



JFE

JFE Group

**Financial Results for Fiscal Year 2022
ending March 31, 2023**

JFE Holdings, Inc.

May 8, 2023



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This presentation material is for information and discussion purpose only.
Any statements in the presentation which are not historical facts are future projections based on certain assumptions and currently available information. Please note that actual performance may vary significantly due to various factors.



Financial Highlights

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Financial Results for FY2022

Landing as previous forecast.
(announced in February)

Business Profit
¥235.8bn.

(Increased by ¥8.0bn.
from previous forecast)

Dividend
80yen

(As previous announced)

Financial Forecast for FY2023

Promote shifting Focus from
quantity to quality by improving
sales prices and structural reforms

Business Profit
¥290.0bn.

(Increased by ¥54.2bn.
year-on-year)

Dividend
100yen

(Increased by 20yen
from previous year)

Progress of the 7th mid- term business plan

**Main initiatives are
making steady progress.**

Steel business profit per ton*
FY2023 forecast

9,000yen/t

(90% Progress
in mid-term business plan)

In fFY2024, the final year of the
mid-term period, aim to achieve
profits that exceed the mid-term plan.

Steel business Segment profit
Revised target for FY 2024

¥260bn. or more

(Increased by ¥30.0bn.
from the mid-term business plan)

* Steel business profit per ton :
(consolidated segment profit excluding Inventory Valuation etc.)
/ non-consolidated sales volume)

Main Performance & Profitability Targets and Results

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		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. [¥280.0bn.]
	Profit attributable to owners of the parent	¥ 220.0 bn.	¥ 288.0 bn.	¥162.6bn.	¥190.0bn
	ROE	10%	15.7%	7.9%	8.7%
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]	9,000yen/t [9,000yen/t]
	Segment profit [Excluding Inventory Valuation etc.]	¥ 230.0bn.	¥323.7bn. [¥129.7bn.]	146.8bn. [¥73.8bn.]	¥200.0bn. [¥190.0bn.]
	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)

Progress of the 7th Medium-Term Business Plan (Economic Sustainability)



[Main initiatives of Steel Business] Improving of sales price and Product-mix enhancements

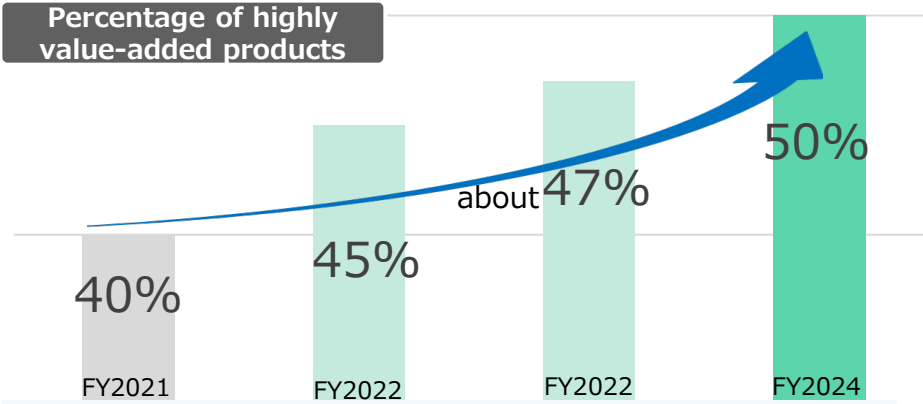
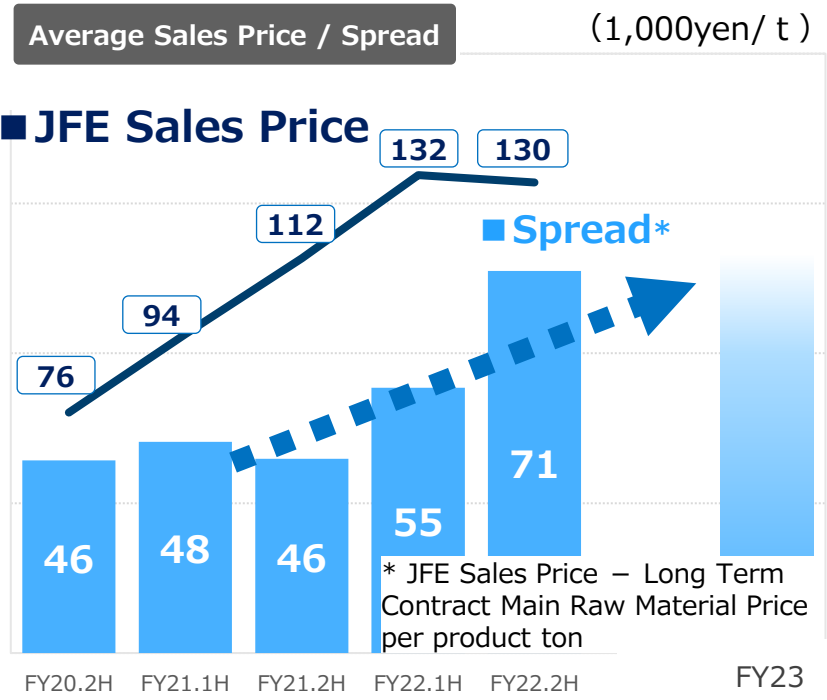
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- In FY2022, Continue to improve sales prices **due to the reflections of metal and commodity costs*, overhaul of extra pricing, and enhancing sales price to the sustainable level.**
The spread* **improved significantly by ¥74 bn. (3,000 yen/t) year on year.**
- **Due to continuing initiatives, the spread in FY2023, is expected to increase by ¥83bn. (4,000 yen/t) year on year.**

*Including foreign exchange effect, scrap, metal, fare, energy, etc.

- **Percentage of highly value-added products in FY2022 is about 47%.**
- Aim to further improve sales prices and spreads by increasing the ratio of high value-added products through **sales expansion in the automotive, energy and infrastructure building materials sectors**, which are particularly important.

*Products that offer technological advantages, are recognized by customers for their value added and have greater earnings power than commodity products.



- Initiatives to increase the ratio of high-value-added products**
- Shut down of upstream facilities and hot rolling facilities in Keihin(Sep.2023)
 - Reinforce extra-thick steel plate production line for offshore wind-power application in Kurashiki(Nov.2023)
 - Reinforce Non-oriented Electrical Steel Sheet Production Line(FY2024.1H,FY2026)
 - Sales expansion of automotive super high-tensile steel sheet compatible with EV and CN



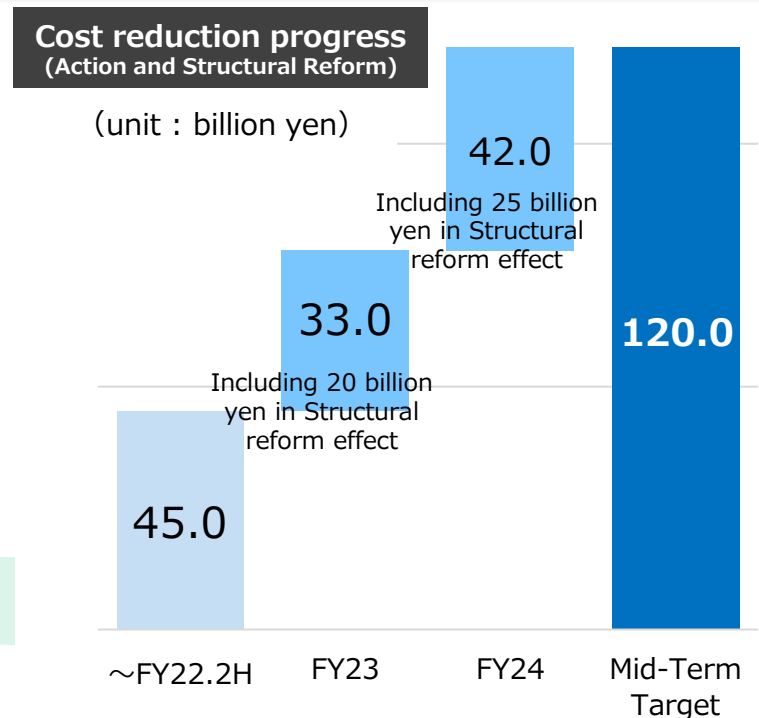
[Main initiatives of Steel Business]

Progress on Structural Reform and Cost Reduction

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- In FY2022, Shutdown of Tin Mills in Chiba & Consolidation of steel sheet production for cans in Fukuyama and Refit of No. 6 Blast Furnace in Chiba were completed steadily.
- **In FY2023, structural reforms, such as Shut down of upstream facilities and hot rolling facilities in Keihin will be completed** and promoted shifting focus from quantity to quality. **The fixed cost reduction effect (45 billion yen) will be realized by FY2024**, aiming to significantly lower the break-even point.
(Total Cost Reduction ¥120.0bn. in the 7th mid-term business Plan)
- **Progress steady in development plans** for the land of Keihin resulting from structural reform.
(Decided to sell land in Ogimachi Area and selected a Business Partner in the north side of the north district in the Minami-Watarida Area)
This coming September, schedule to disclose development plans of Ogishima Area.

	FY21	FY22	FY23	FY24~
Shutdown of Tin Mills in Chiba Consolidation in Fukuyama		Shutdown(Aug. 2022) (No.2 Tandem Mill, No.4 CAL, TFL) ★		
Refit of Blast Furnace	Kurashiki Refit No.4 BF (~Dec.2021) ★	Chiba Refit No.6 BF (Sep.22~Jan.23) ★		
Shut down of upstream facilities and hot rolling facilities in Keihin			To be shut down (Sep. 2023) ★	
Development plans for the land of Keihin		Selection of a Business Partner for the north side of the north district in the Minami-Watarida Area (Mar. 2023) ★	Disclose development plans in Ogishima (Sep. 2023) ★	To Sell Ogimachi land (Dec. 2024) ★

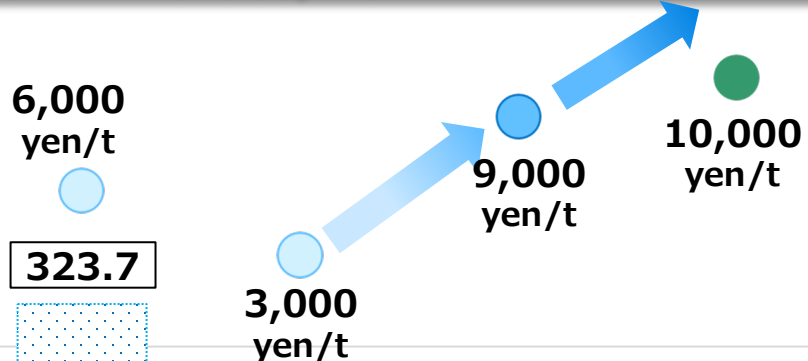


Profit in the steel business

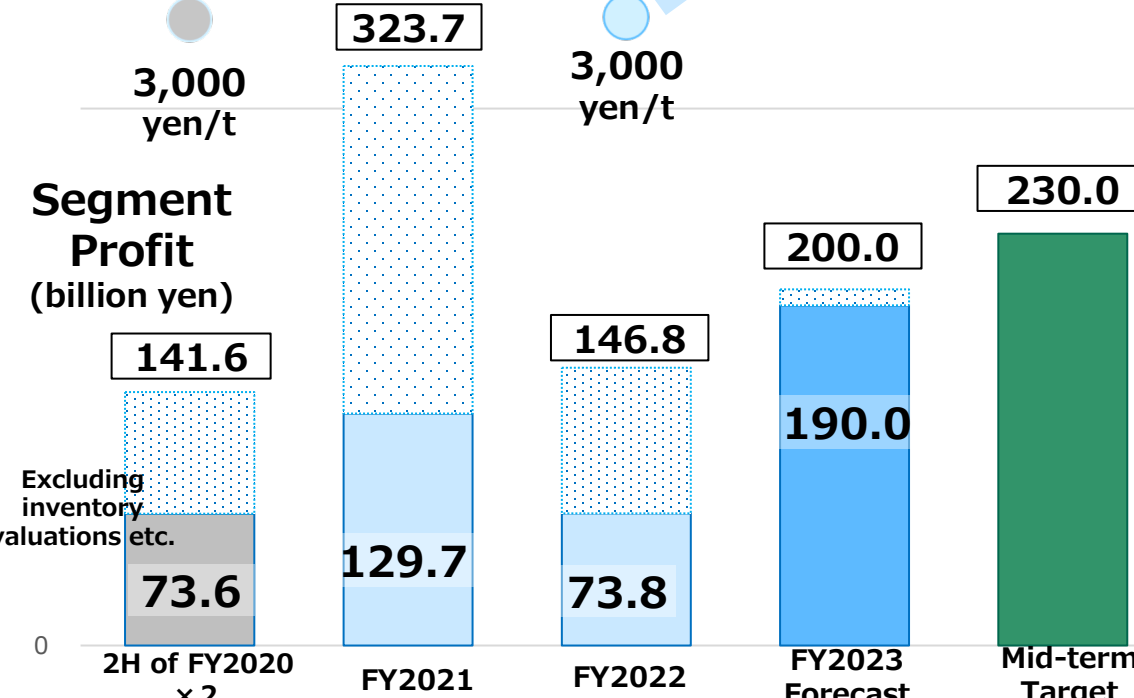


- In FY2023, profit per ton excluding inventory valuations etc. is expected to be reach 9,000yen/t.
- In FY2024, Aim to achieve the Mid-Term Target(10,000yen/t) or more.
- A medium- to long-term growth strategy is also being promoted, with an eye on the 8th medium term and beyond.

Profit per ton excluding inventory valuations etc.



Segment Profit (billion yen)



Future growth strategies

Capturing demand in growth areas by leveraging our company technology, with a view to the 8th mid-term and beyond.

- GX Strategy**
 - Sales expansion of **eco-products** (Further capacity expansion of high grade non-oriented electrical steel sheet etc.)
 - CN Technology Development and Green Steel Sales (**Sales of Eco-Process and Eco-Solution**)
- Global Strategy**
 - Production & sales JV with India's JSW for electrical steel sheets
 - Developing solutions business overseas (High-grade steel manufacturing know-how, DS technology, maintenance technology, etc.)
 - > **Strategies for developing high value-added products overseas**
- Pursuit of group synergy**
 - Capturing demand for high-grade electrical steel [Steel, Trading business]
 - Offshore wind-power business [Steel, Engineering, Trading business]

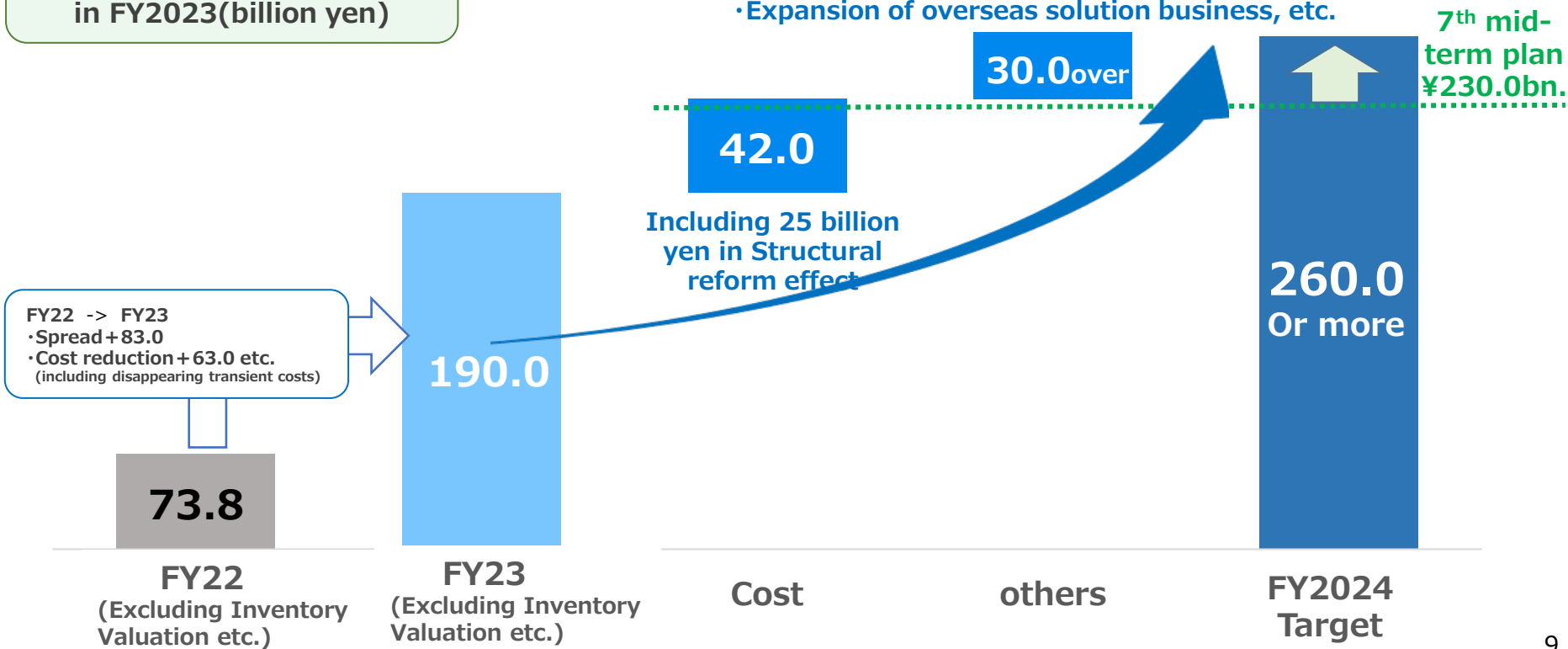


Paths toward achieving the Seventh Medium-Term Plan

- In FY2023, segment profit excluding Inventory Valuation etc. in the steel business is expected to be **190 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, 30 billion yen more than the target of the 7th Mid-Term Plan (230 billion yen)**.

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

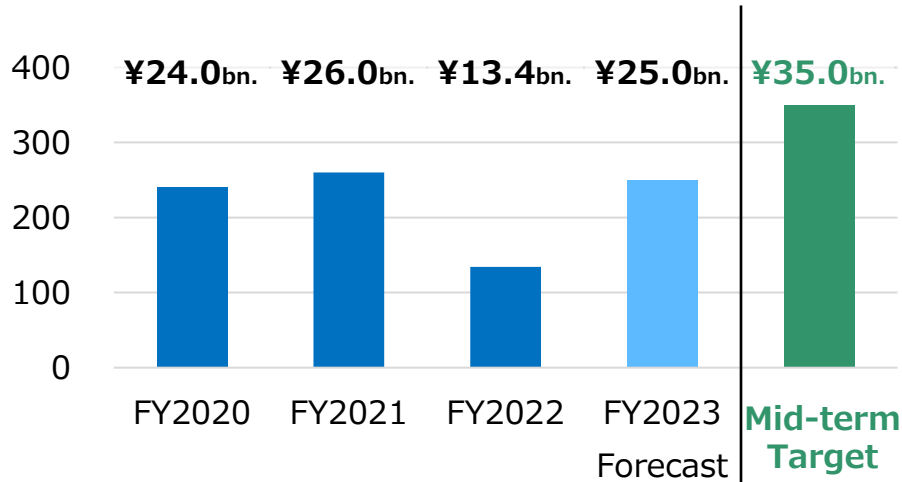
- Product-mix enhancements (Electrical steel sheet etc.)
- Improvements in sales prices such as overhauling the extra pricing, etc.
- Expansion of overseas solution business, etc.



Progress of Engineering and Trading Business

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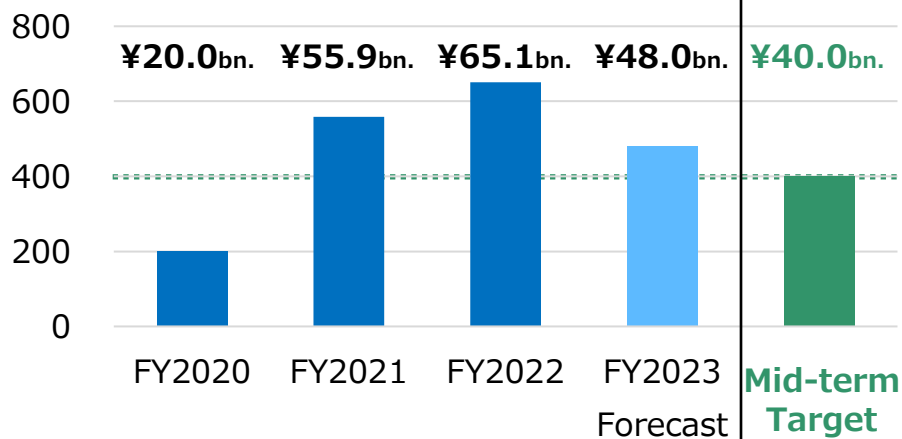
Engineering Business [Segment Profit]



FY2022 Initiatives

- **Orders received in FY2022 reached a record high (¥564.9bn.)** due to an increase in core infrastructure fields, such as large-scale overseas construction projects. It is expected to increase further in FY2023 (¥580bn.).
- **Construction of a new offshore wind monopile plant (Kasaoka)** began, which will start operation in April 2024.
- **Reinforced the foundation of the water engineering business** (signed an integration agreement with Tsukishima Machinery).

Trading Business [Segment Profit]



FY2022 Initiatives

- **Record profit achieved in FY2022.** Profit is expected to exceed the medium-term target in FY2023 as well.
- **Reinforced to establish No. 1 global processing and distribution of electrical steel sheet**
CN: Zhejiang JFE Shoji (March 2022), US: JSA (July 2022)
JPN: JFE Shoji Electrical Steel Nagoya (April 2022)
- **Expansion of overseas construction materials business**
Acquisition of CEMCO (No. 3 US steel frame manufacturing company) to enter the construction market in North America (October 2022).

**Progress of the 7th Medium-Term
Business Plan
(Environmental & Social
Sustainability)**

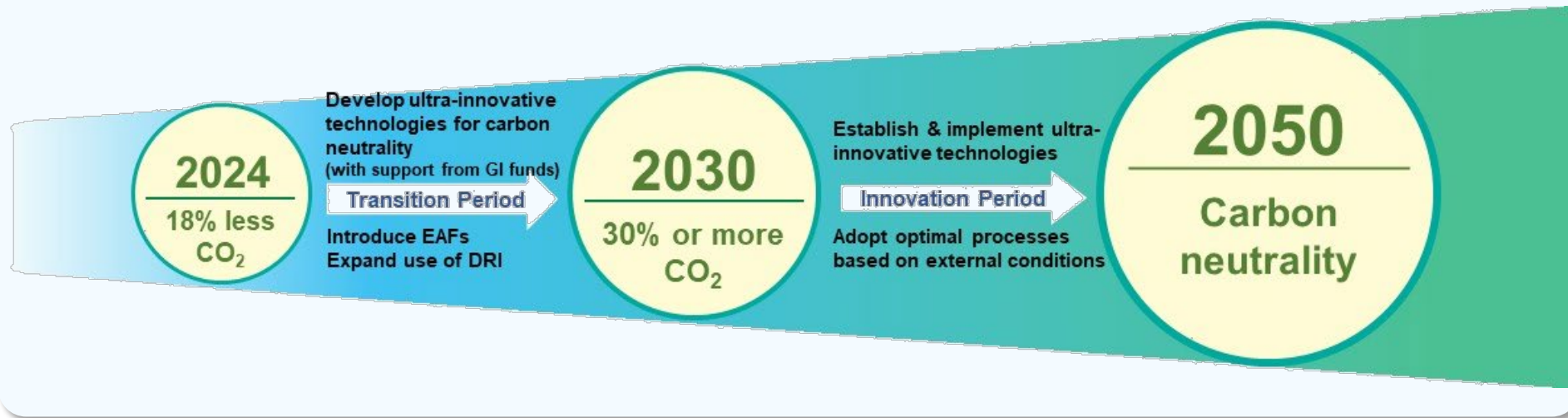


Actions for Carbon Neutrality in the JFE Group

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JFE Steel

September 1, 2022: Held a briefing of carbon neutrality vision and action plans.



JFE Engineering

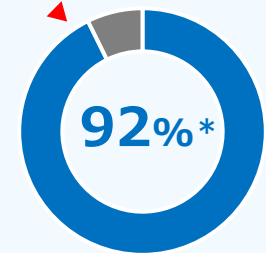
Construction and operation of renewable energy power plants and recycling facilities contributed to a **reduction of 11.14 million tons of CO₂ emissions (an increase of 0.58 million tons reduction compared to FY2021)**.

* e.g., Kyoei J&T Recycling Corporation, West Japan PET Bottle MR Center started commercial operation.

About **10% of total PET bottles in Japan were recycled in there.**

(Contribution to CO₂ emission reduction: approx. 0.09 million tons/y.)

FY2022 target : 11.0 million tons



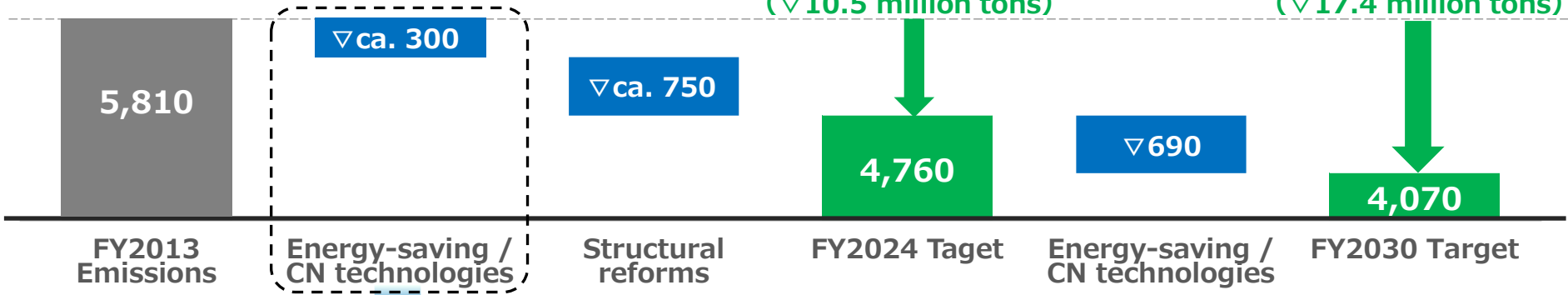
* Achievement rate of medium-term target (12.0 million tons)

Emissions-reduction in JFE Steel (Progress in FY2022)



- In FY2022, **progress was made as planned against targets.**
- FY2024 targets also expected to be achieved (Projected reduction of about 3 million tons through energy-saving and CN technologies, and about 7.5 million tons through structural reforms)

■ Emissions reduction plans



KPI** progress in FY2022

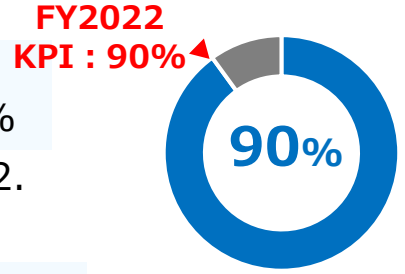
■ Investment

KPI : Approval rate of investment contributing FY2024 target ≥ 90%
 ⇒ **90% was approved** by FY2022.

■ Emissions-reduction

KPI : 50% or more of FY2024 target
 ⇒ Equipment contributing 56% of reduction target has been operated by FY2022.
 (Actual KPI will be reported in JFE GROUP REPORT issued in September.)

<Investment approval rate>



Approved items

Energy savings and high efficiency	23 items including AI/DS guidance, etc.
Low-carbon feedstock & fuel	19 items including expand use of scrap, etc.
Electric arc furnace (EAF)	Upgrade existing EAF in Sendai

*The JFE Group regularly reviews the CO₂ emissions-reduction target for further reduction. In FY2022, we reviewed and verified the progress of technological development and determined that the current reduction target was appropriate.

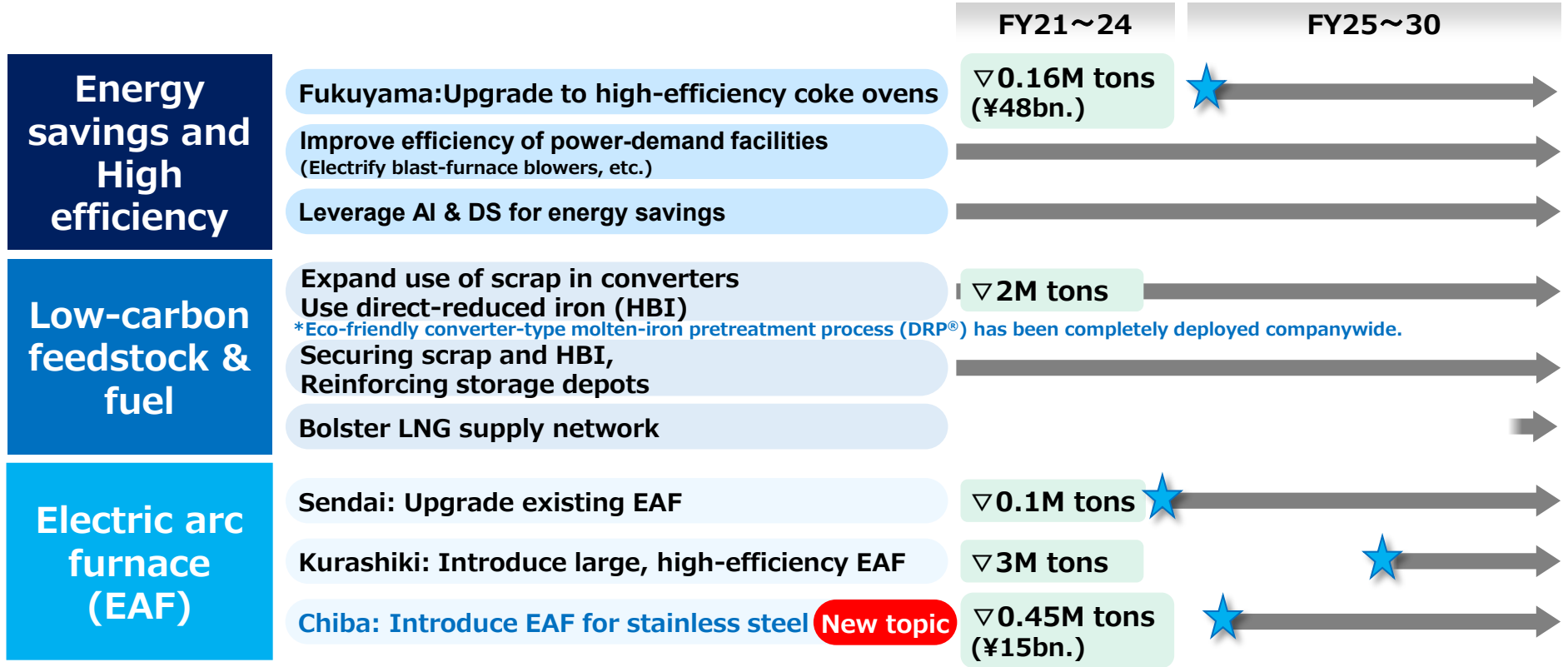
** The JFE Group has set key performance indicators (KPIs) for its initiatives to address priority issues and worked toward achieving its targets (CO₂ emissions-reduction is identified as one of the key management issues).

Investments Program to Achieve 2030 Target



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- The target of reducing emissions by developing energy-saving and CN technologies is **10 million tons or more from FY2021 to FY2030**.
- The approval and execution of investments has been steadily promoted to achieve reduction targets. **About 110 billion yen had been approved by FY2022**.
- About 1 trillion yen in investments are assumed by FY2030.





Topics for carbon neutrality

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Introduction of EAF in Chiba (New!)

- Decided to **install a new EAF** at Stainless Steel Manufacturing in Chiba.
- The capacity to dissolve scrap is expected to increase by up to 6 times compared to conventional process and **reduce CO₂ emissions by up to 450,000 tons per year**.
- Investment: approximately 15 billion yen, Operation start date: second half of FY2025.

Introduction of climate change indicators in the calculation standards for executive remuneration (released in March 2023)

- **Introduction of climate change indicators in executive performance-linked compensation** as an incentive to accelerate efforts to address climate change issues (Adopted in FY2023, industry first).
- Compensation is calculated based on the achievement of KPIs related to "Contribute to resolving climate change issues", which is defined as a key management issue.

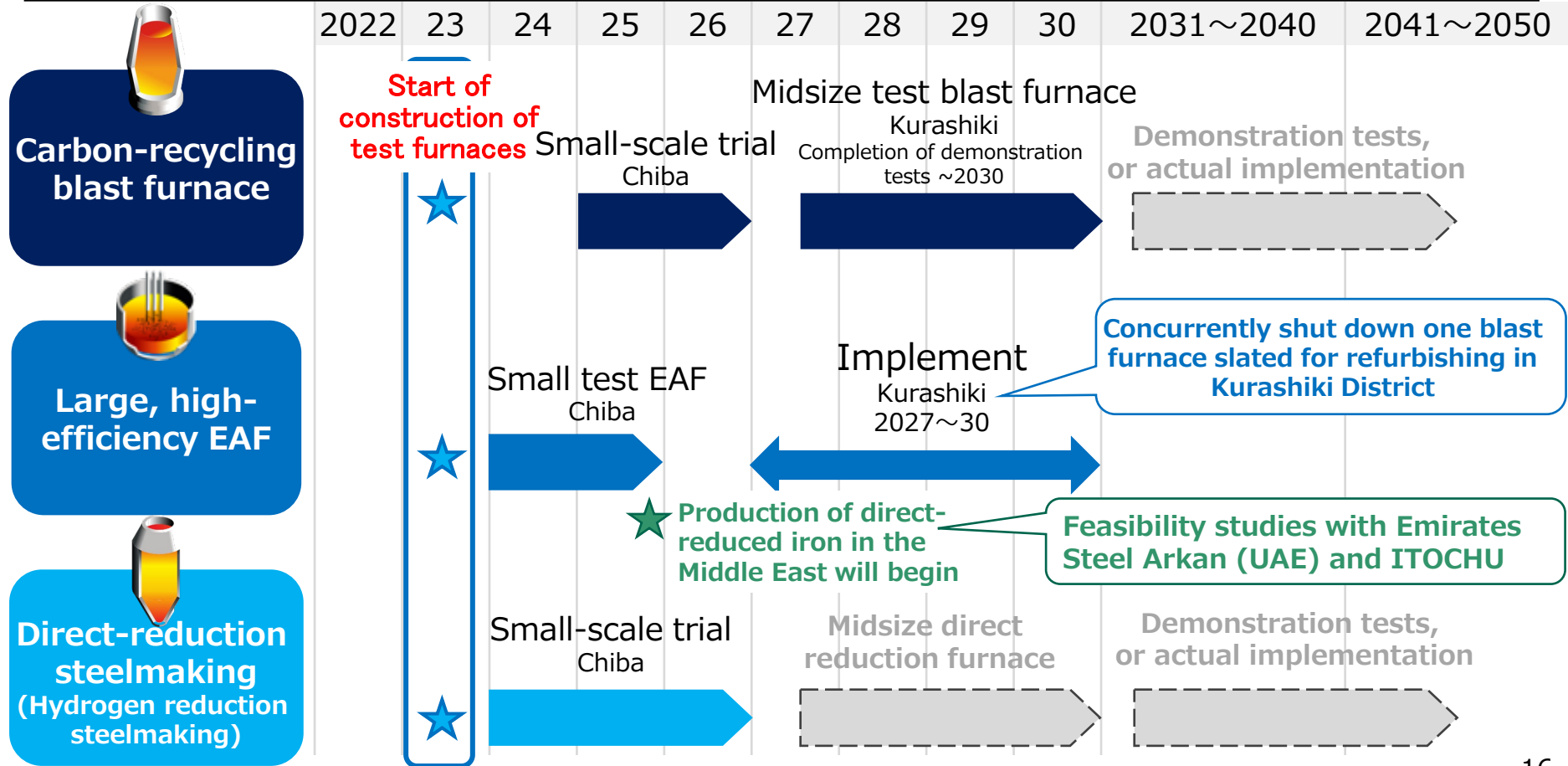
Green Steel

- **The JFE Green Steel brand was named JGreeX™**. (New!)
- Green steel products that offset CO₂ emissions using the mass balance approach will be introduced in the first half of FY2023. **Approximately 200,000 tons of green steel can be supplied in FY2023**. (New!) *Achieving 30% CO₂ reduction by FY2030 will enable JFE Steel to supply up to 5 million tons of green steel using the same approach.

Progress in Development of Ultra-innovative Technologies



- **Development of ultra-innovative technologies is being steadily promoted** on a multitrack approach with support from the GI Fund, etc.
- **Construction of test furnaces for each technology is scheduled to begin in 2023** for aiming at early implementation after assessing feasibility.
- The JFE group also promotes the realization of a carbon-neutral society through the utilization of Keihin land, including the **development of facilities to receive and supply hydrogen**, etc.



Consolidated Results for Fiscal Year 2022

Financial Results for Fiscal Year 2022



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- **Business profit in FY2022 was ¥235.8bn.**
(increased by ¥0.8bn. from previous forecast, decreased by ¥180.6bn. year-on-year)
- Profit Attributable to Owners of Parent in FY2022 was ¥162.6bn.

(billion yen)	FY2021 Actual	FY2022 Forecast	FY2022 Actual			Change FY2021→ FY2022	Change Forecast →Actual
	Full year	Full year	1H	2H	Full year	Full Year	Full Year
Revenue	4,365.1	5,200.0	2,564.3	2,704.4	5,268.7	903.6	68.7
Business Profit [Excluding Inventory Valuation etc.]	416.4 [222.4]	235.0 [162.0]	187.9 [71.9]	47.1 [90.9]	235.8 [162.8]	(180.6) [(59.6)]	0.8 [0.8]
Finance Income/Costs	(11.6)	(15.0)	(6.6)	(8.1)	(14.8)	(3.2)	0.2
Segment Profit	404.8	220.0	181.2	39.7	221.0	(183.8)	1.0
Exceptional Items	(16.2)	(6.2)	-	(10.7)	(10.7)	5.5	(4.5)
Profit before Tax	388.5	213.8	181.2	29.0	210.2	(178.3)	(3.6)
Tax Expense and Profit (Loss) Attributable to Non-Controlling Interests	(100.4)	(63.8)	(57.9)	10.3	(47.6)	52.8	16.2
Profit Attributable to Owners of Parent	288.0	150.0	123.2	39.3	162.6	(125.4)	12.6

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 Fiscal Year 2022

(by Segment)

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(billion yen)		FY2021 Actual	FY2022 Forecast	FY2022 Actual			Change FY2021→ FY2022	Change Forecast →Actual
				Full Year	1H	2H		
Steel Business		3,173.4	3,860.0	1,918.9	1,962.1	3,881.1	707.7	21.1
Engineering Business		508.2	520.0	219.0	293.4	512.5	4.3	(7.5)
Trading Business		1,231.7	1,490.0	750.2	763.9	1,514.1	282.4	24.1
Adjustments		(548.3)	(670.0)	(323.9)	(315.0)	(638.9)	(90.6)	31.1
Revenue		4,365.1	5,200.0	2,564.3	2,704.4	5,268.7	903.6	68.7
Business Profit (A)		416.4	235.0	187.9	47.9	235.8	(1,80.6)	0.8
Finance Income/Costs (B)		(11.6)	(15.0)	(6.6)	(8.1)	(14.8)	(3.2)	0.2
Steel Business		323.7	150.0	148.2	(1.4)	146.8	(176.9)	(3.2)
Engineering Business		26.0	13.0	(3.9)	17.3	13.4	(12.6)	0.4
Trading Business		55.9	60.0	40.6	24.5	65.1	9.2	5.1
Adjustments		(0.9)	(3.0)	(3.6)	(0.7)	(4.3)	(3.4)	(1.3)
Segment Profit (A+B)		404.8	220.0	181.2	39.7	221.0	(183.8)	1.0

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.



Consolidated Cash Flow and Debt/EBITDA Ratio

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➤ Debt in FY2022 was ¥1,862.9bn.
Net Debt* was decreased year on year.

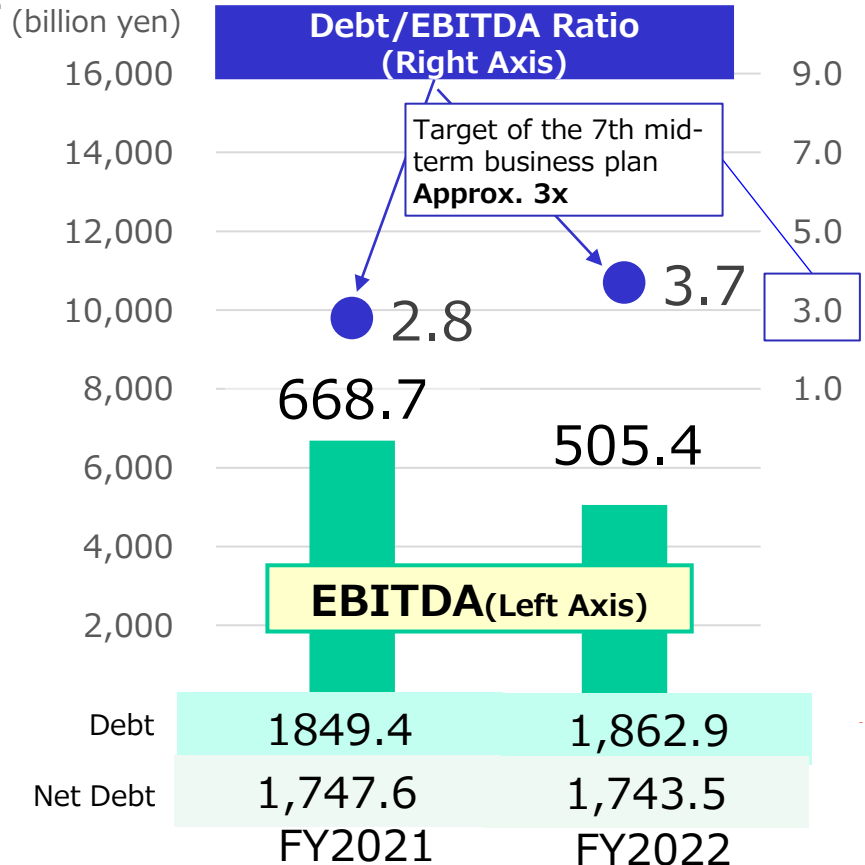
*Net Debt = Debt - Cash and cash equivalents.

Consolidated Cash Flow Forecast in FY2022

Cash-in	Cash-out
Net Profit 162.6	CAPEX & Investments 312.9
Depreciation and Amortization 269.6	
Asset Compression 44.3	Dividend Payment 75.1
Debt 13.5	Working Capital etc. 102.0

(Billion yen)

Progress of Debt/EBITDA Ratio



■ EBITDA = Business profit + Depreciation and Amortization
 ■ Debt/EBITDA Ratio = Interest-bearing debt outstanding / EBITDA
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JFE Steel Financial Results for Fiscal Year 2022

Financial Results in Fiscal Year 2022

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	Unit	FY2021	FY2022					FY2022 Previous Forecast (Full Year)
		Full Year	1H			2H	Full year	
				3Q	4Q			
Revenue	billion yen	3,173.4	1,918.9	986.9	975.3	1,962.2	3,881.1	3,860.0
Segment Profit	billion yen	323.7	148.2	21.8	(23.2)	(1.4)	146.8	150.0
Excluding Inventory Valuation etc.*	billion yen	129.7	32.2	22.8	18.8	41.6	73.8	77.0
Crude Steel (Standalone)	Mt	25.88	12.64	5.48	5.97	11.45	24.10	Approx. 24.00
Crude Steel (Consolidated)	Mt	27.26	13.37	5.81	6.29	12.11	25.48	Approx. 25.40
Shipment (Standalone)	Mt	22.38	10.86	5.25	5.64	10.88	21.74	Approx. 21.60
Export Ratio on Value Basis (Standalone)	%	45.5	46.7	41.0	43.6	42.2	44.5	Approx. 44
Average Sales Price (Standalone)	000 yen / t	103.7	131.6	136.3	124.0	129.9	130.8	Approx. 131
Exchange Rate	¥/\$	112.1	131.6	144.0	133.2	138.6	135.1	Approx. 135

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

176.9Bn. Decrease in JFE Steel's Segment Profit (FY2021 (Actual) vs. FY2022 (Actual))

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JFE Steel	FY2021 Actual	FY2022 Actual	(billion yen) Change
Segment Profit	323.7	146.8	(176.9)
Excluding Inventory Valuation etc.	129.7	73.8	(55.9)

1. Cost**±0**

- Positive : Promote cost reductions
- Negative: Chiba No.6 blast furnace refit and cost increases due to production reduction.

2. Volume and Mix**(30.0)**

- Volume -35.0, Mix +5.0

3. Sales and Raw materials**+220.0**

- Improve spreads due to the reflection of high prices of main raw materials, metals, and other commodities in selling prices

4. Foreign exchange effects on trade**(93.0)**

- 1USD=112.1yen→1USD=135.1yen

5. Inventory valuation**(121.0)**

- Inventory valuation -81.0 (+160.0→+79.0)
- Carry over-46.0 (+23.0→-23.0)
- Foreign exchange valuation+6.0 (+11.0→+17.0)

6. Others**(152.9)**

- Group companies-71.8
- Energy prices -53.0, etc.

**JFE Engineering
JFE Shoji
Financial Results
for Fiscal Year 2022**



Financial Results for Fiscal Year 2022

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- JFE Engineering: **Revenues reached a record high of ¥512.5bn** (up ¥4.3bn. from FY2021)
Segment profit was ¥13.4bn., almost unchanged from the previous forecast (down ¥12.6bn. from FY2021)
- JFE Shoji: **Segment profit was ¥65.1bn.**, increased by ¥5.1bn. from the previous forecast (up ¥9.2bn. from FY2021)

Engineering Business

(billion yen)	FY2021 (Actual) (A)	FY2022 (Forecast) (B)	FY2022 (Actual) (C)	Change (From Previous Year) (C)-(A)	Change (From Previous Forecast) (C)-(B)
Orders	505.8	550.0	564.9	59.1	14.9
Revenue	508.2	520.0	512.5	4.3	(7.5)
Segment Profit	26.0	13.0	13.4	(12.6)	0.4

Trading Business

(billion yen)	FY2021 (Actual) (A)	FY2022 (Forecast) (B)	FY2022 (Actual) (C)	Change (From Previous Year) (C)-(A)	Change (From Previous Forecast) (C)-(B)
Revenue	1,231.7	1,490.0	1,514.1	282.4	24.1
Segment Profit	55.9	60.0	65.1	9.2	5.1

Financial Forecast for Fiscal Year 2023

Current Business Environment (Steel Business)

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Sales environment

- **Domestic** : **Domestic steel demand is expected to improve gradually, supported by a recovery in the automotive sector** as supply constraints for semiconductors and other products are eased, although some of the effects are attributable to higher prices and labor shortages.
- **Overseas** : While there has been a slowdown in economic activity in developed countries due to inflation and monetary policy, **steel demand and market are expected to gradually recover**, driven by the economic recovery after China lifted its zero-COVID policy.

Raw material market

- **Iron ore**: Market conditions have been on an uptrend since the start of 2023 on expectations of a recovery in Chinese steel demand. **The current level is expected to continue.**
- **Coking coal**: Although rising for a while due to weather and other factors in Australia, it has remained weak since then. **It is expected to rise from the current level.**

Forecast for FY 23

- Based on the above external environmental awareness, Standalone crude steel production is expected to be approx. 25.0Mt, 0.9Mt up from FY2022. In line with the recovery in demand, we are going to further improve sales prices and promote a shift from quantity to quality.



Financial Forecast for FY2023 (Steel Business)

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Crude Steel Production
(JFE Steel standalone)

approx. 25.0Mt
per year

Exchange Rate

130 yen/\$

(billion yen)	FY2022 Actual(A)	FY2023 Forecast(B)	Change (B)-(A)
Segment Profit	146.8	200.0	53.2
Excluding Inventory Valuation etc.	73.8	190.0	116.2

1. Cost

63.0

- Structural reforms effect 20.0
- Operational improvement 20.0
- Disappearance of blast furnace refurbishment impact and production reduction impact 23.0

2. Volume and Mix

18.0

- Increased volume due to recovered steel demand (Crude Steel Production 24.1Mt⇒approx. 25.0Mt)

3. Sales and Raw materials

75.0

- Improved spreads due to the reflection of high prices of main raw materials, metals, and other commodities in selling prices

4. Inventory valuation

(63.0)

- Inventory valuation -82.0 (+79.0→-3.0)
- Carry over+40.0 (-23.0→+17.0)
- Foreign exchange valuation-21.0 (+17.0→-4.0)

5. Others

(39.8)

- Energy prices, depreciation cost etc.



Financial Forecast for FY2023 (Engineering・Trading)

JFE

(billion yen)	FY2022 (Actual) (A)	FY2023 (Forecast) (B)	Change (B)-(A)
Engineering Orders	564.9	580.0	15.1
Segment Profit	13.4	25.0	11.6
Trading Segment Profit	65.1	48.0	(17.1)

Engineering Business

- Orders: Expected to expand in “Waste to Resource” and “Carbon Neutral” fields.
- Segment profit: ¥25.0bn., up ¥11.6bn. from FY2022, due to the elimination of temporary losses on individual projects in Europe, as well as the reflection of higher sales due to the progress of projects on order and the impact of higher prices on materials and equipment.

Trading Business

- Domestic: Expect a modest recovery in demand, including an increase in domestic auto production, although spreads will shrink.
- Overseas: Expect a decline in steel prices and a reduction in spreads in North America.
- Segment profit: Forecast of ¥48bn., down ¥17.1bn. from FY2022. (up ¥8bn. from the mid-term target.)



Financial Forecast for FY2023

JFE

(billion yen)	FY2022 Actual(A)	FY2023 Forecast(B)	Change (B)-(A)
Revenue	5,268.7	5,540.0	271.3
Business Profit [Excluding Inventory Valuation etc.]	235.8 [162.8]	290.0 [280.0]	54.2 [117.2]
Steel Business	146.8	200.0	53.2
Engineering Business	13.4	25.0	11.6
Trading Business	65.1	48.0	(17.1)
Segment Profit (Including Adjustments)	221.0	270.0	49.0
Profit Attributable to Owners of Parent	162.6	190.0	27.4

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.

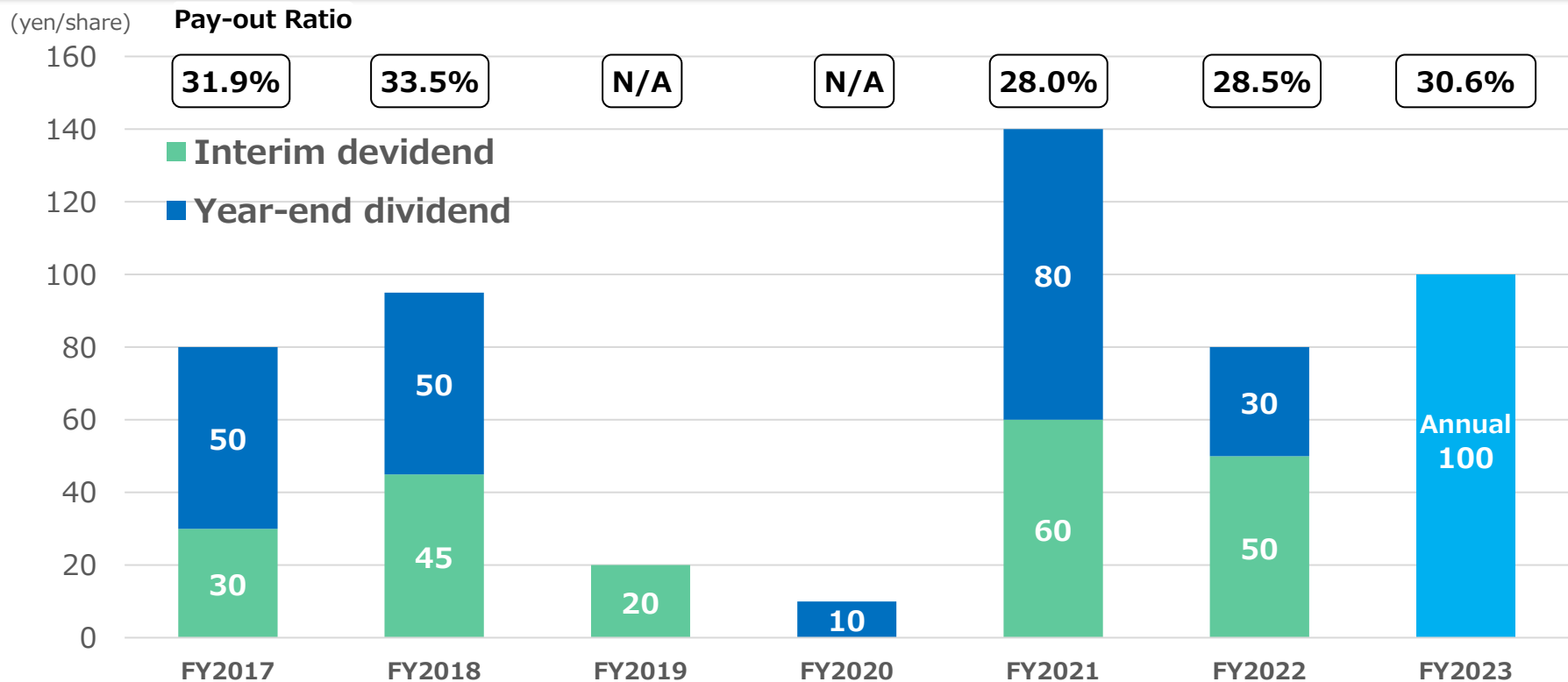
Dividends



Dividend

JFE

- JFE Holdings has decided to propose at its general meeting of shareholders **a year-end dividend of 30 yen per share**, as previously announced.(annual dividend: 80 yen)
- The annual dividend for FY2023 is expected to be **100 yen per share**, based on our payout ratio policy of approximately 30%.



Appendix(1) Profit/Loss Analysis



Main Financial Data

JFE
JAAP
IFRS

	FY14	FY15	FY16	FY17	FY18
(bn. Yen, times)					
Ordinary Income	231.0	64.2	84.7	216.3	221.1
EBITDA	421.5	254.4	279.9	388.8	405.9
ROS	6.0%	1.9%	2.6%	5.9%	5.6%
ROE	7.7%	1.8%	3.7%	7.6%	8.3%
ROA	5.5%	1.7%	2.3%	5.2%	5.1%
Debt Outstanding	1,501	1,379	1,375	1,331	1,450
Debt/EBITDA Ratio	x3.6	x5.4	x4.9	x3.4	x3.6
D/E Ratio	59.0%	56.9%	51.4%	58.1%	62.0%
Profit attributable to owners of parent (yen/share)					
	241.6	58.4	117.8	250.8	285.0
Dividend (yen/share)	60	30	30	80	95
Pay-out Ratio	24.8%	51.4%	25.5%	31.9%	33.3%

	FY18	FY19	FY20	FY21	'22
(bn. Yen, times)					
Business profit	232.0	37.8	-12.9	416.4	235.8
EBITDA * 1	428.2	269.4	223.4	668.7	505.4
ROS * 2	6.0%	1.0%	-0.4%	9.5%	4.5%
ROE * 3	8.6%	-11.1%	-1.3%	15.7%	7.9%
ROA * 4	5.0%	0.8%	-0.3%	8.4%	4.4%
Interest-bearing debt outstanding	1,524	1,814	1,806	1,849	1,863
Debt/EBITDA multiple * 5	x3.6	x6.7	x8.1	x2.8	x3.7
D/E Ratio * 6	68.2%	96.4%	93.2%	80.8%	67.8%
Profit attributable to owners of parent (yen/share)					
	283.8	-343.4	-38.0	500.1	280.7
Dividend (yen/share)	95	20	10	140	80
Pay-out Ratio	33.5%	—	—	28.0%	28.5%

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 Third Quarter of Fiscal Year 2022

JFE

	Unit	FY2021					FY2022				
		1Q	2Q	3Q	4Q	Full Year	1Q	2Q	3Q	4Q	Full Year
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
Segment Profit	billion yen	69.7	88.8	93.5	71.7	323.7	93.0	55.2	21.8	(23.2)	146.8
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
Crude Steel (Standalone)	Mt	6.25	6.45	6.49	6.69	25.88	6.43	6.21	5.48	5.97	24.10
Crude Steel (Consolidated)	Mt	6.59	6.80	6.85	7.02	27.26	6.77	6.59	5.81	6.29	25.48
Shipment (Standalone)	Mt	5.26	5.56	5.63	5.92	22.38	5.54	5.32	5.25	5.64	21.74
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
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
Exchange Rate	¥/\$	109.8	110.0	113.1	115.3	112.1	126.5	136.6	144.0	133.2	135.1
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

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

3.2bn. Decrease in JFE Steel's Segment Profit (FY2022 (Forecast) vs. FY2022(Actual))

JFE

(billion yen)

JFE Steel	FY2022 Forecast	FY2022 Actual	Change
Segment Profit	150.0	146.8	(3.2)
Excluding Inventory Valuation etc.	77.0	73.8	(3.2)

1. Cost**±0****2. Volume
and Mix****±0****3. Sales and
Raw materials****±0****4. Inventory
valuation****±0**

- Inventory valuation-5.0 (+84.0→+79.0)
- Carry over+2.0 (-25.0→-23.0)
- Foreign exchange valuation+3.0 (+14.0→+17.0)

5. Others**(3.2)**

149.6Bn. Yen Decrease in JFE Steel's Segment Profit (FY2022.1H vs. FY2022.2H)

JFE

JFE Steel	FY2022 Actual			Change
	1H	2H	Full Year	
Segment Profit	148.2	(1.4)	146.8	(149.6)
Excluding Inventory Valuation etc.	32.2	41.6	73.8	9.4

(billion yen)

1. Cost**(10.0)**

- Positive : Promote cost reductions
- Negative: Chiba No.6 blast furnace refit and cost increases due to production reduction.

2. Volume and Mix**(21.0)**

- Volume -24.0, Mix +3.0

3. Sales and Raw materials**+117.0**

- Reflect high prices of main raw materials, metals, and other commodities quickly in selling prices to further improve spreads

4. Inventory valuation**(159.0)**

- Inventory valuation -85.0 (+82.0→-3.0)
- Carry over-33.0 (+5.0→-28.0)
- Foreign exchange valuation-41.0(+29.0→-12.0)

5. Others**(76.6)**

- Foreign exchange effects on trade -9.0 (1USD=131.6yen→1USD=138.6yen)
- Group companies-23.0
- Energy prices -19.0, etc.

45.0Bn. Yen Decrease in JFE Steel's Segment Profit (FY2022.3Q vs. FY2022.4Q)

JFE

(billion yen)

JFE Steel	FY2022					Change
	1Q	2Q	3Q	4Q	Full Year	
Segment Profit	93.0	55.2	21.8	(23.2)	146.8	(45.0)
Excluding Inventory Valuation etc.	(23.0)	55.2	22.8	18.8	73.8	(4.0)

1. Cost**±0****2. Volume and Mix****+11.0**

• Volume + 9.0, Mix + 2.0

3. Sales and Raw materials**(5.0)**

• Sluggish market due to overseas economic slowdown

4. Inventory valuation**(41.0)**

- Inventory valuation -33.0 (+15.0→-18.0)
- Carry over-20.0 (-4.0→-24.0)
- Foreign exchange valuation+12.0(-12.0→±0.0)

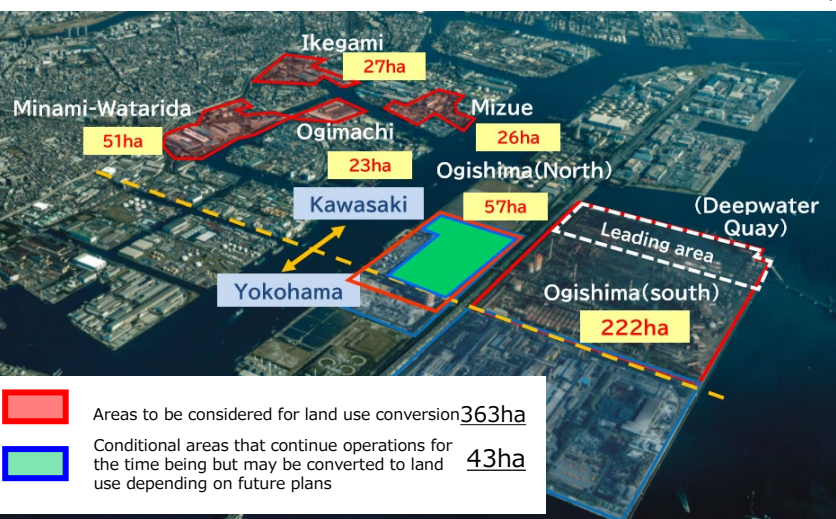
5. Others**(10.0)**

• Increase in depreciation cost and other expenses etc.

Progress of development plans for the land of Keihin district



- The development area, located on the waterfront of the Tokyo metropolitan area and close to Haneda Airport, **is a huge land. (5 areas, Approx. 400ha)**
- Leveraging the characteristics of each area, we are **promoting initiatives based on three pillars: "Sale", "Lease", and "Do business (by ourselves)"**.



Area	Progress
Ogishima 279ha*	<ul style="list-style-type: none"> ✓ Disclose development plans in Sep.2023. ✓ Strive to see some properties put to new use by FY2030. ✓ Launched joint study for the development of a base for receiving and supplying decarbonized fuels such as hydrogen and ammonia with ENEOS Corporation and JERA Co., Inc. (Released on 21st Apr. 2022) ✓ Launched Community association with the other companies based in Ogishima. (Total 9 companies, Released on 28th Oct, 2022)
Minami-Watarida 52ha	<ul style="list-style-type: none"> ✓ Developing as an R&D and innovation base consistent with the policy of Kawasaki City. (Disclosed the basic plan for area development by Kawasaki City, 26th Aug. 2022) ✓ Business Partner for the north side of the north district in the Minami-Watarida Area was Selected and the area will start construction in FY2024 and will be partially put to new use in FY2027. (Released on 30th Mar.2023) ✓ The start of a project on the northern side of the North District is the first step toward a huge land(Approx. 400ha).
Ogimachi 23ha	<ul style="list-style-type: none"> ✓ We decided to sell about 21 ha of land, which will be delivered in December 2024. Estimated capital gain of 45 billion yen. (Released on 30th Mar.2023)
Other 2area 53ha	<ul style="list-style-type: none"> ✓ Expansion and development as a major recycling base in the Tokyo metropolitan area. With regard J&T Recycling Corporation planned "Plastic Recycling Business (Super Sorting Center)," the company has started environmental assessment and other administrative measures. (Mizue Area)

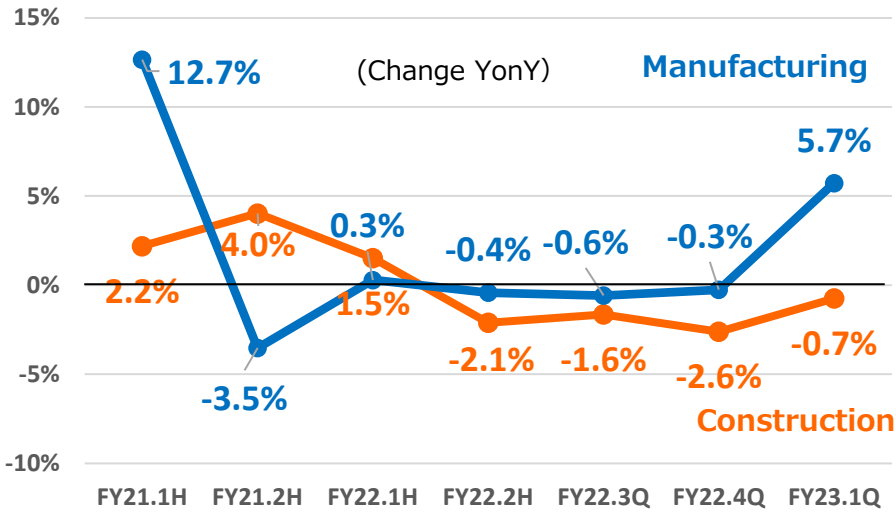
*Area of upstream facilities (shut down area):222ha

Appendix(2) Business Environmental Indicators, etc.

Current Business Environment (Domestic)

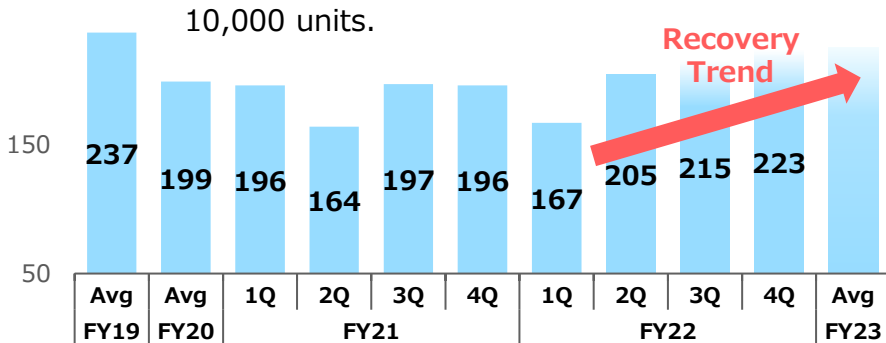


【Outlook for Domestic Ordinary Steel Consumption】



Source: Ministry of Economy, Trade and Industry, "Outlook for Steel Consumption" 11 April 2023. (FY2022.1H and after is estimated results)

【Outlook for Domestic Auto Production】



【Trend by Sector】

Auto-mobile	<ul style="list-style-type: none"> • Demand remains strong and there is a large backlog of orders. • Restrictions on the supply of semiconductors and other components are gradually eased and the level of activity is expected to improve in the future.
Ship-building	<ul style="list-style-type: none"> • Little progress about new shipbuilding negotiation, however the contract balance still remains for two years. • The current level of activity is expected to remain stable over next two to three years, although there are soaring materials prices and labor shortages.
Other manufacturing	<ul style="list-style-type: none"> • In the construction equipment sector, mining demand remains strong due to high resources. • Steel demand remains strong. • In the industrial machinery sector, although machine tool orders are on a downward trend due to the impact of parts and labor shortages, the level of activity is flat due to a backlog of orders.
Building	<ul style="list-style-type: none"> • New housing have been slow due to soaring materials prices and labor shortages, and small- and medium-sized projects are still sluggish, but large-scale projects such as distribution warehouses and semiconductor factories are firm. • Steel demand is expected to increase slightly from the previous year.
Civil engineering	<ul style="list-style-type: none"> • In the public sector, although there are some cases of delayed projects due to labor shortages and soaring materials prices, the budget remains at a high level. Steel demand is expected to increase slightly from the previous year.

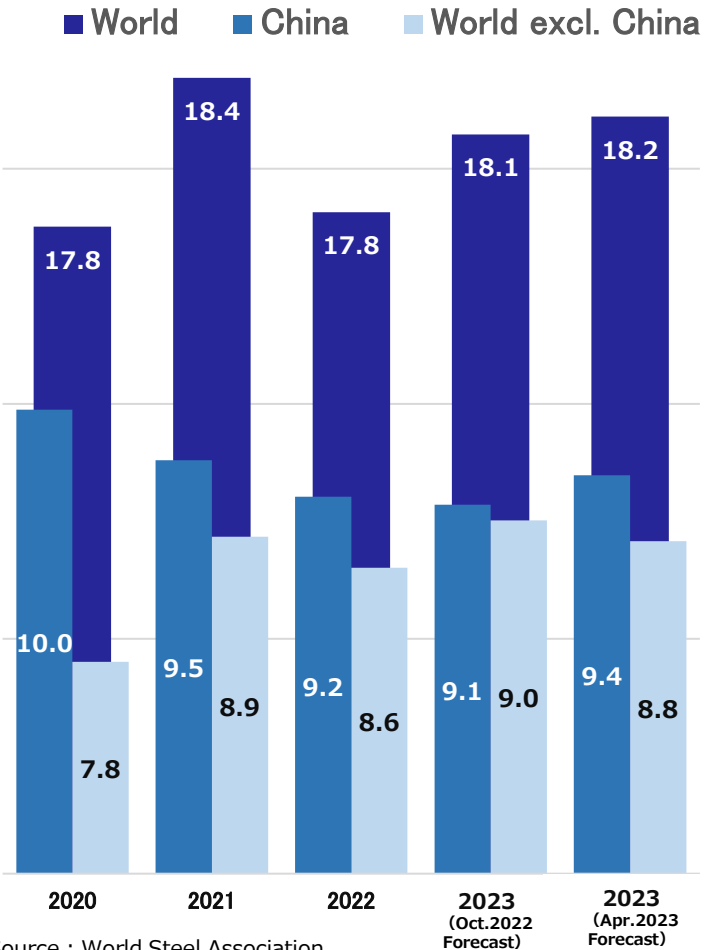
Current Business Environment (Overseas)



JFE

【World Steel Demand Forecasts】

Unit : 100 million tons



【Real GDP Growth Forecast in 2023】

(Arrows indicate changes from the previous forecast)

	World	US	China	India	ASEAN-5
2022 Actual	3.4%	2.1%	3.0%	6.8%	4.4%
Jan. 2023 Forecast	2.9%	1.4%	5.2%	6.1%	5.3%
Apr. 2023 Forecast	2.8% ➡	1.6% ➡	5.2% ➡	5.9% ➡	5.3% ➡

Source: IMF World Economic Outlook Update January 31, 2023, April 11, 2023

*ASEAN5 : Thailand, Malaysia, Indonesia, Philippine, and Singapore

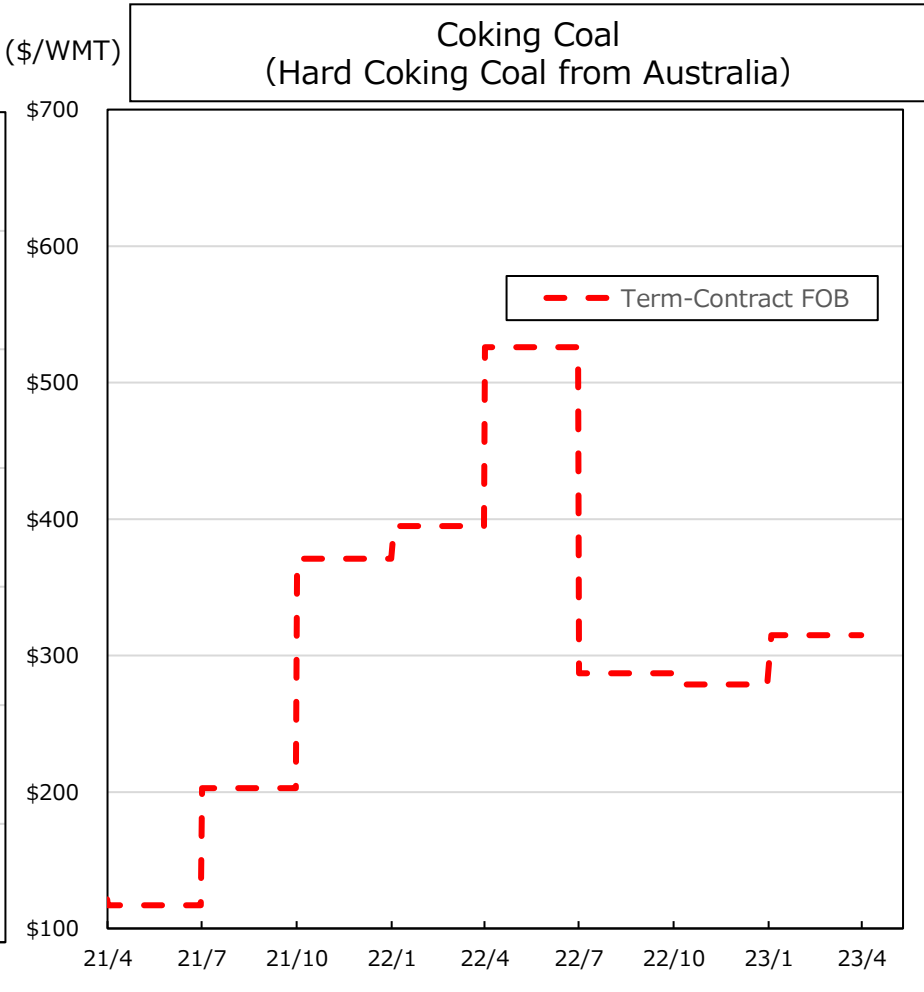
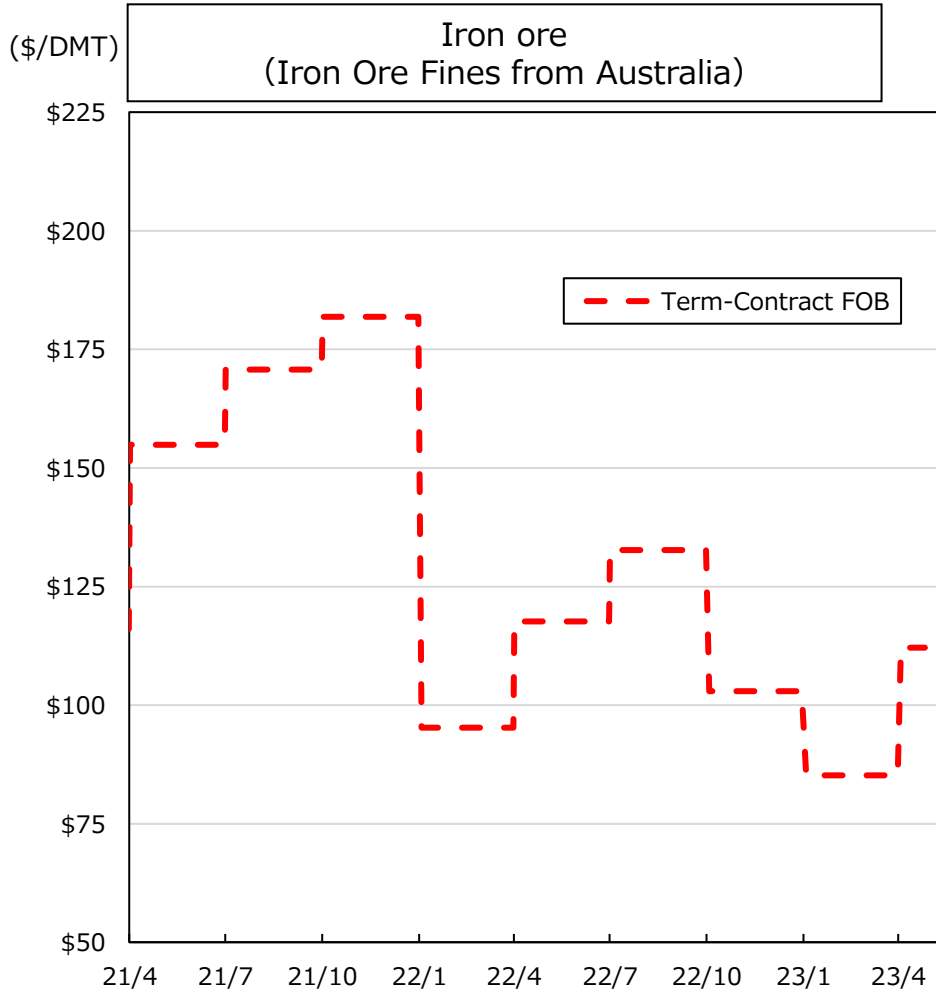
【Trend by Sector】

Thin Sheet	<ul style="list-style-type: none"> • In China, demand is expected to recover moderately as a result of the easing of the zero-COVID policy and support for the real estate sector. • Other emerging economies are also expected to gradually unwind, although the effects such as the postponement of purchases will remain due to the shortage of foreign exchange reserves caused by the depreciation of currencies and soaring prices.
Auto mobile	<ul style="list-style-type: none"> • Expected that demand remains firm and production levels gradually recover although there are influences of the prolonged crisis in Ukraine, inflation, US monetary policy, slower growth in China and so on.
Ship Building	<ul style="list-style-type: none"> • Chinese and South Korean shipbuilding companies secured stable contracts balance by increasing new construction orders. • It is assumed that there will be a delay in construction due to a shortage of workers, but there will be no significant impact.
Energy	<ul style="list-style-type: none"> • Despite a temporary decline in crude oil and gas prices, the tight supply-demand situation continued, and development of alternatives to Russian crude oil and gas continued, mainly in North America and the Middle East. • Inquiries increase mainly for high chromium seamless steel pipes.



Raw materials (Steel Business)

JFE

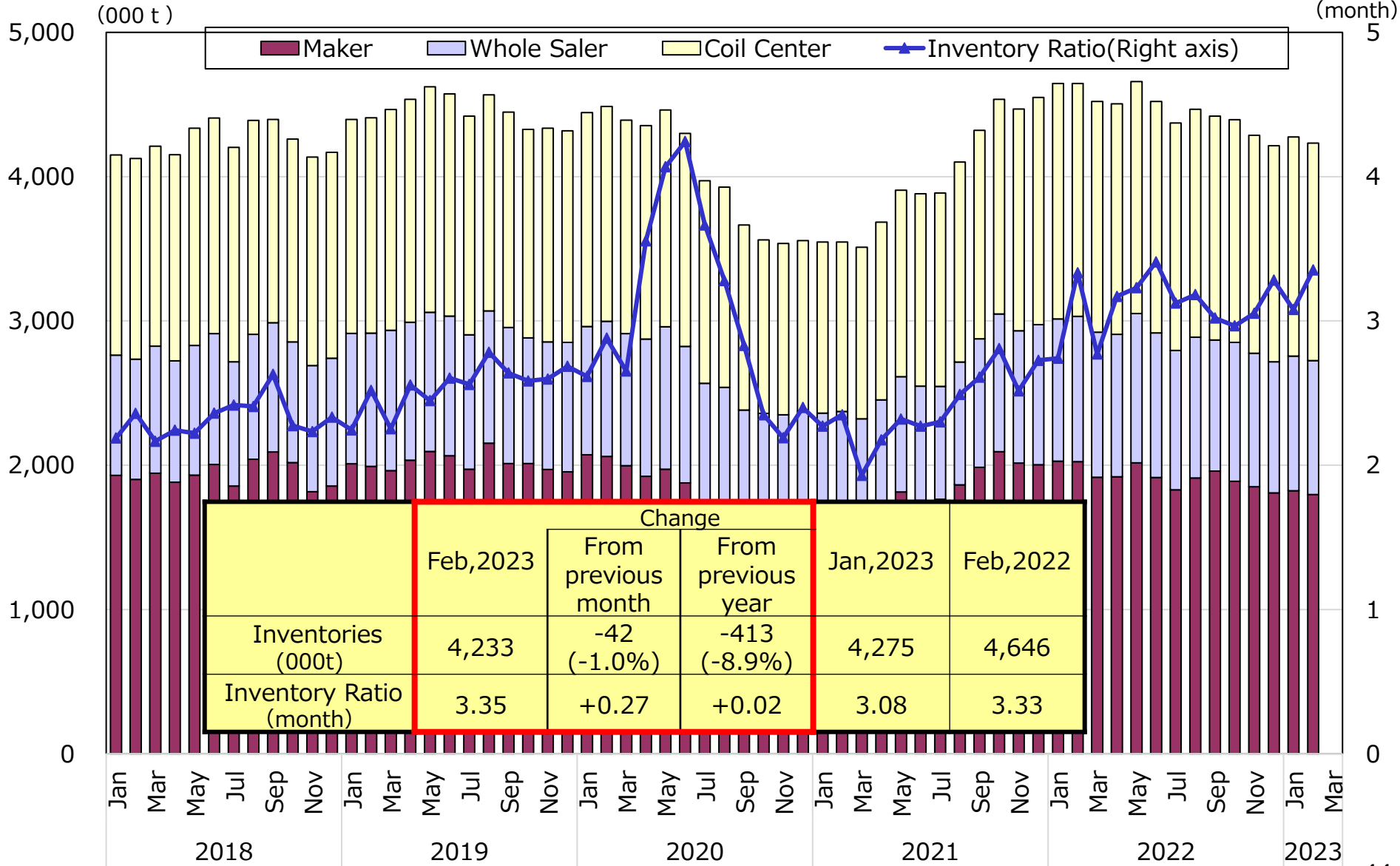


Term-contract FOB	FY2022				FY2023
	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
\$/DMT	118	133	103	85	112

Term-contract FOB	FY2022				FY2023
	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
\$/WMT	526	287	279	315	—

Domestic Market Environment

Combined Inventories of HR, CR and Coated Steel Sheet

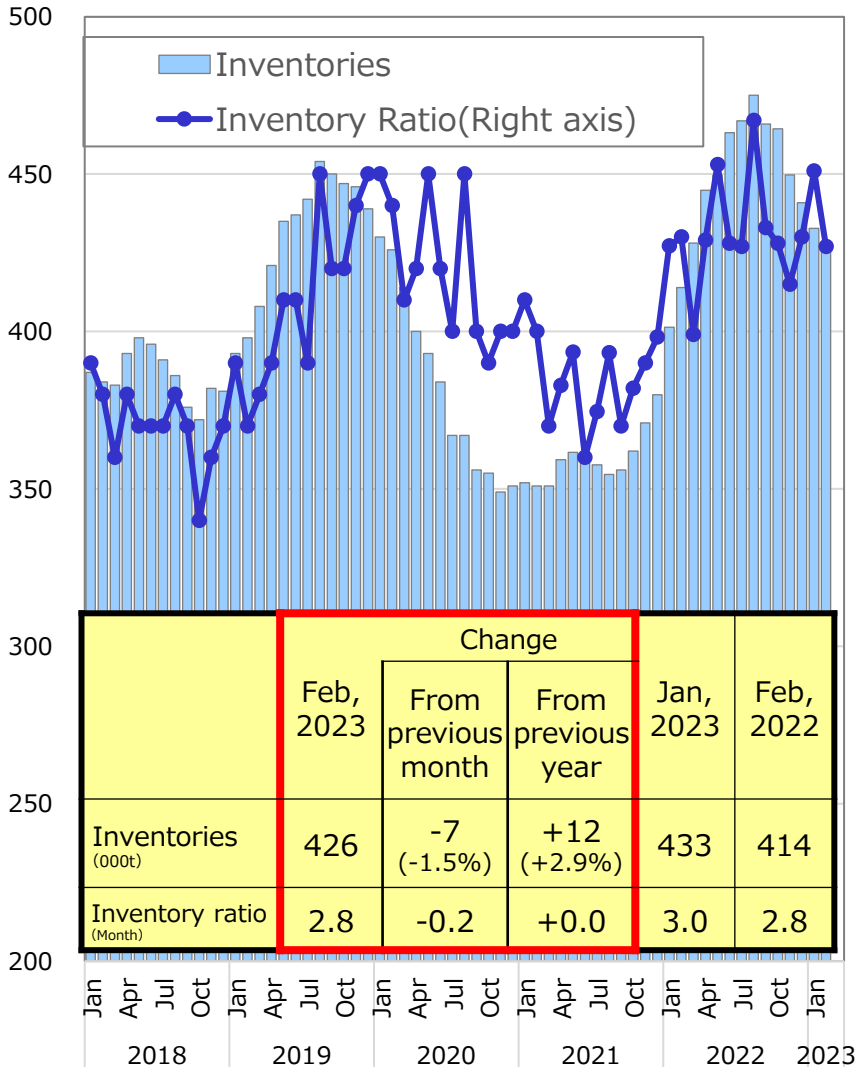


Domestic Market Environment

Inventories of Plate (Plate Shear) and Wide Flange Shapes

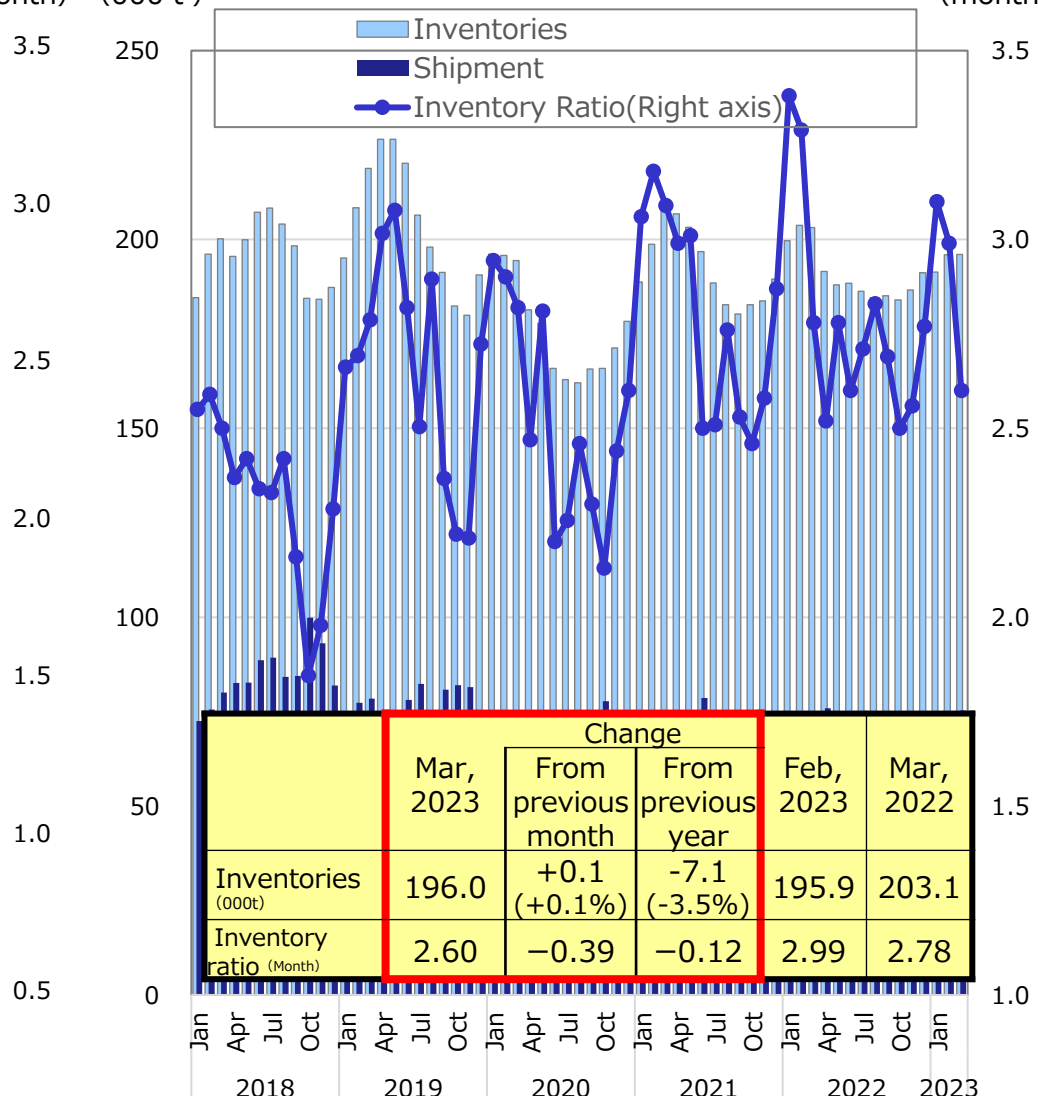


(000 t) Inventories of Plate (Plate Shear) (month) (000 t)



Inventories of Wide Flange Shapes

(month) (000 t)



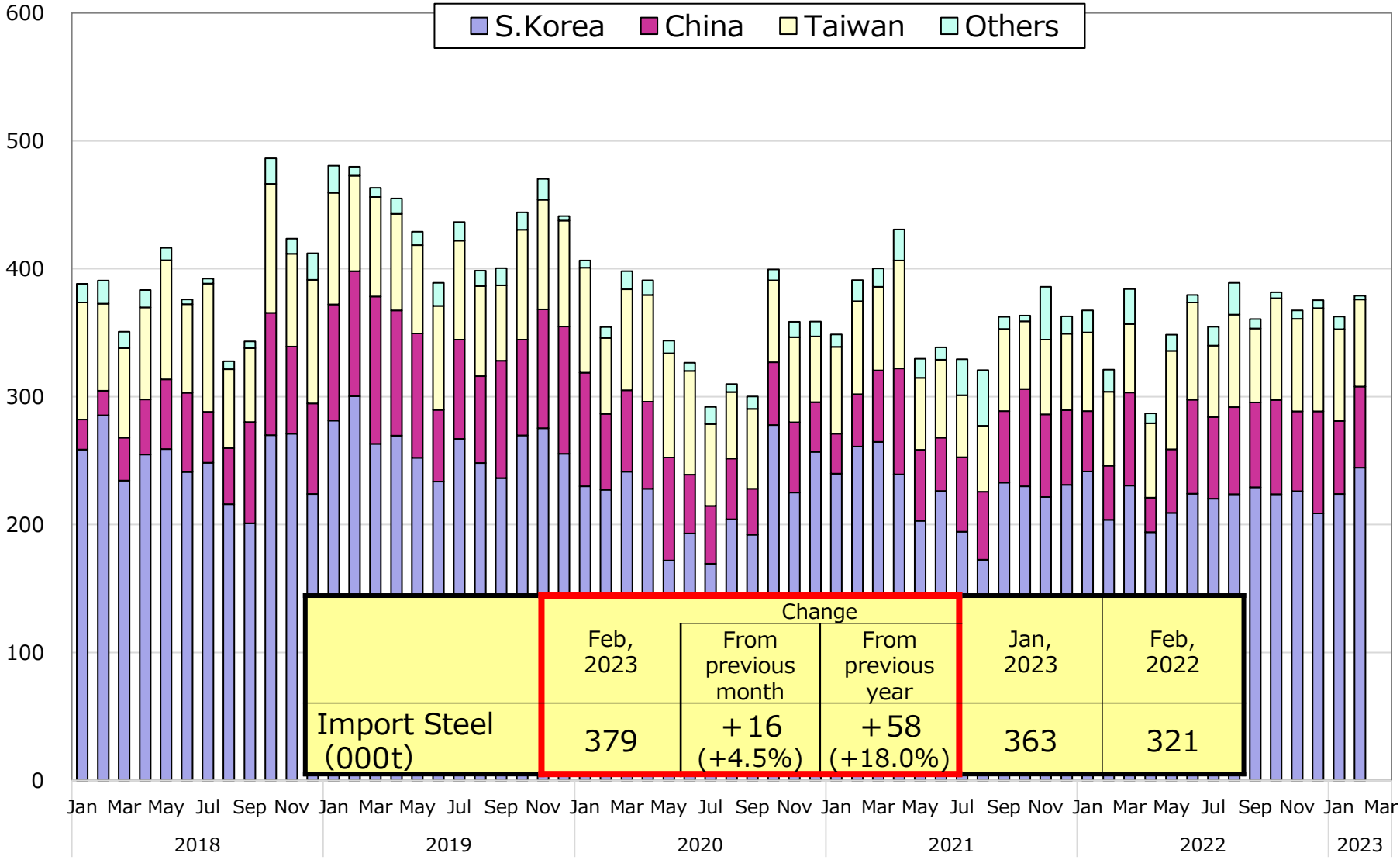


Domestic Market Environment

Trend of Import Steel (Ordinary Steel)

JFE

(000 t)



Import Steel (000t)	Change			Jan, 2023	Feb, 2022
	Feb, 2023	From previous month	From previous year		
379		+ 16 (+4.5%)	+ 58 (+18.0%)	363	321

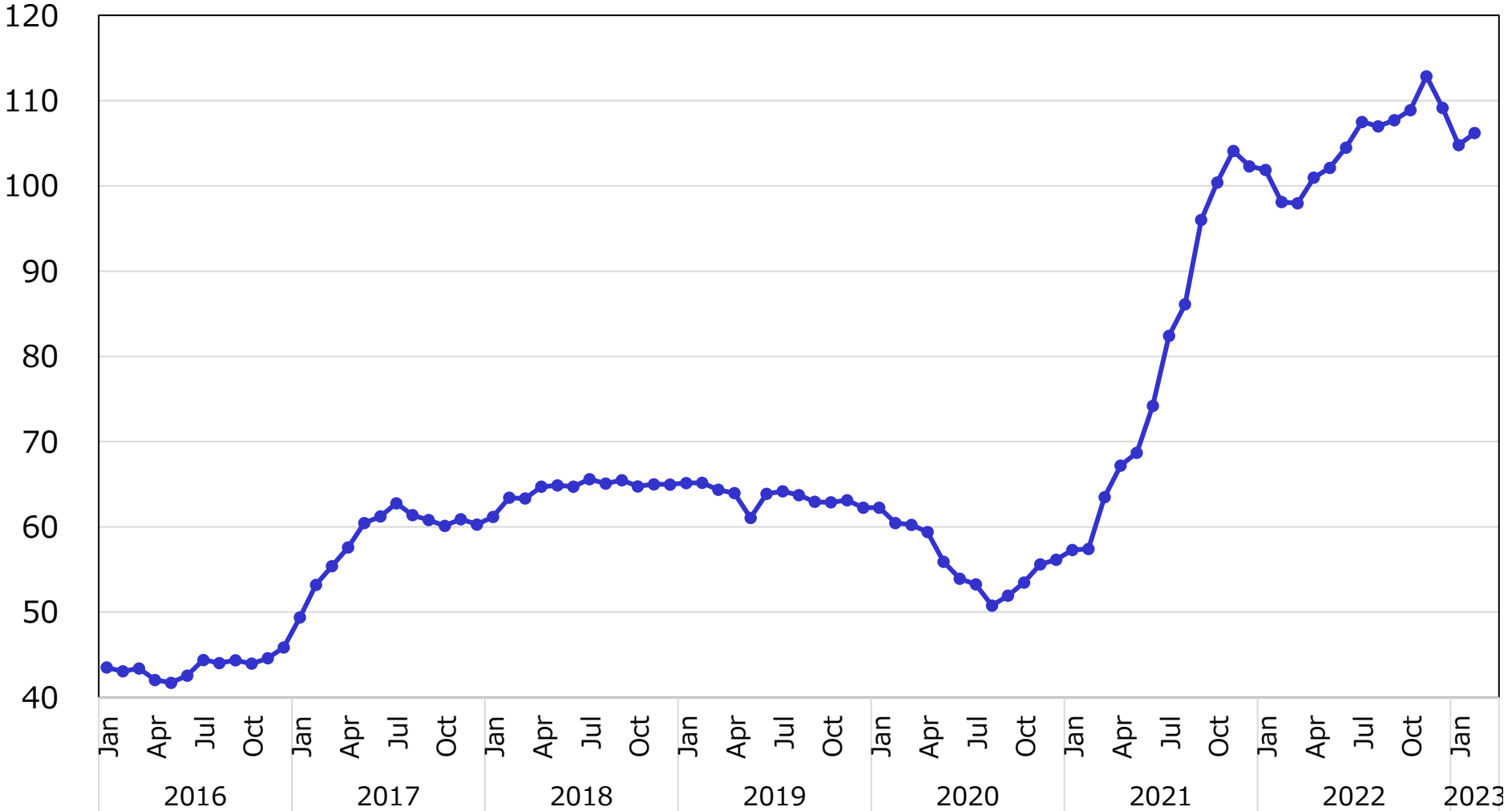


Domestic Market Environment

Price Trend of Import Steel

JFE

(000 yen/ t)



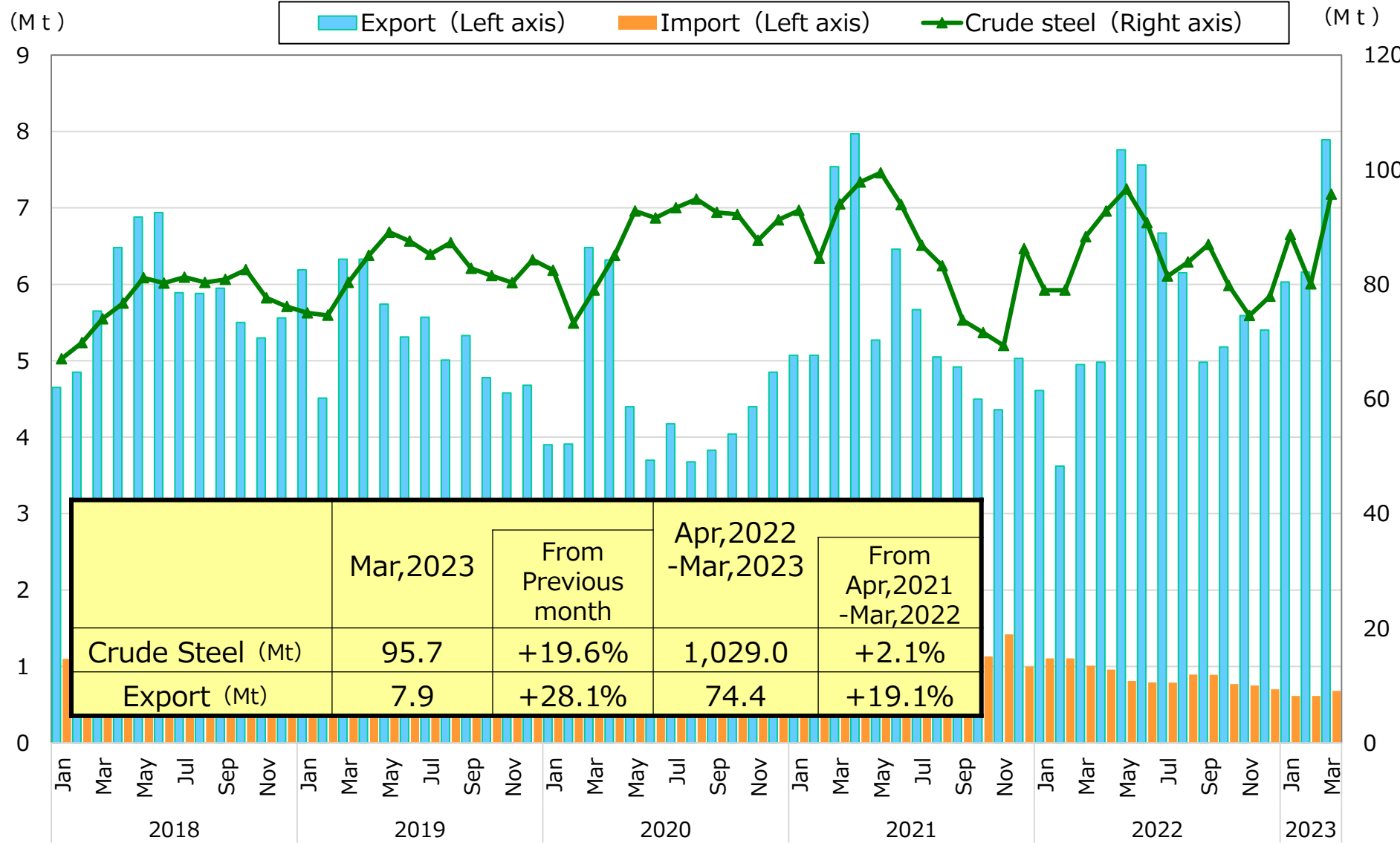
Data: The Japan Iron and Steel Federation Import Steel from S. Korea



Overseas Market Environment

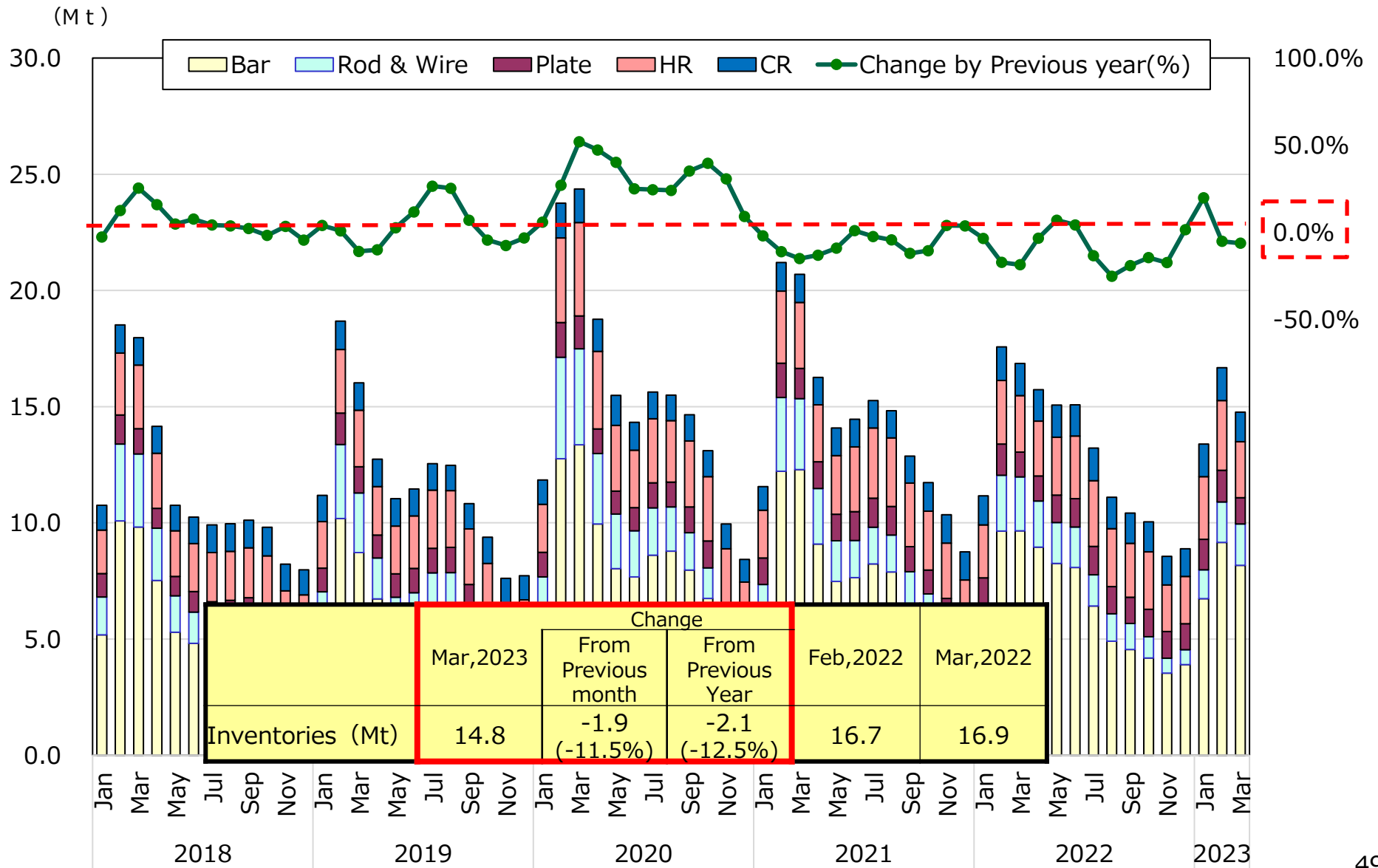
Crude Steel & Im/Export, China

JFE



Overseas
Market Environment

Crude Steel & Im/Export, China

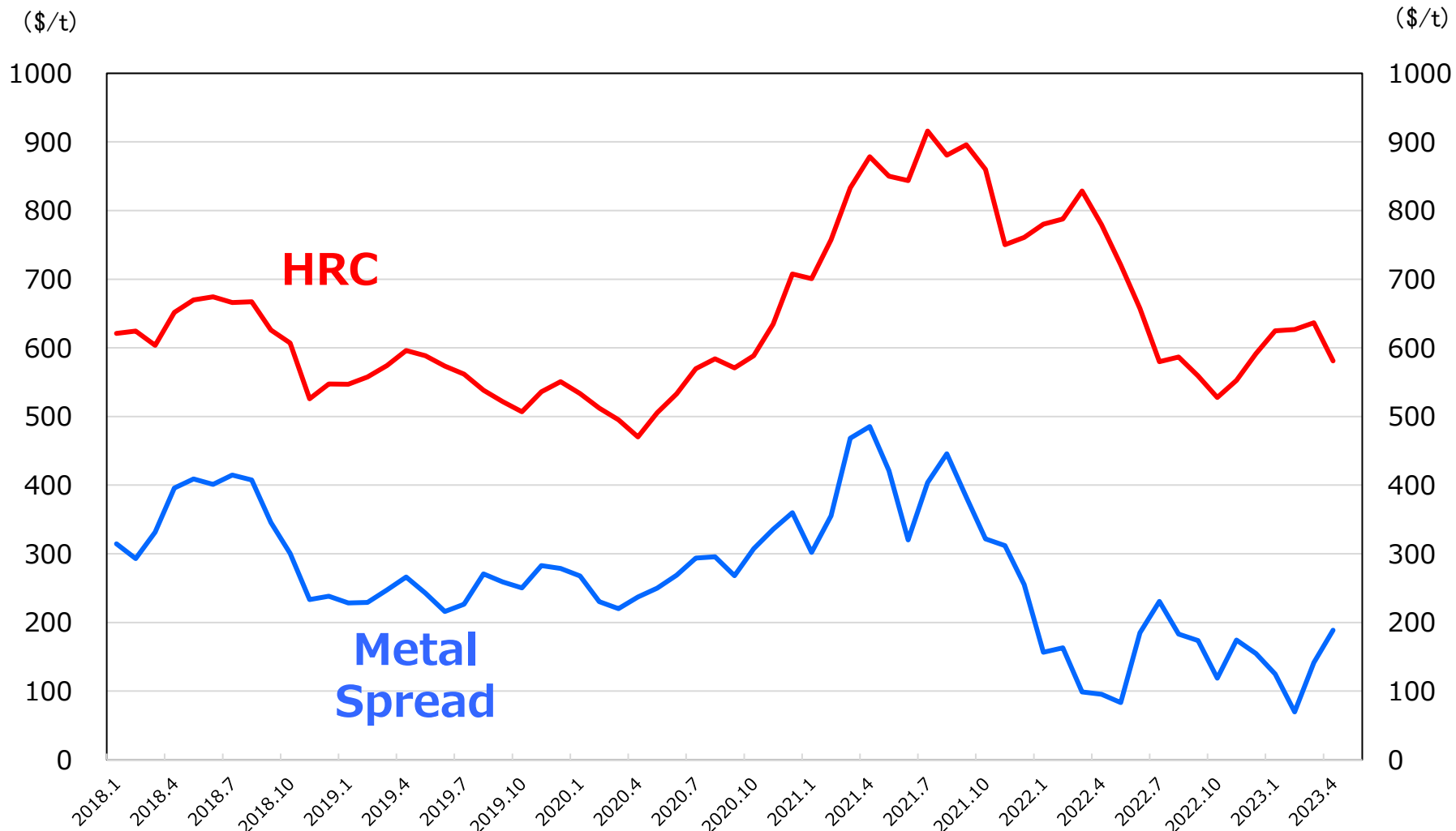




Overseas Market Environment

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

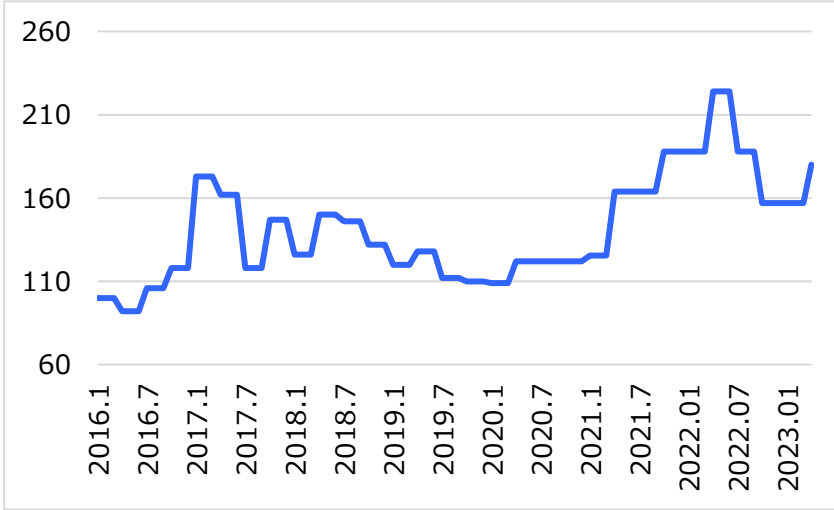


Raw Materials

Trend of Sub Material's Market Price

JFE

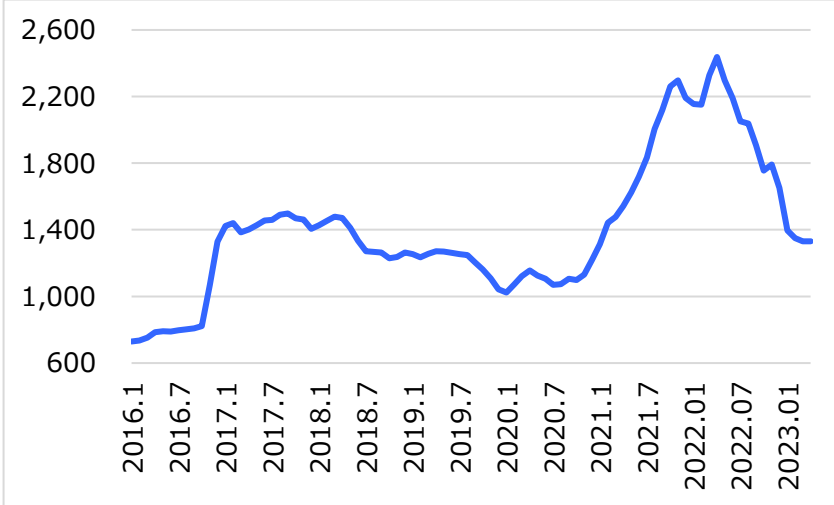
(¢/lb) FeCr



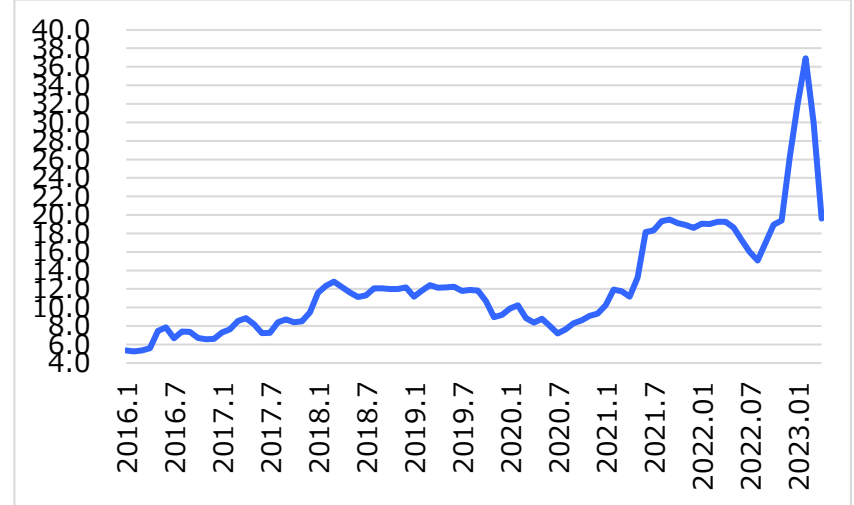
(US\$/t) Zn



(US\$/t) FeMn



(US\$/lb) Mo



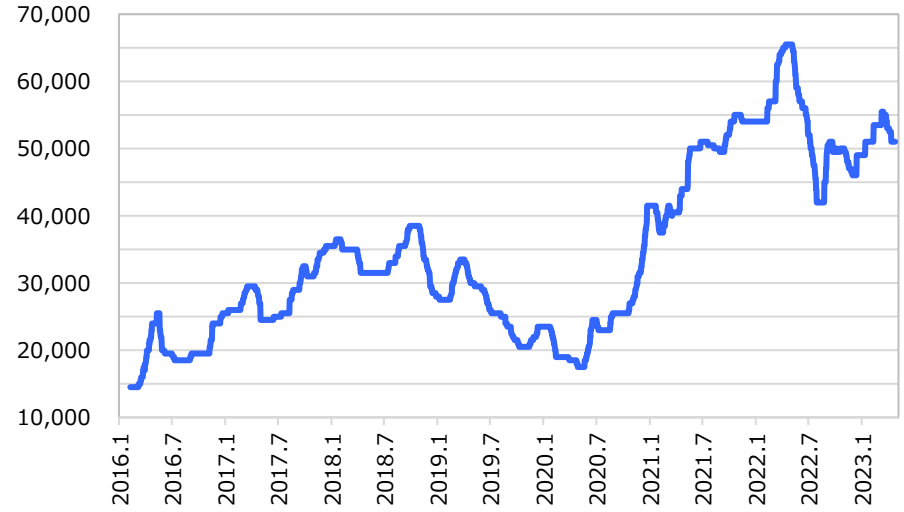


Raw Materials

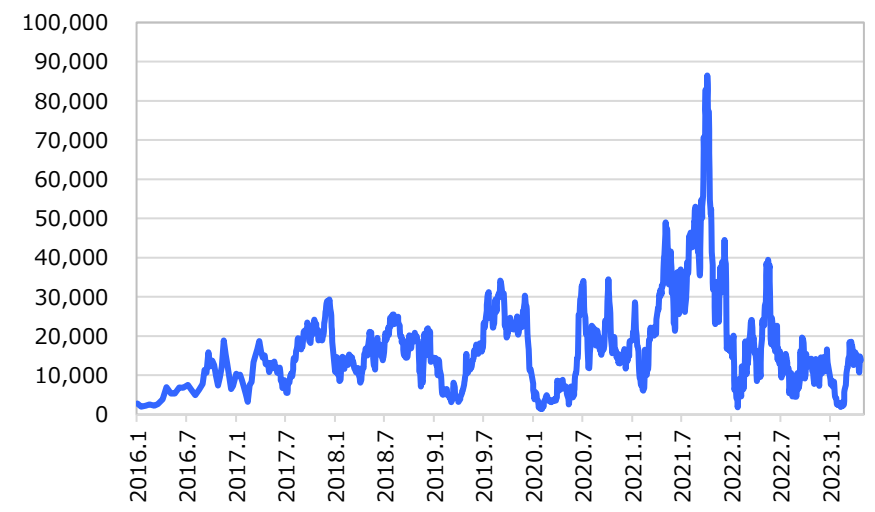
Trend of Sub Material's Market Price

JFE

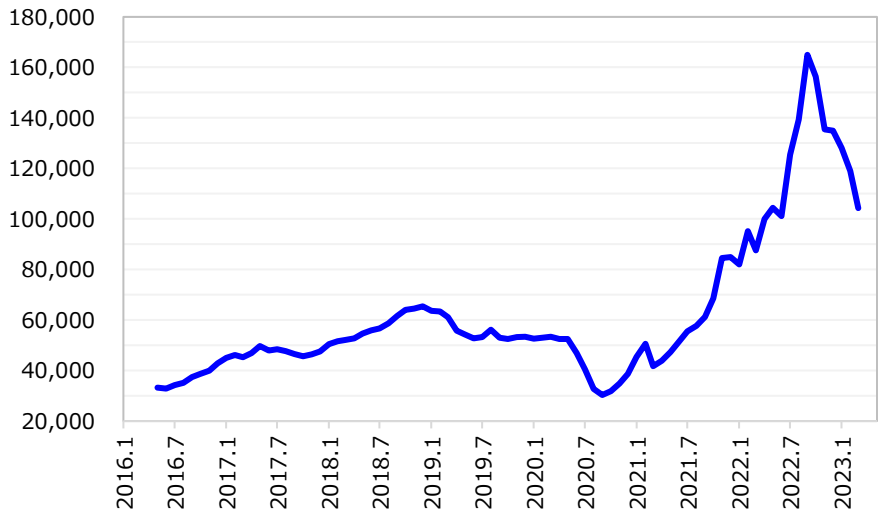
(yen/ t) Scrap



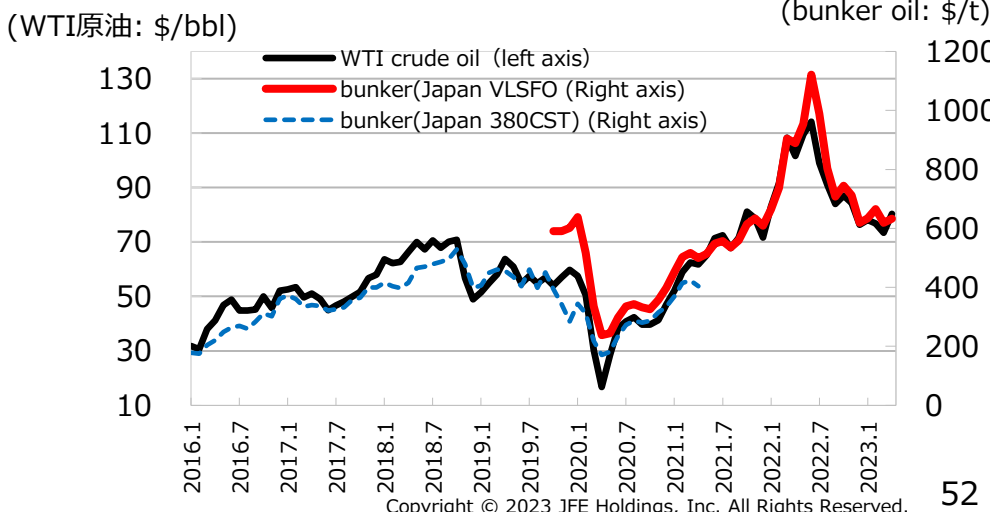
(\$/B) Spot Bulker



(円/ t) LNG



Oil





Orders by Business Field

JFE




(billion yen)

Business Field	FY2021 Actual	FY2022 Actual	Change	Main orders received in FY2022 ★...New projects received in 4Q of FY2022
Waste to Resource	203.9	216.9	13.0	Construction works of domestic waste treatment plant [Okayama] Renewal construction of domestic waste treatment plant [Hokkaido, Aichi, Tochigi, ★Fukuoka, ★Shimane] Construction works of overseas waste treatment and power plant [Germany, UK]
Carbon Neutral	87.4	57.6	(29.8)	
Combined Utility Service	13.4	21.1	7.7	
Core Infrastructure	201.1	269.3	68.2	Construction works of fuel feeding pipe for LNG power plant [Hyogo] Construction works of bridge (DAINI SHINMEI ROAD [Hyogo] Reconstruction works of bridge (Tomei Expressway [Aichi], ★Hanwa Expressway [Osaka]) Construction works of overseas bridge [Ghana, Cote d'Ivoire] Construction works of overseas chemical plant [Singapore] ★Construction of a large-scale LNG receiving facility [Taiwan] ★Construction of a large-scale wastewater treatment plant [Indonesia]
Total	505.8	564.9	59.1	

Links to the reports published during FY2022



JFE

Report	URL	QR code
JFE Group REPORT 2022	https://www.jfe-holdings.co.jp/en/investor/library/group-report/index.html	
JFE Group CSR REPORT 2022	https://www.jfe-holdings.co.jp/en/csr/data/index.html	
JFE Group CSR REPORT 2022 ESG Data	https://www.jfe-holdings.co.jp/en/csr/pdf/2022/2022_09.pdf	
DX REPORT 2022	*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

JFE

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**

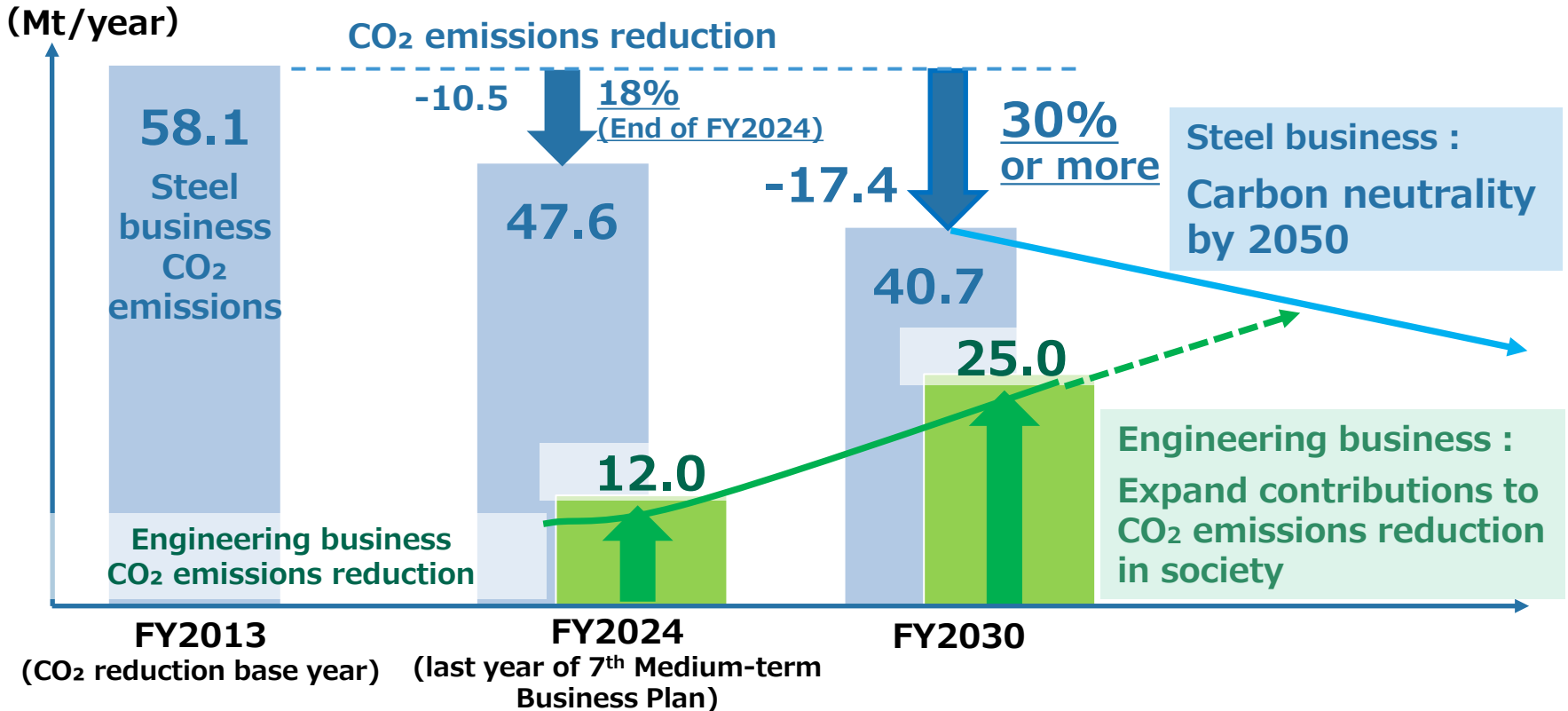


JFE Group's activities for Carbon neutrality

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.





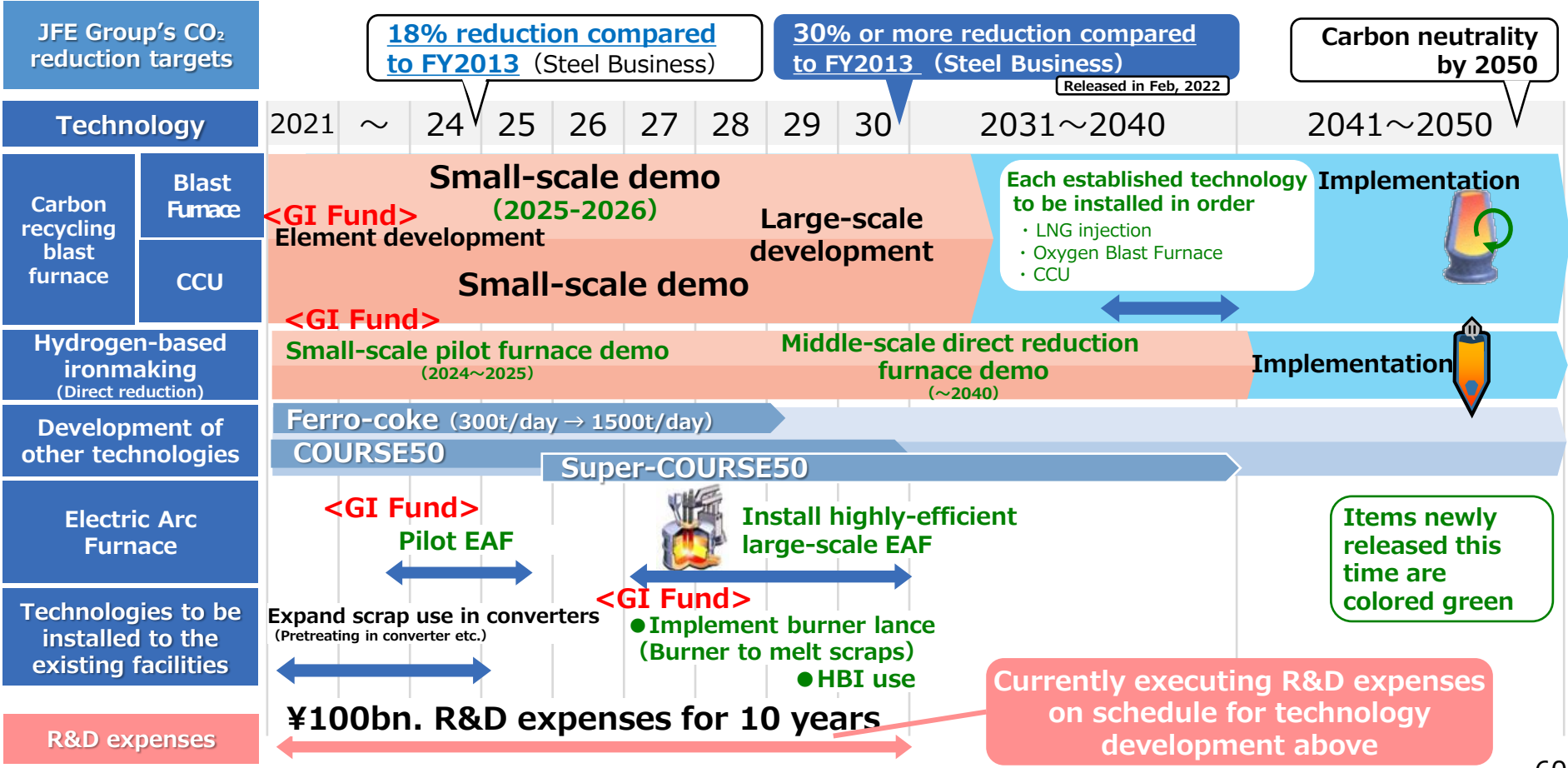
[Steel Business] Roadmap for Carbon Neutrality



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)

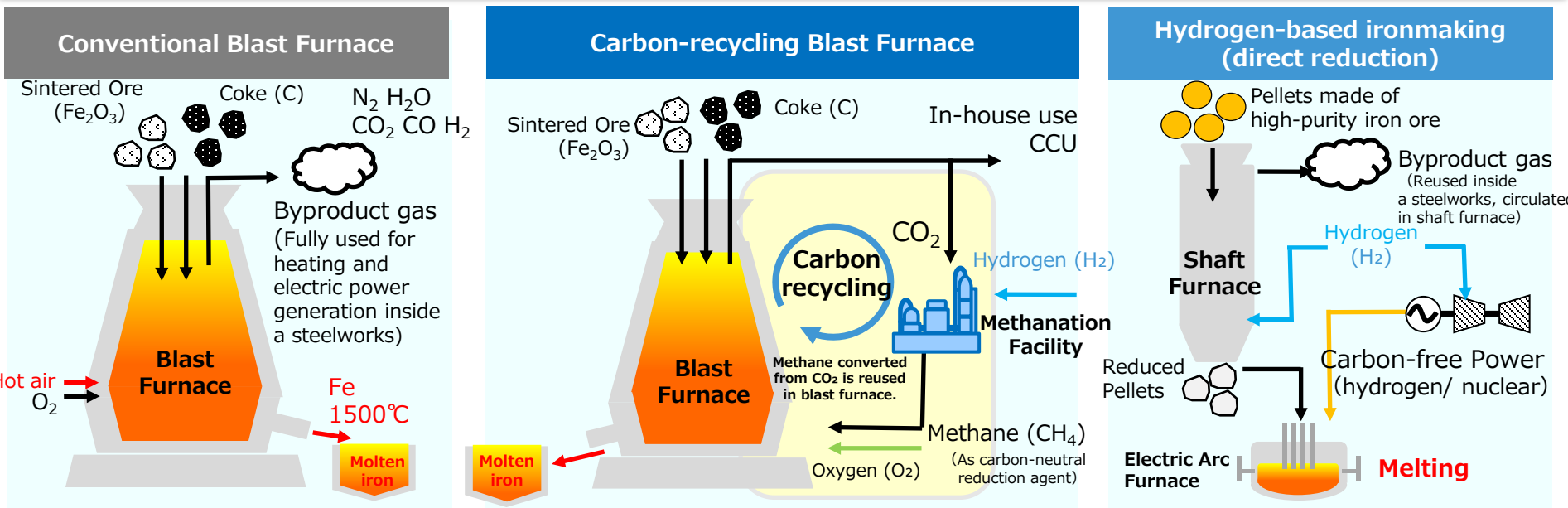




Carbon-recycle Blast Furnace

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

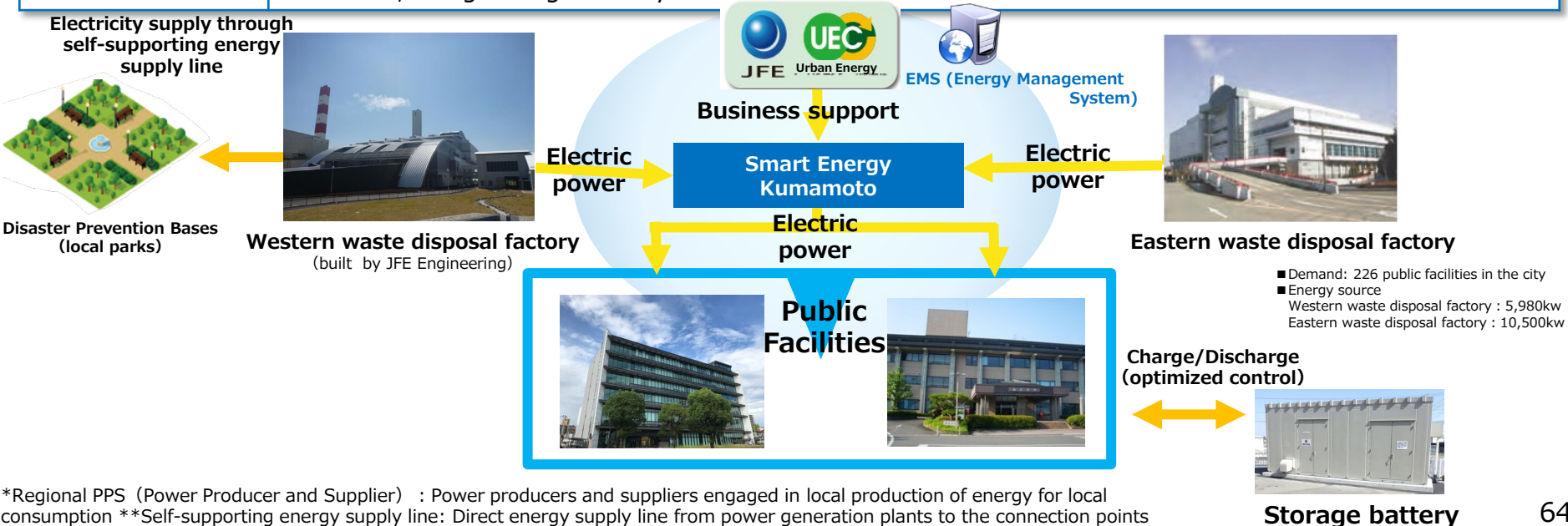
Social sustainability : Contribution to Regional Societies through Engineering Business

- 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)



*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

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



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

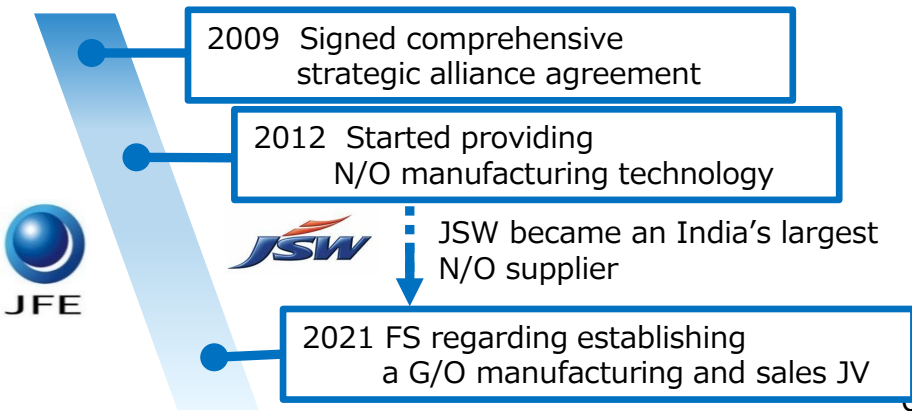


To conduct FS of grain-oriented electrical-steel-sheet JV with JSW in India
Released May 7, 2021

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

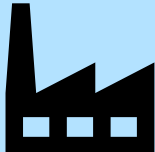
JFE Shoji

Processing and distribution of electric cores

World's No.1 global distribution and processing system

Sharing Strategies

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

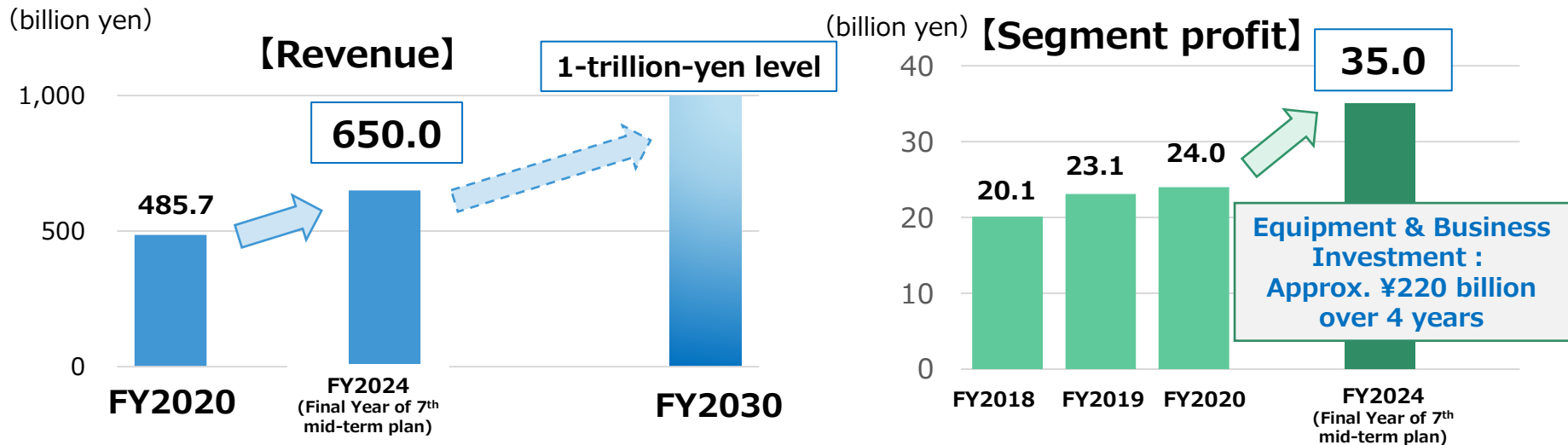
7th mid-term business plan <Engineering Business>

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

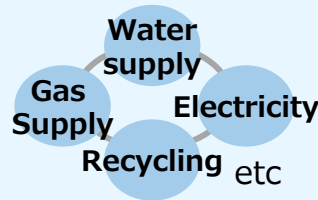
- Put priority in renewable energy (offshore wind-power generation, biomass power plant, solar power plant, geothermal power plant etc.)
- Develop carbon neutral technologies.



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.

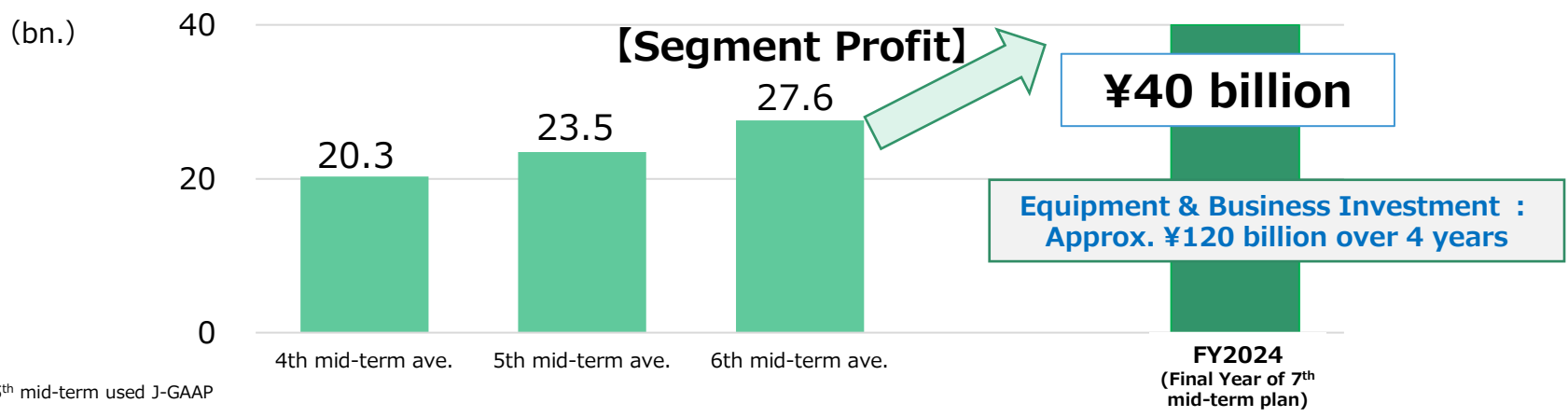


7th mid-term business plan <Trading Business>

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)

Appendix(4)
JFE Steel Carbon Neutral
Strategy Briefing

JFE Steel's Transition to Low-carbon Processes



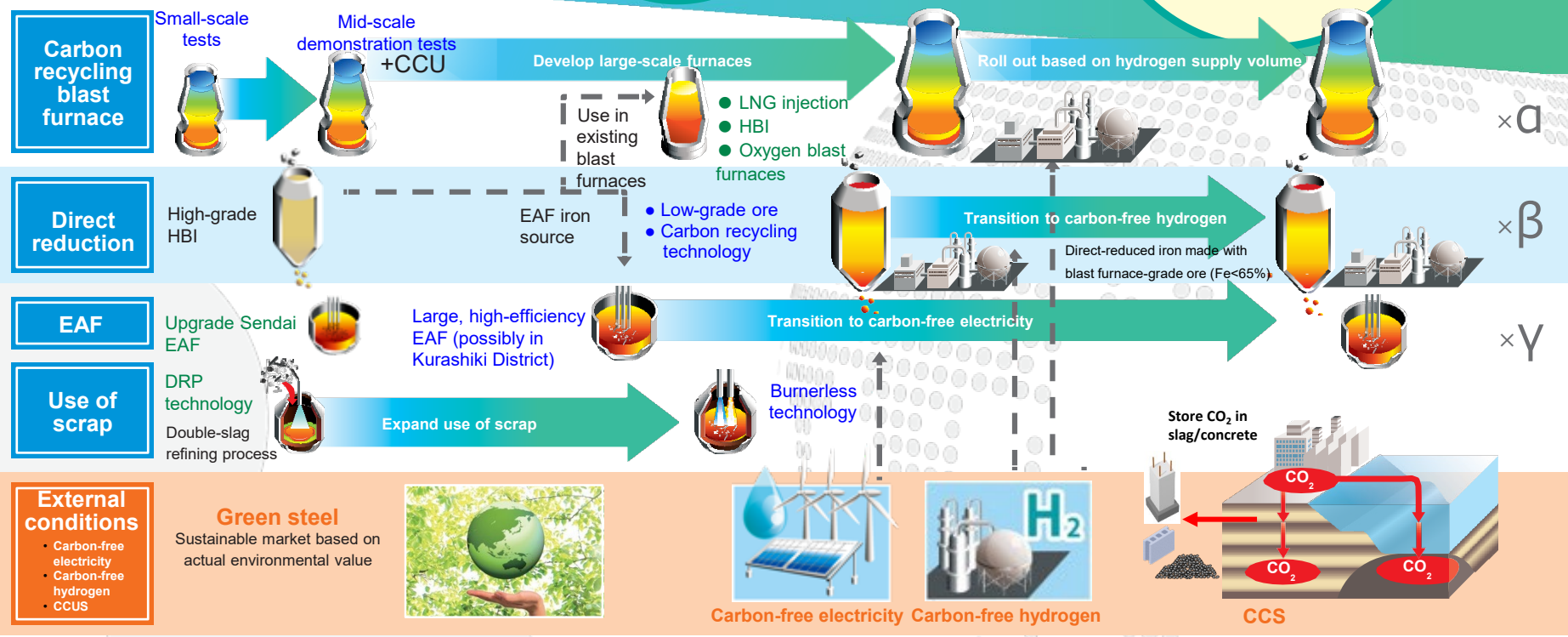
2024
18% less CO₂

Develop ultra-innovative technologies for carbon neutrality
(GI Use of funds)
Transition Period
Use EAFs
Expand use of DRI

2030
30% or more CO₂

Establish & implement ultra-innovative technologies
Innovation Period
Adopt optimal processes based on external conditions

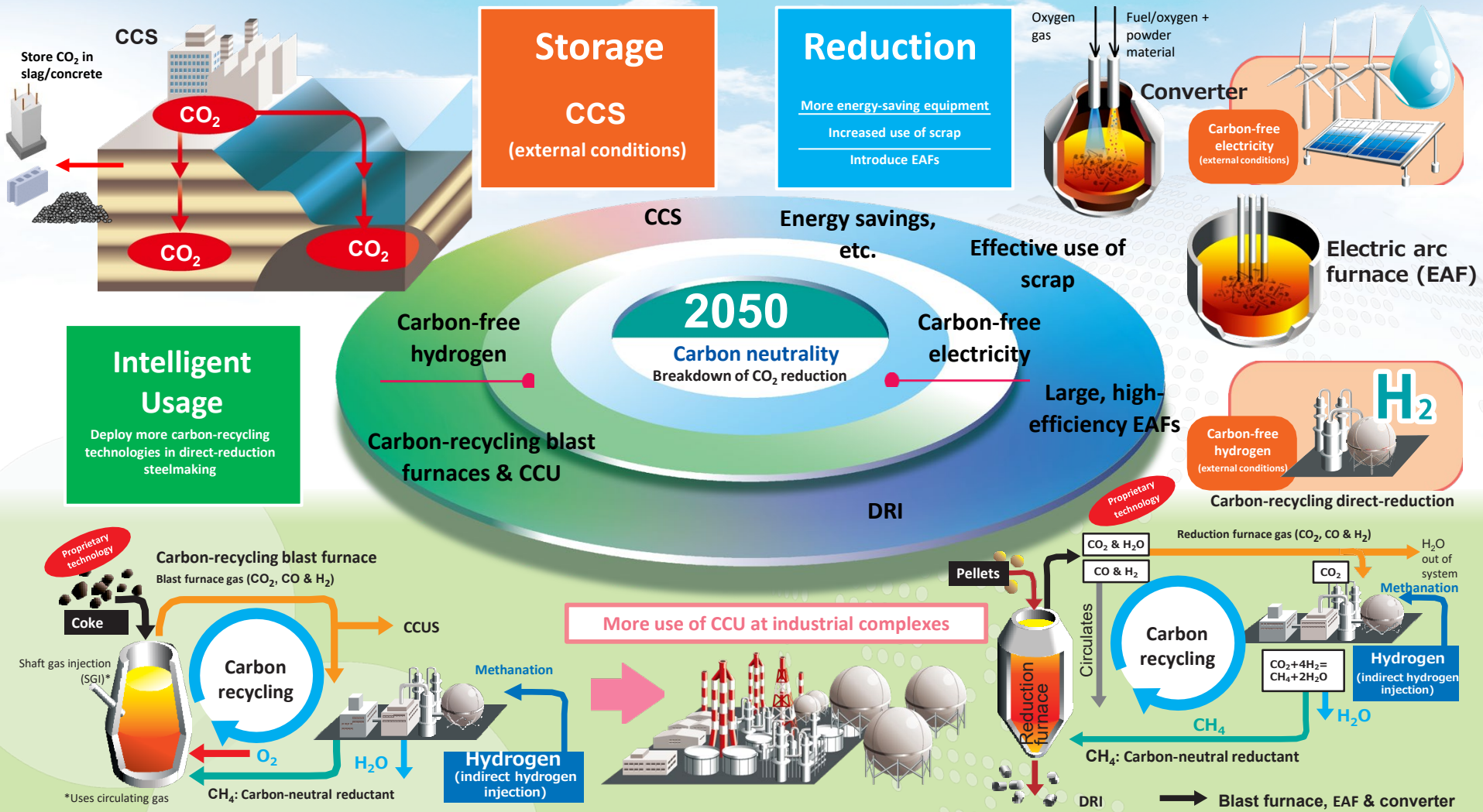
2050
Carbon neutrality



Pursue multilayered technology development, via GI Fund projects, etc., to discover the most proven technologies and then achieve carbon neutrality by deploying the most optimized configuration of green steelmaking processes.

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





- ▶ 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

Transition to Low-carbon Processes



- ▶ Continue to develop ultra-innovative technologies for decarbonized steel processes by 2030
- ▶ Increasingly use low-carbon technologies to cut CO₂ by 30% or more by FY2030

Energy savings and high efficiency	Low-carbon feedstock & fuel	Low-carbon processes
<p>Upgrade to high-efficiency coke ovens</p> <p>Fukuyama District (2025)</p>	<p>Expand use of scrap in converters Use direct-reduced iron (HBI)</p> <p>All districts (under way)</p>	<p>Upgrade existing EAFs</p> <p>Sendai Works (2024)</p>
<p>Improve efficiency of power-demand facilities (Electrify blast-furnace blowers, raise efficiency of oxygen plants, etc.)</p> <p>All districts (under way)</p>	<p>Securing Scrap and HBI Reinforcing storage depots</p> <p>All districts (under way)</p>	<p>Introduce large, high-efficiency EAFs</p> <p>Kurashiki District (2027-2030)</p>
<p>Leverage AI & DS (companywide CPS, etc.) for energy savings</p> <p>All districts (under way)</p>	<p>Bolster LNG supply network</p>	<p>Use ferro-coke for commercial production</p> <p>Fukuyama District (TBD)</p>

- ✓ To reduce CO₂ emissions by 30% or more by 2030, 1 trillion yen in capital investment will be needed for low-carbon initiatives (large electric furnaces, ferro coke, scrap and reduced iron, LNG, etc.).
- ✓ A market that reflects the actual environmental value of green steel must be created to support capital investment in decarbonization technologies.

Development Project Supported by Green Innovation Fund



- ▶ This project, targeted at using hydrogen in ironmaking and commissioned and subsidized by NEDO*, was selected in December 2021 to receive support from the Green Innovation Fund.
- ▶ The fund is helping to accelerate the development of technologies for achieving carbon neutrality.
- ▶ Formed a consortium with three steel companies and JRCM** and held the first meeting of the Hydrogen Iron and Steel Committee in June 2022.

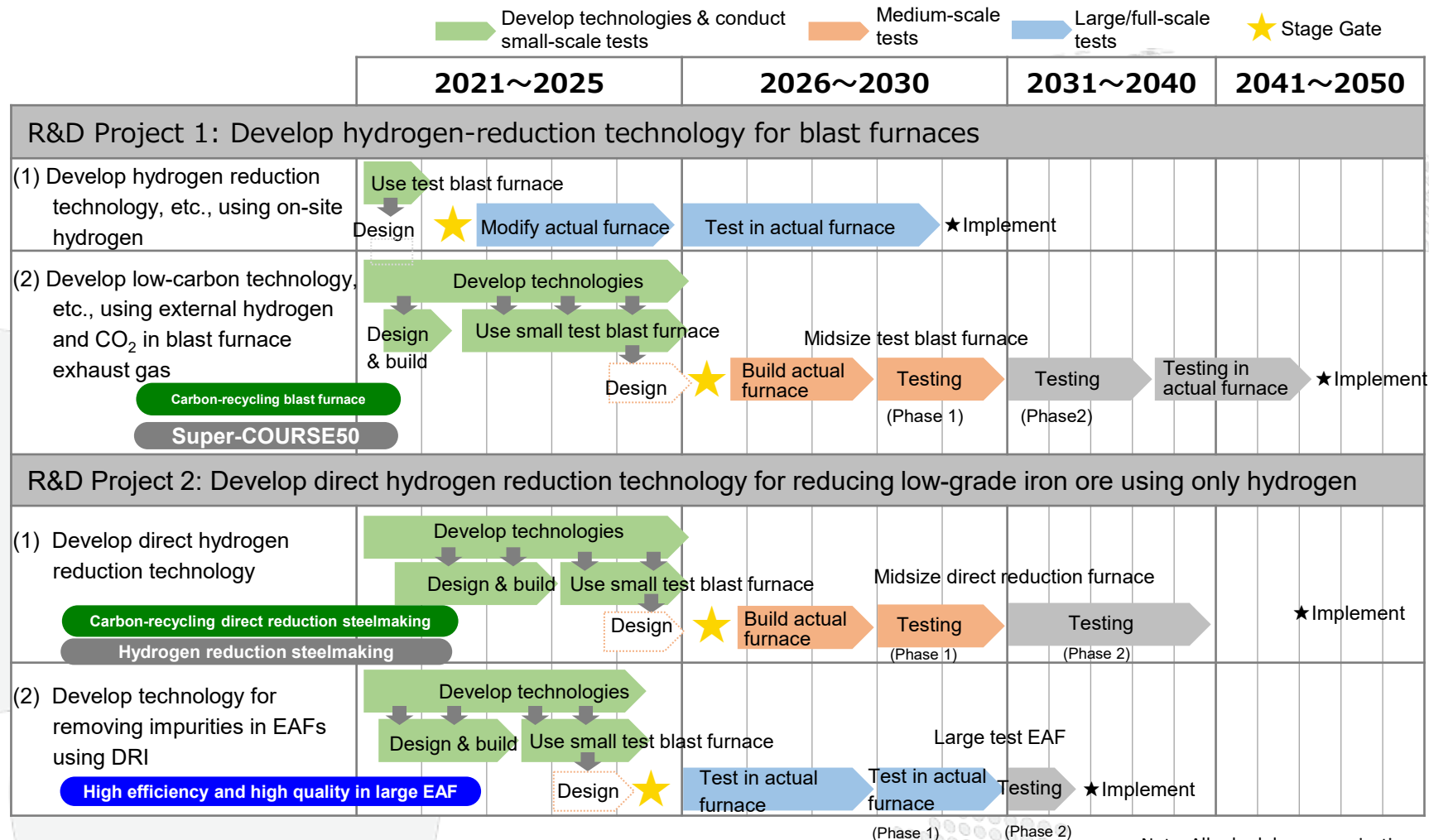
*New Energy and Industrial Technology Development Organization **Japan Research and Development Center for Metals

	Carbon-recycling blast furnace	Direct-reduction steelmaking	Large, high-efficiency EAF
Development project			
Summary	<p>Build a small test blast furnace (150m³) in Chiba District Prefecture to develop a process for converting CO₂ by-product into methane for reuse as a reductant, aiming to cut CO₂ emissions by 50% or more.</p>	<p>Build a small test reduction furnace in Chiba District Prefecture to develop a direct-reduction ironmaking process for reduced iron that uses hydrogen to remove oxygen from low-grade iron ore, aiming to cut CO₂ emissions by 50% or more vs. blast furnaces.</p>	<p>Build a small test EAF in Chiba District Prefecture to develop a high-quality steel manufacturing method incorporating high-efficiency melting of scrap and reduced iron, reduction of impurities, etc.</p>

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



- ▶ 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.



- Realizing carbon-neutral steelmaking is a top priority for JFE Steel, but generating environmental value will involve large cost increases, so there are limits on what a single company can do.
- 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.

Huge R&D and facility installation costs

- Achieving CN by 2050 will be a major technological challenge requiring huge R&D outlays.
- Transitioning steelworks to carbon-neutral processes will require even greater capital investment.
- Long-term government support will be needed to shoulder the financial costs of achieving carbon neutrality.

Deliver environmental value and create markets during transition

- Government support is needed for capital investment in low-carbon technologies by 2030
- A mechanism is needed to create a market where costs commensurate with green steel's environmental value can be shared with customers and society

Develop infrastructure for carbon-neutral steelmaking and fuel inter-company collaboration

- Develop infrastructure for the low-cost, stable, large-scale supply of carbon-free hydrogen and electricity needed for carbon-neutral steelmaking
- Develop an execution platform for CCUS and green infrastructure implementation through collaboration with industrial complexes, corporations, etc.

Economic policies targeting green-transformation investment and international competitiveness

- Ensure international competitiveness of industrial electricity prices
- Introduce tax system that encourages implementation of ultra-innovative technologies, such as the abolition of depreciable asset taxation and the avoidance of a carbon tax before the establishment of decarbonizing technologies
- Carbon Border Adjustment Measure (CBAM) should be consistent with WTO rules. Ensure a level playing field in cooperation with other countries



JFE