



Oji Holdings Corporation

Summary of Financial Results / Management Strategies

May 27, 2019



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I . FY2018 Result Overview

1. Financial Highlights of FY2018 (consolidated)

(¥ billion)

	FY2017	FY2018	Increase (Decrease)
Net Sales	1,485.9	1,551.0	65.1
Operating Profit	70.8	110.2	39.4
Ordinary Profit	66.0	118.4	52.4
Profit Attributable to Owners of Parent	36.2	52.0	15.8
Depreciation	71.9	69.5	(2.4)
Overseas Sales Ratio	31.0%	32.0%	1.0%
Operating Profit of Overseas Companies	46.5	76.5	30.0
Average Exchange Rate (¥/US\$)	110.9	110.9	-
Number of Consolidated Companies			
Domestic	91	91	-
Overseas	98	99	+1
Total	189	190	+1

Domestic : (1) [Logistics], +1 [Energy]

Overseas : +1[Disposable diaper in Malaysia], +1[Corrugated containers in China], +1[Corrugated containers in Indonesia],
+1[Corrugated containers in Cambodia], +1[Corrugated containers in Malaysia],
(2)[Paper bag in China], (1)[Folding cartons in Thailand], (1)[Paper in China]

Equity Method Affiliates +1 <[Overseas]+1, [Domestic]+1/(1)>

2. Sales and Operating Profit by Segment

[FY2018 Result] (consolidated)

(¥ billion)

	FY2017		FY2018		Increase (Decrease)	
	Net Sales	Operating Profit	Net Sales	Operating Profit	Net Sales	Operating Profit
Household & Industrial Materials	651.3	5.4	681.2	22.4	29.9	17.0
Functional Materials	220.8	18.6	224.1	18.4	3.3	(0.2)
Forest Resources & Environment Marketing	298.5	39.0	326.5	64.6	28.0	25.6
Printing & Communications Media	305.4	(1.2)	302.9	(4.8)	(2.5)	(3.6)
Others	9.8	9.0	16.3	9.6	6.5	0.6
Total	1,485.9	70.8	1,551.0	110.2	65.1	39.4

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

3. Analysis of Increase/Decrease in Profit by Segment

(1) Household and Industrial Materials

FY2017				FY2018				Increase (Decrease)	
Sales		Operating Profit		Sales	Operating Profit			Operating Profit	
¥651.3 billion	¥5.4 billion	Domestic ¥2.2 bil. Overseas ¥3.2 bil.	➡	¥681.2 billion	¥22.4 billion	Domestic ¥14.1 bil. Overseas ¥8.3 bil.		+¥17.0 billion	Domestic +¥11.9 bil. Overseas +¥5.1 bil.

Domestic +¥11.9 billion

Sales&marketfactor +¥31.3 bil.

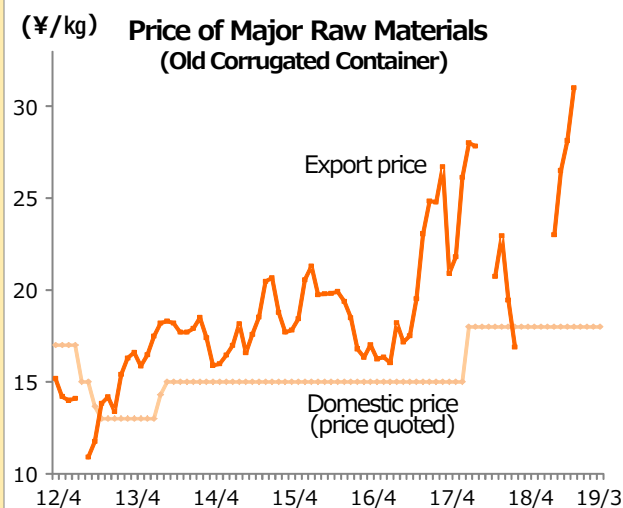
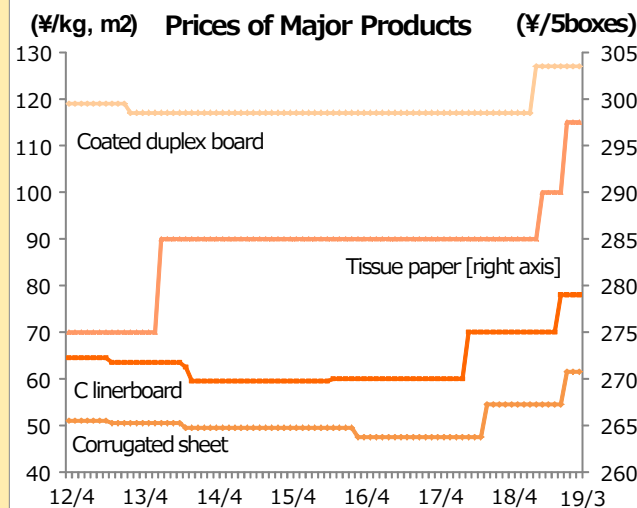
Price difference in raw materials& fuels (¥18.7 bil.)

etc.

Overseas +¥5.1 billion

Sales&marketfactor +¥6.8 bil.

etc.



Sales of Major Products (*)		FY2017			FY2018			Increase (Decrease)			
		Sales Volume	Unit Price	Sales Amount	Sales Volume	Unit Price	Sales Amount	Sales Volume	Year-on Year	Unit Price	Sales Amount
		1,000 t (or) million m2 (or) million pcs	¥ / kg (or) m2	¥ billion	1,000 t (or) million m2 (or) million pcs	¥ / kg (or) m2	¥ billion	1,000 t (or) million m2 (or) million pcs	%	¥ / kg (or) m2	¥ billion
Paperboard	Domestic & Overseas	3,677	63.94	235.1	3,705	67.96	251.8	28	100.8%	4.01	16.6
Corrugated sheet & container (million m2)	Domestic & Overseas	4,018	63.61	255.6	4,097	65.63	268.9	79	102.0%	2.02	13.3
Disposable diaper (million pcs)	Domestic & Overseas	993	-	-	1,178	-	-	185	118.6%	-	-

*Total of Group's consolidated manufacturing companies, with intra-Group consumption included

3. Analysis of Increase/Decrease in Profit by Segment

(2) Functional Materials

FY2017

Sales

Operating Profit

¥220.8 billion

¥18.6billion

Domestic ¥13.2bil.
Overseas ¥5.4bil.

FY2018

Sales

Operating Profit

¥224.1billion

¥18.4billion

Domestic ¥11.9bil.
Overseas ¥6.5bil.

Increase (Decrease)

Operating Profit

(¥0.2billion)

Domestic (¥1.3bil.)
Overseas +¥1.1bil.

Domestic (¥1.3 billion)

Price difference in
raw materials& fuels (¥3.9 bil.)

Sales&marketfactor +¥1.1 bil.

etc.

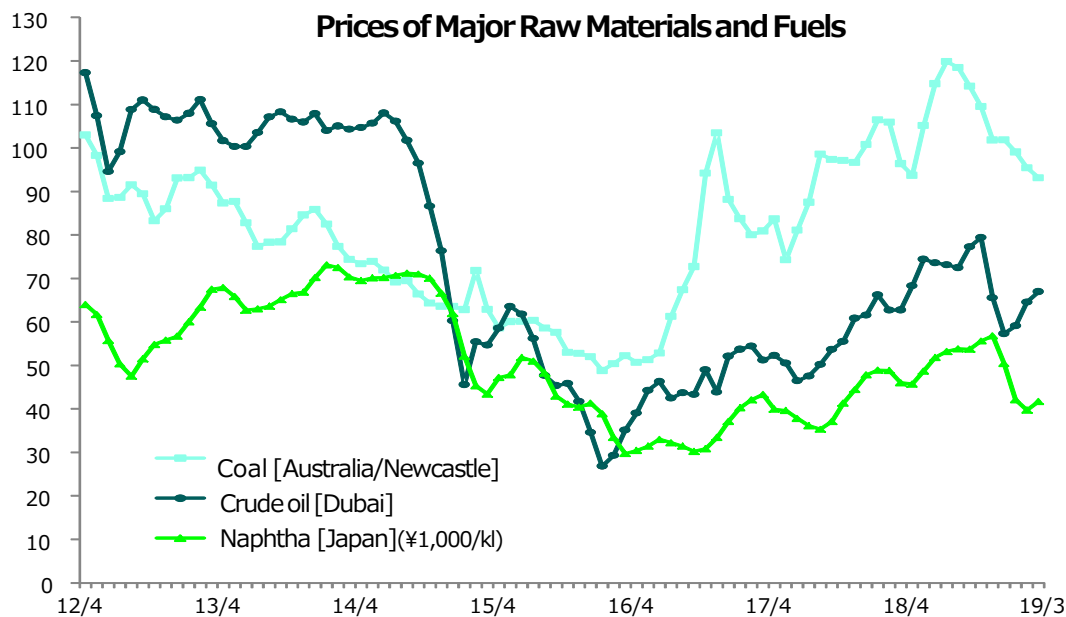
Overseas +¥1.1 billion

Sales&marketfactor +¥8.3 bil.

Price difference in
raw materials& fuels (¥6.8 bil.)

etc.

Prices of Major Raw Materials and Fuels

Sales of
Major Products (*)

FY2017

FY2018

Increase (Decrease)

Sales Volume
million m2Unit Price
¥ / m2Sales Amount
¥ billionSales Volume
million m2Unit Price
¥ / m2Sales Amount
¥ billionSales Volume
million m2Year-on Year
%Unit Price
¥ / m2Sales Amount
¥ billionThermal paper
(million m2)Domestic &
Overseas

3,220

19.57

63.0

3,395

20.23

68.7

175

105.4%

0.66

5.7

*Total of Group's consolidated manufacturing companies, with intra-Group consumption included

3. Analysis of Increase/Decrease in Profit by Segment

(3) Forest Resources and Environment Marketing



FY2017

Sales

Operating Profit

¥298.5billion

¥39.0billion

Domestic ¥4.7bil.
Overseas ¥34.3bil.

FY2018

Sales

Operating Profit

¥326.5billion

¥64.6billion

Domestic ¥4.3bil.
Overseas ¥60.3bil.

Increase (Decrease)

Operating Profit

+¥25.6billion Domestic (¥0.4bil.)
Overseas +¥26.0bil.

(\$/t)

Prices of Major Products
(Pulp – Net Price for China Market)

Overseas +¥26.0 billion

Rise in pulp prices +¥34.2 bil.

Price difference in raw materials & fuels (¥8.3 bil.) etc.

NBKP

680
\$/t

+190\$/t

870
\$/t665
\$/t705
\$/t

LBKP

645
\$/t

+100\$/t

745
\$/t645
\$/t660
\$/t2017 Results
(Jan-Dec)2018 Results
(Jan-Dec)2019 Assumption
(Jan-Dec)Reference
(Apr. 19 Results)Sales of
Major Products (*)

FY2017

FY2018

Increase (Decrease)

		Sales Volume	Unit Price	Sales Amount	Sales Volume	Unit Price	Sales Amount	Sales Volume	Year-on Year	Unit Price	Sales Amount
		1,000t (or) GWh	¥/kg	¥ billion	1,000t (or) GWh	¥/kg	¥ billion	1,000t (or) GWh	%	¥/kg	¥ billion
Market pulp	Domestic & Overseas	2,319	68.76	159.5	2,337	80.07	187.1	18	100.8%	11.31	27.6
Electric power (GWh)	Domestic	1,032	-	-	1,004	-	-	(28)	97.3%	-	-

*Total of Group's consolidated manufacturing companies, with intra-Group consumption included

3. Analysis of Increase/Decrease in Profit by Segment

(4) Printing and Communications Media



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FY2017

Sales

Operating Profit

¥305.4 billion

¥(1.2 billion)

Domestic ¥(4.9 bil.)
Overseas ¥3.7 bil.

FY2018

Sales

Operating Profit

¥302.9 billion

¥(4.8 billion)

Domestic ¥(6.2 bil.)
Overseas ¥1.4 bil.

Increase (Decrease)

Operating Profit

(¥3.6 billion)

Domestic (¥1.3 bil.)
Overseas (¥2.3 bil.)

Domestic (¥1.3 billion)

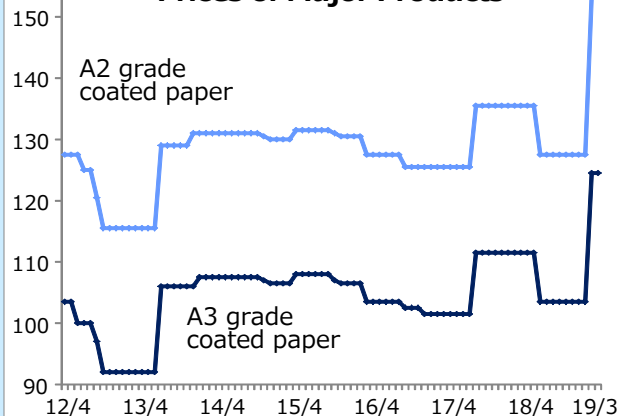
Price difference in
raw materials& fuels (¥9.2 bil.)Retirement Benefit
Expense +¥3.7 bil.

Overseas (¥2.3 billion)

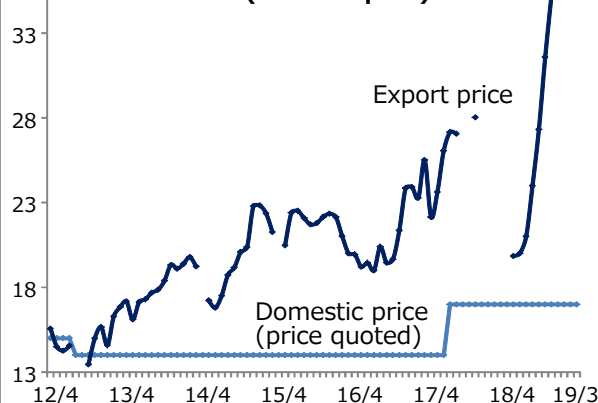
Price difference in
raw materials& fuels (¥2.6 bil.)Sales&marketfactor +¥1.5 bil.
etc.

(¥/kg)

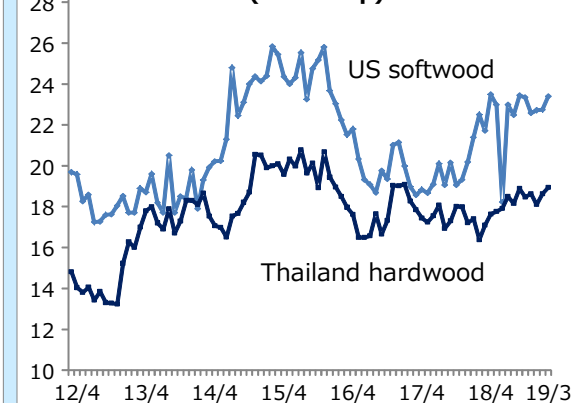
Prices of Major Products



(¥/kg)

Prices of Major Raw Materials
(Old Newsprint)

(¥1,000t)

Prices of Major Raw Materials
(Woodchip)

Sales of

Major Products (*)

FY2017

FY2018

Increase (Decrease)

Sales Volume
1,000 tUnit Price
¥/kgSales Amount
¥ billionSales Volume
1,000 tUnit Price
¥/kgSales Amount
¥ billionSales Volume
1,000 tYear-on Year
%Unit Price
¥/kgSales Amount
¥ billionNewsprint, printing &
communication paper Domestic

2,366

104.98

248.4

2,348

104.15

244.6

(18)

99.2%

(0.83)

(3.9)

*Total of Group's consolidated manufacturing companies, with intra-Group consumption included

II. FY2019 Financial Forecast

1. Financial Forecast for FY2019 (consolidated)

(¥ billion)

	FY2018	FY2019F	Increase (Decrease)
Net Sales	1,551.0	1,600.0	49.0
Operating Profit	110.2	110.0	(0.2)
Ordinary Profit	118.4	110.0	(8.4)
Profit	52.0	60.0	8.0
Depreciation	69.5	62.9	(6.6)
Overseas Sales Ratio	32.0%	31.1%	(0.9%)
Operating Profit of Overseas Companies	76.5	47.0	(29.5)
Average Exchange Rate (¥/US\$)	110.9	110.0	(0.9)

*The above forecasts are based on the forecasts of economic conditions made at the time of publication.
As such, actual results may differ from these forecasts due to various unforeseen circumstances.

Assumptions for FY2019 Financial Forecast

◆ Raw Material & Fuel Prices

- Woodchip :
based on current contract
- Recovered paper :
price to remain static at current level
- Coal
based on current contract
- Heavy oil
price to remain static at current level

◆ Effects of Fluctuation on Operating Profit (per annum)

- Exchange rate Japanese Yen : approx. ¥0.41 billion with a fluctuation of US\$ by 1% (strong US\$ -)
- Brazilian Real : approx. ¥0.33 billion with a fluctuation of US\$ by 1% (strong US\$ +)
- New Zealand Dollar : approx. ¥0.93 billion with a fluctuation of US\$ by 1% (strong US\$ +)
- Price of recovered paper : approx. ±¥4.1 billion with a fluctuation of ¥1/kg
- Price of Dubai crude oil : approx. ±¥0.3 billion with a fluctuation of US\$1/bbl
(heavy oil, bunker, naphtha and others)
- Price of pulp : approx. ±¥2.46 billion with a fluctuation of US\$10/t (high price +)

2. Sales and Operating Profit by Segment

[FY2019 Forecast]

(¥ billion)

	FY2018		FY2019F		Increase (Decrease)	
	Sales	Operating Profit	Sales	Operating Profit	Sales	Operating Profit
Household & Industrial Materials	681.2	22.4	737.0	42.0	55.8	19.6
Functional Materials	224.1	18.4	237.0	20.0	12.9	1.6
Forest Resources & Environment Marketing	326.5	64.6	308.0	37.0	(18.5)	(27.6)
Printing & CommunicationsMedia	302.9	(4.8)	302.0	3.0	(0.9)	7.8
Others	16.3	9.6	16.0	8.0	(0.3)	(1.6)
Total	1,551.0	110.2	1,600.0	110.0	49.0	(0.2)

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

4. Increase/Decrease in Profit by Segment

Household & Industrial Materials

FY2018	
Sales	Operating Profit
¥ 681.2 billion	¥ 22.4 billion
Operating profit margin	Domestic ¥14.1 bil. Overseas ¥8.3 bil.
3.3%	



FY2019F		Increase (Decrease)
Sales	Operating Profit	Operating Profit
¥ 737.0 billion	¥ 42.0 billion	+¥ 19.6 billion
Operating profit margin	Domestic ¥32.7 bil. Overseas ¥9.3 bil.	Domestic +¥18.6 bil. Overseas +¥1.0 bil.
5.7%		

Functional Materials

FY2018	
Sales	Operating Profit
¥ 224.1 billion	¥ 18.4 billion
Operating profit margin	Domestic ¥11.9 bil. Overseas ¥6.5 bil.
8.2%	



FY2019F		Increase (Decrease)
Sales	Operating Profit	Operating Profit
¥ 237.0 billion	¥ 20.0 billion	+¥ 1.6 billion
Operating profit margin	Domestic ¥12.8 bil. Overseas ¥7.2 bil.	Domestic +¥0.9 bil. Overseas +¥0.7 bil.
8.4%		

Forest Resources & Environment Marketing

FY2018	
Sales	Operating Profit
¥ 326.5 billion	¥ 64.6 billion
Operating profit margin	Domestic ¥4.3 bil. Overseas ¥60.3 bil.
19.8%	



FY2019F		Increase (Decrease)
Sales	Operating Profit	Operating Profit
¥ 308.0 billion	¥ 37.0 billion	(¥ 27.6 billion)
Operating profit margin	Domestic ¥6.4 bil. Overseas ¥30.6 bil.	Domestic +¥2.1 bil. Overseas (¥29.7 bil.)
12.0%		

Printing & Communications Media

FY2018	
Sales	Operating Profit
¥ 302.9 billion	¥ (4.8 billion)
Operating profit margin	Domestic ¥(6.2 bil.) Overseas ¥1.4 bil.
-	



FY2019F		Increase (Decrease)
Sales	Operating Profit	Operating Profit
¥ 302.0 billion	¥ 3.0 billion	+¥ 7.8 billion
Operating profit margin	Domestic ¥3.1 bil. Overseas ¥(0.1 bil.)	Domestic +¥9.3 bil. Overseas (¥1.5 bil.)
1.0%		

4. Influences of Changes in External Environment



(¥billion/year)

			Household & Industrial Materials	Functional Materials	Forest Resources & Environment Marketing	Printing & Communications Media	Total
Impact on operating profit from:							
Changes in exchange rates		Assumed exchange rates for FY2019					
USD-based transactions (USD stronger by 10%)	Japanese Yen (JPY)	110.00 JPY/USD	↓	→	→	↓	(7.0)
	Brazilian Real (BRL)	3.60 BRL/USD	→	→	↑	→	+3.3
	New Zealand Dollar (NZD)	1.45 NZD/USD	↑	→	↑	→	+9.3
Conversion of profit in foreign currency to JPY (JPY weaker by 10%)	US Dollar (USD)	110.00 JPY/USD	↑	↑	↑	→	+2.9
	Brazilian Real (BRL)	30.55 JPY/BRL	→	↑	→	→	+0.4
	New Zealand Dollar (NZD)	75.90 JPY/NZD	↑	→	↑	→	+1.1
Changes in pulp prices (USD10/t stronger)			↓	↓	↑	↓	+2.5

+ : Improve
() : Worsen

III. Medium-term Management Plan

1. FY2016-18 Medium-term Management Plan



Management Strategies FY2016-18 Group Fundamental Policies

Expansion of
Overseas Business

Concentration/
Advancement of
Domestic Business

Enhancement of
Financial Foundation

Numerical Management Targets FY2018

Operating profit
(consolidated)

¥100.0 billion

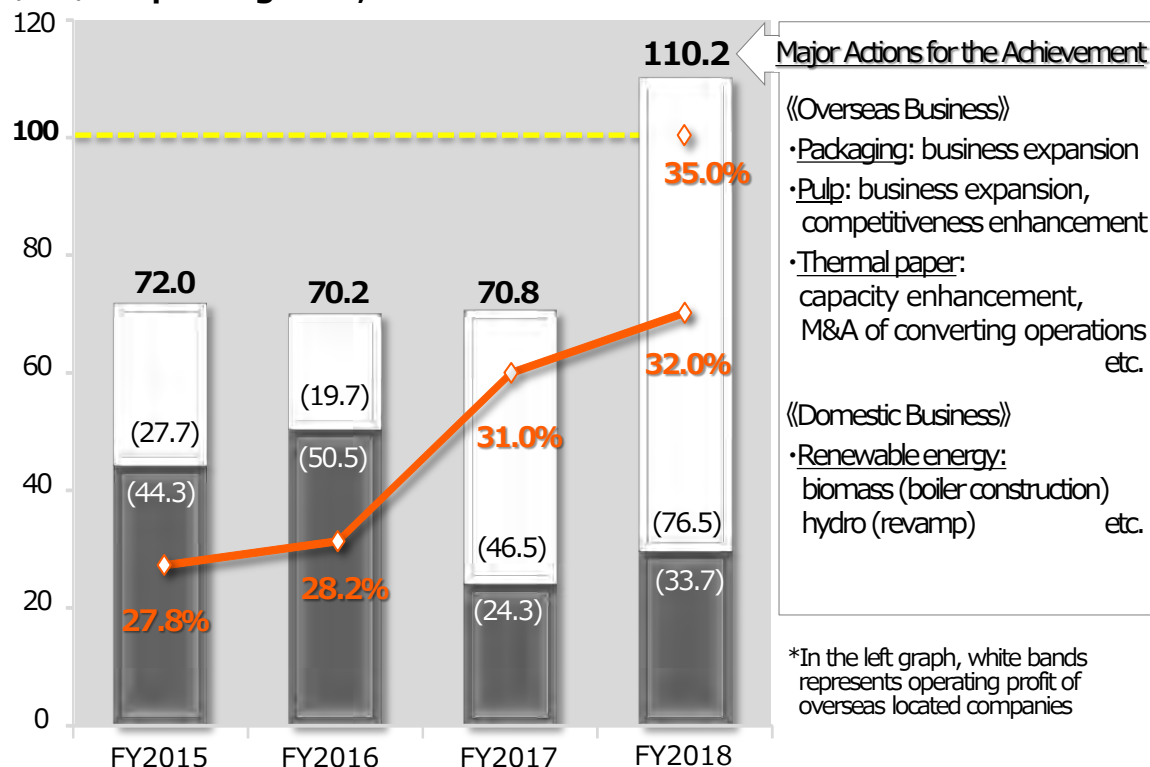
Overseas sales ratio

35%
(Future target 50%)

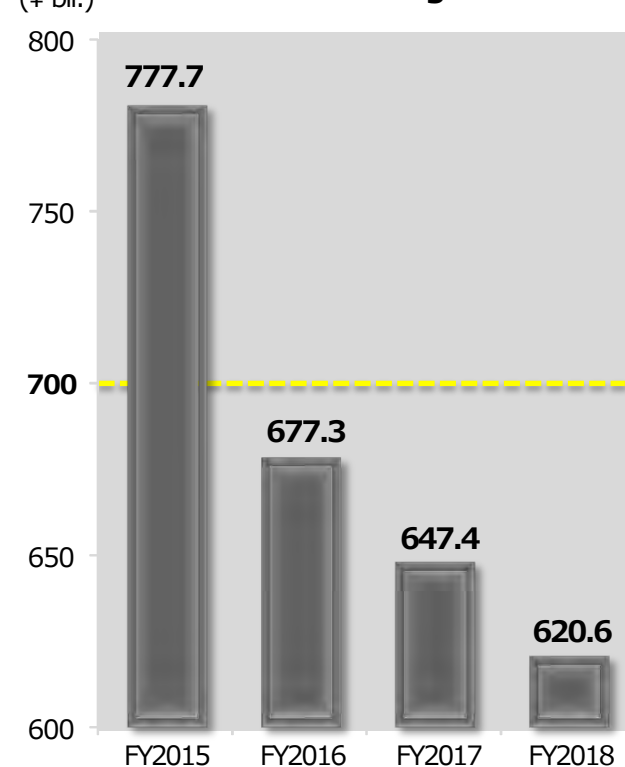
Interest-bearing debt

¥ 700.0 billion

Operating Profit, Overseas Sales Ratio



Interest-bearing Debt



2. (1) Management Philosophy



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Creation of
Innovative Value



Contribution to
Future and the World



Harmony with
Nature and Society



Photo by João Rabelo

2. (2) Fundamental Management Strategies

Management Strategies FY2019-21 Group Fundamental Policies

Profitability Improvement of Domestic Business

- Improve capital efficiency & CF generation by restructuring manufacturing system and effectively using existing facilities
- Concentrate resources on promising business
- Enhance competitiveness through business alliances

Expansion of Overseas Business

- Expand organically from existing operations
- Generate synergies between businesses and operations
- Focus on: Asia & Oceania

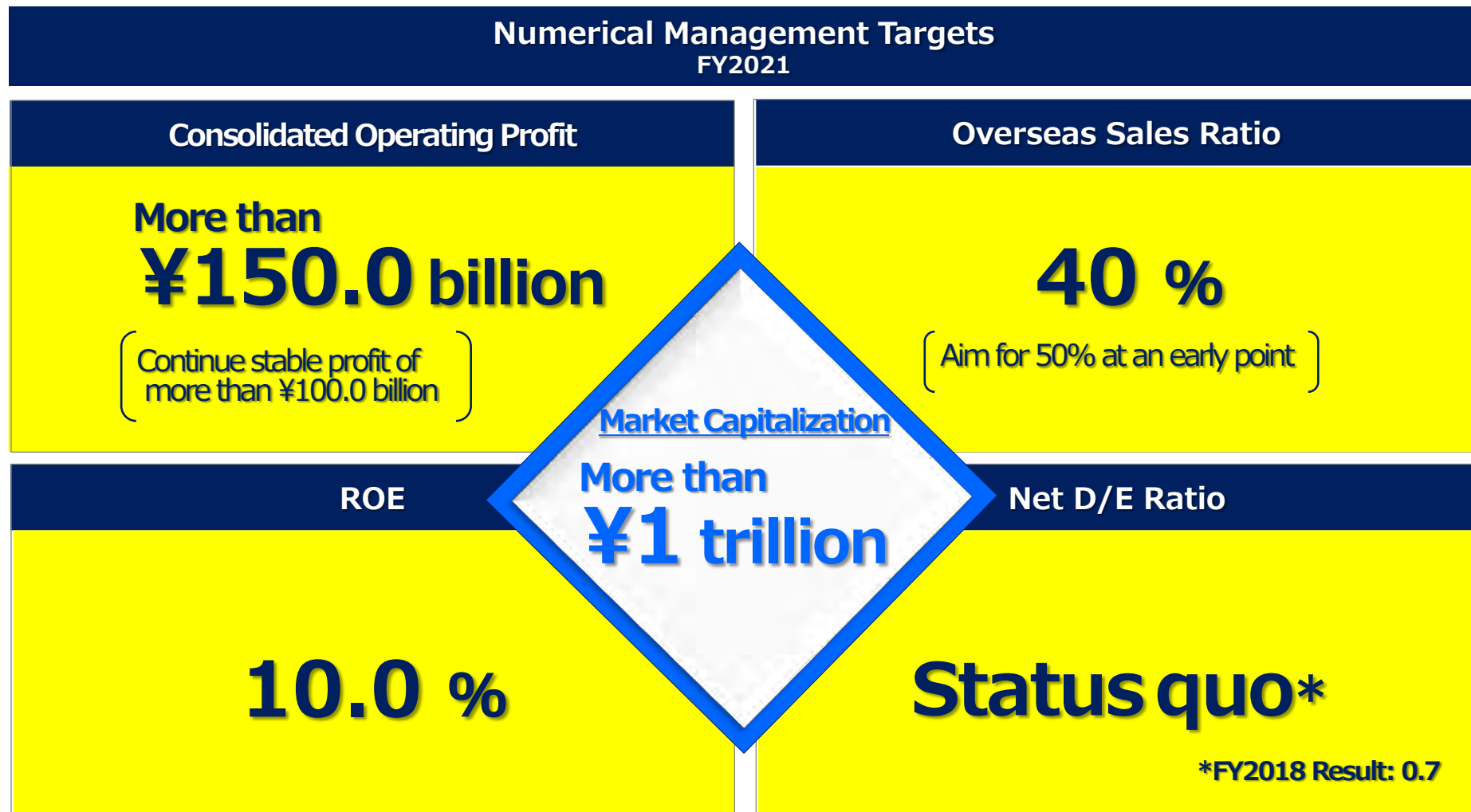
Promotion of Innovation

Promote development and pursue early profitization of new businesses & products

Contribution to a Sustainable Society

Take action with regard to environmental and social needs through business activities

2. (3) Numerical Management Targets [FY2021 Targets]

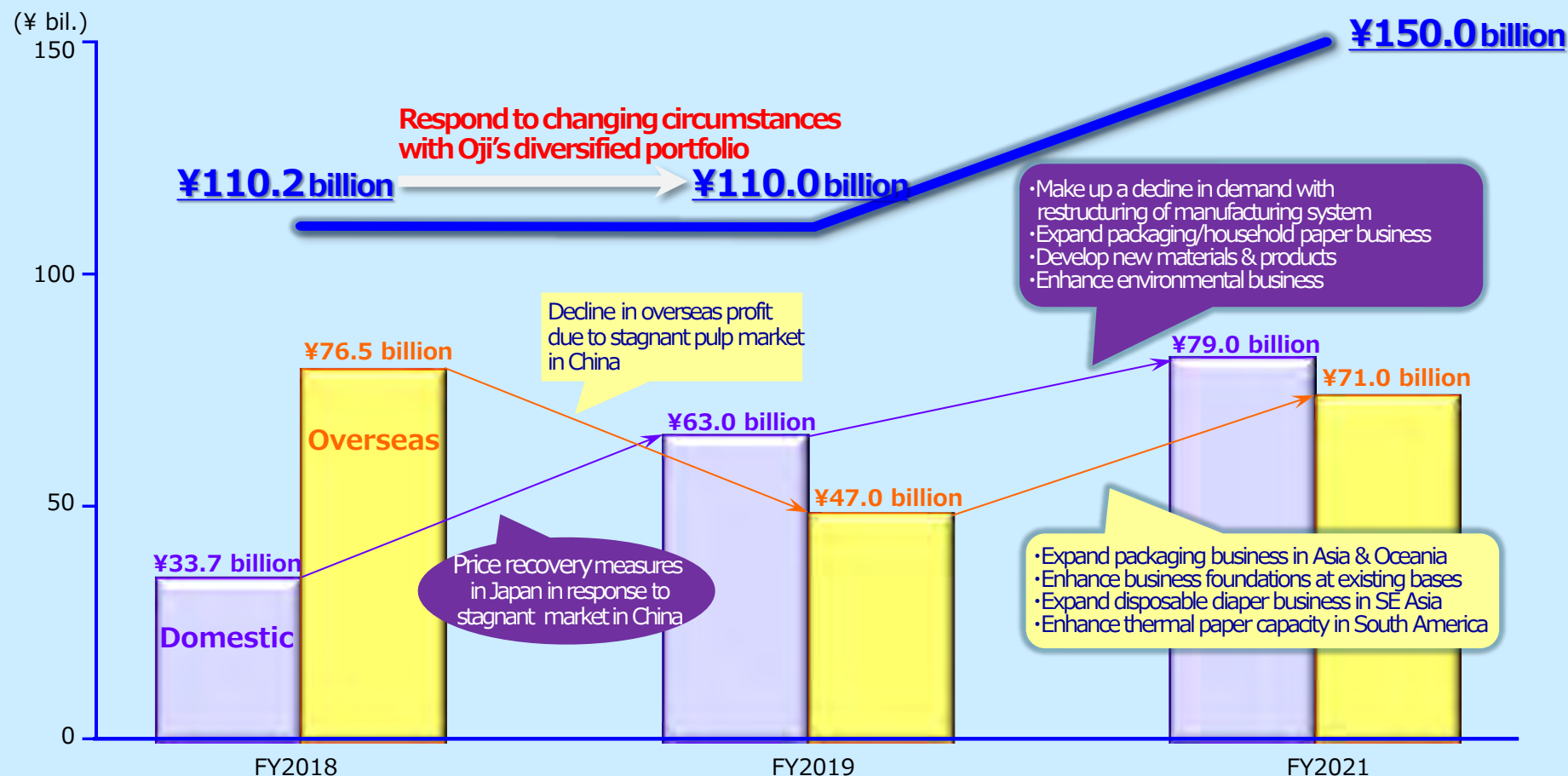


Assumptions for the Medium-term Management Plan (FY2020-21)

- ◆ Exchange rates : remain static at the level of FY2019
- ◆ Pulp prices : slight recovery from FY2019
- ◆ Raw material & fuel prices : remain static at the level of FY2019
- ◆ Domestic demand : corrugated containers ↑ 1% per year, paper ↓ 5% per year

2. (4) Business Strategies for Achieving the Targets - 1

Operating Profit FY2018-2021



Continue stable profit of more than ¥100.0 billion

Raw Materials Market Forecast

Supply Demand Forecast of BHKP in terms of Capacity

2018

Stagnant (Factor) US-China trade conflicts

2019

Recovery Recovery trend during 2019 - 2022

2020

(Capacity) Tighter supply-demand conditions due to lack of large-scale production increase plan
(Raw material) Concern over worldwide shortage of woodchip materials
→ Sharp rise in the international woodchip market

2021

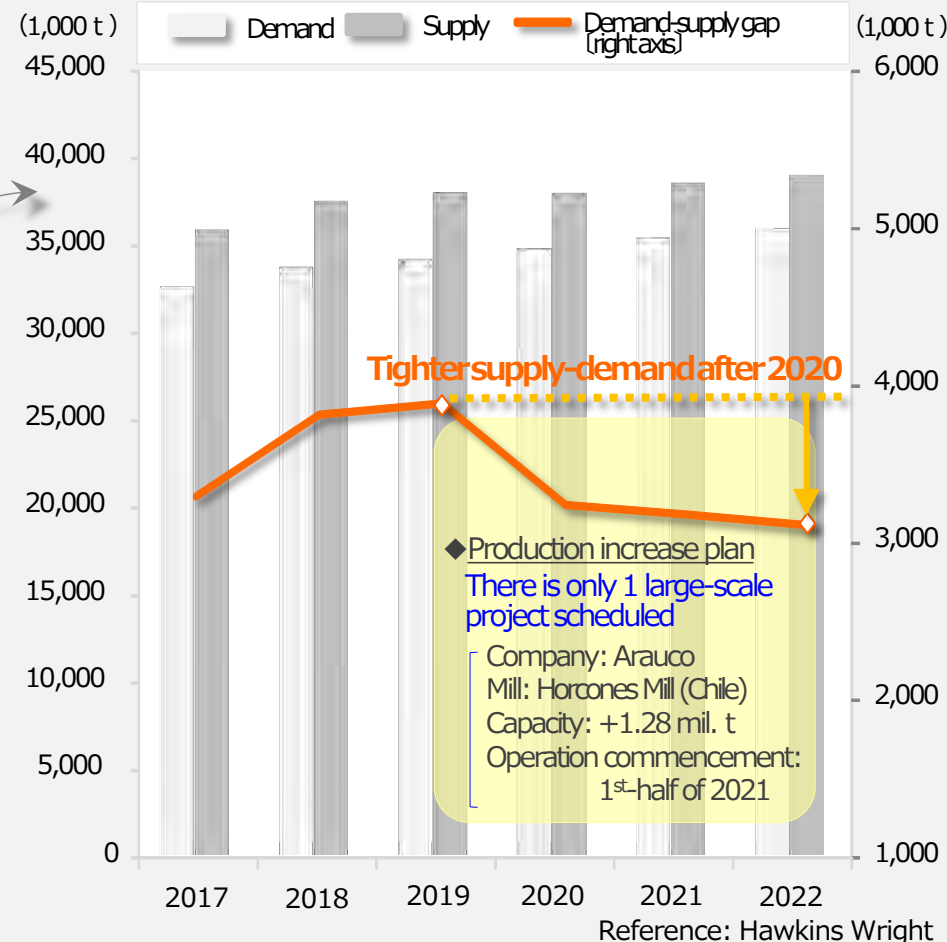
Australia:
Reduction of eucalyptus plantation resources (20-30% reduction in the next 2-3 years)

Indonesia:
Woodchip exporter → importer due to fire, poor growth, etc.

Other:
Reduction of forest plantation resources due to competition with food production (i.e. pasture, palm, etc.)

2022

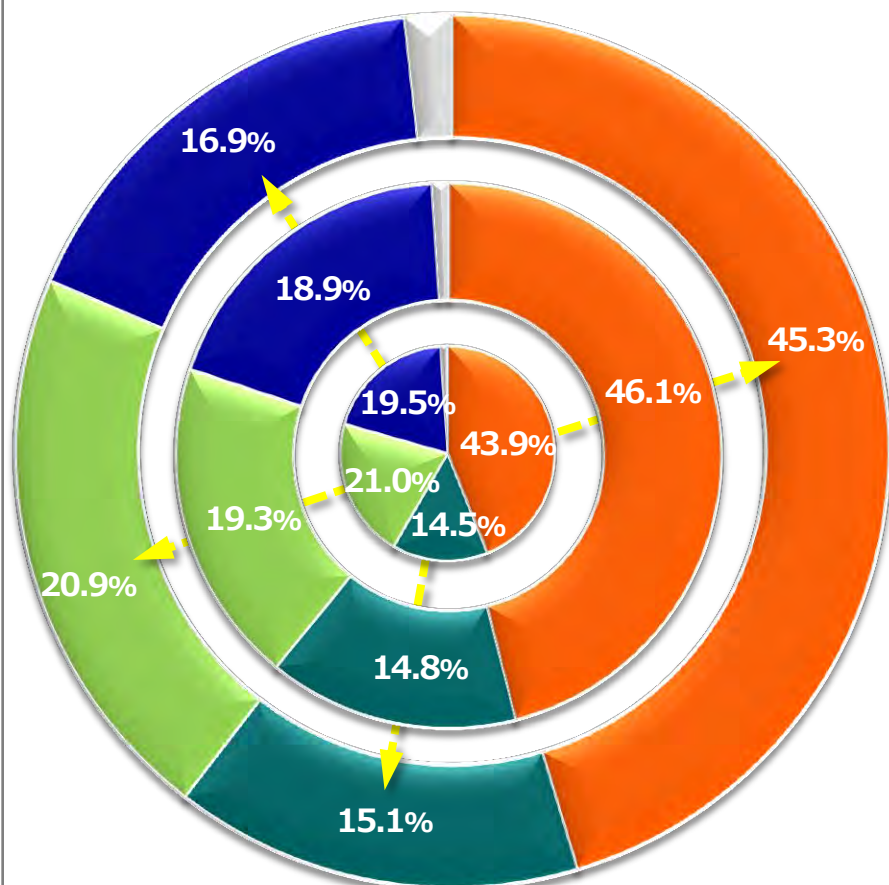
Limited increase in cost-competitive raw material
→ Market conditions would remain steady over the medium-term



Pulp prices will pick up again after 2nd-half of 2019

2. (5) Sales and Operating Profit by Segment [FY2021 Targets]

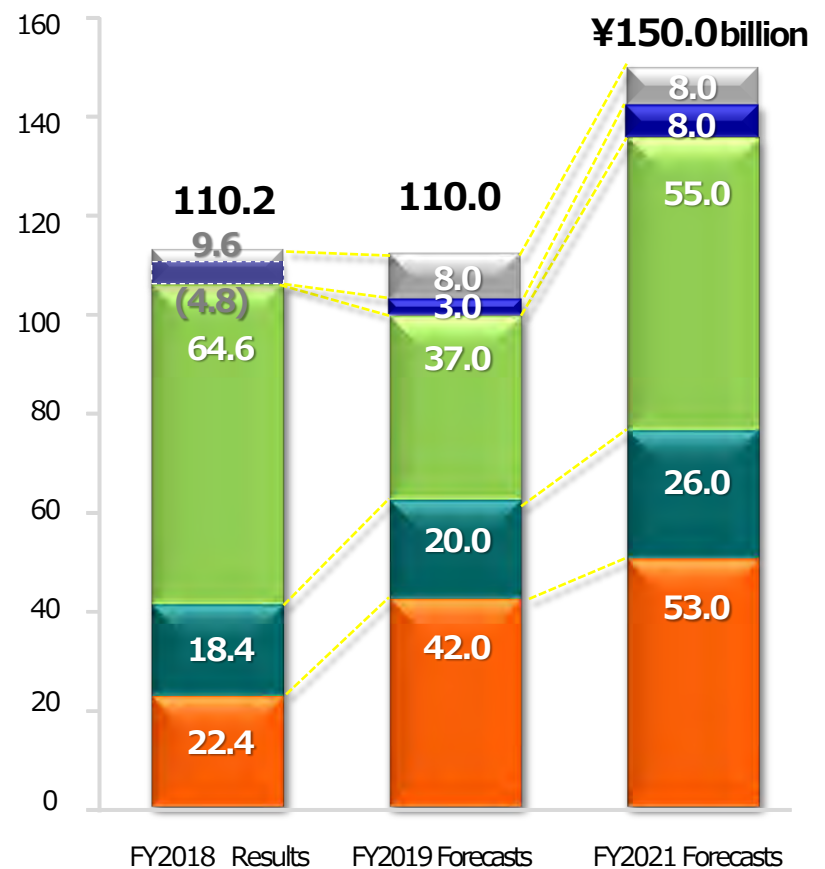
Net Sales by Segment
FY2018 → FY2021



FY2018 Results **¥1,551.0billion** → FY2019 Forecasts **¥1,600.0billion** → FY2021 Forecasts **¥1,700.0billion**

*Sales include intra-segment sales
*Others include adjustment amount

Operating Profit by Segment
FY2018 → FY2021



Household & industrial materials Functional materials Forest resources & environment marketing Printing & communications media Others

Financial Plan

FY2019-21

Timely and certain execution of management strategies

Operating
CF

¥490.0
billion

Dividend 40.0

Maintenance
& Renewal
Investments

150.0

Strategic
Investments

300.0

Projects under promotion and consideration

◆Japan◆

《Industrial materials》

- Containerboard: restructuring of manufacturing system, corrugated containers: plant establishment

《Functional materials》

- Development of high value-added products development, restructuring of manufacturing system

《Forest resources & environment marketing》

- Biomass energy: business enhancement [Hachinohe, Tokushima]

《Printing & communications media》

- Newsprint, printing & communication paper: restructuring of manufacturing system

◆Overseas◆

《Industrial materials》

- Containerboard: machine expansion [SE Asia/Malaysia]
- Corrugated containers: plant expansion & establishment [SE Asia/Malaysia, Vietnam, Cambodia, India, Indonesia, Oceania/Australia, NZ]

《Household & consumer products》

- Baby disposable diapers: establishment of our own plant, machine expansion [SE Asia/Indonesia, Malaysia]
- Household paper: establishment of base paper machine [China]

《Functional materials》

- Thermal paper: capacity enhancement [Europe/Germany, South America/Brazil]

《Forest resources & environment marketing》

- Pulp: capacity enhancement, competitiveness enhancement [South America/Brazil, China, Oceania/NZ]

4. Profitability Improvement of Domestic Business - 1

Expansion of Corrugated Container Business

New Plant Establishment in Funabashi-shi

- Establish a new plant under Morishigyo in the Kanto region, where demand is particularly growing
- Increase supply volume and market share to enhance competitiveness

Redevelop & Diversify the existing distribution base (Funabashi-shi, Chiba)

<Expected business>

New Corrugated Container Plant

Production Capability

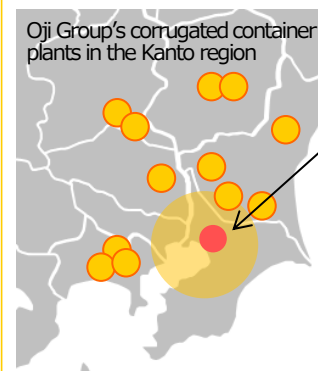
20 million m2/month

Operation Commencement

Sequentially from April 2020 (scheduled)

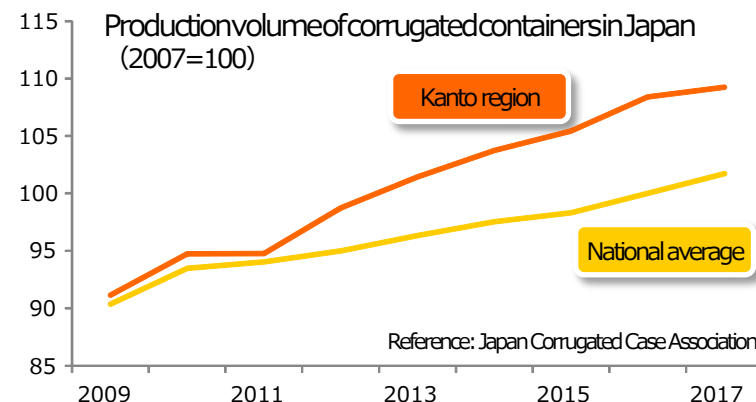
Wastepaper-yard

Distribution warehouse



Planning to establish a new plant at a good location in the big city suburbs

- National demand growth due to e-commerce, etc.
- Remarkable demand growth in the Kanto region due to population concentration in the metropolitan area



4. Profitability Improvement of Domestic Business - 2

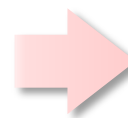
Expansion of Household Paper Business

Base paper production in China and Converting in the Kanto region

Base Paper Machines



Converting Base



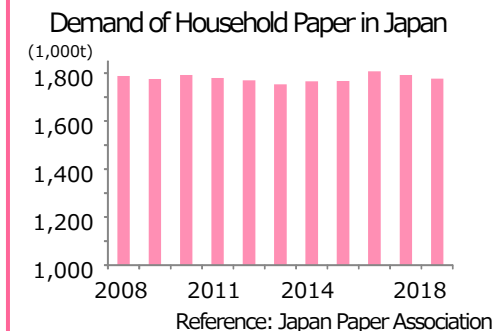
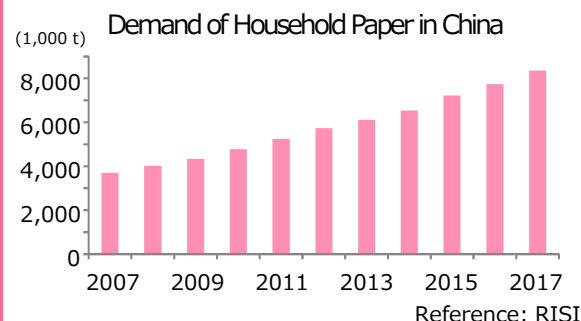
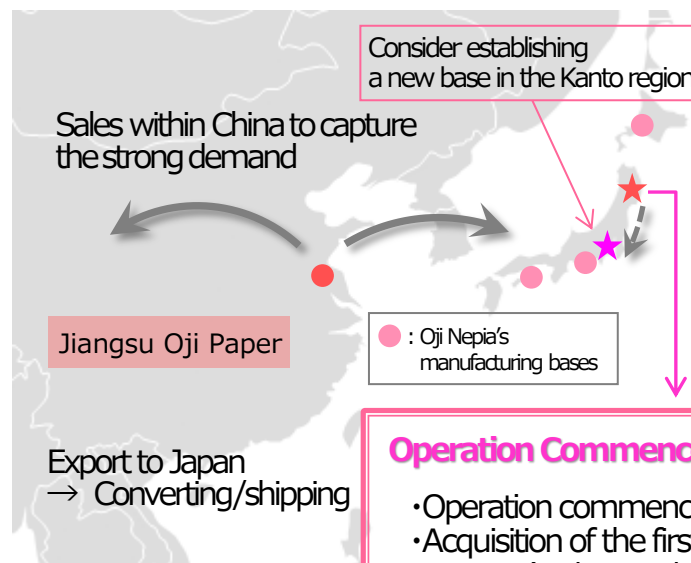
Collaboration within and outside Japan to develop household paper business

Establish base paper machines at Jiangsu Oji Paper, China

Consider establishment of converting machine that use base paper produced within Group in the Kanto region (effective use of idle land in Edogawa)

Overview of Base Paper Machines

- Operation commencement in: 2020 (scheduled)
- Production capability: 120,000t/year
- 2 machines of: base paper for household paper (tissue paper, toilet rolls)



Operation Commencement of MPM Oji Home Products

- Operation commencement in April 2019
- Acquisition of the first household paper base in the Tohoku region (within Hachinohe Mill, Mitsubishi Paper Mills)

➡ Build an optimal manufacturing system, including logistics

4. Profitability Improvement of Domestic Business - 3

Production Efficiency Improvement of Functional Materials Business

Subject bases

Oji Group

Oji F-Tex / Ebetsu Mill
Tokai Mill
Nakatsu Mill

Oji Imaging Media / Kanzaki Mill

Mitsubishi Paper Mills (MPM) Group

MPM/ Hachinohe Mill, Takasago Mill,
Shirakawa Branch

KJ Specialty Paper / Fuji Mill
Kitakami HiTec Paper Corporation



Product group

Thermal paper

Carbonless paper

Pressboard

Decorative base paper

Maximize effects from the business alliance through **rebuilding manufacturing system & joint development of high value-added products** with MPM

Electric Power Business

Expand renewable energy business centering on establishment of new biomass boilers

MPM Oji Eco Energy

Operation commencement
scheduled in Jul. 2019
(within Hachinohe Mill, MPM)

Capacity: 75,000kW

Joint venture with MPM

Oji Green Energy Tokushima

Operation commencement
scheduled in Sept. 2022
(within Tomioka Mill, Oji Paper)

Capacity: 75,000kW

Joint venture with ITOCHU ENEX

Others

Contribute to realizing a low
carbon society through our
businesses such as fuel
procurement for biomass
power generation, and
hydro power generation

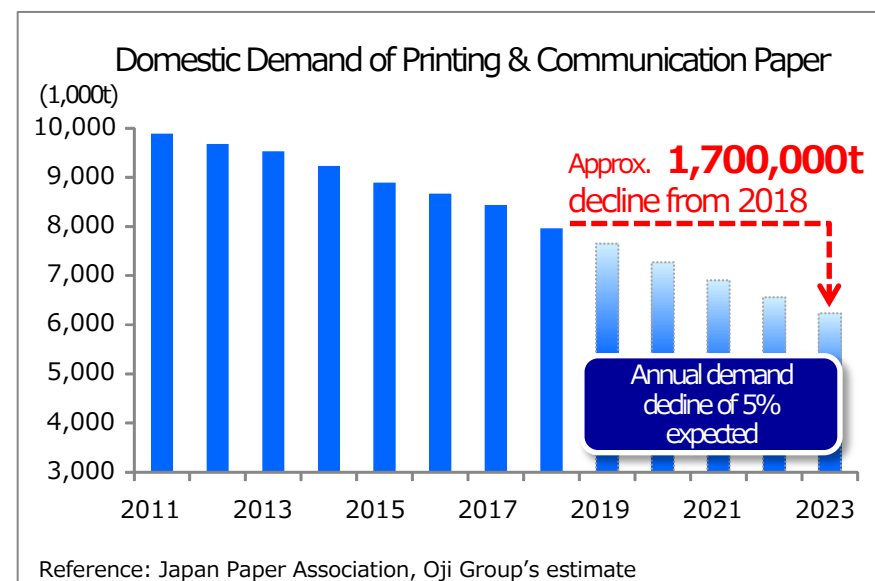
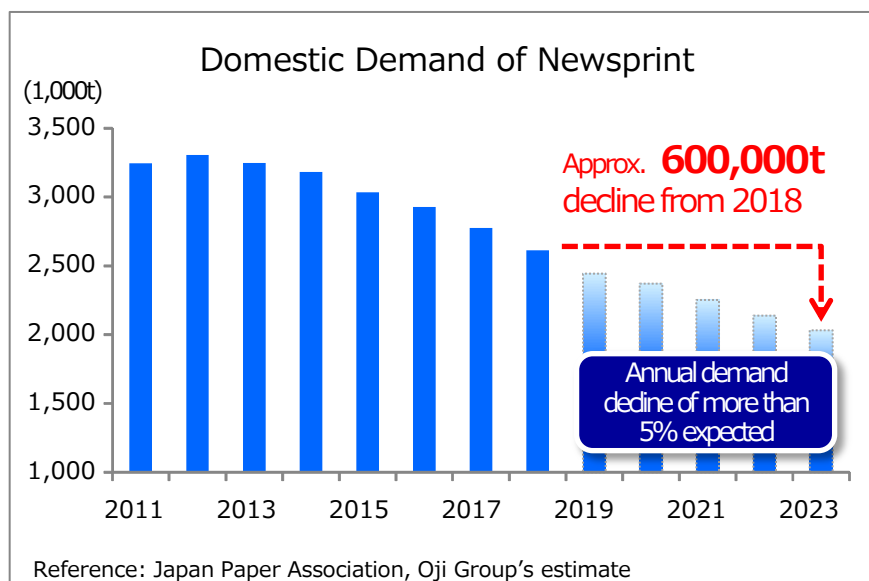


Biomass boiler at MPM Oji Eco Energy

4. Profitability Improvement of Domestic Business - 4

Build a Production System that Matches the Demand Trends

Secure cash flow by optimizing manufacturing system and continuing cost reductions amid declining demand



Prompt implementation of restructuring of manufacturing system

Decline in capacity utilization→

- Convert surplus capacity to containerboard, kraft paper, etc.
- Conduct shut down of machines to consolidate production

4. Profitability Improvement of Domestic Business - 5

Restructuring of Manufacturing System

Respond to structural changes in demand
Effectively utilize owned machines

➡ Radical cost improvement

Converting product varieties

Company	Mill	Machine	Capacity reduction	Product variety	Time of implementation
Oji Paper	Tomakomai Mill	#N-5 Machine	200,000t/year (newsprint)	Newsprint ↓ Containerboard Kraft paper	Shut down: 1 st -half of 2020 Start up: FY2021

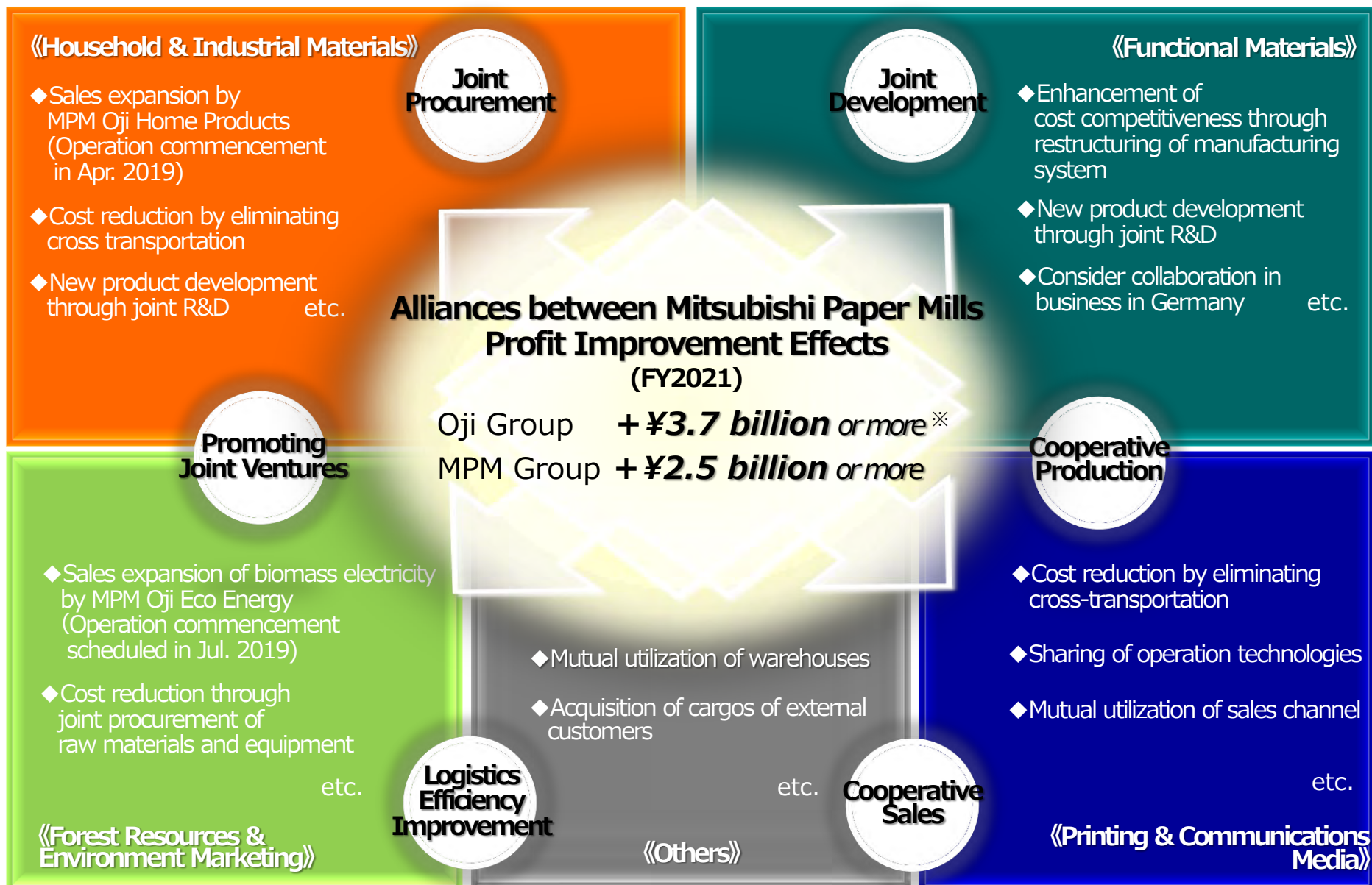
Shut down of machines

Company	Mill	Machine	Capacity reduction	Product variety	Time of implementation
Oji Paper	Tomioka Mill	#9 Machine	130,000t/year	Printing & communication paper	End of FY2019
Oji F-Tex	Ebetsu Mill	#1 Machine	45,000t/year	Printing & communication paper Specialty paper	1 st -half of FY2020
Oji F-tex	Ebetsu Mill	#4 Machine	15,000t/year	Specialty paper	1 st -half of FY2020

Cost reduction effects^(*) by the above restructuring of manufacturing system ... **3.7billion/year**

*mainly of fixed costs

4. Profitability Improvement of Domestic Business - 6



※The figure does not include the profit improving effects before the conclusion of the capital alliance

5. Expansion of Overseas Business - 1



Expansion of Overseas Business

Expansion of corrugated container business in SE Asia & India

Foundation Enhancement

Install containerboard machine in Malaysia

Enhancement at GSPP/Malaysia

- Install containerboard machine of 450,000t/yr
(scheduled operation commencement in Apr. 2021)
- Radical improvement in energy and drainage costs
(Rights of water intake/discharge acquired: 37,000m³/day)

Business Expansion

Continue to build new plants and actively expand into countries we haven't tapped into yet

Schedules for Operation Commencement

- | | |
|-------------|----------------------------------|
| • India | 4 th base : Mar. 2020 |
| • Vietnam | 5 th base : Jul. 2019 |
| • Cambodia | 3 rd base : Jan. 2020 |
| • Indonesia | (1st entry) : 2020 |

Market Shares

- Malaysia 30%
- Cambodia 30%
- Vietnam 10%
- Others 10% or less

➔ **Aim to increase market shares**



New mill starting operation in July 2019 (Vietnam)

Restructuring & expansion of packaging business in Oceania

Enhancement of Overseas Folding Cartons & Packing Paper Businesses

- Optimize manufacturing system
- Consider new M&A

- Operation commencement of a new plant at United Packaging in Vietnam (Jun. 2019)

Improve competitiveness by expanding the total packaging business as a whole

5. Expansion of Overseas Business - 2

Expansion of Disposable Diaper Business in SE Asia

Indonesia

Present Started sales of OEM product from Nov. 2016
Sales have got on track with expanded volumes



Future **Establish a local plant** to secure competitiveness and enhance business foundation

Overview of New Plant

- 2 machines of: pants-type disposable diapers
- Operation commencement in: 2020 (scheduled)
- Expect further expansion in line with increasing demand



Rendering of the new plant

Malaysia

Produce tape-type & pants-type diapers at 2 local operations
Export standard products to surrounding countries such as Vietnam



Consider **Restructuring of manufacturing system** to achieve capacity enhancement & cost reductions

(Consider:)
Consolidation of operations, additional installation of machines etc.



Scene of manufacturing

Export of High-end products from Japan

Continue to expand exports of high quality "made-in-Japan" products for affluent population in China and SE Asia
Pursue sales expansion of **Whito**, a more luxury product

Expand business and enhance competitiveness throughout the region

5. Expansion of Overseas Business -3



OJI HOLDINGS

Continual Enhancement of Pulp Business

Promote capacity enhancement & cost reductions at bases
Consider securing the land for plantation



Forest plantation in Brazil

Hardwood Pulp

Brazil/CENIBRA

- Production capability 1,200,000 t/year
- Continue sophistication of equipment, including modernization of a bleaching machine
- Consider capacity enhancement

China/Jiangsu Oji Paper

- 2nd dry pulp machine started operation in 2017
- Continue to focus on improving operating system and cost reduction

Softwood Pulp

NZ/Oji Fibre Solutions

- Production capability 600,000 t/year
- Continue to upgrade pulp equipment and improve operation efficiency
- Secure competitive raw materials by expanding plantation areas

NZ/PAN PAC

- Production capability 200,000t/year
- Enhance capacity of BC-TMP

Further enhance & expand Oji Group's production capability of market pulp 2,400,000 t/year

6.Promotion of Innovation - 1 Plastic Replacement

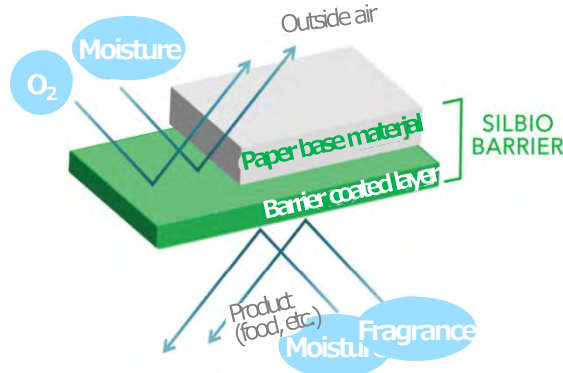
Development of higher value to plastic replacement products including paper products

Packaging material with high barrier properties

- ◆ It has barrier properties that can replace plastic films. It reduces degradation of contents and preserves fragrance and moisture.
- Wide range of applications from food to industrial materials

Consider business development overseas, including SE Asia, as well as in Japan

Image of **"SILBIO BARRIER"**, a multi-barrier paper utilizing Oji's functional coating technology



Paper cup lid (traveler lid)

- ◆ Paper cup lid with resistance to water and heat made from pulp



Functional paper for food & liquid containers

- ◆ Promote development of milk carton and base paper for paper straws

Functions of CNF sheet

- ◆ Promote development of additional functions and wider range of applications

Biodegradable plastic

- ◆ Development of "plastic pellets made from a combination of pulp with polylactic acid"

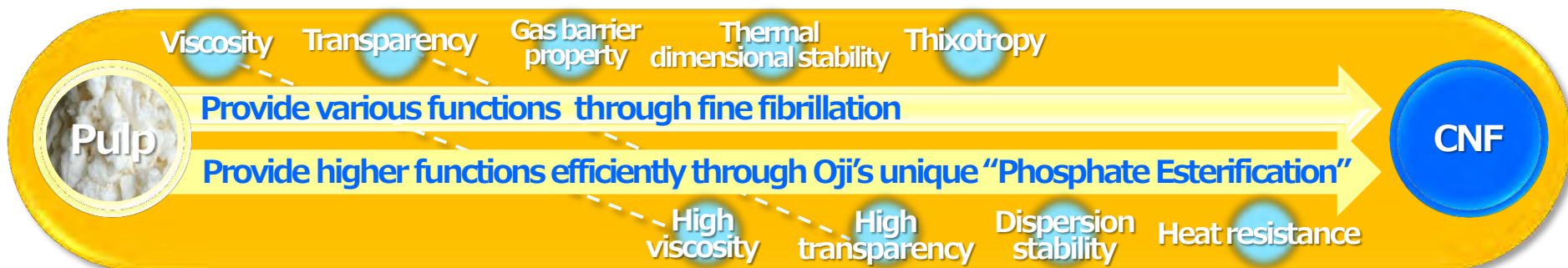
Effects of combining with pulp

- Increasing rigidity of molded products
- Improving heat resistance
- Reducing time required for injection molding

- ◆ Development of technology to produce glucose from pulp
- ➡ Aim at utilization for biodegradable plastics

6.Promotion of Innovation - 2 Cellulose Nano-fiber (CNF)

Accelerate application development & commercialization of CNF in a wide range of fields



Oji Group's Cellulose Nano-fiber ~Promote unique developments differentiated from other companies~

Slurry

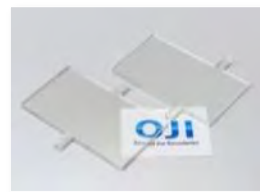


Adopted as:
cosmetic ingredients,
concrete pump primer

Continuous
Transparent Sheet



Composite with
Polycarbonate Resin



Leverage the features to reduce weight
and increase area of car windows

Sales scale in 10 years



Establish a sales & marketing system to
start full-fledged **commercial operation**

¥20.0 bil./year

6.Promotion of Innovation - 3 Hemicellulose

Develop pharmaceutical products from wood-derived hemicellulose
→ Aim to enter into the pharmaceutical sector



Schedule for commercialization ~ From veterinary use to human use~



Sales scale in 10 years



Prepare conditions for entry into the pharmaceutical business to start **commercial operation**

¥10.0 bil./year

Aiming for “Harmony with Nature and Society”

“Harmony with Nature”

Conduct business activities with resource circulation in mind in order to live and prosper in harmony with nature and the earth

Environmental Action Targets 2020

- ◆ Sustainable Forest Management
- ◆ Limitless Challenge to Zero-environmental Burden
 - ... Sustainable Forest Management, Water Recycling
 - ... Zero-emission
- ◆ Responsible Raw Materials Procurement

Biei company-owned forest in Hokkaido

“Harmony with Society”

Promote social contribution activities at Oji Group’s global subsidiaries



Oji Forest Nature School

Produce recyclable resources to conduct a sustainable businesses

Procurement:

Sustainable forest resources

Production:

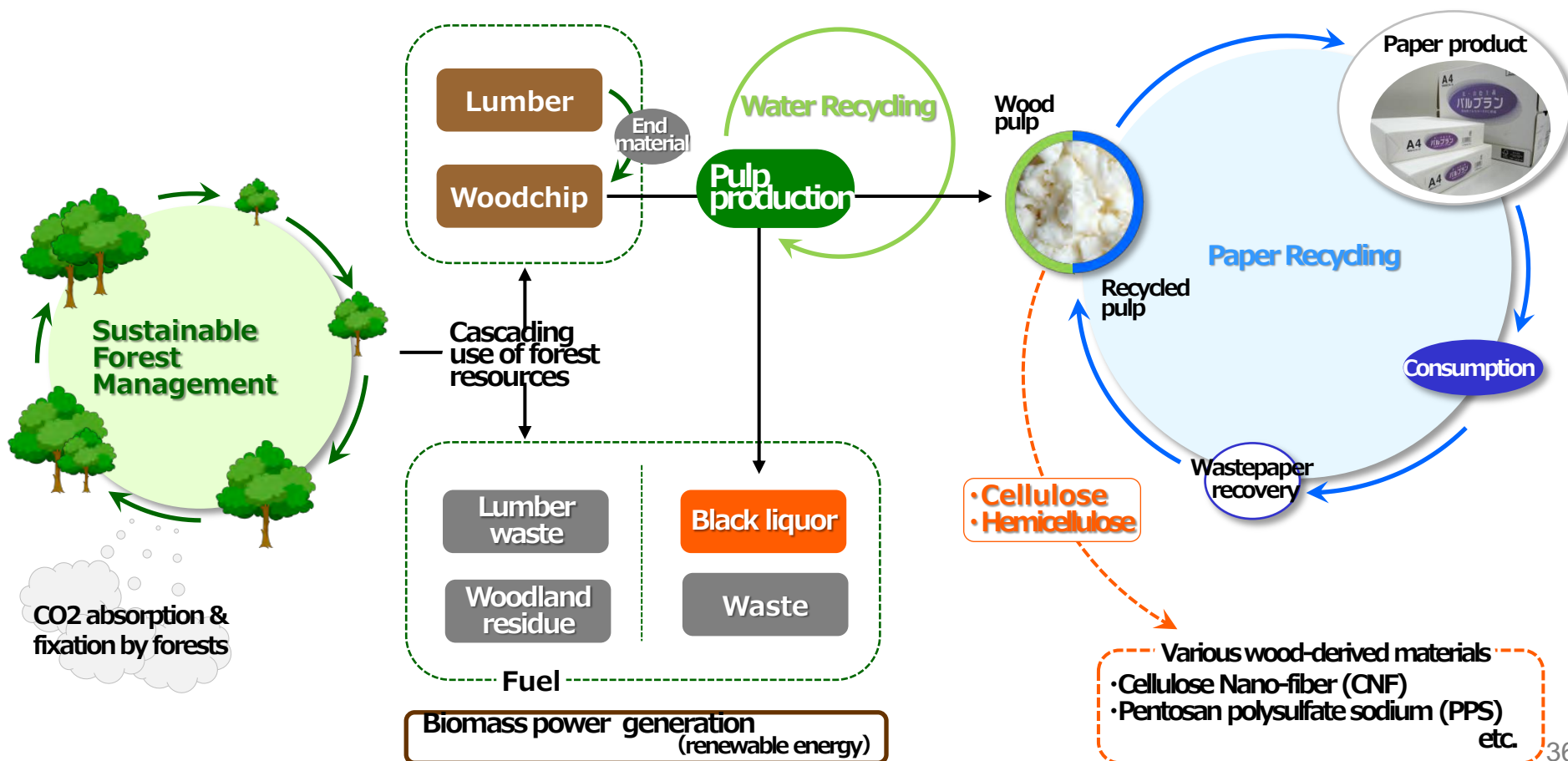
Pulp

Production

Paper, containerboard, new materials

Sales

(Consumption)



Harmony with Nature : "Sustainable Forest Management"

Oji Group's Forests

Forests in Japan

190,000 ha

(No.1 of private enterprises)

Overseas Forest Plantations

260,000 ha

Sustainable Use of Forest Resources

- ◆ Promote acquisition of forest certification & expand eco-friendly products
- ◆ Utilize forest resources for businesses
 - Pulp business
 - Lumber processing business
 - Renewable energy business
 - Development of wood-derived new materials etc.

Global Warming Countermeasures

CO2 absorbed & fixed by grown trees (FY2017 Results)

13,900,000 t co2 equivalent/year

Absorption in Excess of Emissions:

6,060,000 t co2 equivalent/year

contributes to prevent global warming

Oji Group's GHG Emissions (FY2017 Results)

7,840,000 t co2 equivalent/year

Absorption



Biomass boiler at
Oji Green Energy Ebetsu



Kiwi bird in NZ



Niseko company-owned forest,
Hokkaido

Harmony with Nature: “Limitless Challenge to Zero-environmental Burden” “Responsible Raw Materials Procurement”

Zero-Emission

**Zero Environmental
Accidents**
**Zero Product Liability
Accidents**

Preventive & corrective actions
against, and evaluation of
accidents

**Reduction of
Greenhouse Gas (GHG)
Emissions Intensity**

Expanding use of renewable
energy, conserving energy,
and changing fuels

**Promotion of Effective
Utilization of Waste**

Promoting elimination &
effective utilization of wastes

**Management of
Wastewater &
Exhaust Gases
in Consideration of
Local Ecosystems**

Complying with environmental laws
& regulations, reducing substances
of environmental concern

Responsible Raw Materials Procurement

“Oji Group Partnership Procurement Policy”〔2007～〕

“Wood Raw Material Procurement Guidelines”〔2005～〕

Confirm the safety and legality of raw materials and carry out
responsible raw materials procurement taking in consideration
the environment and society



Audit for the FSC™ FM certification (Vietnam)
(License code: FSC™ C016623)



The third-party auditing report
on traceability report

Promote expansion of forest certified
forest materials based on:
“Wood Raw Material Procurement
Guidelines”

Confirm wood resources
are made from
appropriately managed
forests

Harmony with Society : Engage in social contribution activities globally



China Japan

Vietnam

East Timor
(1,000 Toilets Program)

Activities in Japan

- Oji Hall [Developing art & culture]
- Oji General Hospital [Contributing to community healthcare]
- Oji Forest Nature School [Environmental education] etc.



Overseas Activities

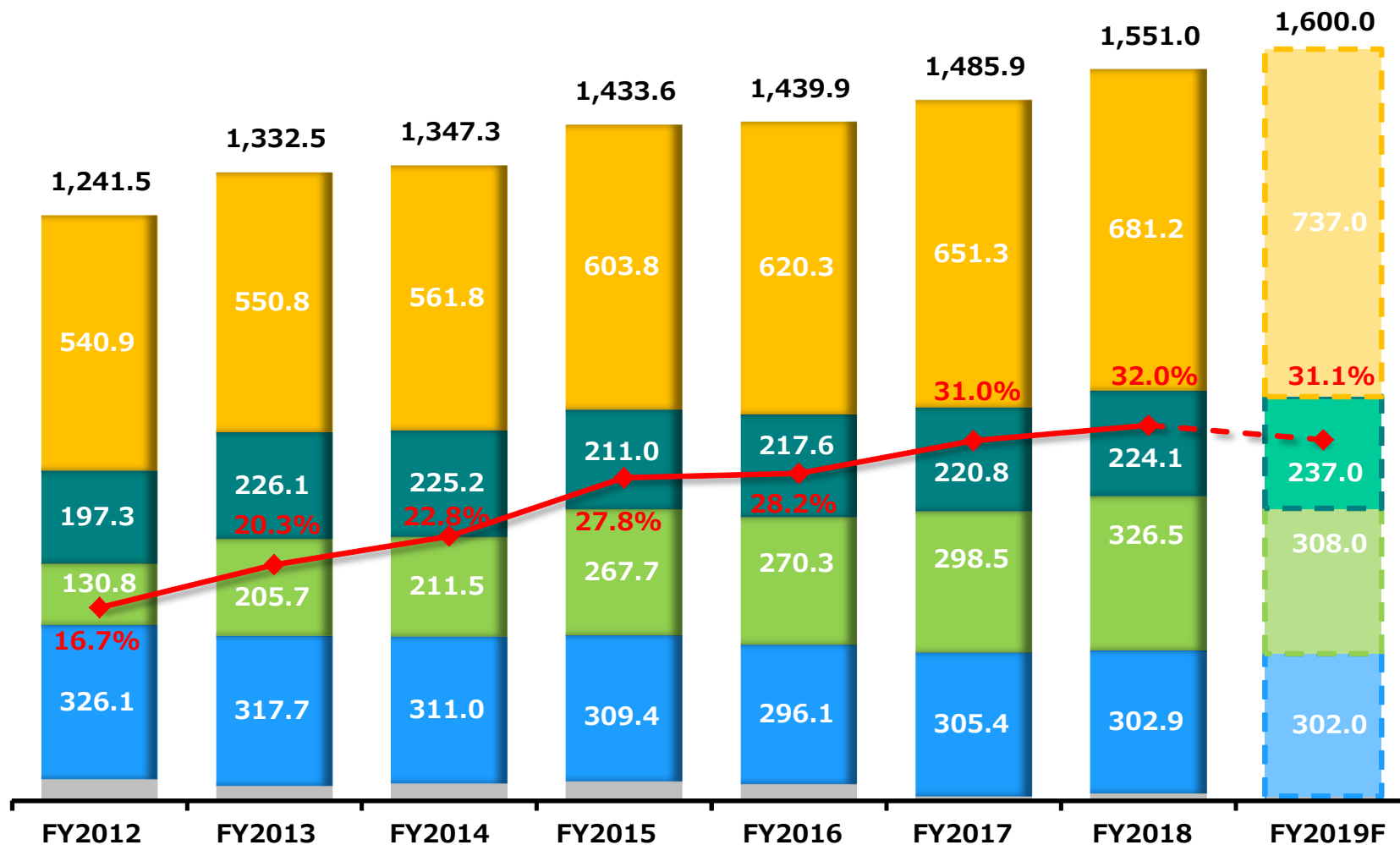
- China : Tree planting in Inner Mongolia [Preserving global environment], Oji Charitable Education Fund [Improving educational environment]
- Vietnam : Dispatch of doctors [Improving medical environment], Repair of nursery schools [Improving educational environment]
- Brazil : Education for visually impaired persons [Improving educational environment], Orquestra Sinfônica de Piracicaba [Developing art & culture]
- nepia 1,000 Toilets Program : providing toilet facilities in East Timor [Improving hygiene environment] etc.



《Reference Materials》

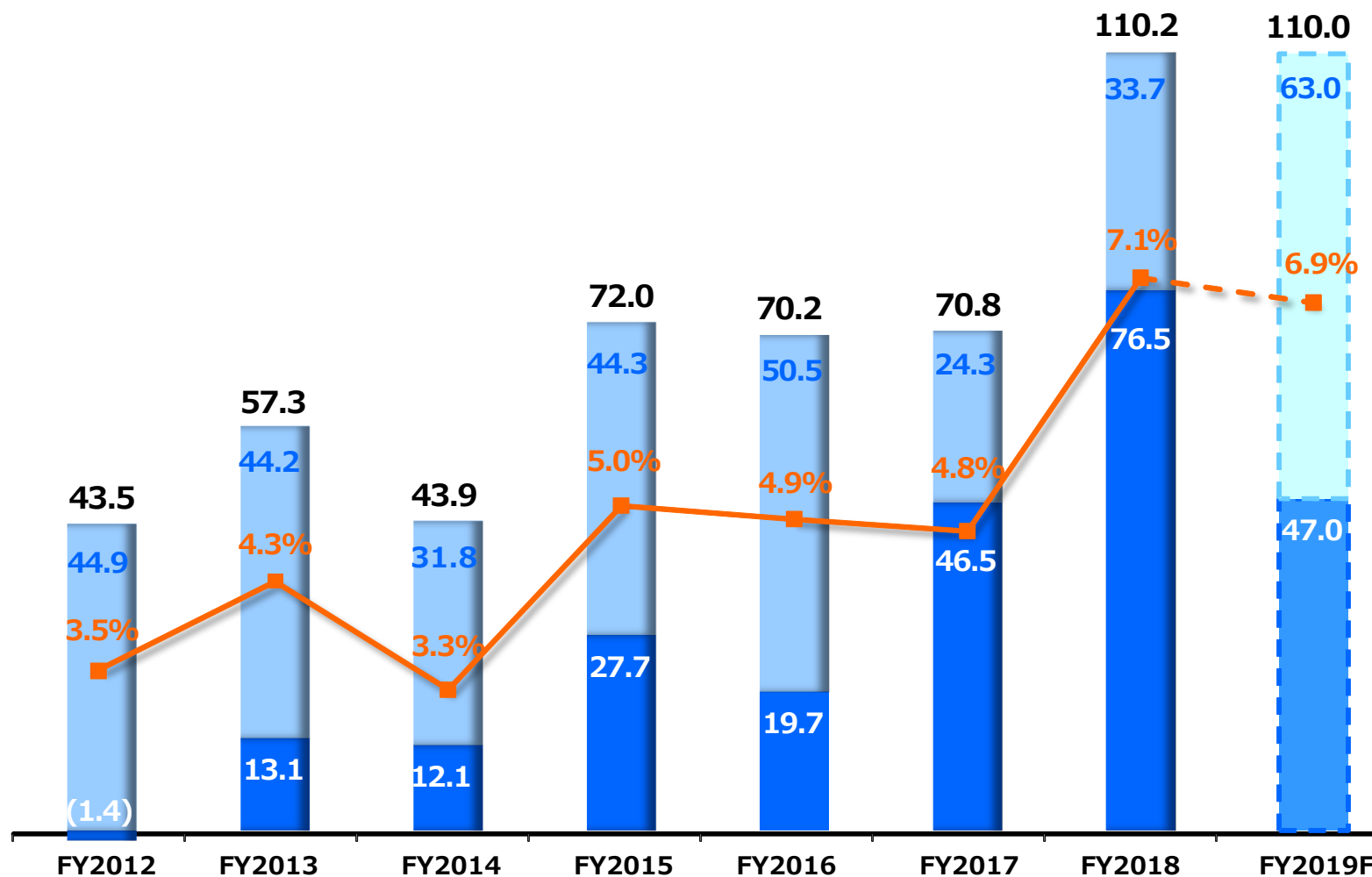
Trends of Net Sales by Segment (consolidated)

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

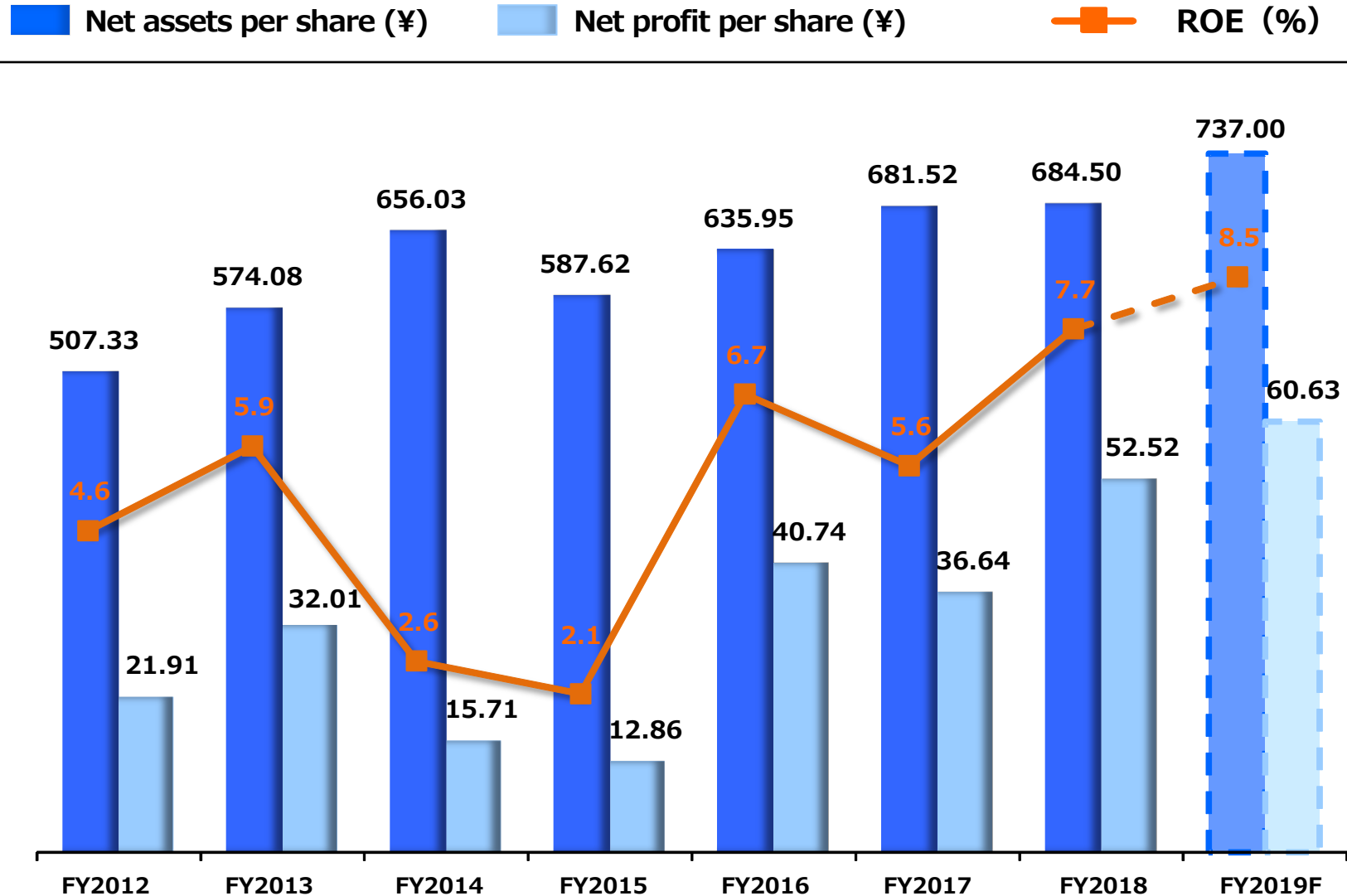


Trends of Operating Profit (consolidated)

Operating profit of domestic companies
 Operating profit of overseas companies
 Operating profit margin
 (¥ billion)



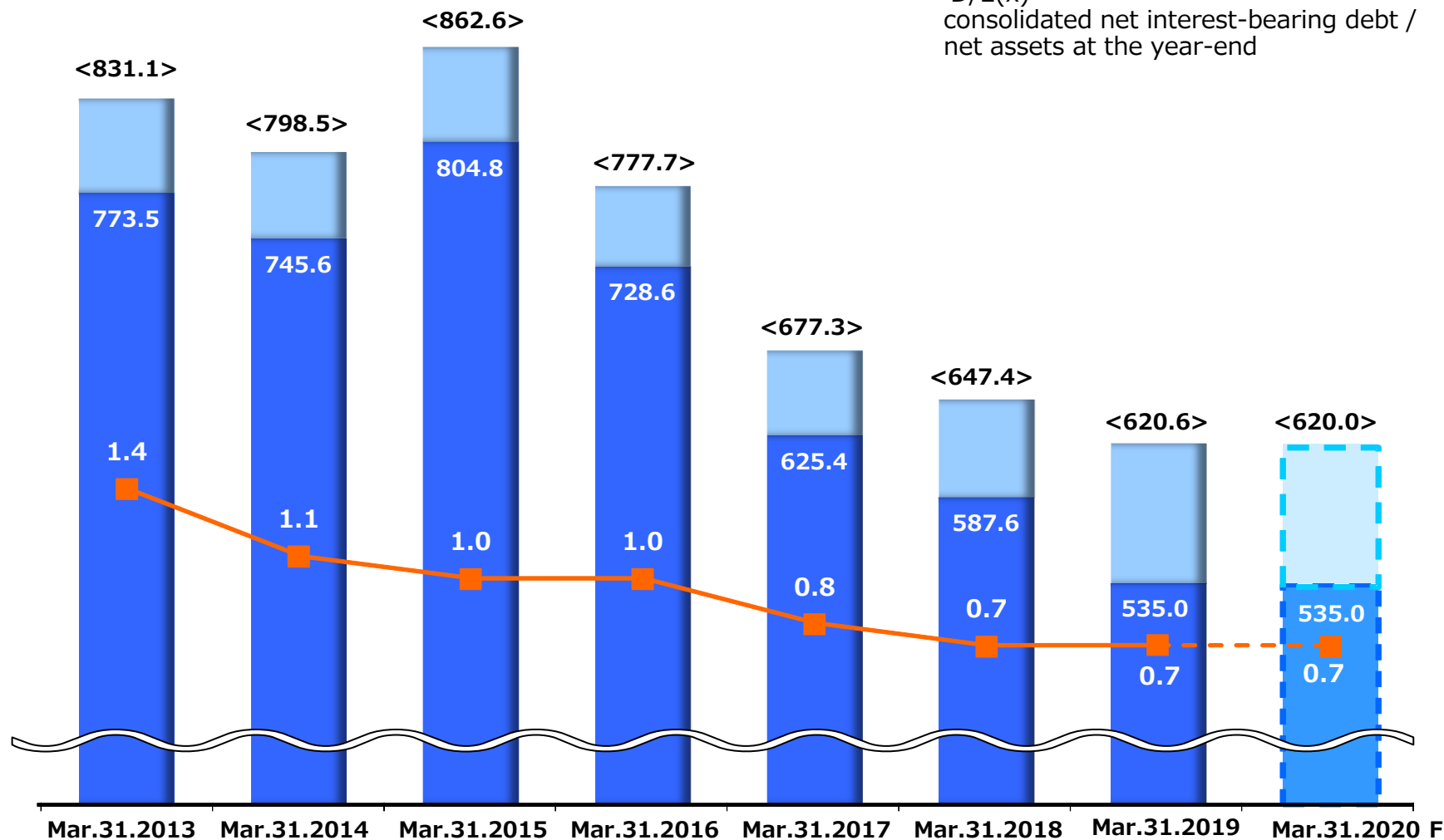
Trends of Return on Equity (ROE)



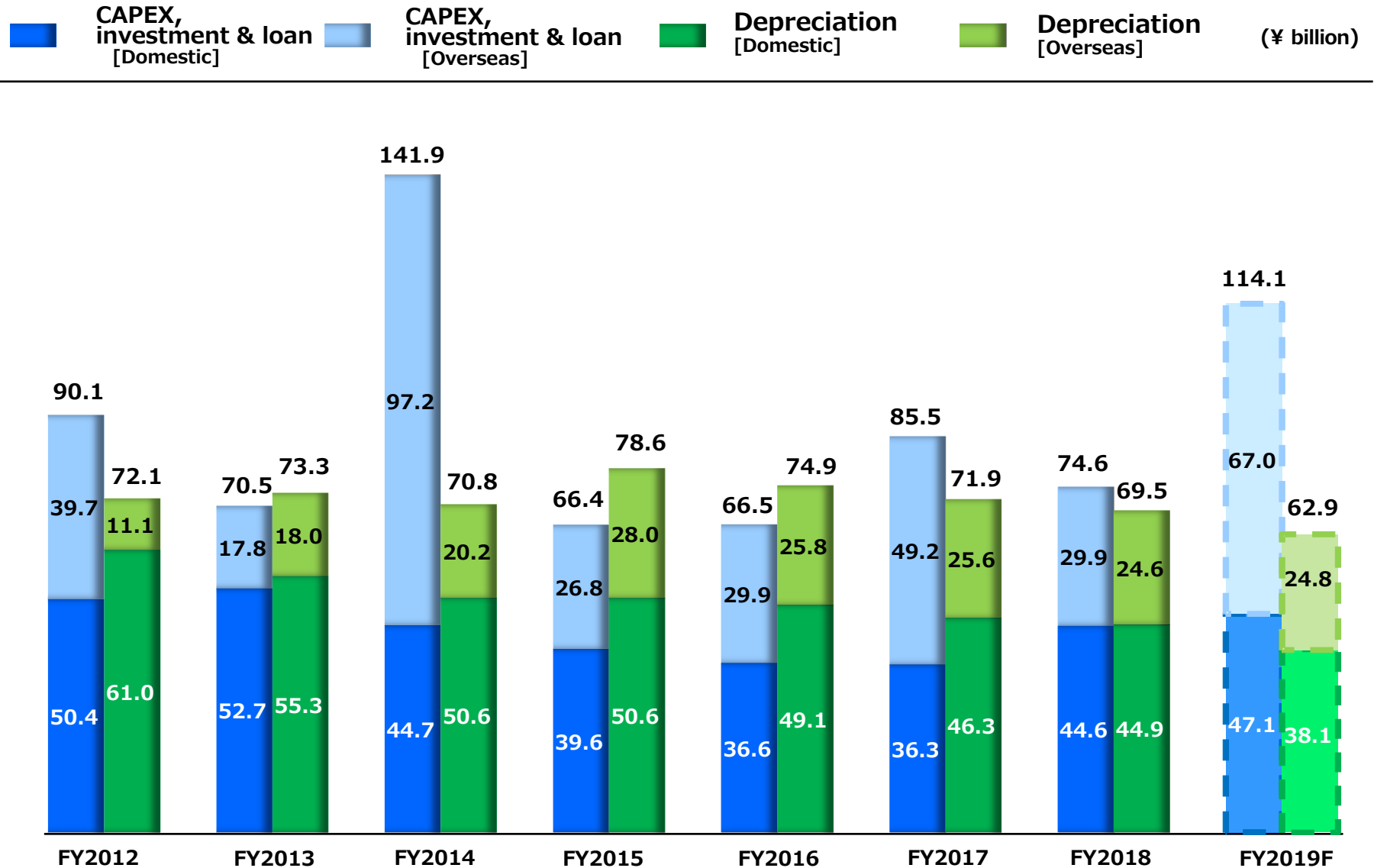
Trends of Net Interest-bearing Debt (consolidated)

■ Consolidated net interest-bearing debt
 ■ <Consolidated interest-bearing debt>
 —■— D/E(x)
 (¥ billion)

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



Trends of CAPEX / Depreciation (consolidated)



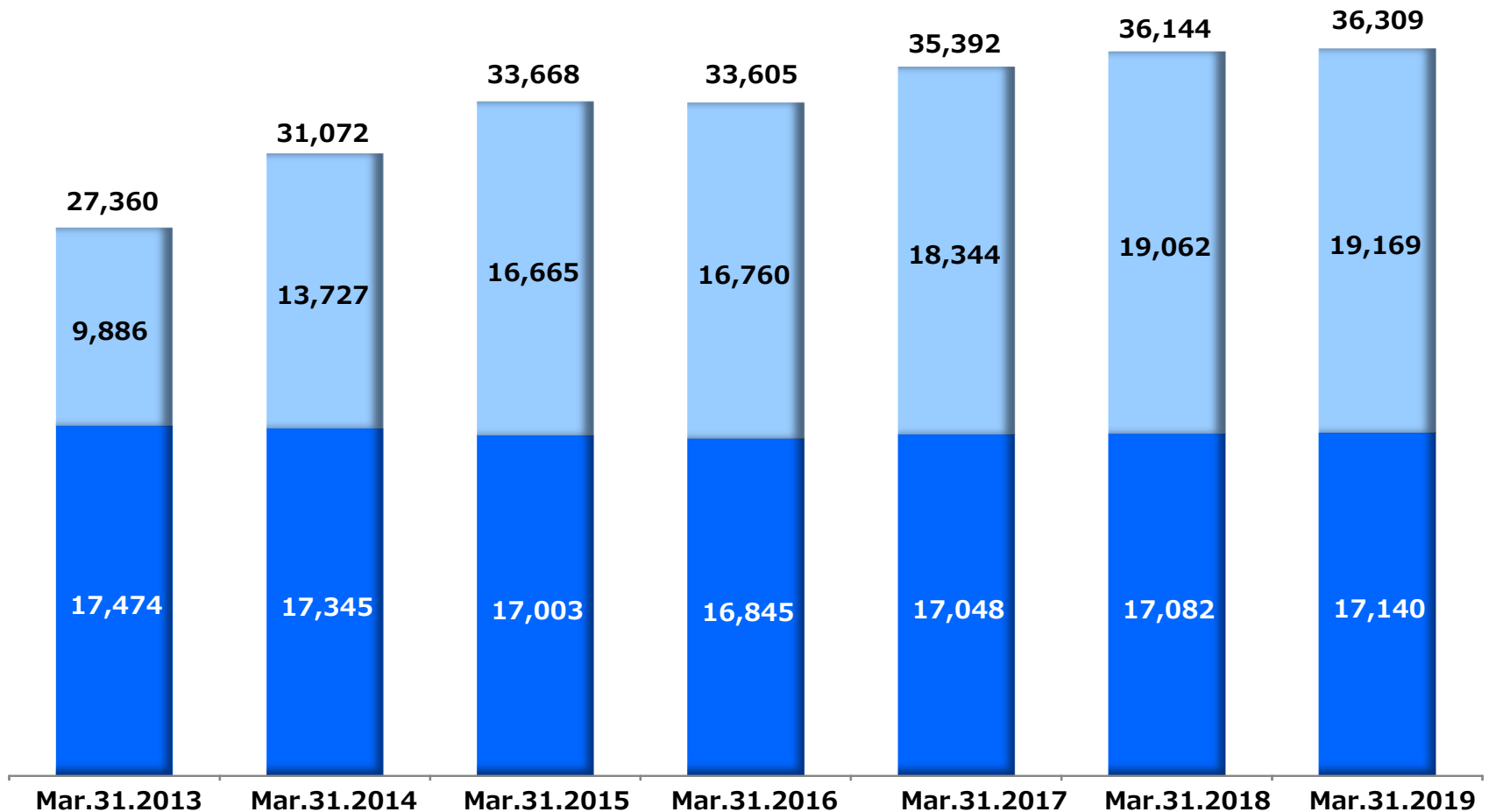
Trends of Employees (consolidated)



OJI HOLDINGS

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

*The figures do not include number of temporary employees



(1,000t)

	Domestic Shipments		Custom Cleared Imports*1		Total	
	Year-on-Year		Year-on-Year		Year-on-Year	
Containerboard	9,270	100.7%	50	116.1%	9,320	100.8%
Boxboard	1,586	100.5%	232	96.4%	1,818	100.0%
Other Paperboard	662	100.8%	34	125.7%	696	101.8%
Paperboard Total	11,517	100.7%	316	101.7%	11,834	100.7%
Sanitary Paper	1,784	99.9%	184	89.5%*2	1,967	98.8%
Packaging Paper	716	101.2%	7	80.4%	723	101.0%
Newsprint	2,545	92.8%	2	24.4%	2,547	92.5%
Printing/Communications Paper	7,133	96.9%	705	75.5%	7,838	94.5%
Miscellaneous Paper	717	95.3%	17	97.0%	734	95.4%
Paper Total	12,895	96.6%	915	77.9%	13,810	95.1%

Paperboard and Paper Total	24,412	98.5%	1,231	82.9%	25,643	97.6%
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(million m³)

Corrugated Containers *3	14,391	101.0%			14,391	101.0%
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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 2018 - March 2019(preliminary)

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

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



Beyond the Boundaries

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