

# Overview of Business Results

for the 1<sup>st</sup> Half of Fiscal Year Ending March 31, 2024

(April 2023 → September 2023)

**October 31, 2023**

**SANYO SPECIAL STEEL Co., Ltd.**

<https://www.sanyo-steel.co.jp/>



Santo-kun  
(Our mascot)

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# **1. FY2023 1st Half Results and FY2023 Forecast**

# Outline of Statements of Income

**Ordinary Income : 7.8 billion yen (Compared to FY2022/1H : -5.9 billion yen)**

**Revenue and profit decreased due to decline in sales volume and decrease of positive OVAKO's transient factors.**

- Although sales prices increased through applying energy surcharge, etc. revenue and profit declined due to drop in sales volume, rising raw material and fuel prices and inflation impact of other materials. Decrease of positive OVAKO's transient factors affected us as well.

(Unit: Billion yen)

	FY2023/1H (A)		FY2022/1H (B)		Change (B) → (A)	
	Amount	Ratio (%)	Amount	Ratio (%)	Amount	Ratio (%)
<b>Net Sales</b>	<b>185.3</b>	<b>100.0</b>	195.4	100.0	<b>-10.2</b>	<b>-5.2</b>
<b>Operating Income</b>	<b>7.3</b>	<b>4.0</b>	13.2	6.7	<b>-5.9</b>	<b>-44.4</b>
<b>Ordinary Income</b>	<b>7.8</b>	<b>ROS 4.2</b>	13.7	ROS 7.0	<b>-5.9</b>	<b>-43.1</b>
(Sanyo)	6.9	7.2	7.0	7.2	-0.1	-0.8
(OVAKO)	5.1	6.8	8.9	10.4	-3.9	-43.2
(SSMI)	0.3	2.8	-0.2	—	+0.5	—
(Amortization of goodwill)	-1.6	—	-1.4	—	-0.2	—
<b>Net Income<sup>*1</sup></b>	<b>5.2</b>	<b>2.8</b>	9.9	5.1	<b>-4.6</b>	<b>-47.0</b>
<b>Net Income before amortization of goodwill</b>	<b>6.8</b>	<b>3.7</b>	11.3	5.8	<b>-4.5</b>	<b>-39.6</b>
<b>Sales Volume (Thousand tons)</b>	<b>739</b> (per month) <b>123.2</b>		812		<b>-73</b> (per month) <b>-12.1</b>	
(Sanyo)	427	71.2	458	76.3	-30	-5.0
(OVAKO)	256	42.6	303	50.5	-48	-7.9
(SSMI)	56	9.4	51	8.5	+5	+0.8

\*1 Profit attributable to owners of parent

\*2 The consolidated accounting period for SSMI is Jan. to Jun.

# Business Environment

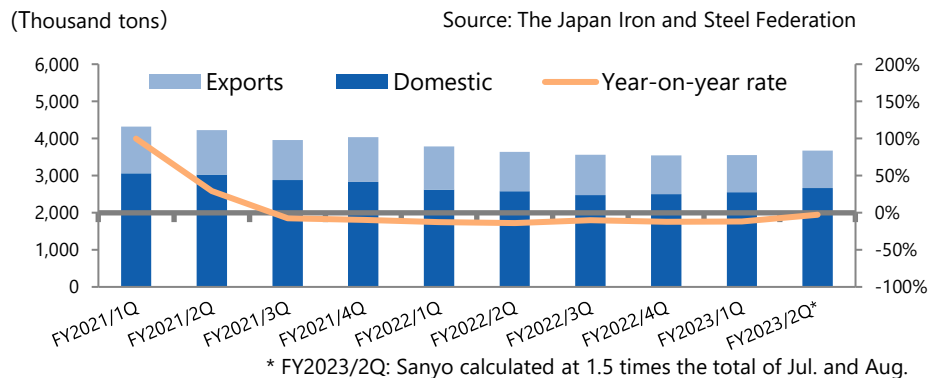
## Demand Trends

Although shortage of semiconductors have resolved, recovery of auto production is still gradual. Demand for construction and industrial machineries has remained stagnant. Economic uncertainty in Europe and continuous deceleration of Chinese economy is becoming a concern.

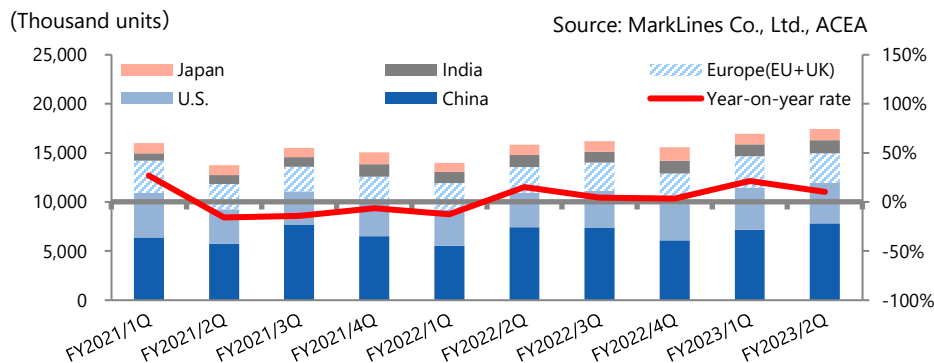
## Raw Material and Fuel Prices

Prices trend of raw material, such as iron scrap and fuel, remains still to be robust and inflation on other materials has also emerged. Energy prices will bottom out and may slightly rebound in FY2023/2H.

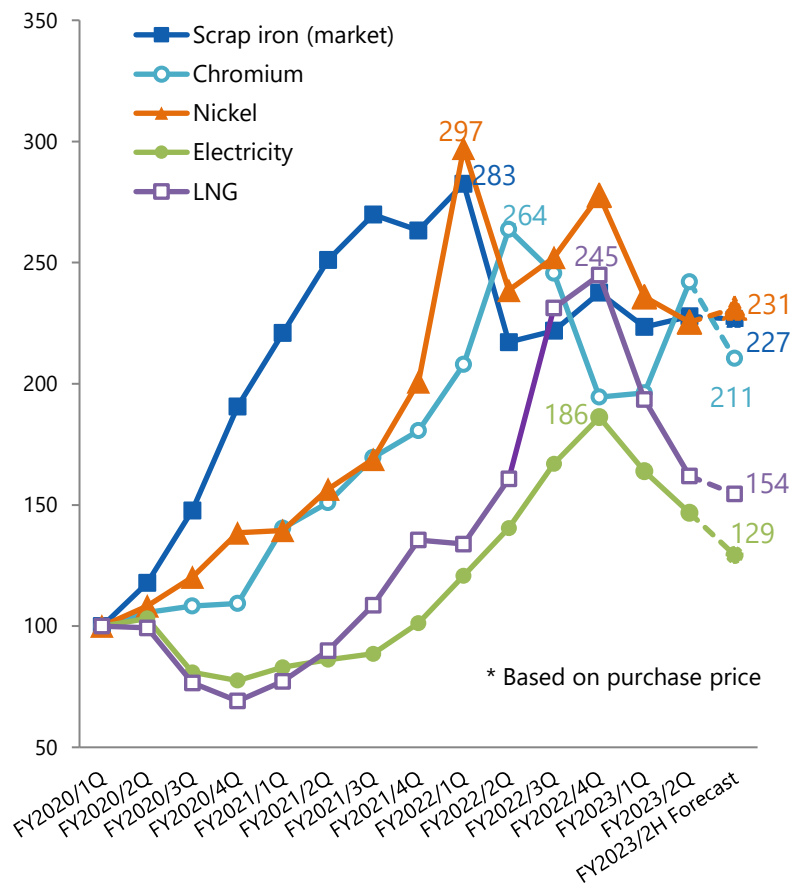
### 1. Volume of order booked (Specialty steel products)



### 2. Units of automobile sales



### 3. Raw Material and Fuel Prices (FY2020/1Q = 100)

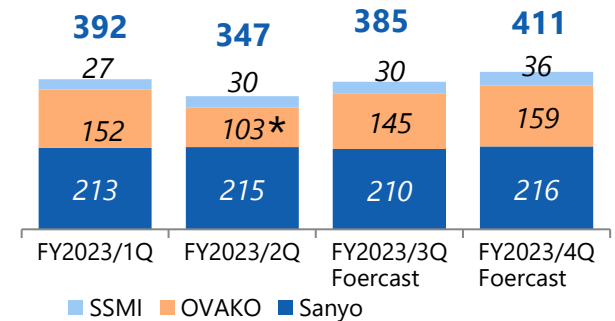


# Business Forecast for FY2023 (announced on October 31, 2023)

## Ordinary Income in FY2023 Forecast : 20.0 billion yen (Same level as previous forecast)

- FY2023/1H result was in line with previous forecast, although sales volume was lower than forecast.
- Sales volume in FY2023/2H, excluding OVAKO's seasonal factors, is expected to be in same level as FY2023/1H, due to continued supply chain adjustments in the construction and industrial machinery industries, uncertainty of European economy and deceleration of Chinese economy, despite gradual improvements in global automobile industry.
- We intend to achieve same level of ordinary income as previous forecast mainly by implementing cost control and reduction measures.

(Reference) Sales Volume (Thousand tons/Q)



\* Impact of OVAKO's seasonal factors

(Unit: Billion yen)

	Revised Forecast (A) (Announced on Oct. 31, 2023)			Previous Forecast (B) (Announced on Jul. 28, 2023)			Change (B) → (A)		
	1H Result	2H	FY	1H	2H	FY	1H	2H	FY
<b>Net Sales</b>	<b>185.3</b>	<b>194.7</b>	<b>380.0</b>	185.0	201.0	386.0	<b>+0.3</b>	<b>-6.3</b>	<b>-6.0</b>
<b>Operating Income</b>	<b>7.3</b>	<b>12.7</b>	<b>20.0</b>	7.5	12.5	20.0	<b>-0.2</b>	<b>+0.2</b>	—
<b>Ordinary Income</b>	<b>7.8</b>	<b>12.2</b>	<b>20.0</b>	8.0	12.0	20.0	<b>-0.2</b>	<b>+0.2</b>	—
(Sanyo)	6.9	6.4	13.3	7.0	8.0	15.0	<b>-0.1</b>	<b>-1.6</b>	<b>-1.7</b>
(OVAKO)	5.1	5.9	11.0	4.7	5.3	10.0	+0.4	+0.6	+1.0
(SSMI)	0.3	0.4	0.7	0.3	0.4	0.7	—	—	—
(Amortization of goodwill)	<b>-1.6</b>	<b>-1.6</b>	<b>-3.2</b>	<b>-1.6</b>	<b>-1.6</b>	<b>-3.1</b>	—	—	<b>-0.1</b>
<b>Net Income<sup>*1</sup></b>	<b>5.2</b>	<b>8.8</b>	<b>14.0</b>	5.0	9.0	14.0	<b>+0.2</b>	<b>-0.2</b>	—
<b>ROE (%)</b>			<b>6.3</b>			6.4			<b>-0.1</b>
<b>Net Income</b> before amortization of goodwill	<b>6.8</b>	<b>10.4</b>	<b>17.2</b>	6.5	10.6	17.1	<b>+0.3</b>	<b>-0.2</b>	<b>+0.1</b>
<b>ROE (%)</b>			<b>7.8</b>			7.8			—

\*1 Profit attributable to owners of parent

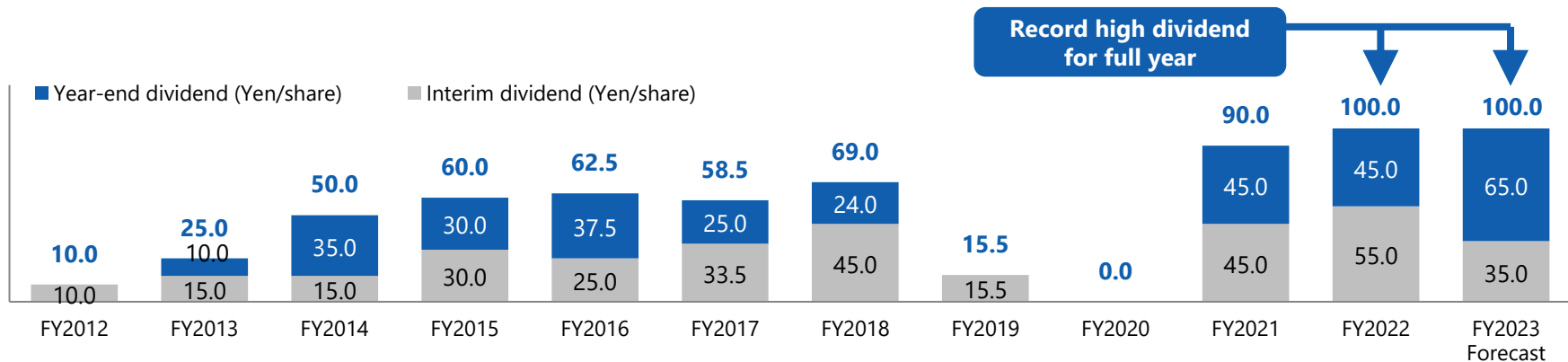
\*2 The consolidated accounting period for SSMI is Jan. to Dec.

Major assumptions after October 2023

- Scrap iron 50,000 yen/t (H2 market price in Himeji area)
- Crude oil (Dubai) 90\$/BL · Exchange rate 145 yen/US\$, 154 yen/€

# Interim Dividend and Dividend Forecast for FY2023 (announced on October 31, 2023)

			Revised Forecast (A) (Announced on Oct. 31, 2023)			Previous Forecast (B) (Announced on Jul. 28, 2023)			Change (B) → (A)		
			1H Result	2H Forecast	FY	1H	2H	FY	1H	2H	FY
Earnings Per Share	A	Yen/share	96.1		257.0	91.8		257.0	+4.3		—
Earnings Per Share before amortization of goodwill	B	Yen/share	125.3		315.7	119.3		313.8	+6.0		+1.9
<b>Dividend</b>	<b>C</b>	<b>Yen/share</b>	<b>35.0</b>	<b>65.0</b>	<b>100.0</b>	<b>35.0</b>	<b>65.0</b>	<b>100.0</b>	—	—	—
Payout Ratio	C/A	%	36.4		38.9	38.1		38.9	-1.7		—
	C/B	%	27.9		31.7	29.3		31.9	-1.4		-0.2



## <Dividend Policy>

Comprehensively considering dividend payout ratio, dividend per share and necessary funds for future investment, etc.

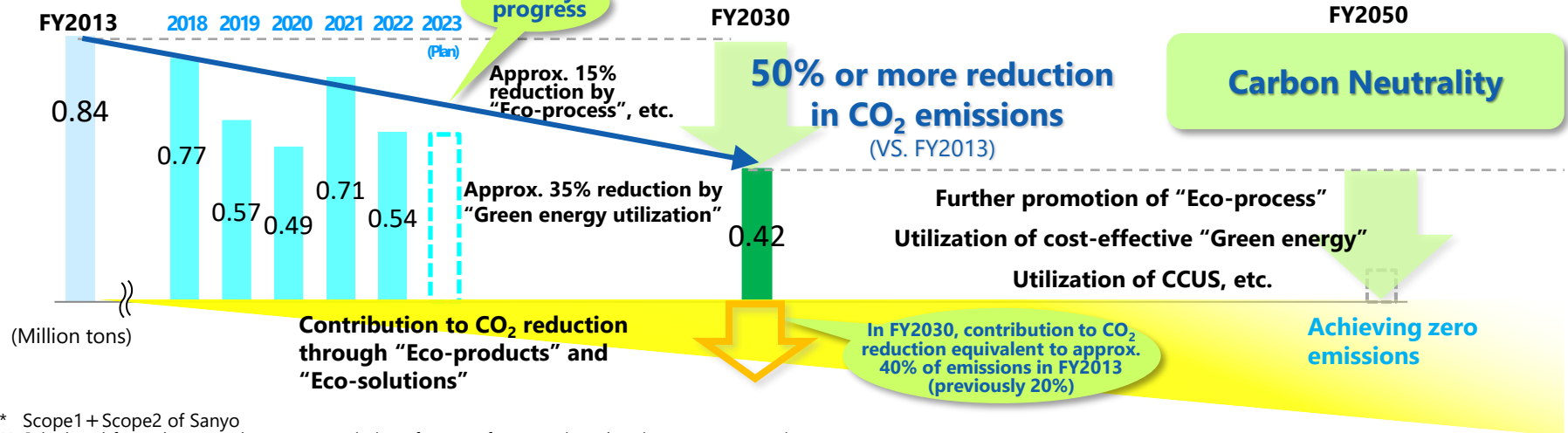
Consolidated dividend payout ratio:(In principle) approx. **35%**,  
(Excluding goodwill amortization) approx. **30%**

## **2. Achieving Carbon Neutrality (CN) by 2050**



# Sanyo's Roadmap to Carbon Neutrality by 2050

[CO<sub>2</sub> emissions of Sanyo\*]



\* Scope1 + Scope2 of Sanyo

\*\* Calculated from the green house gas emissions factors of contracting electric power companies.

## Eco-process



Energy-saving heating furnace that uses regenerative burners

Company-wide energy-saving measures mainly in production  
Development of manufacturing technology to improve energy efficiency

\*Introduced internal carbon pricing from FY2023.

## Green energy utilization



Utilization of carbon free electricity/fuels and natural energy

\*Commenced to utilize renewable energy sources from FY2022.

## Eco-products



Developing long-life bearing steel for wind power generation

Promoting R&D and supply of special steel products that contribute to reducing CO<sub>2</sub> emissions in the supply chain and final usage

## Eco-solutions



Sharing technologies among group members

Sharing our energy-saving technologies and productivity improvements among all Sanyo Group members including OVAKO and SSMI

# Initiative for Green Energy Utilization

## 1. Inauguration of the fossil-free hydrogen plant in OVAKO (Announced on September 7, 2023)

On September 5, 2023, OVAKO inaugurated fossil-free hydrogen plant constructed at Hofors mill in Sweden and held a ceremony in presence of the Honorable Swedish Prime Minister Ulf Kristersson and many other prominent guests.

### Fossil-free hydrogen plant in OVAKO

**This plant will generate approx. 4,000 cubic meters of fossil-free hydrogen per hour** through electrolysis of water using fossil-free electricity.

The conversion to hydrogen will enable OVAKO to **reduce Hofors mill's CO<sub>2</sub> emissions from the process of re-heating steel before rolling by 50 percent (approx. 20,000 t/year).**

**The new fossil-free hydrogen plant is one of the largest facilities in Europe,** accomplished with support of the Swedish Energy Agency and collaboration with local key players such as Volvo Group, Hitachi Energy, H2 Green Steel, and Nel Hydrogen.

**OVAKO will consider to actively implement local hydrogen production in all business units and will promote initiatives to mitigate climate change.**



Electrolyzer of Hydrogen plant of OVAKO

# Initiative for Green Energy Utilization

## 2. Introduction of solar power generator in Sanyo (Announced on October 27, 2023)

We will introduce solar power generator in summer 2024 at our Himeji site. We plan to install the generator on the roof of our product warehouse with building area of approximately 5,600 m<sup>2</sup>. We will be able to generate renewable energy of approximately **600,000 kWh per year**, which exceeds the electricity consumption in product warehouse and main office building and expect reducing CO<sub>2</sub> emissions by approximately **200 tons per year**.



Product warehouse where solar power generation facility to be installed.

## 3. SSMI signs power purchase agreement for renewable power (Announced on September 6, 2023)

SSMI has signed a purchase agreement of solar power with the Tata Power Renewable Energy Limited (TPREL), a subsidiary of Tata Power, one of largest integrated power companies in India. From March 2024 SSMI will use solar power for its own manufacturing process.

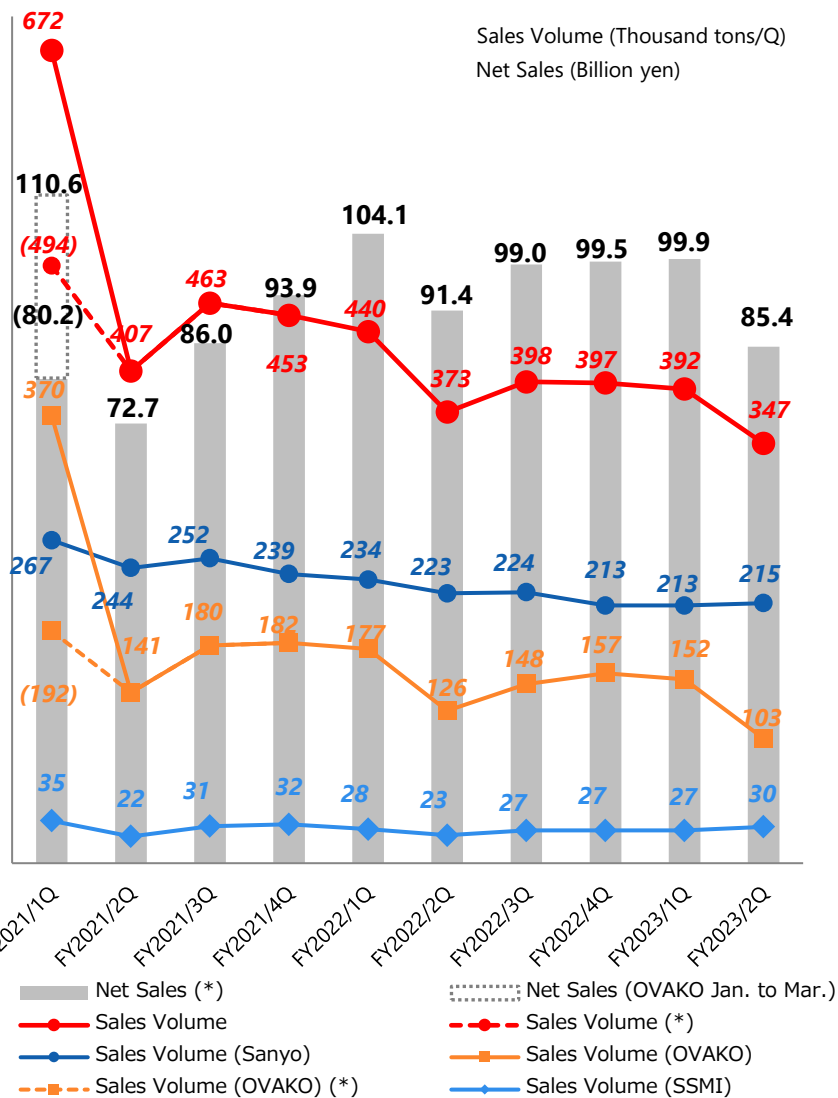
**Purchase approx. 62 million kWh solar power annually and use it for SSMI's manufacturing process**

**Expected to reduce CO<sub>2</sub> emissions by up to 42,500 tons annually, equivalent to approx. 25% of the CO<sub>2</sub> emitted in the company's manufacturing process**

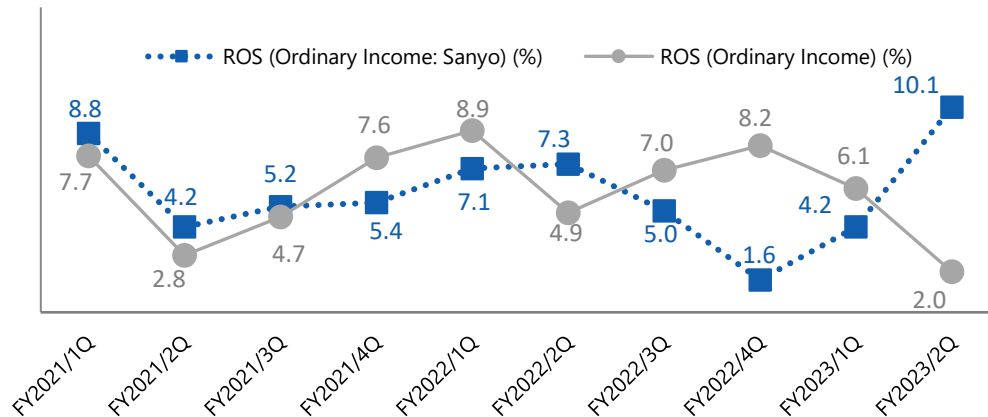
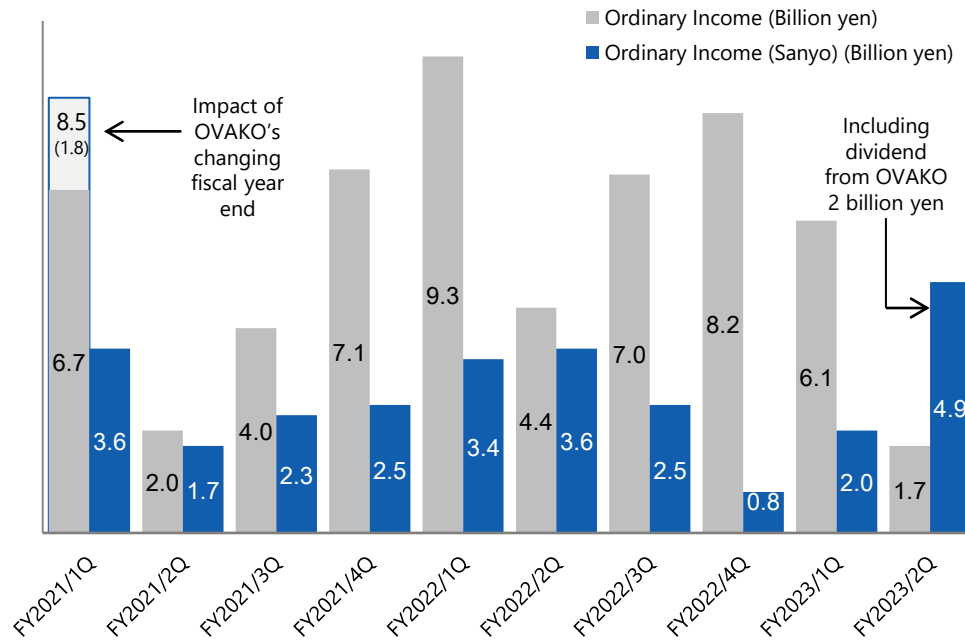


## **3. Details of Results and Forecast for FY2023**

# Net Sales and Income (Quarterly)



(\*) Excluding OVAKO's sales Jan. to Mar.



# Earnings by Business Segment

(Unit: Billion yen)

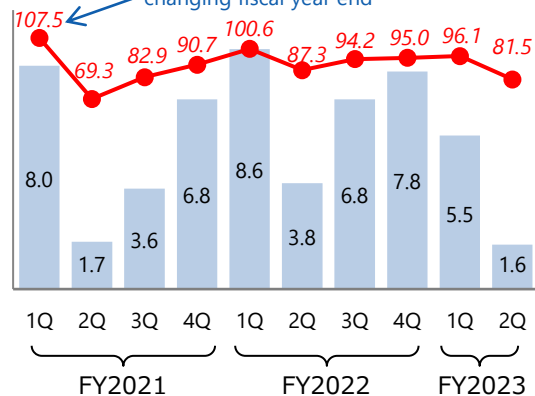
	FY2023/1H (A)			FY2022/1H (B)			Change (B) → (A)		
	Net Sales	Operating Income	ROS (%)	Net Sales	Operating Income	ROS (%)	Net Sales	Operating Income	ROS (%)
Steel Products	177.6	7.1	4.0	187.9	12.4	6.6	-10.2	-5.3	-2.6
Metal Powders	2.7	0.5	17.2	2.6	0.6	21.8	+0.1	-0.1	-4.6
Formed and Fabricated Materials	9.0	-0.3	-3.1	9.4	0.2	1.8	-0.4	-0.4	-4.8
<b>Sub-total</b>	<b>189.4</b>	<b>7.3</b>	<b>3.8</b>	<b>199.9</b>	<b>13.1</b>	<b>6.6</b>	<b>-10.5</b>	<b>-5.8</b>	<b>-2.7</b>
Others	0.6	0.0	2.5	0.7	0.0	1.9	-0.1	+0.0	+0.6
Adjustments	-4.7	0.0	—	-5.2	0.1	—	+0.4	-0.0	—
<b>Consolidated total</b>	<b>185.3</b>	<b>7.3</b>	<b>4.0</b>	<b>195.4</b>	<b>13.2</b>	<b>6.7</b>	<b>-10.2</b>	<b>-5.9</b>	<b>-2.8</b>

## Change in Business Segment

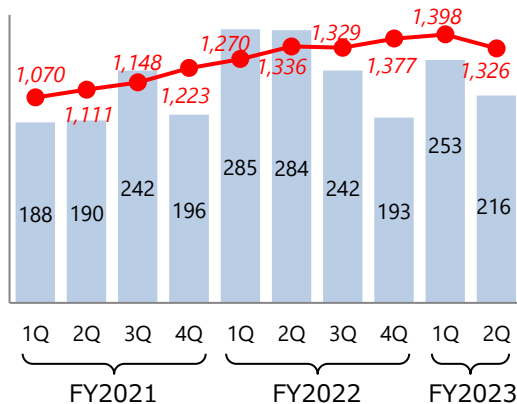
Operating Income   Sales

### Steel Products (Unit: Billion yen)

Including impact of OVAKO's changing fiscal year end

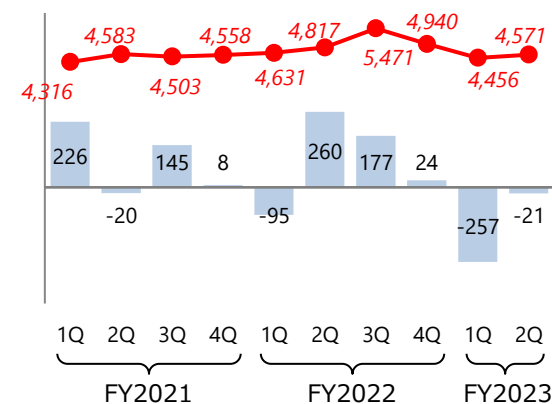


### Metal Powders (Unit: Million yen)



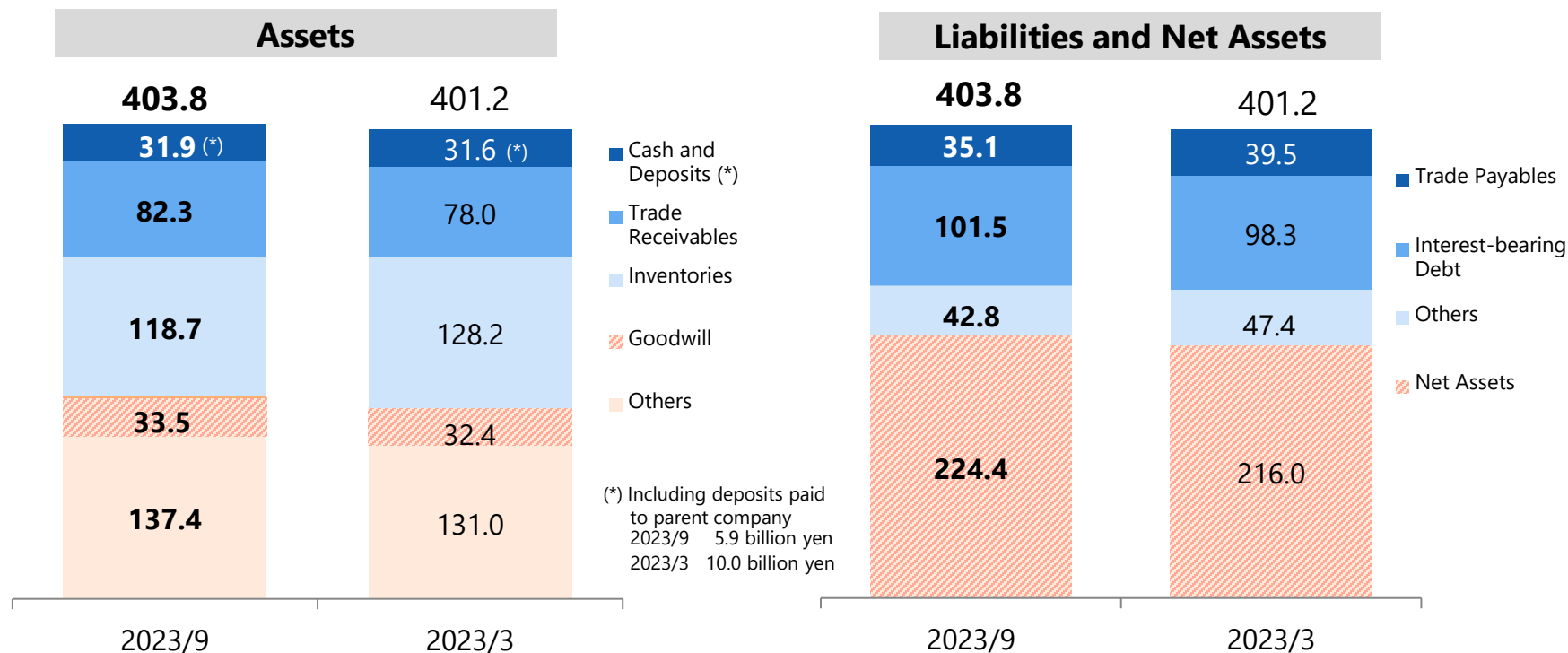
### Formed and Fabricated Materials (Unit: Million yen)

(Unit: Million yen)



# Balance Sheets (Consolidated)

(Billion yen)



## Major changes in Assets

**+2.6 billion yen (+0.6%)**

(including foreign exchange impact +16.8 billion yen)

Cash and Deposits	+4.3
Inventories	-9.5
Goodwill	+1.1
(amortization -1.5, foreign exchange impact +2.6)	
Others	+6.4

## Major changes in Liabilities and Net Assets

**+2.6 billion yen (+0.6%)**

(including foreign exchange impact +16.8 billion yen)

Trade Payables	-4.4
Interest-bearing Debt	+3.2
Others	-4.6
Net Assets	+8.4

(Reference) Assets of Sanyo, OVAKO and SSMI (as of Sep. 2023, non-consolidated basis)  
 Sanyo 282.7 billion yen, OVAKO 125.7 billion yen, SSMI 17.0 billion yen

Equity Ratio	2023/9	2023/3
	55.1%	53.4%

# Statements of Cash Flows (Consolidated)

(Unit : Billion yen)

	FY2021/1H	FY2021/2H	FY2022/1H	FY2022/2H	FY2023/1H
<b>Cash flows from operating activities (A)</b>	<b>0.2</b>	<b>6.9</b>	<b>-7.1</b>	<b>19.2</b>	<b>14.7</b>
Net income before income taxes	21.3	19.0	22.1	22.6	15.9
Depreciation & Amortization of goodwill	EBITDA (simplified method)				
	10.5 10.8	10.5 8.5	13.8 8.3	14.2 8.4	7.6 8.3
Income taxes	-0.3	-0.1	-5.0	-2.4	-5.0
Working capital, etc.	-20.7	-12.0	-24.2	-1.0	3.8
<b>Cash flows from investing activities (B)</b>	<b>-8.7</b>	<b>-4.6</b>	<b>-6.6</b>	<b>-6.1</b>	<b>-10.8</b>
Capital expenditure	-8.7	-5.0	-6.3	-6.8	-10.4
Proceeds from sale of securities	0.6	—	—	0.0	0.1
Others	-0.6	0.4	-0.4	0.7	-0.5
<b>Free cash flows (A+B)</b>	<b>-8.5</b>	<b>2.3</b>	<b>-13.7</b>	<b>13.1</b>	<b>3.8</b>
<b>Cash flows from financing activities (C)</b>	<b>2.2</b>	<b>0.1</b>	<b>11.5</b>	<b>-3.0</b>	<b>-5.5</b>
Increase/Decrease in borrowings/bonds/ commercial papers/lease obligations	2.2	2.5	14.0	0.4	-0.4
Cash dividends	-0.0	-2.4	-2.5	-3.0	-2.5
Others	-0.0	-0.0	-0.0	-0.4	-2.6
<b>Translation Difference (D)</b>	<b>0.3</b>	<b>0.6</b>	<b>1.2</b>	<b>0.1</b>	<b>1.8</b>
<b>Net Increase/Decrease in Cash and cash equivalents (A+B+C+D)</b>	<b>-6.0</b>	<b>3.0</b>	<b>-1.1</b>	<b>10.2</b>	<b>0.2</b>

\* Cash and cash equivalents include deposits paid to affiliated company.

Rating Upgrade

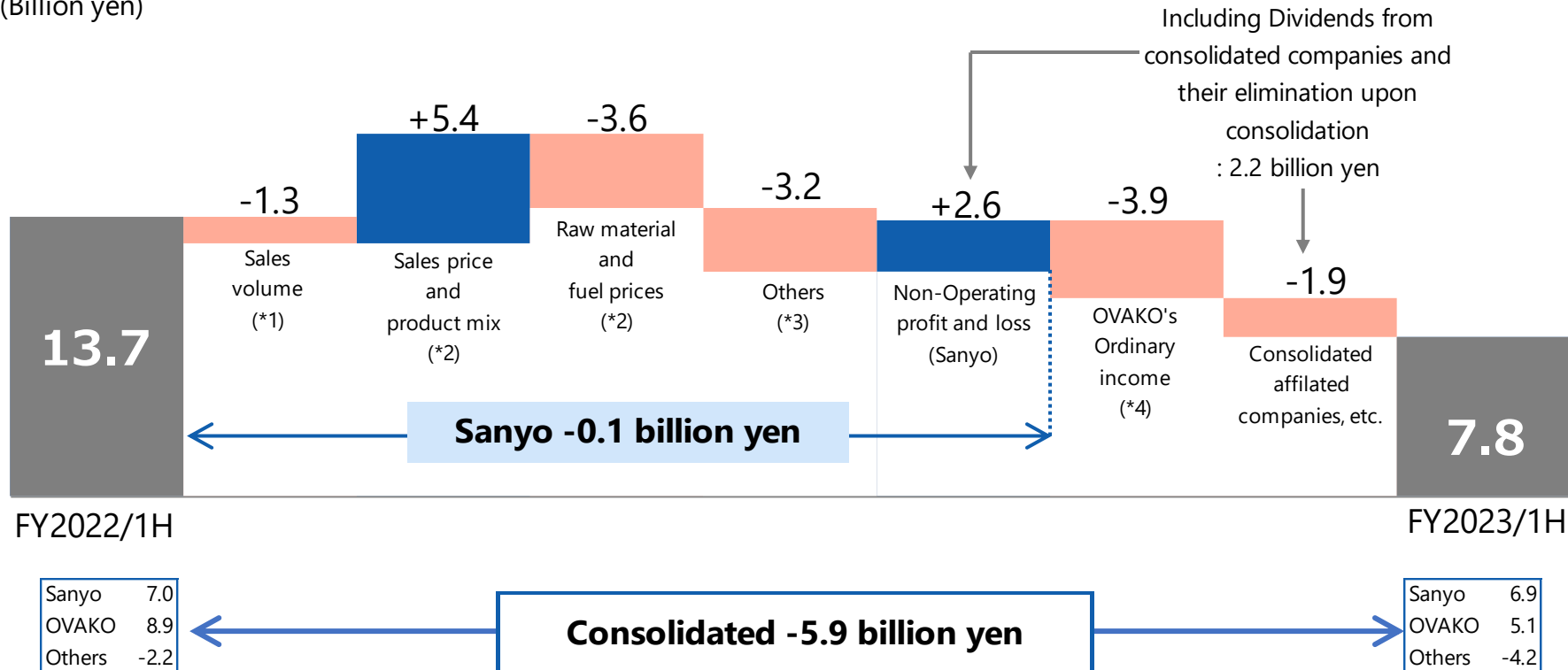
Rating upgraded by Japan Credit Rating Agency, Ltd. (JCR) on October 13, 2023

Long-term Issuer Rating: A → **A+** (Stable)



# Ordinary Income Variance Analysis (FY2022/1H → FY2023/1H Result)

(Billion yen)



## (\*1) Sales volume

- 7% (-31: 458 → 427 thousand tons)

## (\*2) Time lag of surcharge pricing

- Iron scrap :-0.6 (+0.4 → -0.2)
- Energy :+2.1 (-1.1 → +1.0)

## (\*3) Breakdown of Others

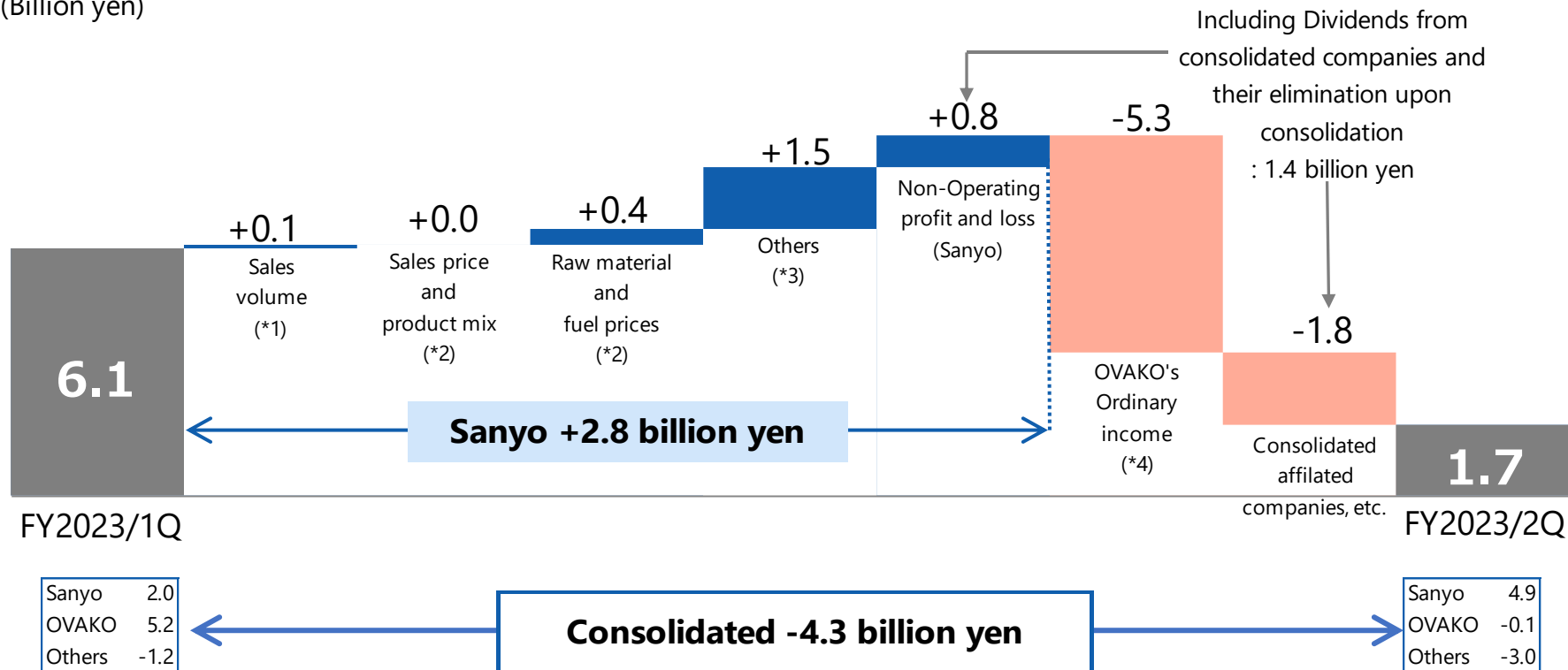
- Variable cost reductions+0.2,
- Other materials, outsourcing, logistic cost, etc.-1.5,
- Repair and maintenance expenses-0.6, Fixed cost-1.3

## (\*4) OVAKO's Ordinary Income

- Sales volume -4.5  
-16% (-47: 303 → 256 thousand tons)
- Transient factors -2.4 ( +4.8 → +2.4)
  - Modification of Surcharge System -1.4 ( +1.4 → 0.0)
  - Refund of Health Insurance -0.6 ( +0.6 → 0.0)
  - Iron scrap market price differences +0.1 ( +1.4 → +1.5)
  - FX effect (SEK vs. EUR) -0.9 ( +1.2 → +0.3)
  - Subsidy of Energy +0.6 ( 0.0 → +0.6)
- Sales margin and product mix, raw material and fuel prices +2.4
- Others (FX effect, etc.) +0.6

# Ordinary Income Variance Analysis (FY2023/1Q → FY2023/2Q Result)

(Billion yen)



## (\*1) Sales volume

- +1% (+2: 213→ 215 thousand tons)

## (\*2) Time lag of surcharge pricing

- Iron scrap :+0.4 (-0.3→ +0.1)
- Energy :+0.4 (+0.3→ +0.7)

## (\*3) Breakdown of Others

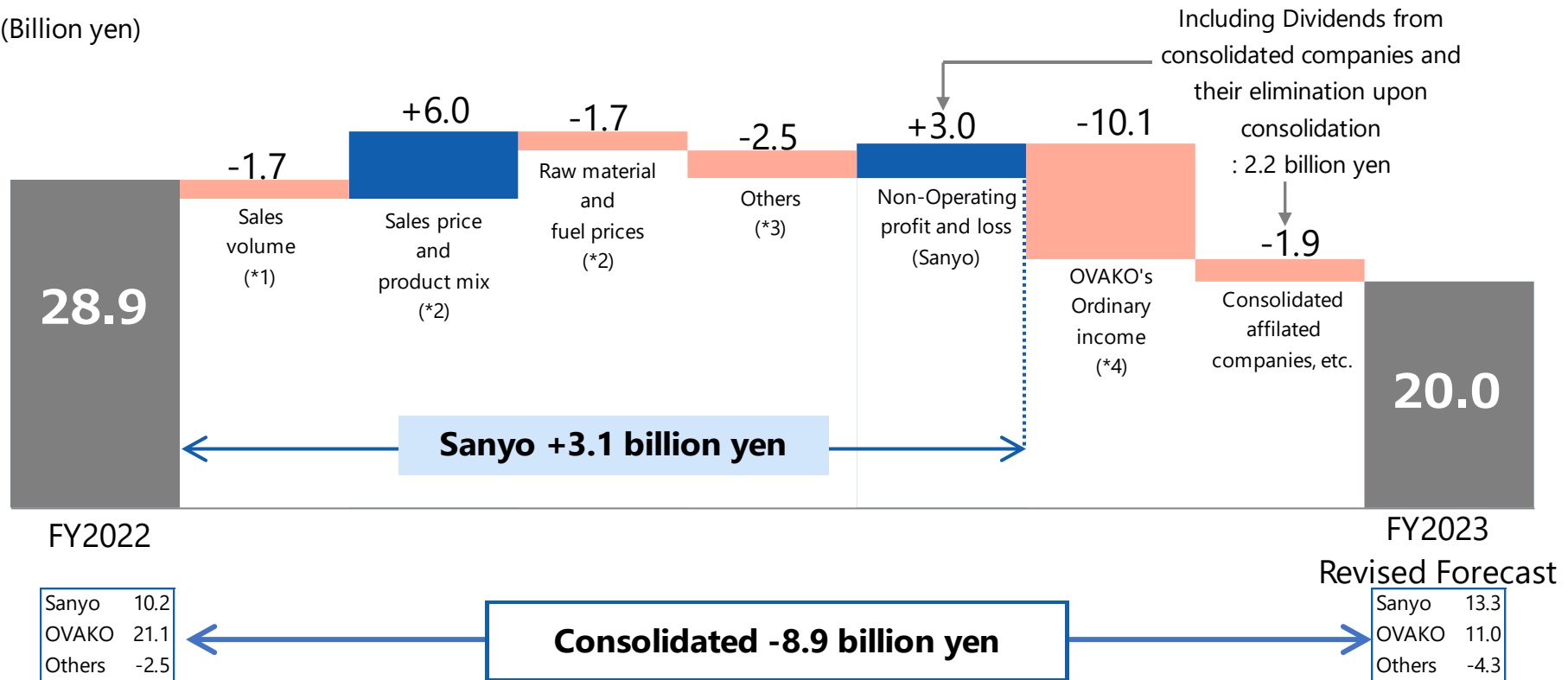
- Variable cost reductions+0.3,  
Other materials, outsourcing, logistic cost, etc.+0.7,  
Repair and maintenance expenses+0.3, Fixed cost+0.2

## (\*4) OVAKO's Ordinary Income

- Sales volume (Seasonal factors, etc.) -5.5  
-32% (-49: 152→ 103 thousand tons)
- Transient factors -0.8 ( +1.6→+0.8)  
Iron scrap market price differences -0.1 ( +0.8→ +0.7)  
FX effect (SEK vs. EUR) -0.7 ( +0.5→ -0.2)  
Subsidy of Energy 0.0 ( +0.3→ +0.3)
- Sales margin and product mix, raw material and fuel prices -0.8
- Others (Fixed cost, etc.) +1.8

# Ordinary Income Variance Analysis (FY2022 → FY2023 Revised Forecast)

(Billion yen)



## (\*1) Sales volume

- 5% (-41: 894 → 853 thousand tons)

## (\*2) Time lag of surcharge pricing

- Iron scrap :-1.5 (+1.3 → -0.2)
- Energy :+5.8 (-3.0 → +2.8)

## (\*3) Breakdown of Others

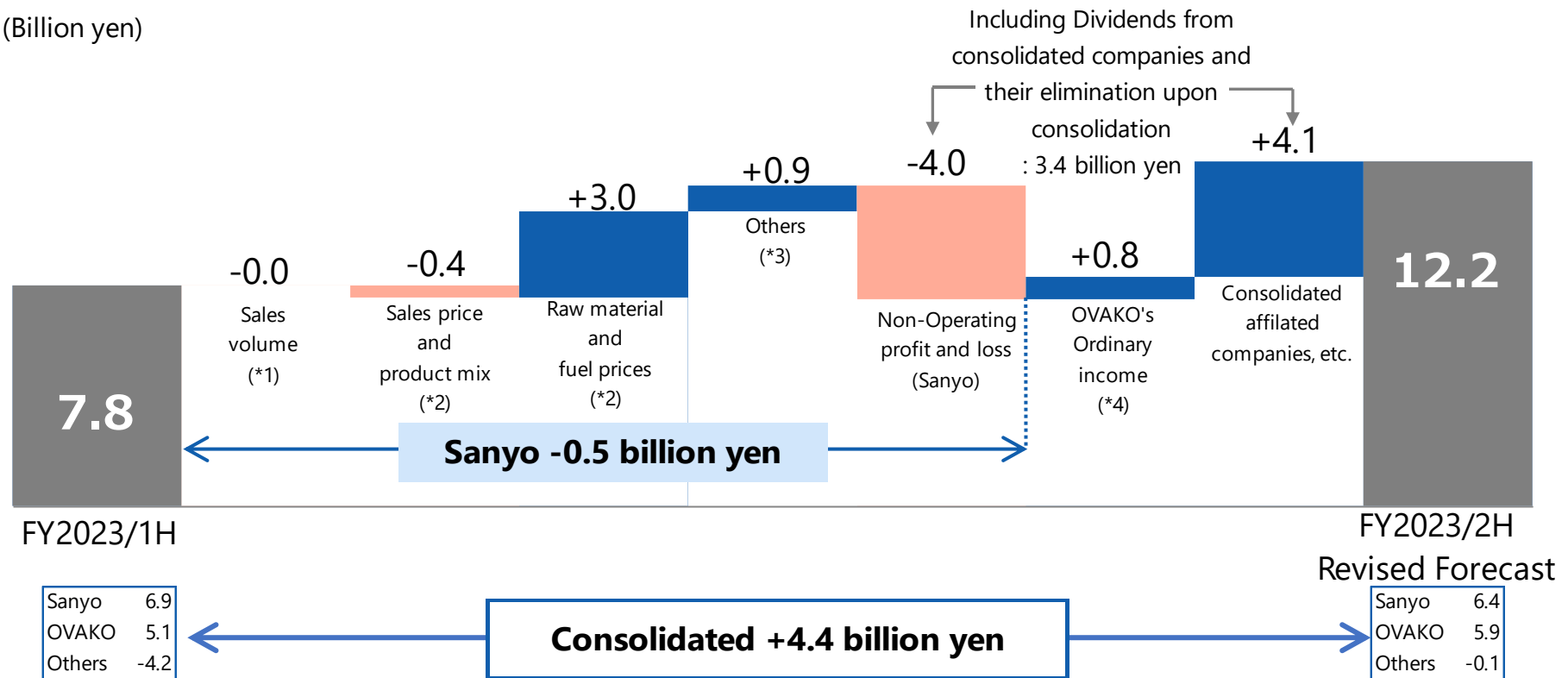
- Variable cost reductions+0.9,
- Other materials, outsourcing, logistic cost, etc.-1.8,
- Repair and maintenance expenses-0.4, Fixed cost-1.2

## (\*4) OVAKO's Ordinary Income

- Sales volume -4.9  
-8% (-48: 608 → 560 thousand tons)
- Transient factors -7.2 ( +9.6 → +2.4)
  - Modification of Surcharge System -2.8 ( +2.8 → 0.0)
  - Refund of Health Insurance -0.6 ( +0.6 → 0.0)
  - Iron scrap market price differences -1.8 ( +3.3 → +1.5)
  - FX effect (SEK vs. EUR) -2.1 ( +2.4 → +0.3)
  - Subsidy of Energy +0.6 ( 0.0 → +0.6)
- Sales margin and product mix, raw material and fuel prices +1.2
- Others (FX effect, etc.) +0.8

# Ordinary Income Variance Analysis (FY2023/1H → FY2023/2H Revised Forecast)

(Billion yen)



## (\*1) Sales volume

- 0% (-1: 427 → 426 thousand tons)

## (\*2) Time lag of surcharge pricing

- Iron scrap : +0.2 (-0.2 → +0.0)
- Energy : +0.8 (+1.0 → +1.8)

## (\*3) Breakdown of Others

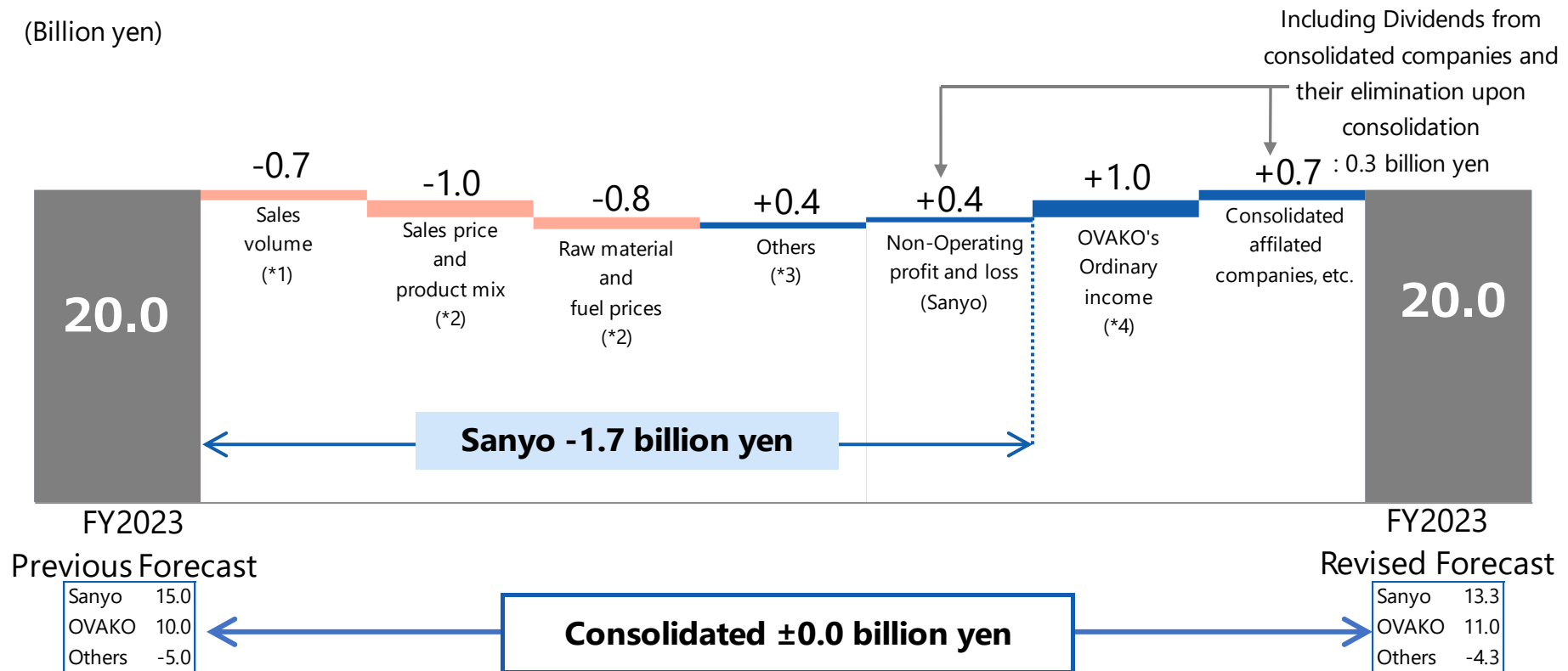
- Variable cost reductions +0.5,
- Other materials, outsourcing, logistic cost, etc. +0.1,
- Repair and maintenance expenses +0.2, Fixed cost +0.1

## (\*4) OVAKO's Ordinary Income

- Sales volume (Seasonal factors, etc.) +4.8  
+19% (48: 256 → 304 thousand tons)
- Transient factors -2.4 ( +2.4 → 0.0)  
Iron scrap market price differences -1.5 ( +1.5 → 0.0)  
FX effect (SEK vs. EUR) -0.3 ( +0.3 → 0.0)  
Subsidy of Energy -0.6 ( +0.6 → 0.0)
- Sales margin and product mix, raw material and fuel prices -0.8
- Others (Fix cost, etc.) -0.8

# Ordinary Income Variance Analysis (FY2023 Previous Forecast → FY2023 Revised Forecast)

(Billion yen)



## (\*1) Sales volume

- 2% (-17: 870 → 853 thousand tons)

## (\*2) Time lag of surcharge pricing

- Iron scrap :-0.4 (+0.2 → -0.2)
- Energy :0.0 (+2.8 → +2.8)

## (\*3) Breakdown of Others

- Other materials, outsourcing, logistic cost, etc.+0.3, Repair and maintenance expenses+0.1

## (\*4) OVAKO's Ordinary Income

- Sales volume -2.2  
-4% (-25: 585 → 560 thousand tons)
- Transient factors +0.8 ( +1.6 → +2.4)  
Iron scrap market price differences +0.7 ( +0.8 → +1.5)  
FX effect (SEK vs. EUR) -0.2 ( +0.5 → +0.3)  
Subsidy of Energy +0.3 ( +0.3 → +0.6)
- Sales margin and product mix, raw material and fuel prices +1.2
- Others (Fix cost, etc.) +1.0

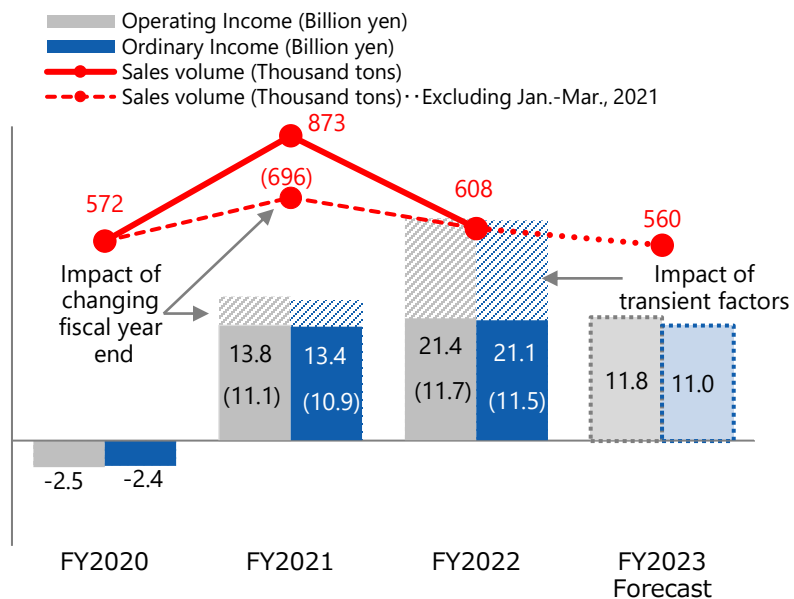
# Review of Performance <OVAKO>

## FY2023 Business Forecast

**Ordinary Income in FY2023 Forecast : 11.0 billion yen (-10.1 billion yen compared to FY2022)**

- Despite decrease in sales volume and of positive impact of transient factors on YOY basis, other factors such as base price increase contributed for FY2023/1H ordinary income of 5.1 billion yen (-3.9 billion yen on YOY basis (8.9 → 5.1)).
- While sales volume will be stagnant in FY2023/2H due to economic uncertainty in Europe, OVAKO will continue cost reduction and implementing optimization of operational structure and aims to achieve FY2023/2H ordinary income of 5.9 billion yen.

## Trend of Sales volume, Operating Income, and Ordinary Income



## Profit improvement measures and Maximizing synergies

1. Profit improvement
  - a) Safeguarding and improving profit margin in an inflationary environment by base price increase and climate surcharge and energy surcharge implementation.
  - b) Streamlining numbers of workforce by optimizing operation by flexibly balancing capacity between mills.
  - c) Continuously lowering BEP by margin improvement and fixed cost control.
2. Maximizing synergies among the 3 companies, OVAKO, Sanyo and Nippon Steel
  - a) Sales promotion activities
  - b) Reduction of operational cost
  - c) Reduction of procurement cost

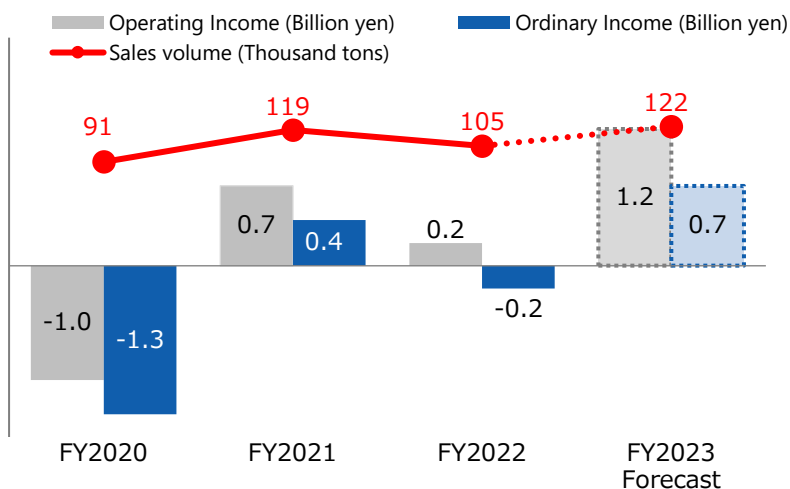
# Review of Performance <SSMI>

## FY2023 Business Forecast

### Ordinary Income in FY2023 Forecast : 0.7 billion yen (+0.9 billion yen compared to FY2022)

- Ordinary income in FY2023/1H (Jan.-Jun. 2023) was 0.3 billion yen (+0.5 billion yen compared to FY2022/1H), due to increase in sales volume and decline of raw material and fuel prices.
- SSMI will secure positive returns of 0.7 billion yen in FY2023 by implementing following measures.
  - ▶ Expanding sales volume in mainly high-margin segments.
  - ▶ Using cost effective cold iron resources, utilizing cost effective and renewable electricity and further pursuing manufacturing cost reduction partly by streamlining production process.

## Trend of Sales volume, Operating Income, and Ordinary Income



## Profit improvement measures and actions

1. Upgrading sales strategy and mix  
Further executing sales strategy reflecting value of SSMI's superior high-cleanliness steel technology, improving product mix and profit margin, reinforcing marketing resources.
2. Reducing variable cost  
Reducing operation cost by improving energy intensity and efficiency and reducing procurement cost by utilizing low-cost raw materials.
3. Controlling fixed cost  
Reducing interest costs by repaying borrowings associated with capital increase, etc.

Capital contribution ratio increased to 84.57% in July 2023. **Sanyo will further bolster SSMI's manufacturing, sales, technology, human resource and financial capabilities to reinforce its presence in Indian market and to capture India's sustaining economic growth, simultaneously enhancing its global presence.**

## **4. Topics**



# Topics

T&D

## 1. NOVASHAPE® series – Advanced metal powders for additive manufacturing Metal powders for die casting molds with higher thermal conductivity

(Announced on September 29, 2023)

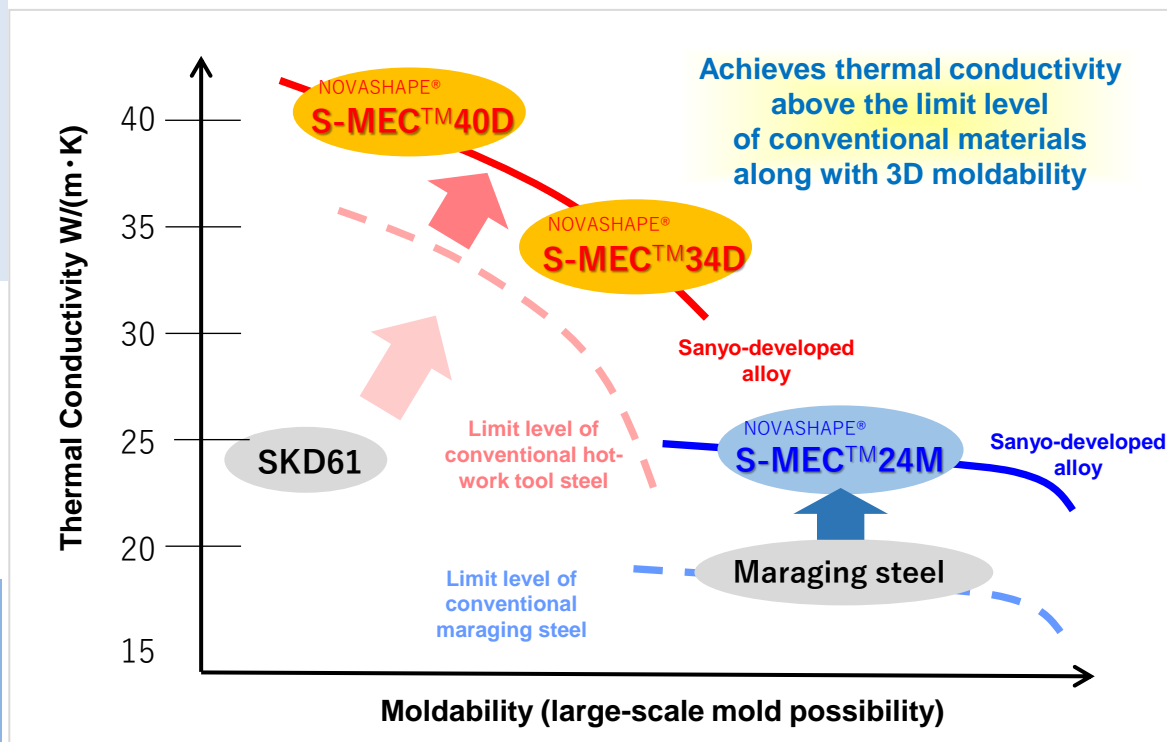
We have released a new metal powder lineup enabling formation of high-thermal-conductivity die casting molds by additive manufacturing, thereby raising productivity for die casting, extending the life of molds and enabling additive manufacturing of large molds. We will continue to focus our efforts on developing new products in the NOVASHAPE® Series and new technologies, providing solutions that utilize materials and technology to improve the competitiveness of our customers.

### Focused on features of additive manufacturing

- Comprehensive hardening effectiveness
  - Inhibition of embrittlement by rapid solidifying
- ⇒ It should be possible to reduce alloy elements compared to conventional materials

Alloy design that utilizes features of additive manufacturing

Alloys that achieve thermal conductivity exceeding the limit levels of conventional materials and excellent 3D moldability.



Achieves thermal conductivity above the limit level of conventional materials along with 3D moldability

Sanyo-developed alloy

Sanyo-developed alloy

Moldability (large-scale mold possibility)

# Topics

## 2. Regular plant tours for elementary school students (Jul.-Sep. 2023)

ESG

- We held plant tours for about 140 students from HAKUCHO elementary school and SOSA elementary school.
- We will accept about 600 students for plant tours in FY2023.



## 3. Exhibiting at the Highly-functional Material Expo (October 4-6, 2023)

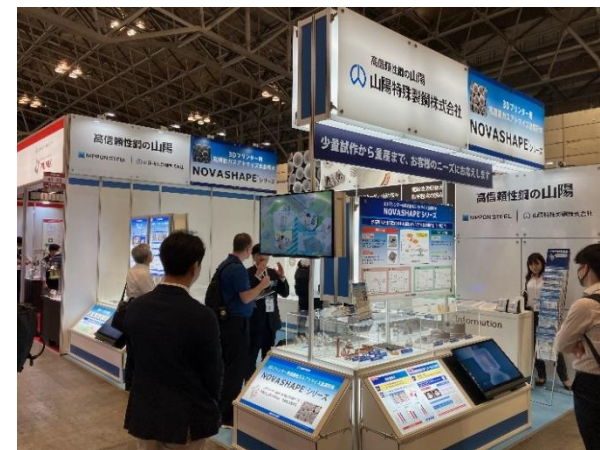
Others

We promoted our high-grade metal powders to 210 visitors.

Our exhibits :

“**NOVASHAPE® series**” Advanced Metal Powder for Additive manufacturing

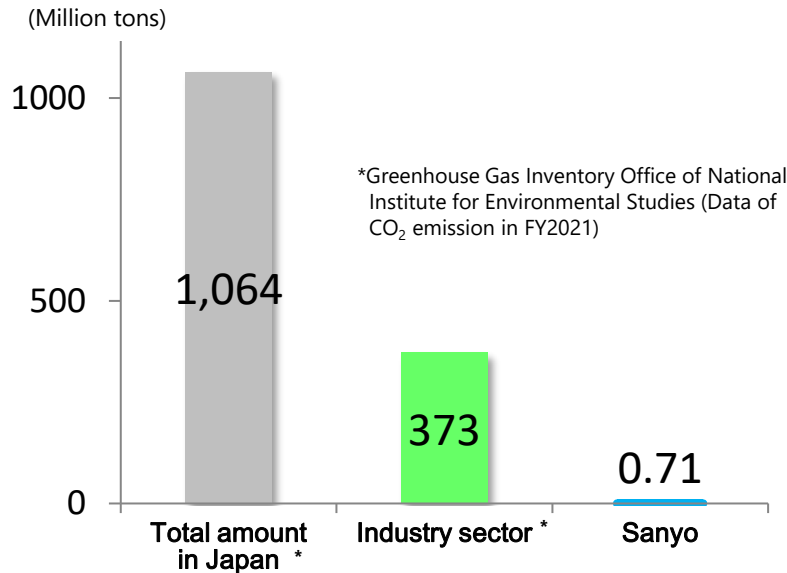
- [NEW] “S-MEC™40D” “S-MEC™34D” “S-MEC™24M”  
for Die Casting Molds with Higher thermal Conductivity
- (Developed product) Cobalt-free Maraging Steel Powder
- (Developed product) Copper Alloy Powder Ideal for  
Laser Additive Manufacturing
- CoCrMoW Alloy for Artificial Teeth



## **5. Reference**

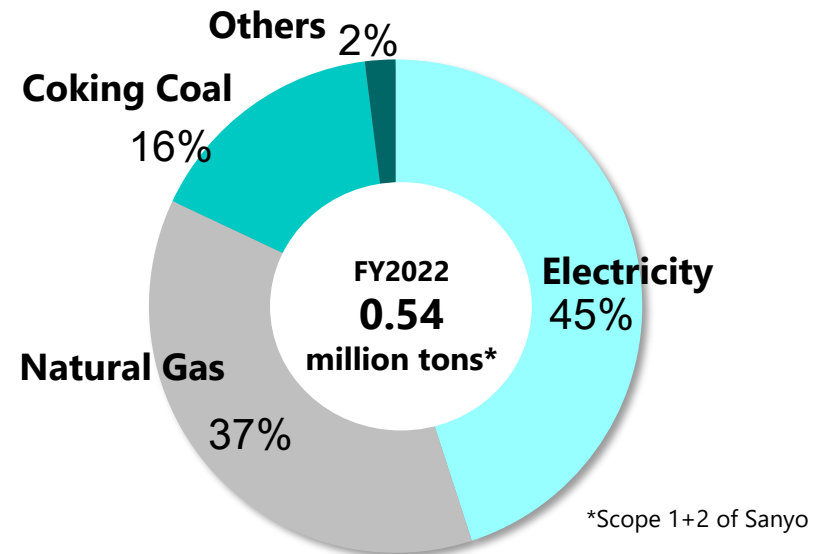
# Basic Consideration to Carbon Neutrality

## Amount of CO<sub>2</sub> emissions in FY2021



Sanyo manufactures high quality special steel, using recycled iron scrap as main raw material, and its CO<sub>2</sub> emissions are approximately 0.2% of that of the total Japanese Industry.

## Breakdown of Sanyo's CO<sub>2</sub> emissions



CO<sub>2</sub> emissions due to consumption of electricity and natural gas account for 80% or more of the total emissions of Sanyo.

**Sanyo aims to reduce CO<sub>2</sub> emissions from its own manufacturing process and at all social stages by promoting "Eco-process", "Green energy utilization", "Eco-products" and "Eco-solutions."**

## Participation in the GX League

Sanyo endorses the GX League Basic Concept and has taken part in this forum from May 2023. The GX League aims to reform the entire economic and social system to achieve corporate growth, consumer happiness and contribution to the global environment at the same time, towards achieving carbon neutrality by 2050.

Sanyo will actively engage in activities of GX League, such as voluntary emissions trading, making rules for market creation, creation of business opportunities and exchanges in GX hosted sessions.



# CO<sub>2</sub> Reduction through “Eco-products”

In particular, Sanyo is focusing on development of “Eco-products” that contribute to reducing CO<sub>2</sub> emissions in the supply chain and final usage.

## Stable and long-life Bearing steel

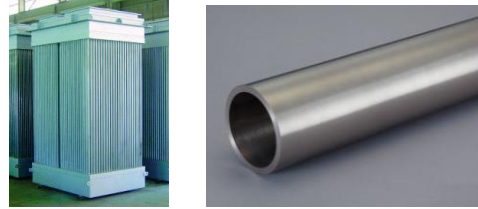


Size and weight reduction of products by improving durability and reliability



Failure ratio reduction and maintenance-free realization by extending product lifespan

## Heat-resistant stainless steel tube



Heat recovery efficiency improvement by increasing strength



Effective use of thermal energy in refuse incinerating power plants by superior corrosion resistance

## High hardness and High toughness steel



Reduction of carbon emissions in heat hardening process of customers by original alloy design and advanced heat treatment technology

**Sanyo aims to continuously reduce CO<sub>2</sub> emissions at all social stages through “Eco-products” by fully utilizing its advanced and innovative technology.**

# Engagement to Carbon Neutrality by OVAKO

First in the world to heat steel using hydrogen

**Decision to introduce Fossil-free hydrogen electrolyzer plant**

**Commit to Science Based Targets initiative**

Science Based Targets (SBT's) are organizational targets in line with meeting the goals of the Paris Agreement that show how much and how quickly organizations need to reduce their Greenhouse Gas emissions.

**Carbon neutral in production from January 2022**

- ✓ OVAKO has utilized carbon offset program to become carbon neutral.
- ✓ OVAKO has applied climate surcharge to all customers.

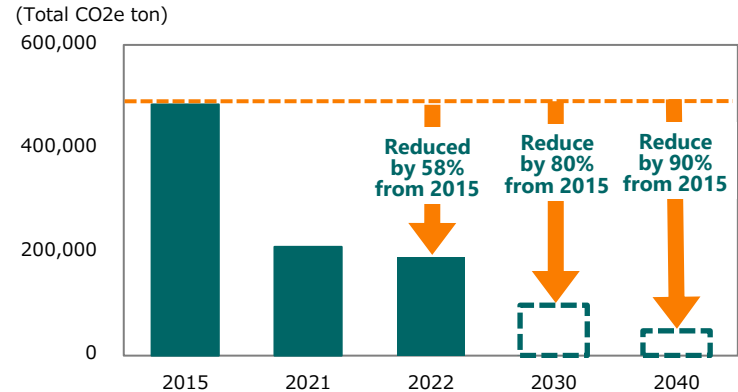
**Inauguration of Fossil-free hydrogen electrolyzer plant**

**Collaboration with customers**

- SKF has produced bearings with 90% less carbon emission than its standard, using OVAKO's high quality bearing steel.
- OVAKO has participated in Volvo's climate-neutral car project.

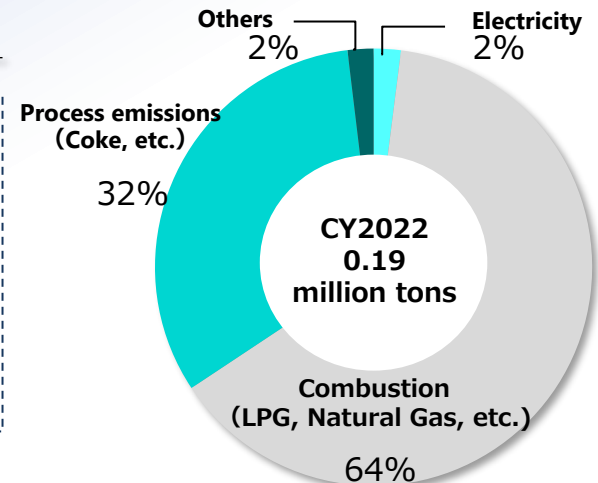


## OVAKO's Roadmap: CO<sub>2</sub> emissions, scope 1&2



Made by Sanyo based on OVAKO's SUSTAINABILITY REPORT 2022

## Breakdown of OVAKO's CO<sub>2</sub> emissions

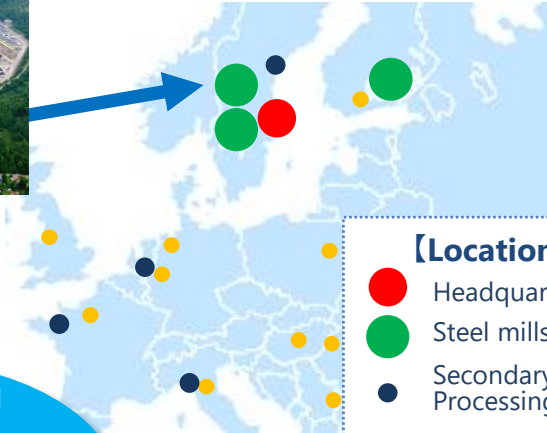


# Fossil-free hydrogen initiative by OVAKO

- The fossil-free hydrogen production plant at Hofors has been realized with the support of the Swedish Energy Agency and collaboration with key players in Sweden and Norway, such as Volvo Group.
- The Total investment : 180MSEK  
(Swedish government supports about 40% of them)
- The plant will generate 4,000 cubic meters of fossil-free hydrogen per hour (approximately 3,000 t/year) by electrolysis of water using fossil-free electricity.
- The conversion to hydrogen will enable OVAKO to reduce Hofors' CO<sub>2</sub> emissions from the process of re-heating steel before rolling by 50 percent (approximately 20,000 t/year) from an already low level.



the Hofors mill



## 【Locations】

- Headquarter
- Steel mills
- Secondary Processing mills
- Sales offices

## 【Sweden's feature】

- The ratio of defossil power (Hydrogen, Wind, Nuclear) is overwhelmingly high
- Industrial electric charges are 1/2 ~ 1/3 of charges in Japan

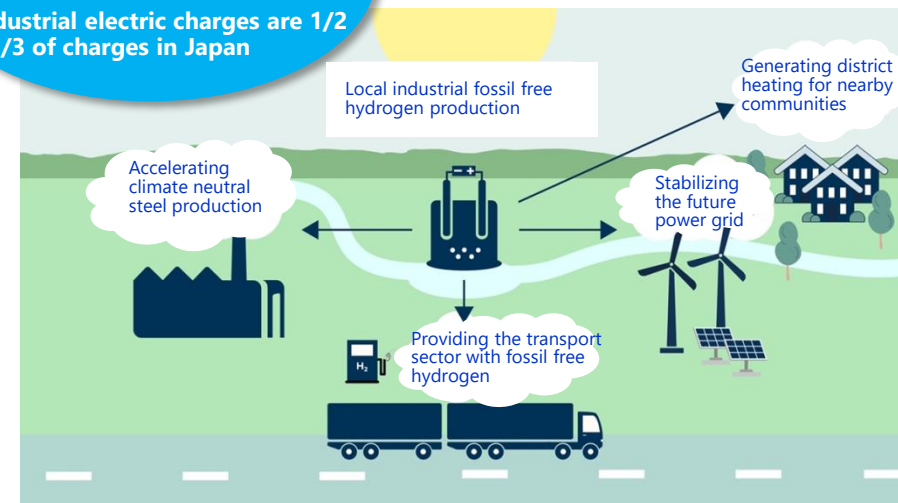
## OVAKO's full-scale trial using hydrogen to heat steel before rolling

In April 2020, OVAKO has conducted a full-scale trial using hydrogen to heat steel before rolling at the Hofors mill in Sweden.



## (Reference) Financial Support System in Sweden

- **Industriklivet (= Industrial Evolution)**
  - The program to support technical development towards the transition for zero GHG emissions in Swedish mining and industrial sector (supervising : the Swedish Energy Agency)
  - The budget for 2021 : 750MSEK (2020 : 600MSEK)  
The financial support will continue until 2028

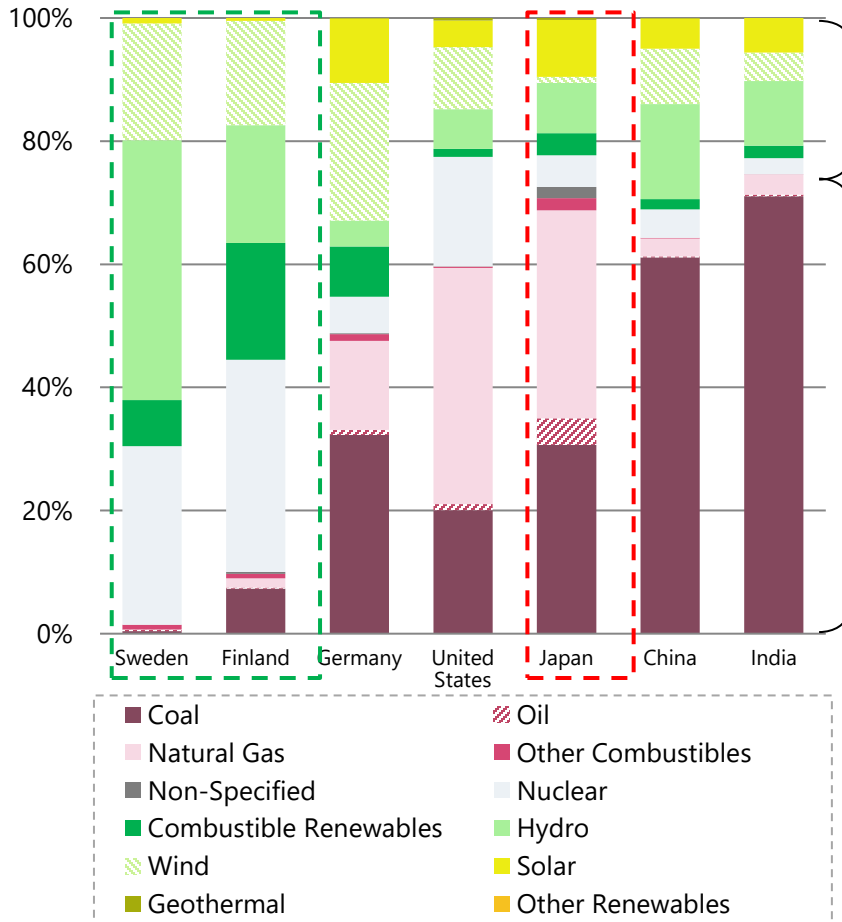


This technical solution will be the first step in development of hydrogen infrastructure which is expected to contribute to supplying for fuel cell-powered trucks, improving stability of the power grid, and utilizing the residual heat which can be utilized in adjacent communities heating networks.

# Electricity Mix and Prices of major Countries

## Electricity mix as of 2022

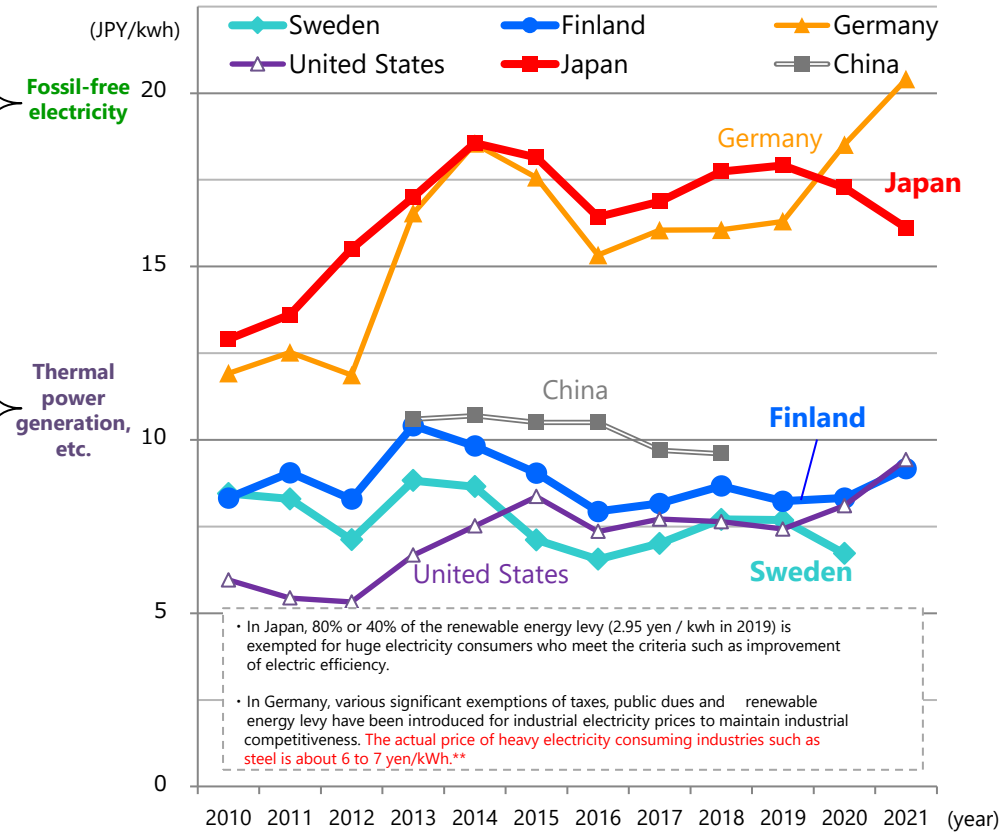
The ratios of carbon free electricity (hydropower, wind power, nuclear power) in Sweden and Finland, where OVAKO's production sites are located, is overwhelmingly high compared to other nations.



\*Made by Sanyo based on IEA's Monthly Electricity Statistics

## Industrial electricity prices\*

Industrial electricity prices in Sweden and Finland are about one-half to one-third of that of Japan.



\* In Japan, 80% or 40% of the renewable energy levy (2.95 yen / kWh in 2019) is exempted for huge electricity consumers who meet the criteria such as improvement of electric efficiency.  
 \* In Germany, various significant exemptions of taxes, public dues and renewable energy levy have been introduced for industrial electricity prices to maintain industrial competitiveness. The actual price of heavy electricity consuming industries such as steel is about 6 to 7 yen/kWh.\*\*

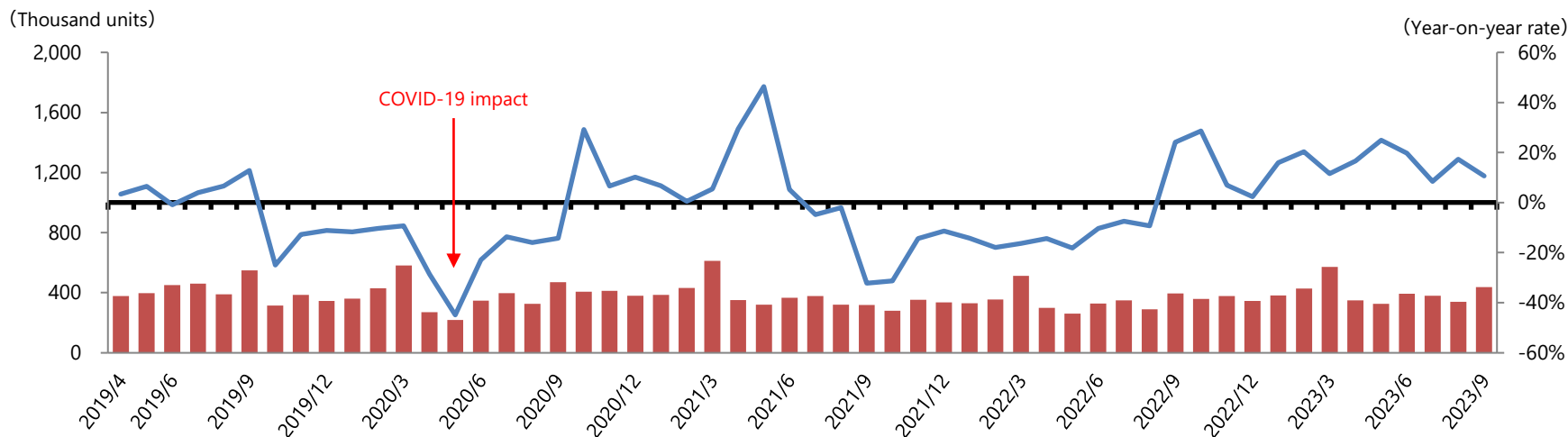
\*Made by Sanyo based on "Industrial electricity prices in the IEA" from Department for Business, Energy, and Industrial Strategy of UK and "Chinese electric power system reforms" from Renewable Energy Institute  
 \*\*International Environment and Economy Institute (Realities of the carbon pricing of overseas)



# Trends in Automobile Market

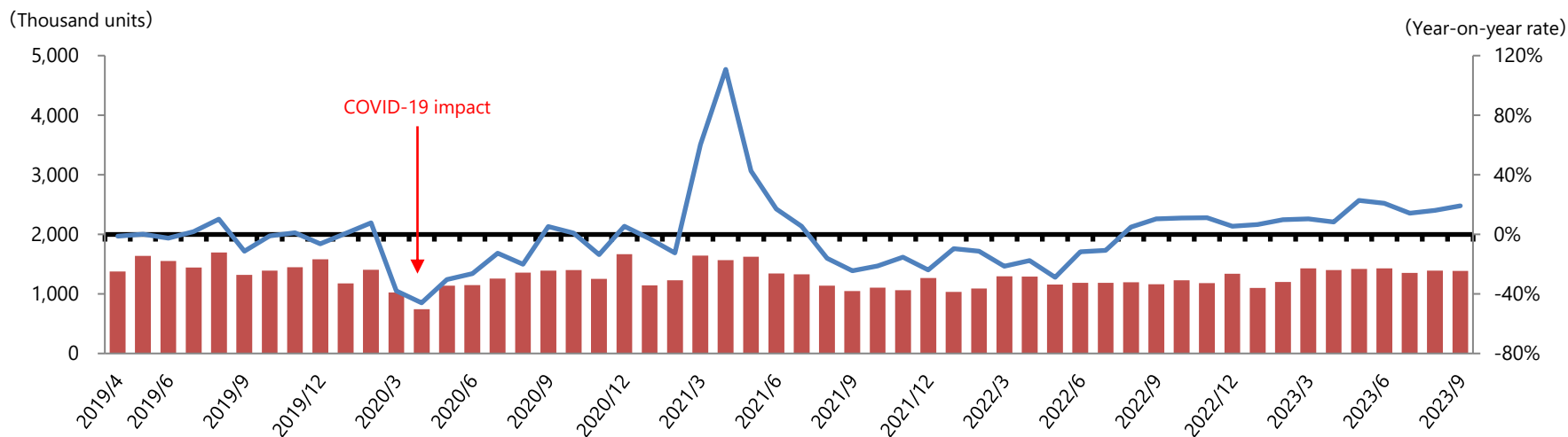
## Units of automobile sales in Japan

Source: MarkLines Co., Ltd.



## Units of automobile sales in U.S.

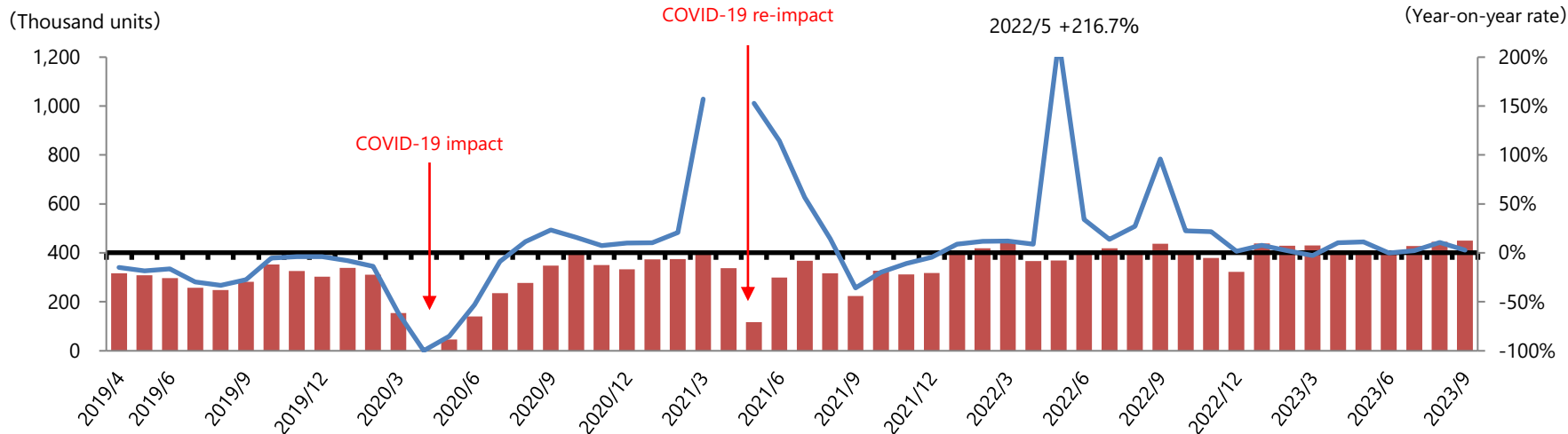
Source: MarkLines Co., Ltd.



# Trends in Automobile Market

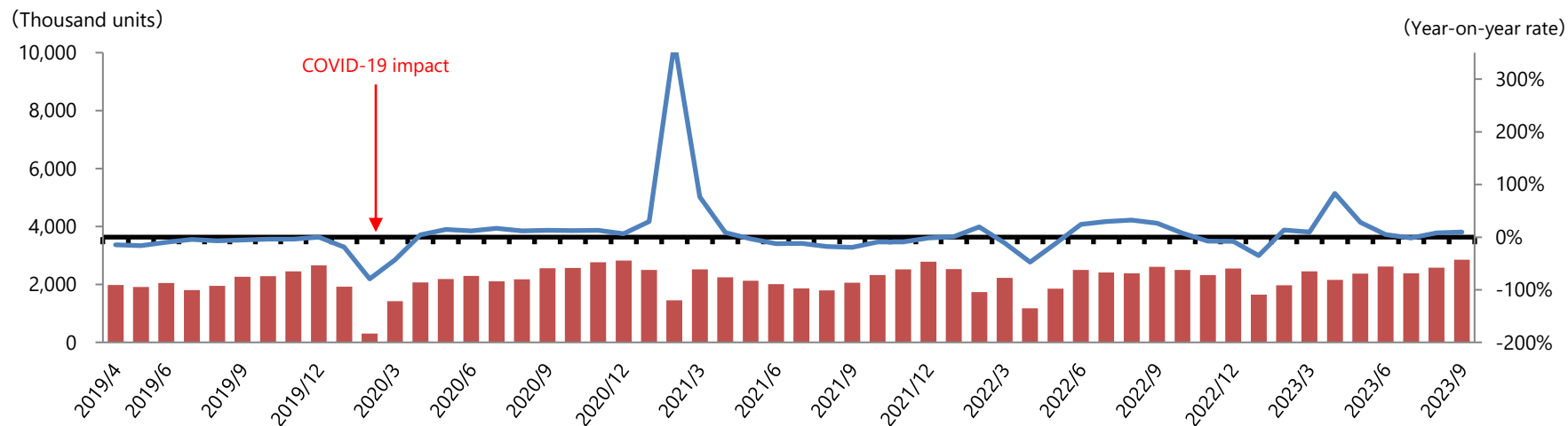
## Units of automobile sales in India

Source: MarkLines Co., Ltd.



## Units of automobile sales in China(Factory shipment base)

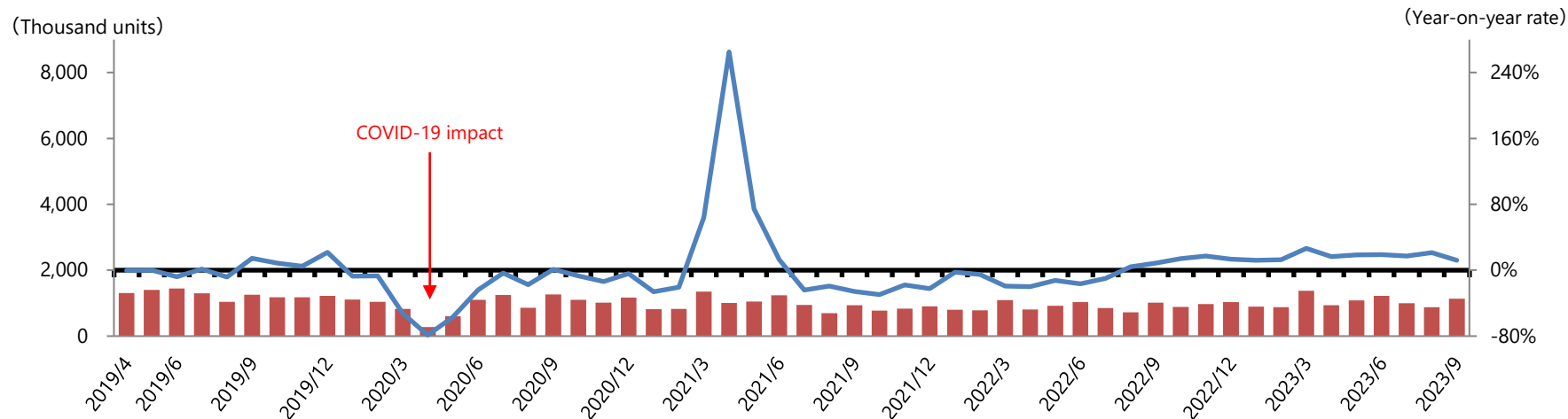
Source: MarkLines Co., Ltd.



# Trends in Automobile Market

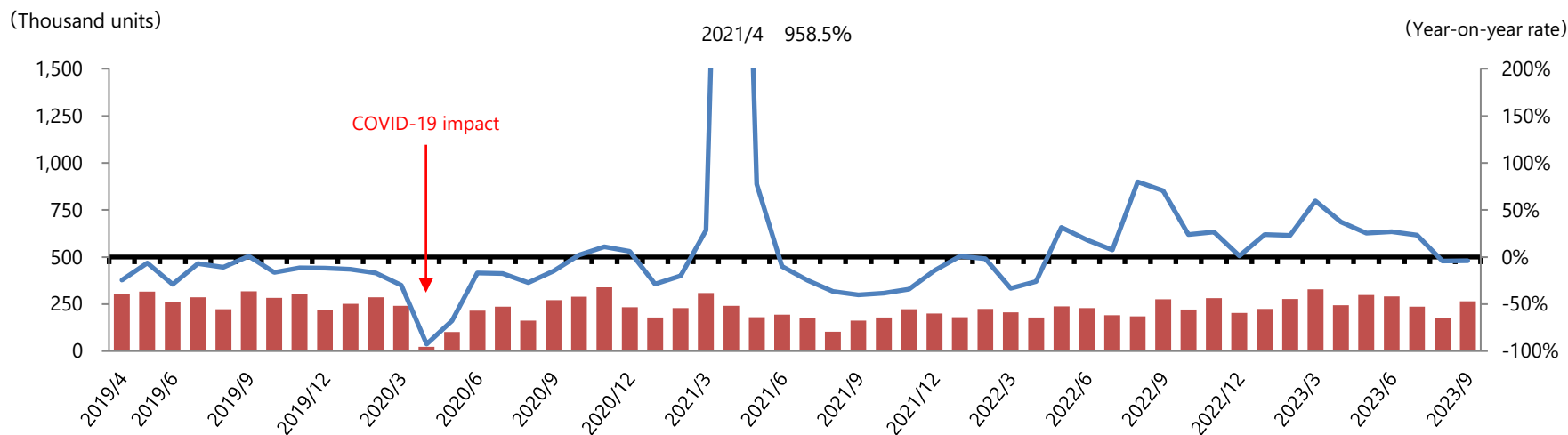
## Units of automobile sales in Europe

Source: ACEA



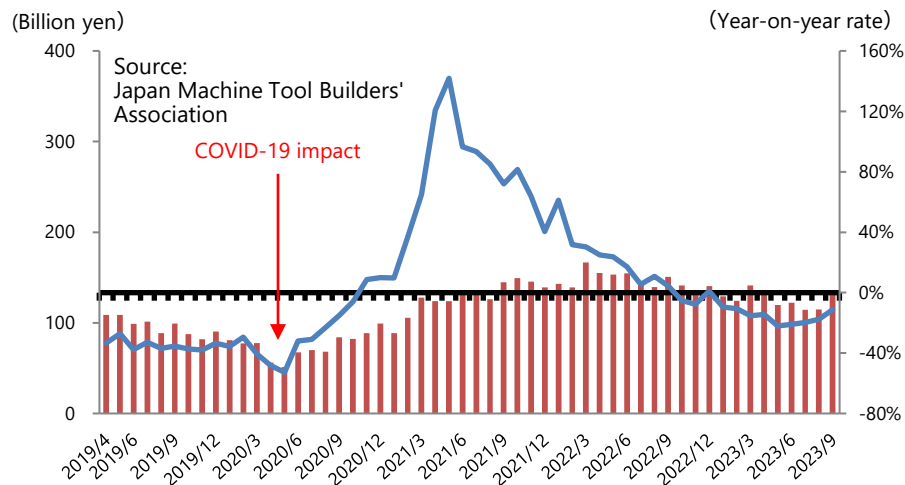
## Units of automobile export from Germany

Source: VDA

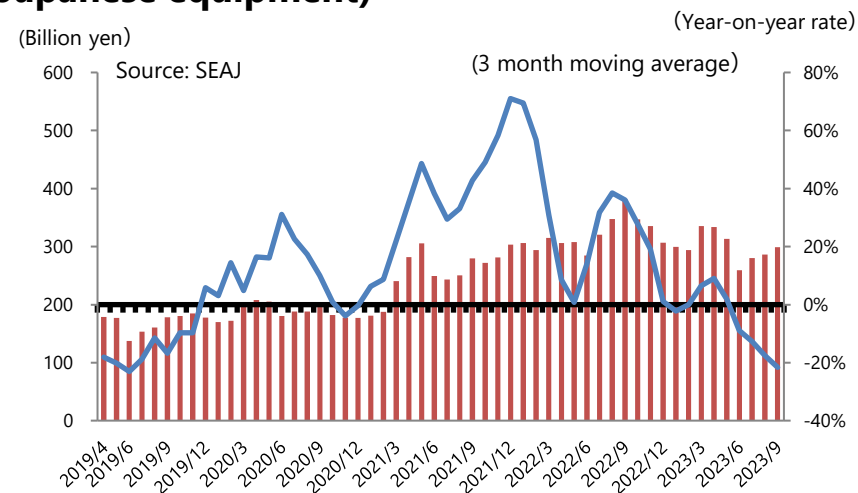


# Trends in Industrial Machinery and Construction Machinery Market

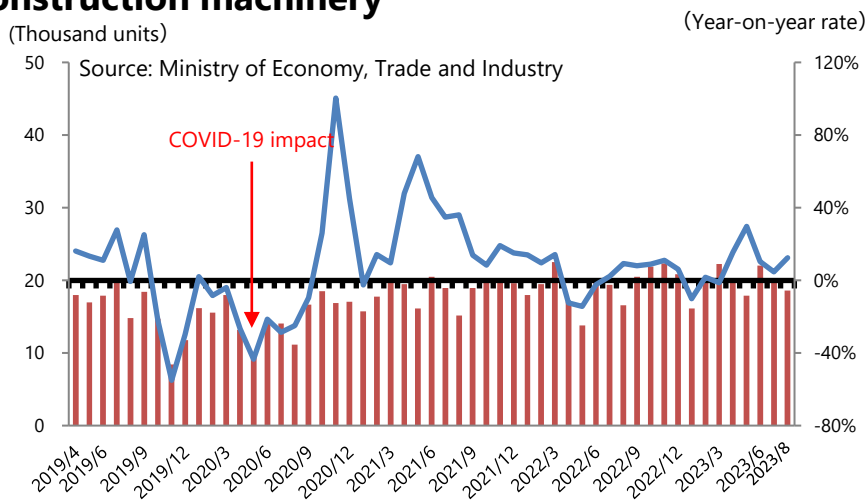
## Sales amount of machine tool orders(Japan)



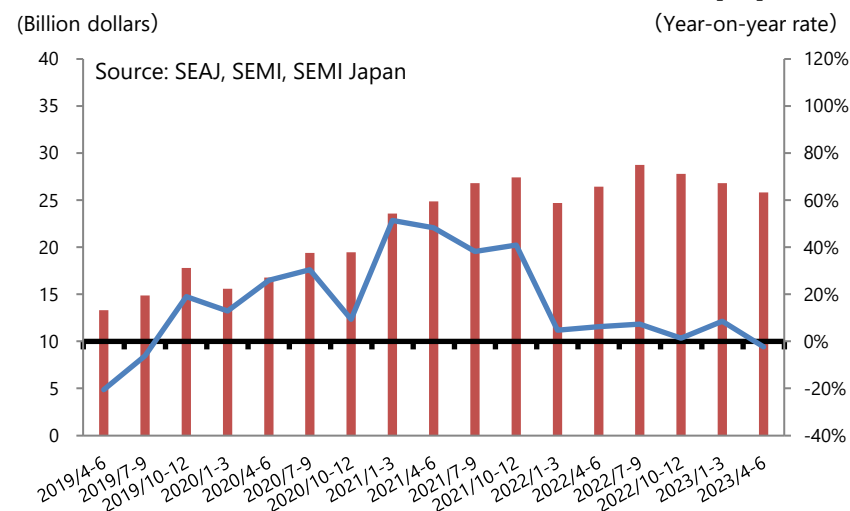
## Sales amount of semiconductor manufacturing equipment (Japanese equipment)



## Domestic production of excavator-based construction machinery

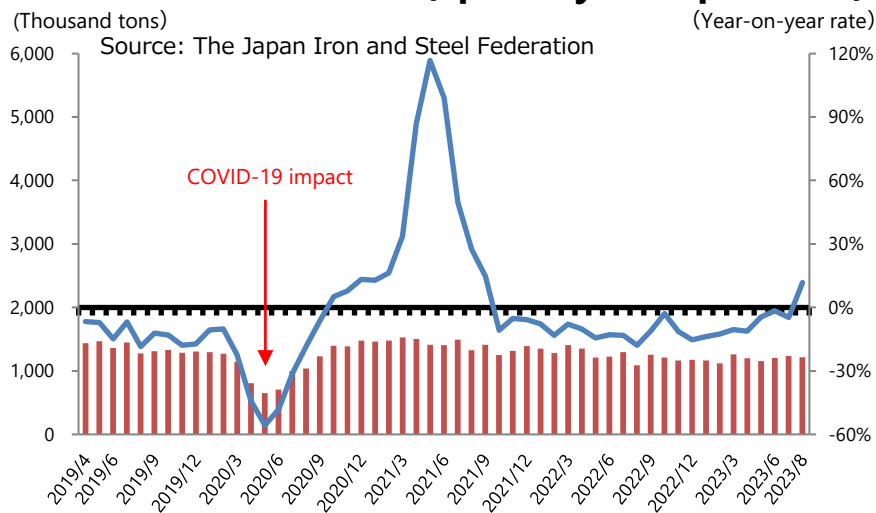


## Sales amount of world wide semiconductor equipment

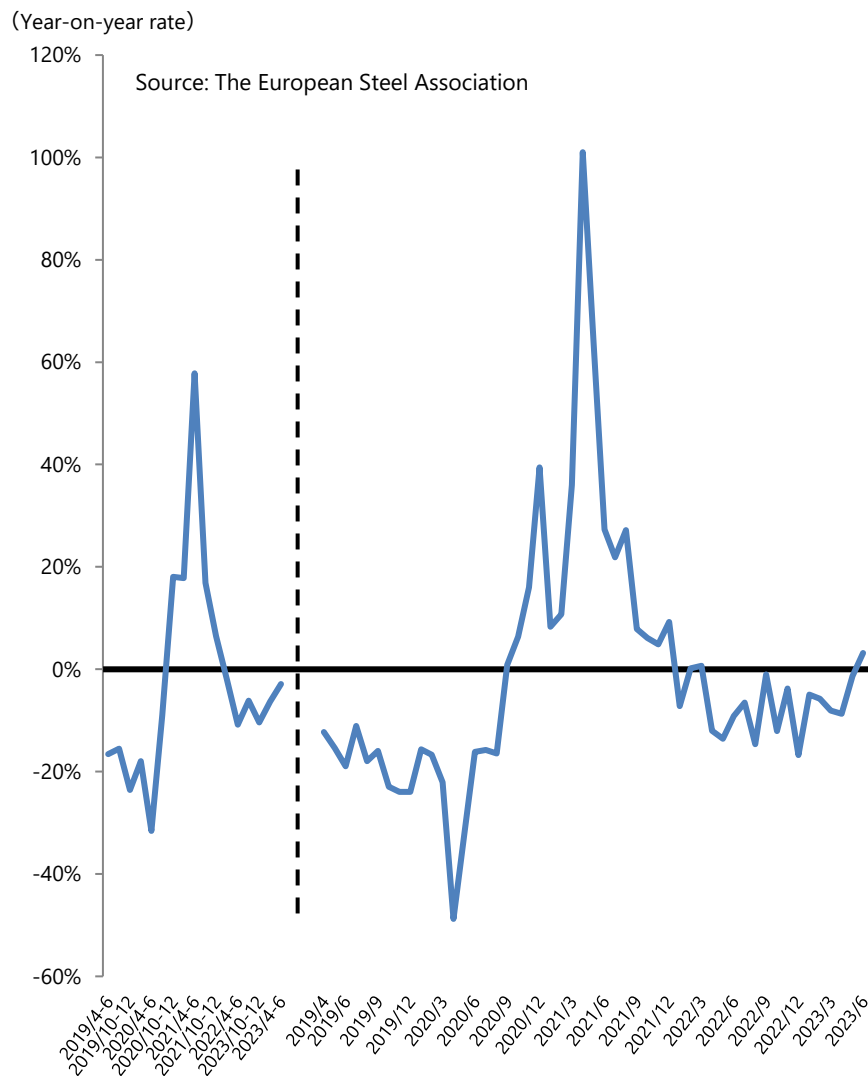


# Trends in Special Steel Market

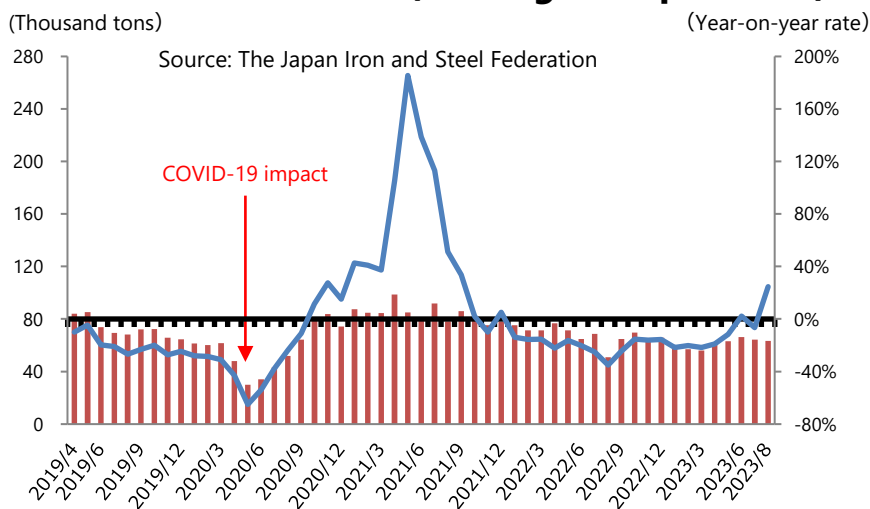
## Volume of order booked (Specialty steel products)



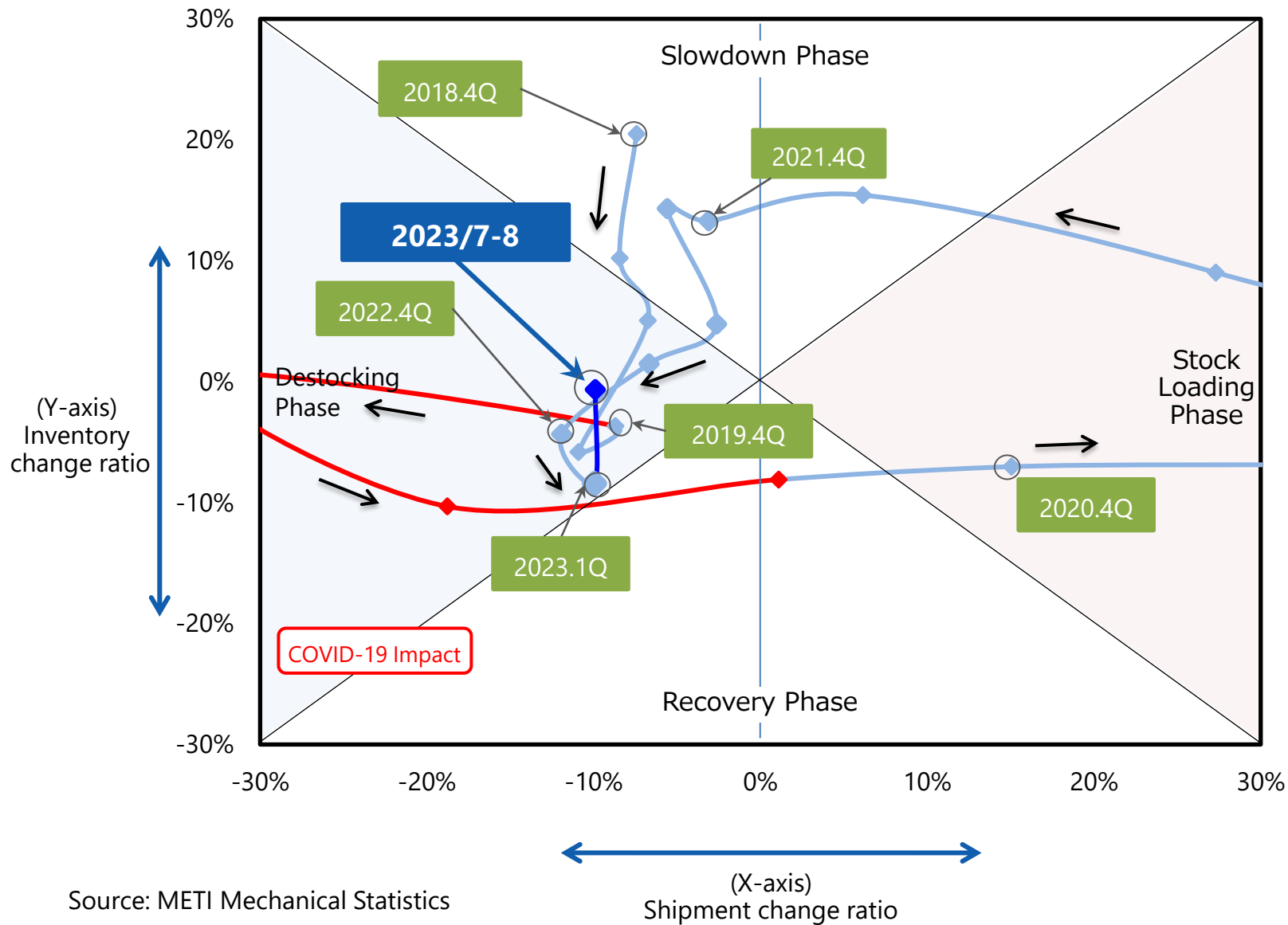
## Volume of European deliveries : Bars and Flats / Alloy Engineering Steel



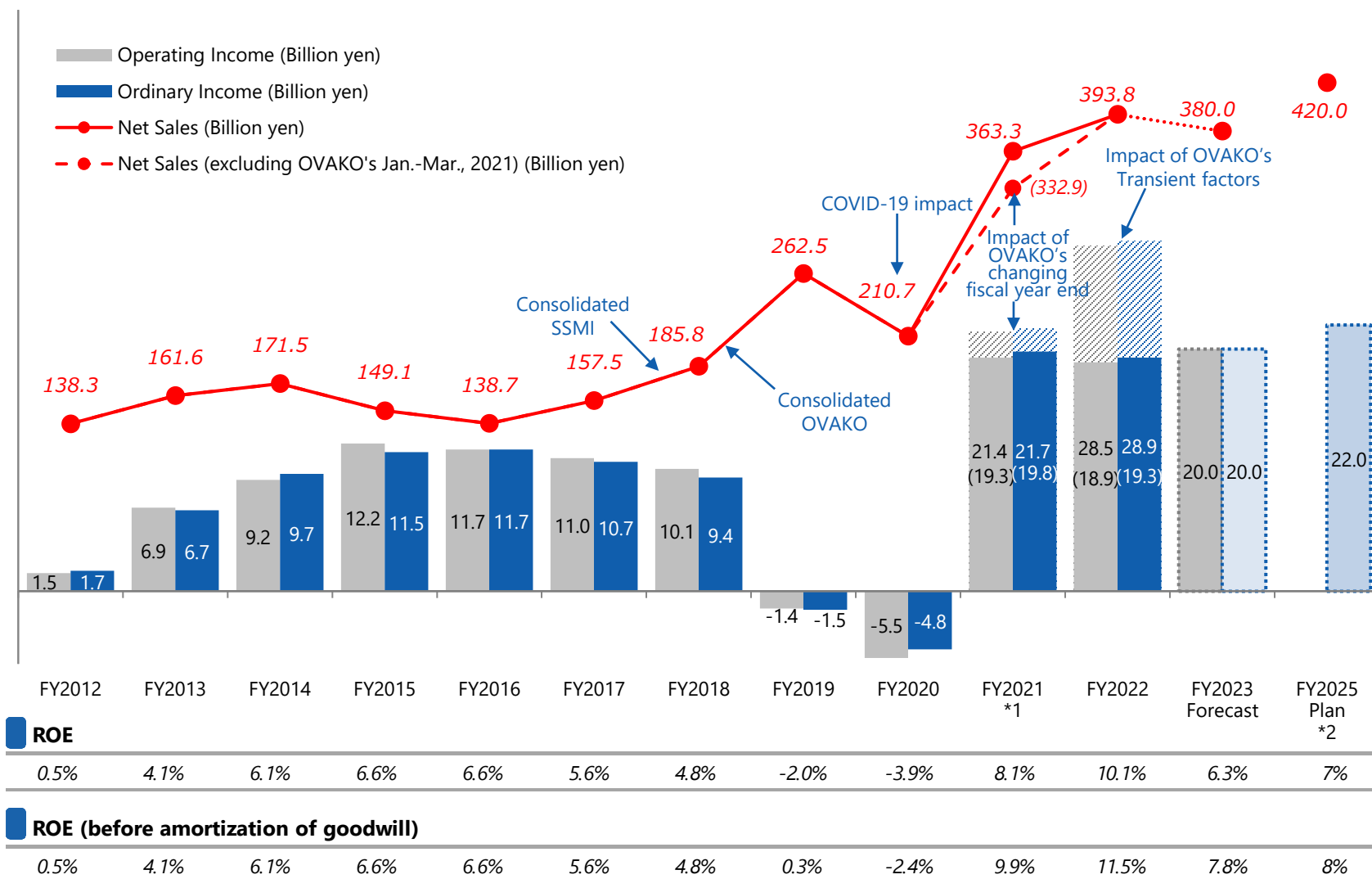
## Volume of order booked (Bearing steel products)



# Inventory Circulation Diagram (Bearing Products)



# Net Sales and Income (Fiscal)

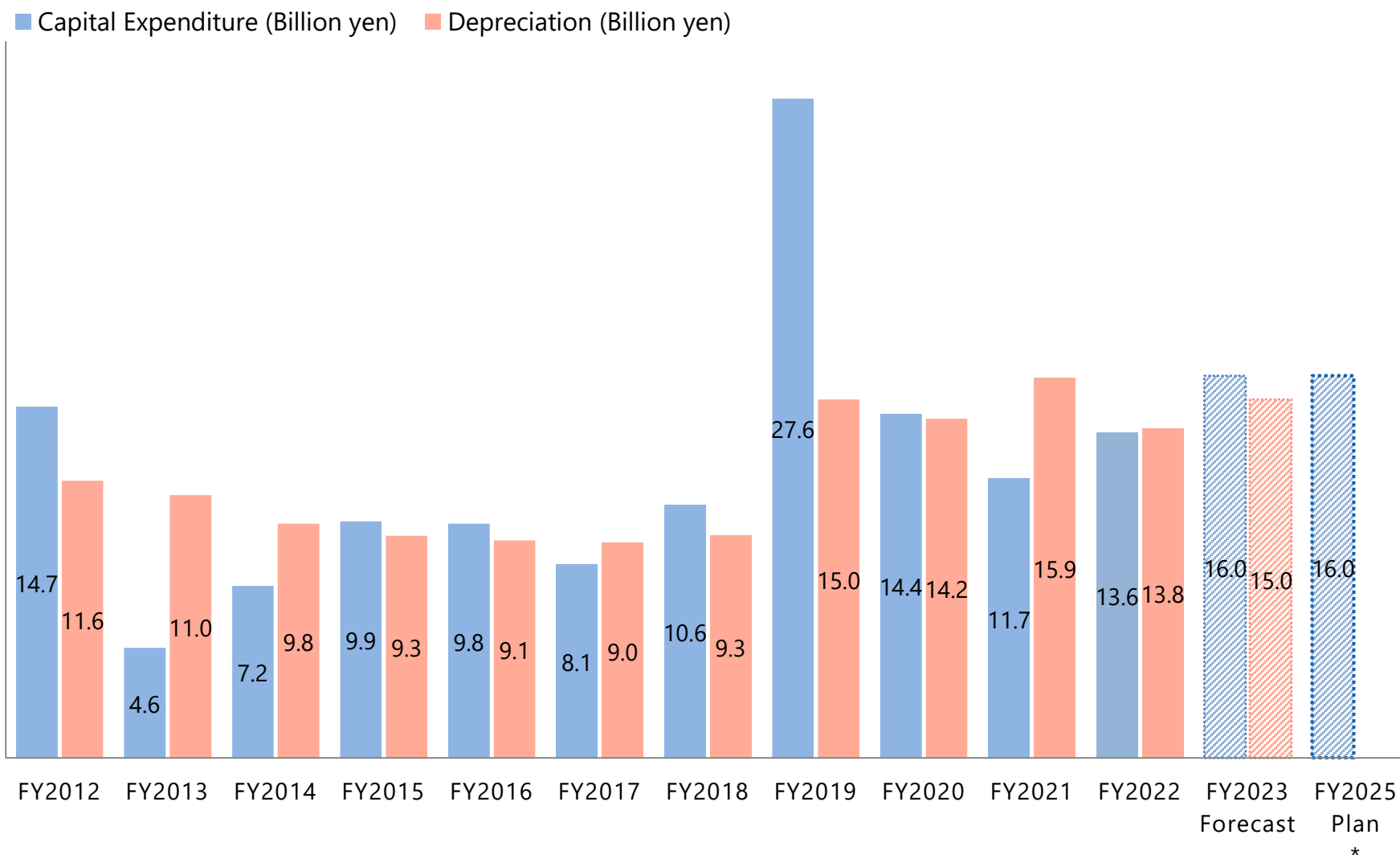


\*1 FY2021 reflects numbers of OVAKO by 15 months from Jan. 2021 to Mar. 2022.

\*2 Revised 2025 Medium-term Management Plan announced on Jul. 28, 2023

\*3 SSMI has been consolidated since FY2018/2Q, and OVAKO has been consolidated since FY2019/1Q for profit and loss.

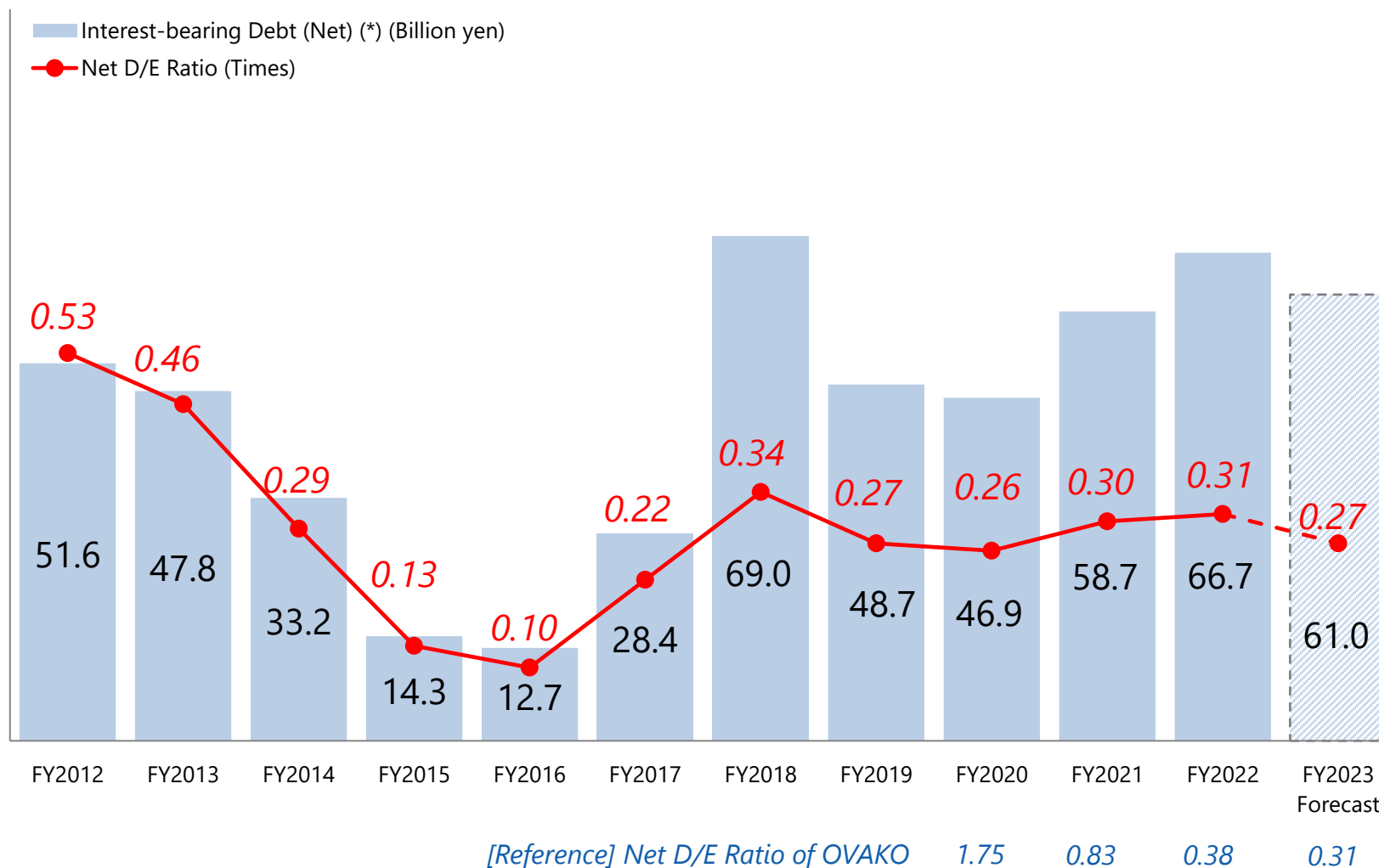
# Capital Expenditure and Depreciation



\* Revised 2025 Medium-term Management Plan announced on Jul. 28, 2023



# D/E Ratio



(\*) Interest-bearing Debt (Net) = Interest-bearing Debt – (cash + deposits paid to affiliated company)

# Details of Statements of Income (FY2023/1H vs. FY2022/1H)

(Unit: Billion yen, Yen per share)

	FY2023/1H	FY2022/1H	Change (B) → (A)	
	(A)	(B)	Amount	Ratio (%)
<b>Sales Volume</b>	<b>185.3</b>	<b>195.4</b>	<b>-10.2</b>	<b>-5.2</b>
(Sanyo)	96.2	96.5	-0.4	-0.4
(OVAKO)	74.1	85.7	-11.6	-13.5
(SSMI)	11.2	9.9	+1.2	+12.6
<b>Operating Income</b>	<b>7.3</b>	<b>13.2</b>	<b>-5.9</b>	<b>-44.4</b>
(Sanyo)	2.7	5.3	-2.7	-49.8
(OVAKO)	5.6	8.8	-3.3	-37.2
(SSMI)	0.5	-0.1	+0.5	—
(Amortization of goodwill)	-1.6	-1.4	-0.2	—
<b>Ordinary Income</b>	<b>7.8</b>	<b>13.7</b>	<b>-5.9</b>	<b>-43.1</b>
(Sanyo)	6.9	7.0	-0.1	-0.8
(OVAKO)	5.1	8.9	-3.9	-43.2
(SSMI)	0.3	-0.2	+0.5	—
(Amortization of goodwill)	-1.6	-1.4	-0.2	—
<b>Net Income <sup>*1</sup></b>	<b>5.2</b>	<b>9.9</b>	<b>-4.6</b>	<b>-47.0</b>
<b>Earnings Per Share</b>	<b>96.1</b>	<b>181.2</b>	<b>-85.1</b>	<b>-47.0</b>
Operating Income before amortization of goodwill	8.9	14.6	-5.7	-39.0
Ordinary Income before amortization of goodwill	9.4	15.2	-5.8	-38.0
Net Income before amortization of goodwill	6.8	11.3	-4.5	-39.6
Earnings Per Share before amortization of goodwill	125.3	207.5	-82.3	-39.6
<b>Sales volume (Thousand tons)</b>	<b>739</b>	<b>812</b>	<b>-73</b>	<b>-9.0</b>
(Sanyo)	427	458	-30	-6.6
(OVAKO)	256	303	-48	-15.7
(SSMI)	56	51	+5	+9.8

\*1 Profit attributable to owners of parent \*2 The consolidated accounting period for SSMI is Jan. to Jun.

# Details of Statements of Income

## (FY2023 Forecast announced on October 31, 2023 vs. FY2022)

(Unit: Billion yen, Yen per share)

	FY23/1H	FY23/2H	FY2023 Forecast	FY22/1H	FY22/2H	FY2022	Change
	Result (A)	Forecast (B)	(C)=(A)+(B)	(D)	(E)	(F)=(D)+(E)	(F) → (C)
<b>Sales Volume</b>	<b>185.3</b>	<b>194.7</b>	<b>380.0</b>	<b>195.4</b>	<b>198.4</b>	<b>393.8</b>	<b>-13.8</b>
(Sanyo)	96.2	90.8	187.0	96.5	96.7	193.2	-6.2
(OVAKO)	74.1	85.9	160.0	85.7	85.4	171.1	-11.1
(SSMI)	11.2	13.8	25.0	9.9	11.7	21.6	+3.4
<b>Operating Income</b>	<b>7.3</b>	<b>12.7</b>	<b>20.0</b>	<b>13.2</b>	<b>15.3</b>	<b>28.5</b>	<b>-8.5</b>
(Sanyo)	2.7	6.2	8.9	5.3	3.3	8.7	+0.2
(OVAKO)	5.6	6.2	11.8	8.8	12.5	21.4	-9.6
(SSMI)	0.5	0.7	1.2	-0.1	0.2	0.2	+1.0
(Amortization of goodwill)	-1.6	-1.6	-3.2	-1.4	-1.5	-2.9	-0.3
<b>Ordinary Income</b>	<b>7.8</b>	<b>12.2</b>	<b>20.0</b>	<b>13.7</b>	<b>15.1</b>	<b>28.9 *</b>	<b>-8.9</b>
(Sanyo)	6.9	6.4	13.3	7.0	3.3	10.2	+3.1
(OVAKO)	5.1	5.9	11.0	8.9	12.2	21.1	-10.1
(SSMI)	0.3	0.4	0.7	-0.2	0.0	-0.2	+0.9
(Amortization of goodwill)	-1.6	-1.6	-3.2	-1.4	-1.5	-2.9	-0.3
<b>Net Income <sup>*1</sup></b>	<b>5.2</b>	<b>8.8</b>	<b>14.0</b>	<b>9.9</b>	<b>10.9</b>	<b>20.7</b>	<b>-6.7</b>
<b>Earnings Per Share</b>	<b>96.1</b>		<b>257.0</b>	<b>181.2</b>		<b>380.7</b>	<b>-123.8</b>
Operating Income							
before amortization of goodwill	8.9	14.3	23.2	14.6	16.8	31.4	-8.2
Ordinary Income							
before amortization of goodwill	9.4	13.8	23.2	15.2	16.6	31.8	-8.6
Net Income							
before amortization of goodwill	6.8	10.4	17.2	11.3	12.4	23.7	-6.5
Earnings Per Share							
before amortization of goodwill	125.3		315.7	207.5		434.4	-118.7
<b>Sales volume (Thousand tons)</b>	<b>739</b>	<b>796</b>	<b>1,535</b>	<b>812</b>	<b>795</b>	<b>1,607</b>	<b>-72</b>
(Sanyo)	427	426	853	458	436	894	-41
(OVAKO)	256	304	560	303	305	608	-48
(SSMI)	56	66	122	51	54	105	+17

\*1 Profit attributable to owners of parent \*2 The consolidated accounting period for SSMI is Jan. to Dec.

\* Ordinary income excluding impact of OVAKO's transient factors : 19.3 billion yen

# Details of Statements of Income

## (FY2023 Revised Forecast announced on October 31, 2023 vs. Previous Forecast)

(Unit: Billion yen, Yen per share)

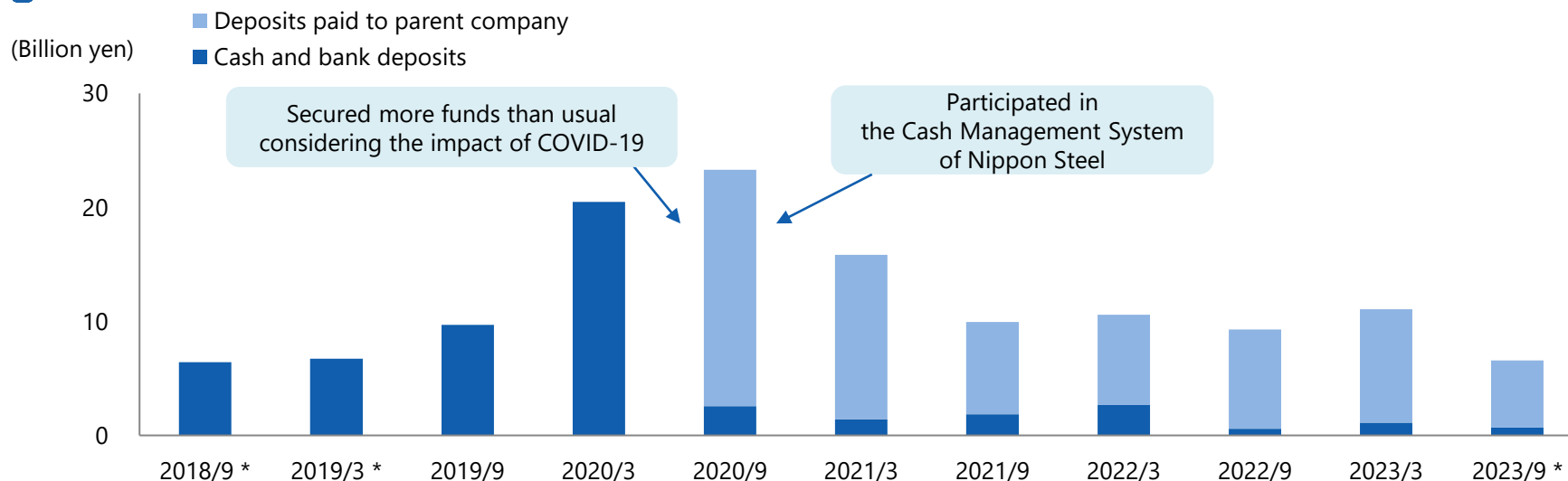
	Revised Forecast (Announced on Oct. 31, 2023)			Previous Forecast (Announced on Jul. 28, 2023)			Change (F) → (C)
	FY23/1H	FY23/2H	FY2023	FY23/1H	FY23/2H	FY2023	
	Result (A)	Forecast (B)	(C)=(A)+(B)	Forecast (D)	Forecast(E)	(F)=(D)+(E)	
<b>Sales Volume</b>	<b>185.3</b>	<b>194.7</b>	<b>380.0</b>	<b>185.0</b>	<b>201.0</b>	<b>386.0</b>	<b>-6.0</b>
(Sanyo)	96.2	90.8	187.0	95.0	96.0	191.0	-4.0
(OVAKO)	74.1	85.9	160.0	75.0	87.0	162.0	-2.0
(SSMI)	11.2	13.8	25.0	11.2	14.5	25.7	-0.7
<b>Operating Income</b>	<b>7.3</b>	<b>12.7</b>	<b>20.0</b>	<b>7.5</b>	<b>12.5</b>	<b>20.0</b>	<b>—</b>
(Sanyo)	2.7	6.2	8.9	3.1	7.9	11.0	-2.1
(OVAKO)	5.6	6.2	11.8	5.0	5.3	10.3	+1.5
(SSMI)	0.5	0.7	1.2	0.5	0.7	1.2	—
(Amortization of goodwill)	-1.6	-1.6	-3.2	-1.6	-1.6	-3.1	-0.1
<b>Ordinary Income</b>	<b>7.8</b>	<b>12.2</b>	<b>20.0</b>	<b>8.0</b>	<b>12.0</b>	<b>20.0</b>	<b>—</b>
(Sanyo)	6.9	6.4	13.3	7.0	8.0	15.0	-1.7
(OVAKO)	5.1	5.9	11.0	4.7	5.3	10.0	+1.0
(SSMI)	0.3	0.4	0.7	0.3	0.4	0.7	—
(Amortization of goodwill)	-1.6	-1.6	-3.2	-1.6	-1.6	-3.1	-0.1
<b>Net Income <sup>*1</sup></b>	<b>5.2</b>	<b>8.8</b>	<b>14.0</b>	<b>5.0</b>	<b>9.0</b>	<b>14.0</b>	<b>—</b>
<b>Earnings Per Share</b>	<b>96.1</b>		<b>257.0</b>	<b>91.8</b>		<b>257.0</b>	<b>—</b>
Operating Income before amortization of goodwill	8.9	14.3	23.2	9.1	14.1	23.1	+0.1
Ordinary Income before amortization of goodwill	9.4	13.8	23.2	9.6	13.6	23.1	+0.1
Net Income before amortization of goodwill	6.8	10.4	17.2	6.5	10.6	17.1	+0.1
Earnings Per Share before amortization of goodwill	125.3		315.7	119.3		313.8	+1.8
<b>Sales volume (Thousand tons)</b>	<b>739</b>	<b>796</b>	<b>1,535</b>	<b>754</b>	<b>825</b>	<b>1,579</b>	<b>-44</b>
(Sanyo)	427	426	853	430	440	870	-17
(OVAKO)	256	304	560	267	318	585	-25
(SSMI)	56	66	122	56	67	124	-2

\*1 Profit attributable to owners of parent \*2 The consolidated accounting period for SSMI is Jan. to Dec.

# Deposits paid to parent company

- Sanyo participated in the Cash Management System of Nippon Steel from June 2020.
- Sanyo's balance is daily deposited into Nippon Steel's account and it can be withdrawn at any time.
- If some shortage of funds occur, emergency loan for Sanyo will be issued automatically.
- Sanyo earns interest rates higher than that of deposits to banks.
- [Deposits paid to parent company is equivalent to cash and bank deposits](#), since the deposits paid to parent company can be utilized as working capital of Sanyo at any time when necessary.

## Cash and deposits including Deposits paid to parent company (Sanyo)



\* Including impact of financial institution holidays

(Cautionary Statement)

Business forecasts contained in this document are based on the information available at the time of the release of this document, and actual results may differ from these forecasts due to various factors that may occur in the future. The business forecasts should not be interpreted as any commitment to or guarantee of future performance.

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