

# 1ST HALF FY2019/3 FINANCIAL REVIEW

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November 7, 2018



**NIPPON PAPER INDUSTRIES**  
SHAPING THE FUTURE WITH TREES 

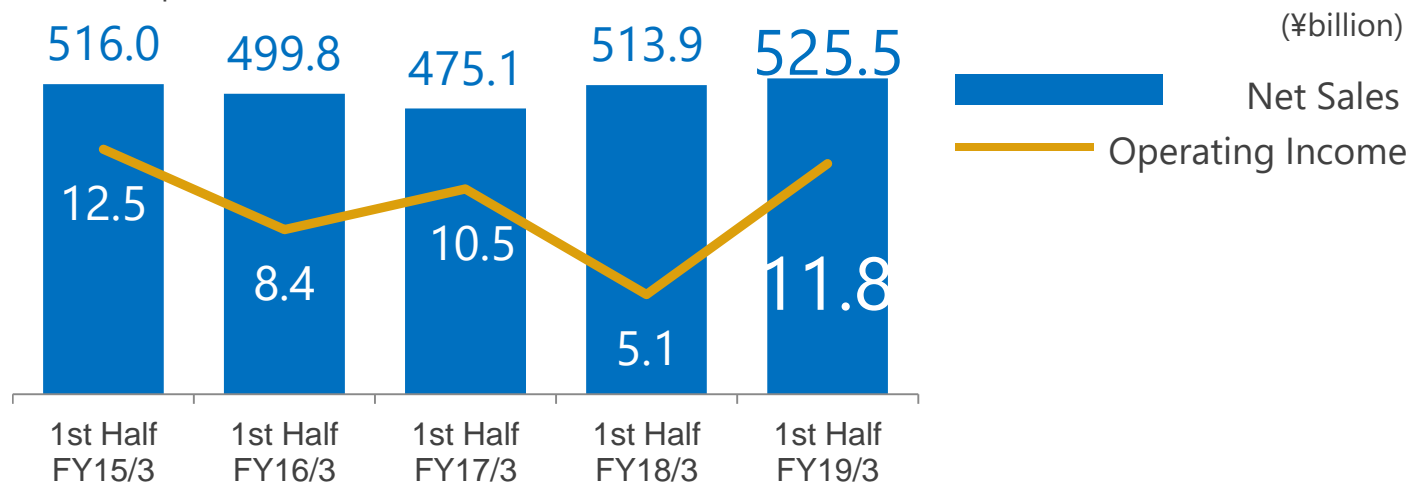
# 1<sup>st</sup> Half FY2019/3 Financial Results

## Consolidated Statement

(¥billion)

	1st Half FY2018/3 Results	1st Half FY2019/3 Results	Variance	
			Amount	%
Net Sales	513.9	525.5	11.6	2.3%
Operating Income	5.1	11.8	6.7	131.1%
Ordinary Income	6.8	13.1	6.3	92.1%
Net Income*	5.1	-6.0	-11.1	—

\* Profit attributable to owners of parent



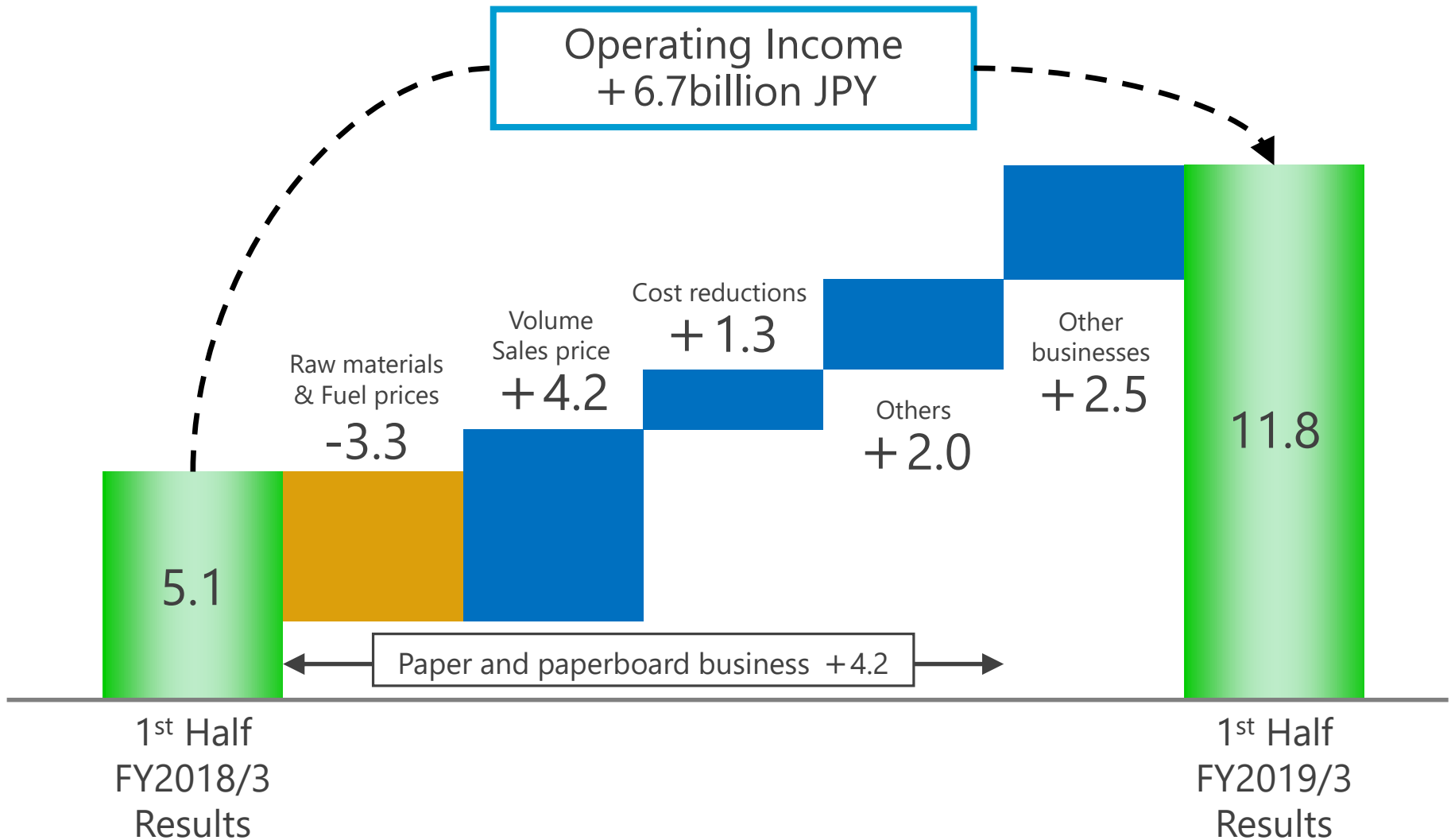
# 1<sup>st</sup> Half FY2019/3 Financial Results

## Results by Segment

(¥billion)

	Net Sales			Operating Income		
	1 <sup>st</sup> Half FY2018/3 Results	1 <sup>st</sup> Half FY2019/3 Results	Variance	1 <sup>st</sup> Half FY2018/3 Results	1 <sup>st</sup> Half FY2019/3 Results	Variance
Paper and paperboard	365.0	363.7	-1.3	-6.7	-2.5	4.2
Livelihood-related	96.2	100.5	4.3	6.6	6.3	-0.3
Energy	7.8	18.2	10.4	1.6	4.3	2.7
Wood products and construction related	29.9	28.0	-1.9	1.7	2.2	0.5
Other	15.0	15.1	0.1	1.9	1.5	-0.4
Total	513.9	525.5	11.6	5.1	11.8	6.7

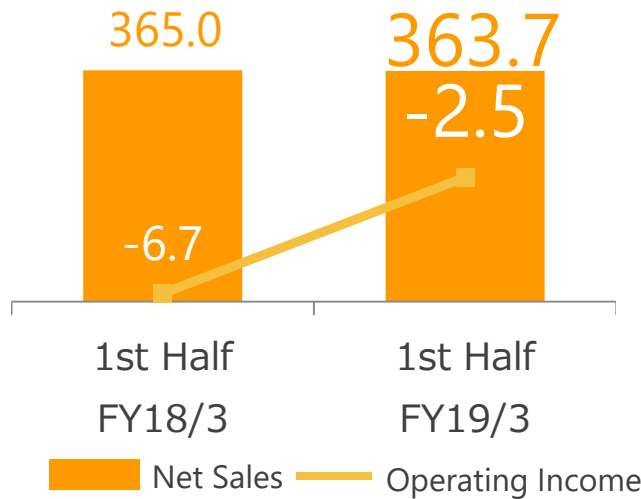
## Variance Analysis for Operating Income



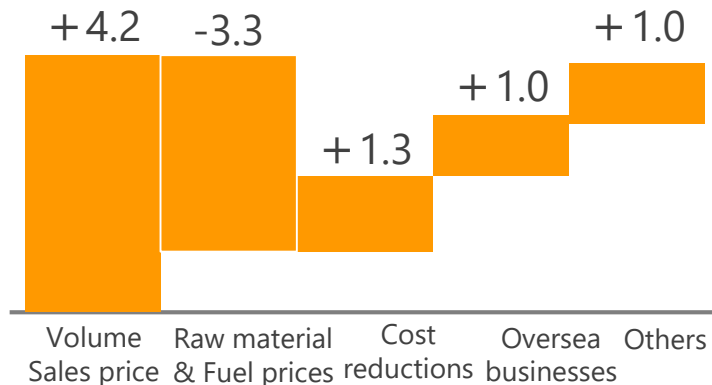
# 1<sup>st</sup> Half FY2019/3 Financial Results

## Paper and paperboard business

Net Sales • Operating Income (¥billion)



Variance analysis for operating income (¥billion)



### ○Domestic (Paper)

Domestic sales volume remained low due to circulation decline in newspaper and sluggish demand on printing advertisement. For export, the profit improved due to sales price increase.

### ○Domestic(Paperboard)

Domestic sales decreased from the same period of previous year. For export, demand has been strong mainly in Asia and the volume increased by 8% compared to the same period of previous year.

### ○Oversea business

For Paper Australia and Jujo Thermal Oy, the sales remained steady. The sale of assets owned by NPI USA, which was done last year, contributed increase in profit.

# 1<sup>st</sup> Half FY2019/3 Financial Results

## Sales Volume(Paper & Paperboard)

	1H FY2018/3	1H FY2019/3	YOY
volume: '000 tonnes			
Newsprint	479	451	-5.9%
Printing paper	820	768	-6.3%
Business communication paper	244	240	-1.8%
Others	187	183	-2.3%
Domestic sales (paper)	1,731	1,642	-5.1%
Export (paper)	215	207	-3.8%
Paper total	1,946	1,849	-5.0%
Container board	867	850	-2.0%
Folding box board and others	179	180	0.8%
Domestic sales (paperboard)	1,046	1,030	-1.6%
Export (paperboard)	91	99	8.3%
Paperboard total	1,137	1,129	-0.8%
Grand total (paper and paperboard)	3,083	2,977	-3.4%

"Total " means the sum of sales volume of Nippon Paper Industries Co.,Ltd., Nippon Paper Papyrus Co.,Ltd. Nippon Paper Creca Co., Ltd.(Not include house hold tissue), and Shin Tokai Paper Co., Ltd.

# 1<sup>st</sup> Half FY2019/3 Financial Results

## Livelihood-related business

### ○Package

For liquid packaging, the sales volume increased from the previous year mainly on cartons for fruit and vegetable juice as sales of new-shape carton with closure increased.

Nippon Dynawave Packaging has been stable, as both sales and profit increased.

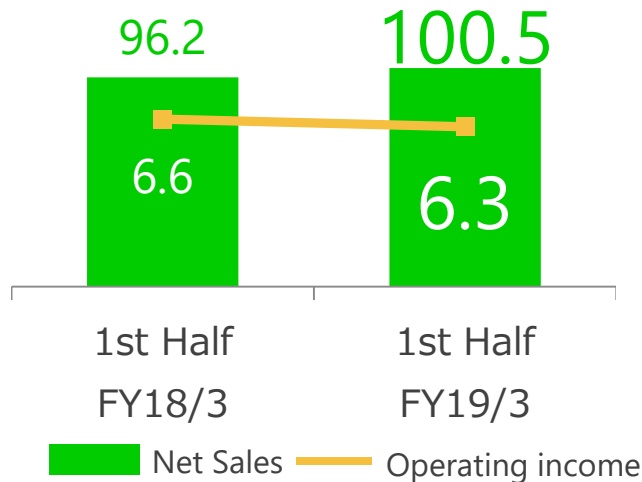
### ○Household tissue, Health Care

The sales volume increased from the same period of previous year as demand for health care products and business-use products for hotel stayed firm. However, operating income decreased from the same period of previous year due to rise in raw materials and fuel prices.

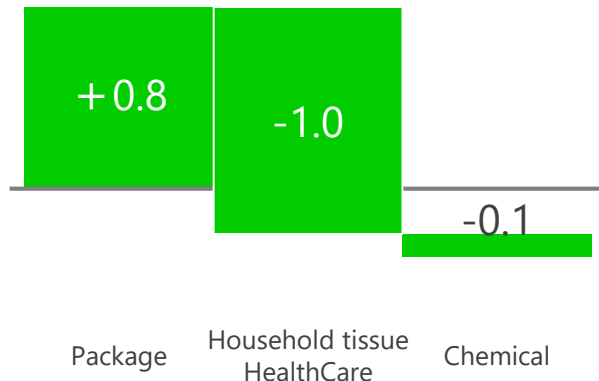
### ○Chemical

While the demand for functional coating resin and functional cellulose stayed firm, volume for functional film decreased from the same period of previous year. In addition, rise in raw materials and fuel prices resulted in decrease in sales and profit.

Net Sales • Operating Income (¥billion)



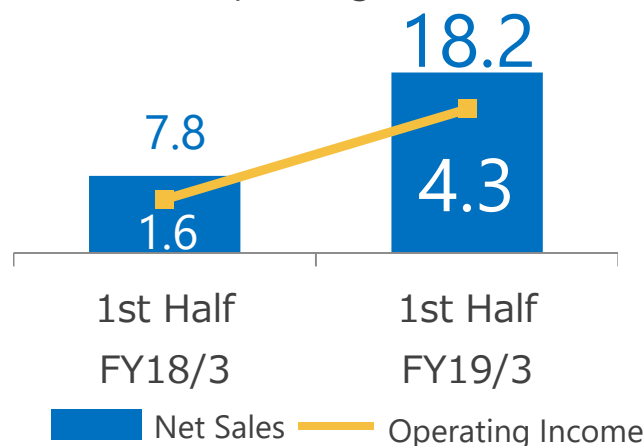
Variance analysis for operating income (¥billion)



# 1<sup>st</sup> Half FY2019/3 Financial Results

## Energy business

Net Sales • Operating Income (¥billion)

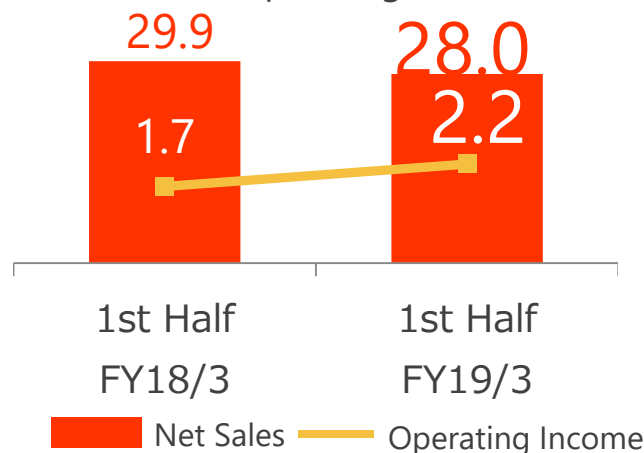


Ishinomaki Hibarino Power Plant(Nippon Paper Ishinomaki Energy Center), which started commercial operation in March 2018, continues stable operation.

As a result, both sales and profit increased from the same period of previous year.

## Wood products and construction related business

Net Sales • Operating Income (¥billion)



For Nippon Paper Lumber, both sales and profit decreased due to weak housing starts and sales decrease in pulp logs.

For AMCEL, its profit increased, as the sales ratio in Europe was going up.



## Consolidated Balance Sheet

	Mar.31, 2018	Sep.31, 2018	(¥billion) Variance
<b>Total assets</b>	<b>1,429.9</b>	<b>1,411.0</b>	<b>-18.9</b>
Cash and time deposit	59.0	43.6	-15.4
Inventories	165.9	172.9	7.0
Other current assets	265.6	267.8	2.2
Property, equipment, and intangible fixed asset	731.8	711.4	-20.4
Investment and other assets	207.6	215.4	7.8
<b>Total liabilities</b>	<b>986.5</b>	<b>972.7</b>	<b>-13.8</b>
Interests bearing liabilities	693.6	680.4	-13.2
Other liabilities	292.9	292.3	-0.6
<b>Total net assets</b>	<b>443.4</b>	<b>438.3</b>	<b>-5.1</b>
Shareholder's equity	393.4	384.4	-9.0
<b>Total liabilities and net assets</b>	<b>1,429.9</b>	<b>1,411.0</b>	<b>-18.9</b>
Net interest-bearing debt	634.6	636.8	2.2
Net D/E ratio	1.61	1.66	0.05

## Consolidated Statement

(¥billion)

	FY2018/3 Results	FY2019/3 Revised forecast	FY2019/3 Previous forecast	Variance
Net Sales	1,046.5	1,080.0	1,080.0	0.0
Operating Income	17.6	20.0	25.0	-5.0
Ordinary Income	18.6	23.0	25.0	-2.0
Net Income*	7.8	-8.0	-18.0	10.0

\* Profit attributable to owners of parent

## Major Assumptions

Domestic Sales	Volume	• Paper -4.1% vs. FY2018/3      • Paperboard -0.3% vs. FY2018/3
Raw Materials & Fuel prices	Waste Paper	Considering price trend in October.
	Crude Oil	\$75/BL (Dubai)
	Coal	\$110/t (Australian coal benchmark price)
Other	FOREX	¥115/USD

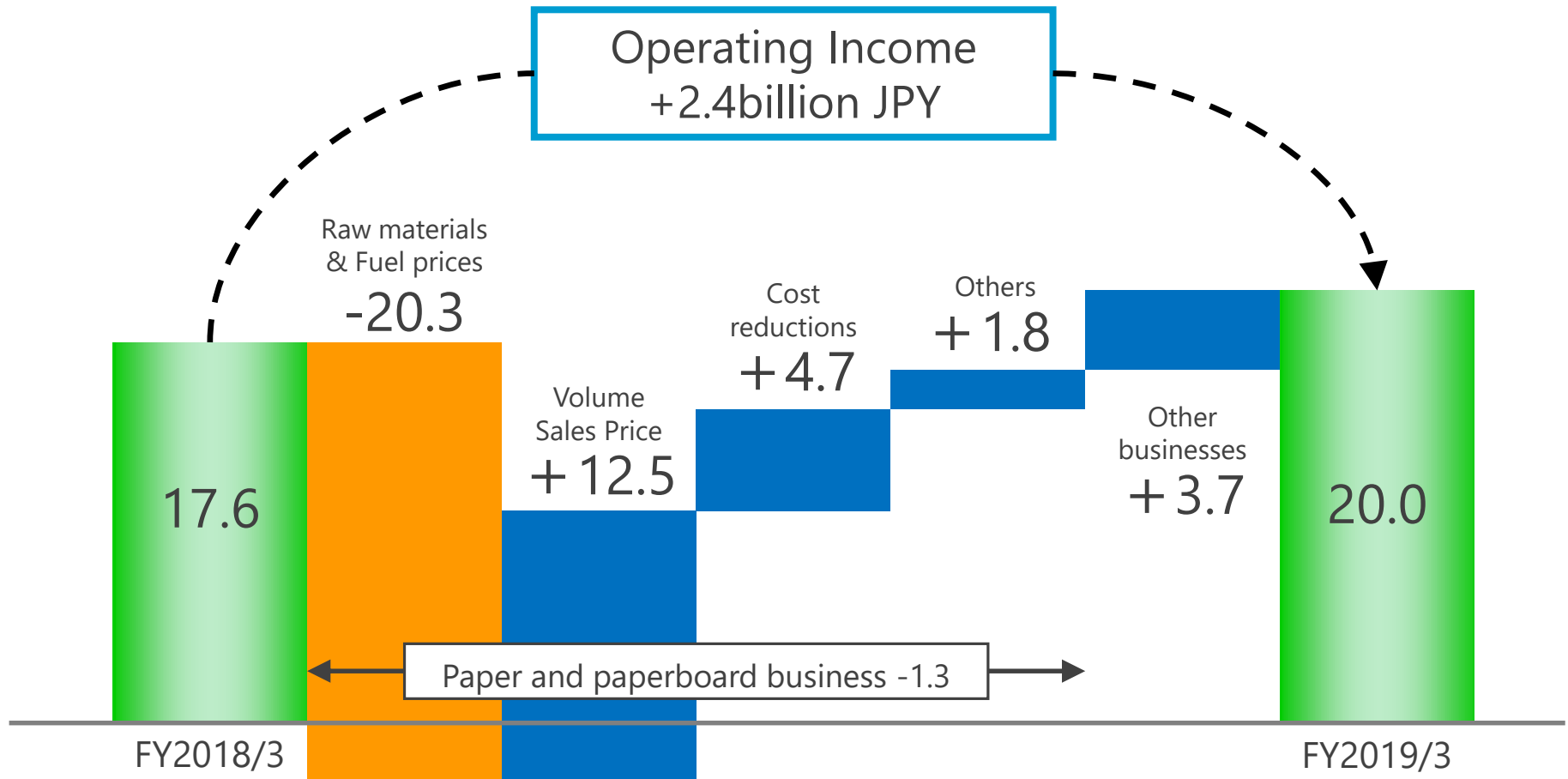
## ● Volume Outlook (Paper& paperboard)

volume: '000 tonnes

	FY2018/3 results	FY2019/3 estimate (As of Nov.7)	YOY	FY2019/3 estimate (As of May.28)
Newsprint	974	910	-6.5%	909
Printing & Business communication paper	2,130	2,054	-3.6%	2,082
Others	378	373	-1.2%	379
Domestic sales (paper)	3,482	3,338	-4.1%	3,369
Export (paper)	456	447	-2.0%	464
Paper total	3,938	3,784	-3.9%	3,833
Domestic sales (paperboard)	2,066	2,059	-0.3%	2,108
Export (paperboard)	194	229	17.8%	200
Paperboard total	2,260	2,288	1.2%	2,309
Grand total (paper and paperboard)	6,198	6,072	-2.0%	6,142

“Grand total ” means the sum of sales volume of Nippon Paper Industries Co.,Ltd., Nippon Paper Papyrus Co.,Ltd. Nippon Paper Creca Co., Ltd.(Not include house hold tissue), and Shin Tokai Paper Co., Ltd.

# Variance Analysis for Operating Income



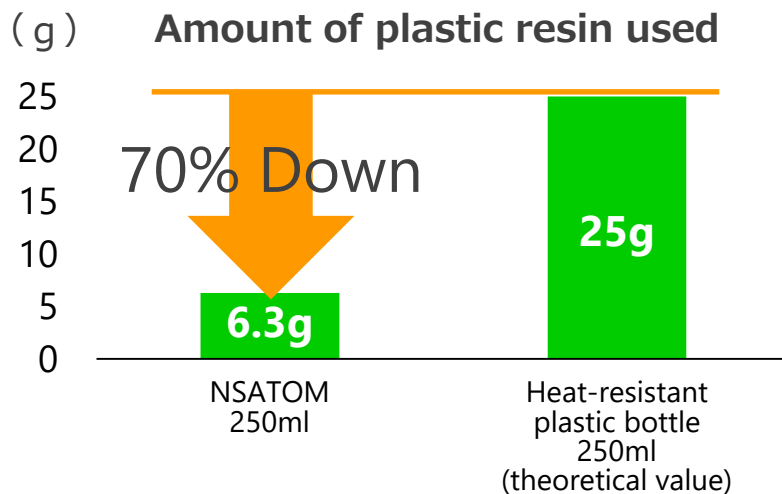
## Nippon Paper Industries Develops "NSATOM®", a New Aseptic Filling System for Paper Packaging

~New package system equipped with world-first features with support for new beverages with particles, long fiber and high viscosity ~

### Features of NSATOM® Paper Packages

1. Support for new beverages with particles, long fibers and high viscosity.
2. Highly eye catching
3. Portability
4. Easy opening
5. Easy to pour out the contents
6. Three volume variations(200ml,250ml and 300ml)
7. Reduction of plastic amount used

### Plastic Reduction



Easy to open



Easy to pour out



# NSATOM ASEPTIC

## Nippon Paper Industries Completed Constructing a Demonstration Plant for “Miner Pa®” at Fuji Mill (Oct.2018)

### Demonstration Plant for “Miner Pa®”

- Annual production capacity of more than 450 tons
- Will be able to provide large-scale sample to customers, that help us accelerating new application development as well as searching for promising business areas.



Demonstration Plant



### What is “Miner Pa®”?

- New material combining inorganic material and wood fibers.

### Features of “Miner Pa®”

- |  |  |
|--|--|
| ● Environmentally friendly <ul style="list-style-type: none"><li>• Carbon neutral</li><li>• Sustainable resources</li></ul>                      | ● Functionality <ul style="list-style-type: none"><li>• Deodorization • Disinfection</li><li>• Antiviral • Flame retardant • X-ray shielding</li></ul> |
| ● Friendly to humans <ul style="list-style-type: none"><li>• Natural fibers derived from trees</li><li>• Not hazardous to human health</li></ul> | ● Formability <ul style="list-style-type: none"><li>• Sheets • Molds</li><li>• Unwoven cloth • Powder</li></ul>  |

# REFERENCE MATERIALS

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**NIPPON PAPER INDUSTRIES**  
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## Key indicators

	FY2015/3	FY2016/3	FY2017/3	FY2018/3	FY2019/3	
					1st Half Results	Full year Forecasts
Operating margin on sales	2.2%	2.2%	2.4%	1.7%	2.2%	1.9%
Ordinary margin on sales	2.2%	1.7%	2.7%	1.8%	2.5%	2.1%
Capital expenditure (¥billion)	48.5	46.9	51.3	72.8	29.8	64.4
Depreciation (¥billion)	61.4	57.7	55.1	57.9	29.9	60.2
EBITDA (¥billion) ※1	87.1	83.1	81.5	78.1	43.2	82.7
Net-interest bearing debt (¥billion)	647.7	591.3	588.0	634.6	636.8	630.0
Net D/E (times)	1.55	1.47	1.49	1.61	1.66	1.65
Number of employees	12,771	11,741	13,057	12,881	13,098	13,145
Earnings per share (¥)	200.27	20.95	72.57	67.80	-52.09	-69.13
Dividends per share (¥)	50	60	60	60	0	30
ROA ※2	2.2%	2.0%	2.6%	1.8%	—	2.2%

※1 : EBITDA = Operating income + depreciation + dividend income + interest income

※2 : ROA = (Ordinary income + Interest expense) / Total assets \* FY 2019/3 forecast based on total assets as of Sept. 30, 2018.

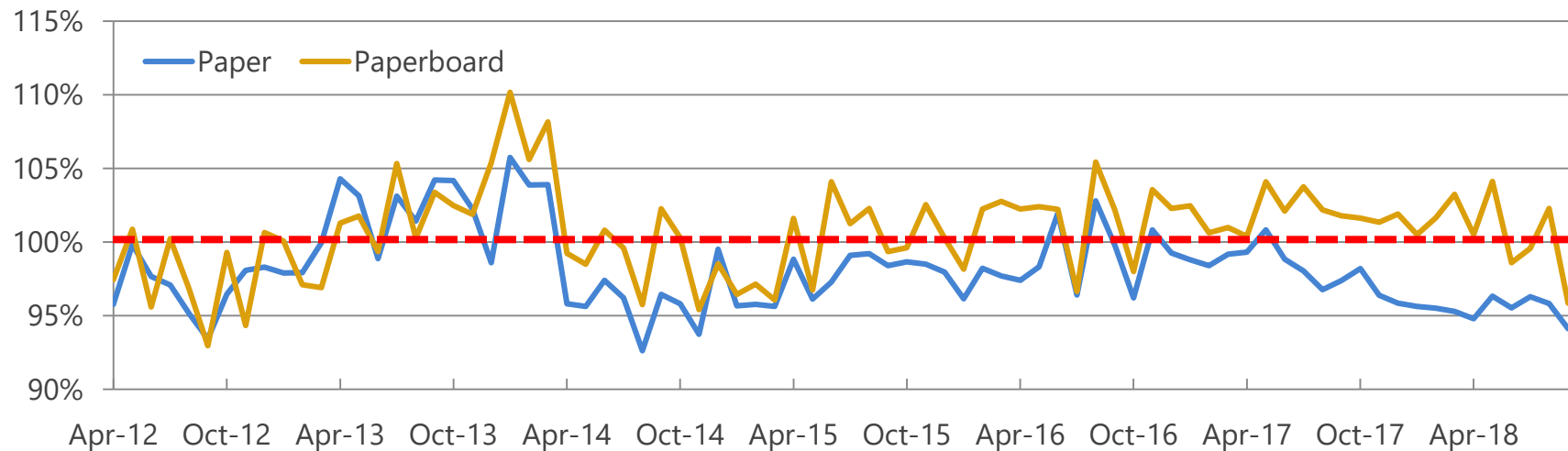


## Domestic demand and export (Paper and paperboard)

	April,2018 - September,2018										volume: '000 tonnes
	Domestic shipments(A)		Exports(B)		(A+B)		Imports(C)		Domestic demand(A+C)		
	volume	YOY	volume	YOY	volume	YOY	volume	YOY	volume	YOY	
Newsprint	1,275	-5.9%	0	—	1,275	-5.9%	2	-62.5%	1,277	-6.1%	
Printing & business communication paper	3,471	-5.0%	421	23.7%	3,892	-2.6%	342	-32.7%	3,813	-8.4%	
Coated paper *	1,932	-7.2%	303	14.4%	2,235	-4.7%	93	-51.3%	2,025	-10.9%	
Uncoated paper	885	-4.3%	102	75.5%	986	0.4%	26	-62.2%	911	-8.3%	
Business communication paper	654	0.9%	17	-5.9%	671	0.8%	223	-10.3%	877	-2.2%	
Other papers	1,575	-2.4%	150	0.5%	1,725	-2.1%	23	1.3%	1,598	-2.3%	
Paper total	6,321	-4.5%	571	16.6%	6,893	-3.1%	367	-31.6%	6,689	-6.6%	
Container board	4,597	-0.3%	266	7.4%	4,863	0.1%	24	4.9%	4,621	-0.3%	
Folding box board and others	1,112	2.0%	13	-19.3%	1,125	1.7%	142	1.0%	1,254	1.8%	
Paperboard total	5,709	0.1%	279	5.8%	5,988	0.4%	166	1.5%	5,874	0.1%	
Paper and paperboard total	12,030	-2.4%	850	12.8%	12,880	-1.5%	533	-23.9%	12,563	-3.5%	

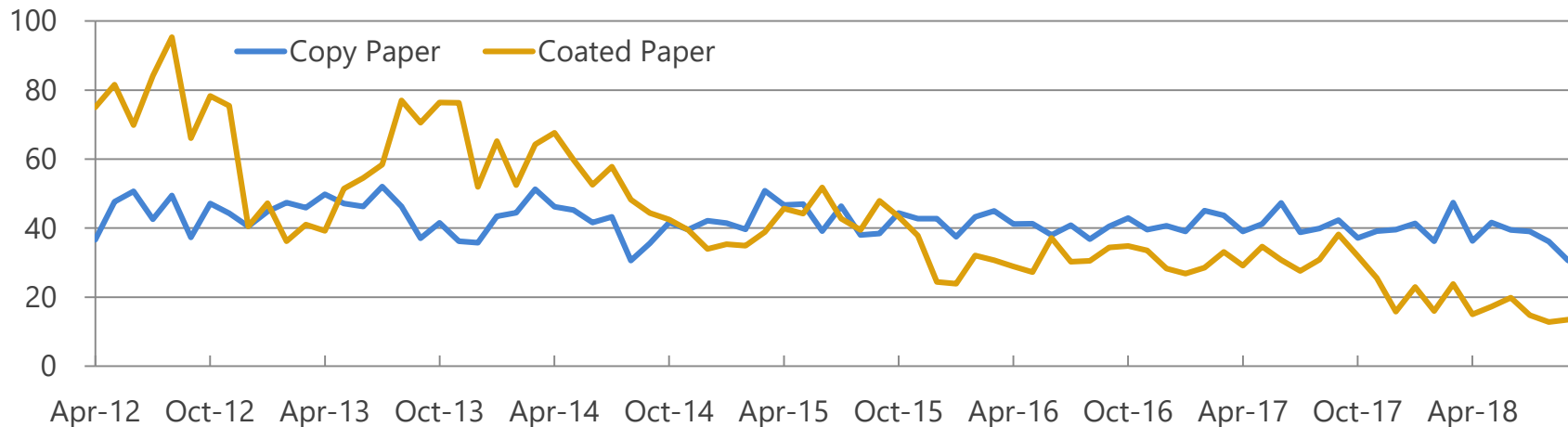
※ "Bitoko-shi" paper is included in coated paper.

## Domestic shipment of paper industry(YOY)

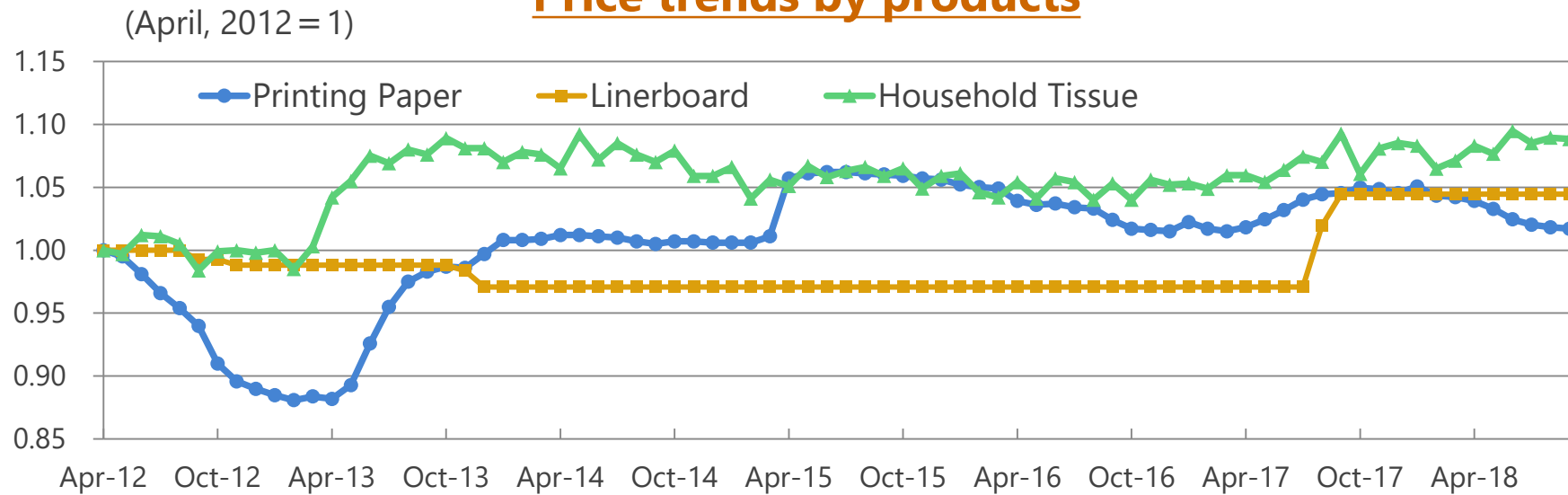


## Coated paper and copy paper import volume

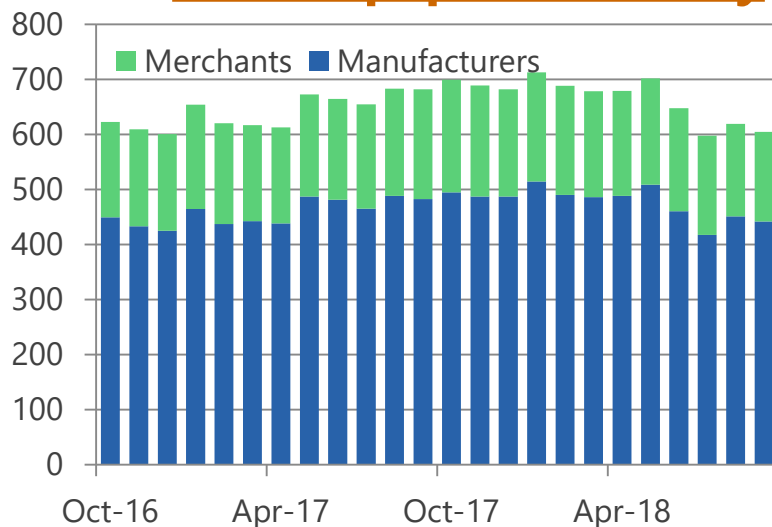
('000 tonnes)



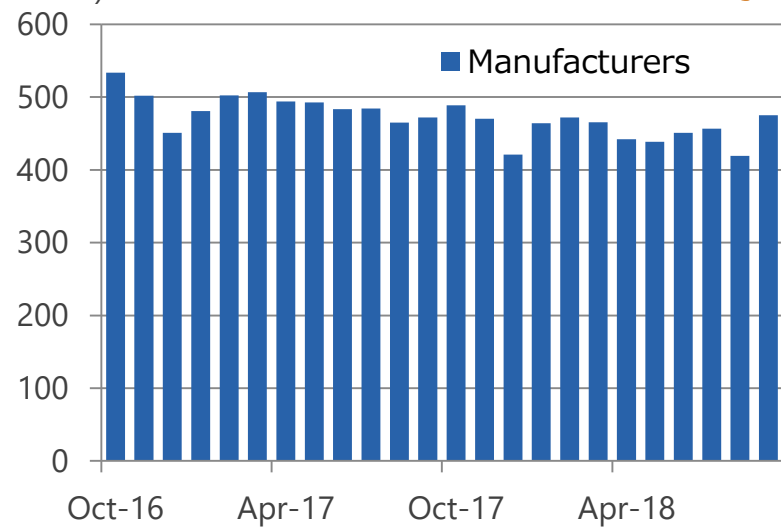
## Price trends by products



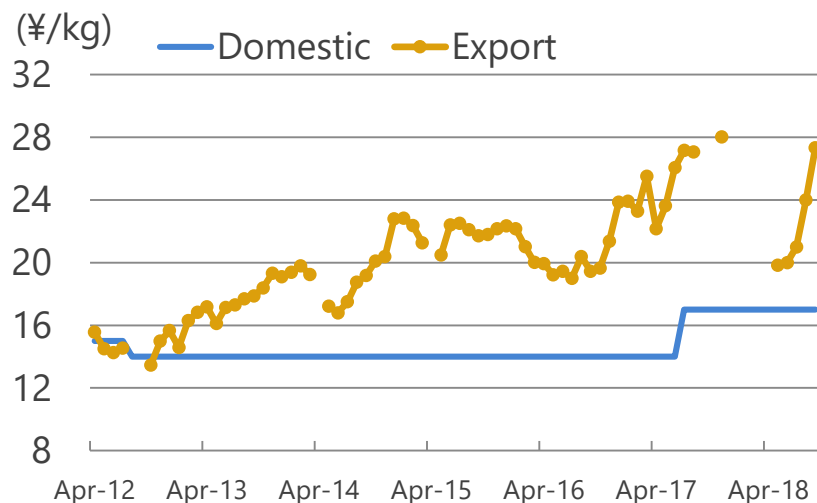
## ('000 tonnes) Coated paper inventory



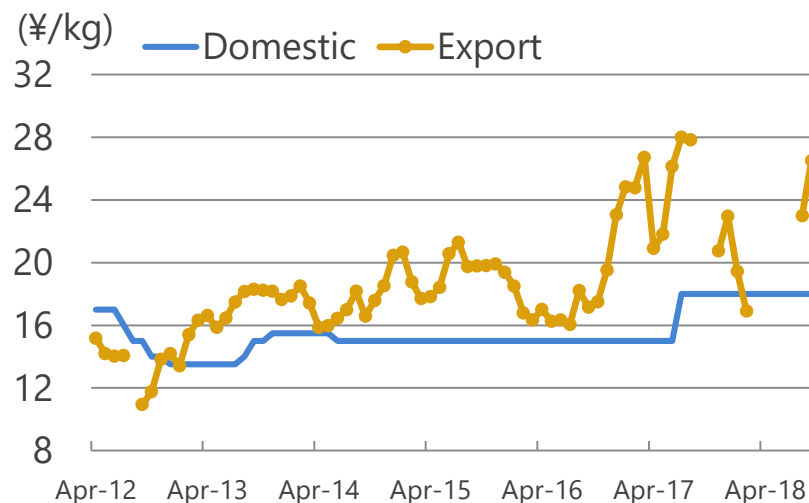
## ('000 tonnes) Containerboard inventory



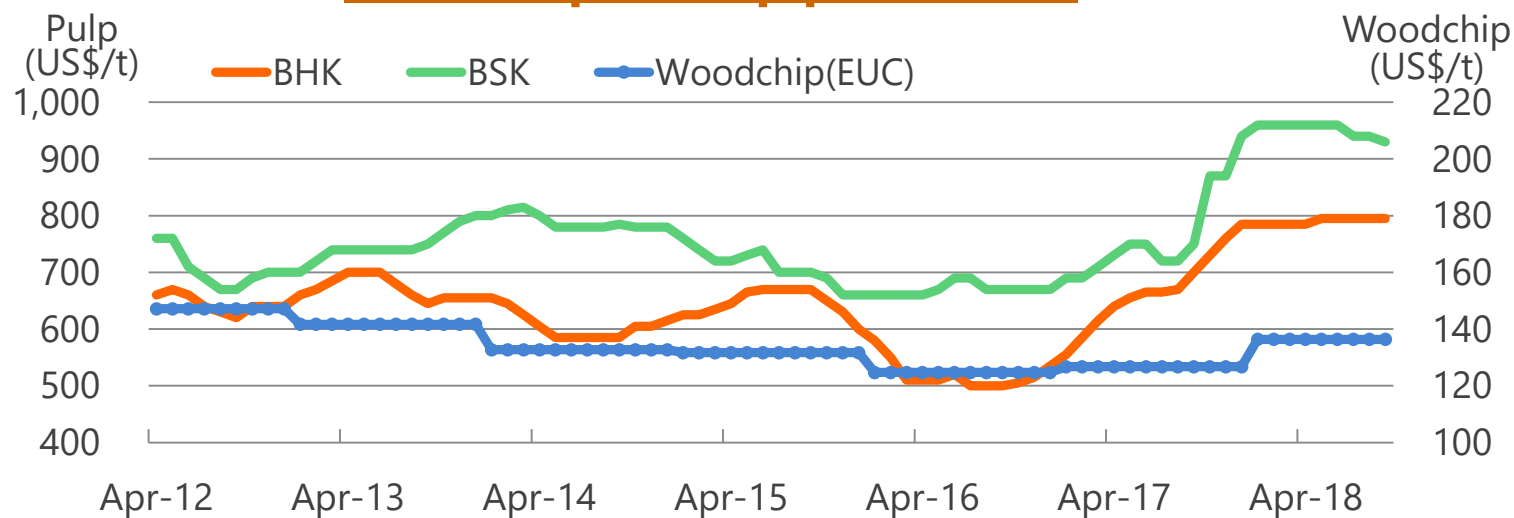
## ONP price trend



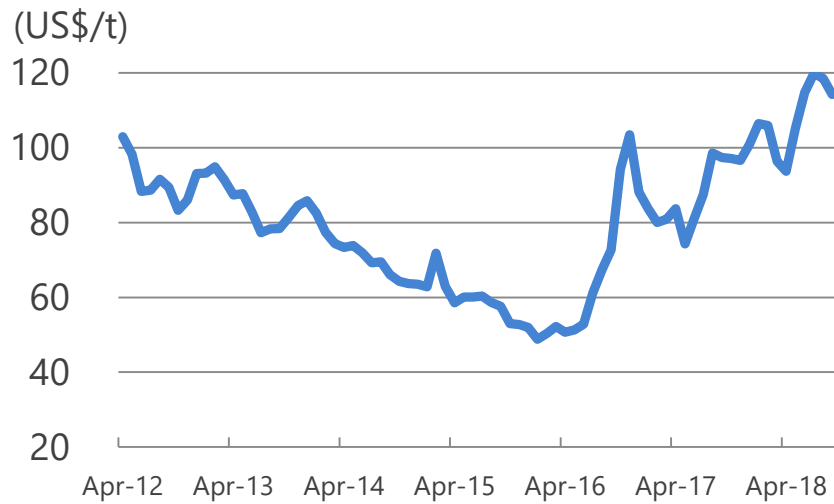
## OCC price trend



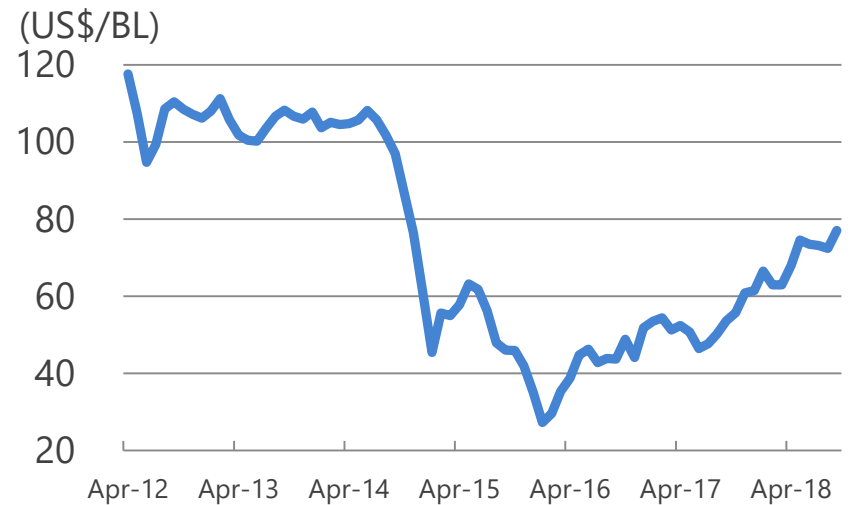
## Woodchip & Pulp price trend



## Coal price trend



## Crude oil price trend



## <Disclaimer>

Any statements in this presentation document, other than those of historical fact, are forward-looking statements about the future performance of Nippon Paper Industries Co., Ltd., and its Group companies. These statements are based on management's assumptions and beliefs in light of information currently available and involve risks and uncertainties. Actual results may differ materially from these forecasts.

# NIPPON PAPER INDUSTRIES CO.,LTD.