



JFE

JFE Group

**Financial Results for Fiscal Year 2021
ending March 31, 2022**

JFE Holdings, Inc.

May 6, 2022

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(April 1, 2021 to March 31, 2022)**
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Consolidated Results for Fiscal Year 2021



Financial Results for Fiscal Year 2021

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- Despite sharply higher prices for raw materials, metals and scrap etc., strong demand for steel and the result of initiatives to improve sales price led to a significant increase in profit, particularly in the steel business.
- Business profit was ¥416.4bn. and profit attributable to owner of parent was ¥288.0bn., both of which recorded the highest result since the last global financial crisis triggered by the Lehman Brothers collapse, turning into black from the previous fiscal year.

(billion yen)	FY2020 Actual (A)	FY2021 Forecast (B)	FY2021 Actual			Change (C-A)	Change (C-B)
			1H	2H	Full Year (C)		
Revenue	3,227.2	4,370.0	1,942.9	2,422.1	4,365.1	1,137.9	(4.9)
Business Profit	(12.9)	390.0	198.8	217.5	416.4	429.3	26.4
Finance Income/Costs	(12.4)	(10.0)	(5.6)	(6.0)	(11.6)	0.8	(1.6)
Segment Profit	(25.4)	380.0	193.2	211.5	404.8	430.2	24.8
Exceptional Items	20.4	(12.0)	–	(16.2)	(16.2)	(36.6)	(4.2)
Profit before Tax	(4.9)	368.0	193.2	195.3	388.5	393.4	20.5
Tax Expense and Profit (Loss) Attributable to Non- Controlling Interests	(16.9)	(98.0)	(52.4)	(48.0)	(100.4)	(83.5)	(2.4)
Profit Attributable to Owners of Parent	(21.8)	270.0	140.7	147.3	288.0	309.8	18.0

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.



Financial Results for Fiscal Year 2021 (by Segment)

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(billion yen)	FY2020 Actual (A)	FY2021 Forecast (B)	FY2021 Actual			Change (C-A)	Change (C-B)
			1H	2H	Full Year(C)		
Revenue							
Steel Business	2,255.2	3,210.0	1,410.4	1,763.0	3,173.4	918.2	(36.6)
Engineering Business	485.7	510.0	229.2	278.9	508.2	22.5	(1.8)
Trading Business	932.5	1210.0	544.4	687.3	1,231.7	299.2	21.7
Adjustments	(446.1)	(560.0)	(241.1)	(307.1)	(548.3)	(102.2)	11.7
Total	3,227.2	4,370.0	1,942.9	2,422.1	4,365.1	1,137.9	(4.9)
Business Profit(A)	(12.9)	390.0	198.8	217.5	416.4	429.3	26.4
Finance Income/Costs(B)	(12.4)	(10.0)	(5.6)	(6.0)	(11.6)	0.8	(1.6)
Segment Profit							
Steel Business	(65.4)	303.0	158.5	165.2	323.7	389.1	20.7
Engineering Business	24.0	25.0	11.1	14.8	26.0	2.0	1.0
Trading Business	20.0	53.0	25.6	30.3	55.9	35.9	2.9
Adjustments	(4.1)	(1.0)	(2.0)	1.1	(0.9)	3.2	0.1
Total (A+B)	(25.4)	380.0	193.2	211.5	404.8	430.2	24.8



Progress of Cash Flow Improvements, Debt/EBITDA Ratio

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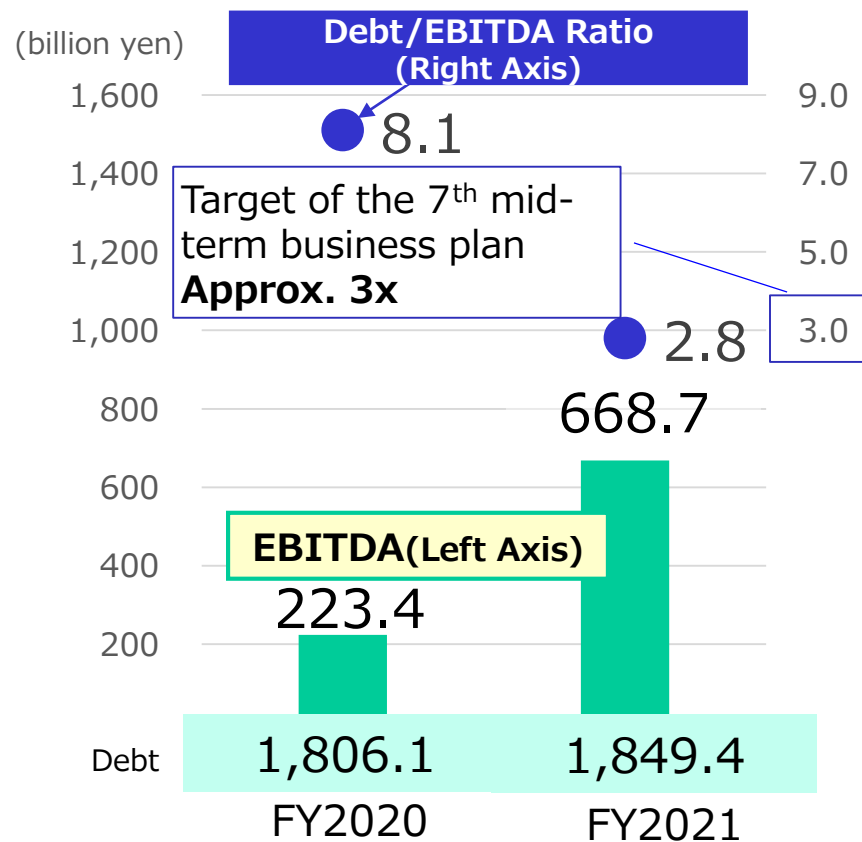
- At the end of FY2021, the Debt/EBITDA ratio exceeded the target level of the 7th mid-term business plan (3.0x).

FY2021 Consolidated Cash Flow

(billion yen)

Cash-in	Cash-out
Net Profit 288.0	CAPEX & Investments 322.5
Depreciation and Amortization 252.2	Dividend Payment 40.4
Asset Compression 41.0	Working Capital etc. 261.6
Debt 43.3	

Progress of Debt/EBITDA Ratio



- EBITDA = Business profit + Depreciation and Amortization
- Debt/EBITDA Ratio = Interest-bearing debt outstanding/EBITDA₆

JFE Steel Financial Results for Fiscal Year 2021



Financial Results for Fiscal Year 2021

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	Unit	FY2020 Full Year	FY2021					FY2021 Full Year Previous Forecast
			1H				Full Year	
				3Q	4Q	2H		
Revenue	billion yen	2,255.2	1,410.4	832.8	930.2	1,763.0	3,173.4	3,210.0
Segment Profit	billion yen	(65.4)	158.5	93.5	71.7	165.2	323.7	303.0
Excluding Inventory Valuation etc. *	billion yen	(31.4)	68.5	(3.5)	64.7	61.2	129.7	127.0
Crude Steel (Standalone)	Mt	22.76	12.70	6.49	6.69	13.18	25.88	Approx. 26.00
Crude Steel (Consolidated)	Mt	23.96	13.39	6.85	7.02	13.87	27.26	Approx. 27.40
Shipment (Standalone)	Mt	20.49	10.83	5.63	5.92	11.55	22.38	Approx. 22.70
Export Ratio on Value Basis (Standalone)	%	42.3	46.5	45.9	43.6	44.7	45.5	46
Average Sales Price (Standalone)	kyen/ t	74.8	94.5	107.6	116.7	112.2	103.7	Approx. 103
Exchange Rate	¥/\$	105.8	109.9	113.1	115.3	114.2	112.1	112

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



20.7 Billion Yen Increase in JFE Steel's Segment Profit (FY2021 (Previous Forecast) vs. FY2021 (Actual))

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Segment profit increased from the previous forecast due to selling price improvements, such as quick reflection of raw material cost in selling prices, as well as increase in profit of domestic and overseas subsidiary companies.

JFE Steel	FY2021 Previous Forecast	FY2021 Actual	Change (billion yen)
Segment Profit	303.0	323.7	+20.7
1. Cost	±0.0		
2. Volume and Mix	(3.0)	<ul style="list-style-type: none"> Crude steel (Standalone) Approx. 26.00 Mt→ 25.88 Mt 	
3. Sales and Raw materials	+10.0	<ul style="list-style-type: none"> (+400 yen/t-shipment) Improvement of steel selling prices, such as quick reflection of key raw material costs 	
4. Inventory valuation	+18.0	<ul style="list-style-type: none"> Inventory valuation +9.0 (+151.0→+160.0) Carry over of raw materials +2.0 (+21.0→+23.0) Foreign exchange valuation +7.0(+4.0→+11.0) 	
5. Others	(4.3)	<ul style="list-style-type: none"> Increase in profit of domestic and overseas subsidiary companies Rising in price of metals etc. 	

389.1 Billion Yen Increase in JFE Steel's Segment Profit (FY2020 (Actual) vs. FY2021 (Actual))



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- The steel demand recovered significantly from FY2020, which was greatly affected by COVID-19.
- Segment profit improved significantly from FY2020 due to quick reflection of raw material cost in domestic sales prices, higher steel prices in overseas markets, and higher production volumes, as well as higher profits at domestic and overseas subsidiary companies.

JFE Steel	FY2020 Actual	FY2021 Actual	Change (billion yen)
Segment Profit	(65.4)	323.7	+389.1

1. Cost	+30.0	<ul style="list-style-type: none"> • Capital investment effects • Expanded use of low-cost raw materials etc.
2. Volume and Mix	+60.0	<ul style="list-style-type: none"> • Production increase amid recovery of steel demand (Crude steel (Standalone) 22.76⇒25.88Mt)
3. Sales and Raw materials	+103.0	(+4,600yen/t-shipment) <ul style="list-style-type: none"> • Improvements in metal spread due to supply-demand and market condition, despite sharply increased prices for key raw materials
4. Inventory valuation	+228.0	<ul style="list-style-type: none"> • Inventory Valuation+197.0 (-37.0→+160.0) • Carry over of raw materials +20.0 (+3.0→+23.0) • Foreign exchange valuation+11.0(±0.0→+11.0)
5. Others	(31.9)	<ul style="list-style-type: none"> • Increase in profit of domestic and overseas subsidiary companies. • Rising in price of metals and scrap etc.

JFE Engineering Financial Results for Fiscal Year 2021



Financial Results for Fiscal Year 2021

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Current Business Environment/ Overview of Financial Status

- Orders stayed at the high level due to strong domestic demand both in the environment & energy sector and infrastructure sector. Segment profit posted 4-year consecutive increase*.
- Orders increased in carbon neutral area
- Despite an increase in materials and equipment prices, segment profit increased from M&A etc.

*Segment profit: FY2017 ¥19.3bn, FY2018 ¥20.1bn, FY2019 ¥23.1bn, FY2020 ¥24.0bn, FY2021 ¥26.0bn. (FY2017 used J-GAAP)

Financial Results

(billion yen)	FY2020 (Actual) (A)	FY2021 (Forecast) (B)	FY2021 (Actual) (C)	Change (From Previous Year) (C)-(A)	Change (From Previous Forecast) (C)-(B)
Orders	501.1	530.0	505.8	4.7	(24.2)
Revenue	485.7	510.0	508.2	22.5	(1.8)
Segment Profit	24.0	25.0	26.0	2.0	1.0

Compared to FY2020

- Revenue +22.5 Increase in orders in previous year, increase from M&A
- Segment Profit +2.0 Increase in revenue, increase by cost reduction

Compared to Previous Forecast

- Orders (24.2) Decrease due to delay of bid solicitation of overseas projects
- Segment Profit +1.0 Increase due to cost reduction

JFE Shoji

Financial Results

for Fiscal Year 2021



Financial Results for Fiscal Year 2021

JFE

Current Business Environment/ Overview of Financial Status

- Full-year segment profit posted **¥55.9 bn., up ¥2.9 bn. from the previous forecast and up ¥35.9 from FY2020.**
- Revenue and segment profit recovered from the slump brought by COVID-19 pandemic.
- Earnings of domestic business increased due to **the recovery of steel demand** and **strong steel market price**. Earnings of overseas business, **mainly subsidiaries in the US** such as Kelly Pipe, **significantly increased** due to strong market prices.

Financial Results

(billion yen)	FY2020 (Actual) (A)	FY2021 (Forecast) (B)	FY2021 (Actual) (C)	Change (YonY) (C)-(A)	Change (Previous Forecast) (C)-(B)
Revenue	932.5	1,210.0	1,231.7	299.2	17.6
Segment Profit	20.0	53.0	55.9	35.9	2.9

Compared to the previous forecast : Segment Profit +2.9

- Increase due to continued high metal spreads in the US business such as Kelly Pipe etc.

Dividends

Dividends

JFE Holdings has decided to propose at its general meeting of shareholders a year-end dividend of 80 yen per share, which would bring the annual dividend of 140 yen per share.

Fiscal Year 2022

Financial Forecast for Fiscal Year 2022

Our consolidated financial forecast for FY2022 remains pending because uncertainties regarding the global economy began rising as the situation in Ukraine intensified, leaving the outlook highly unclear.

The major impacts on the steel business from the Ukraine situation are as follows:

- **The key raw material prices keep swinging drastically at a high level.**
- **Commodity prices such as ferroalloys and energy remain soaring.**
- **Amid the volatile raw material prices, the steel prices are also difficult to be predicted.**

Business environment (Steel Business)

■ Domestic environment

- Auto production which remained at low level due to the supply restriction of semiconductors **is gradually recovering**. However, **its recovering speed is sluggish**.
- Activity level in other sectors **remains solid** amid the recovery in domestic and overseas economic trends.
- Overall **steel supply and demand is anticipated being tightened** again in 2022.

■ Overseas environment

- Steel demand is expected to **continue recovery trends** amid the recovery in the global economy.
 - Peaking out of COVID-19 will **recover the demand in the construction sector**.
 - **Activity level in manufacturing industry such as the auto sector is expected to recover** amid the easing supply restriction of semiconductors and parts.
- The impact of **the Ukraine situation** and **re-spread of COVID-19 inside and outside of the country, especially Chinese large-scale lockdown in cities such as Shanghai**, need to be monitored carefully.

Key raw materials (Steel Business)

■ Iron Ore

- The policy of annual crude steel production cuts in China continues in 2022.
- The iron ore price is considered to remain at a current high level due to the economic stimulus measures in China.
- However, the trend should be monitored because the iron ore price depends on the economic trends and policy in China.

■ Coking Coal

- The economic sanction against Russia, the impact of COVID-19 and the Chinese government's policy significantly change the market prices, which makes the market price forecast for FY2022 difficult.
- The market prices will remain at the historically high level for a while, and they will keep drastically fluctuating amid the global trends.



Measures in FY2022 (Steel Business)

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■ Sales prices:

- **Accelerate the measures of selling price improvement** which we have been working on since FY2021, such as **quick reflection of key raw material costs.** (Measures have already been taken to reflect the current rise in coking coal prices and other materials prices in sales prices)
- Getting into full swing of **improving extra pricing** and **revising up to the sustainable level of sales prices** as part of the initiatives of “shifting focus from quantity to quality” and “overhauling sales prices” in the 7th mid-term business plan.

■ Cost reduction : +10.0 bn. yen (Cost reduction from action +23.0 bn. Yen, Cost increase in Blast Furnace refit -13.0 bn. yen)

While the one-off cost increase is expected due to the refit of No.6 blast furnace in Chiba, we will make every effort to cover it with other cost reduction items.

■ Standalone crude steel production: Approx. 26.0 Mt

Based on the premise that the current business environment will remain for a year. 8 blast furnaces are currently operating.

No.6 blast furnace in Chiba is planned to be refitted from this September.

JFE is focusing on optimal production, matching the demand level.

Topic

Restructuring of Group Company

(Released on May 6th, 2022)

JFE Container to be JFE Steel's Wholly-Owned Subsidiary

- JFE Steel has decided to make JFE Container, a group company that has been manufacturing and marketing high-quality steel drums and various high-pressure gas containers, a wholly-owned subsidiary by share exchange. (August 1, 2022 as the effective date)

Synergy delivered by the share exchange

1. Solidifying a position in growing markets and stepping up efforts to attain a decarbonized and hydrogen-centric society
2. Sustained growth for the domestic steel drum business
3. Acceleration of overseas strategy
4. Enhance expertise sharing and human resource development through further promotion of human resource exchange
5. Streamlining cash management and lowering listing maintenance cost

Progress of the 7th Medium-Term Business Plan

Main Performance & Profitability Targets and Results of Fiscal Year of 2021

- Business profit for FY2021 was ¥416.4 billion, exceeding the target in FY2024.
- The first year was successfully launched with achieving the other profitability targets.

		The 7 th mid-term business plan FY2024	FY2021 Actual
Consolidated	Business Profit	¥ 320.0 billion	¥ 416.4 billion
	Profit attributable to owners of the parent	¥ 220.0 billion	¥ 288.0 billion
	ROE	10%	15.7%
Operating companies	Steel Business Profit per ton* Segment profit	10,000 yen/t ¥ 230.0 billion	14,000 yen/t ¥ 323.7 billion
	Engineering Business Segment Profit Revenue	¥ 35.0 billion ¥ 650.0 billion	¥ 26.0 billion ¥ 508.2 billion
	Trading Business Segment Profit	¥ 40.0 billion	¥ 55.9 billion

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

[Steel Business]

Progress of the 7th Medium-Term Business Plan



Overview of FY2021

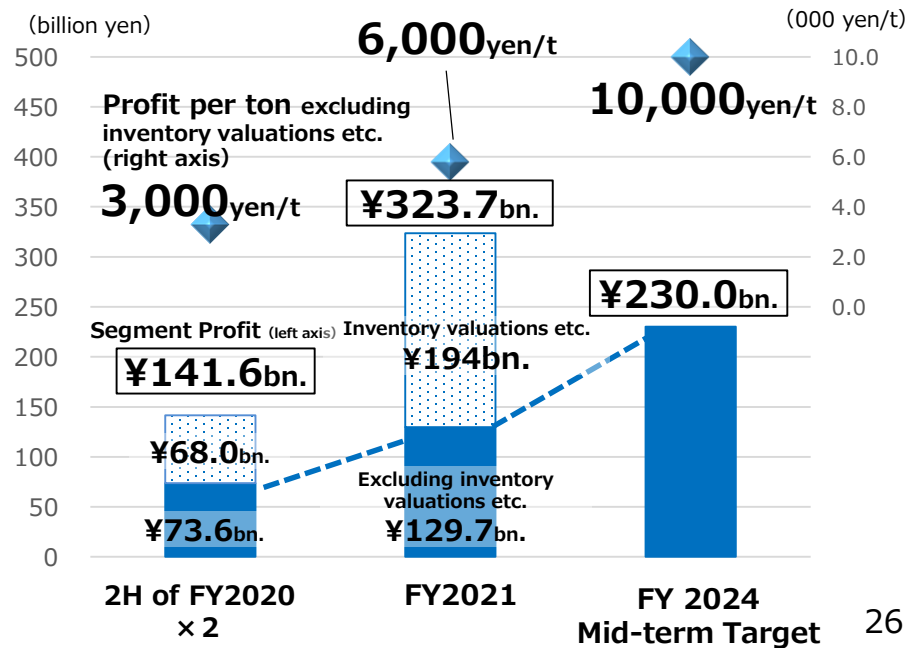
- Profit in FY2021 exceeded the target in FY2024, partially due to one-off effect of gain in inventory valuations etc..
(Profit per ton in FY2021: Approx. 14,000 yen/t Target in FY2024: 10,000yen/t)
- **Excluding inventory valuations etc. : Approx. 6,000 yen/t (4,000 yen/t lower than the mid-term target)**

Items Achieved in FY2021

- ✓ Cost reduction ¥ 30.0 billion / year
 - ✓ Steadily executed CAPEX and refit of No.4 BF in Kurashiki
 - ✓ Improvements in sales prices: quick reflection of key raw material costs to sales prices; started to overhaul the extra pricing and partially finished revision
- Main measures planned in the first year were implemented as scheduled.**

Initiatives to Achieve Target of Mid-term Plan -Shifting Focus from Quantity to Quality-

- **Fully overhaul sales pricing**
 - Further progress of quick reflection of key raw material cost to sales prices
 - Reflection of increase in prices of other raw materials
 - Acceleration of overhauling the extra pricing etc.
- **Effects from structural reform**
Reduction in fixed costs, increase in labor productivity etc.
- **Product-mix enhancements**
(Percentage of highly value-added products:
40% in FY2020→ 45+ %* in FY 2021→50% in FY2024)
 - Increase production capacity of high-grade non-oriented electrical steel sheet
 - Increase production capacity of extra-thick steel plate for off-shore wind-power applications



*estimated

Shifting Focus from Quantity to Quality

(Progress of Structural Reform and Major CAPEX)



- Steadily progress the structural reform to realize greatly reducing fixed cost and lowering breakeven point.
- Progress in development plans for partial area of Keihin district resulting from structural reform.

Facilities	FY2020	FY2021	FY2022	FY2023	FY2024~
Shutdown of Tin Mills in Chiba (No.2 Tandem Mill, No.4 CAL, TFL)			★ To be shut down (~Sep. 2022)		
Refit of Blast Furnace Refit		Kurashiki Refit No.4 BF(~Dec.2021) ★	Chiba Refit No.6 BF(Sep.2022~Jan.2023) ★		
Shut down of upstream facilities in Keihin (No.2 BF, Sintering Machine, Coke oven, Converters, EAF, Continuous Casting Machine etc.)				To be shut down (~Sep. 2023) ★	Effect of structural reform and CAPEX <ul style="list-style-type: none"> • Maintenance cost reduction • Fixed cost reduction • Product-mix enhancements etc.
Shutdown of Hot Rolling Facilities in Keihin (excl. Pickling line and skinpass mill)				To be shut down (~Sep. 2023) ★	
CAPEX related to improvements of high-value added product ratio		Installed new Continuous Casting Machine (Jun.2021) ★		Reinforce extra-thick steel plate production line for offshore wind-power application (Nov.2023) ★	

Joint Study of a Hydrogen and Ammonia Supply Collaboration Base at the Keihin Waterfront Area to begin

- ENEOS Corporation, JERA Co., Inc., and JFE Holdings, Inc. have concluded a memorandum of understanding of begun to discuss the followings:
 - **Establishment of hydrogen and ammonia receiving and supply base**
 - **Development of a hydrogen and ammonia supply network**
 - **Hydrogen and ammonia suppliers, transportation carriers, and transportation methods.**

Released on April 21

Contribute to the establishment of a stable and economical supply chain for decarbonized fuels to achieve carbon neutrality

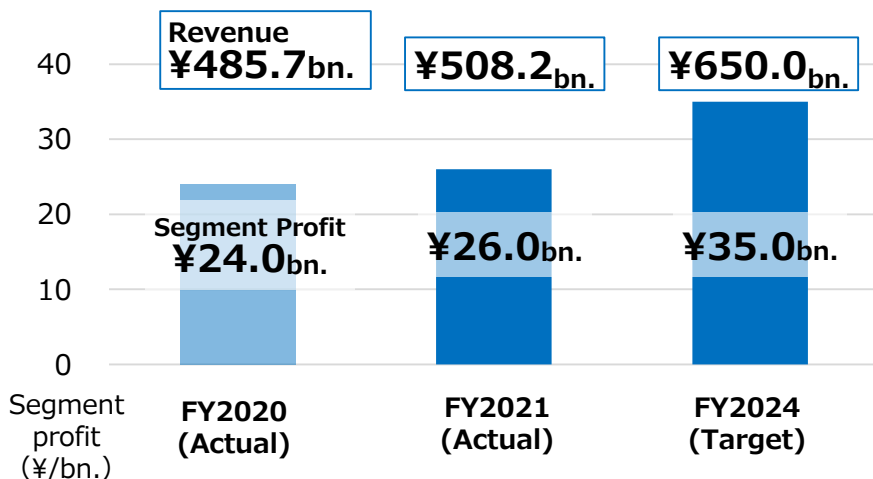


[Engineering Business]

Progress of the 7th Medium-Term Business Plan

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<Revenue & Segment Profit>



Business Environment

- The level of FY2021 segment profit was as planned in the mid-term plan, increasing through the effect of M&A* in environment sector.

*JFE Environment Technology Co., Ltd.
(The former Mitsui E&S Group's environmental plant division)

- Demand mainly for waste treatment facility inside and outside of country is strong** despite delay in bid solicitation of overseas projects caused by COVID-19 pandemic and political turmoil.

FY2021 Initiatives and Future Initiatives

Waste to Resource

- Nationwide expansion of bases for recycling business and started operation of recycling plants (Currently operating 8 plants in Japan. To be operating 5 domestic plants after 2022.)
- ✓ Full operation of West Japan PET plastic bottle MR* center (The first plant manufacturing bottle-to-bottle raw materials in central and west Japan Apr. 2022)

*Mechanical Recycling

Carbon Neutral

- Decided to invest in establishing a new plant for monopile foundation structure of offshore windmills (the first plant in all Japan, expected time to start operation is April 2024.)
- Decided to commercialize woody biomass power plant, one of the largest biomass power plants in Japan (Tahara Biomass Power LLC, Scheduled start of construction: Apr. 2022, Scheduled start of operation: Sep. 2025)

Combined utility services

- Started operating business of comprehensive service from water supply to gas supply as the first company in Japan (Myoko Green Energy Co., Ltd. : Established in Sep. 2021, Started operation in Apr. 2022)

Strengthening the earnings base by M&A etc.

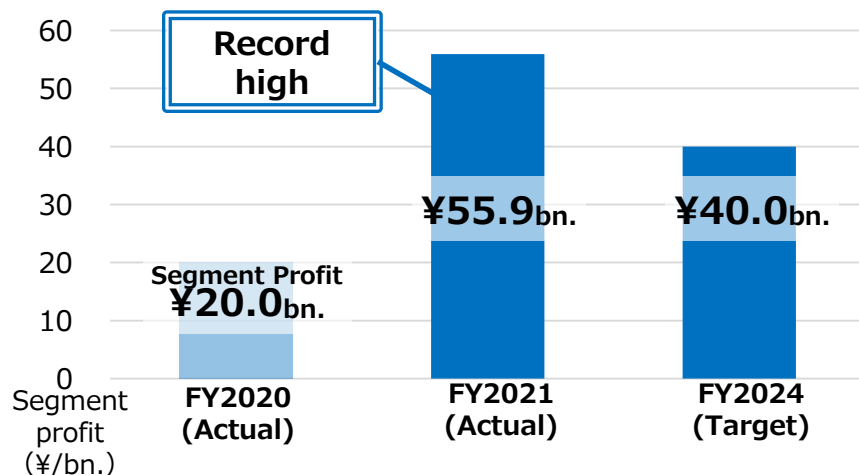
- Realized M&A effect in overseas business To expand its scale (JFE Project One Co., Ltd. : The former Mitsui E&S Plant Engineering Inc.)
- Embarked on waste power generation plant in Vietnam and an operating business of waste treatment facility in Malaysia



[Trading Business] Progress of the 7th Medium-Term Business Plan

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<Segment Profit>



Business Environment

- **Segment profit recorded a historical high** in FY2021 due to steel demand recovery from the slump caused by COVID-19 pandemic and increasing steel market price. The favorable business environment such as an increase in steel market price helped segment profit in FY2021 exceed the target level of the mid-term plan.
- **Initiatives in priority field in this mid-term plan need to continuously proceed**
- Steadily advancing reinforcement of global supply chain.

FY2021 Initiatives and Future Initiatives

Establish No.1 global distribution and processing system of electrical steel sheet market

- Promote the investment to capture the growing demand for in-vehicle motors and transformers inside and outside of Japan
 - ✓ Decided expansion of capacity to manufacture core products for transformer in Canada (JFE Shoji Power Canada Inc. Oct, 2021)
 - ✓ Decided expansion of capacity to manufacture in-vehicle motor core products in China (Jiangsu JFE Shoji Steel Products Co., Ltd. Nov. 2021)

Strengthen supply chain management of automotive steel composite materials

- Strengthen collaboration among JFE Group in the four global key regions.
 - ✓ Started operation of the steel processing center for automotive industry (JSSB May. 2021: Adjacent to NJSM, JFE Steel's group company)
 - ✓ Decided to expand production capacity in the processing center in China in Oct. 2021. (Guangzhou JFE Shoji Steel Products Co., Ltd., Near GJSS, JFE Steel's group company)

Accelerate activities overseas in construction materials business

- Capture the demand for construction materials in ASEAN
 - ✓ Boosted investment in Vietnamese coated steel manufacturer (Ton Dong A Corporation, Mar. 2022)



Progress of GX & DX Investment

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Progress of GX & DX Investment in FY2021

- Investment in each operating company in FY2021 was on track to the mid-term business plan
- Total investment in FY2021 (decision making basis)

GX
Investment

Less than
of the investment target
during this mid-term plan

40%

DX
Investment

More than
of the investment target
during this mid-term plan

30%

- Main GX investments decided in FY2021

➤ Contribute to reduce CO₂ emissions across society by offshore wind power generation business and eco-products supply

Offshore
Windmills

✓ **Construction of new plant for foundation structure (monopile)**

(JFE Engineering: Scheduled start of operation: April, 2024)

Amount of Investment
¥40 billion

✓ **Reinforcement of extra-thick steel plate production line**

(JFE Steel: Scheduled start of operation: November, 2023)

Amount of Investment
¥13 billion

Electrical
Steel Sheet

✓ **Expansion of manufacturing facilities for non-oriented electrical steel sheet**

(JFE Steel: Scheduled start of operation: 1H of FY2024)

Amount of Investment
¥46 billion

➤ Steadily progress the investment for carbon neutrality in the steel business

JFE Holdings' investment plan during the 7th mid-term business plan

GX investment
¥340 billion

DX investment
¥120 billion

Initiatives to Establish Environmental Sustainability

Progress of Initiatives for JFE Group's CO₂ emissions reduction in FY2021

- ✓ **Raised FY2030 CO₂ emissions-reduction target**
 - Raised the FY2030 CO₂-reduction target to 30% or more above the JFE group's FY2013 level by expanding the application of existing impact-reduction technologies, adding new measures for CO₂ reduction, and establishing an efficient in-house framework.
- ✓ **Revised roadmap for carbon neutrality** (See the next page)
- ✓ **JFE's proposal of carbon neutral technologies was adopted as the NEDO Green Innovation Fund Project**
 - Launched development project of super-innovative process, supported by the government.
- ✓ **Decided to issue transition bonds as the first manufacturing company in Japan**
 - The external organization certified that JFE's business plan for carbon neutrality is consistent to The Paris Agreement, and the JFE's CAPEX plan was consistent to its target of carbon emissions reduction.

External Recognition in FY2021

- ✓ **Included in the ESG-related indices, FTSE4Good Index Series and FTSE Blossom Japan Index, for the second consecutive time**
- ✓ **Received high evaluation, [A-], in the climate change area and the water security area by CDP 2021**

[Steel Business] Roadmap for Carbon Neutrality

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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

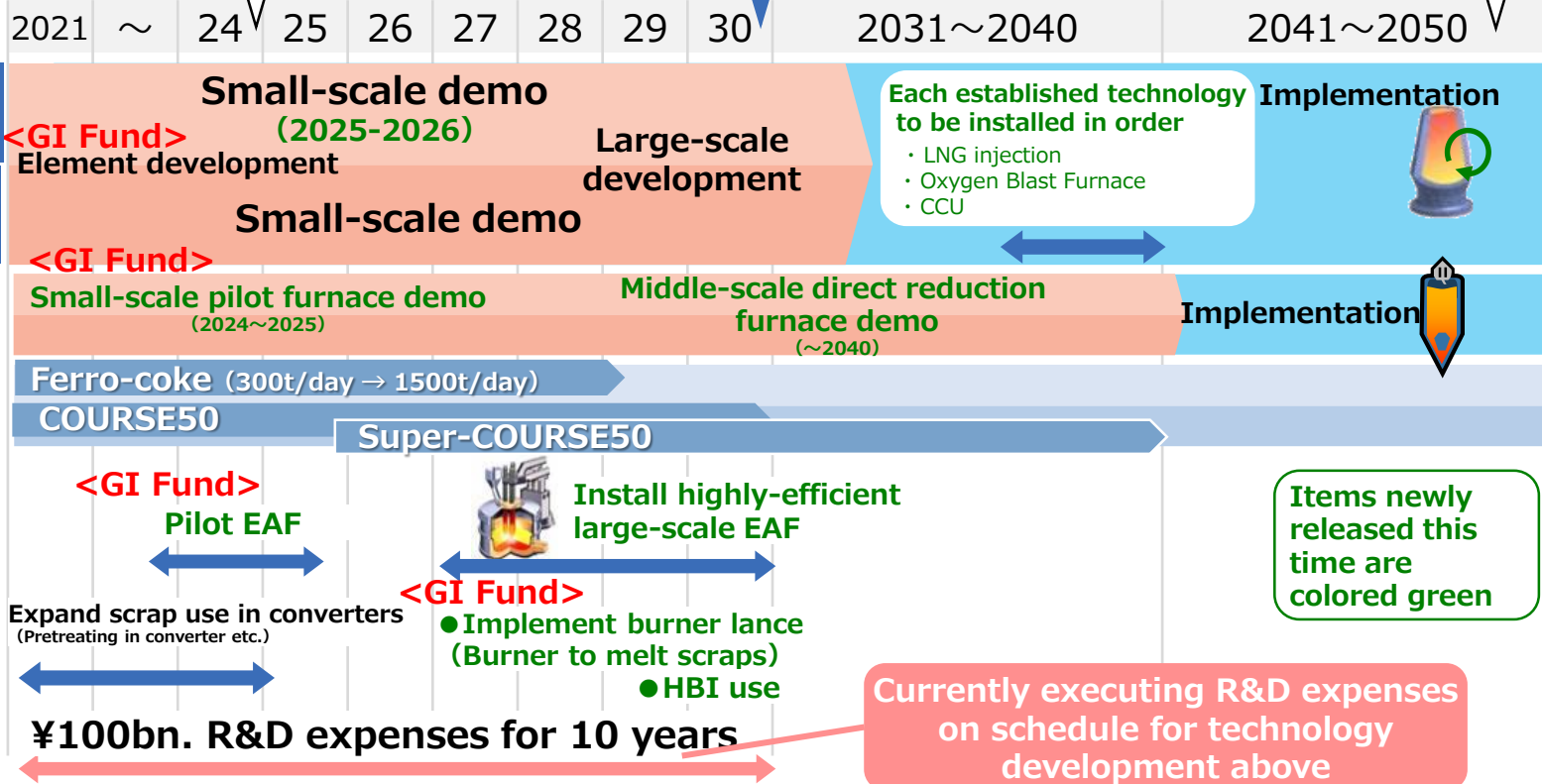
**18% reduction compared
to FY2013** (Steel Business)

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

Released in Feb, 2022

**Carbon neutrality
by 2050**

Technology





Technology Development Items of the Green Innovation Fund Project

JFE

- On December 24th, 2021, the following technology-development items were adopted as part of the Green Innovation Fund Project, "Hydrogen Utilization in Iron and Steelmaking Processes" Project.
- With support from the Green Innovation Fund, JFE accelerates technology development toward the realization of carbon neutrality as stated in "Environmental Vision 2050".

	1. Carbon-recycling blast furnace	2. Hydrogen-based ironmaking	3. Highly-efficient large-scale EAF
Development items			
Detail	<p>Develop processes where CO₂ generated from blast furnace is converted to methane and it is repeatedly used as reducing material. Install a small-scale pilot blast furnace of 150m³ in Chiba and confirm CO₂ reduction of more than 50%. <u>Start demo in small-scale pilot blast furnaces in 2025 and establish technologies by 2030 and completing the implementation by 2050.</u></p>	<p>Develop direct-reduction ironmaking processes where oxygen is removed in a reduction furnace from low-purity iron ore used in the existing blast furnace, and reduced iron (Fe) is produced. Install a small-scale direct reduction pilot furnace and confirm CO₂ reduction of more than 50%. <u>Start small-scale demo in 2024, aiming to establish technologies by 2030 and complete the implementation by 2050.</u></p>	<p>Develop technologies of high-efficiency melting and producing high-grade steel by electric arc furnace (EAF) using scrap and reduced iron. Install a small-scale pilot EAF in Chiba and confirm the same ability to control the concentration of impurities as the existing blast furnace process. <u>Start small-scale demo in 2024, and completing implementation by 2030.</u></p>



Main Performance & Profitability Targets and Results of Fiscal Year of 2021

JFE

- Earnings in FY2021 **include the one-off effects** such as inventory valuation gains and a rise in the overseas steel market prices.
Accelerate the main measures from FY2022 to achieve the target in FY2024.
- Continuously progress the measures to achieve carbon neutrality by CO₂ emissions reduction in Steel Business and the contribution to the CO₂ reduction in the society on the whole.**
- ROE and Debt/EBITDA achieved the target of the mid-term business plan. The annual dividend will be ¥140/share in FY2021, which is the highest since JFE started.

		The 7 th mid-term business plan FY2024	FY2021 Actual
Consolidated	Business profit	¥ 320.0 bn.	¥ 416.4 bn.
	Profit attributable to owner of the parent	¥ 220.0 bn.	¥ 288.0 bn.
	ROE	10%	15.7%
	Debt/EBITDA	About 3x	2.8x
	D/E*	About 70%	80.8%
	Payout ratio (DPS)	The 7 th mid-term business plan Around 30%	(¥140)

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

Appendix



Main Financial Data

JFE

J-GAAP

	FY13	FY14	FY15	FY16	FY17	FY18
(bn. Yen, times)						
Ordinary Income	173.6	231.0	64.2	84.7	216.3	221.1
EBITDA	368.9	421.5	254.4	279.9	388.8	405.9
ROS	4.7%	6.0%	1.9%	2.6%	5.9%	5.6%
ROE	6.3%	7.7%	1.8%	3.7%	7.6%	8.3%
ROA	4.5%	5.5%	1.7%	2.3%	5.2%	5.1%
Debt Outstanding	1,534	1,501	1,379	1,375	1,331	1,450
Debt/EBITDA Ratio	x4.2	x3.6	x5.4	x4.9	x3.4	x3.6
D/E Ratio	67.9%	59.0%	56.9%	51.4%	58.1%	62.0%
Profit attributable to owners of parent (yen/share)	177.4	241.6	58.4	117.8	250.8	285.0
Dividend (yen/share)	40	60	30	30	80	95
Pay-out Ratio	22.5%	24.8%	51.4%	25.5%	31.9%	33.3%

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.

IFRS

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



6.7 Billion Yen Increase in JFE Steel's Segment Profit (FY2021.1H vs. FY2021.2H)

JFE

- Crude steel production increased, and further cost reduction was achieved in 2H
- Despite rising in the price of other raw materials such as metals and scrap, segment profit in 2H increased due to selling price improvements, such as quick reflection of key raw materials in selling prices.

JFE Steel	FY2021			Change (billion yen)
	1H	2H	Full Year	
Segment Profit	158.5	165.2	323.7	+6.7

1. Cost	+15.0	<ul style="list-style-type: none"> • Capital investment effects • Variable cost reduction etc.
2. Volume and Mix	+14.0	<ul style="list-style-type: none"> • Production volume increase along with the completion of Kurashiki No.4 BF refit (Crude steel (Standalone) 12.70Mt⇒13.18Mt)
3. Sales and Raw materials	+53.0	(+4,600 yen/t-shipment) <ul style="list-style-type: none"> • Metal spread increased due to selling price improvements, such as quick reflection of key raw materials in selling prices.
4. Inventory valuation	+14.0	<ul style="list-style-type: none"> • Inventory valuation +42.0 (+59.0→+101.0) • Carry over of raw materials -37.0 (+30.0→-7.0) • Foreign exchange valuation +9.0(+1.0→+10.0)
5. Others	(89.3)	<ul style="list-style-type: none"> • Increase in depreciation cost and other expenses • Rising in price of metals and scrap etc.



21.8 Billion Yen Decrease in JFE Steel's Segment Profit (FY2021.3Q vs. FY2021.4Q)

JFE

JFE Steel	FY2021					Change (billion yen)
	1Q	2Q	3Q	4Q	Full Year	
Segment Profit	69.7	88.8	93.5	71.7	323.7	(21.8)

1. Cost **±0.0**

2. Volume and Mix **+3.0**

• Crude steel (Standalone) 6.49⇒6.69Mt +0.2Mt

3. Sales and Raw materials **+110.0**

(+18,600 yen/t-shipment)
• Metal spread improvement by quickly reflecting the coking coal price which soared in the 3Q in the selling price, in addition to falling price of iron ore.

4. Inventory valuation **(90.0)**

• Inventory valuation -27.0(+64.0→+37.0)
• Carry over of raw material -67.0(+30.0→-37.0)
• Foreign exchange valuation+4.0(+3.0→+7.0)

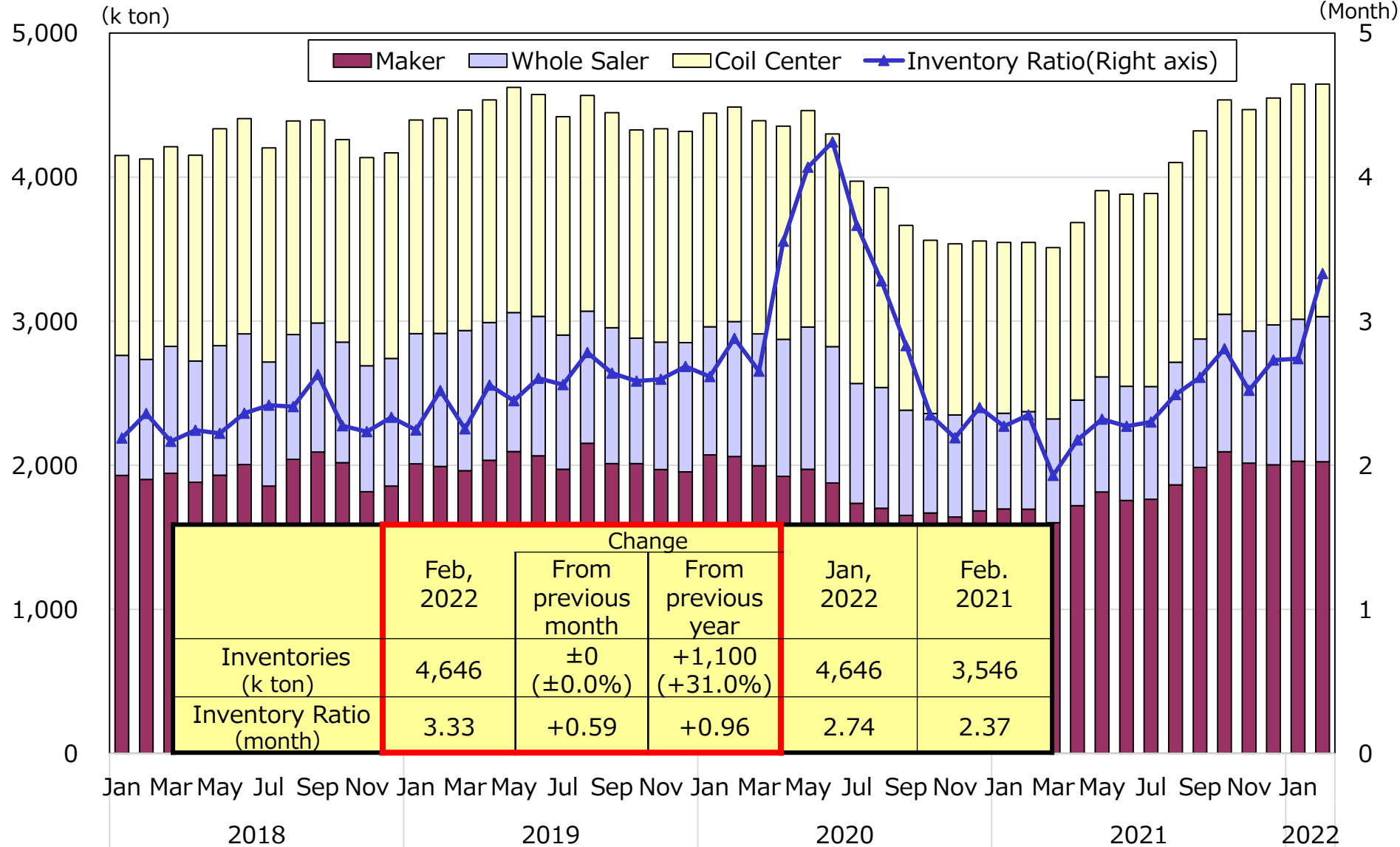
5. Others **(44.8)**

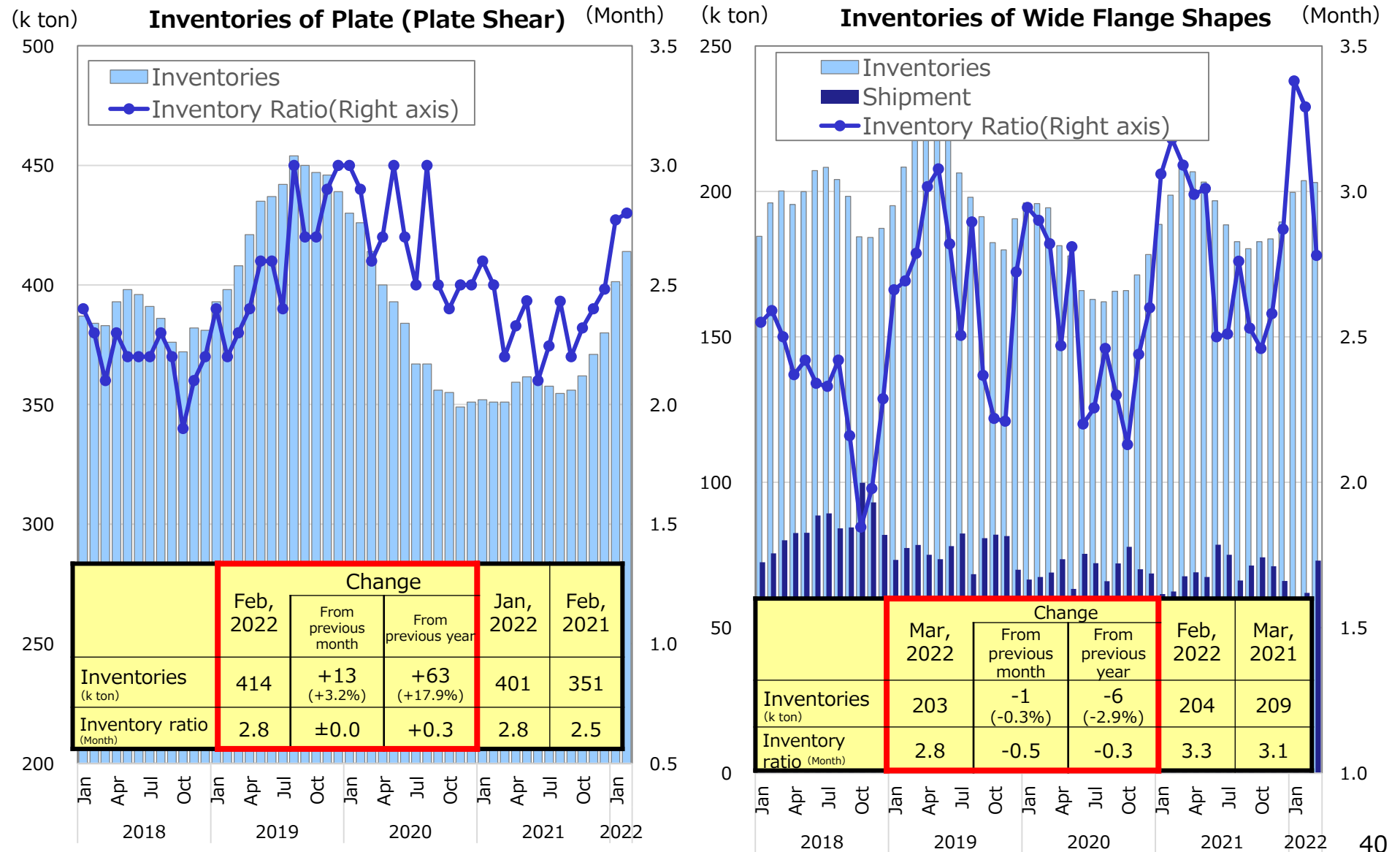
• Increase in depreciation cost and other expenses etc.

Domestic Market Environment

Combined Inventories of HR, CR and Coated Steel Sheet

JFE



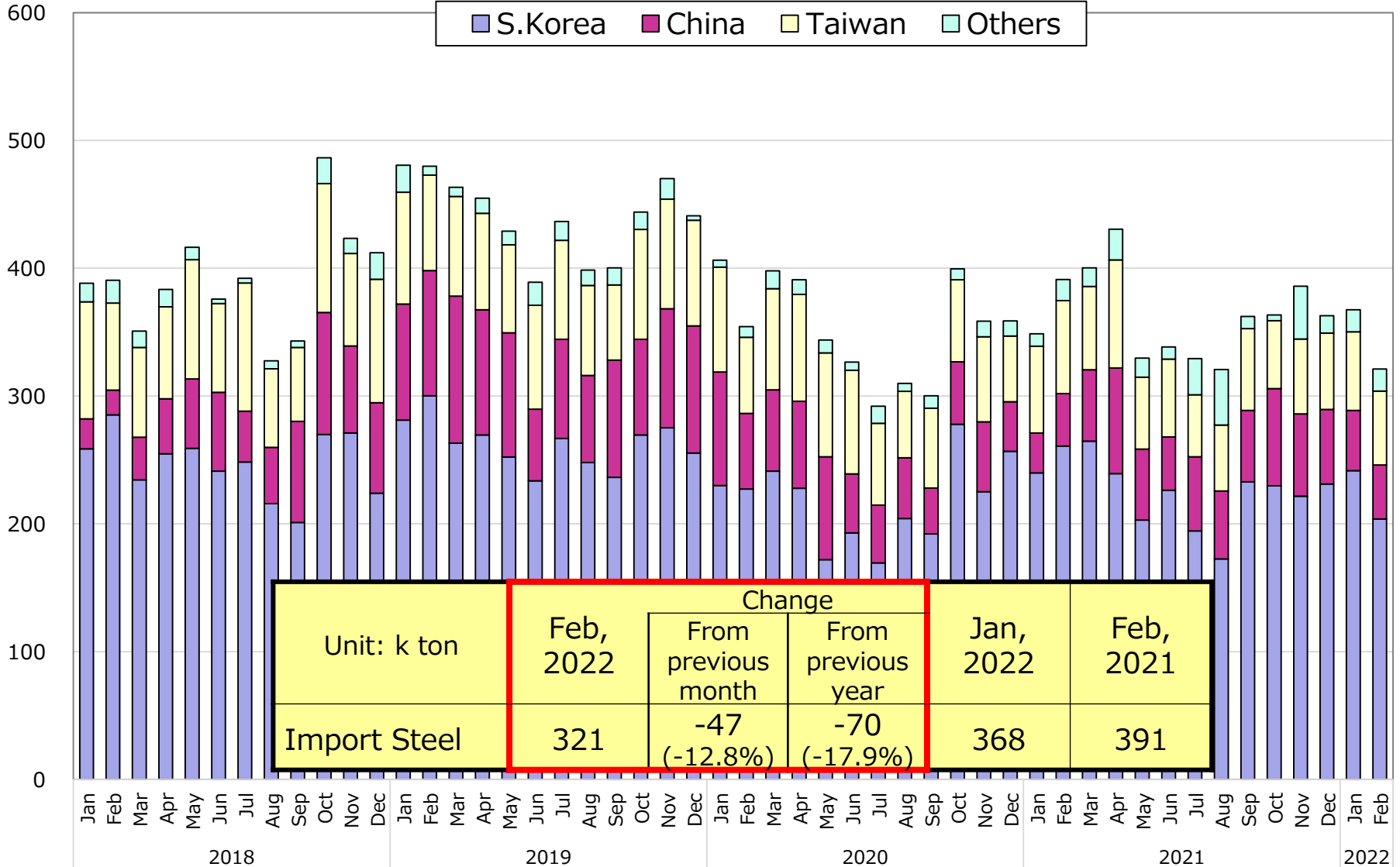


Domestic Market Environment

Trend of Import Steel (Ordinary Steel)

JFE

(k ton)



Crude Steel & Im/Export, China

JFE

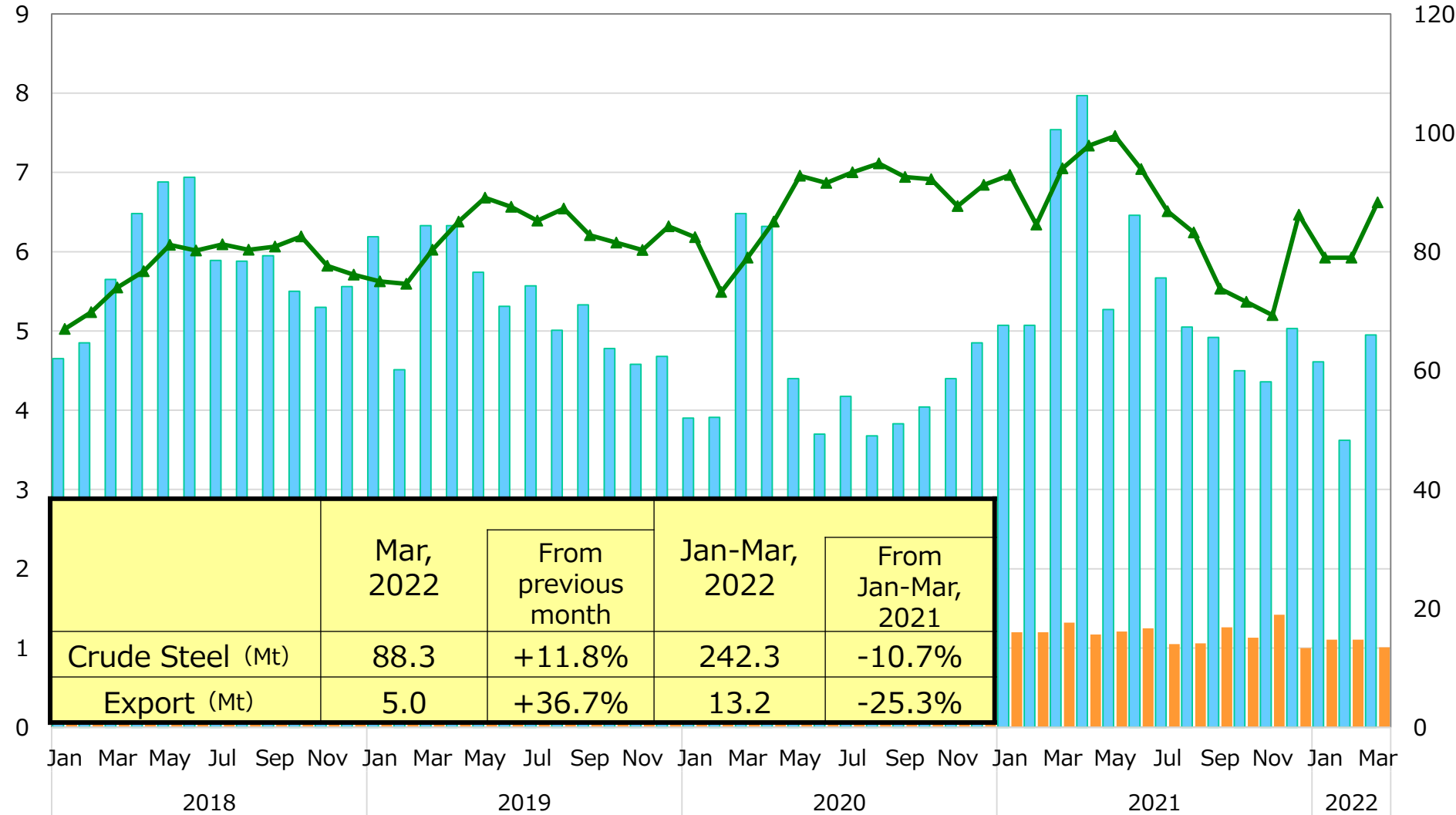
(M t)

Export (Left axis)

Import (Left axis)

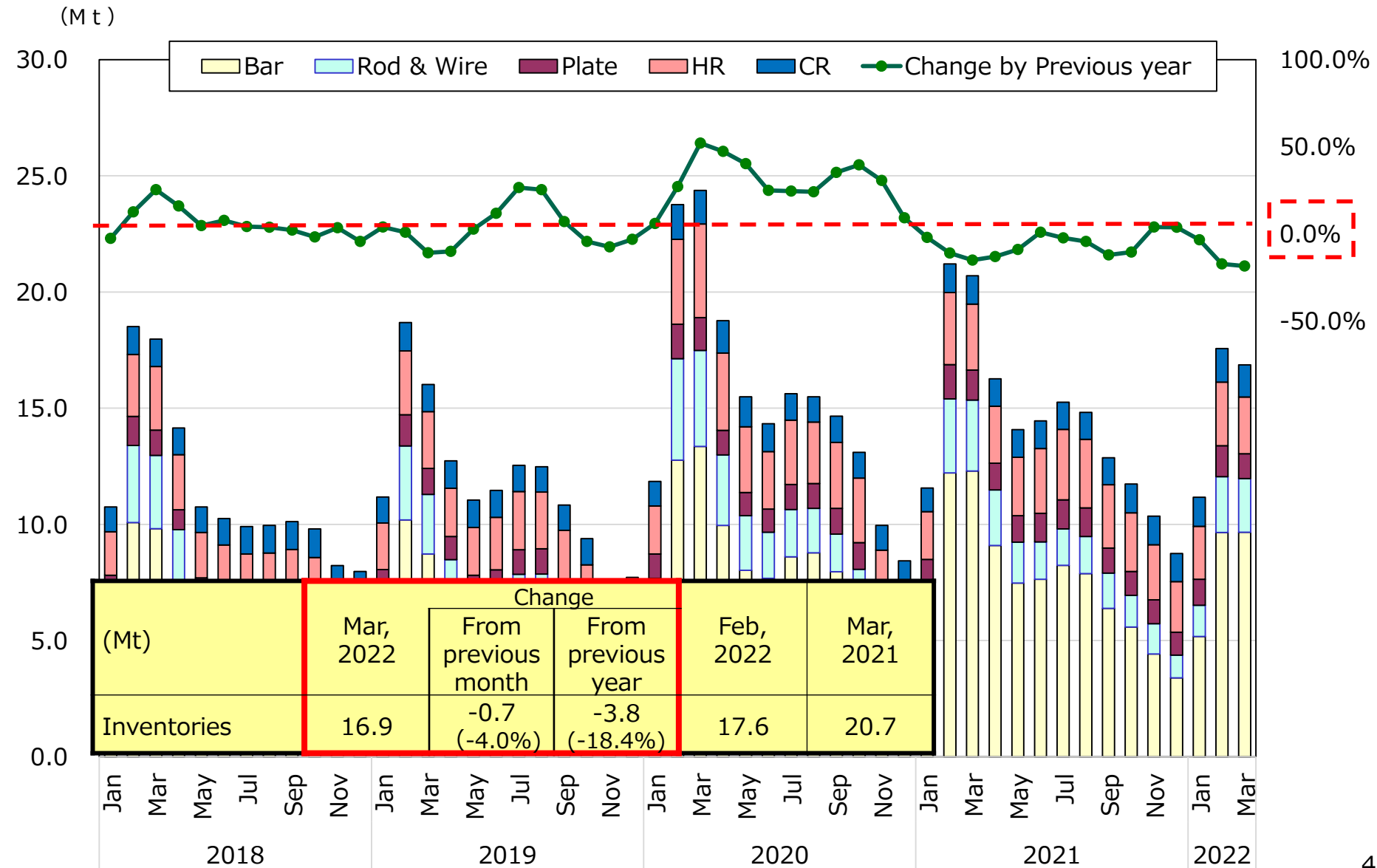
Crude steel (Right axis)

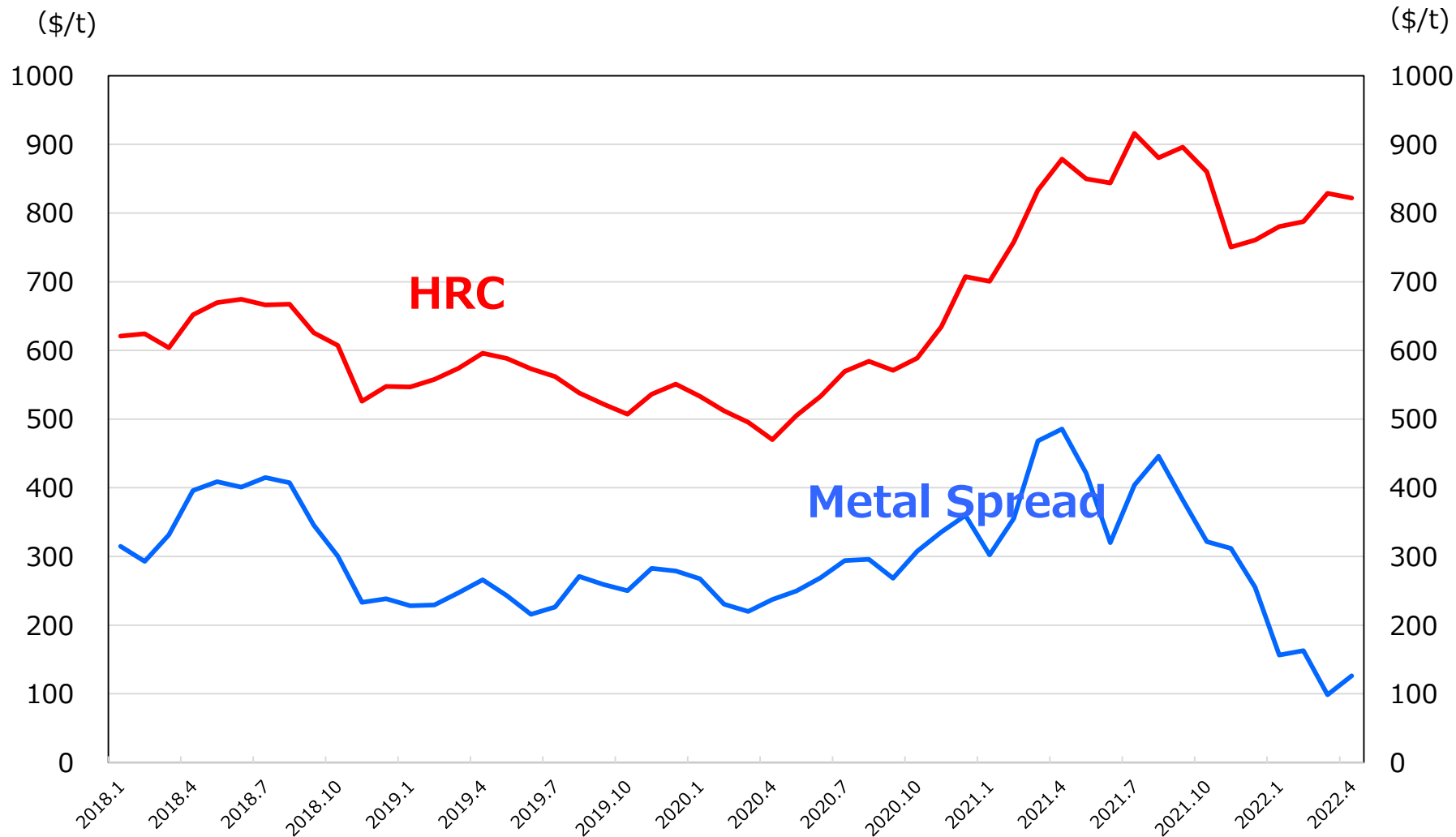
(M t)



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



Domestic
Market Environment

Price Trend of Import Steel

JFE

(k yen / t)

110

100

90

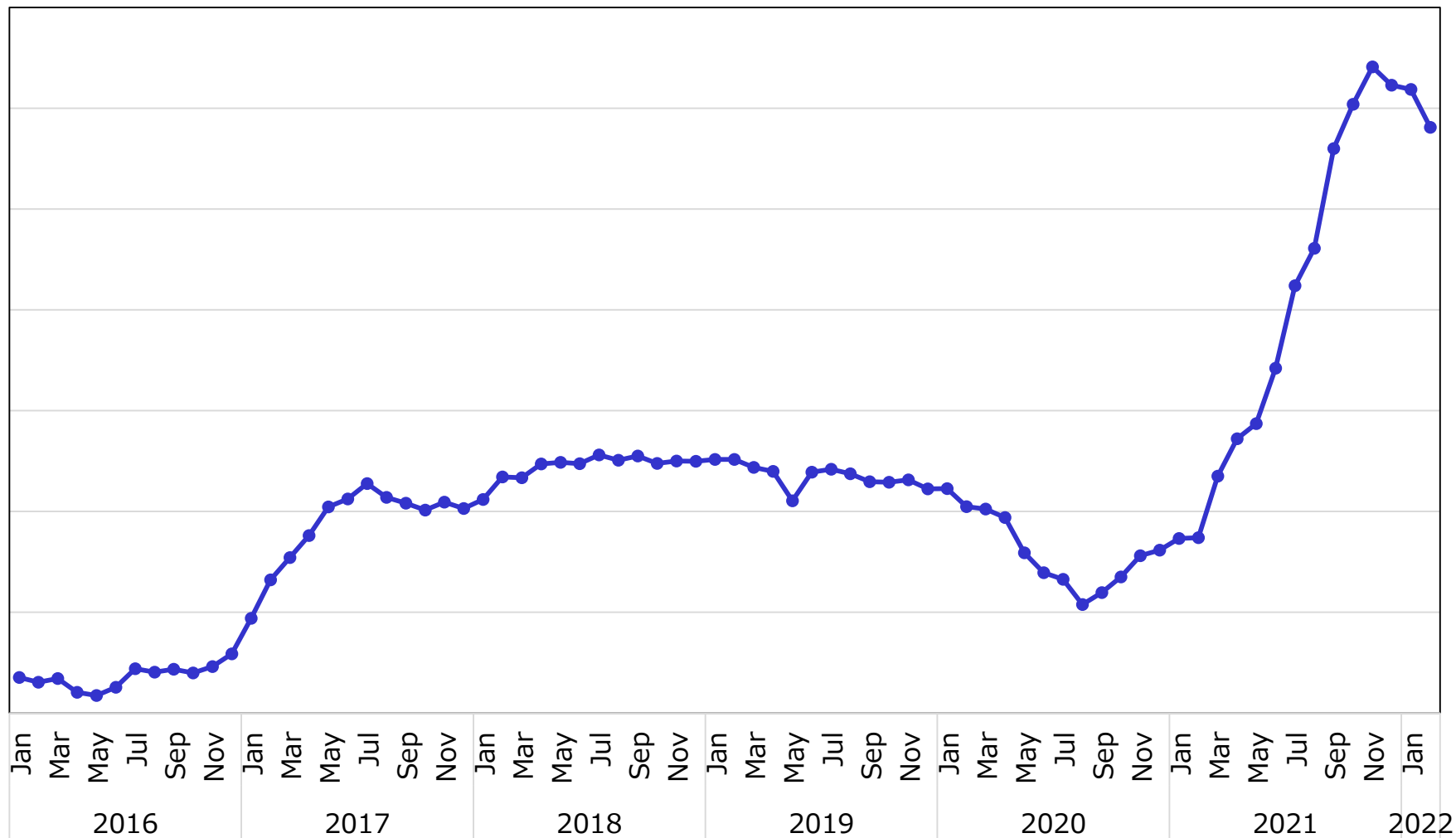
80

70

60

50

40



Progress of Initiatives of Steel Business

(Structural Reforms and Strategic Investment in Japan)

JFE

Facilities			~FY19	FY20	FY21	FY22	FY23~
Structural Reforms	Keihin District	Upstream Facilities					★ To be shut down (~Sep. 2023)
		Hot rolling Facilities					★ To be shut down (~Sep. 2023)
		Cold-rolling & Hot-dip Galvanizing Facilities	★ Shut down				
	Chiba District	Tin Mills	★ Shut down (2CAL・2ETL)			Facilities manufacturing steel sheet for cans to be shut down (~Sep.2022)	
Strategic Investments	Chiba & Kurashiki	Blast Furnace Refit			★ Kurashiki Refit No.4 BF(~Dec.2021)		★ Chiba Refit No.6 BF(Sep.2022~Jan.2023)
	Kurashiki District	Continuous Casting Machine			★ Installed new Continuous Casting Machine (Jun.2021)		
		Extra-thick steel plate for offshore wind-power application				Reinforce extra-thick steel plate production line (Nov. 2023) ★	
		Electrical Steel Sheet Facilities					★ FY24 Reinforce Non-oriented Electrical Steel Sheet Production Line
	Fukuyama District	Coke Oven	★ Renewed No.3 Coke Oven(A)	★ Renewed No.3 Coke Oven(B) (Jun.2021)			
		Sintering Machine	★ Installed new Sintering Machine				
		Energy Plants		★ Installed No.2 power generator in Joint Thermal Power			
		Ferro Coke Production Facility		Develop ferro coke production technology			
	Overseas	Mexico NJSM	★ Begun Operating CGL for Automotive Applications				







Orders by Business Area

JFE

(billion yen)

Business Area	Actual FY2020	Actual FY2021	Change	Main orders received in FY2021 ★: New projects received in FY2021 4Q
Waste to Resource	220.0	203.9	-16.1	Construction of domestic waste treatment plant [Nara, Nagoya] Improvement works of domestic waste treatment plant [Kochi] Construction of overseas waste treatment plant [Vietnam]
Carbon Neutral	36.0	87.4	51.4	Renewal construction of Matsukawa geothermal power generation plant[Iwate prefecture] Construction of Mori Binary power generation plant [Hokkaido] Construction of Tahara Biomass Power plant [Aichi]
Combined Utility Service	11.0	13.4	2.4	
Core Infrastructure	234.1	201.1	-33.0	Installation of offsite equipment of Himeji power generation [Hyogo] Reconstruction of Sludge Treatment Plant at Iriezaki General Sludge Center [Kawasaki] Construction of domestic bridge (★Tokai-Kanjo Expressway [Gifu]) Reconstruction of domestic bridge (Tomei Expressway [Shizuoka], Shuto Expressway [Tokyo], Chuo Expressway[Nagano])
Total	501.1	505.8	4.7	

Links to the reports published during FY2021

Report	URL	QR code
JFE Group REPORT 2021	https://www.jfe-holdings.co.jp/en/investor/library/group-report/index.html	
JFE Group CSR REPORT 2021	https://www.jfe-holdings.co.jp/en/csr/data/index.html	
JFE Group CSR REPORT 2021 ESG Data	https://www.jfe-holdings.co.jp/en/csr/pdf/2021/2021_08.pdf	
DX REPORT 2021	https://www.jfe-holdings.co.jp/en/investor/library/dx-report/index.html	



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