



OJI HOLDINGS



Credit: Paper Museum
(Opening ceremony of Shoshi Kaisha)



In Feb 2023, Oji Holdings celebrated its 150th anniversary.



Summary of Financial Business Results

May 12, 2023

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Beyond the Boundaries

I . FY2022 Result Overview

1. Financial Highlights of FY2022 (consolidated)

(¥ billion)

		FY2021	FY2022	Increase (Decrease)
Net Sales		1,470.2	1,706.6	236.5
Operating Profit		120.1	84.8	(35.3)
	[Domestic Companies]	[61.5]	[18.8]	[(42.7)]
	[Overseas Companies]	[58.6]	[66.0]	[7.4]
Ordinary Profit		135.1	95.0	(40.1)
Profit		87.5	56.5	(31.0)
Attributable to Owners of Parent				
Depreciation		65.9	73.0	7.1
Overseas Sales Ratio		33.5%	37.6%	4.1pt
Average Exchange Rate (¥/US\$)		112.4	135.5	23.1
Number of Consolidated Companies	Domestic	92	92	-
	Overseas	94	104	+10
	Total	186	196	+10

Domestic : -

Overseas : +10[High-performance label printing and processing in Aisa], +1[Forest plantation in Indonesia],(1)[Lumber processing in Vietnam] etc.

Equity Method Affiliates : (3)[Domestic±0, Overseas(3)]

2. Sales and Operating Profit by Segment

[FY2022 Result]



OJI HOLDINGS

(¥ billion)

	FY2021		FY2022		Increase (Decrease)	
	Net Sales	Operating Profit	Net Sales	Operating Profit	Net Sales	Operating Profit
Household & Industrial Materials	698.8	26.2	780.5	(1.2)	81.7	(27.4)
Functional Materials	184.7	15.3	219.9	15.5	35.2	0.2
Forest Resources & Environment Marketing	320.6	55.2	423.8	68.5	103.2	13.3
Printing & Communications Media	244.5	17.8	281.0	(4.8)	36.5	(22.6)
Others	21.6	5.6	1.4	6.8	(20.2)	1.2
Total	1,470.2	120.1	1,706.6	84.8	236.5	(35.3)

*1: Sales include inter-segment sales *2: Others include adjustment amount

3. Analysis of Operating Profit by Segment

(1) Household and Industrial Materials

FY2021			FY2022			Increase (Decrease)	
Net Sales	Operating Profit		Net Sales	Operating Profit		Operating Profit	
¥698.8 bil.	¥26.2 bil.	Domestic ¥21.5 bil. Overseas ¥4.7 bil.	¥780.5 bil.	(¥1.2 bil.)	Domestic (¥1.9 bil.) Overseas ¥0.7 bil.	(¥27.4 bil.)	Domestic (¥23.4 bil.) Overseas (¥4.0 bil.)

Domestic (¥23.4 billion)

Price difference in raw materials & fuels (¥54.5 bil.)

Sales & market factor +¥36.0 bil.
etc.

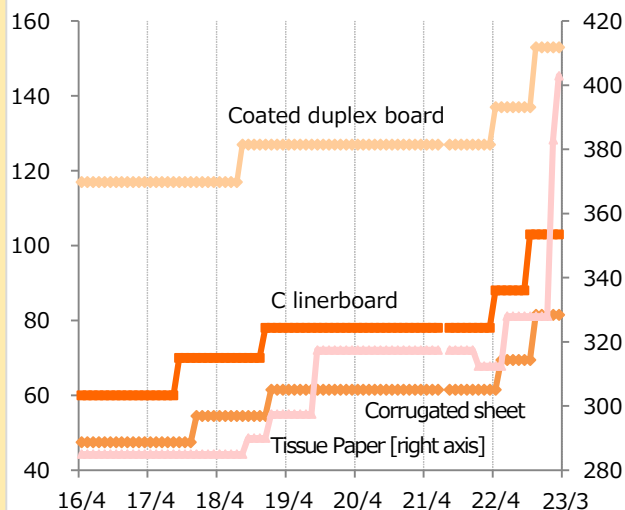
Overseas (¥4.0 billion)

Price difference in raw materials & fuels (¥13.6 bil.)

Other costs (¥6.7 bil.)

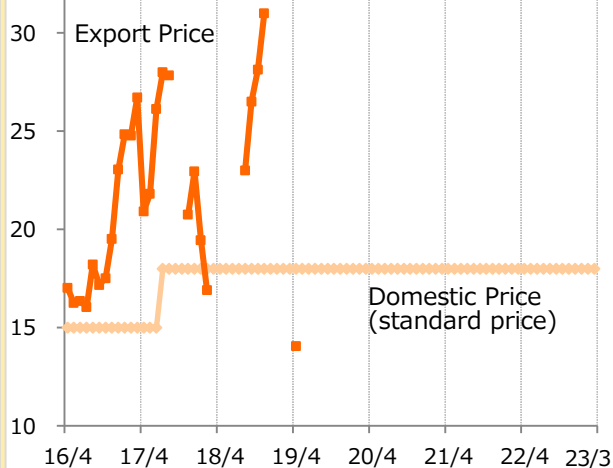
Sales & market factor +¥15.8 bil.
etc.

(¥/kg·m²) Price of Key Products (¥/5boxes)



(¥/kg) Price of Key Raw Materials

(Old Corrugated Container)



Sales of Key Products (*)		FY2021			FY2022			Increase (Decrease)			
		Sales Volume	Unit Price	Sales Amount	Sales Volume	Unit Price	Sales Amount	Sales Volume	Year-on Year	Unit Price	Sales Amount
		1000t(or) million m	¥/kg(or)m ²	¥ billion	1000t(or) million m	¥/kg(or)m ²	¥ billion	1000t(or) million m	%	¥/kg(or)m ²	¥ billion
Paperboard	Domestic	2,984	68.46	204.3	2,981	78.87	235.1	(3)	99.9%	10.41	30.9
Corrugated containers (million m)	Domestic	3,028	65.19	197.4	3,088	69.33	214.1	60	102.0%	4.14	16.7

*Total amount of consolidated Group's manufacturing companies including internal consumption

3. Analysis of Operating Profit by Segment

(2) Functional Materials

FY2021			FY2022			Increase (Decrease)	
Net Sales	Operating Profit		Net Sales	Operating Profit		Operating Profit	
¥184.7 bil.	¥15.3 bil.	Domestic ¥9.9 bil. Overseas ¥5.4 bil.	¥219.9 bil.	¥15.5 bil.	Domestic ¥5.8 bil. Overseas ¥9.7 bil.	+¥0.2 bil.	Domestic (¥4.1 bil.) Overseas +¥4.3 bil.

Domestic (¥4.1 billion)

Price difference in raw materials & fuels (¥13.5 bil.)

Sales&market factor +¥10.5 bil.

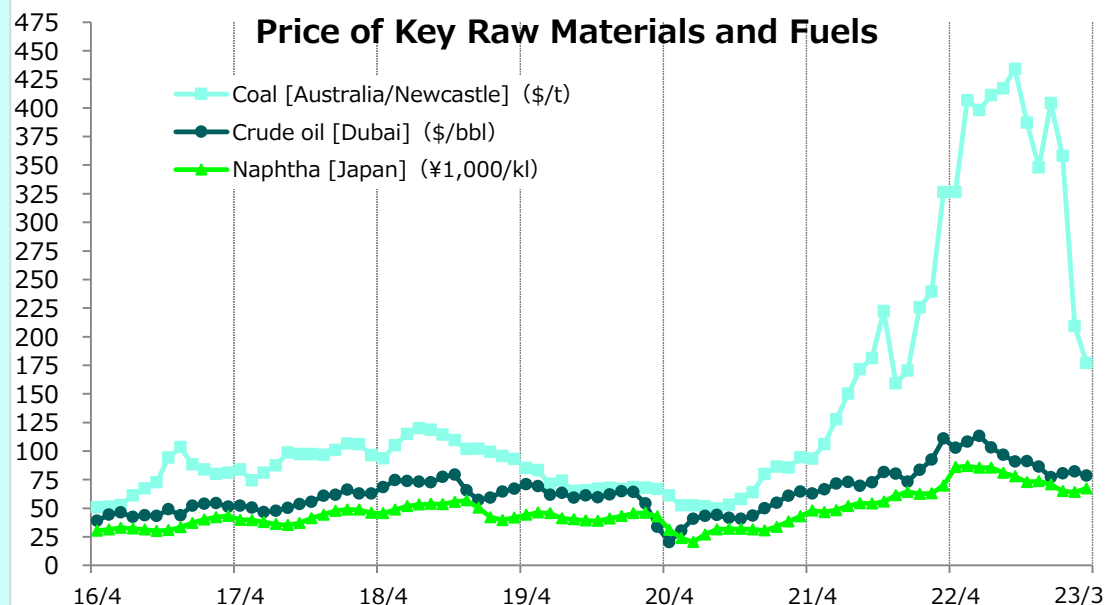
etc.

Overseas +¥4.3 billion

Sales&market factor +¥15.5 bil.

Price difference in raw materials & fuels (¥9.9 bil.)

etc.



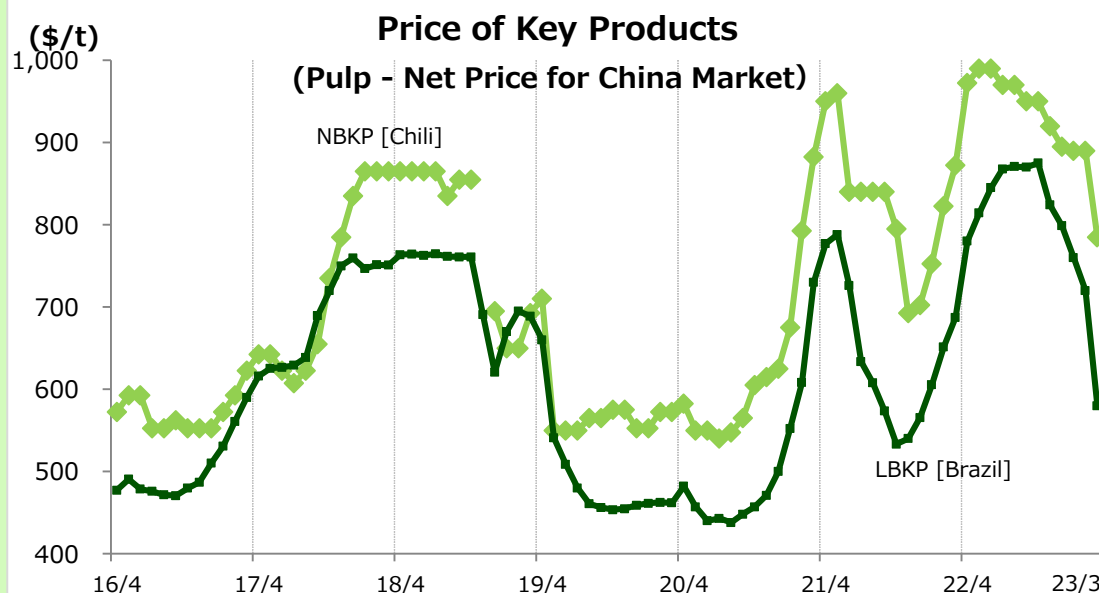
Sales of Key Products (*)		FY2021			FY2022			Increase (Decrease)			
		Sales Volume	Unit Price	Sales Amount	Sales Volume	Unit Price	Sales Amount	Sales Volume	Year-on Year	Unit Price	Sales Amount
		million m ³	¥/m ³	¥ billion	million m ³	¥/m ³	¥ billion	million m ³	%	¥/m ³	¥ billion
Thermal paper (million m ³)	Domestic& Overseas	3,315	18.24	60.5	3,951	22.42	88.6	636	119.2%	4.18	28.1

*Total amount of consolidated Group's manufacturing companies including internal consumption

3. Analysis of Operating Profit by Segment

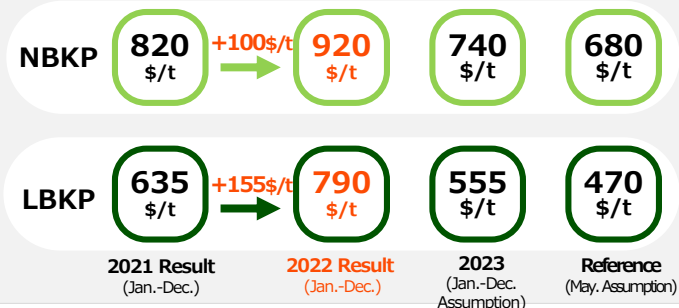
(3) Forest Resources and Environment Marketing

FY2021			FY2022			Increase (Decrease)	
Net Sales	Operating Profit		Net Sales	Operating Profit		Operating Profit	
¥320.6 bil.	¥55.2 bil.	Domestic ¥9.0 bil. Overseas ¥46.2 bil.	¥423.8 bil.	¥68.5 bil.	Domestic ¥7.1 bil. Overseas ¥61.4 bil.	+¥13.3 bil.	Domestic (¥1.9 bil.) Overseas +¥15.2 bil.



Overseas +¥15.2 billion

Rise in pulp sales prices +¥43.1 bil.
Price difference in raw materials & fuels (¥12.9 bil.) etc.



Sales of Key Products (*)		FY2021			FY2022			Increase (Decrease)			
		Sales Volume 1,000t (or) GWh	Unit Price ¥/kg	Sales Amount ¥ billion	Sales Volume 1,000t (or) GWh	Unit Price ¥/kg	Sales Amount ¥ billion	Sales Volume 1,000t (or) GWh	Year-on Year %	Unit Price ¥/kg	Sales Amount ¥ billion
Market pulp	Domestic& Overseas	2,220	75.78	168.2	2,337	102.74	240.1	117	105.3%	26.96	71.9
Electric power (GWh)	Domestic	1,487	-	-	1,603	-	-	117	107.8%	-	-

*Total amount of consolidated Group's manufacturing companies including internal consumption

3. Analysis of Operating Profit by Segment

(4) Printing and Communications Media

FY2021			FY2022			Increase (Decrease)	
Net Sales	Operating Profit		Net Sales	Operating Profit		Operating Profit	
¥244.5 bil.	¥17.8 bil.	Domestic ¥15.5 bil. Overseas ¥2.3 bil.	¥281.0 bil.	(¥4.8 bil.)	Domestic (¥2.0 bil.) Overseas (¥2.8 bil.)	(¥22.6 bil.)	Domestic (¥17.5 bil.) Overseas (¥5.1 bil.)

Domestic (¥17.5 billion)

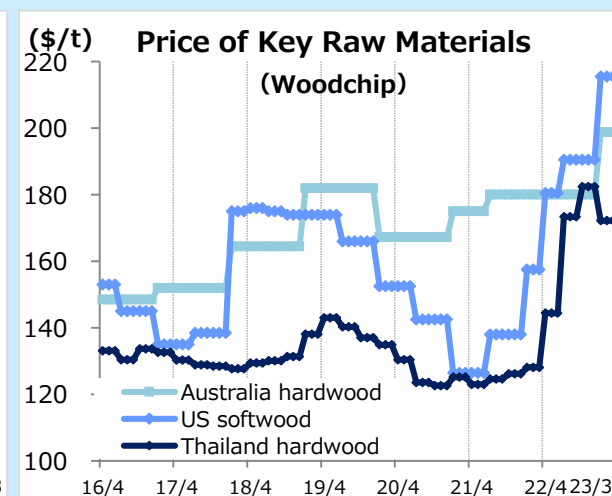
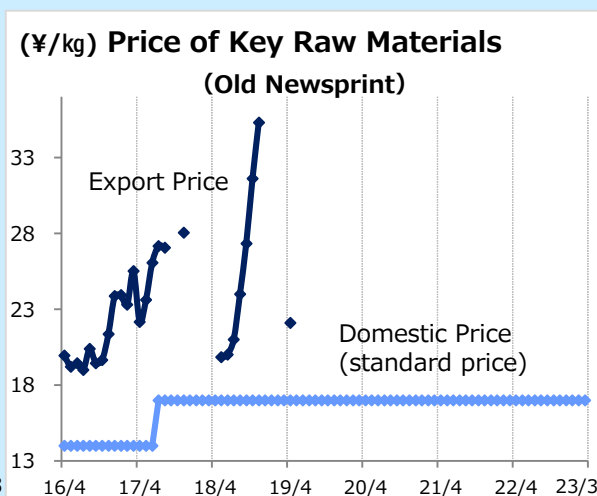
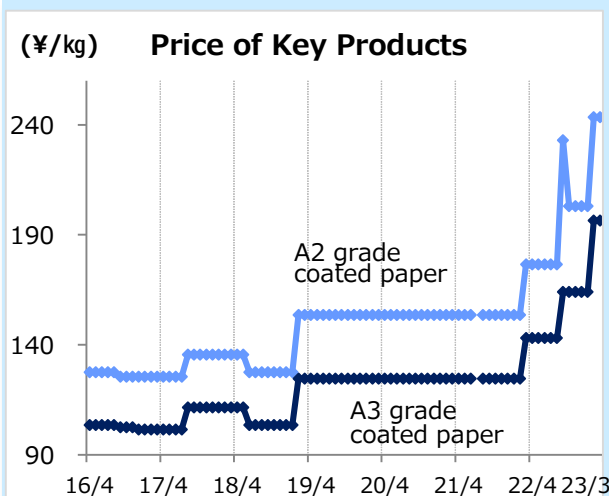
Price difference in raw materials & fuels (¥40.8 bil.)

Sales&marketfactor +¥24.9 bil. etc.

Overseas (¥5.1 billion)

Price difference in raw materials & fuels (¥4.9 bil.)

etc.



Sales of Key Products (*)		FY2021			FY2022			Increase (Decrease)			
		Sales Volume 1,000 t	Unit Price ¥/kg	Sales Amount ¥ billion	Sales Volume 1,000 t	Unit Price ¥/kg	Sales Amount ¥ billion	Sales Volume 1,000 t	Year-on Year %	Unit Price ¥/kg	Sales Amount ¥ billion
Newsprint, printing & communication paper	Domestic	1,812	96.74	175.3	1,838	106.75	196.2	25	101.4%	10.01	20.8

*Total amount of consolidated Group's manufacturing companies including internal consumption

II . FY2023 Financial Forecast

1. Financial Forecast for FY2023 (consolidated)



(¥ billion)

	FY2022	FY2023F	Increase (Decrease)
Net Sales	1,706.6	1,800.0	93.4
Operating Profit	84.8	100.0	15.2
[Domestic Companies]	[18.8]	[78.0]	[59.2]
[Overseas Companies]	[66.0]	[22.0]	[(44.0)]
Ordinary Profit	95.0	100.0	5.0
Profit Attributable to Owners of Parent	56.5	65.0	8.5
Depreciation	73.0	74.7	1.7
Overseas Sales Ratio	37.6%	33.0%	(4.7pt)
Average Exchange Rate(¥/US\$)	135.5	130.0	(5.5)

*The forecasts above are based on future economic conditions assumed as of this publication. As such, actual results may differ from these forecasts due to various unforeseen circumstances

Assumption for FY2023 Financial Forecast

◆ Assumption

Exchange rates	:130JPY/USD
Woodchip	:based on current contract
Recovered paper	:static at current level
Coal	:based on current Australia coal price (US\$244/t)
Heavy Oil	:based on current Dubai crude oil price (US\$80/bbl)

◆ Effects of fluctuation on operation profit (per annum)

Exchange rates [JPY]	: approx. ¥0.93 billion with a fluctuation of US\$ by 1% (strong US\$ -)
[BRL]	: approx. ¥0.58 billion with a fluctuation of US\$ by 1% (strong US\$ +)
[NZD]	: approx. ¥0.81 billion with a fluctuation of US\$ by 1% (strong US\$ +)
Price of pulp	: approx. ±¥2.57 billion with a fluctuation of US\$10/t (high price +)
Price of woodchip	: approx. ±¥4.58 billion with a fluctuation of US\$10/BDt (high price -)
Price of recovered paper	: approx. ±¥3.39 billion with a fluctuation of ¥1/kg
Price of Dubai crude oil	: approx. ±¥0.51 billion with a fluctuation of US\$1/bbl (heavy oil, bunker, naphtha and others)

2. Sales and Operating Profit by Segment

[FY2023 Forecast]



OJI HOLDINGS

(¥ billion)

	FY2022		FY2023F		Increase (Decrease)	
	Net Sales	Operating Profit	Net Sales	Operating Profit	Net Sales	Operating Profit
Household & Industrial Materials	780.5	(1.2)	866.0	39.0	85.5	40.2
Functional Materials	219.9	15.5	252.0	16.0	32.1	0.5
Forest Resources & Environment Marketing	423.8	68.5	375.0	18.0	(48.8)	(50.5)
Printing & Communications Media	281.0	(4.8)	305.0	21.0	24.0	25.8
Others	1.4	6.8	2.0	6.0	0.6	(0.8)
Total	1,706.6	84.8	1,800.0	100.0	93.4	15.2

*1: Sales include inter-segment sales *2: Others include adjustment amount

3. Operating Profit by Segment

(¥ billion)

Household & Industrial Materials

	FY2022	FY2023F
Net Sales	780.5	866.0
Operating Profit	(1.2)	39.0
[Domestic]	[(1.9)]	[37.5]
[Overseas]	[0.7]	[1.5]
Operating Profit Margin	-0.2%	4.5%

Operating Profit
+¥40.2 billion

◆ Domestic +¥39.4 billion

◆ Overseas +¥0.8 billion

Functional Materials

	FY2022	FY2023F
Net Sales	219.9	252.0
Operating Profit	15.5	16.0
[Domestic]	[5.8]	[8.6]
[Overseas]	[9.7]	[7.4]
Operating Profit Margin	7.0%	6.3%

Operating Profit
+¥0.5 billion

◆ Domestic +¥2.8 billion

◆ Overseas (¥2.3 billion)

Forest Resources & Environment Marketing

	FY2022	FY2023F
Net Sales	423.8	375.0
Operating Profit	68.5	18.0
[Domestic]	[7.1]	[8.4]
[Overseas]	[61.4]	[9.6]
Operating Profit Margin	16.2%	4.8%

Operating Profit
(¥50.5 billion)

◆ Domestic +¥1.3 billion

◆ Overseas (¥51.8 billion)

Printing & Communications Media

	FY2022	FY2023F
Net Sales	281.0	305.0
Operating Profit	(4.8)	21.0
[Domestic]	[(2.0)]	[17.4]
[Overseas]	[(2.8)]	[3.6]
Operating Profit Margin	-1.7%	6.9%

Operating Profit
+¥25.8 billion

◆ Domestic +¥19.4 billion

◆ Overseas +¥6.4 billion

4. Impact on Operating Profit from External Environment

(¥billion/year)

Impact on operating profit from:

◆ Changes in exchange rates

Assumed exchange rates
for FY2023

				Household & Industrial Materials	Functional Materials	Forest Resources & Environment Marketing	Printing & Communi- cations Media	Total
Impact from USD fluctuation on trade and profit- conversion (in case of stronger USD by 10%)	Japanese Yen (JPY) (※)	130.00 JPY/USD		↘	↘	↑	↘	↘ (9.3)
	Brazilian Real (BRL)	5.20 BRL/USD			↔	↑		↑ +5.8
	New Zealand Dollar (NZD)	1.60 NZD/USD		↗		↑		↑ +8.1

(※) The figure includes the effect of conversion of profit in USD to JPY

◆ Changes in pulp prices

	Household & Industrial Materials	Functional Materials	Forest Resources & Environment Marketing	Printing & Communi- cations Media	Total
Pulp sales & purchase (USD 10/t higher)	↘	↘	↑	↘	↑ +2.6

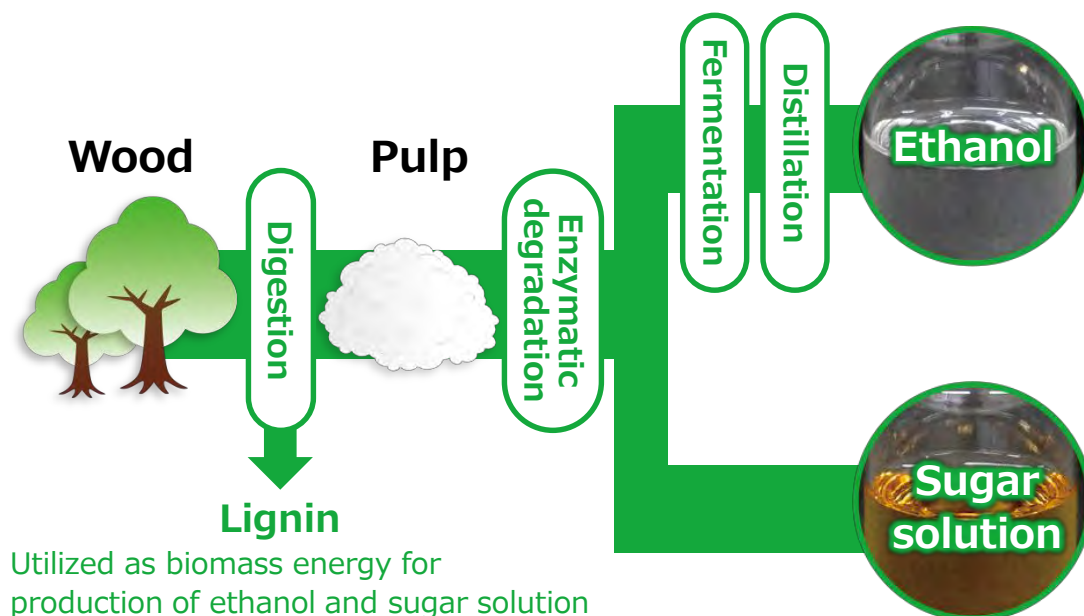
+: Positive Impact
(): Negative Impact



Ⅲ. Topics

1. Introduction of Pilot Plant for Wood-derived Ethanol and Sugar Solution

Replacing petroleum-derived materials with "wood-derived" ones for the decarbonized society.
Producing and supplying wood-derived ethanol and sugar solution, which are expected to be in growing demand in the future.



Application example in user company

Production of bio-fuel and bio-based commodity plastics such as polyethylene, polypropylene
* There are synergies with our own business



PE laminate paper

Bio-based inks, rubbers, fibers, engineer plastics, foods, medical products etc. via various microbe reaction



Summary of pilot plant

Place : Oji Paper Co., Ltd. Yonago Mill

Capacity :

- ① Wood-derived ethanol Max. 1,000kL/year (as 95% ethanol)
- ② Wood-derived sugar solution Max. 3,000t/year (as dry weight of sugar)

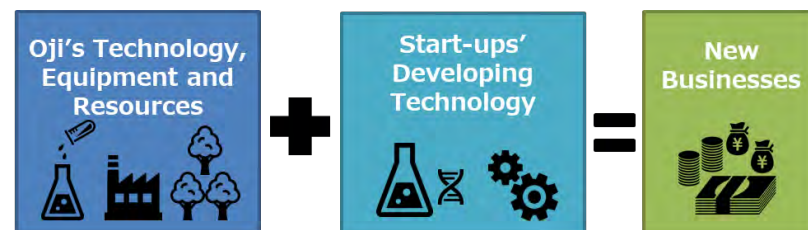
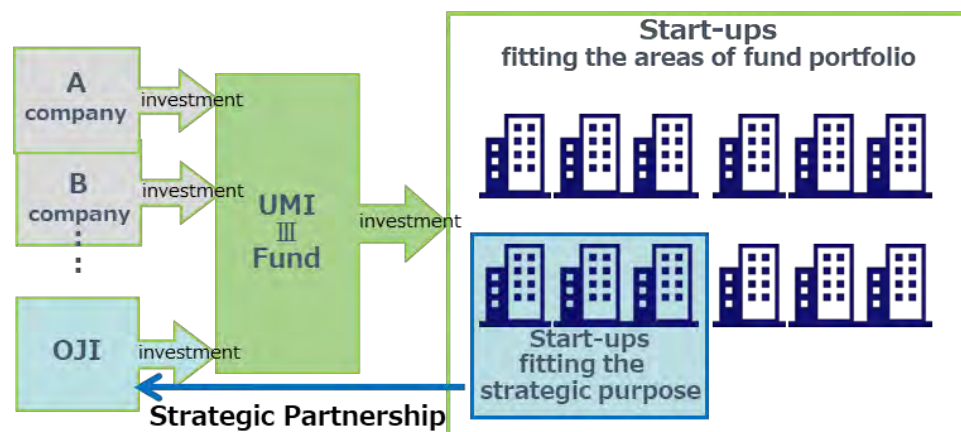
Beginning of operation : Second half of FY2024

Towards achieving the long-term goals for 2030

We have determined to invest in a venture capital specializing in materials and chemical industries with the aim of creating new businesses utilizing Oji's resources in collaboration with start-ups from home and abroad.

(Our committed investment amounts to 500 million yen.)

• Collaboration with Start-ups



• Benefits

It enables to acquire technology in new areas and speed up the timeline from the development to the commercialization

< UMI III Investment Limited Partnership ("UMI III Fund") >

Established	October 7, 2022	Investment Stage	From Business Stage 2 (product development) to Stage 3 (production technology)
Unlimited partner	Universal Materials Incubator Co., Ltd.	Investment Portfolio	Environment and energy, food and agriculture, life sciences, electronics and information, and mobility utilizing a competitive edge in material and chemical technologies as well as common basic technologies for the development of the material and chemical fields.
Fundraising amount	20 billion yen (maximum)		
Duration	October 6, 2032 (Possible duration would be until October 6, 2034)	Number of investment companies	Around 40 companies

3.Cyclone Damage at Pan Pac



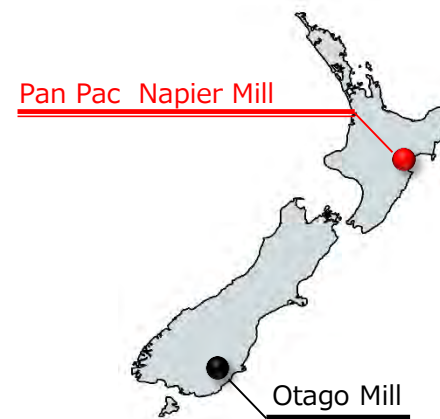
On February 12, 2023, a huge cyclone Gabrielle hit the North Island of New Zealand. Pan Pac Napier Mill, which operates pulp, lumber, and forestry businesses, was flooded by up to 2 meters as the Esk River, which the mill intakes water, overflowed, causing floodwater to enter the premises.



Panoramic view of the mill (as of Feb 15)



Inside the pulp mill (as of Feb 15)



1.Damage

- Personnel : All employees and their families were safe.
- Plant : Extensive flood damage, mainly to electrical equipment.
- Forest : 3-5% of the area damaged (third-party assessment underway)

2.Recovery Schedule

- Current status : Mud removal and cleaning of buildings completed.
Damage assessment and cleaning of production facilities underway.
Forestry operations have recovered to 70% of normal levels.
- Aug. 2023 : Lumber business is scheduled to partially start production
(all lines are expected to restart in October).
- Oct. 2023 : Pulp business is scheduled to partially start production
(all lines are expected to restart in December).

3. Recovery Support

Oji Group provided NZ\$130,000 in aid to local governments affected by the disaster.

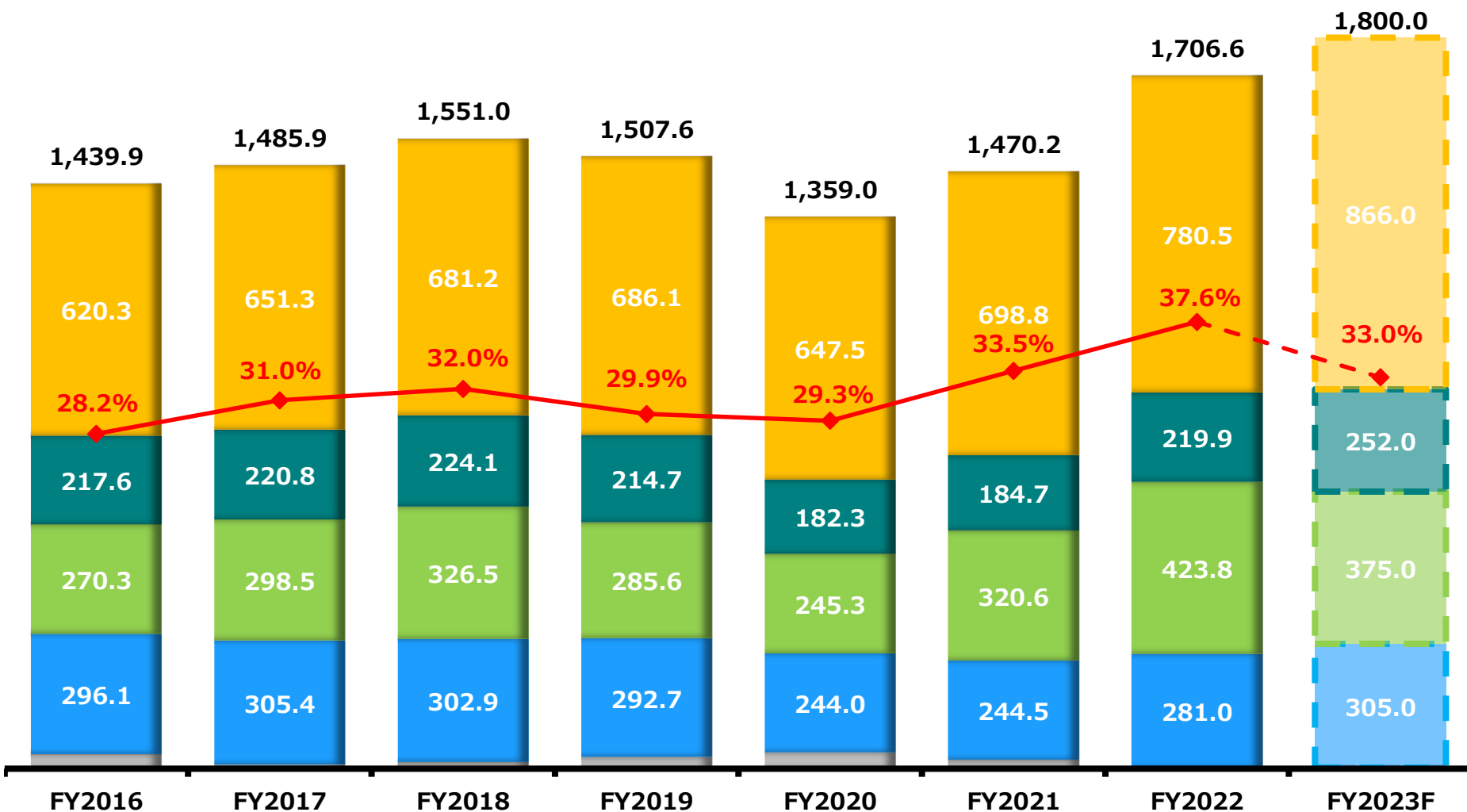
Pan Pac Pan Pac (Otago)	
Business Lines	Forest Operations, Manufacturing and Sales of Pulp and Lumber Products
Location	Napier, Hawke's Bay Otago (New Zealand)
Number of Employees	464



《 Reference Materials 》

Trends of Net Sales by Segment (consolidated)

■ Household & Industrial Materials ■ Functional Materials ■ Others ◆ Overseas Sales (¥ billion)
■ Forest Resources & Environment Marketing ■ Printing & Communications Media



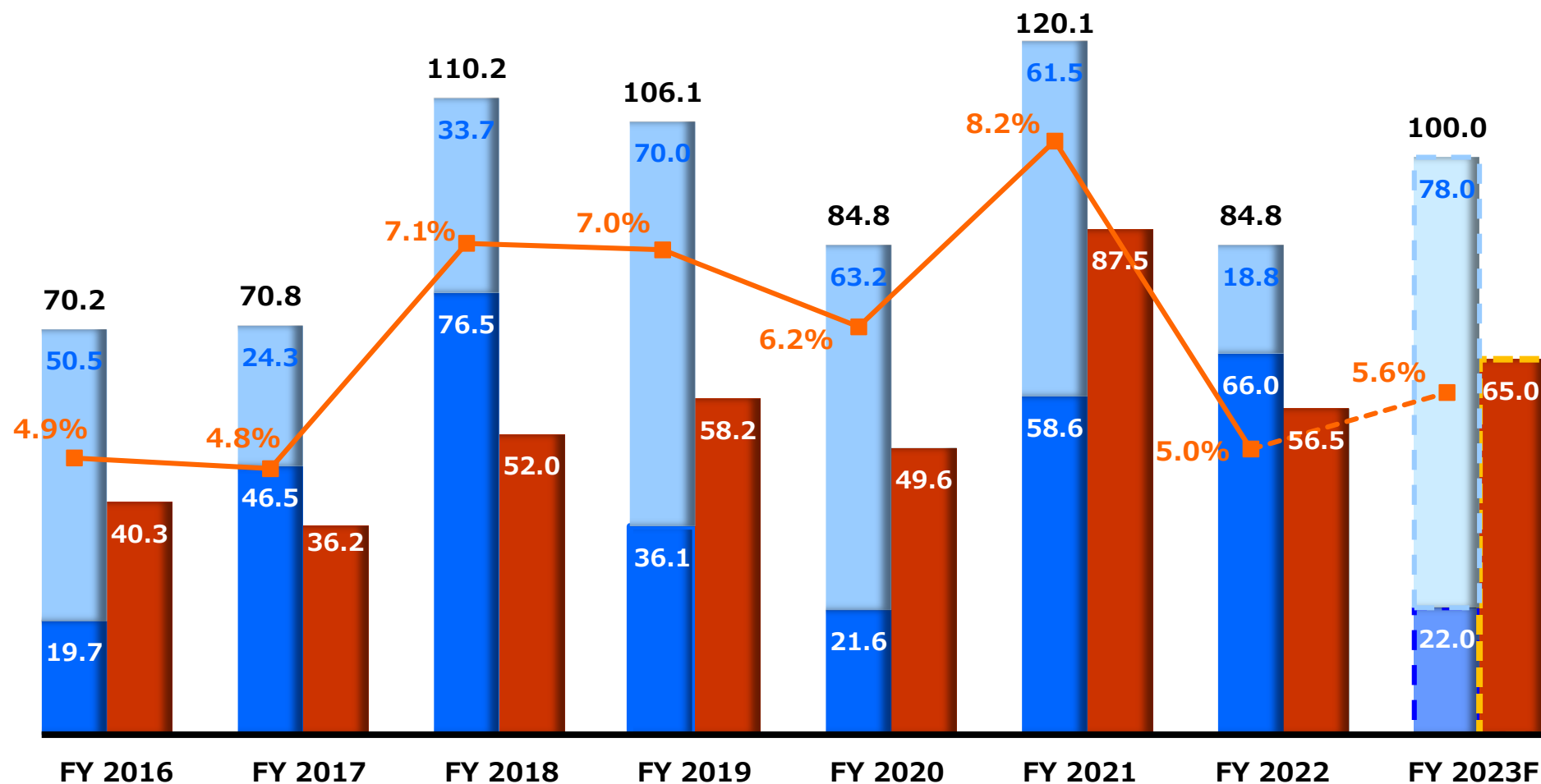
Trends of Operating Profit (consolidated)

Operating profit of domestic companies

Profit attributable to owners of parent

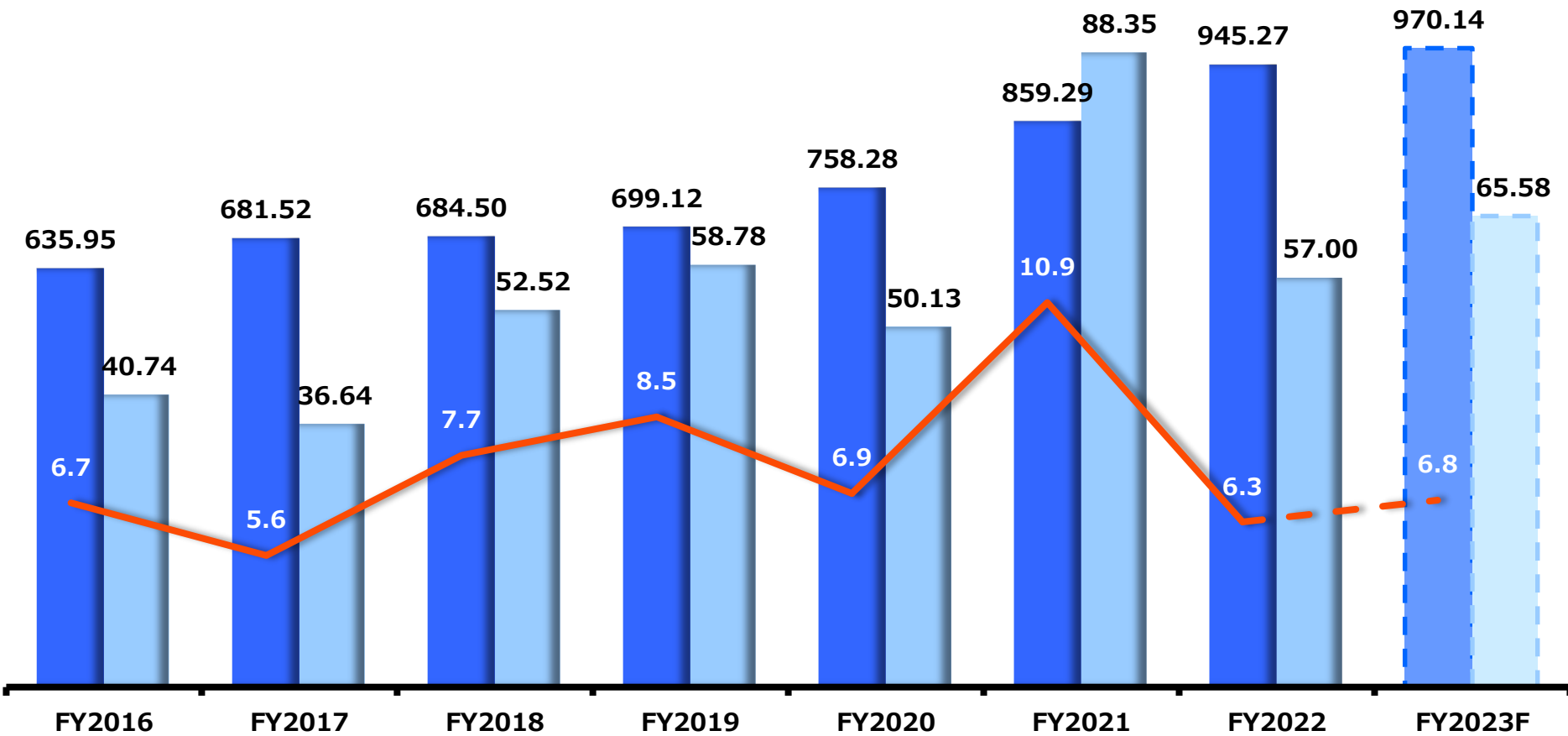
Operating profit of overseas companies

Operating profit margin (¥ billion)



Trends of Return on Equity (ROE)

■ Net assets per share (¥) ■ Net profit per share (¥) — ROE (%)

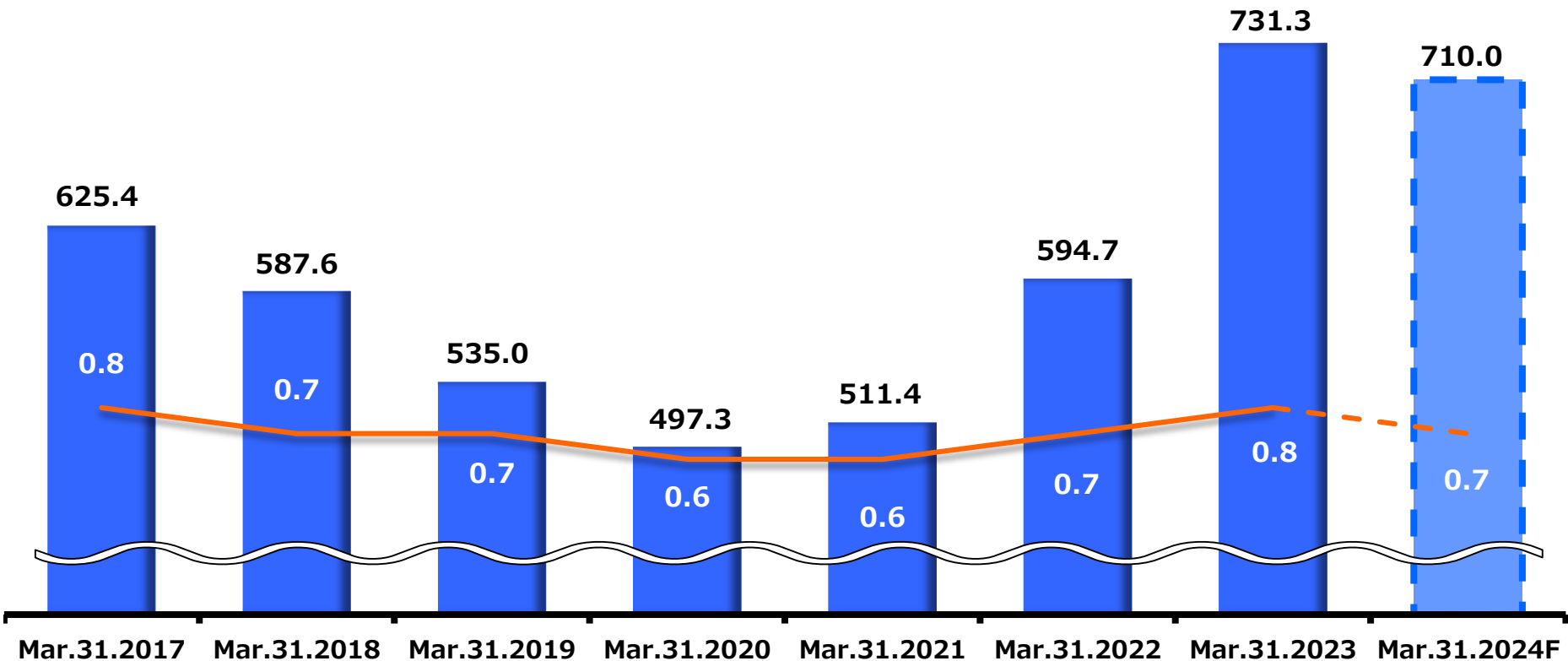


Trends of Net Interest-bearing Debt (consolidated)

Consolidated net interest-bearing debt (¥ billion)

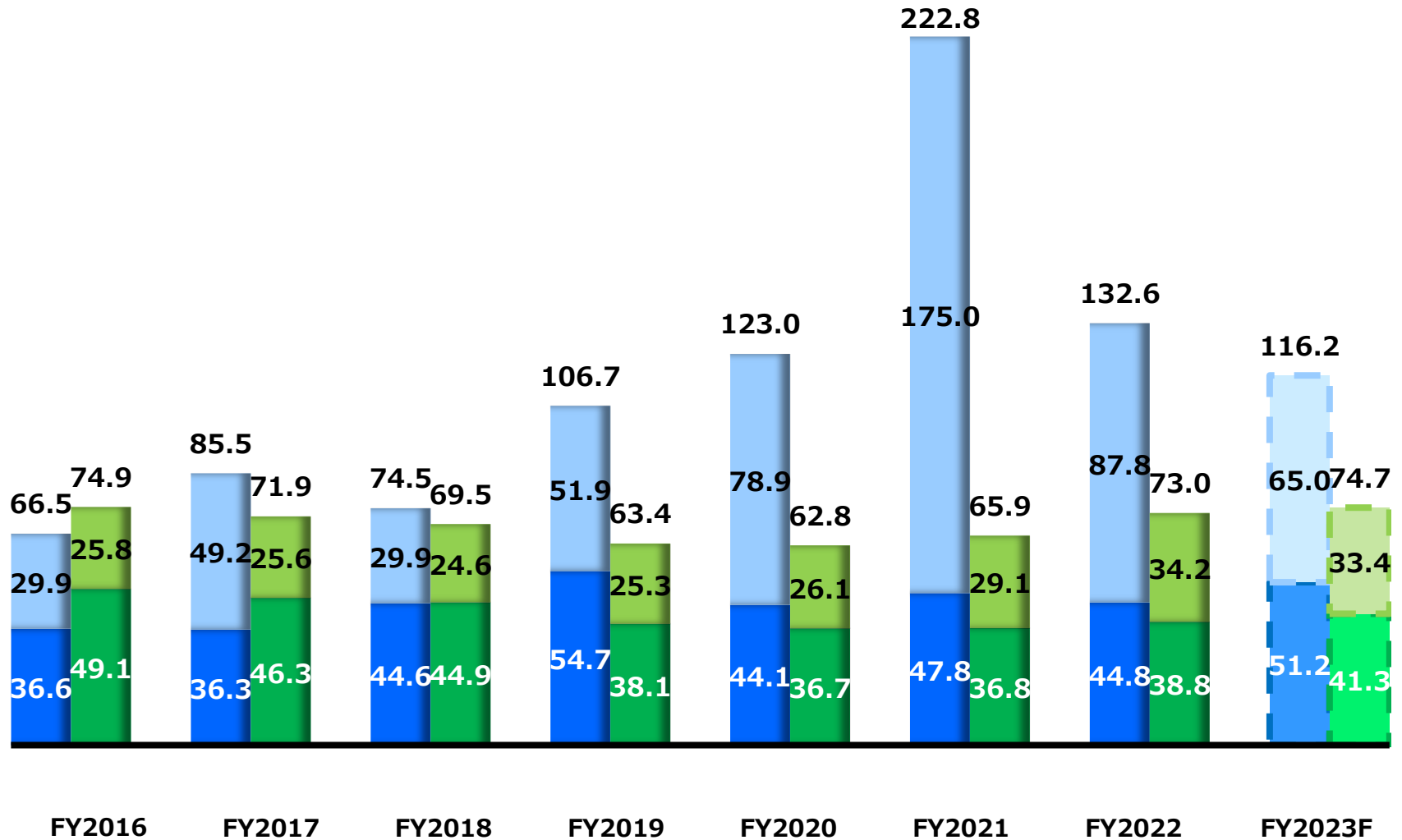
D/E(x)

*D/E(x) = consolidated net interest-bearing debt / net assets at the year-end



Trends of CAPEX / Depreciation (consolidated)

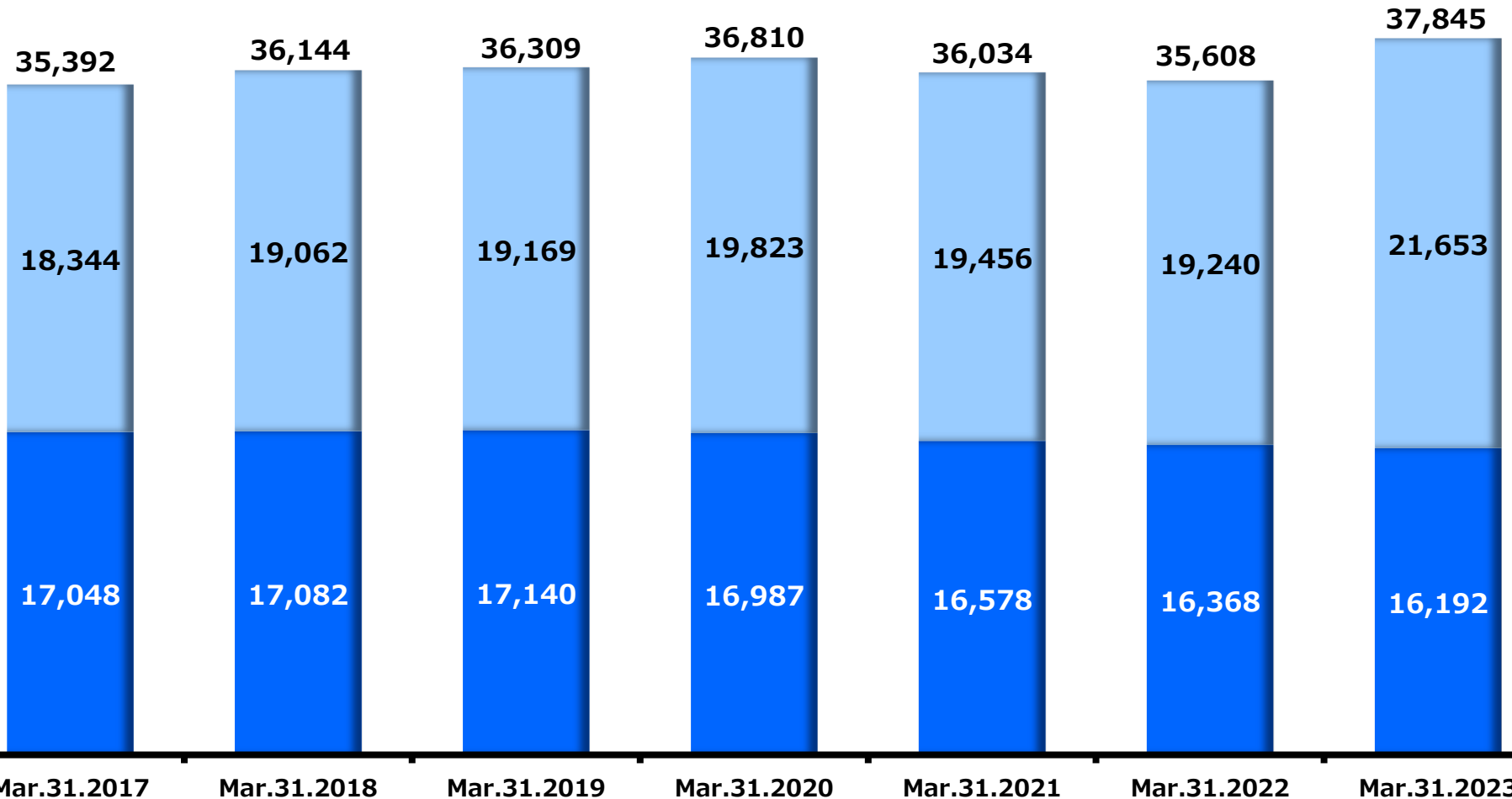
■ CAPEX, investment & loan [Domestic]
 ■ CAPEX, investment & loan [Overseas]
 ■ Depreciation [Domestic]
 ■ Depreciation [Overseas]
 (¥ billion)



History of the Number of Employees (consolidated)

 **Employees [Domestic] (consolidated)**  **Employees [Overseas] (consolidated)** **(person)**

*The figures do not include number of temporary employees



(thousand ton)

	Domestic Shipments		Imports (Custom-cleared)*1		Total	
	Year-on-Year		Year-on-Year		Year-on-Year	
Containerboard	9,061	99.2%	38	88.7%	9,099	99.1%
Boxboard	1,481	100.4%	217	94.4%	1,698	99.5%
Other Paperboard	612	97.7%	30	125.0%	642	98.7%
Paperboard Total	11,154	99.2%	285	96.0%	11,439	99.2%
Sanitary Paper	1,848	101.6%	211	95.7% *2	2,059	101.0%
Packaging Paper	667	99.4%	13	121.7%	679	99.7%
Newsprint	1,827	92.5%	1	52.0%	1,828	92.4%
Printing/Communications Paper	5,498	96.1%	528	76.9%	6,026	94.1%
Miscellaneous Paper	572	92.8%	20	108.3%	591	93.2%
Paper Total	10,411	96.4%	772	82.4%	11,184	95.3%
Paperboard and Paper Total	21,565	97.9%	1,057	85.7%	22,623	97.2%
Corrugated Containers *3	14,576	99.4%			14,576	99.4%

(million m³)

Source: Japan Paper Association - Statistics on Paper and Paperboard; Trade Statistics of Ministry of Finance, Japan; Japan Corrugated Case Association - Production Volume of Corrugated Case

*1: Statistics for customs cleared imports of paper: April 2022 - March 2023(preliminary)

*2: The figure includes secondary products (processed goods)

*3: The figure represents the production volume of corrugated board