segment)

JFE

(billion yen)		FY2023 Actual		FY2024 Forecast (Previous)	FY2024 Forecast(Updated)		Change FY2023 →FY2024	Change Previous →Updated
		1H	Full year	Full year	1H	Full year	Full year	Full year
	Steel Business	1,865.8	3,716.0	3,670.0	1,780.0	3,660.0	(56.0)	(10.0)
	Engineering Business	248.4	539.9	580.0	260.0	580.0	40.1	0
	Trading Business	742.0	1,476.4	1,650.0	700.0	1,550.0	73.6	(100.0)
	Adjustments	(279.7)	(557.8)	(510.0)	(280.0)	(550.0)	7.8	(40.0)
Revenue		2,576.5	5,174.6	5,390.0	2,460.0	5,240.0	65.4	(150.0)
Business Profit (A)		164.3	298.2	300.0	85.0	260.0	(38.2)	(40.0)
Finance Income/Costs (B)		(8.9)	(18.6)	(20.0)	(10.0)	(20.0)	(1.4)	0
	Steel Business	122.8	202.7	205.0	40.0	165.0	(37.7)	(40.0)
	Engineering Business	8.7	24.3	20.0	8.0	20.0	(4.3)	0
	Trading Business	26.8	48.9	50.0	22.0	50.0	1.1	0
	Adjustments	(3.1)	3.5	5.0	5.0	5.0	1.5	0
Segment Profit (A+B)		155.3	279.6	280.0	75.0	240.0	(39.6)	(40.0)

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

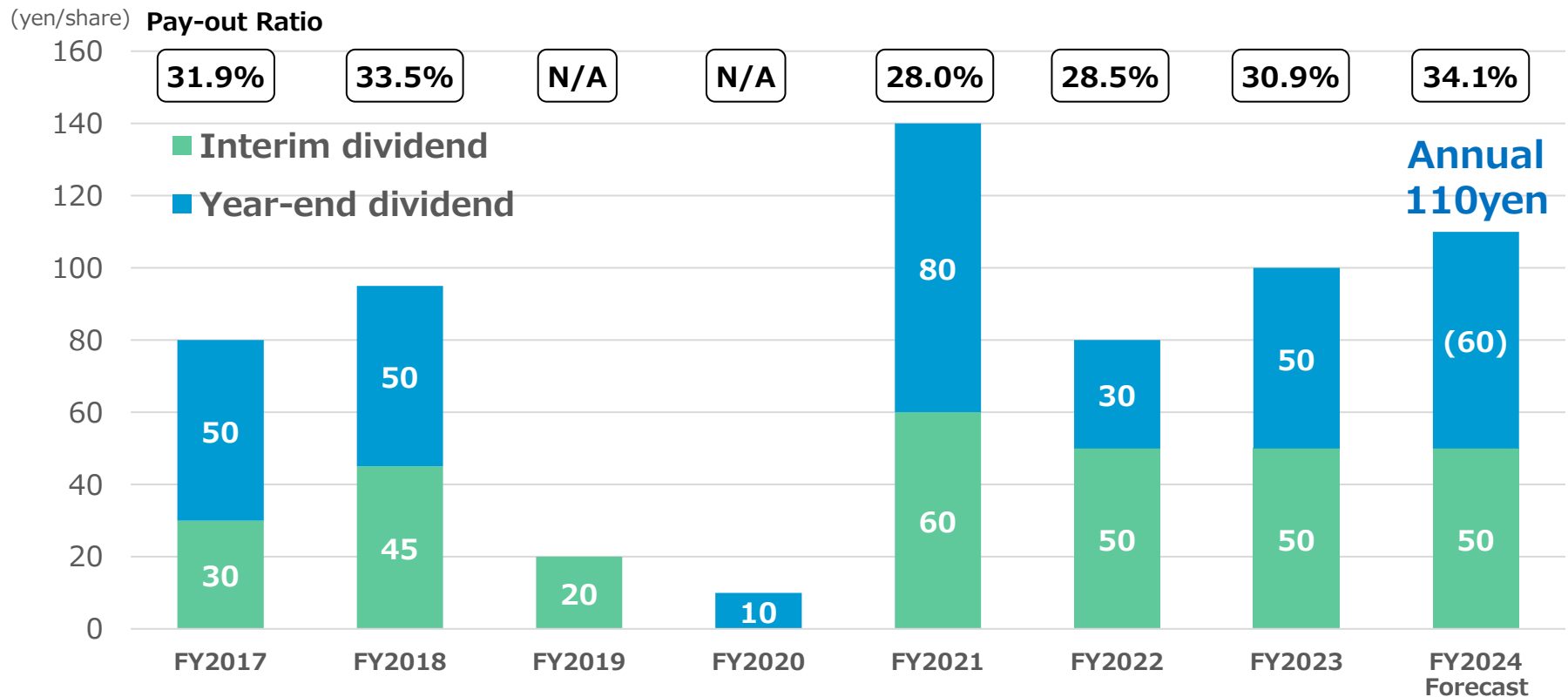
Segment profit is profit including financial income in business profit.



Dividend

JFE

- JFE Holdings agreed to pay an interim dividend of **50 yen per share** at its Board of Directors.
- The annual dividend for FY2024 is expected to be **110 yen per share**, based on our payout ratio policy of approximately 30%.
(as previously announced, increased by 10 yen year-on-year.)



JFE Steel

Financial Forecast for Fiscal Year 2024

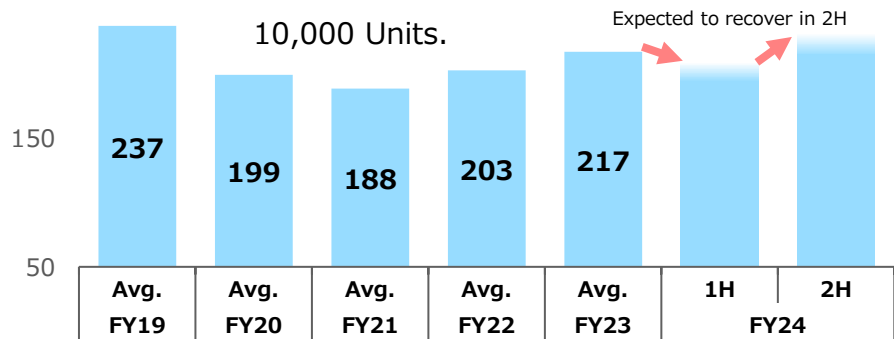
Business environment (Domestic)



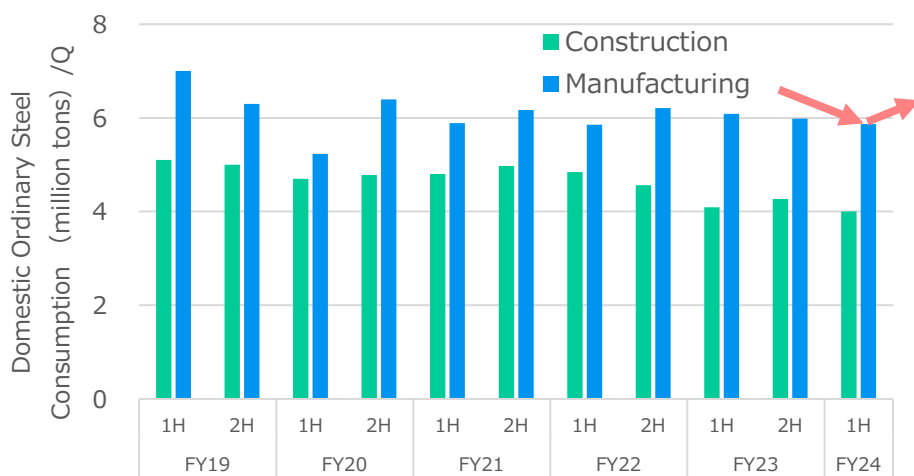
JFE

- Demand in the **automotive sector** is steady, but **production has declined due to newly emerged certification issues**. In **the civil engineering and construction field**, demand **continues to be postponed** due to labor shortages and a surge in materials.
- **Steel demand is expected to improve** in 2H, mainly **driven by the automotive sector**.

【Outlook for Domestic Auto Production/Q】



【Outlook for Domestic Ordinary Steel Consumption/Q】



Source : Ministry of Economy, Trade and Industry, “Outlook for Steel Consumption” July 2024. (FY2023, 2H and after is estimated results)

【Trend by Sector】

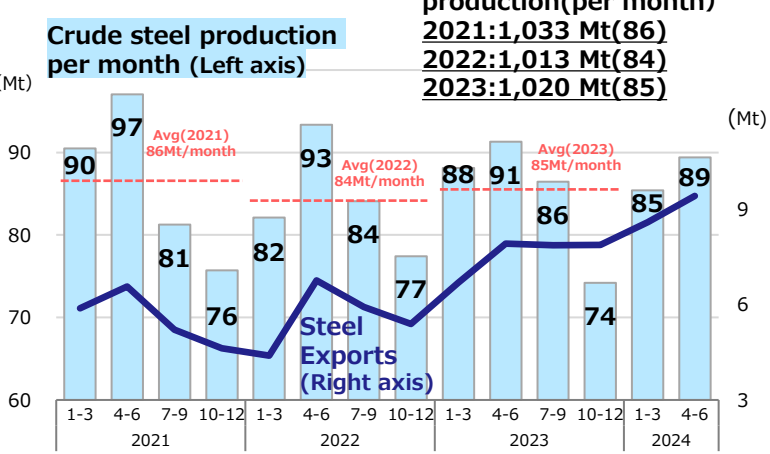
Auto-mobile	<ul style="list-style-type: none"> Despite the impact of newly emerged certification issues and other factors, production motivation is high due to a steady demand. Continue to monitor development in production plans
Ship-building	<ul style="list-style-type: none"> Despite the effects of high materials prices and labor shortages, each shipbuilder has secured a three-year backlog of orders. The current level is expected to remain stable over the next two to three years.
Other manufacturing	<ul style="list-style-type: none"> Construction equipment: We are closely monitoring the softening trend in Europe and Asia, as well as the indication of a peak in the North American market. Industrial machinery: It has been sluggish due to uncertainties surrounding rising interest rates and ongoing inflation. While there are some observations of a potential bottoming out, there are currently no significant signs of recovery.
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. Demand remains sluggish, due to the impact on construction investment and housing acquisition sentiment against the rise in construction costs and interest rates.
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 rising costs of materials and labor shortages.

Business environment (Overseas)

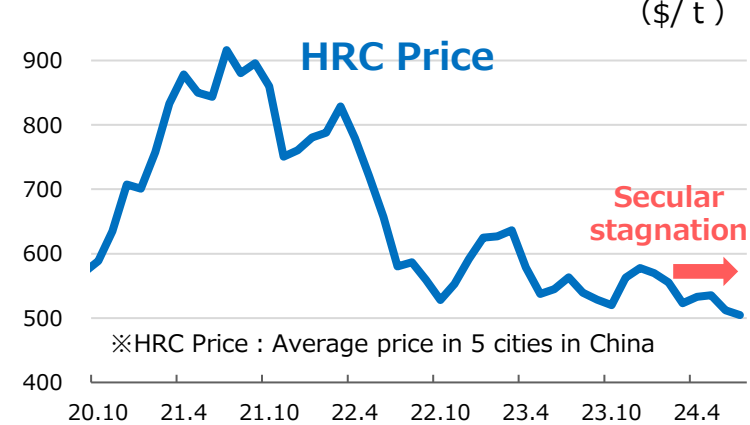


➤ Continued high production and increased exports in China, despite the sluggish domestic demand, are leading to **a slackening in steel supply and a stagnant market situation**. We expect that **the tough business environment will last for a while**.

【China's crude steel production and steel exports】



【China: Steel Market Price】



【Real GDP Growth Forecast in 2024】

(Arrows indicate changes from the previous forecast)

	World	US	China	India	ASEAN-5
2023	3.3%	2.5%	5.2%	8.2%	4.1%
Apr. 2024 Forecast	3.2%	2.7%	4.6%	6.8%	4.5%
Jul. 2024 Forecast	3.2%	2.6%	5.0%	7.0%	4.5%

Source : IMF World Economic Outlook Update April 2024 and July 2024

*ASEAN-5 : Thailand, Malaysia, Indonesia, Philippine, and Singapore

【Trend by Sector】

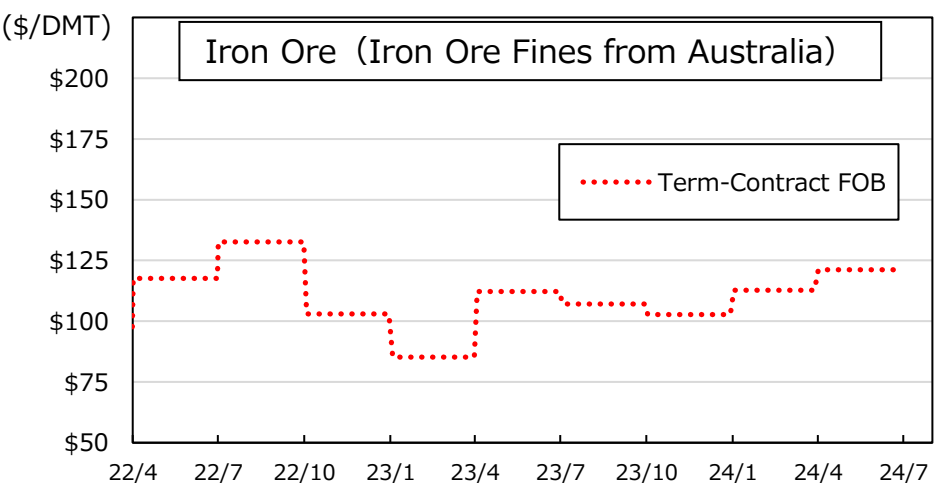
Thin Sheet	<ul style="list-style-type: none"> • Market conditions particularly in Asia are sluggish due to China's weak domestic demand, high production levels, and increased exports. It is anticipated that it will take time for demand and market conditions to recover, as we await effective economic stimulus and production control measures from the Chinese government.
Auto-mobile	<ul style="list-style-type: none"> • Although production in China is increasing, Japanese OEMs are losing market share. • In ASEAN, the impact of higher interest rates and stricter loan screening has been prolonged, but recovery is expected in 2H. • In India, demand is strong due to high economic growth.
Ship-building	<ul style="list-style-type: none"> • China and South Korea shipbuilders are securing stable contracts, despite the impact of labor shortages.
Energy	<ul style="list-style-type: none"> • Despite potential risks, such as developments in OPEC+, overall investment is expected to remain firm as the demand for stable energy supply remains strong amidst moderate global economic growth and heightened geopolitical tensions.



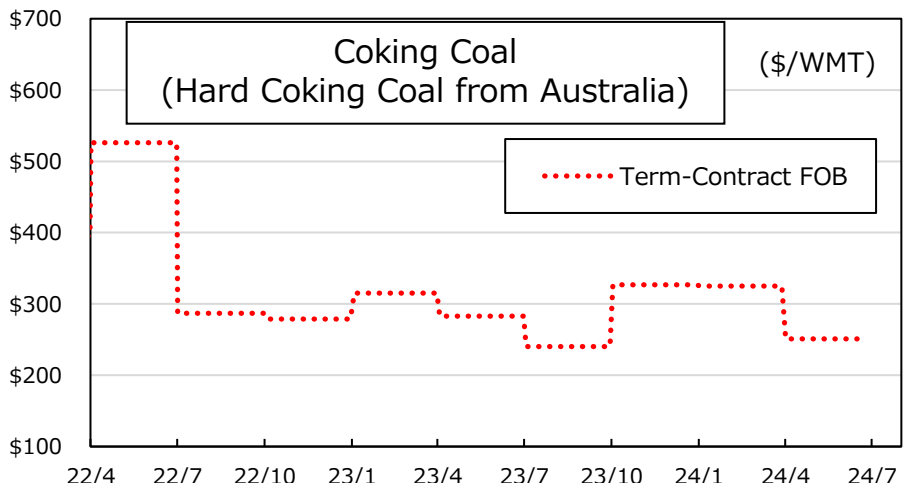
JFE

Raw materials market trends

- Key Raw materials
 - Iron Ore: Prices are expected **to remain at current levels** as demand for Chinese steel continues to slump.
 - Coking Coal: Prices are expected **to remain at current levels** for a while, while there are some risks to rise such as sluggish production by suppliers and increase in demand for infrastructures in India after the general election. The impact of the fire at the Australian coal mine on the market will be closely monitored.
- Metals
 - Demand has been sluggish due to the slow recovery of the Chinese economy and steel demand, but **market prices for some stocks have risen** due to tightening of supply and demand due to supply capacity cuts.



Term-Contract FOB	FY2023				FY2024	
	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep
\$/DMT	112	107	103	113	121	101



Term-Contract FOB	FY2023				FY2024	
	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep
\$/WMT	283	240	327	325	251	—

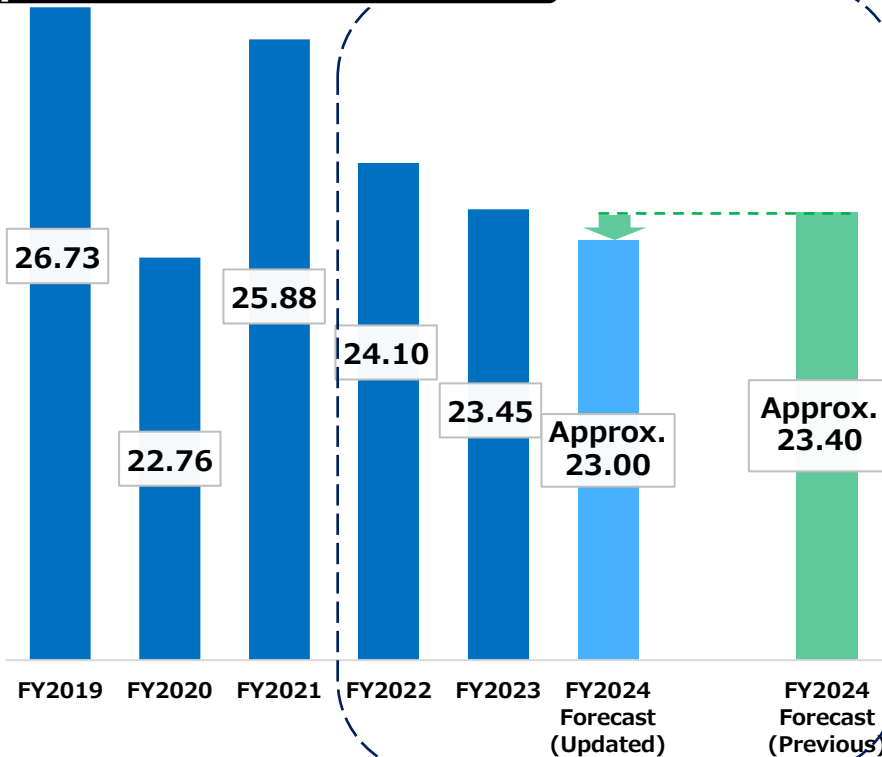
Crude Steel production

JFE

- Demand is expected to improve in 2H, but **standalone crude steel production is expected to be around 23 million tons per year** due to a decline in demand for automobiles both in Japan and overseas in 1H (**-400Kt from the previous forecast**).
- Continue to aim for a shift from quantity to quality by increasing high value-added products (In line with the target of the 7th Mid-term Plan, the ratio is expected to reach 50% in FY24.). **Capacity expansion in Kurashiki district for electrical steel sheet will be completed in 1H as scheduled.**

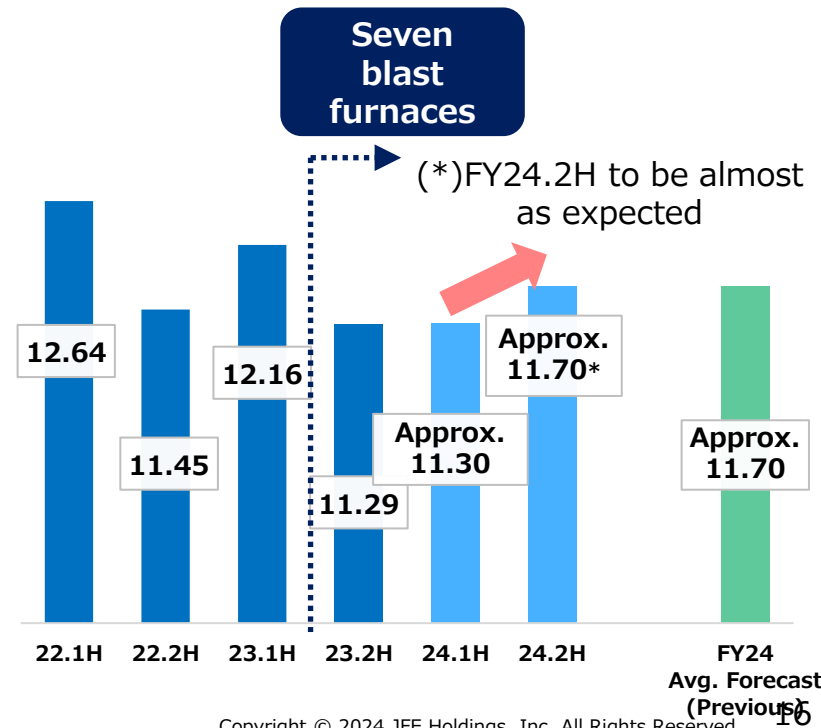
Standalone crude steel production <Full Year>

Unit : Mt



Standalone crude steel production <Half Year>

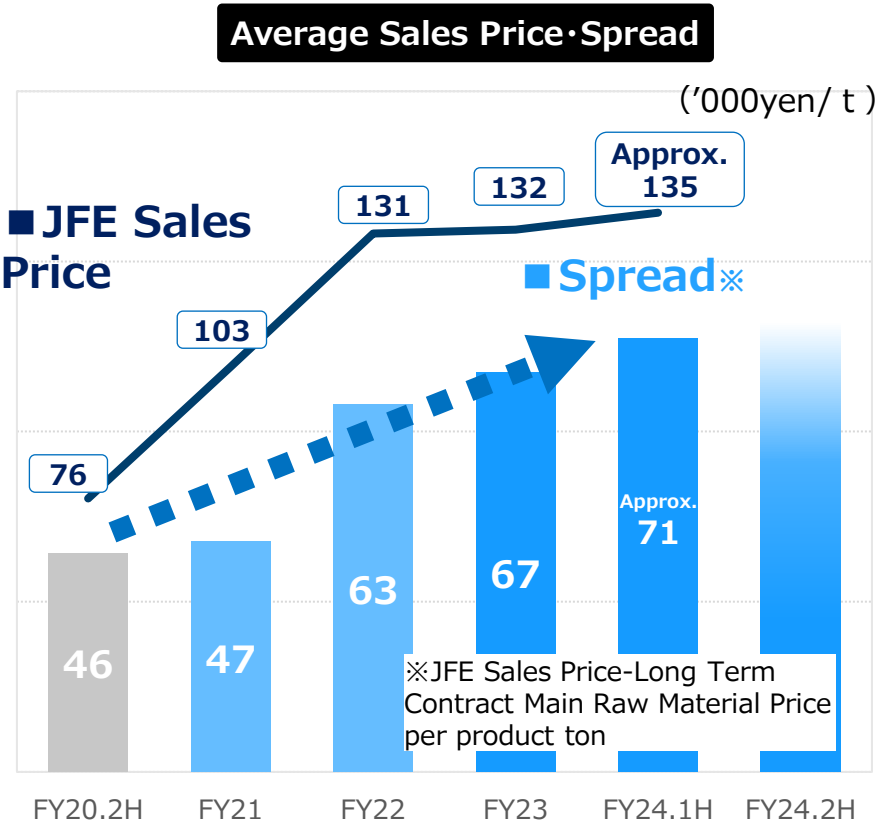
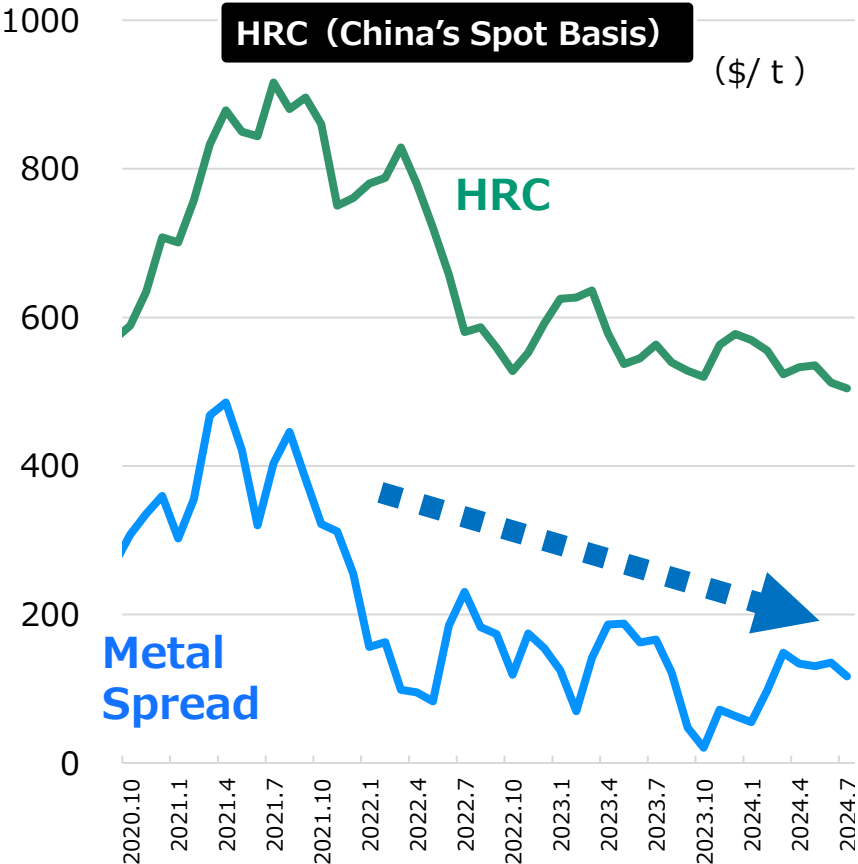
Unit : Mt



Improving of sales price



- Sales prices are expected to improve due to **passing on various costs to the sales price, reviewing extras, and correcting price levels.**
 - The spread in FY2024 including various costs* is expected to remain at the level of FY2023, despite the influences of the slump in overseas markets, as **measures are taken to cope with rising costs such as logistics and labor costs.**
- *Spreads including metals, energy, materials, logistics, labor costs, foreign exchange impact, etc.



Financial Forecast for Fiscal Year 2023


JFE

	Unit	FY2023					FY2024					FY24 Previous Forecast
		1Q	2Q	1H	2H	Full Year	1Q	2Q	1H	2H	Full Year	
Revenue	billion yen	917.2	948.6	1,865.8	1,850.2	3,716.0	860.6	919.4	1,780.0	1,880.0	3,660.0	3,670.0
Segment Profit	billion yen	68.1	54.7	122.8	79.8	202.7	31.5	8.5	40.0	125.0	165.0	205.0
Excluding Inventory Valuation*	billion yen	59.1	64.7	123.8	76.8	200.7	36.5	31.5	68.0	145.0	213.0	240.0
Crude Steel (Standalone)	Mt	6.05	6.11	12.16	11.29	23.45	5.48	Approx. 5.80	Approx. 11.30	Approx. 11.70	Approx. 23.00	Approx. 23.40
Crude Steel (Consolidated)	Mt	6.38	6.47	12.85	11.95	24.80	5.80	Approx. 6.10	Approx. 11.90			
Shipment (Standalone)	Mt	5.23	5.42	10.65	10.12	20.77	4.70	Approx. 5.20	Approx. 9.90			
Export Ratio on Value Basis (Standalone)	%	44.2	44.2	44.2	41.5	42.9	40.6	Approx. 45	Approx. 43			
Average Sales Price (Standalone)	000 yen/ t	128.5	130.1	129.3	133.8	131.5	139.2	Approx. 132	Approx. 135			
Exchange Rate	¥/\$	135.8	144.1	139.9	147.7	143.8	155.0	Approx. 157	Approx. 156	Approx. 155	Approx. 156	Approx. 150
Exchange Rate (End of Term)	¥/\$	145.0	149.6	149.6	151.4	151.4	161.1	Approx. 155	Approx. 155	Approx. 155	Approx. 155	Approx. 150

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

¥40.0bn. Decrease in JFE Steel's Segment Profit (FY2024 (Previous Forecast) vs. FY2024(Updated Forecast))

- **Decrease in sales for automobiles and in profit at overseas group companies (India) is expected mainly in 1H.**

JFE Steel		FY2024 Previous Forecast	FY2024 Updated Forecast	Change
Segment Profit		205.0	165.0	(40.0)
Excluding Inventory Valuation etc.		240.0	213.0	(27.0)

(billion yen)

1. Cost **± 0**

2. Volume and Mix **(15.0)**

• Crude Steel Production
Approx. 23.40Mt→Approx. 23.00Mt

3. Spreads* **(5.0)**


4. Inventory Valuation **(13.0)**

• Inventory valuation -8.0 (-12.0→-20.0)
• Carry over-10.0 (-23.0→-33.0)
• Foreign exchange valuation + 5.0 (±0→+ 5.0)

5. Others **(7.0)**

• Group Companies-7.0

*Spreads including various prices (metals, energy, materials, logistics, labor costs, foreign exchange effects, etc.) Copyright © 2024 JFE Holdings, Inc. All Rights Reserved.



¥37.7bn. Decrease in JFE Steel's Segment Profit(FY2023 (Actual) vs. FY2024 (Forecast))


JFE Steel

(billion yen)

JFE Steel	FY2023 Actual	FY2024 Forecast	Change
Segment Profit	202.7	165.0	(37.7)
Excluding Inventory Valuation etc.	200.7	213.0	12.3

1. Cost	+42.0	<ul style="list-style-type: none"> • Structural reforms effect + 25.0 • Operational improvement + 17.0
2. Volume and Mix	(5.0)	<ul style="list-style-type: none"> • Crude Steel Production 23.45Mt⇒Approx. 23.00Mt
3. Spreads*	±0	
4. Inventory Valuation	(50.0)	<ul style="list-style-type: none"> • Inventory valuation -25.0 (+5.0→-20.0) • Carry over -35.0 (+2.0→-33.0) • Foreign exchange valuation -10.0 (+15.0→+5.0) • One-time structural reform costs +20.0 (-20.0→±0)
5. Others	(24.7)	<ul style="list-style-type: none"> • Group companies -11.0

*Spreads including various prices (metals, energy, materials, logistics, labor costs, foreign exchange effects, etc.)



¥85.0bn. Increase in JFE Steel's Segment Profit (FY2024.1H vs. FY2024.2H)

JFE Steel

- A recovery in 2H is expected in **demand for automobiles, sales expansion of high-value-added products**, and an improvement in earnings for our **India's group companies, where an overall improvement in economic activity is expected**.

JFE Steel		FY2024 Forecast			Change (billion yen)
		1H Forecast	2H Forecast	Full Year	
Segment Profit		40.0	125.0	165.0	85.0
Excluding Inventory Valuation etc.		68.0	145.0	213.0	77.0

- Cost**
+ 10.0
- Volume and Mix**
+ 24.0
 - Crude steel production Approx. 11.30Mt⇒Approx. 11.70Mt
 - Recovery in Automobile production and sales expansion of high-value-added products (Electrical steel sheet, Wind power generation, etc.)
- Spreads***
+ 11.0
 - Improved spreads due continued sales price improvement efforts
- Inventory Valuation**
+ 8.0
 - Inventory valuation -20.0 (±0→-20.0)
 - Carry over + 33.0 (-33.0→±0)
 - Foreign exchange valuation -5.0 (+5.0→±0)
- Others**
+ 32.0
 - Group Companies + 25.0

*Spreads including various prices (metals, energy, materials, logistics, labor costs, foreign exchange effects, etc.)

Profitability in steel business

JFE

- Mid-term target of business profit of ¥230bn. is not expected to be achieved mainly due to temporary factors in 1H. However, the target for profit per ton will be maintained at 10,000 yen per ton.
- Profit in 2H is expected to be in line with the forecast announced in May as a result of cost reductions and capacity expansion of electrical steel sheets.

Profitability in steel business (Segment profit excluding inventory valuation)

FY23.1H→FY23.2H

① Decrease in volume (automobiles, etc.), slowdown in overseas markets, rise in coking coal prices, etc.

FY23.2H→FY24.1H

② (Previous) Sales price improvement and increase in volume (automobiles)
③ (Updated) Decrease in volume (automobiles) and decrease in profit due to overseas group companies (India)

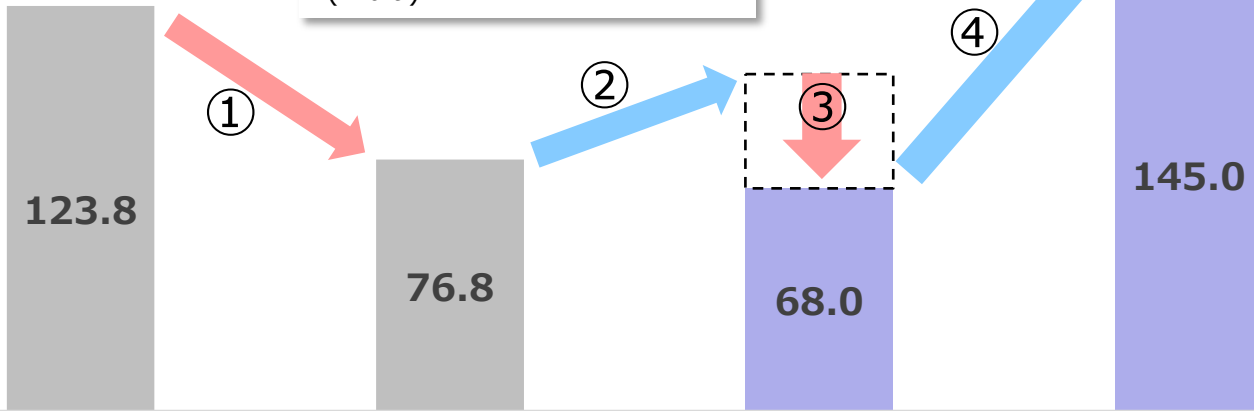
FY24.1H→FY24.2H

④ (Updated) Recovery of domestic automobile production, improvement of economic activity level in India after general election, and recovery of demand for steel products

Long-term vision
Double profitability

8th Mid-term business plan

Unit : billion yen



■ The annualized profit for 2H(2H×2) exceeds ¥230bn.

■ Aiming for further profit growth under the 8th Medium-Term Plan and Long-Term Vision.

FY23.1H Actual

FY23.2H Actual

FY24.1H Forecast

FY24.2H Forecast

JFE Engineering

Financial Forecast for Fiscal Year 2024



Financial Forecast for Fiscal Year 2024

JFE

■ Current Business Environment/Overview of Financial Status

- Expect to increase orders in the field of **“Waste to Resource”** and **“Core infrastructure”**
- Full year segment profit is expected to be **¥20.0bn.** (as previously announced).

■ Financial Forecast

(billion yen)	FY2023 Actual		FY2024 Forecast		Change	
	1H	Full Year	1H	Full Year	1H	Full Year
Orders*	269.7	563.0	240.0	600.0	(29.7)	37.0
Revenue	248.4	539.9	260.0	580.0	11.6	40.1
Segment Profit	8.7	24.3	8.0	20.0	(0.7)	(4.3)

*From FY2024, the Company changed its method of accruing orders for long-term O&M (operation and maintenance) contracts for waste treatment facilities, etc. contracted by local governments. Based on the previous order accruing method, we forecast annual orders for FY2024 to be ¥590 billion.

JFE Shoji

Financial Forecast for Fiscal Year 2024



Financial Forecast for Fiscal Year 2024

JFE

■ Current Business Environment/Overview of Financial Status

- In the first half, demand in North America and China is expected to remain sluggish, resulting in a year-on-year decrease of ¥4.8bn. to ¥22.0bn.
- Annual segment profit is expected to be ¥50.0bn. (as previously announced) with the anticipation of the gradual recovery of domestic demand for automobiles and the incorporation of profits by Studco*, etc. in the second half. (increased by ¥1.1bn. year-on-year, increased by ¥10.0bn. over the 7th medium-term business plan)

* Manufacturer of steel framing based in the United States and Australia acquired in May 2024)

■ Financial Forecast

(billion yen)	FY2023 Actual		FY2024 Forecast		Change	
	1H	Full Year	1H	Full Year	1H	Full Year
Revenue	742.0	1,476.4	700.0	1,550.0	(42.0)	73.6
Segment Profit	26.8	48.9	22.0	50.0	(4.8)	1.1

Topics

JFE Group and Japan Suiso Energy* Sign Land-lease Agreement for Demonstration of World's First Liquefied Hydrogen Supply Chain

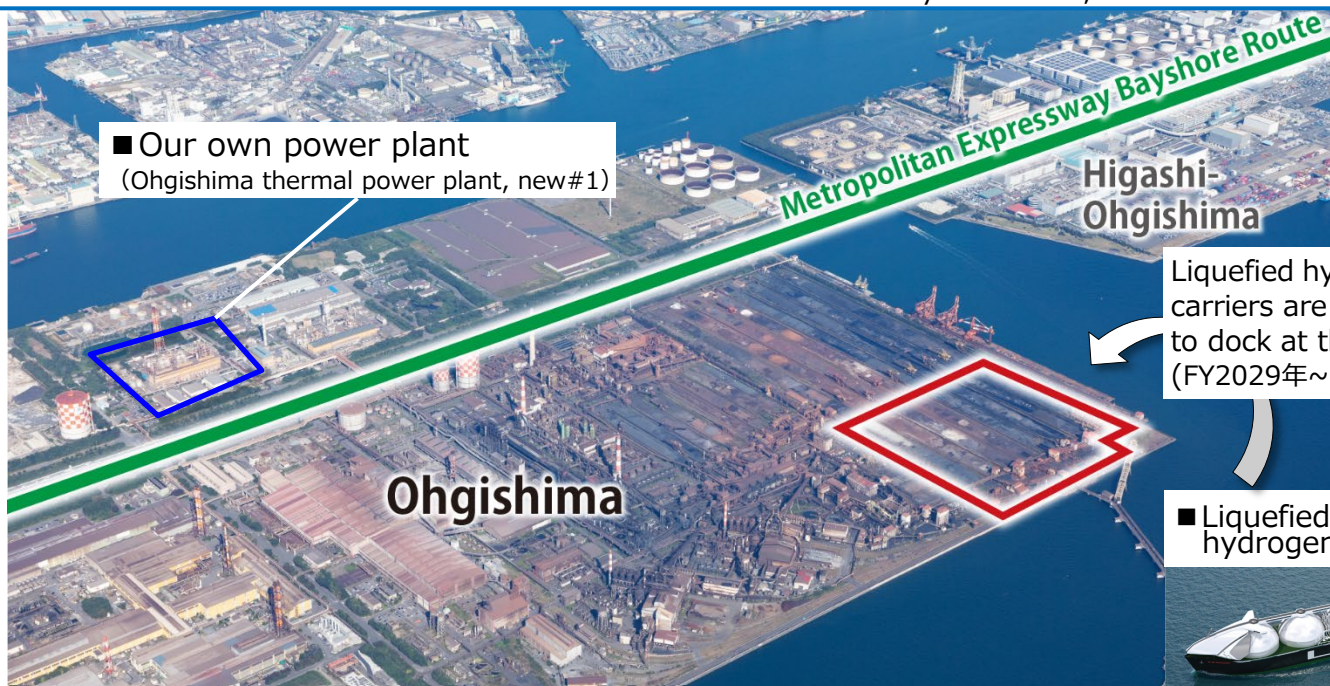
Released on Jul 25th, 2024

JFE

Ohgishima was selected as the liquefied hydrogen receiving site for a Green Innovation Fund Project "Liquefied Hydrogen Supply Chain Commercialization Demonstration".

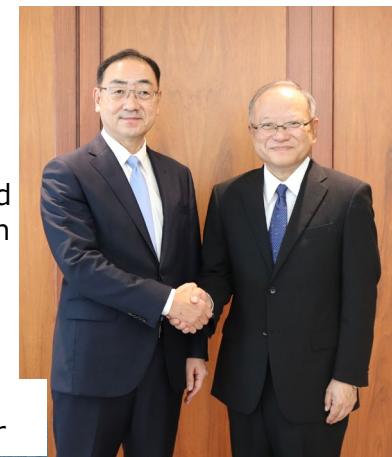
➡ Leading the way toward a hydrogen-powered society in Japan from Ohgishima.

*Kawasaki Heavy Industries, Ltd.:36.6%•Iwatani Corporation:33.4%•INPEX:30%



■ Agreement signing ceremony

Right: Eiichi Harada, president of Japan Suiso Energy
Left: Masayuki Hirose, president and CEO of JFE Steel



- **Large-scale land use conversion in Ohgishima started in preparation for the start of land use in FY2028.** In cooperation with Kawasaki City, we are working to improve road and traffic access and the reception environment for liquefied hydrogen carriers in preparation for the start of the demonstration.
- After the commercialization demonstration, we will consider the introduction of hydrogen to our own power plant, the utilization of cold heat generated by hydrogen supply, and joining the business of the hydrogen supply chain.

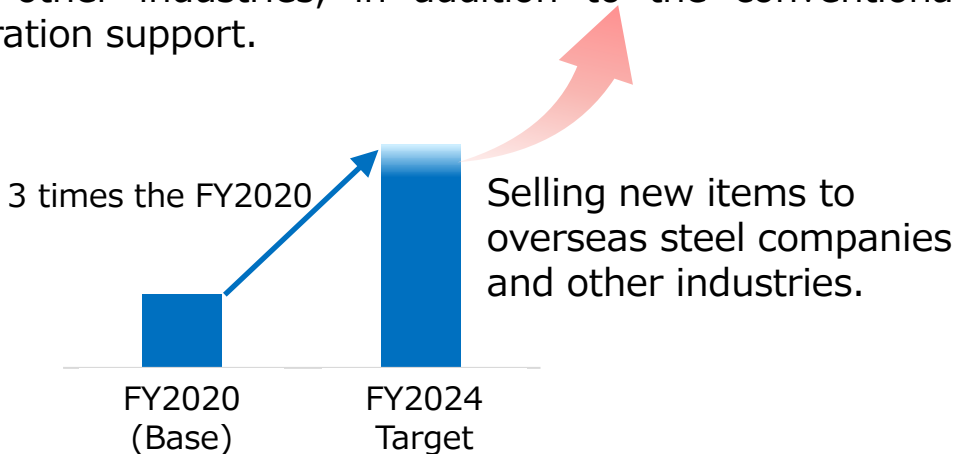
Promote overseas expansion of JFE Resolus™ solutions business

JFE

- **First order for continuous-caster breakout detection system for FHS in Vietnam.**
Released on May 22nd, 2024
- **JSW & JFE begin pilot demonstration of advanced Cyber-Physical System (CPS) technologies in blast furnace operations.**
Released on Jul 1st, 2024

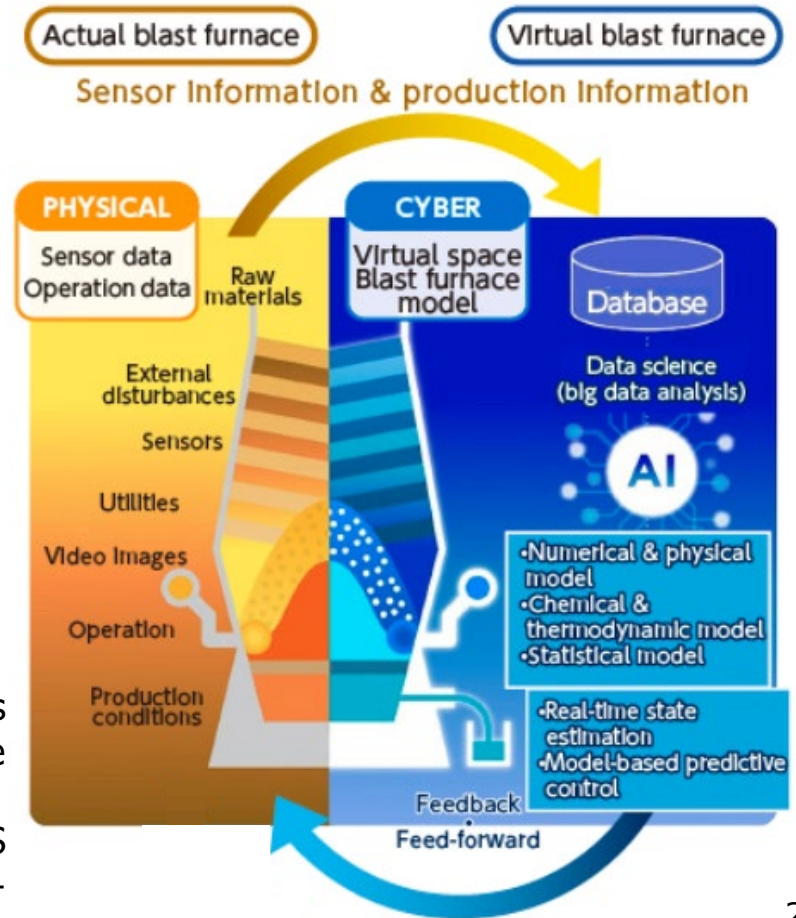
■ Contribution of the solutions business to profits

Further contribution of the solutions business to profits is aimed from the next mid-term onward by selling new items using DS technology to overseas steel companies and other industries, in addition to the conventional operation support.



■ CPS in blast furnace operation

- A virtual space blast furnace model using data science is used to visualize the internal state in real time and realize high efficiency and stabilization of operation.
- First project wherein JFE provides its proprietary CPS capability to overseas steel company through a cloud-based environment.



Appendix(1)

Profit/Loss Analysis

Profitability Targets and Main Performance



JFE

			The 7 th mid-term business plan FY2024	FY2021 Actual	FY2022 Actual	FY2023 Actual	FY2024 Forecast
Consolidated	Business Profit [Excluding Inventory Valuation etc.]		¥320.0bn.	¥416.4bn. [¥222.4bn.]	¥235.8bn. [¥162.8bn.]	¥298.2bn. [¥296.2bn.]	¥260.0bn. [¥308.0bn.]
	Profit attributable to owners of the parent		¥220.0bn.	¥288.0bn.	¥162.6bn.	¥197.4bn.	¥205.0bn.
	ROE		10%	15.7%	7.9%	8.6%	8.1%
Operating companies	Steel Business	Segment profit [Excluding Inventory Valuation etc.] Profit per ton* [Excluding Inventory Valuation etc.]	¥230.0bn. 10,000 yen/t	¥323.7bn. [¥129.7bn.] 14,000yen/t [6,000yen/t]	¥146.8bn. [¥73.8bn.] 7,000yen/t [3,000yen/t]	¥202.7bn. [¥200.7bn.] 10,000yen/t [10,000yen/t]	¥165.0bn. [¥213.0bn.] 8,000yen/t [10,000yen/t]
	Engineering Business	Segment profit	¥35.0bn.	¥26.0bn.	¥13.4bn.	¥24.3bn.	¥20.0bn.
	Trading Business	Segment profit	¥40.0bn.	¥55.9bn.	¥65.1bn.	¥48.9bn.	¥50.0bn.

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

Main Financial Data

JFE
JAAP

[IFRS]

	FY15	FY16	FY17	FY18		FY18	FY19	FY20	FY21	FY22	FY23
(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	298.2
EBITDA	254.4	279.9	388.8	405.9	EBITDA * 1	428.2	269.4	223.4	668.7	505.4	572.3
ROS	1.9%	2.6%	5.9%	5.6%	ROS * 2	6.0%	1.0%	(0.4%)	9.5%	4.5%	5.8%
ROE	1.8%	3.7%	7.6%	8.3%	ROE * 3	8.6%	(11.1%)	(1.3%)	15.7%	7.9%	8.6%
ROA	1.7%	2.3%	5.2%	5.1%	ROA * 4	5.0%	0.8%	(0.3%)	8.4%	4.4%	5.3%
Debt Outstanding	1,379	1,375	1,331	1,450	Interest-bearing debt outstanding	1,524	1,814	1,806	1,849	1,863	1,830
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%	58.0%
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	323
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%	30.9%

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.



Financial Results for Fiscal Year 2024

JFE

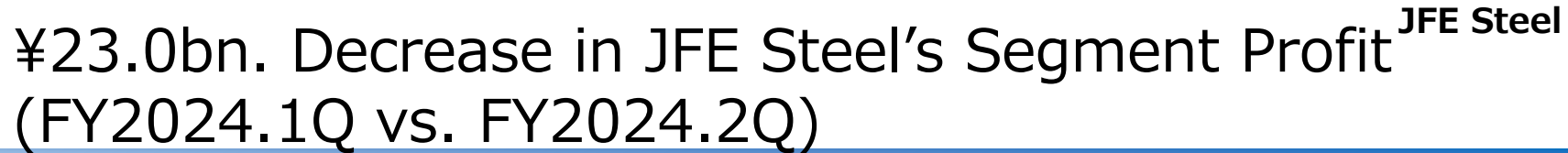
	Unit	FY2022					FY2023					FY2024
		1Q	2Q	3Q	4Q	Full Year	1Q	2Q	3Q	4Q	Full Year	1Q
Revenue	billion yen	932.6	986.3	986.9	975.3	3,881.1	917.2	948.6	915.6	934.6	3,716.0	860.6
Segment Profit	billion yen	93.0	55.2	21.8	(23.2)	146.8	68.1	54.7	48.2	31.7	202.7	31.5
Excluding Inventory Valuation etc.*	billion yen	(23.0)	55.2	22.8	18.8	73.8	59.1	64.7	49.2	27.7	200.7	36.5
Crude Steel (Standalone)	Mt	6.43	6.21	5.48	5.97	24.10	6.05	6.11	5.62	5.67	23.45	5.48
Crude Steel (Consolidated)	Mt	6.77	6.59	5.81	6.29	25.48	6.38	6.47	5.95	6.01	24.80	5.80
Shipment (Standalone)	Mt	5.54	5.32	5.25	5.64	21.74	5.23	5.42	5.08	5.04	20.77	4.70
Export Ratio on Value Basis (Standalone)	%	48.5	45.0	41.0	43.6	44.5	44.2	44.2	41.6	41.3	42.9	40.6
Average Sales Price (Standalone)	000 yen/ t	126.7	136.7	136.3	124.0	130.8	128.5	130.1	132.5	135.2	131.5	139.2
Exchange Rate	¥/\$	126.5	136.6	144.0	133.2	135.1	135.8	144.1	148.7	146.7	143.8	155.0
Exchange Rate (End of Term)	¥/\$	136.7	144.8	132.7	133.5	133.5	145.0	149.6	141.8	151.4	151.4	161.1

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



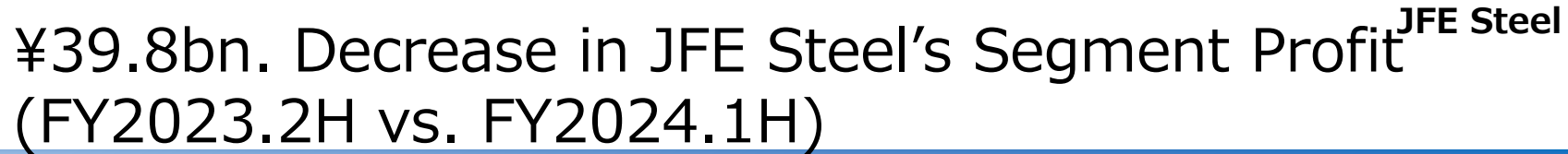
Change

34



JFE Steel		FY2024 Forecast			Change
		1Q Actual	2Q Forecast	1H Forecast	
Segment Profit		31.5	8.5	40.0	(23.0)
	Excluding Inventory Valuation etc.	36.5	31.5	68.0	(5.0)

35



JFE Steel	FY2023 2H Actual	FY2024 1H Forecast	Change
Segment Profit	79.8	40.0	(39.8)
Excluding Inventory Valuation etc.	76.8	68.0	(8.8)

36

¥82.8bn. Decrease in JFE Steel's Segment Profit (FY2023.1H vs. FY2024.1H)

			(billion yen)
JFE Steel	FY2023 1H Actual	FY2024 1H Forecast	Change
Segment Profit	122.8	40.0	(82.8)
Excluding Inventory Valuation etc.	123.8	68.0	(55.8)

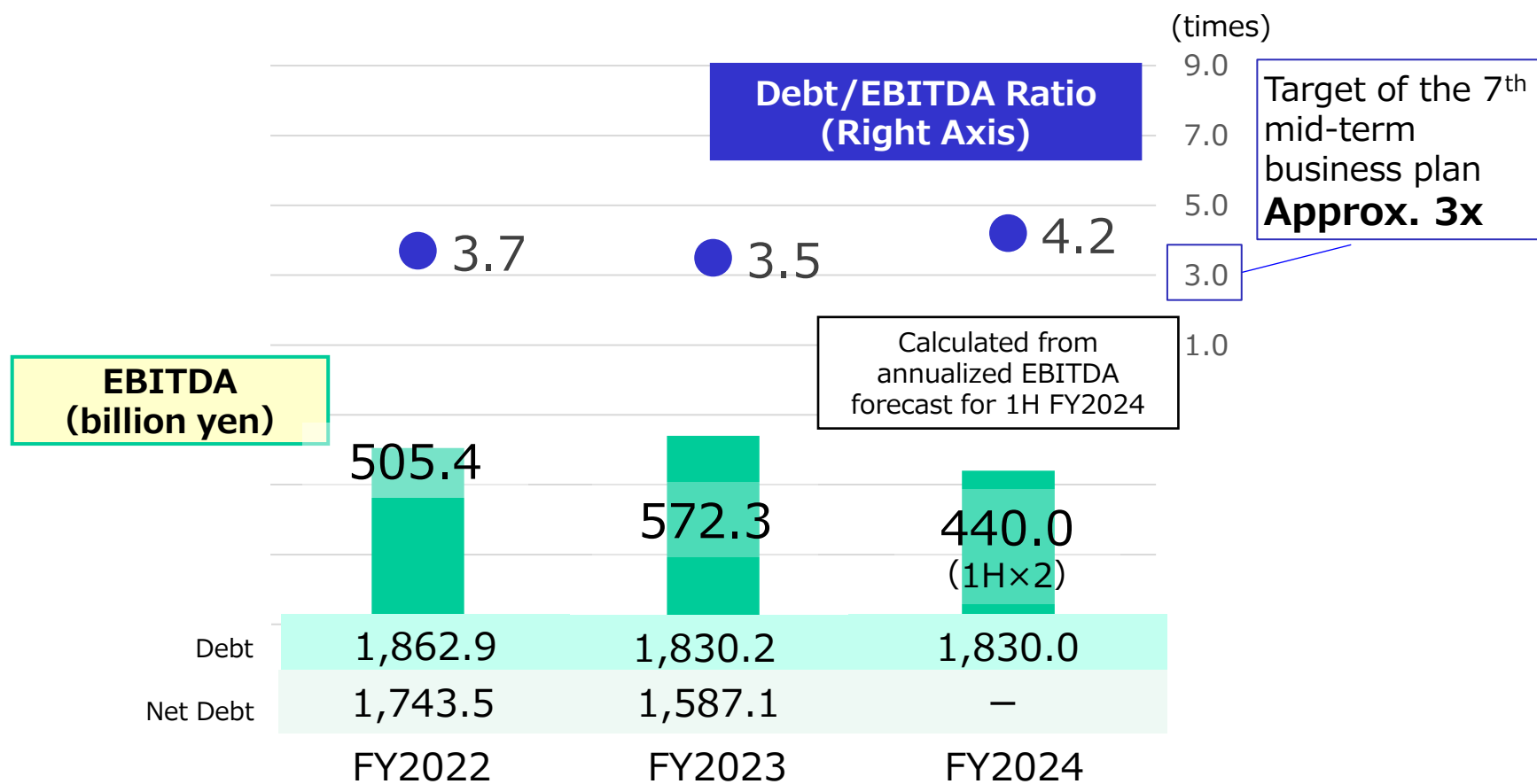
1. Cost	+30.0	<ul style="list-style-type: none"> • Structural reforms effect +22.0 • Operational improvement +8.0
2. Volume and Mix	(19.0)	<ul style="list-style-type: none"> • Crude steel production 12.16Mt→Approx. 11.30Mt
3. Spreads*	(28.0)	<ul style="list-style-type: none"> • Slowdown in overseas market conditions
4. Inventory Valuation	(27.0)	<ul style="list-style-type: none"> • Inventory valuation -1.0 (+1.0→±0) • Carry over -16.0 (-17.0→-33.0) • Foreign exchange valuation -10.0 (+15.0→+5.0)
5. Others	(38.8)	<ul style="list-style-type: none"> • Group Companies -20.0

*Spreads including various prices (metals, energy, materials, logistics, labor costs, foreign exchange effects, etc.)



Debt/EBITDA Ratio

- Debt/EBITDA ratio as of the end of 1H of FY2024 is 4.2x.



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

1H Forecast

Appendix(2)

Business Environmental Indicators, etc.



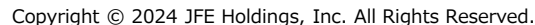
Combined Inventories of HR, CR and Coated Steel Sheet

(000 t)

(Month)

5

—●— Inventory Ratio(Right Axis)

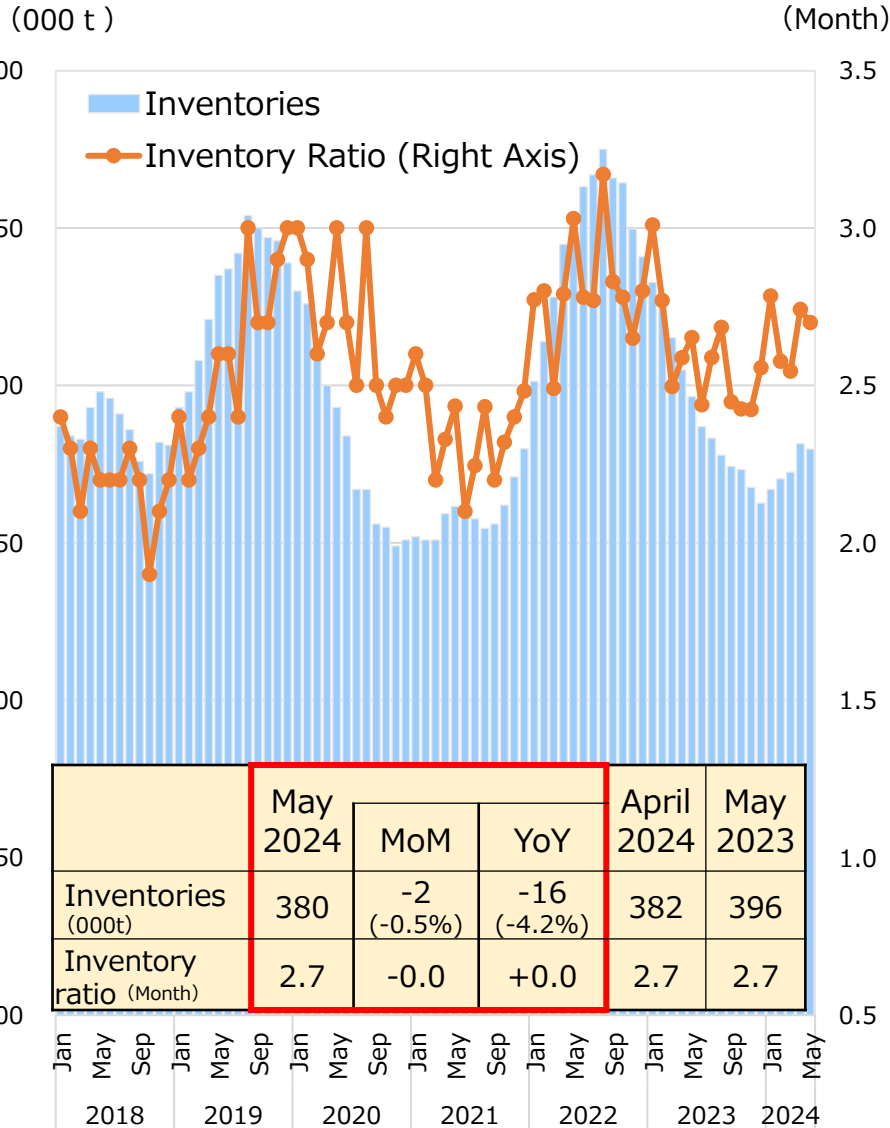




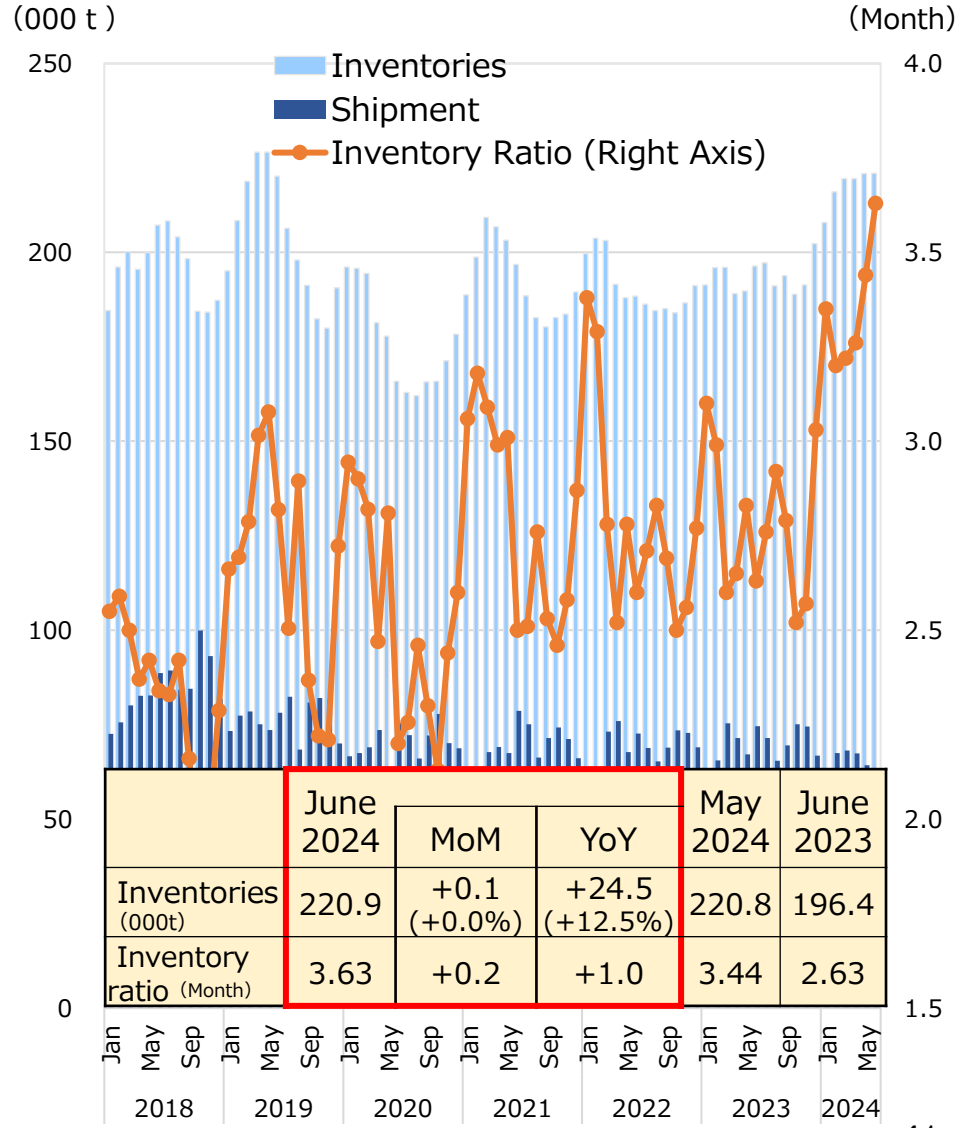
Domestic
Market Environment

Inventories of Plate (Plate Shear) and Wide Flange Shapes

Inventories of Plate (Plate Shear)



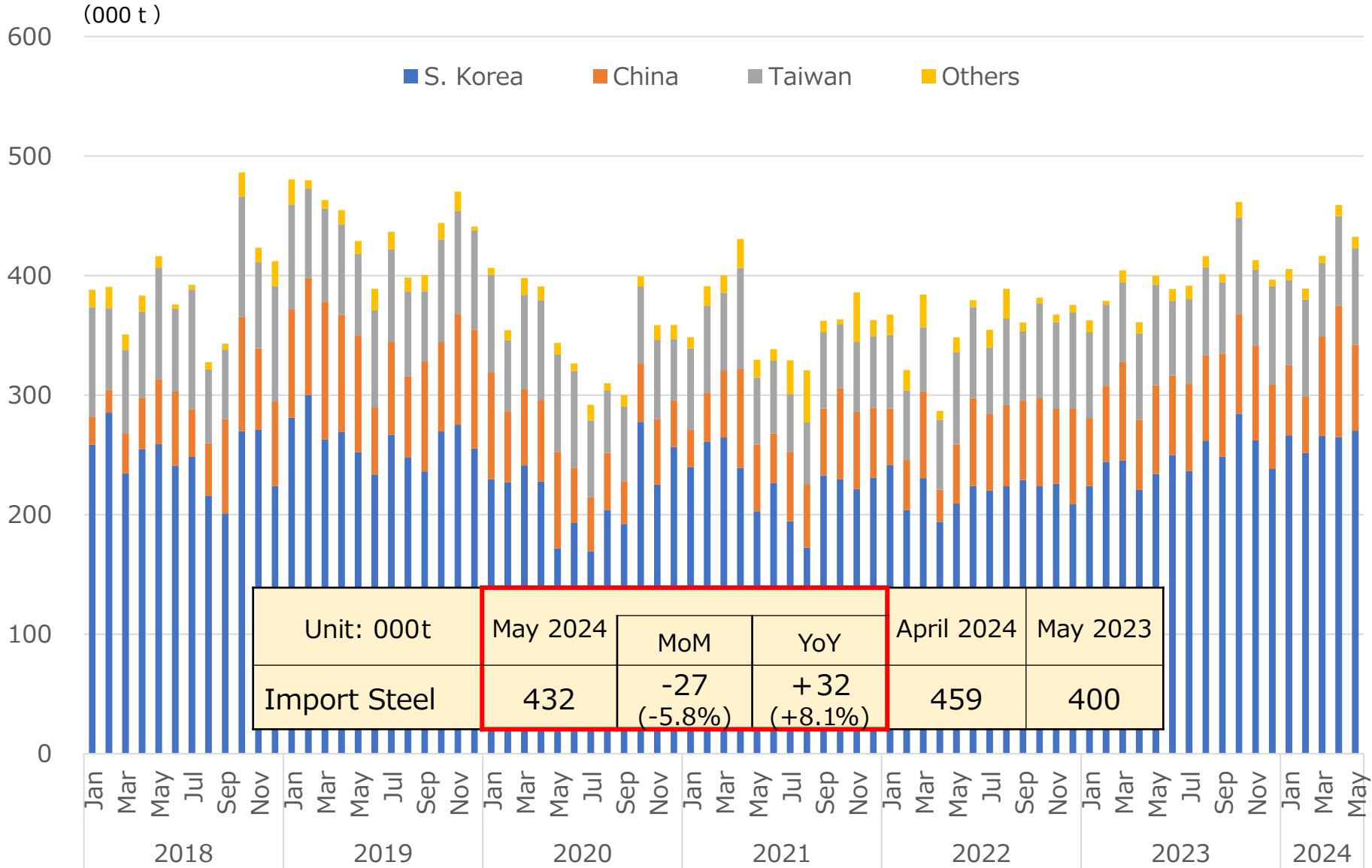
Inventories of Wide Flange Shapes



Domestic
Market Environment

Trend of Import Steel (Ordinary Steel)

JFE

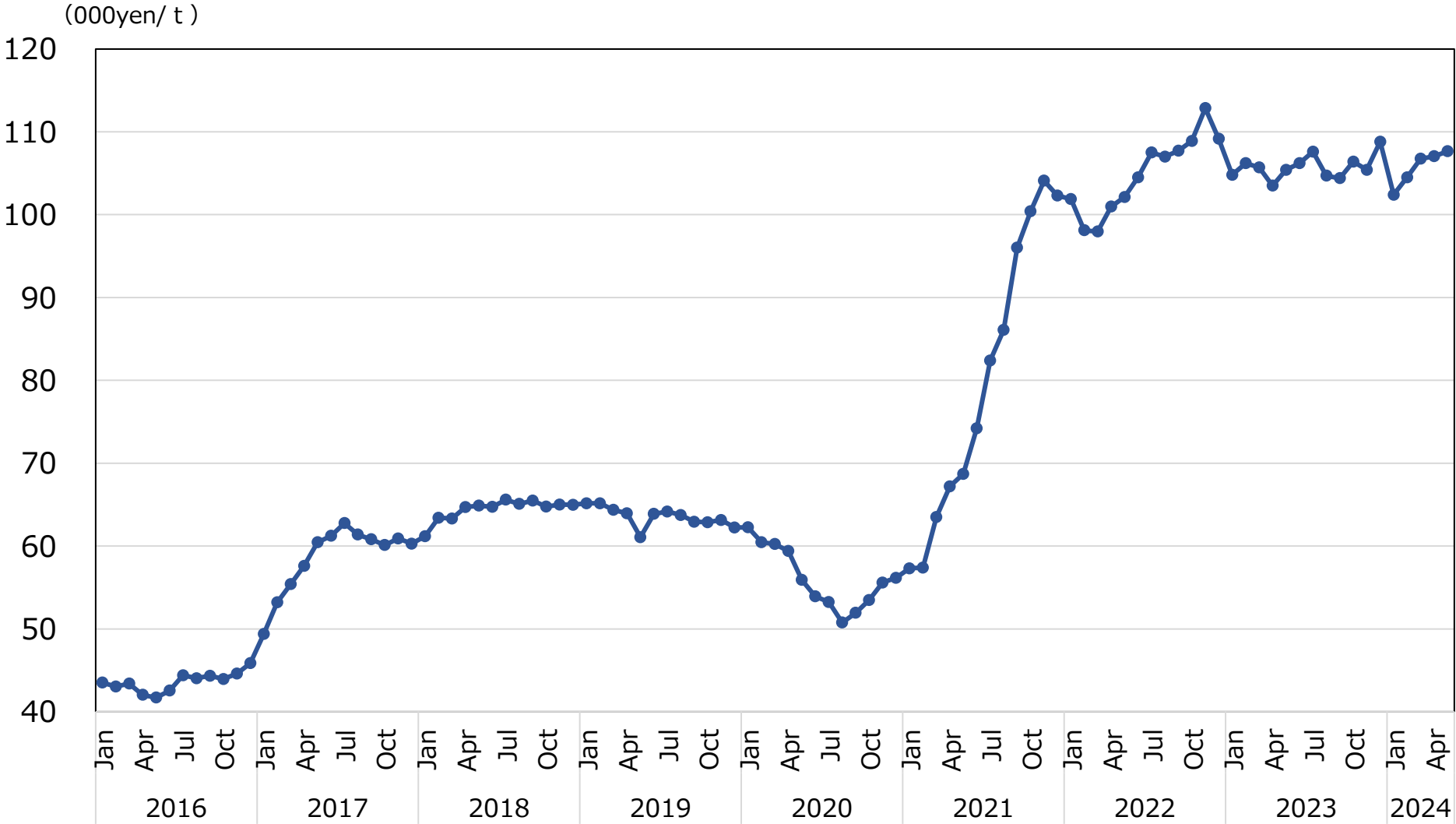




Domestic
Market Environment

Price Trend of Import Steel

JFE



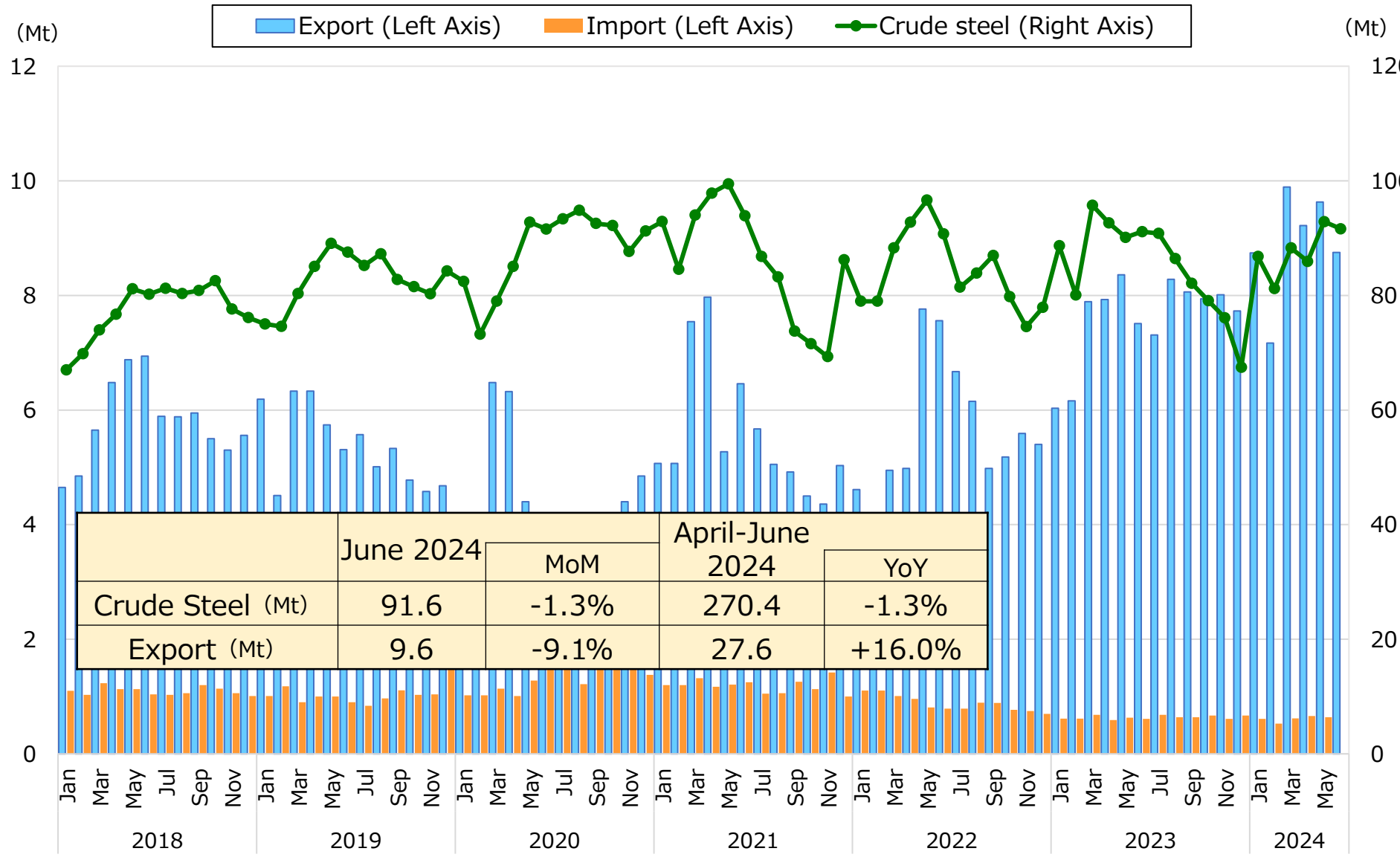
Data: The Japan Iron and Steel Federation Import Steel from S. Korea



Overseas Market Environment

Crude Steel & Im/Export, China

JFE

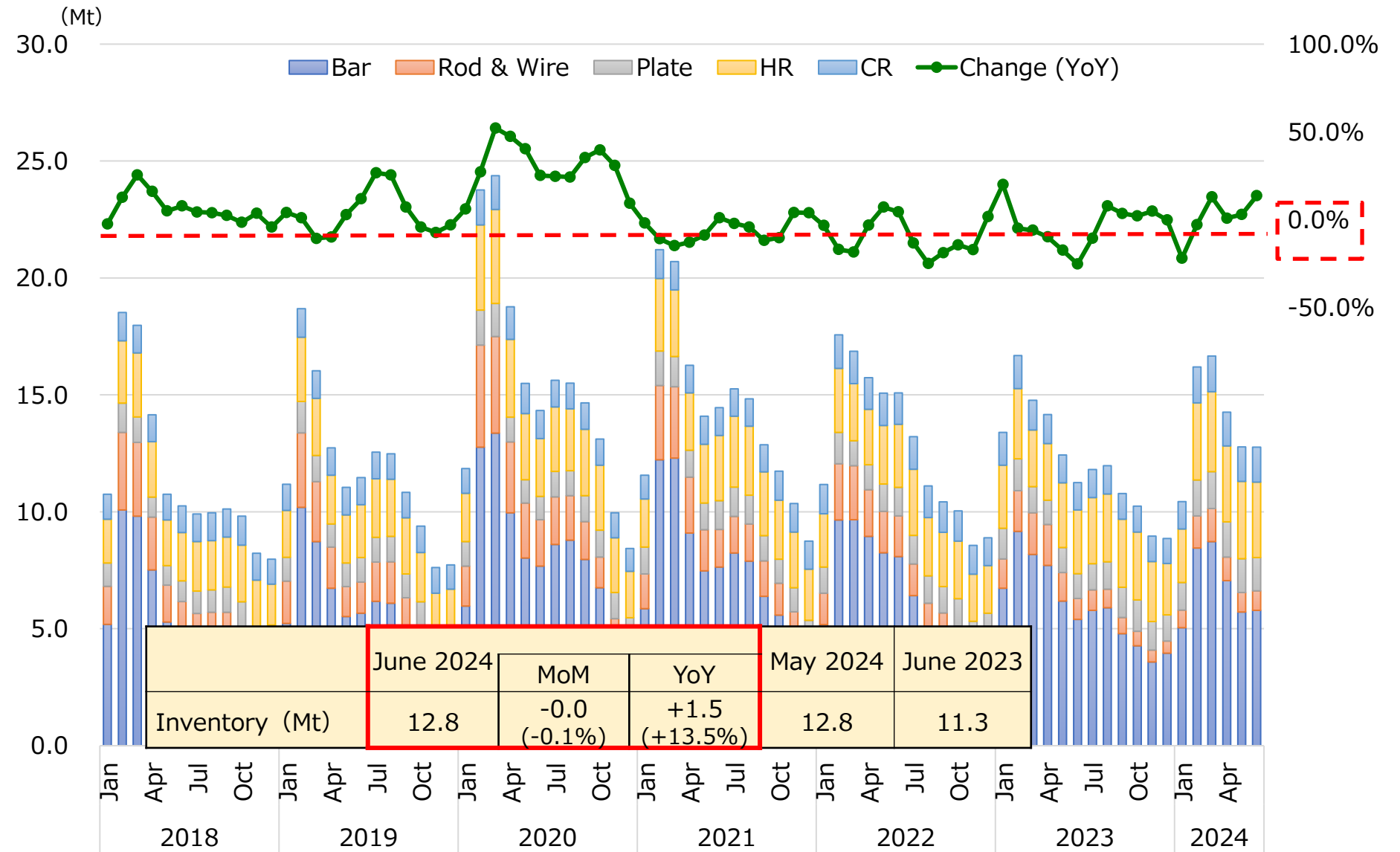


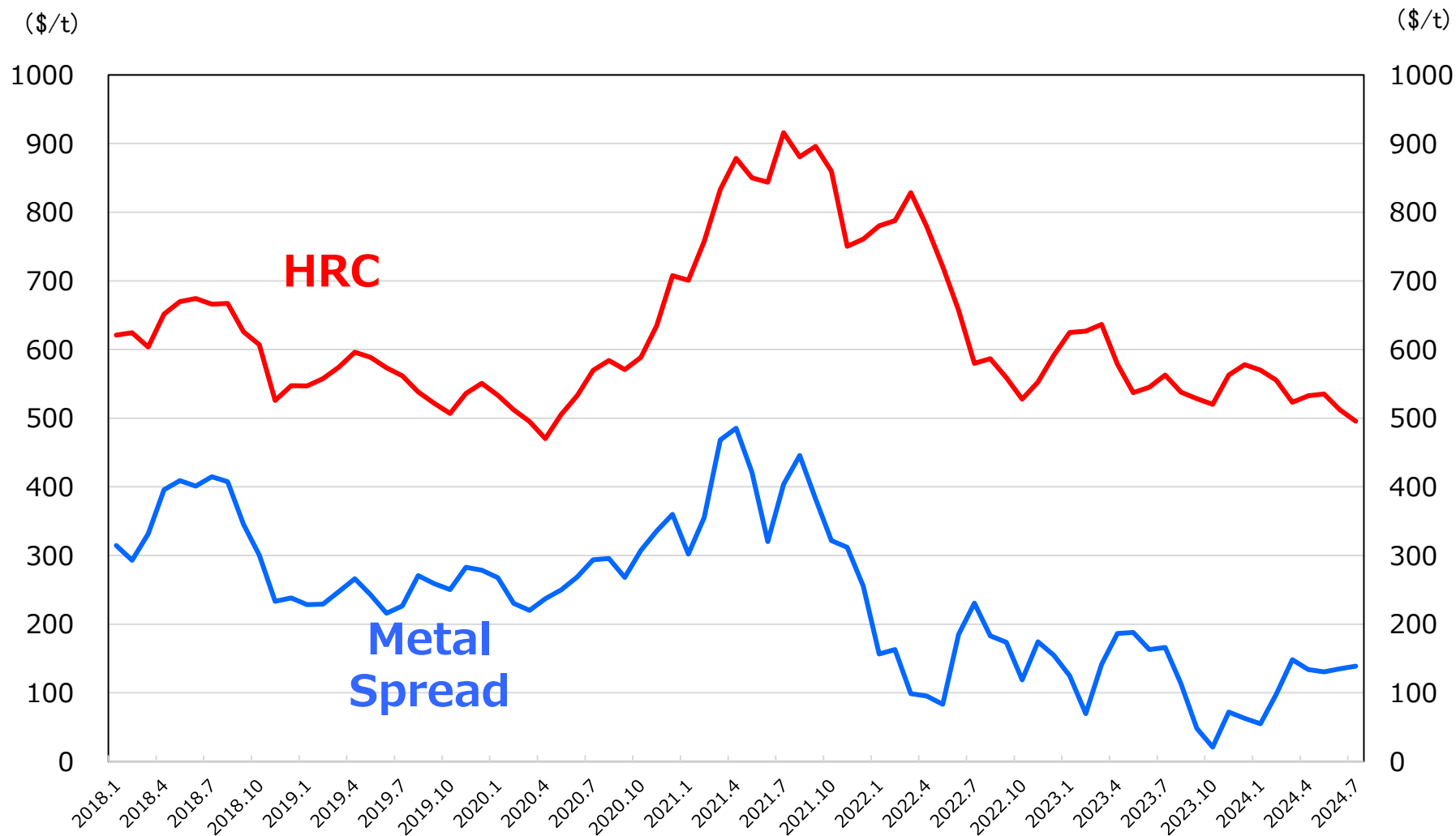


Overseas
Market Environment

Inventories in China by Product

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

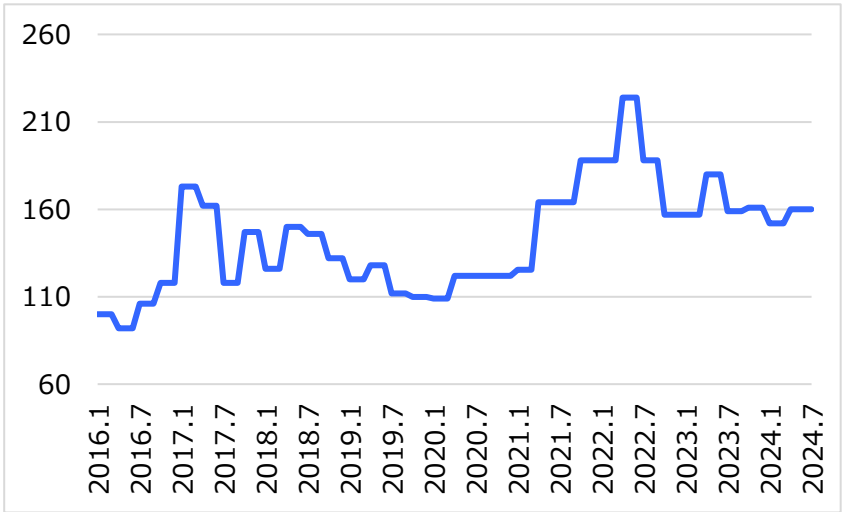


Raw
Materials

Trend of Sub Material's Market Price

JFE

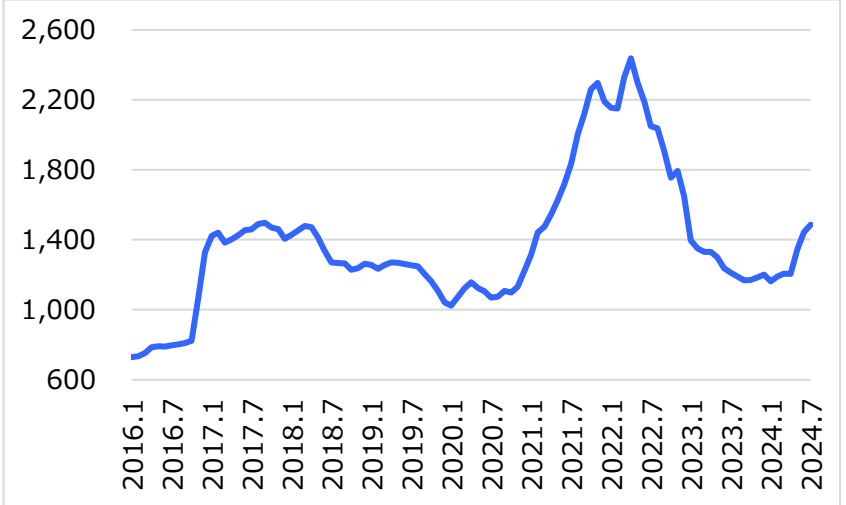
(¢ /lb) FeCr



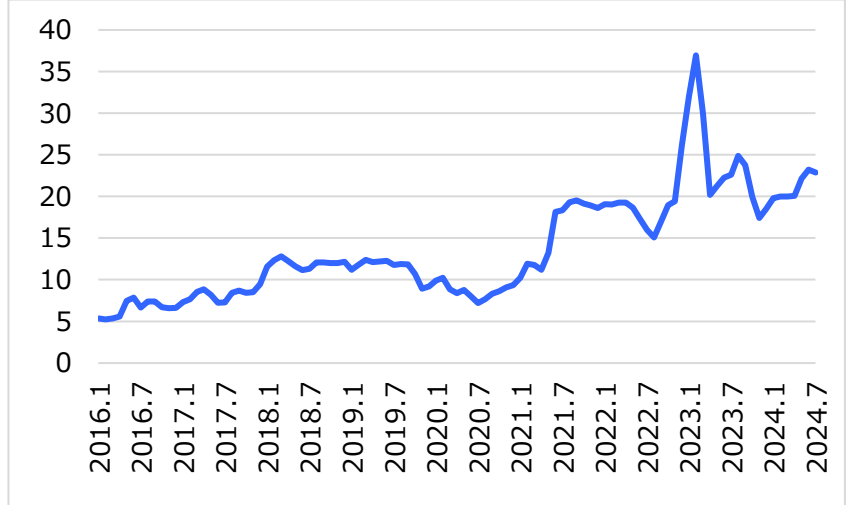
(US\$/t) Zn



(US\$/t) FeMn



(US\$/lb) Mo



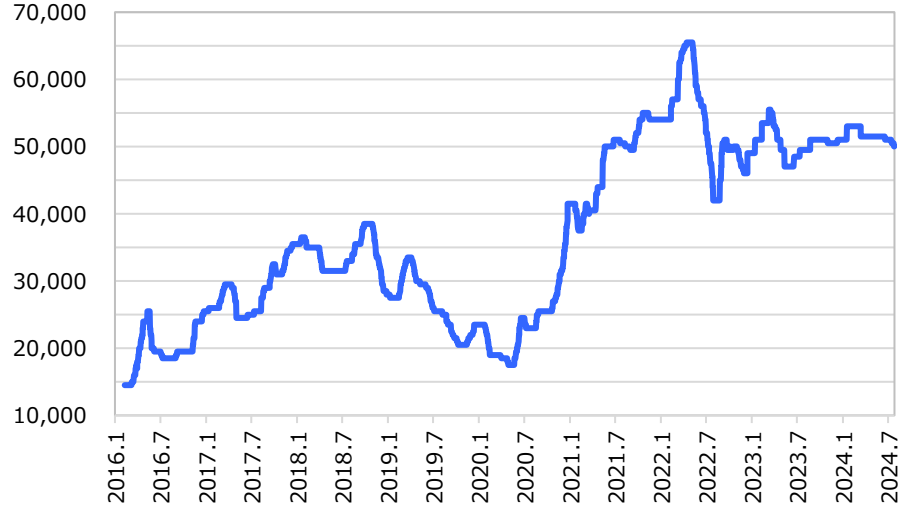


Raw
Materials

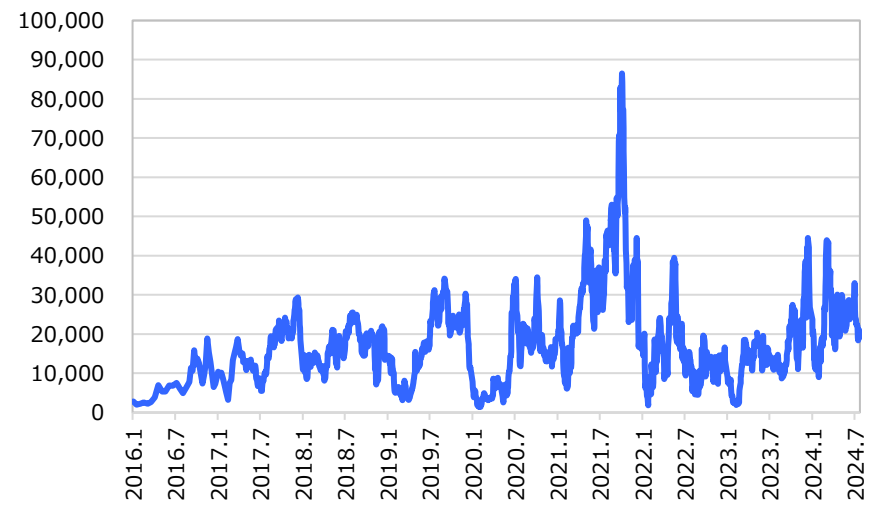
Trend of Sub Material's Market Price

JFE

(yen/ t) Scrap



(\$/B) Spot Bulker



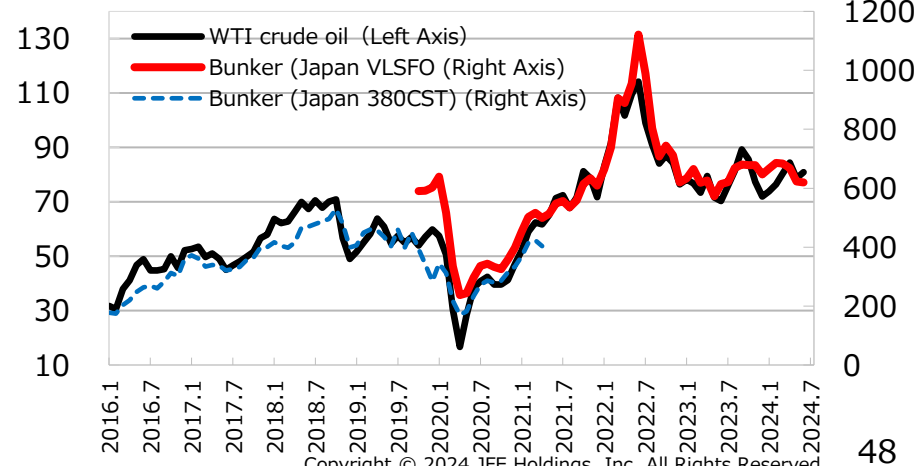
(yen/ t) LNG



Crude Oil, Bunker Oil

(Crude Oil: \$/bbl)

(Bunker Oil: \$/t)





Orders of JGreeX™ Green Steel

JFE

- Fields of orders have expanded for electric power, consumer goods, and overseas as well as for domestic shipbuilding and construction.
- In FY2024, **we aim to expand sales of JGreeX™ to all varieties and all fields.**

Field	Domestic/ Overseas	Products	Customer	Use
Ship building	Domestic	Plates	Higaki Shipbuilding, Onomichi Dockyard, Imabari Shipbuilding	Dry bulk carriers
	Domestic	Plates	Tsuneishi Shipbuilding	Hydrogen-fueled Tugboats
Construction	Domestic	Plates, Shapes, Pipes	Kumagai Gumi, Sumitomo Corporation	Office Building
	Domestic	Pipes	YASHIMANADA	Roll column
	Domestic	Shapes	Tomakomai Kuribayashi Transportation	Warehouse
Ship building, Construction, Offshore structure	Overseas	Plates	Hock Seng Hoe	Wholesale of plates
Electric power	Overseas	Electrical sheets	European transformer manufacturer	Transformer
	Overseas	Electrical sheets	Eaton Corporation	Transformer
Office equipment	Domestic	Bars	Suzutoyo Seiko	Resource-recycling Containers
Can	Domestic	Tin	MoNo Factory	Pinback Buttons



Efforts to Create a Green Steel Market

JFE

- Appropriate environmental value is required for "actual reduction" of GHG emissions using low-carbon technologies in the transition period.
- With appealing the necessity of a mass balance system/CoC* based on the actual amount of reduction, promote demand of green steel products by visualizing economic value, and promote activities for international standardization in cooperation with the Japan Iron and Steel Federation(JISF).
- We propose the popularization of green steel products and energy policy issues for realization of decarbonized society.

(Jun 6th, 2024, 56th Advisory Committee for Natural Resources and Energy, 56th Strategic Policy Committee)

- International standardization and rulemaking *CoC : Chain of Custody
 - Formulation of mass balance system/CoC guidelines (JISF-Three blast furnace companies, worldsteel)
 - ✓ Establishment of JISF Guidelines (Oct. 2023), worldsteel basic principle agreement (Apr. 2024)
 - Activities to revise the GHG Protocol
 - Efforts to establish ISO standards for mass balance systems / CoC
- Efforts to create demand
 - Start of supply JGreeX™ (Jun. 2023)
 - ✓ Adopted in 6 fields including Ship building, Construction, Transformer, etc.
 - Efforts to establish rules for emission reduction measurement methods in private-sector procurement in the GX League, etc.
 - ✓ GX League proposal (Dec. 2023), METI-GX Product Market Study Group Interim Report(Mar. 2024)



Orders by Business Field





JFE

(billion yen)

Business Field	FY2023 Actual	FY2024 Outlook	Change	Main orders received in FY2024 First-Quarter
Waste to Resource	243.7	257.0	13.3	Renewal works of domestic waste treatment facility [Kanagawa]
Carbon Neutral	54.3	60.0	5.7	
Combined Utility Service	15.6	9.0	(6.6)	
Core Infra-structure	249.4	274.0	24.6	Construction works of bridge (KEINAWA EXPWY [Nara], Harbor road [Kanagawa], MAIZURU-WAKASA EXPWY [Kyoto]) Water pipeline renewal project [Hyogo]
Total	563.0	600.0	37.0	
Order Backlog	613.8	970.0	356.2	

*The outlook for FY2024 is based on the revised method of accruing orders for long-term O&M contracts.

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	https://www.jfe-holdings.co.jp/en/investor/library/dx-report/index.html	

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



Mid/long-term directions

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

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

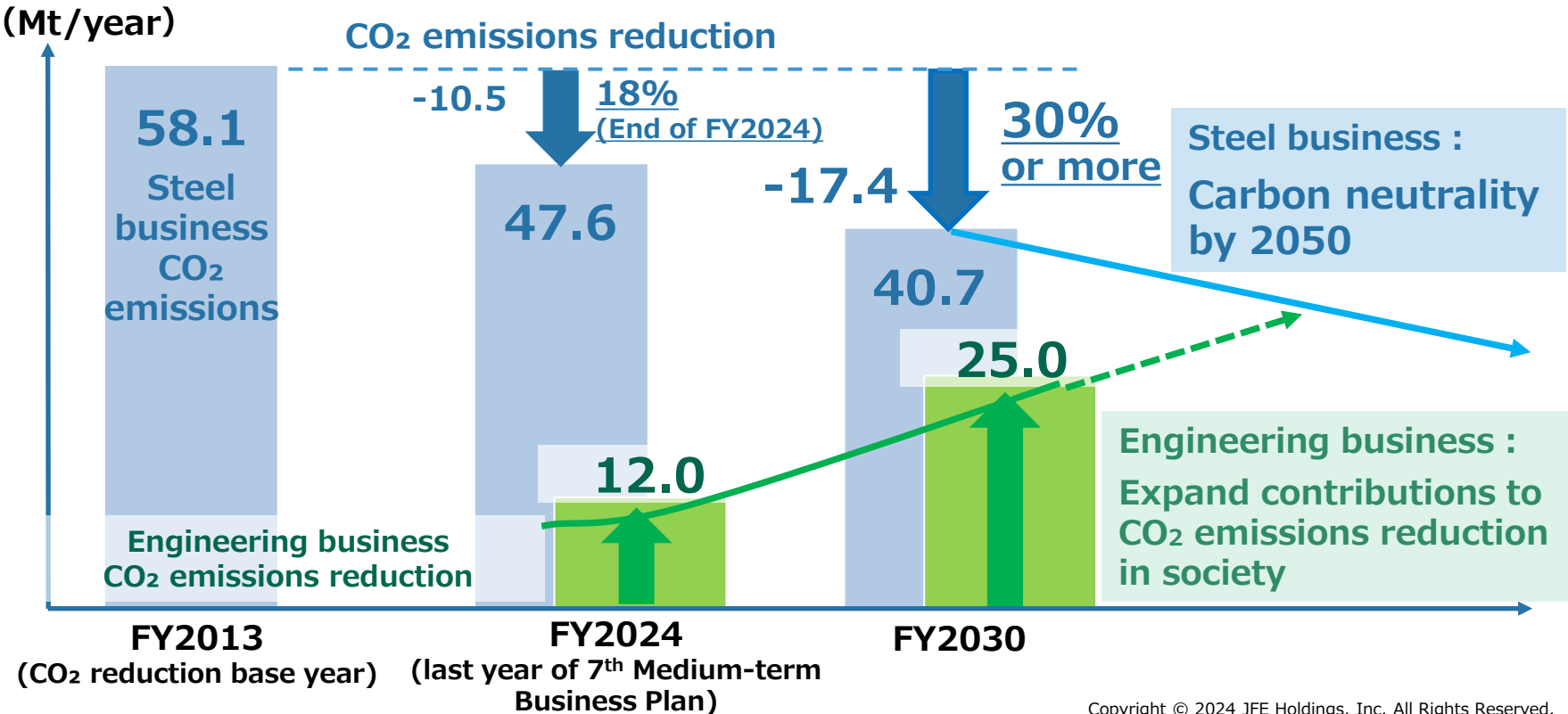


JFE

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)

JFE Group's CO₂
reduction targets

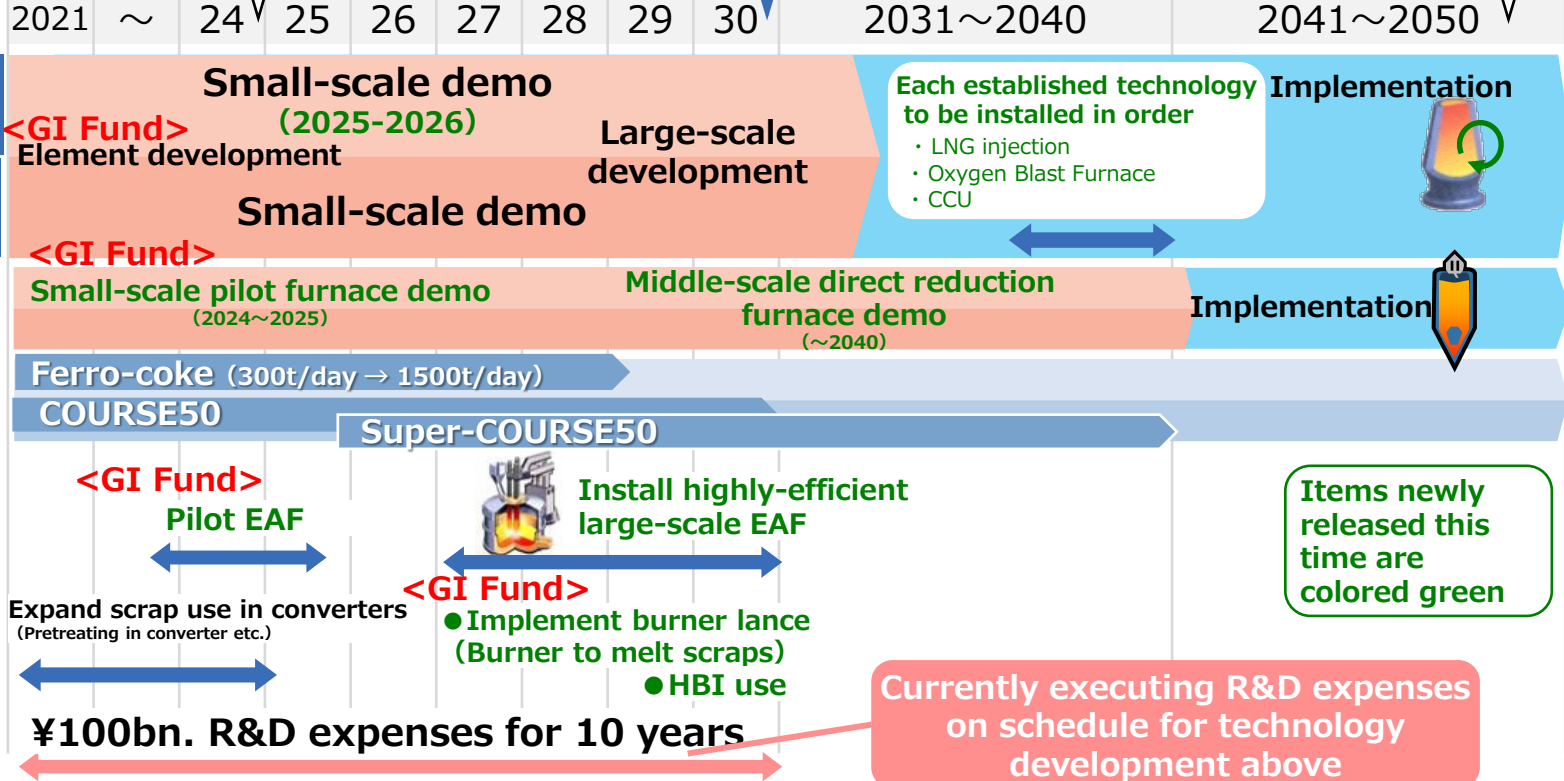
**18% reduction compared
to FY2013** (Steel Business)

**30% or more reduction compared
to FY2013** (Steel Business)

Released in Feb, 2022

**Carbon neutrality
by 2050**

Technology

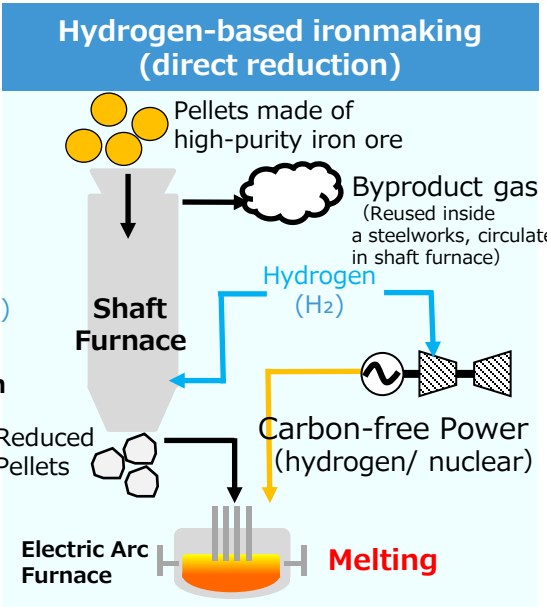
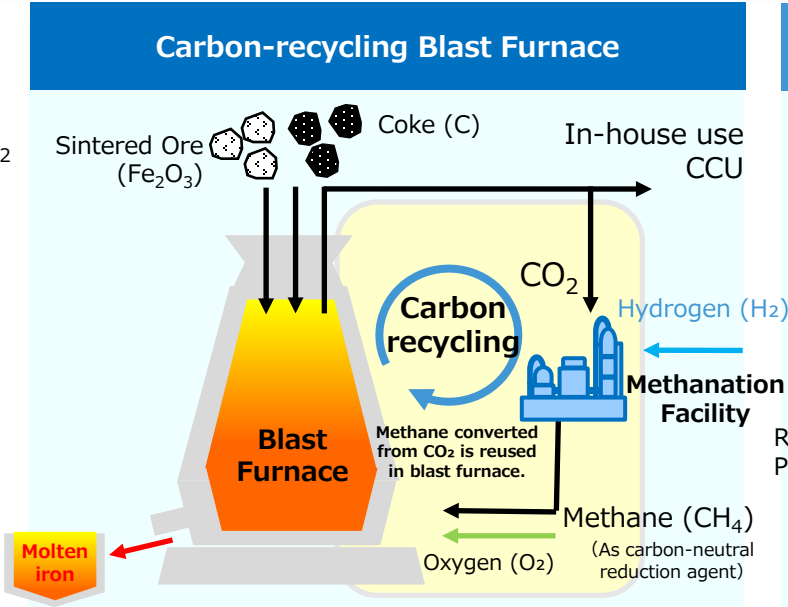
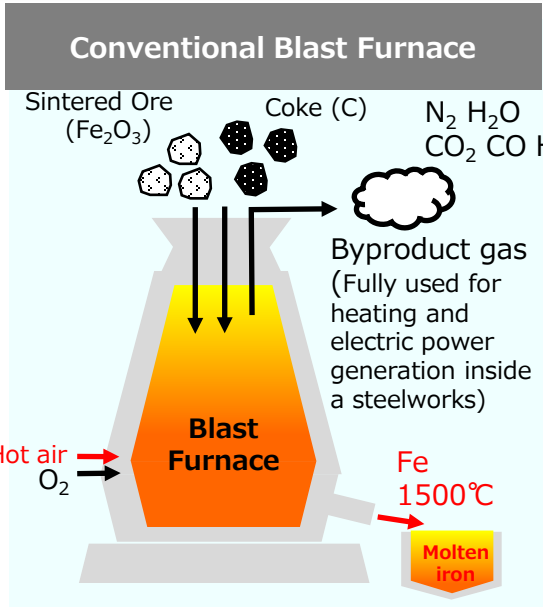


Carbon-recycle Blast Furnace



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

JFE

- 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



Smart Energy Kumamoto

Electric power



Eastern waste disposal factory



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)

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

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
CO ₂ 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**

**Sharing
Strategies**

Synergy

**Expand collaboration
with alliance partners**

**Establish SCM in
new regions**

**Expand processing
functions in coil centers**

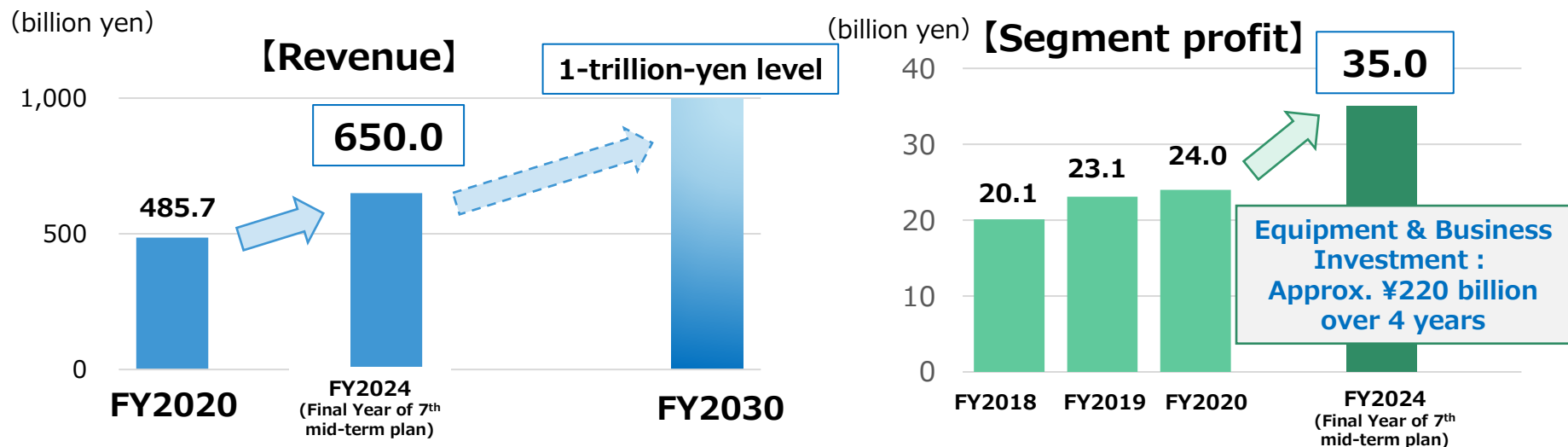
**Groupwide Strategy: Capture increasing demand for high value-added
electrical steel sheets both in domestic and overseas market**

7th mid-term business plan <Engineering Business>

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—

- 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

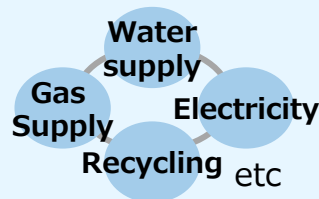
- Put priority in renewable energy (offshore wind-power generation, biomass power plant, solar power plant, geothermal power plant etc.)
- Develop carbon neutral technologies.



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

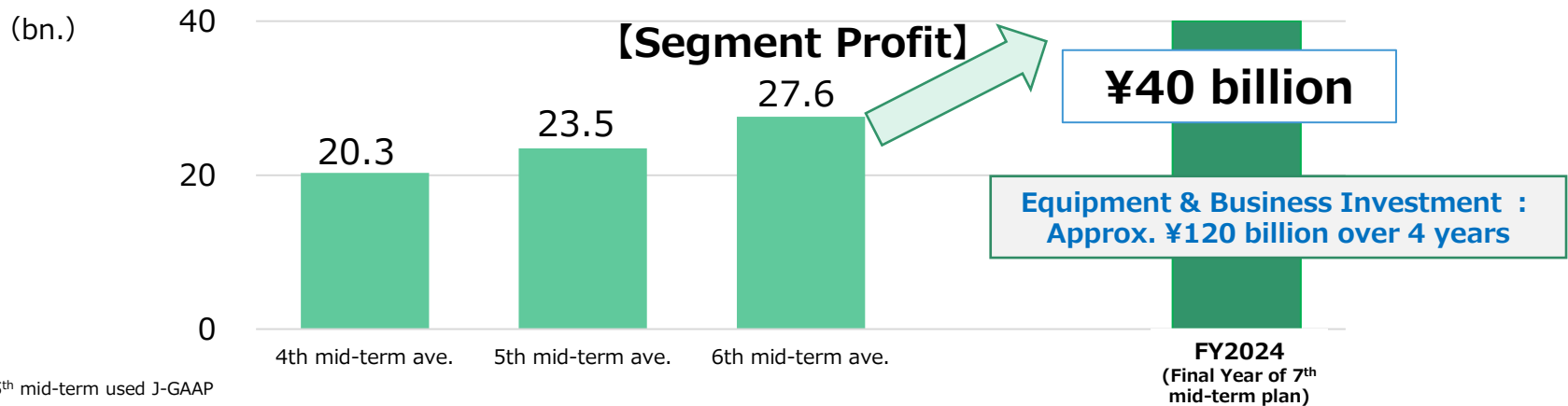
1. **Waste to Resource** : Recycling and waste-to-power generation etc. 2. **Carbon neutral** : Renewable energy, carbon recycling etc.
 3. **Combines utility services**: contribute to the local-production and local-consumption (circular economy) by mutual combination among various operation and maintenance 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>

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.



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.



JFE

Main Financial Data and Performance & Profitability Targets

		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	7 th 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.

75

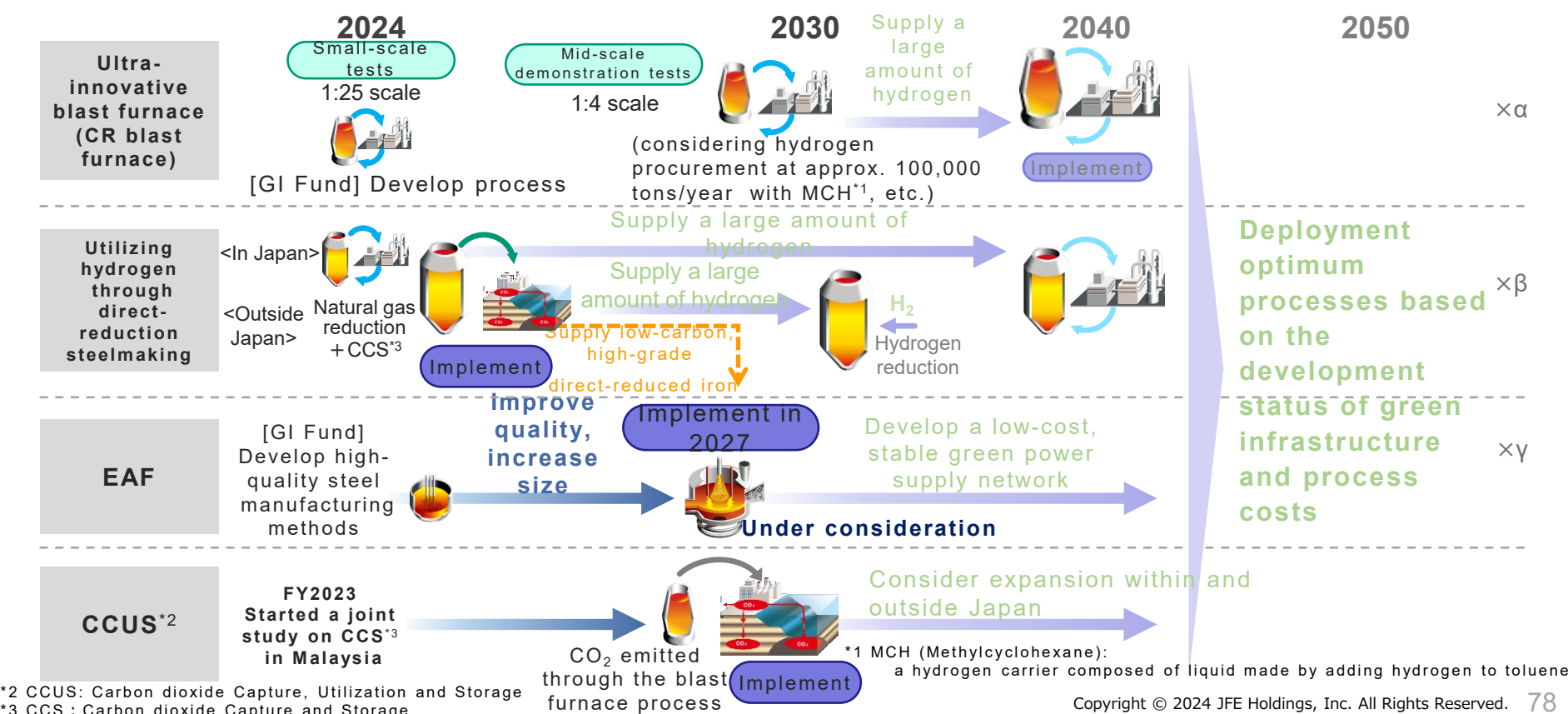
Appendix(4)

JFE Steel Carbon Neutral Strategy Briefing



JFE Steel's Transition: Direction and Challenges

- ▶ 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

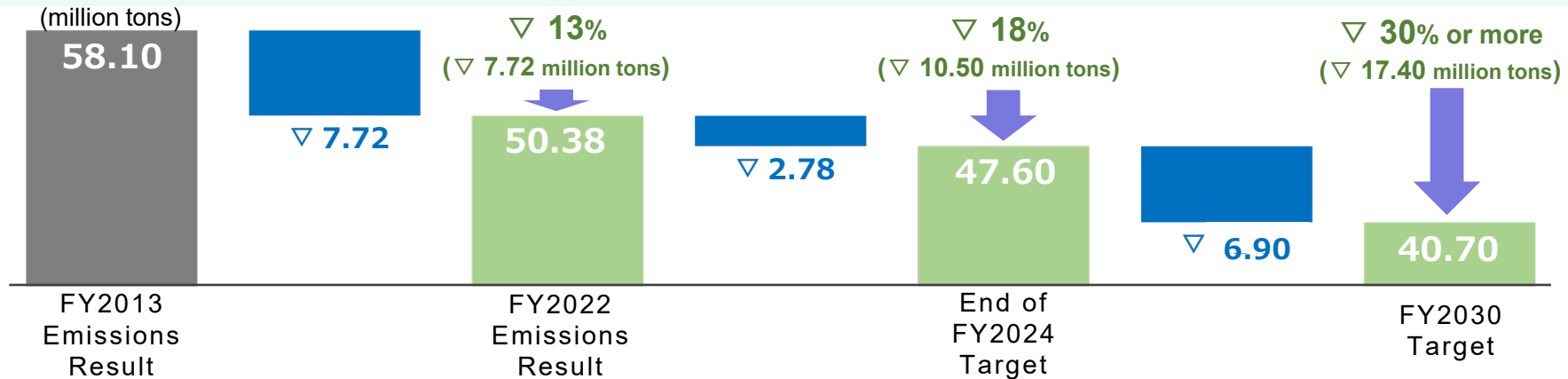
Maintain the competitiveness of Japanese steel through plentiful, low-cost, stable supplies of carbon-free hydrogen and electricity

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



Progress on the CO₂ Emissions Reduction Plan

- ▶ 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

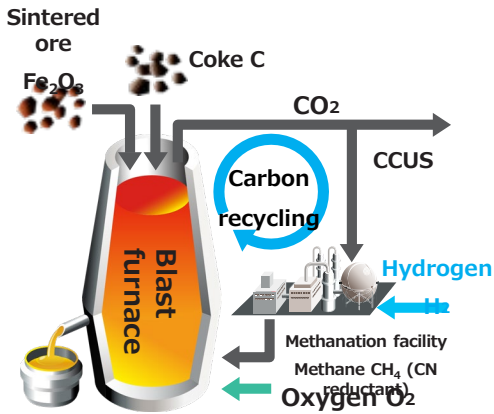
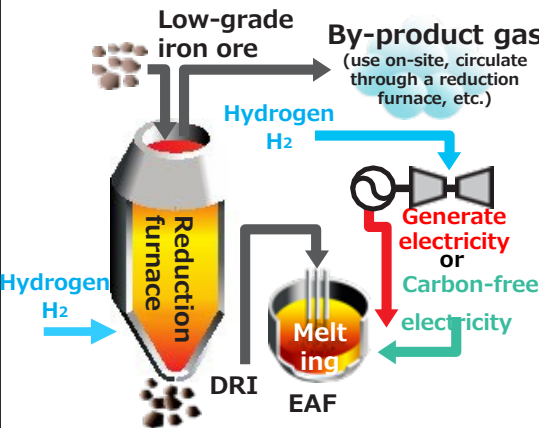
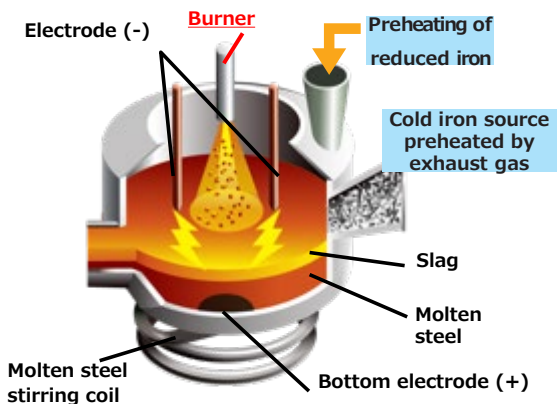
- | | |
|---|---|
| Energy savings and high efficiency | <ul style="list-style-type: none">• Upgrade to high-efficiency coke ovens in Fukuyama (▼ 16)• Improve efficiency of power demand facilities• Leverage AI & DS |
| Low-carbon feedstock & fuel | <ul style="list-style-type: none">• Expand the use of scrap in converters (▼ 150)• Use reduced iron in blast furnaces and converters (▼ 200) |
| Utilizing EAFs | <ul style="list-style-type: none">• 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).



Projects Supported by the Green Innovation Fund

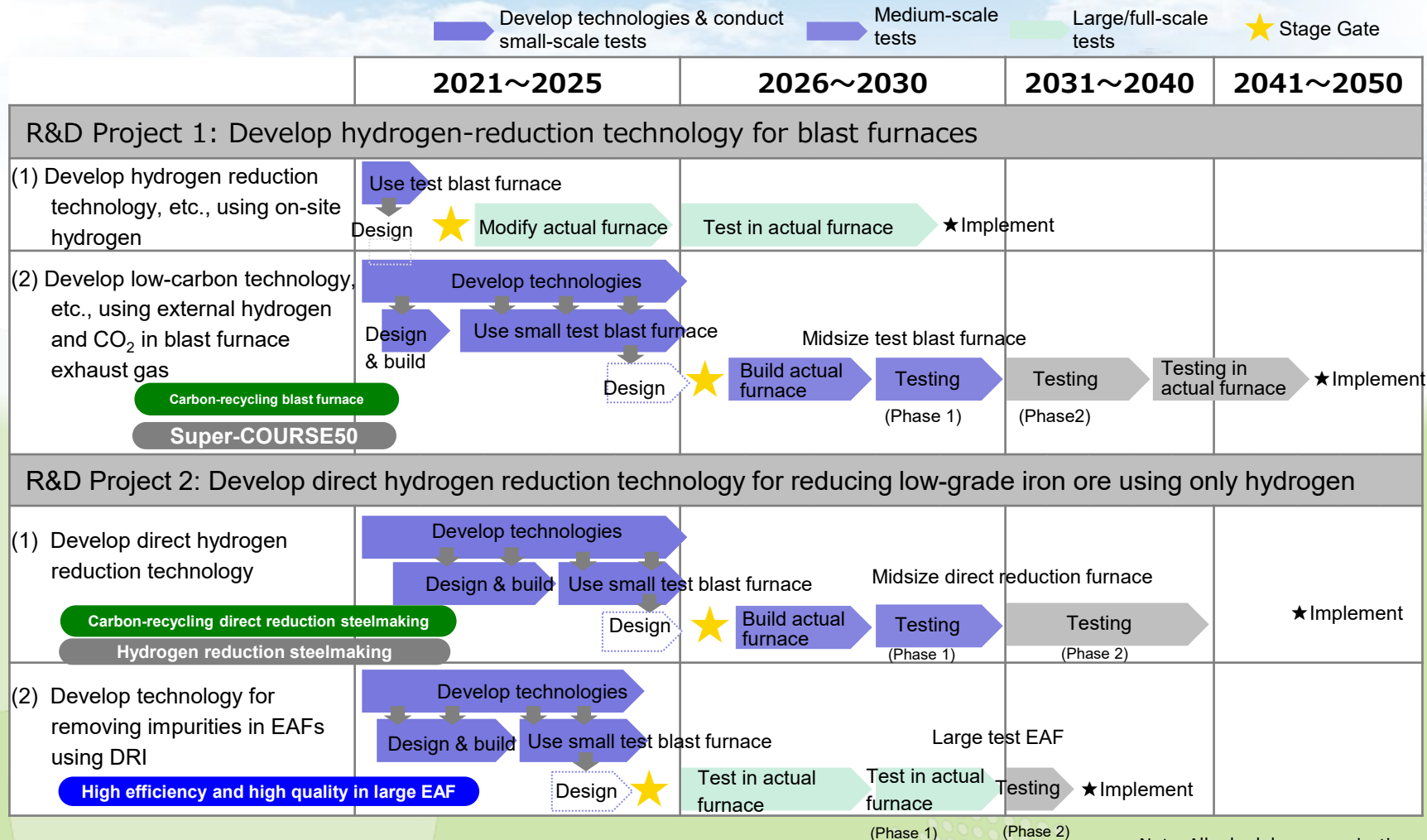
- ▶ Promoting the development of ultra-innovative technologies in the NEDO project on hydrogen utilization in iron and steelmaking processes, financed by the Green Innovation (GI) Fund.
- ▶ Started building a small test blast furnace (150m³) in Chiba District, aiming for swift implementation.

	Ultra-innovative blast furnace (Carbon-recycling blast furnace)	Direct-reduction steelmaking	Large, high-efficiency EAF
Development project			
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





- ▶ 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.



Collaborating with Society on Carbon Neutrality

- ▶ 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