



JFE

JFE Group

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

JFE Holdings, Inc.

August 3, 2022



Key Points of today's Announcement

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Results for 1Q of FY2022

- **Business profit in 1Q of FY2022 was ¥116.6bn.**(increased by ¥28.3bn. year-on-year) due to selling price improvements and inventory valuation gain because of the rising price of coking coal, etc.

Forecast of FY2022

- **Full-year business profit is expected to be ¥235.0bn.** (decreased by ¥181.4bn. year-on-year)
- The current business environment has been **significantly worse than the previous fiscal year** due to the prolonged Ukraine situation.(falling overseas steel market, rising commodity prices and a sharp depreciation of the yen)
- The supply-demand balance is expected to recover gradually from now on. However it is necessary to monitor **carefully the trend of steel production and steel demand in China**, and **the impact of auto production due to a shortage of the parts supply**.
- In the steel business, despite the severe business environment, initiatives for improvement in earnings, such as price improvement, are in progress.
- In the engineering and trading businesses, earnings are expected to remain stable despite rising commodity prices.

Dividends

- The Board of Directors has decided to pay **an interim dividend of 40 yen per share**. The year-end dividend has been still pending.

Carbon Neutral

- Organize the roadmap for realizing carbon neutrality in 2050 and arrange the emission reduction structure.
- A briefing session will be held to explain the details.(In Japanese)

[Scheduled for Sep.1st, 2022]

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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.

**Consolidated Results for First
Quarter of Fiscal Year 2022
(April 1 to June 30, 2022)**

and

**Consolidated Financial Forecast
for Fiscal Year 2022
(April 1, 2022 to March 31, 2023)**



Financial Results and Forecast for Fiscal Year 2022

- **Business profit in 1Q of FY2022 was ¥116.6bn.**(increased by ¥28.3bn. year-on-year)
- Full-year revenue is expected to be **over ¥5 trillion.**, and full-year business profit is expected to be **¥235.0bn.**(decreased by ¥181.4bn. year-on-year)

| (billion yen) | FY2021 Actual | | | FY2022 Forecast | | | Change | | |
|---|-----------------|---------|----------------|-----------------|---------|----------------|-----------------|--------|----------------|
| | 1Q (Apr-Jun) | 1H | Full Year | 1Q (Apr-Jun) | 1H | Full Year | 1Q (Apr-Jun) | 1H | Full Year |
| Revenue | 888.9 | 1,942.9 | 4,365.1 | 1,253.6 | 2,610.0 | 5,370.0 | 364.7 | 667.1 | 1,004.9 |
| Business Profit | 88.3 | 198.8 | 416.4 | 116.6 | 165.0 | 235.0 | 28.3 | (33.8) | (181.4) |
| Finance Income/Costs | (2.9) | (5.6) | (11.6) | (3.2) | (10.0) | (15.0) | (0.3) | (4.4) | (3.4) |
| Segment Profit | 85.4 | 193.2 | 404.8 | 113.4 | 155.0 | 220.0 | 28.0 | (38.2) | (184.8) |
| Exceptional Items | - | - | (16.2) | - | - | - | - | - | 16.2 |
| Profit before Tax | 85.4 | 193.2 | 388.5 | 113.4 | 155.0 | 220.0 | 28.0 | (38.2) | (168.5) |
| Tax Expense and Profit (Loss) Attributable to Non-Controlling Interests | (23.4) | (52.4) | (100.4) | (29.5) | (55.0) | (80.0) | (6.1) | (2.6) | 20.4 |
| Profit Attributable to Owners of Parent | 61.9 | 140.7 | 288.0 | 83.8 | 100.0 | 140.0 | 21.9 | (40.7) | (148.0) |

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 and Forecast for Fiscal Year 2022 (by Segment)

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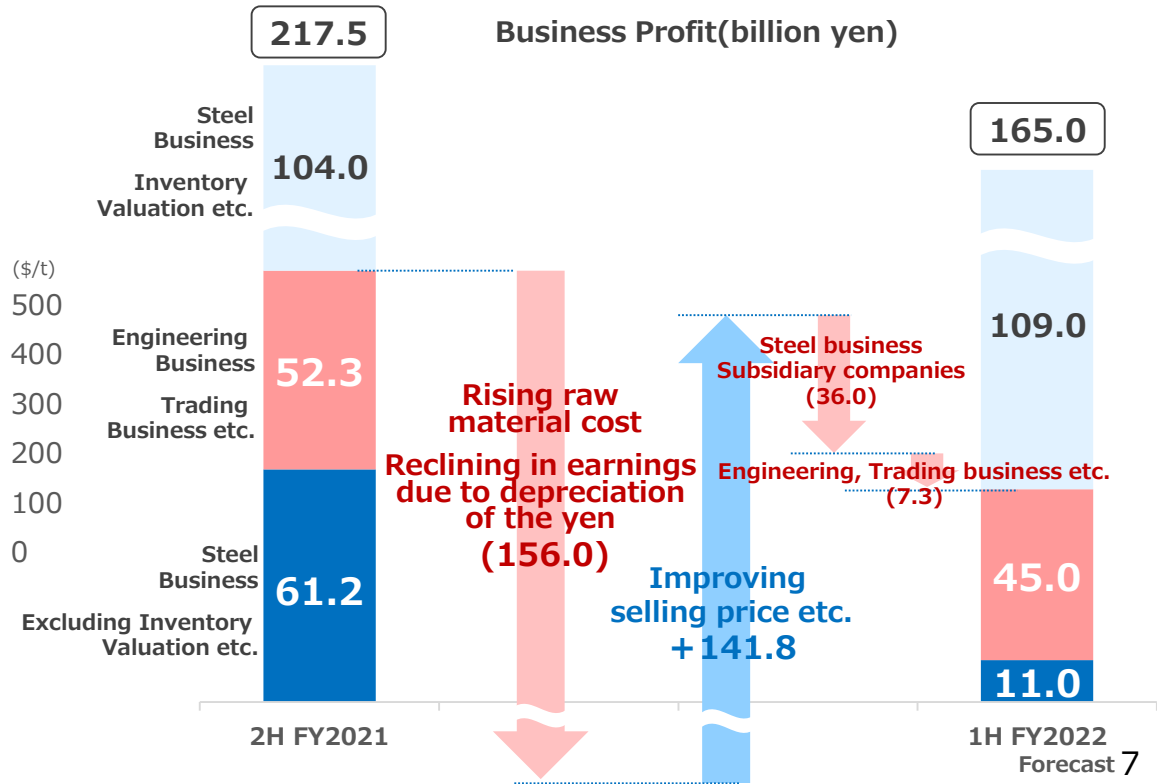
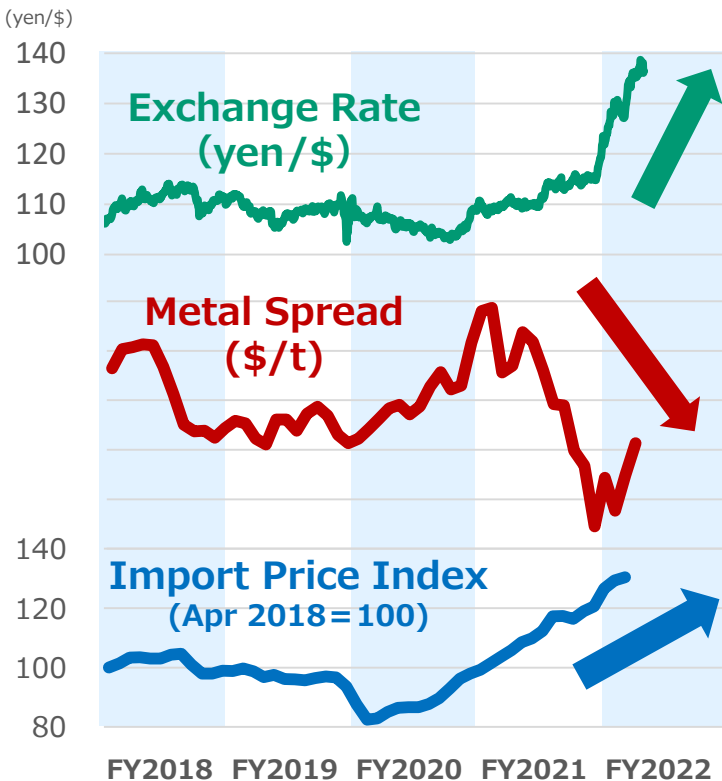
(billion yen)

| | FY2021 Actual | | | FY2022 Forecast | | | Change | | |
|-----------------------------|-----------------|---------------|----------------|-----------------|---------------|----------------|-----------------|---------------|----------------|
| | 1Q (Apr-Jun) | 1H | Full Year | 1Q (Apr-Jun) | 1H | Full Year | 1Q (Apr-Jun) | 1H | Full Year |
| Steel Business | 638.5 | 1410.4 | 3,173.4 | 932.6 | 1975.0 | 4,100.0 | 294.1 | 564.6 | 926.6 |
| Engineering Business | 103.0 | 229.2 | 508.2 | 98.2 | 230.0 | 520.0 | (4.8) | .8 | 11.8 |
| Trading Business | 261.6 | 544.4 | 1,231.7 | 379.5 | 750.0 | 1,470.0 | 117.9 | 205.6 | 238.3 |
| Adjustments | (114.2) | (241.1) | (548.3) | (156.8) | (345.0) | (720.0) | (42.6) | (103.9) | (171.7) |
| Revenue | 888.9 | 1942.9 | 4,365.1 | 1,253.6 | 2610.0 | 5,370.0 | 364.7 | 667.1 | 1,004.9 |
| Business Profit (A) | 88.3 | 198.8 | 416.4 | 116.6 | 165.0 | 235.0 | 28.3 | (33.8) | (181.4) |
| Finance Income/Costs (B) | (2.9) | (5.6) | (11.6) | (3.2) | (10.0) | (15.0) | (0.3) | (4.4) | (3.4) |
| Steel Business | 69.7 | 158.5 | 323.7 | 93.0 | 120.0 | 150.0 | 23.3 | (38.5) | (173.7) |
| Engineering Business | 4.2 | 11.1 | 26.0 | (1.2) | 4.0 | 20.0 | (5.4) | (7.1) | (6.0) |
| Trading Business | 11.5 | 25.6 | 55.9 | 21.1 | 35.0 | 55.0 | 9.6 | 9.4 | (0.9) |
| Adjustments | (0.0) | (2.0) | (0.9) | 0.4 | (4.0) | (5.0) | 0.4 | (2.0) | (4.1) |
| Segment Profit (A+B) | 85.4 | 193.2 | 404.8 | 113.4 | 155.0 | 220.0 | 28.0 | (38.2) | (184.8) |

Business Environment and Earnings in the first Half of FY2022



- **The current business environment has been significantly worse** than the previous fiscal year when the steel market was strong.
 - ✓ Despite zero-COVID policy constraints on economic activity, maintaining high steel production in China has led increasing in inventory and a falling global steel market.
 - ✓ Further rising commodity prices due to the Ukraine situation and a sharp depreciation of the yen.
- Despite severe business environment, **initiatives for rising steel price are expected to reach significant level in the first half of FY2022.**
Continuing initiatives for improving earnings in the second half and beyond.

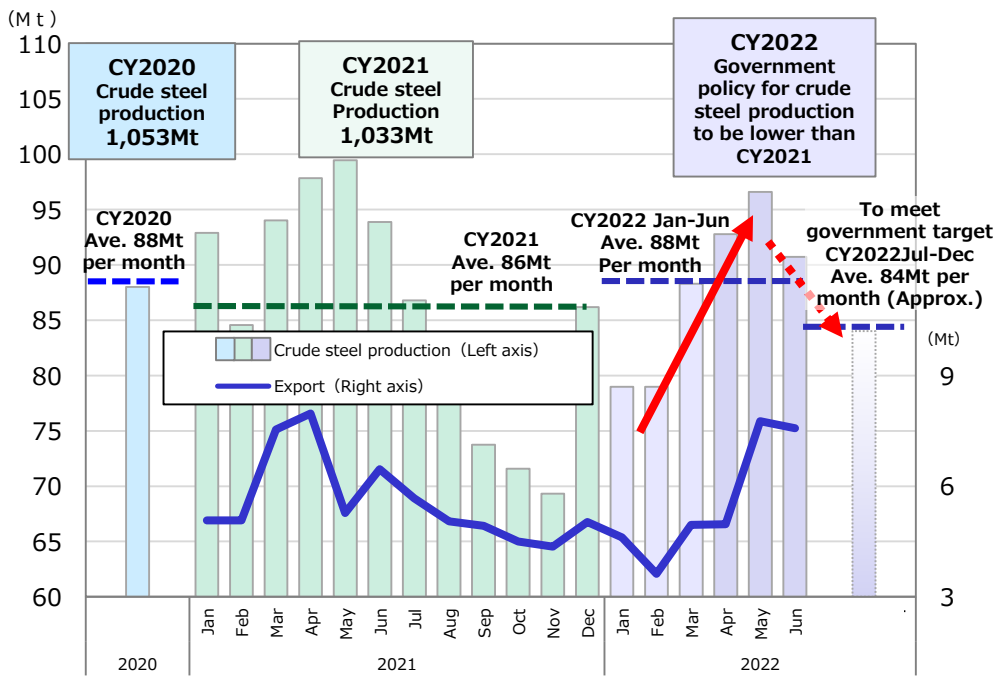


Trend of Supply-Demand in China

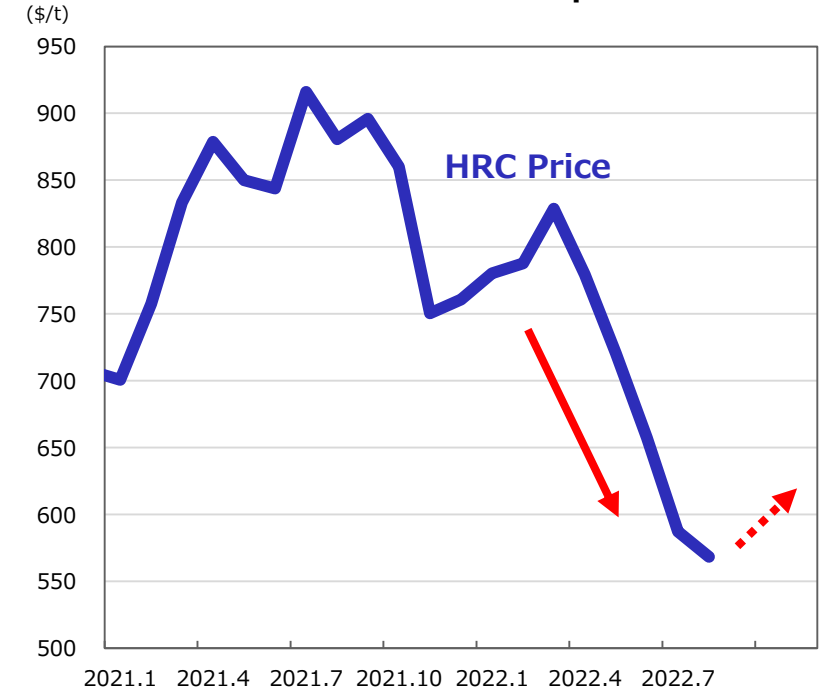


- In the first half of CY2022, crude steel production continued to increase in anticipation to the Chinese government's economic stimulus measures.
The steel market in China deteriorated and exports increased due to **sluggish domestic steel demand affected by constraints on economic activity due to zero-COVID policy.**
- The Chinese government keeps its policy of curbing crude steel production. Therefore crude steel production in the second half of CY2022 is **expected to be reduced.**
 The domestic steel demand and steel market are **expected to recover due to the Government's economic stimulus measures.**

China : Crude steel production and Exports



China : Steel market price



※HRC Price : Average price in 5 cities in China

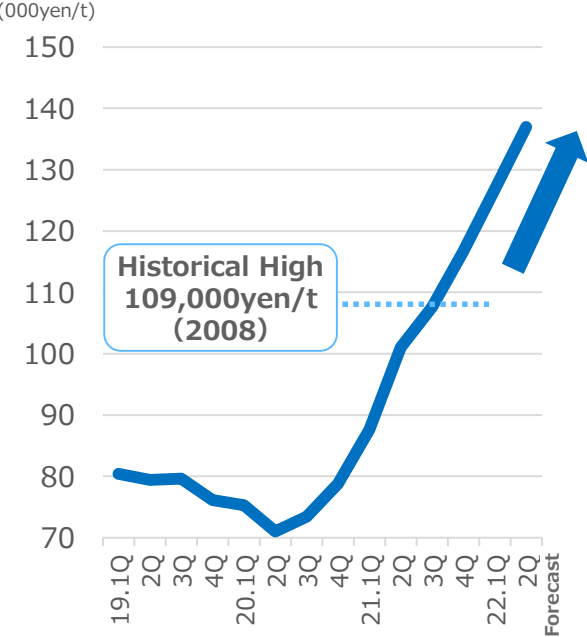


Initiatives for Improving Sales Price in the first Half of FY2022

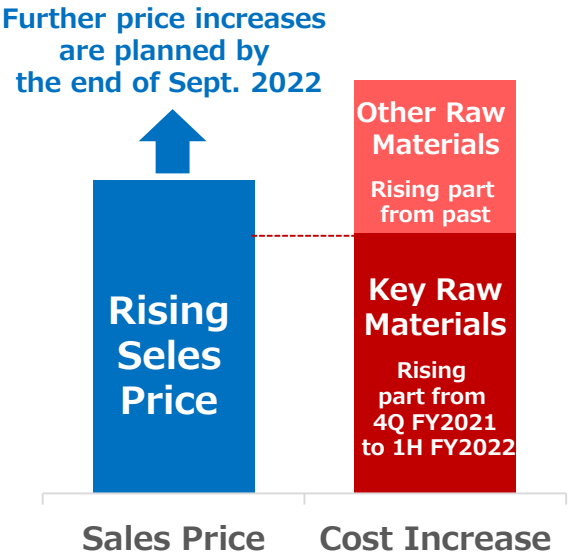
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- In order to achieve the target of the mid-term plan –Shifting Focus from Quantity to Quality–, we have made further efforts to proceed with the price improvement initiatives.
- **Reflections of key raw material cost to sales price are expected to realize without delay, including the impact of depreciation of the yen.**
Reflections of other raw material cost are also expected to proceed at a certain level but it is not sufficient. It is necessary to continue making efforts.
- We will continue to improve sales price to reach the target of the mid-term plan (Per-ton profit 10,000yen/ton)

Average Sales Price (000yen/t)



Progress in Rising Price in the 1st Half of FY2022



Initiatives to Improve our Sales Price

- ◆ **Quick reflection of raw material cost to sales price**
 Make effort to quickly and steadily pass on the cost increase of key raw materials to the sales prices.
- ◆ **Overhaul of extra pricing**
 Already realized some part of extra revision. Accelerate overhaul to modify the extra pricing which is inappropriate to the current status.
- ◆ **Sales price improvement to the sustainable level**
 Improve sales prices to the sustainable level even among the long-term/continuous contracts if the margin is not enough.

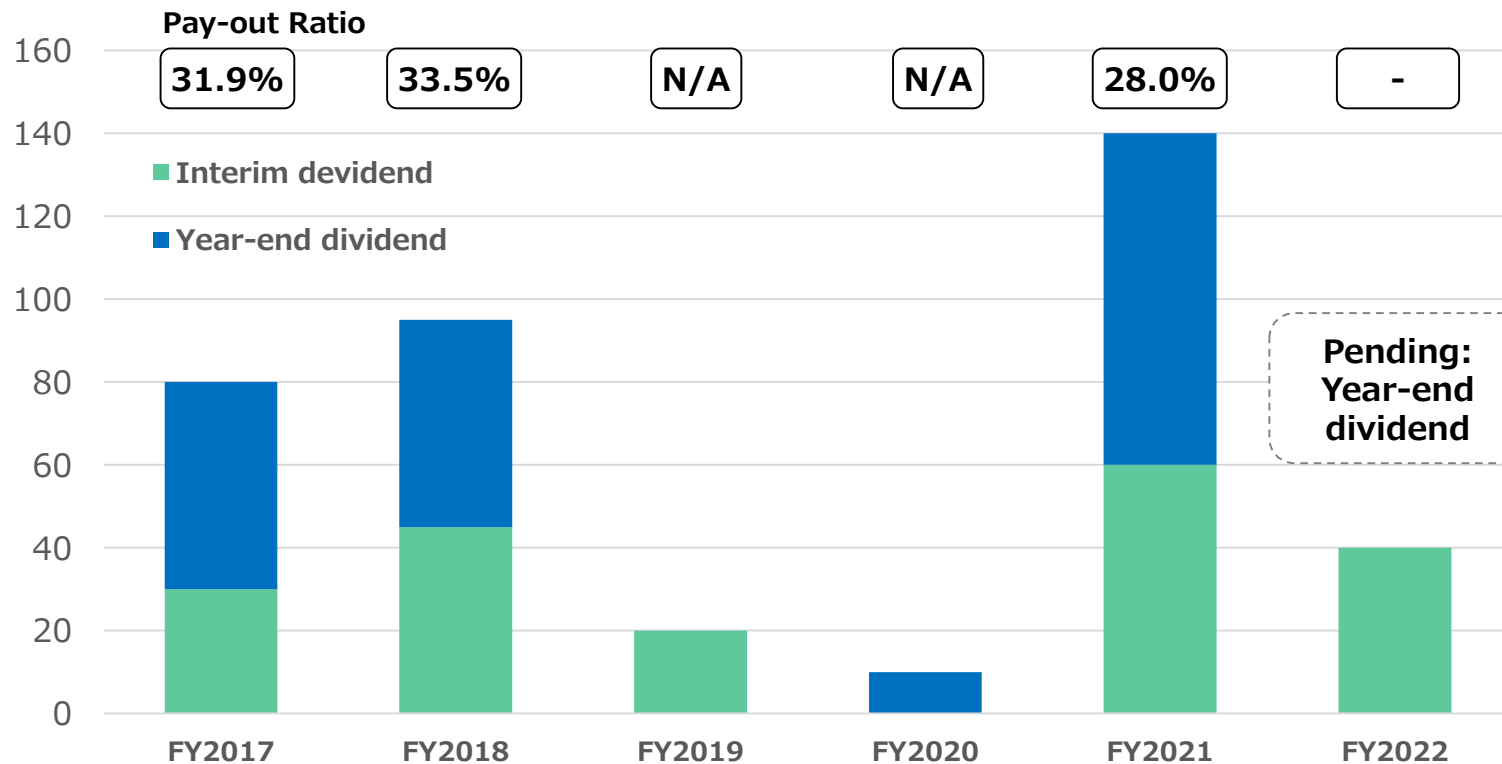
Dividends



Dividend

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- JFE Holdings has decided to pay an interim dividend of **40 yen per share** at its Board of Directors.
- A decision regarding the year-end dividend has been postponed while the company carefully monitors its ongoing performance.



JFE Steel

**Financial Results for First Quarter of
Fiscal Year 2022 and
Financial Forecast for Fiscal Year 2022**

Financial Forecast for Fiscal Year 2022

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| | Unit | FY2021 | | FY2022 Forecast | | | | | Change Year-on-Year | |
|--|-------------|--------|-----------|-----------------|--------------|----------------|----------------|-----------------|---------------------|------------|
| | | 1Q | Full year | 1Q | 2Q | 1H | 2H | Full year | 1Q | Full year |
| Revenue | billion yen | 638.5 | 3,173.4 | 932.6 | 1,042.4 | 1,975.0 | 2,125.0 | 4,100.0 | 294.1 | (926.6) |
| Segment Profit | billion yen | 69.7 | 323.7 | 93.0 | 27.0 | 120.0 | 30.0 | 150.0 | (23.3) | (173.7) |
| Excluding Inventory Valuation etc.* | billion yen | 25.7 | 129.7 | (230) | 34.0 | 11.0 | 17.0 | 28.0 | (48.7) | (101.7) |
| Crude Steel (Standalone) | Mt | 6.25 | 25.88 | 6.43 | Approx. 6.50 | Less than 13.0 | Less than 13.0 | Less than 26.00 | 1.8 | — |
| Crude Steel (Consolidated) | Mt | 6.59 | 27.26 | 6.77 | Approx. 6.90 | Approx. 13.70 | / | | 1.8 | / |
| Shipment (Standalone) | Mt | 5.26 | 22.38 | 5.54 | Approx. 6.00 | Approx. 11.50 | | | 2.8 | |
| Export Ratio on Value Basis (Standalone) | % | 43.2 | 45.5 | 48.5 | Approx. 47 | Approx. 48 | | | 5.3 | |
| Average Sales Price (Standalone) | 000 yen / t | 87.6 | 103.7 | 126.7 | Approx. 134 | Approx. 130 | | | 39.1 | |
| Exchange Rate | ¥/\$ | 109.8 | 112.1 | 126.5 | Approx. 136 | Approx. 131 | Approx. 135 | Approx. 133 | 16.7 | Approx. 21 |

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

23.3bn. Increase in JFE Steel's Segment Profit (FY2021.1Q (Actual) vs. FY2022.1Q (Actual))

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(billion yen)

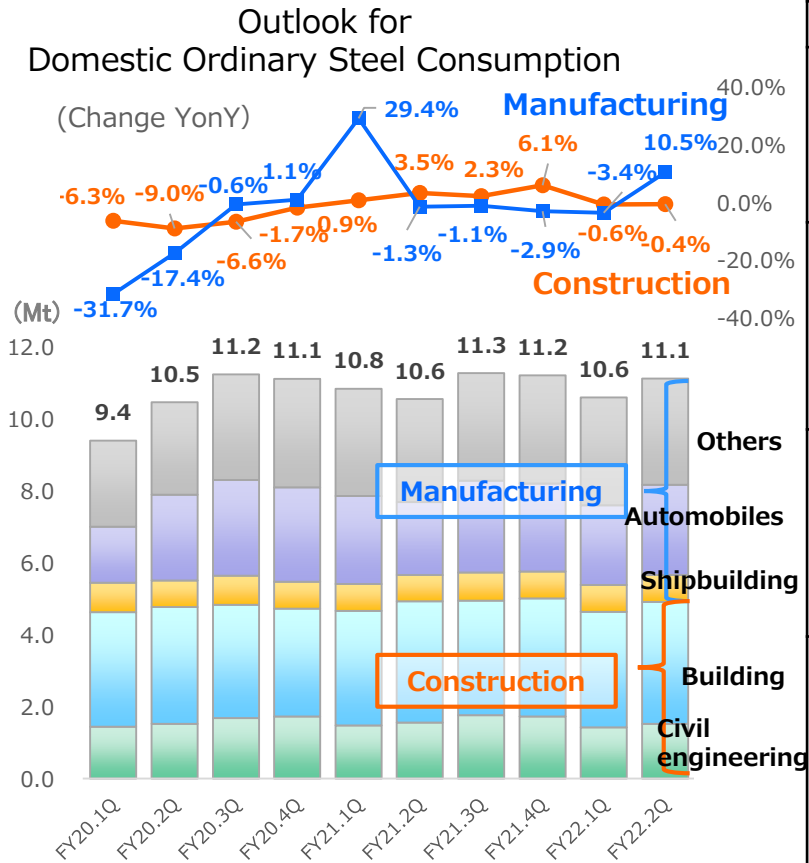
| JFE Steel | FY2021 | | | | | FY2022 | Change FY2021.1Q → FY2022.1Q |
|----------------|-------------|------|------|------|-----------|-------------|---------------------------------------|
| | 1Q | 2Q | 3Q | 4Q | Full Year | 1Q | |
| Segment Profit | 69.7 | 88.8 | 93.5 | 71.7 | 323.7 | 93.0 | +23.3 |

| | | |
|-----------------------------------|---------------|--|
| 1. Cost | +5.0 | • Capital investment effect etc. |
| 2. Volume and Mix | +1.0 | |
| 3. Sales and Raw materials | ±0.0 | |
| 4. Inventory valuation | +72.0 | <ul style="list-style-type: none"> • Inventory valuation+33.0 (+28.0→+61.0) • Carry over of raw materials +22.0 (+15.0→+37.0) • Foreign exchange valuation +17.0 (+1.0→+18.0) |
| 5. Others | (54.7) | • Foreign exchange effects on trade -20.0 etc. |



Current Business Environment (Domestic)

- In the automotive sector, **the decline in auto production has been prolonged** due to the remaining constraints on parts supply.
- The COVID-19 has gradually subsided in China, the supply chain activity level is expected to gradually recover toward the second half of FY2022, and **steel supply and demand is expected to become tight.**
- It is necessary to carefully monitor **whether soaring prices will delay demand** in each sector.



Source: Ministry of Economy, Trade and Industry, "Outlook for Steel Consumption" 14 July 2022. (FY2021.3Q and after is estimated results)

| | Trends |
|-------------------|---|
| Auto-mobile | <ul style="list-style-type: none"> Although product demand itself is firm, production activities have been restrained due to supply constraints of components such as semiconductors. Supply constraints are expected to ease gradually toward the second half of FY2022. |
| Shipbuilding | <ul style="list-style-type: none"> Demand for steel products will remain firm but will only recover moderately. Maritime trade volume and charter fees remain firm. Domestic shipbuilding companies have recovered their contract balance, but due to rising material costs and labor shortages, they build with their current capabilities. |
| Building | <ul style="list-style-type: none"> Steel demand is expected to recover moderately. Demand for non-residential products remain strong, supported by demand from distribution warehouses and semiconductor plants. Housing use is expected to decline slightly due to the suspension of housing acquisition support measures and rising material costs. |
| Civil engineering | <ul style="list-style-type: none"> Steel demand is expected to decrease slightly from the previous year. In the public sector, activity levels are expected to be maintained at a high level by securing a high level of budget, but steel consumption is expected to decrease slightly from the previous year. Activity levels in the private sector are expected to rise on the back of a recovery in capital investment. |

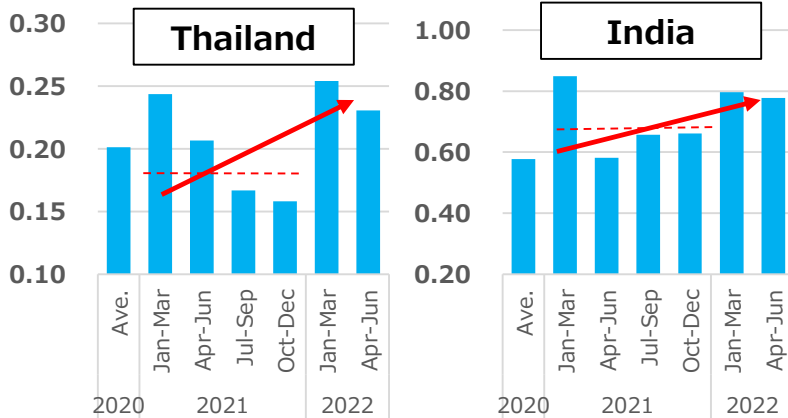
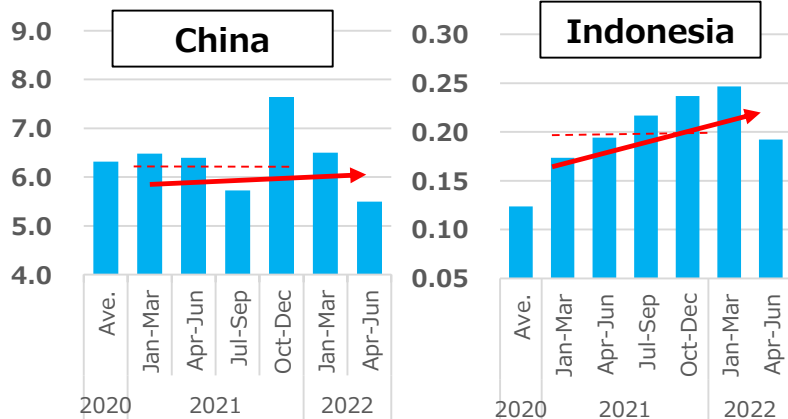
Current Business Environment (Overseas)



- As the global economy recovers, **overseas demand for steel products continues to recover.**
- **Demand for steel products is currently weak**, but due to the end of the rainy season in Asia and economic stimulus measures by the Chinese government, **demand for steel products is expected to recover a certain degree, and market conditions are expected to improve.**

Automobile Sales by Quarter

(million units)



Real GDP Growth Forecast in 2022

(Arrows indicate changes from the previous forecast)

| | World | US | China | India | ASEAN-5 |
|--------------------|--------|--------|--------|--------|---------|
| 2021 Actual | 6.1% | +5.7% | 8.1% | 8.7% | +3.4% |
| Apr. 2022 Forecast | 3.6% | 3.7% | 4.4% | 8.2% | 5.3% |
| Jul. 2022 Forecast | 3.2% → | 2.3% → | 3.3% → | 7.4% → | 5.3% → |

Source: IMF World Economic Outlook Update April 19, 2022, July 26, 2022

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

Steel Export Trend

| Trend by Country | |
|------------------|---|
| China | <ul style="list-style-type: none"> • Exports increased due to the timing gap of increased production in anticipation of economic stimulus measures and recovery in domestic demand. • The government's policy (Control of crude steel and economic stimulus measures) and the recovery of domestic demand is monitored carefully. |
| India | <ul style="list-style-type: none"> • Exports to Europe decreased due to a decline in demand and falling market conditions, in addition to the non-demand period caused by the rainy season. As a result, exports to Southeast Asia increased. • This trend is expected to end after the rainy season. |
| Russia | <ul style="list-style-type: none"> • Steel products, which had nowhere to go due to economic sanctions, have flowed into Turkey and Middle and Near East at low prices, worsening the supply and demand of steel products and the steel market in each country. |

Raw materials (Steel Business)

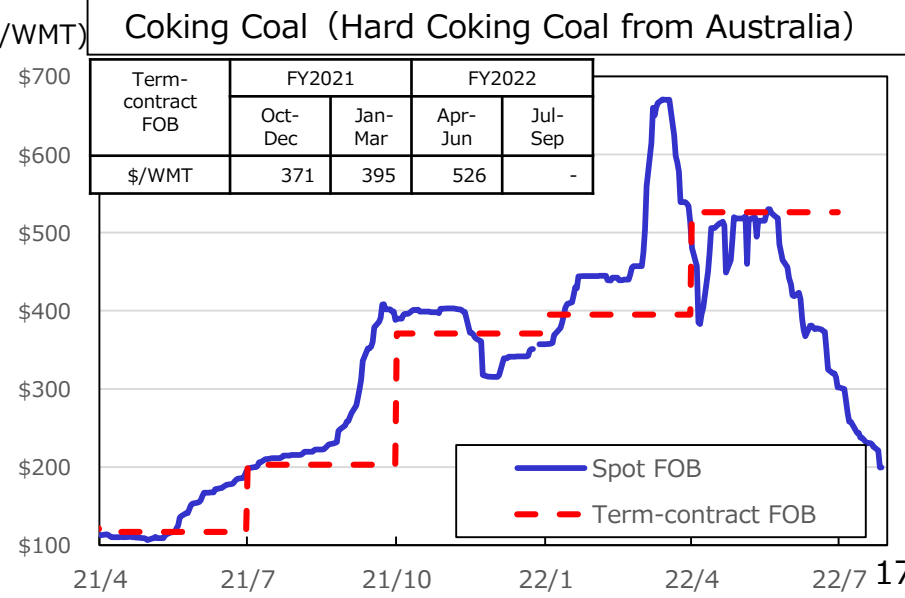
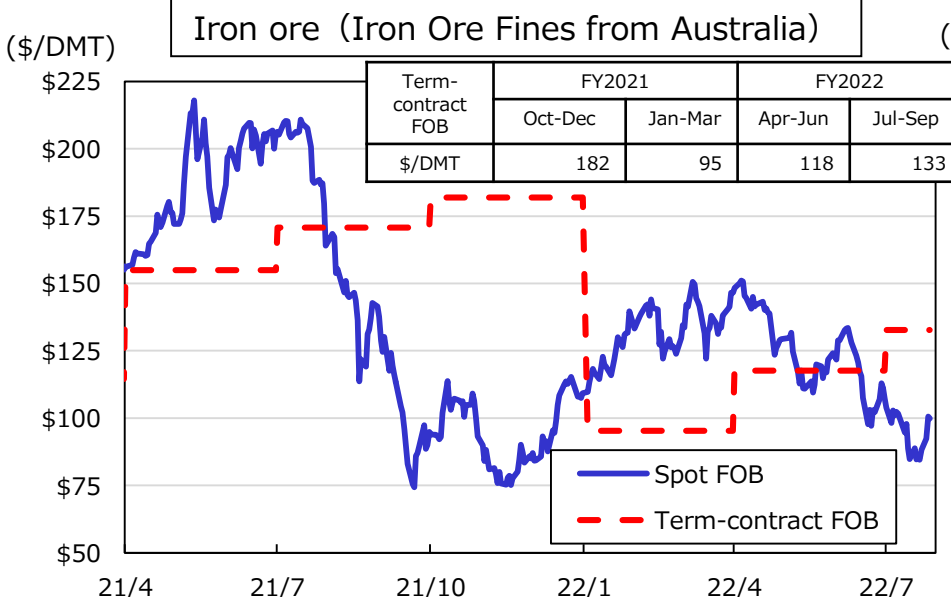


■ Key raw material

- Iron ore remained **weak due to sluggish demand for steel products** in China.
- Coking coal prices **are on a downward trend from their recent peak** due to the recent deterioration in overseas steel prices.
- As the supply and demand of steel products tightens due to the Chinese government's economic stimulus measures, **the raw material market is expected to rise from the current level by the second half of FY2022.**

■ Metal and scrap

- **Almost all metal prices rose sharply** due to tight supply and demand for alloy iron, which is highly dependent on Russia and Ukraine, as well as a rise in electricity prices due to a rise in the fuel market. Although the market is currently on a downward trend, it is expected to **remain in the high range.**



173.7bn. Decrease in JFE Steel's Segment Profit (FY2021 (Actual) vs. FY2022 (Forecast))

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| JFE Steel | FY2021 (Actual) | FY2022 (Forecast) | Change (billion yen) |
|----------------|--------------------|----------------------|-------------------------|
| Segment Profit | 323.7 | 150.0 | (173.7) |

| | | |
|---|----------------|---|
| 1. Cost | +10.0 | <ul style="list-style-type: none"> • Cost reductions +23.0 • Chiba No.6 blast furnace refurbishment -13.0 |
| 2. Volume and Mix | ±0.0 | |
| 3. Sales and Raw materials | +70.0 | <ul style="list-style-type: none"> • Improved spreads due to higher selling prices (despite more costly raw materials and metals) |
| 4. Foreign exchange effects on trade | (100.0) | <ul style="list-style-type: none"> • 1USD=112.1yen→1USD=133yen (about) |
| 5. Inventory valuation | (72.0) | <ul style="list-style-type: none"> • Inventory valuation-85.0(+160.0→+75.0) • Carry over of raw +7.0 (+23.0→+30.0) • Foreign exchange valuation +6.0 (+11.0→+17.0) |
| 6. Others | (81.7) | <ul style="list-style-type: none"> • Group companies -45.0, etc. |

Impact of the depreciation of the yen(steel business)



- Due to soaring raw material prices and falling overseas steel prices, **the foreign currency balance of trade(imports and exports) is substantially overpaid.**
- The depreciation of the yen makes worse profits (A little less than less than 5bn. per 1 yen depreciation), but we **promote to reflect the impact of the depreciation of the yen to sales price** by improving sales prices in the domestic market.

Sales environment

Past

Improving export competitiveness of customers/JFE Steel



Now

Parts supply constraints in the automotive sector and weak overseas steel market



Manufacturing cost

A small portion of imported raw materials in manufacturing costs
=> Small impact of FOREX movements



Due to the soaring prices, a big portion of imported raw materials in manufacturing costs
=> Heavy impact of FOREX movements

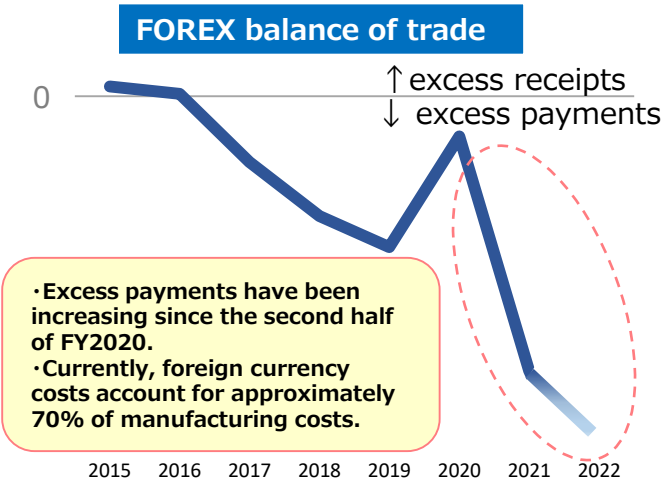
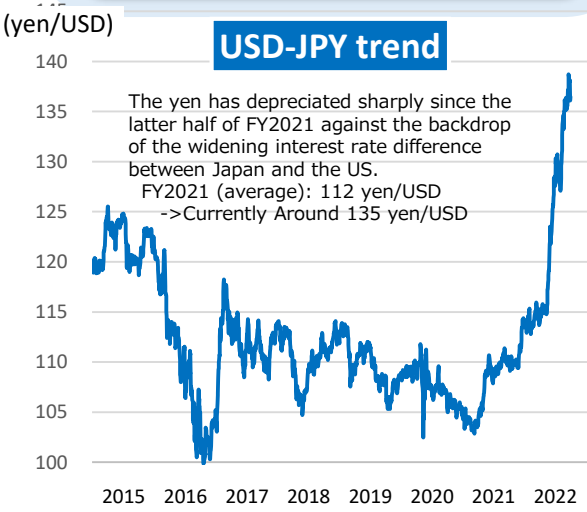


Profit and Loss※1

Valuation : positive
effects on trade : neutral
(imports and exports)



Valuation : positive
effects on trade : neutral
(imports and exports)



※1 **Valuation** : Translational FOREX Impact concerning foreign currency assets, liabilities and overseas Gr companies' profit.

effects on trade : Impact of FOREX movements on foreign currency trade (imports and exports) on earnings.



Trend of profit for subsidiary and affiliated companies in steel business

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➤ Profit of subsidiary and affiliated companies in FY2022 is expected to be **second high** due to initiatives of subsidiary and affiliated companies to improving their profit, despite the severe business environment

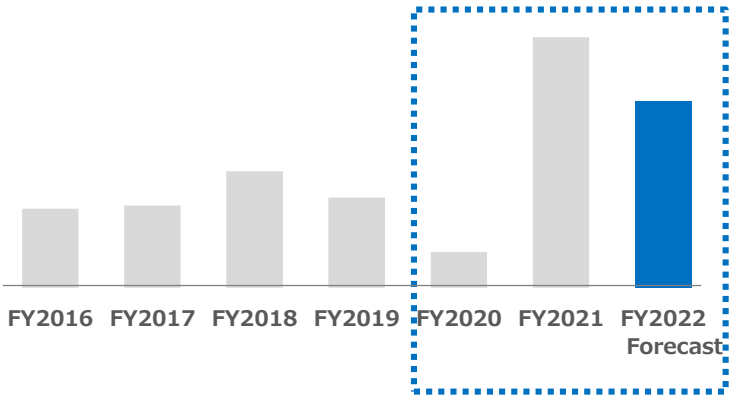
Domestic subsidiary and affiliated companies

- **Allocation of management resources to growth areas**
Feb. 2022: Integrating JFE Mineral, Mizushima Ferroalloy, and JFE Material
Aug. 2022: JFE Container to be JFE Steel's wholly-owned subsidiary
- **Expansion of outside profit businesses not dependent on steel business**

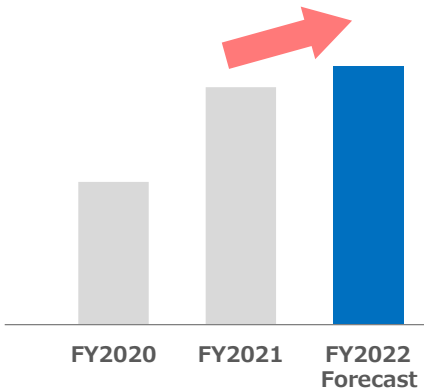
Overseas subsidiary and affiliated companies

- **Expanding vertical specialization business, stable operation**
CSI(US),GJSS(China),JSGT(Thailand),JSGI(Indonesia),NJSM(Mexico) etc.
- **Earnings of integrated production business in high-demand market**
JSW(India), FHS(Vietnam)

Profit of domestic and overseas subsidiary and affiliated companies in steel business



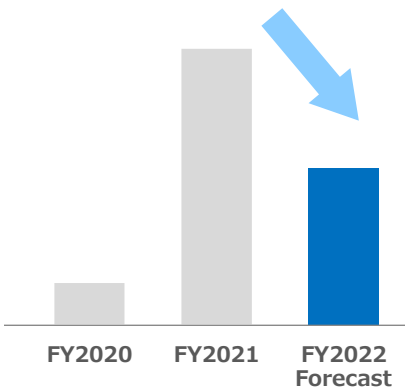
Profit of domestic subsidiary and affiliated companies



FY2021 vs FY2022

Profit is expected to increase from previous fiscal year mainly raw material and resource subsidiaries, which is due to rising raw material prices.

Profit of overseas subsidiary and affiliated companies



FY2021 vs FY2022

Profit is expected to remain high, although profit is expected to decrease from previous fiscal year mainly JSW and CSI, which is due to the falling global steel market.

JFE Engineering

Financial Forecast for Fiscal Year 2022



Financial Forecast for Fiscal Year 2022



Current Business Environment/Overview of Financial Status

- Domestic demand both in the **environment & energy sector** and **infrastructure sector** is expected to remain solid.
- Segment profit is expected to decrease by **¥6.0bn. year-on-year to ¥20.0bn.**, due to **rising prices of materials and equipment**.

Financial Forecast

| (billion yen) | FY2021 Actual | | FY2022 Forecast | | Change | |
|----------------|---------------|-----------|-----------------|--------------|--------|-----------|
| | 1 H | Full Year | 1 H | Full Year | 1 H | Full Year |
| Orders | 252.3 | 505.8 | 310.0 | 550.0 | 57.7 | 44.2 |
| Revenue | 229.2 | 508.2 | 230.0 | 520.0 | 0.8 | 11.8 |
| Segment Profit | 11.1 | 26.0 | 4.0 | 20.0 | (7.1) | (6.0) |

<1H>

- Orders +57.7 Increase in large-scale orders in carbon-neutral area
- Segment profit (7.1) Construction mix and rising price of material and equipment.

<Full Year>

- Orders +44.2 Increase in overseas projects due to changes in contract schedule.
- Revenue +11.8 Construction mix
- Segment profit (6.0) Rising price of material and equipment.

JFE Shoji
Financial Forecast
for Fiscal Year 2022



Financial Forecast for Fiscal Year 2022

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Current Business Environment/Overview of Financial Status

- In the first half of FY2022, segment profit is expected to **increase year-on-year for both JFE Shoji itself and group companies** due to **strong sales of steel products and raw materials** in Japan and overseas.
- Full year segment profit is expected to be **¥55.0bn.**, the same as previous fiscal year.

| (billion yen) | FY2021 Actual | | FY2022 Forecast | | Change | |
|----------------|---------------|-----------|-----------------|----------------|--------|-----------|
| | 1 H | Full Year | 1 H | Full Year | 1 H | Full Year |
| Revenue | 544.4 | 1,231.7 | 750.0 | 1,470.0 | 205.6 | 238.3 |
| Segment Profit | 25.6 | 55.9 | 35.0 | 55.0 | +9.4 | (0.9) |

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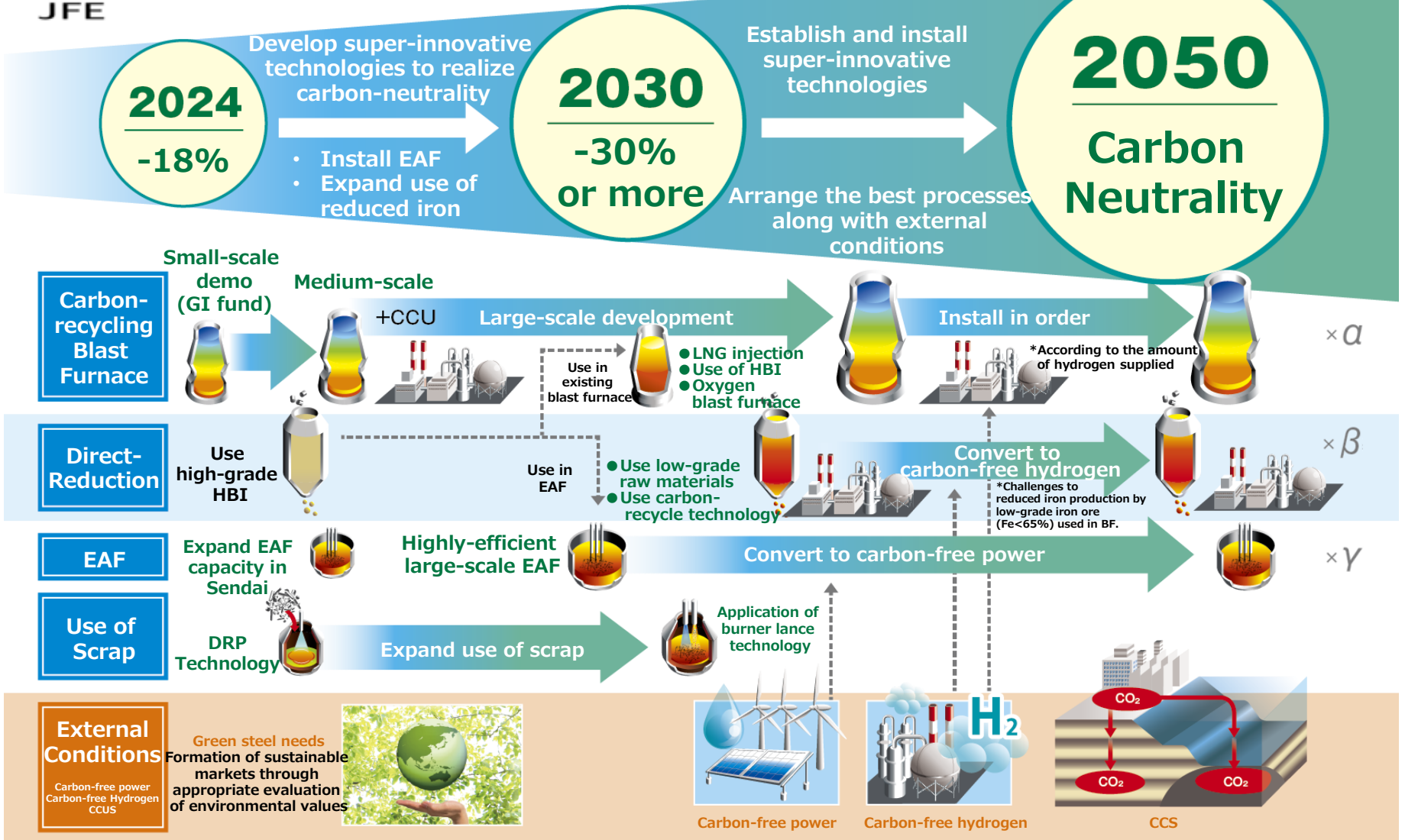
- Segment Profit +9.4 Domestic and overseas markets are expected to be solid, especially overseas businesses in northern America are expected to proceed successfully.

Topics

Initiatives to achieve carbon neutrality
in Steel business

**JFE Steel Carbon Neutral Strategy Briefing
scheduled for September 1**

Overview of Process Conversion toward 2050



Promote technology development on a multi-track basis and introduce proven technologies sequentially. Aim to achieve carbon neutrality by applying proven technologies to steelworks with optimal combination of technologies.

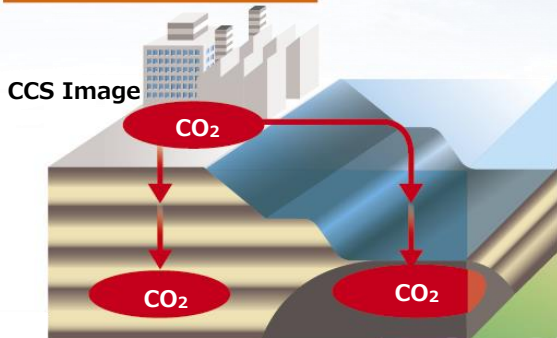


JFE

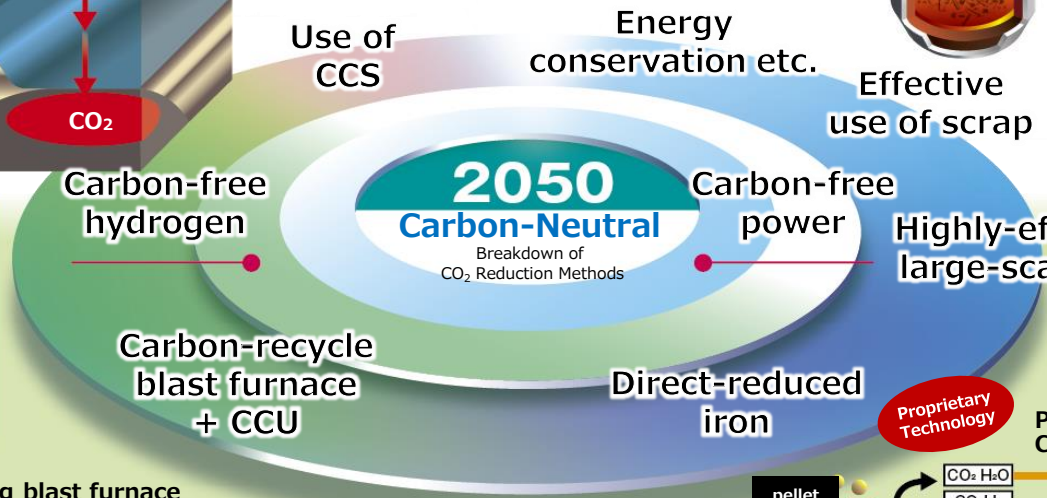
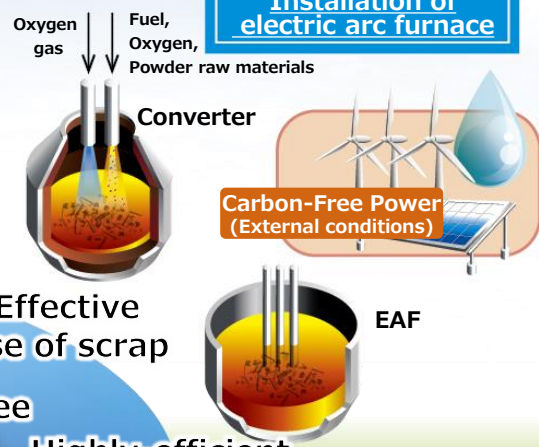
2050

Carbon-Neutral Vision

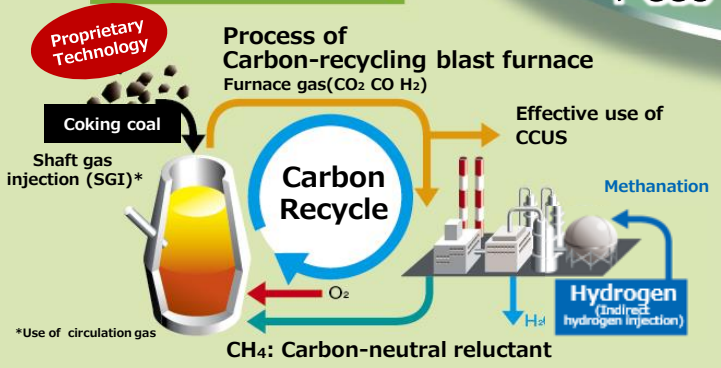
Immobilization
Use of CCS
(External conditions)



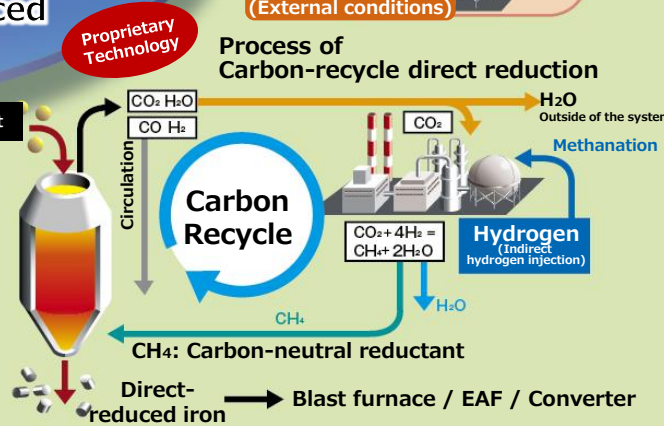
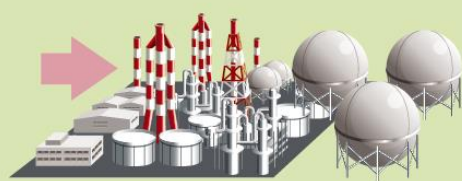
Reduce
Expansion of energy conservation facilities
Expansion of scrap use
Installation of electric arc furnace



Wise use
Expansion of application of carbon-recycle technologies
(Application to direct reduction)



Expand use of CCU through cooperation with industrial complexes



Aim to achieve carbon neutrality in the steel business by 2050 through a combination of "reduce," "Wise use," and "Immobilization"

Construction of Carbon-Recycle Blast Furnace and Coke Oven

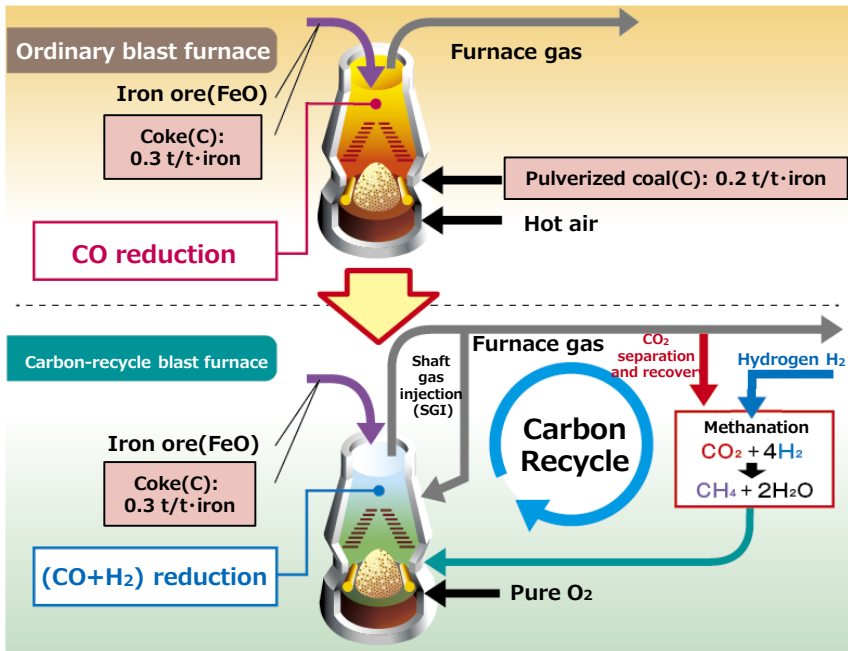
Carbon-Recycle Blast Furnace (Project of Green Innovation Fund)

Emission reduction by carbon-recycle blast furnace

CO₂ from blast furnace is converted into recycle-methane by using hydrogen, through methanation.

Coexistence of heat compensation and methane quantity maximization by oxygen utilization and SGI

Develop the technology which reduces CO₂ emission 50% in steelmaking proses



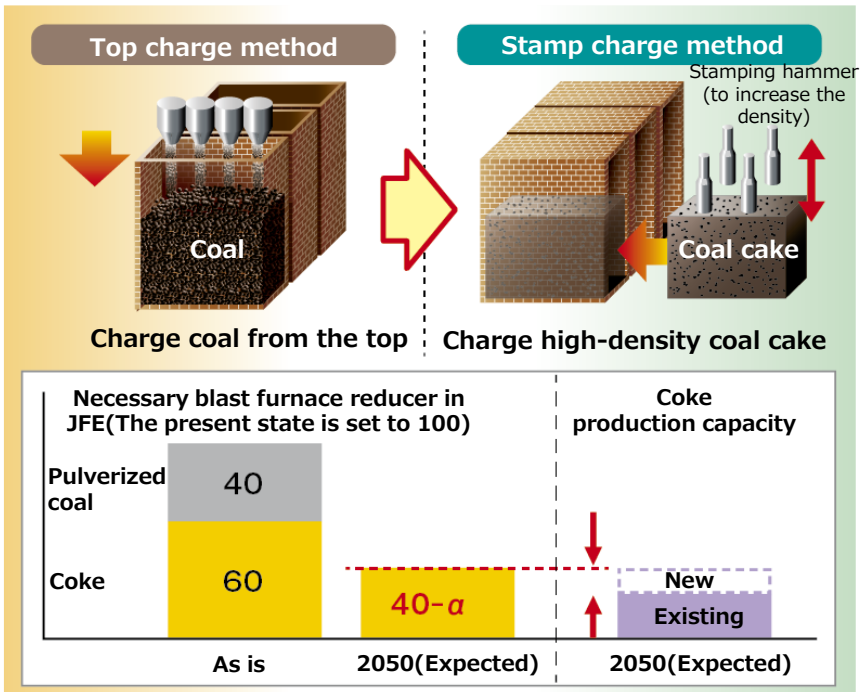
- Install area: Chiba district (150m³), Operation start: 2025
- Install each technology in order according to H₂ supply after scale-up test

Construction of new coke ovens

- Reduce CO₂ emission by installing high efficient new coke oven
- Satisfy necessary amount of coke to be used after carbon-recycle blast furnace

CO₂ emission reduction
160K ton /year

Production efficiency improves 16% by installing large stamp charge coke oven
 Reduce dust generation at input/output timing



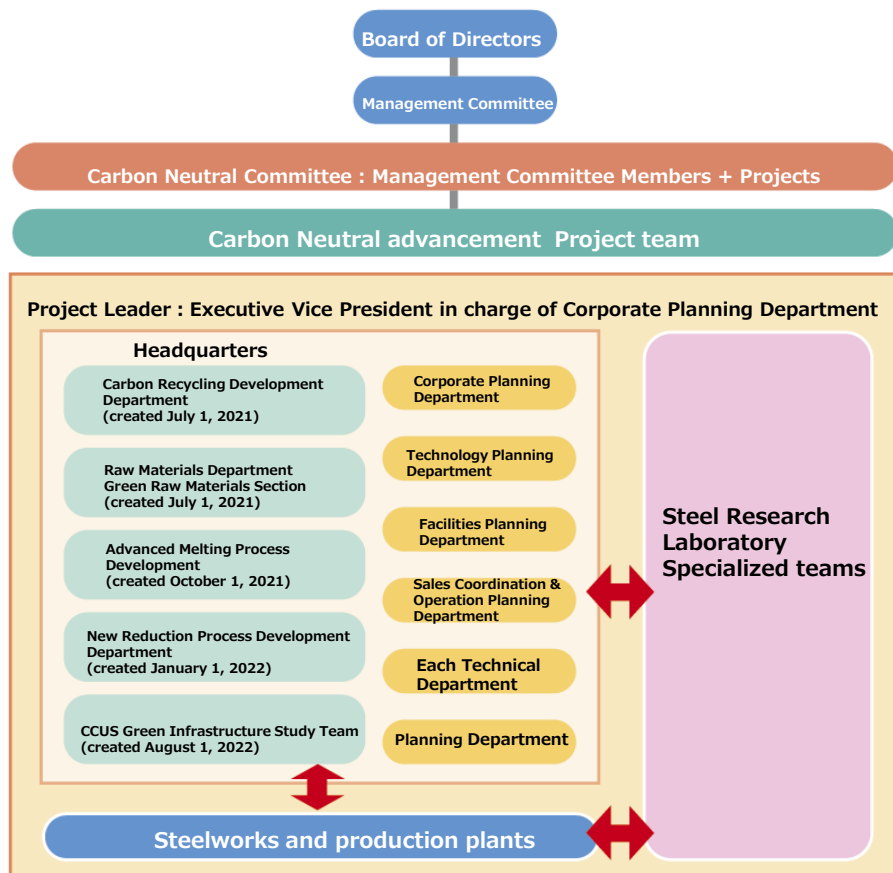
- Install area: Fukuyama district
- Operation start: 6A oven 2025. 6B oven is under planning.

Framework for CCUS Green Infrastructure Study

- **CCUS(※1) Green Infrastructure Study Team** was established in the Carbon Neutral Promotion Project Team.
- Carry out existing research and development and promote studies on the use of CO₂ separation, capture, utilization and storage technologies in collaboration with industrial complexes and companies.

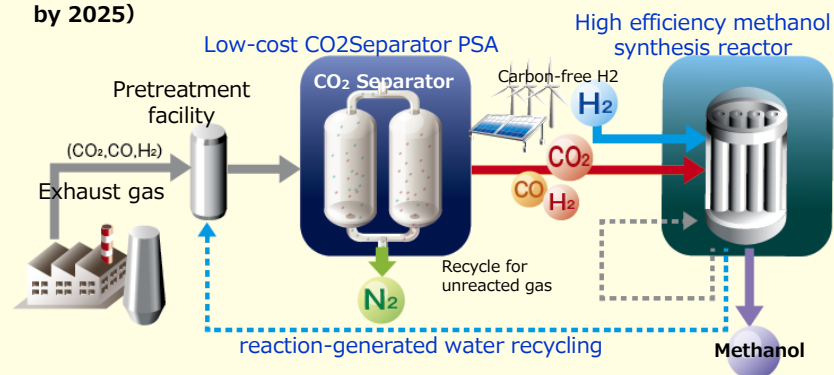
※1) CCUS: Carbon dioxide, Capture, Utilization and Storage

Framework



Main initiatives※2

- **Develop an Optimal System for Methanol Synthesis using CO₂**
(Operation scheduled for 2023, completion of demonstration testing by 2025)



- **Research and Development of Innovative CO₂ Fixation Technology by High-Speed Mass Carbonation of Steelmaking slag**
(Operation scheduled for 2024, completion of commercialization test by 2025)



※2) This research and development is conducted as a commissioned project "Development of technologies for carbon recycling, next generation thermal power generation/Development of technologies for reducing and effectively utilizing CO₂ emissions" publicly offered by NEDO.

Appendix(1)

Profit/Loss Analysis



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% |

Main Financial Data and Performance & Profitability Targets

JFE

| | | 7 th mid-term business plan FY2024 | FY2020 Actual | FY2021 Actual | FY2022 Forecast |
|---------------------|---|--|---------------------------------|----------------------------------|---|
| Consolidated | Business profit | ¥320.0 billion | ¥-12.9 billion | ¥416.4 billion | ¥235.0 billion |
| | Profit attributable to owners of the parent | ¥220.0 billion | ¥-21.8 billion | ¥288.0 billion | ¥140.0 billion |
| | ROE | 10% | -1.3% | 15.7% | - |
| | Debt/EBITDA | About 3x | 8.1x | 2.8x | - |
| | D/E*1 | About 70% | 93.2% | 80.8% | - |
| Operating companies | Steel business Profit per ton*2 Segment profit | 10,000 yen/ton ¥230.0 billion | -3000 yen/ton ¥65.4 billion | 14,000 yen/ton ¥323.7 billion | 6,000 yen/ton ¥150.0 billion |
| | Engineering business Segment profit Revenue | ¥35.0 billion ¥650.0 billion | ¥24.0 billion ¥485.7 billion | ¥26.0 billion ¥508.2 billion | ¥20.0 billion ¥550.0 billion |
| | Trading Business Segment profit | ¥40.0 billion | ¥20.0 billion | ¥55.9 billion | ¥55.0 billion |
| | Payout ratio | 7 th mid-term business plan Around 30% | - | (140 yen) | (interim: 40yen) |

*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)

21.3bn. Increase in JFE Steel's Segment Profit (FY2021.4Q (Actual) vs. FY2022.1Q (Actual))

JFE

| JFE Steel | FY2021 | | | | | FY2022 1Q | Change (billion yen) |
|----------------|--------|------|------|-------------|-----------|--------------|----------------------------|
| | 1Q | 2Q | 3Q | 4Q | Full Year | | |
| Segment Profit | 69.7 | 88.8 | 93.5 | 71.7 | 323.7 | 93.0 | +21.3 |

1. Cost **±0.0**

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

3. Sales and Raw materials **(75.0)**

- Metal spread was deteriorated due to higher raw material and metal prices, despite improved steel prices.

4. Inventory valuation **+109.0**

- Inventory valuation +24.0 (+37.0→+61.0)
- Carry over of raw +74.0 (-37.0→+37.0)
- Foreign exchange valuation +11.0(+7.0→+18.0)

5. Others **(5.7)**

- Foreign exchange effects on trade -13.0, etc.

66.0bn. Decrease in JFE Steel's Segment Profit (FY2022.1Q (Actual) vs. FY2022.2Q (Forecast))

JFE

| JFE Steel | FY2022 Forecast | | | Change (billion yen) |
|----------------|-----------------|--------------|--------------|-------------------------|
| | 1Q(Actual) | 2Q(Forecast) | 1H | |
| Segment Profit | 93.0 | 27.0 | 120.0 | (66.0) |

1. Cost **±0.0**

2. Volume and Mix **+1.0**

3. Sales and Raw materials **+89.0**

- Prices of main raw materials and metals remained high, but spreads improved due to improved selling prices.

4. Inventory valuation **(123.0)**

- Inventory valuation-40.0(+61.0→+21.0)
- Carry over of raw-64.0 (+37.0→-27.0)
- Foreign exchange valuation -19.0(+18.0→-1.0)

5. Others **(33.0)**

- Foreign exchange effects on trade -10.0, etc.

45.2bn. Decrease in JFE Steel's Segment Profit (FY2021.2H (Actual) vs. FY2022.1H (Forecast))

JFE

| JFE Steel | FY2021 2H(Actual) | FY2022 1H(Forecast) | Change (billion yen) |
|----------------|----------------------|------------------------|-------------------------|
| Segment Profit | 165.2 | 120.0 | (45.2) |

1. Cost **±0.0**

2. Volume and Mix **(5.0)**

3. Sales and Raw materials **+22.0** • Improved spreads due to higher selling prices (despite more costly raw materials and metals)

4. Inventory valuation **+5.0** • Inventory valuation-19.0(+101.0→+82.0)
• Carry over of raw+17.0 (-7.0→+10.0)
• Foreign exchange valuation +7.0(+10.0→+17.0)

5. Others **(67.2)** • Foreign exchange effects on trade -40.0
• Group companies -36.0, etc.

90.0bn. Decrease in JFE Steel's Segment Profit (FY2022.1H vs. FY2022.2H)

JFE

| JFE Steel | FY2022 Forecast | | | Change (billion yen) |
|----------------|-----------------|-------------|-----------|-------------------------|
| | 1H | 2H | Full Year | |
| Segment Profit | 120.0 | 30.0 | 150.0 | (90.0) |

| | | |
|----------------------------|---------------|---|
| 1. Cost | ±0.0 | |
| 2. Volume and Mix | ±0.0 | |
| 3. Sales and Raw materials | +17.0 | <ul style="list-style-type: none"> Prices of main raw materials and metals remained high, but spreads improved due to improved selling prices. |
| 4. Inventory valuation | (96.0) | <ul style="list-style-type: none"> Inventory valuation-89.0 (+82.0→-7.0) Carry over of raw+10.0 (+10.0→+20.0) Foreign exchange valuation -17.0(+17.0→±0.0) |
| 5. Others | (11.0) | <ul style="list-style-type: none"> Foreign exchange effects on trade -9.0, etc. |

385.0bn. Decrease in JFE Steel's Segment Profit (FY2021.1H (Actual) vs. FY2022.1H (Forecast))

JFE

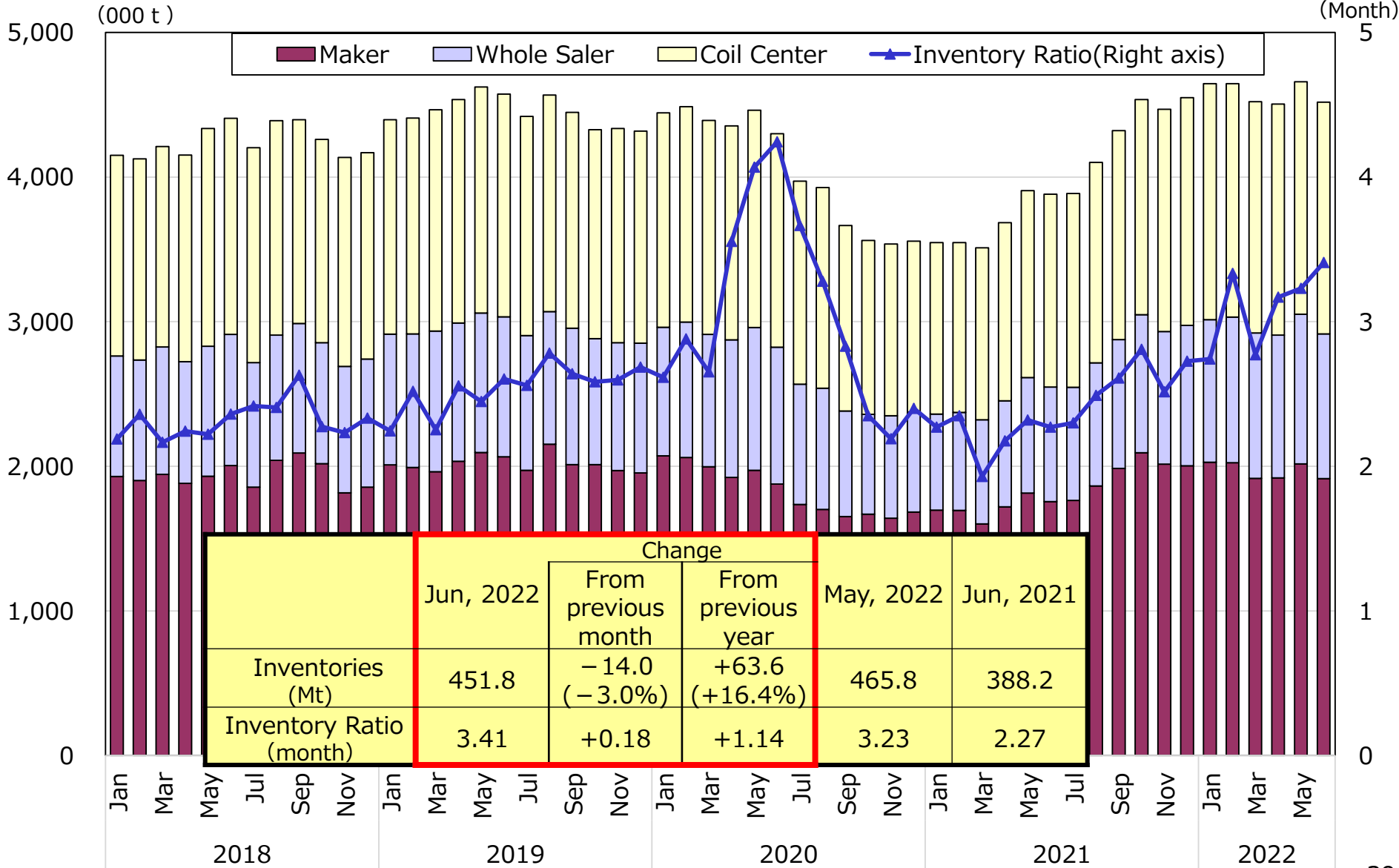
| JFE Steel | FY2021 1H(Actual) | FY2022 1H(Forecast) | Change (billion yen) |
|----------------|----------------------|------------------------|-------------------------|
| Segment Profit | 158.5 | 120.0 | (38.5) |

| | | |
|-----------------------------------|----------------|---|
| 1. Cost | +10.0 | • Capital investment effect etc. |
| 2. Volume and Mix | +5.0 | |
| 3. Sales and Raw materials | +51.0 | • Improved spreads due to higher selling prices (despite more costly raw materials and metals) |
| 4. Inventory valuation | +19.0 | • Inventory valuation+23.0 (+59.0→+82.0) • Carry over of raw-20.0(+30.0→+10.0) • Foreign exchange valuation +16.0(+1.0→+17.0) |
| 5. Others | (123.5) | • Foreign exchange effects on trade -50.0, etc. |

Appendix(2)
Business Environmental
Indicators, etc.

Domestic Market Environment

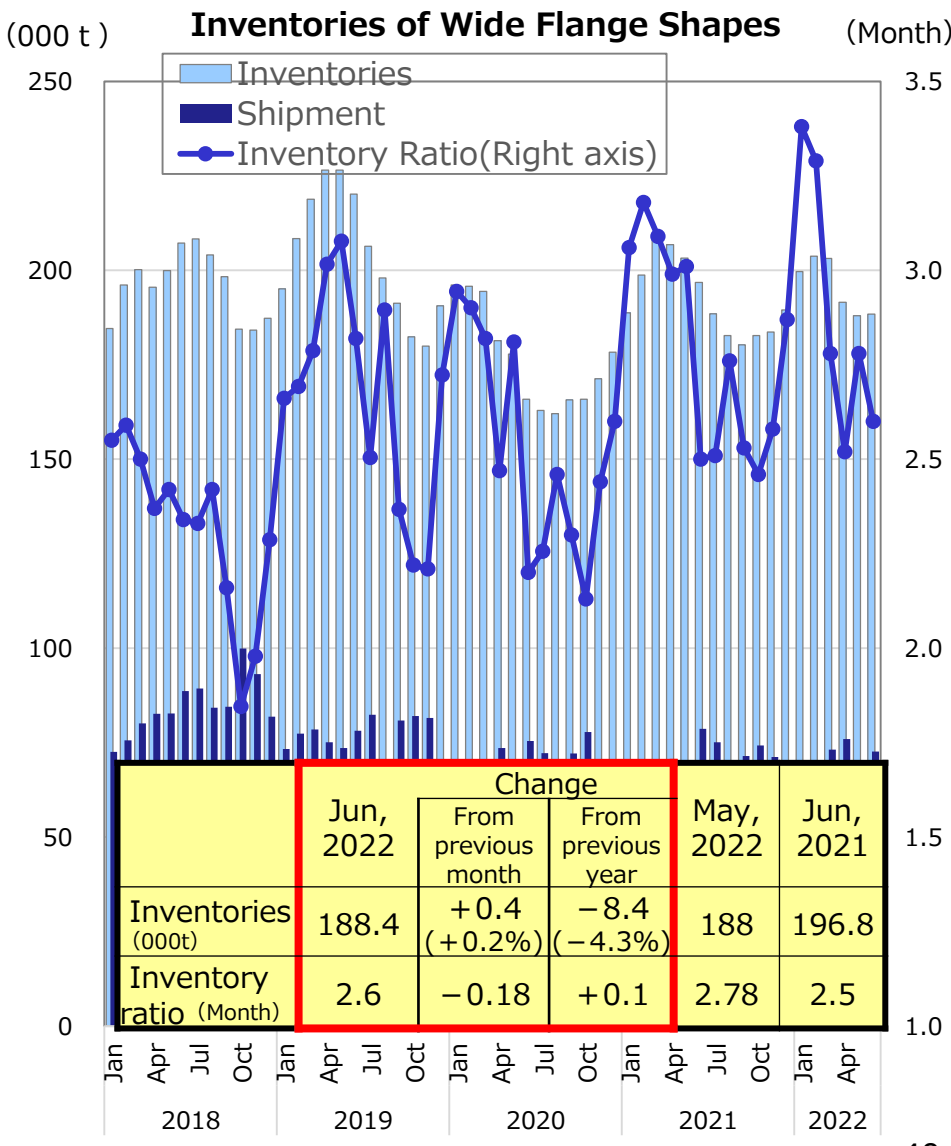
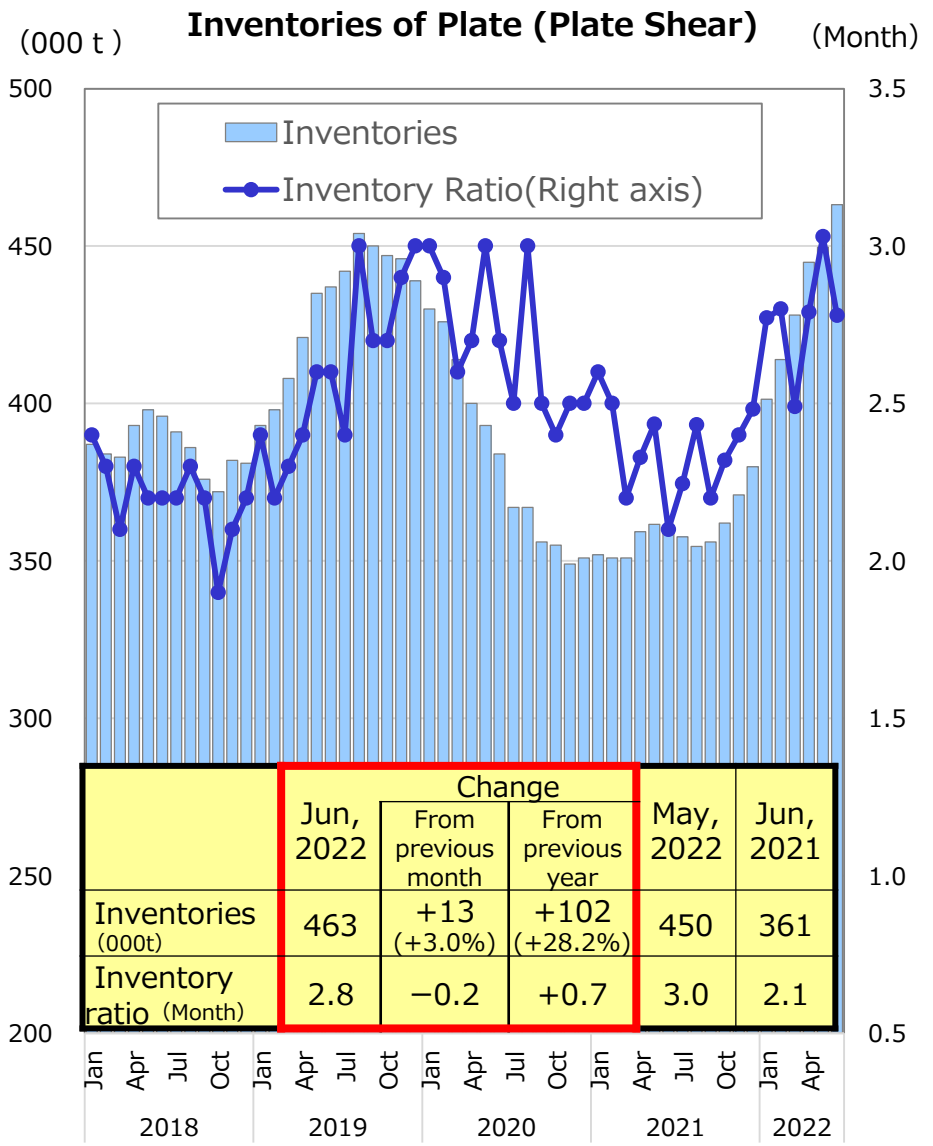
Combined Inventories of HR, CR and Coated Steel Sheet





Domestic Market Environment

Inventories of Plate (Plate Shear) and Wide Flange Shapes

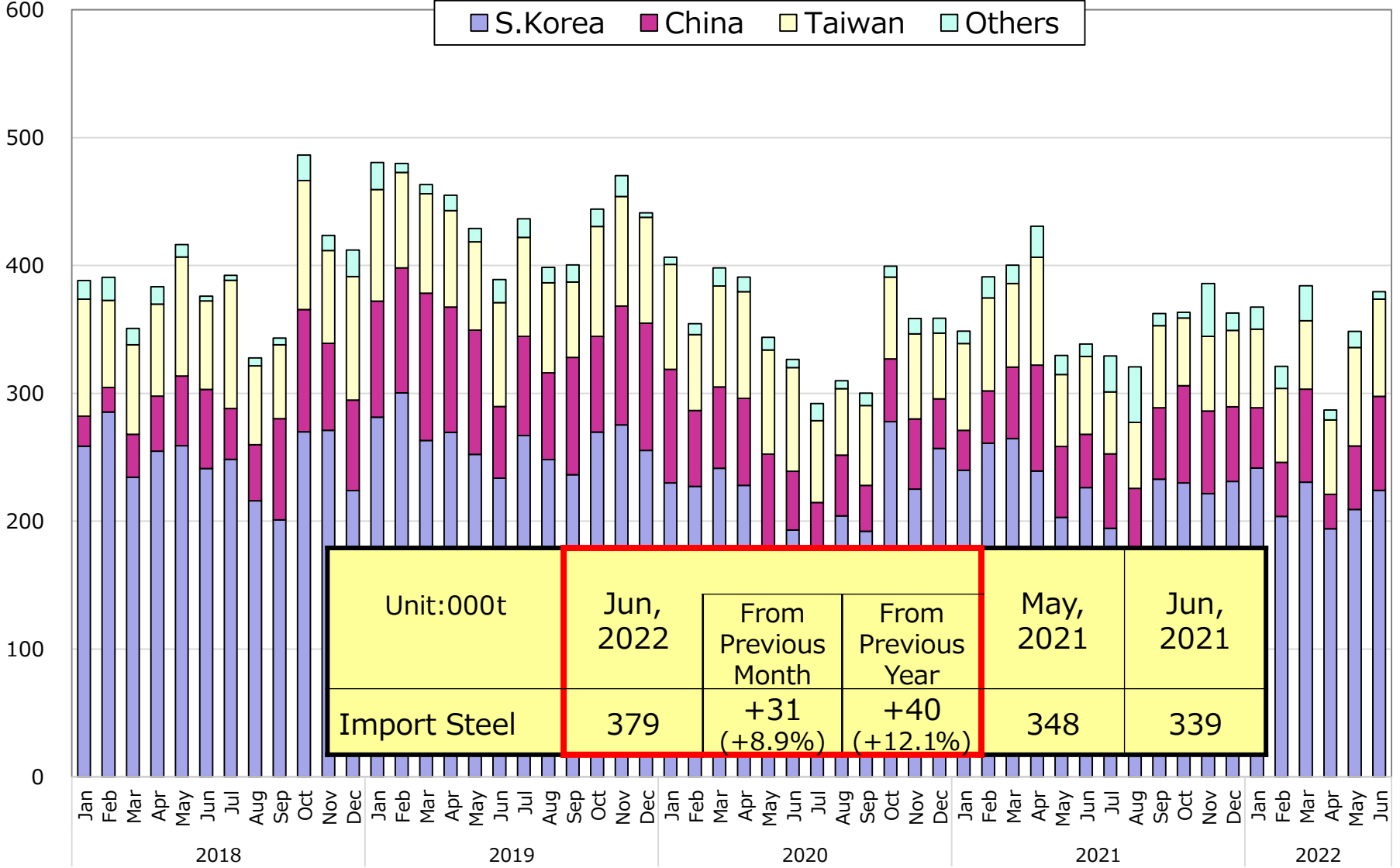


Domestic Market Environment

Trend of Import Steel (Ordinary Steel)



(000 t)



| | | | | | |
|-----------|-----------|---------------------|--------------------|-----------|-----------|
| Unit:000t | Jun, 2022 | From Previous Month | From Previous Year | May, 2021 | Jun, 2021 |
| | 379 | +31 (+8.9%) | +40 (+12.1%) | 348 | 339 |

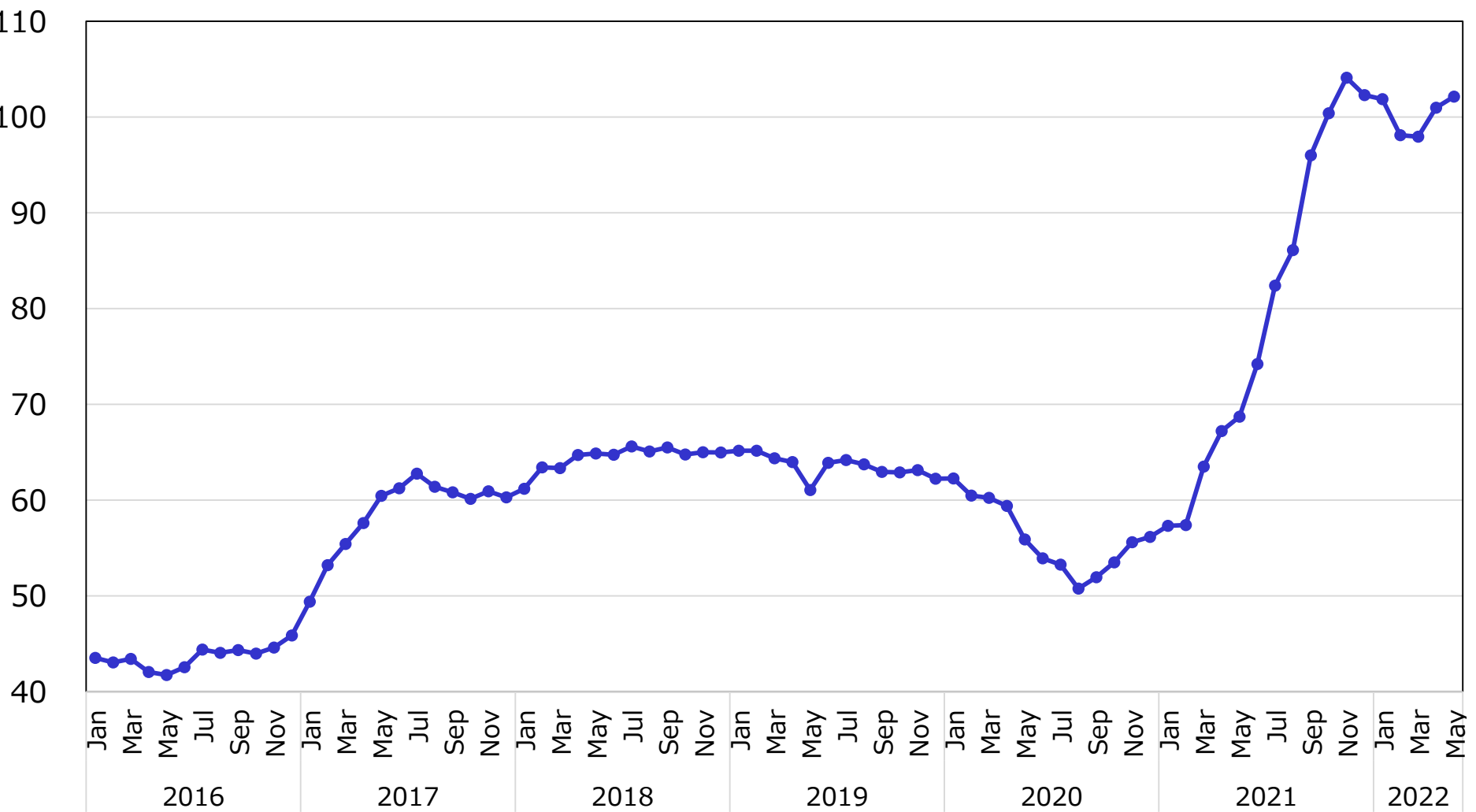


JFE

Domestic Market Environment

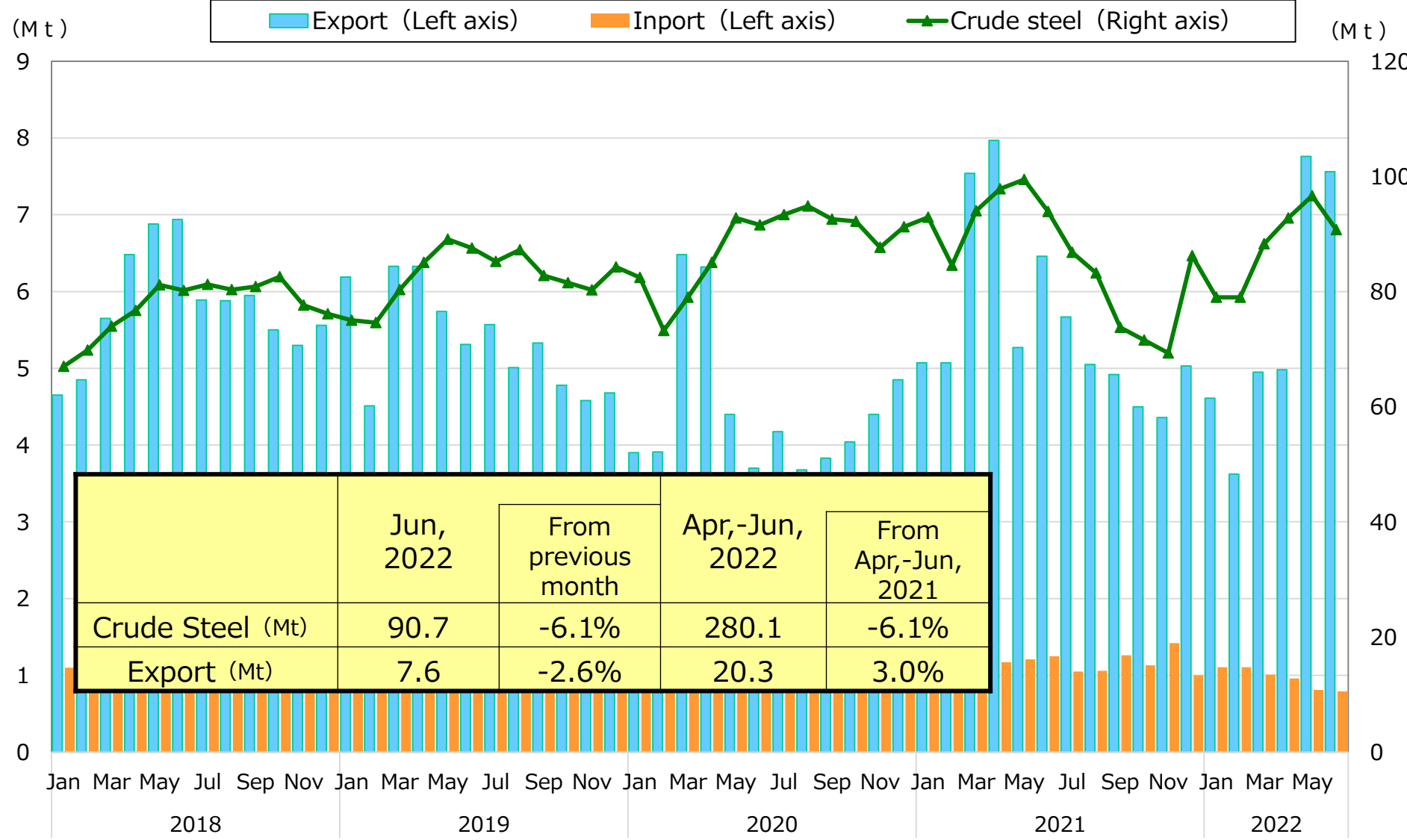
Price Trend of Import Steel

(000 yen / t)



Overseas Market Environment

Crude Steel & Im/Export, China



| | Jun, 2022 | From previous month | Apr,-Jun, 2022 | From Apr,-Jun, 2021 |
|------------------|-----------|---------------------|----------------|---------------------|
| Crude Steel (Mt) | 90.7 | -6.1% | 280.1 | -6.1% |
| Export (Mt) | 7.6 | -2.6% | 20.3 | 3.0% |

Inventories in China by Product



(Mt)

30.0

25.0

20.0

15.0

10.0

5.0

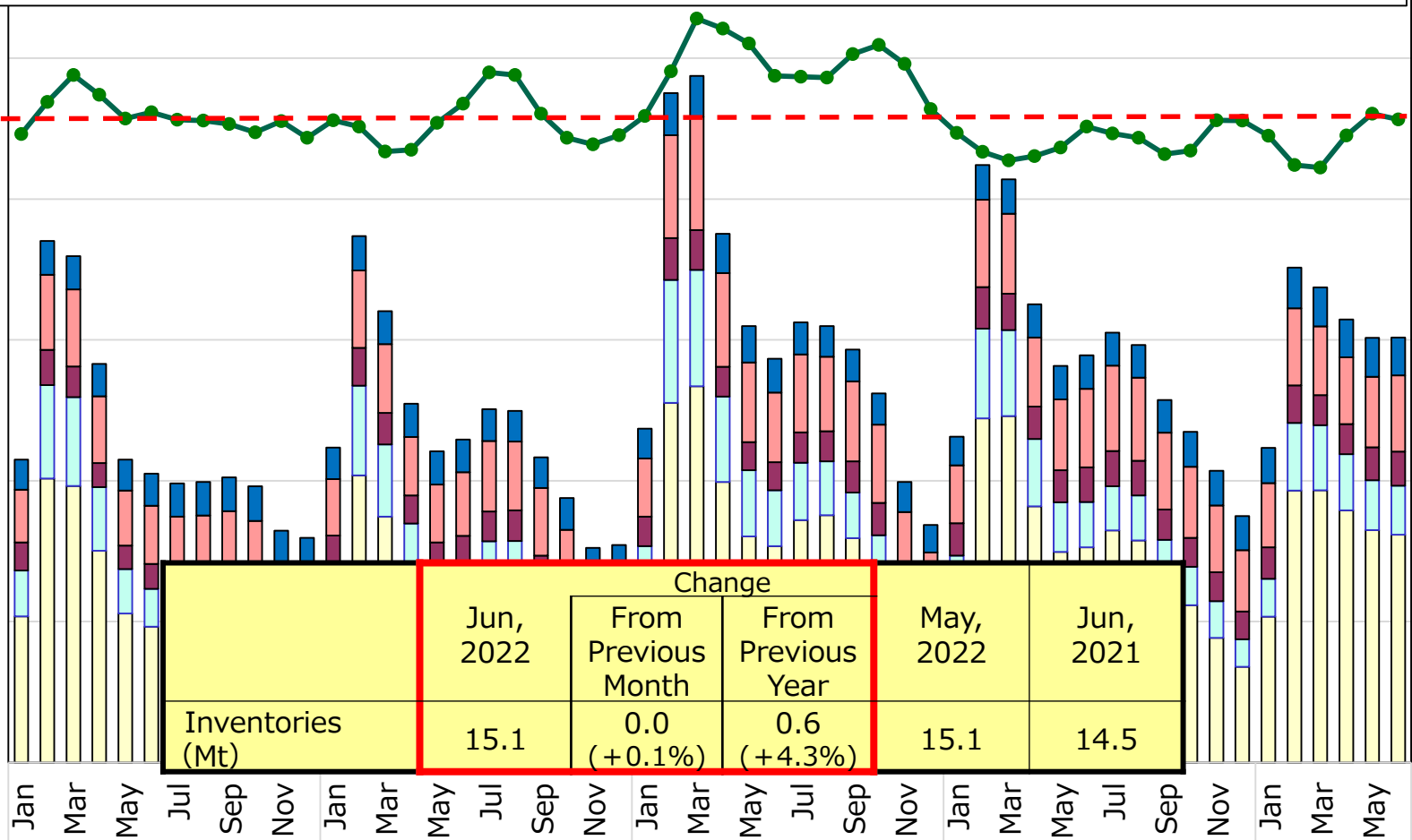
0.0

100.0%

50.0%

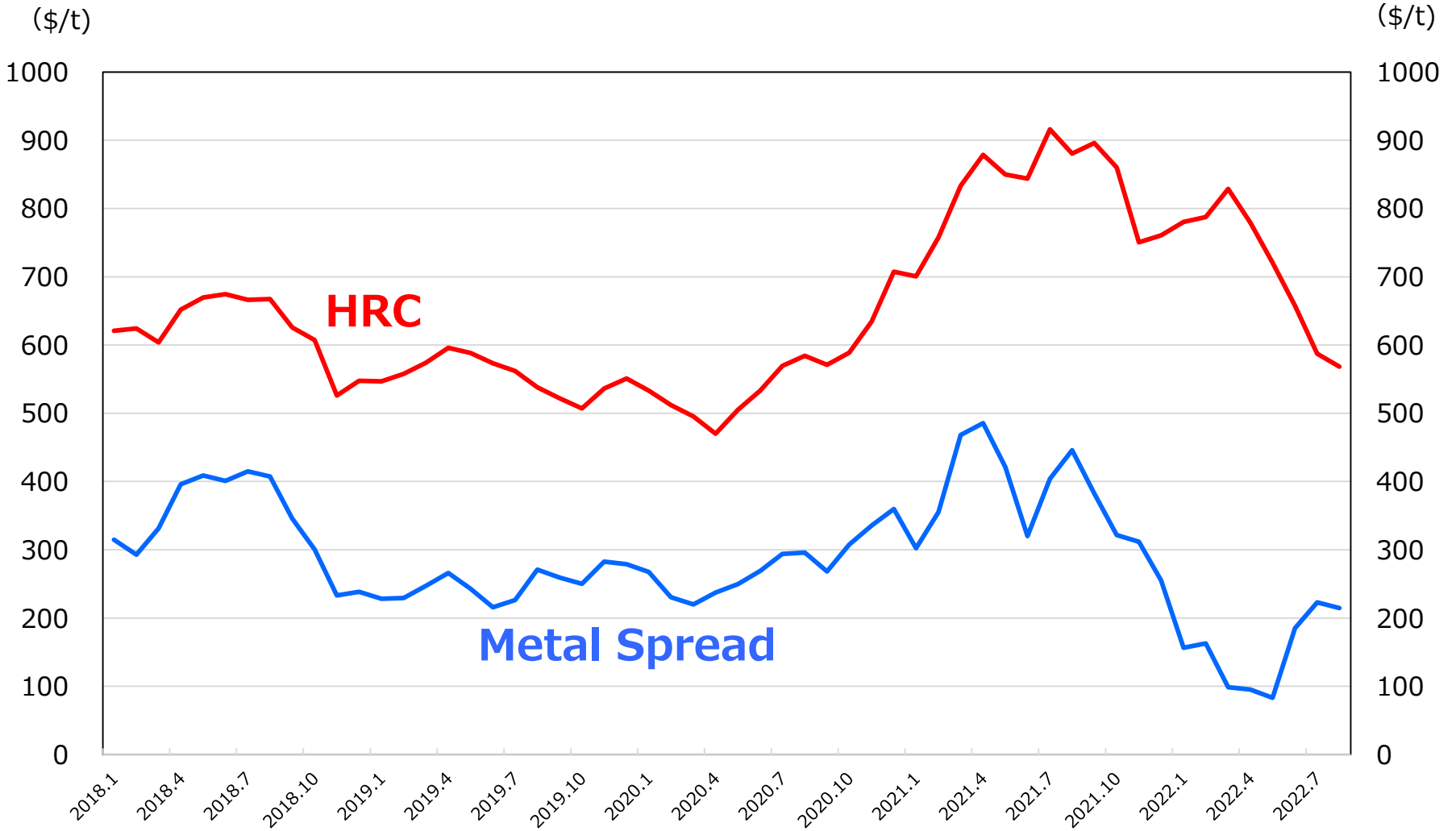
0.0%

-50.0%



| | | Change | | | | |
|------------------|------|-------------|---------------------|--------------------|-----------|-----------|
| | | Jun, 2022 | From Previous Month | From Previous Year | May, 2022 | Jun, 2021 |
| Inventories (Mt) | 15.1 | 0.0 (+0.1%) | 0.6 (+4.3%) | 15.1 | 14.5 | |

Jan Mar May Jul Sep Nov Jan Mar May Jul Sep Nov Jan Mar May Jul Sep Nov Jan Mar May
 2018 2019 2020 2021 2022



Metal Spread = HRC Price – Raw Materials Cost

*HRC Price : Chinese Spot basis

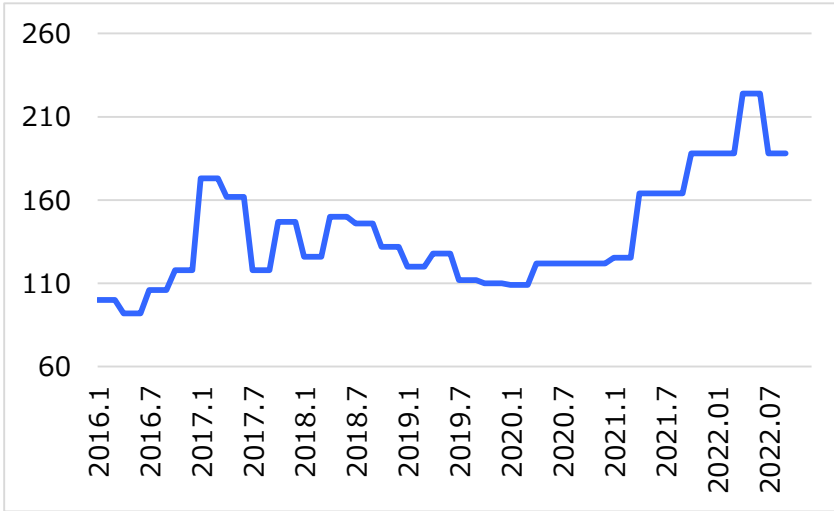
Raw Materials Cost : Calculated from market price of Iron Ore and Hard Coking Coal

Raw Materials

Trend of Sub Material's Market Price



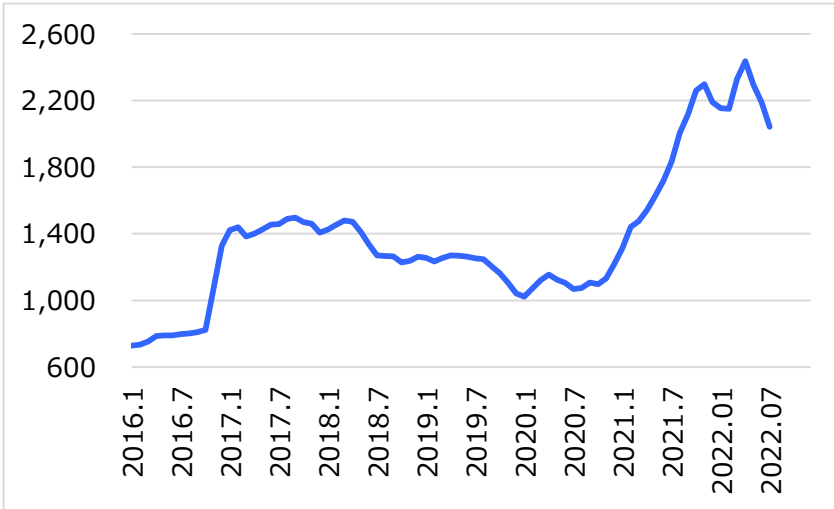
(¢/lb) FeCr



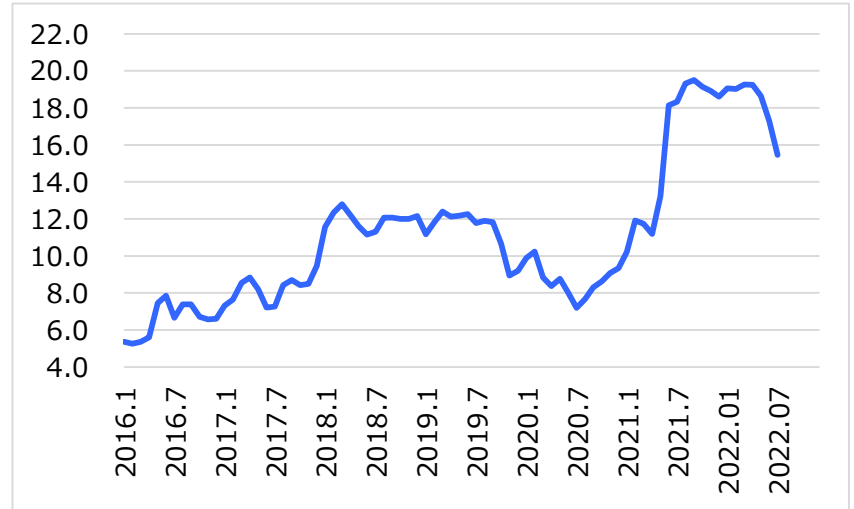
(US\$/t) Zn



(US\$/t) FeMn



(US\$/lb) Mo

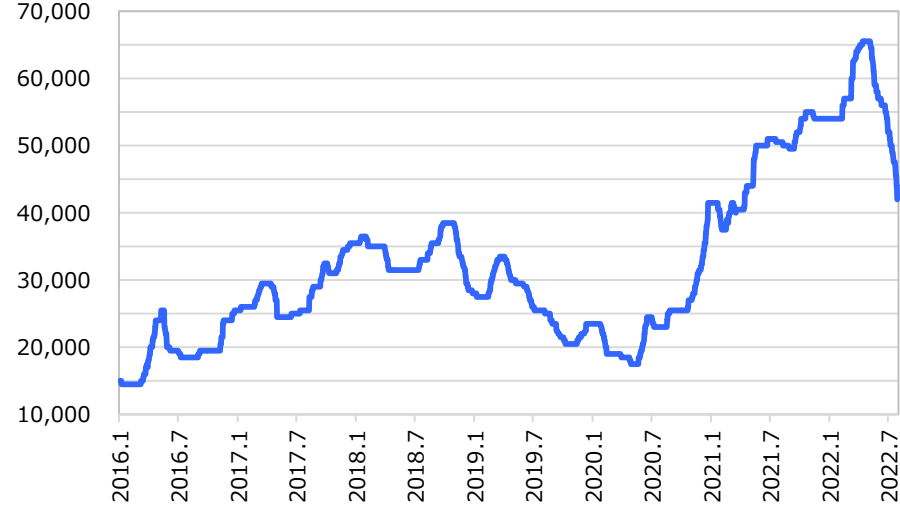


Raw Materials

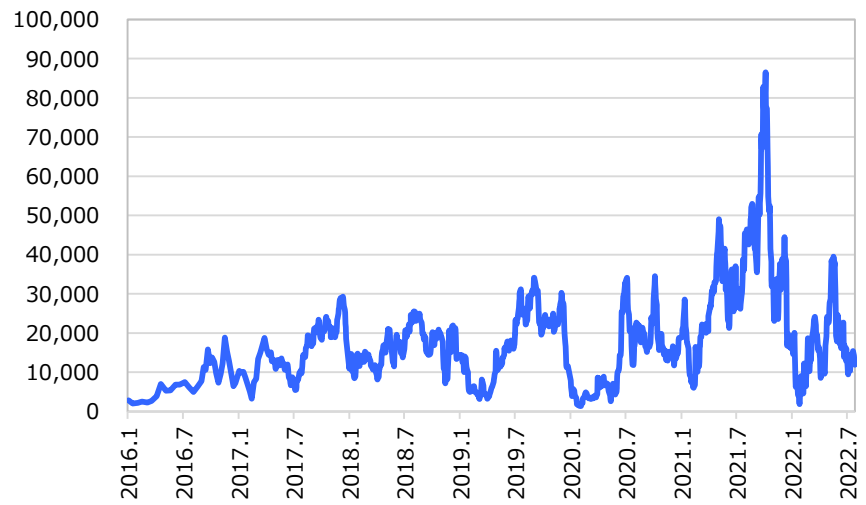
Trend of Sub Material's Market Price



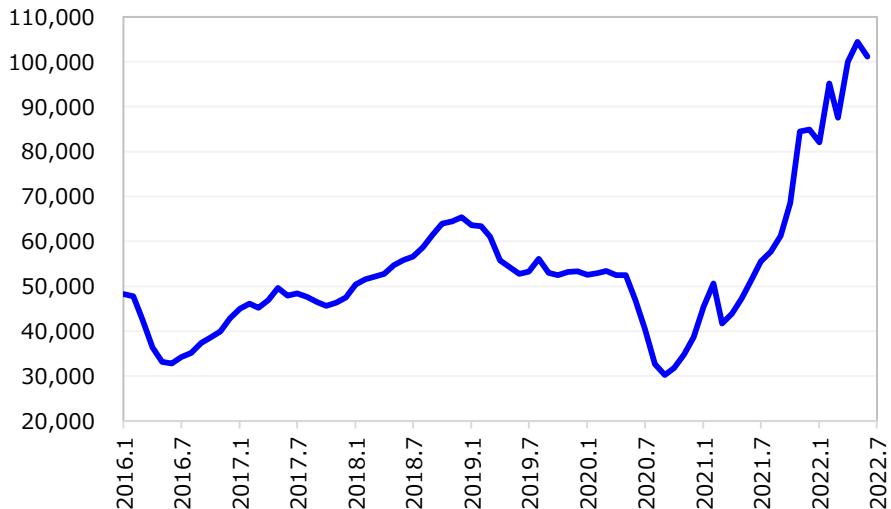
(yen/ t) Scrap



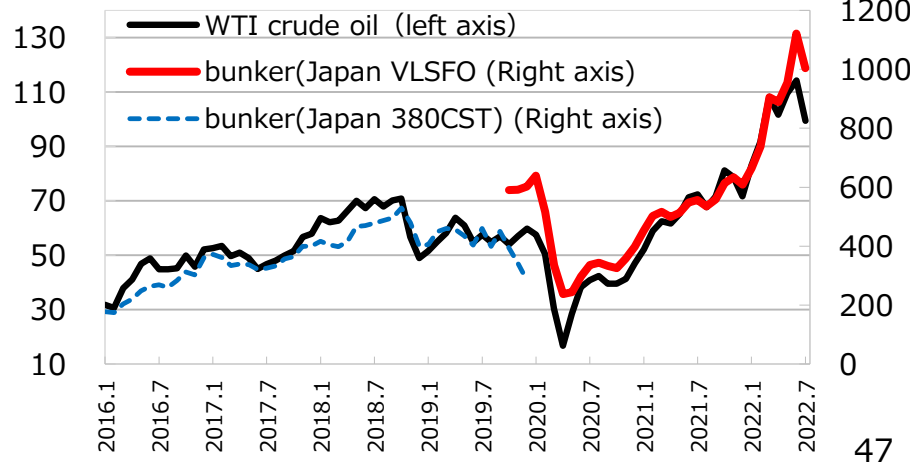
(\$/B) Spot Bulker



(yen/ t) LNG



(crude oil : \$/bbl)



Progress of Initiatives of Steel Business

(Structural Reforms and Strategic Investment in Japan)



| 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) | | ★ Kurashiki Refit (2021) ★ Facilities manufacturing steel sheet for cans to be shut down (~Sep.2022) | | |
| Strategic Investments | Chiba & Kurashiki | Blast Furnace 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





(bn.)

| Business Area | FY2021 Actual | FY2022 Forecast | Change | Main Orders received in FY2022 1Q |
|--------------------------|---------------|-----------------|--------|---|
| Waste to Resource | 203.9 | 220.0 | 16.1 | Renewal construction of domestic waste treatment plant [Hokkaido] Construction works of overseas waste treatment and power plant [Germany, UK] |
| Carbon Neutral | 87.4 | 77.0 | (10.4) | |
| Combined Utility Service | 13.4 | 18.0 | 4.6 | |
| Core Infrastructure | 201.1 | 235.0 | 33.9 | Construction works of fuel feeding pipe for LNG power plant [Hyogo] Construction works of overseas bridge [Ghana] |
| Total | 505.8 | 550.0 | 44.2 | |

Links to the reports published during FY2021



JFE

| 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 |  |

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



Mid/long-term directions

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

JFE

JFE's corporate vision

Contributing to society with the world's most innovative technology

JFE's mission

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

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



Economic sustainability
(stable earnings power)

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



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

E JFE Group Environmental Vision for 2050

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

S **Solve issues impacting society**

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

G **Enhance corporate governance**

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



JFE Group Environmental Vision for 2050

Toward Carbon Neutrality by 2050 JFE Group Environmental Vision for 2050

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

GX : Green transformation

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

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

2. Carbon Neutrality by 2050

① Reduce CO₂ emissions at JFE Steel

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

② Expand contributions to CO₂ emissions reduction in society

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

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

SCM : Supply Chain Management

③ Groupwide commercialization of offshore wind-power business

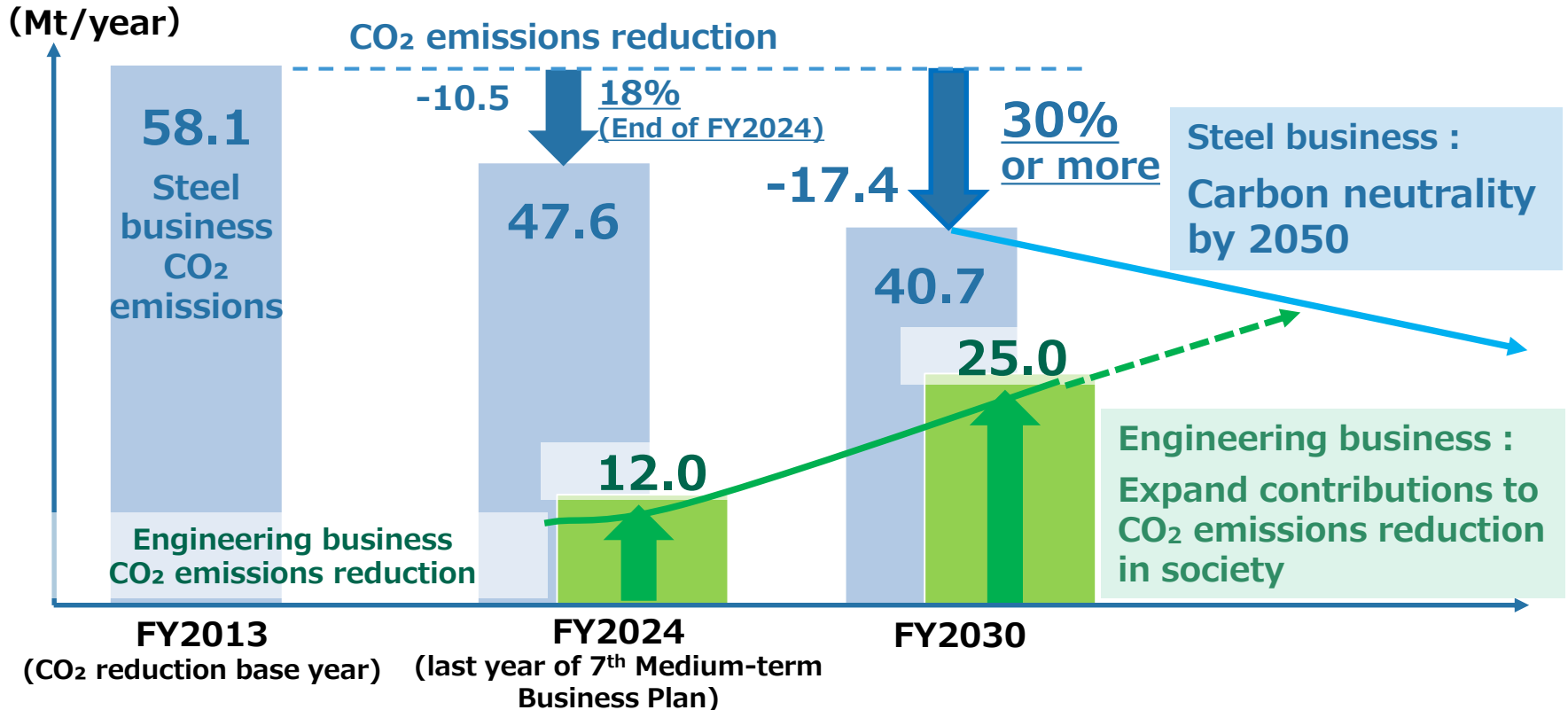


JFE Group's activities for Carbon neutrality

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.





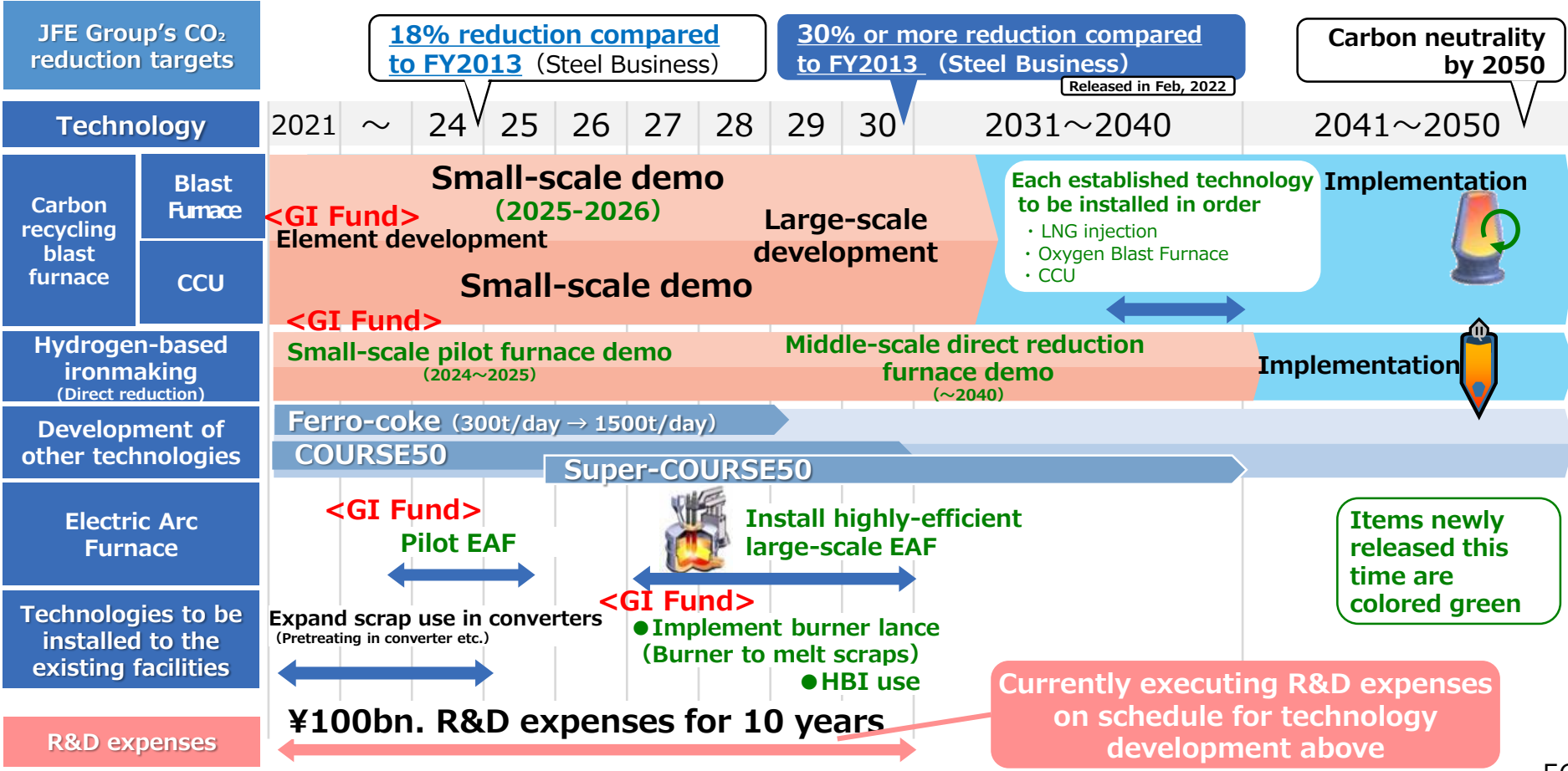
[Steel Business] Roadmap for Carbon Neutrality



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)

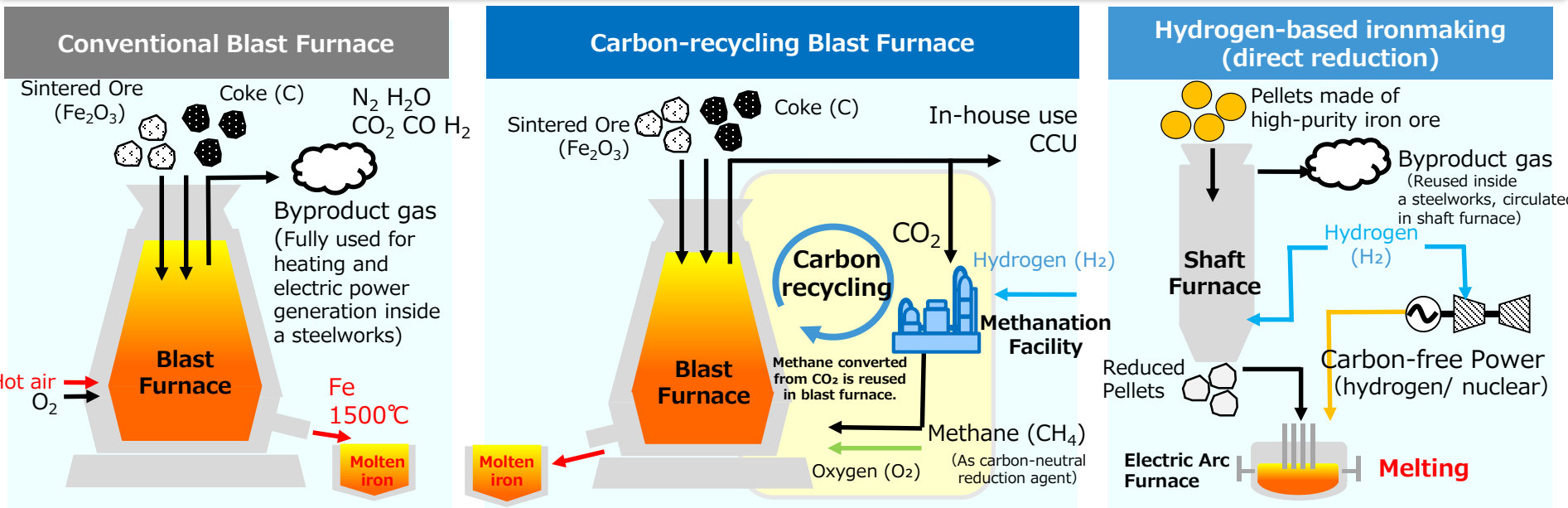




Carbon-recycle Blast Furnace

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 |

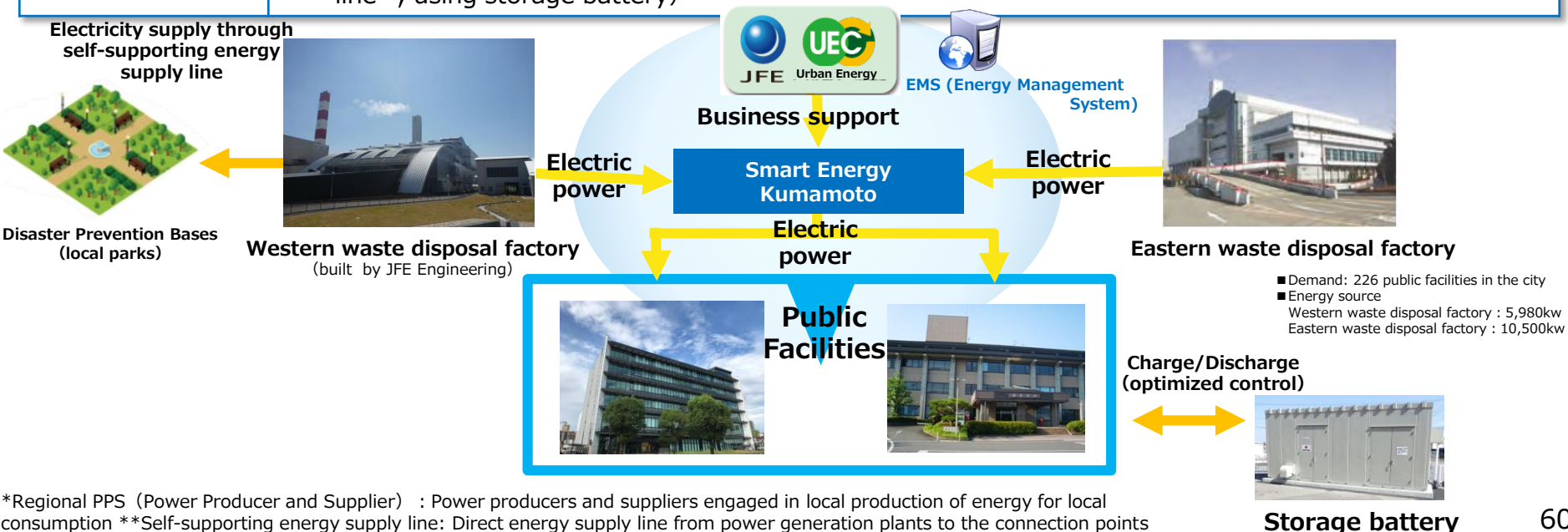
Social sustainability : Contribution to Regional Societies through Engineering Business

- 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**

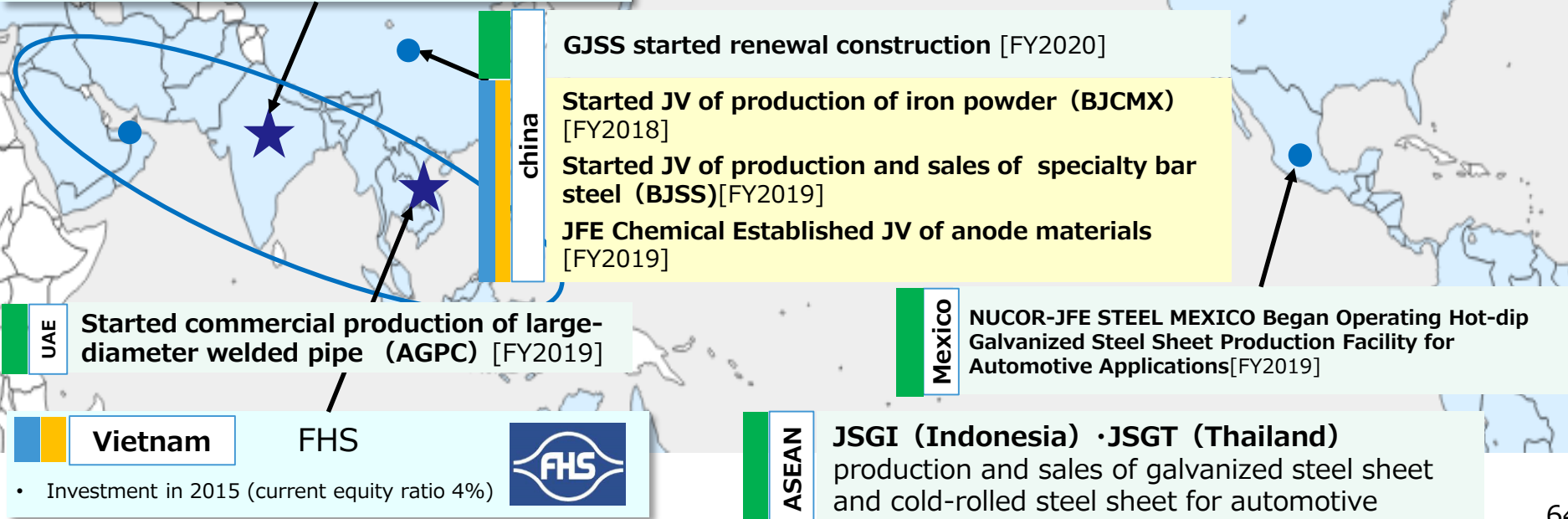


- Investment in 2009 (current equity ratio 15%)
- **Further deepen direct participation** such as beginning FS of establishing a grain-oriented electrical steel sheet manufacturing company

1. Vertical specialization business

2. "Insider" business

3. Solution business



China

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


UAE

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

Mexico

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

Vietnam **FHS**



- Investment in 2015 (current equity ratio 4%)

ASEAN

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

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

JFE



To expand non-oriented electrical steel sheet (N/O) production capacity

Released April 1, 2021

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

<Demand forecast of high-grade N/O>

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

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

*CO₂ reductions effect resulting from expanding EV/HEV



To conduct FS of grain-oriented electrical-steel-sheet JV with JSW in India

Released May 7, 2021

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

<Demand forecast of G/O>

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



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



JFE Steel

Production of electrical steel sheets


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

JFE Shoji

Processing and distribution of electric cores

World's No.1 global distribution and processing system

Domestic



Increase electrical steel sheet production capacity

Overseas



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


Sharing Strategies



Expand collaboration with alliance partners



Establish SCM in new regions



Expand processing functions in coil centers

Synergy

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

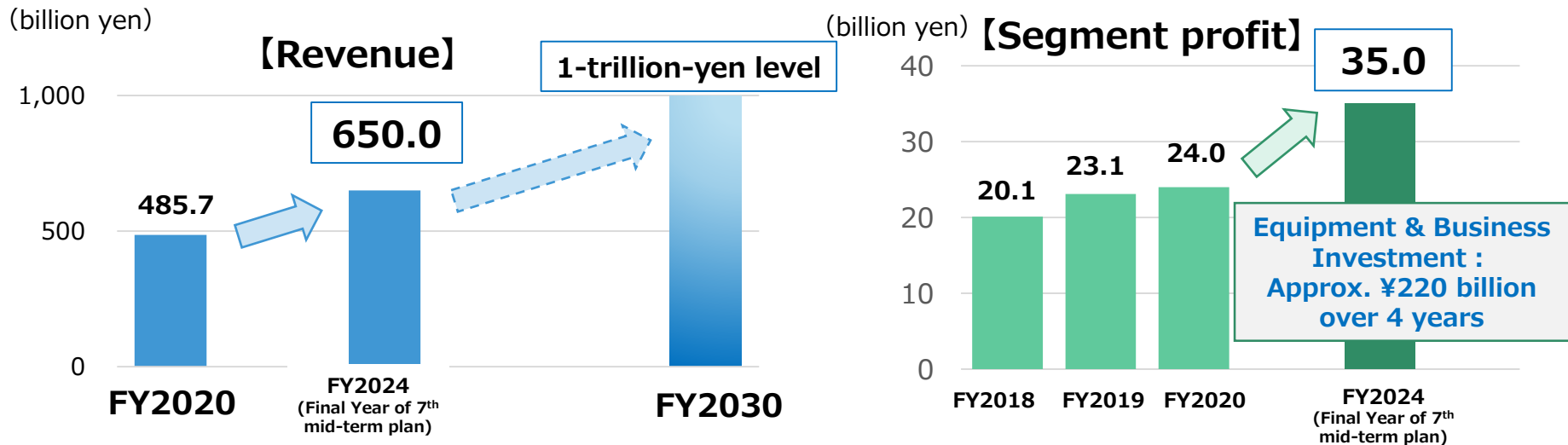
7th mid-term business plan <Engineering Business>

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

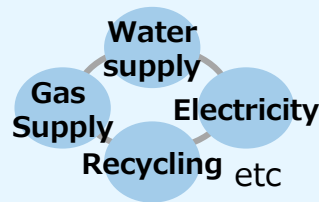
- Put priority in renewable energy (offshore wind-power generation, biomass power plant, solar power plant, geothermal power plant etc.)
- Develop carbon neutral technologies.



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.



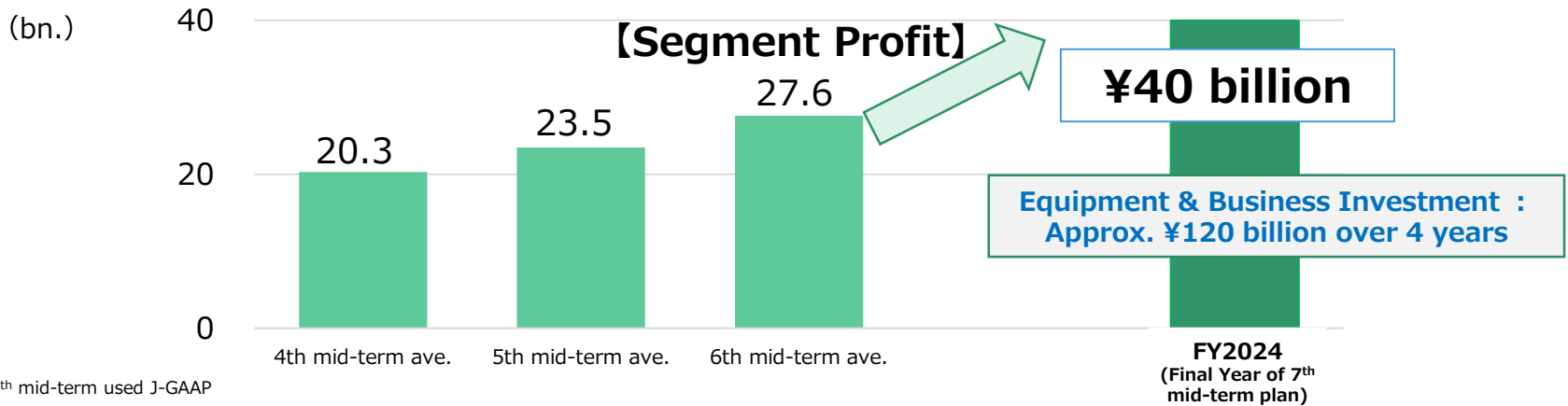
7th mid-term business plan <Trading Business>

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.



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)



JFE