

**Daio Paper Corporation**

**FY2019/3 H1 (Apr-Sep 2018)**

**Financial Overview**

**Nov 29, 2018**

**Notes regarding figures and expressions:**

1. Amounts are rounded off to the nearest 0.1 billion yen; totals may not sum due to rounding.
2. Fiscal year (FY) represents the 1-year period from Apr 1 to Mar 31. (FY19/3 is the fiscal year from Apr 1, 2018 to Mar 31, 2019.)

**Disclaimers regarding translation:**

1. This document is an English translation of the original Japanese document dated Nov 29, 2018 and is only for reference purposes. In the event of any discrepancy between the original Japanese document and this translated document, the Japanese document shall prevail.
2. Translations of brand names and product names not yet launched in English-speaking regions are not official and are subject to change without notice.

# **Consolidated Financial Results for the Six Months Ended September 30, 2018**

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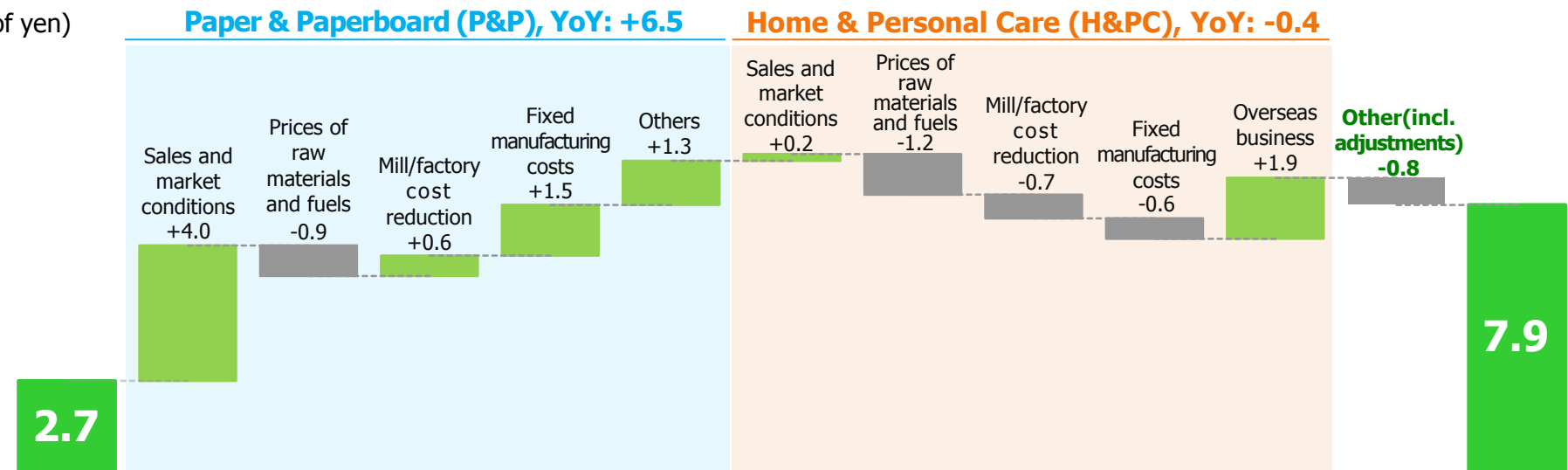
billions of yen, %	FY18/3 H1		FY19/3 H1		Variance	
	<i>Net sales %</i>		<i>Net sales %</i>		<i>%</i>	
<b>Net sales</b>	252.8		257.7		4.9	1.9
<b>Operating income</b>	2.7	1.1	7.9	3.1	5.2	194.0
<b>Ordinary income</b>	5.2	2.1	6.7	2.6	1.5	27.8
<b>Profit attributable to owners of parent</b>	4.2	1.6	4.5	1.7	0.3	7.4
<b>Depreciation</b>	15.4		16.1		0.7	4.3
<b>Capital expenditure</b>	15.6		32.6		17.0	109.0
Exchange rate (period-average):	111.1	JPY/USD	110.3	JPY/USD	-0.8	JPY/USD
Dubai crude oil (period-average):	50.1	USD/barrel	73.1	USD/barrel	23.0	USD/barrel

billions of yen, times	18/3-end	18/9-end	Variance
<b>Net interest-bearing debt</b>	280.0	292.4	12.4
<b>Net D/E ratio</b>	1.6	1.6	-

# Operating income, YoY: +5.2 bn yen

(FY18/3 H1: 2.7 bn yen → FY19/3 H1: 7.9 bn yen)

(billions of yen)



	FY18/3 H1			FY19/3 H1		
	P&P	H&PC	Other *	Total	P&P major factors	H&PC major factors
Sales and market conditions	4.0	0.2	-	4.2	Price +4.1, Volume -0.1	Volume +0.4, Price -0.2
Prices of raw materials and fuels	-0.9	-1.2	-	-2.1	Recovered paper +2.7, coal -1.9, woodchip -0.5, heavy oil -0.4, pulp -0.2, chemicals and others -0.6	Pulp -0.6, SAP and others -0.3, woodchip -0.1, coal -0.1, heavy oil -0.1
Mill/factory cost reduction	0.6	-0.7	-	-0.1	Yield and raw materials composition +1.0 (includes increase in hard-to-recycle recovered paper composition), decreased production -0.5, others +0.1	Decreased production -0.4, energy efficiency -0.3
Fixed manufacturing costs	1.5	-0.6	-	0.9	Maintenance +0.8, labor +0.5, depreciation +0.1, others +0.1	Labor -0.5, depreciation -0.2, others +0.1
Overseas business	-	1.9	-	1.9	-	Overseas subsidiaries profit increase +1.9
Others	1.3	-	-0.8	0.5	Corrugated container subsidiary +0.7, logistics cost and others +0.6	-
<b>OP income YoY, total</b>	<b>6.5</b>	<b>-0.4</b>	<b>-0.8</b>	<b>5.2</b>		
Increase, total	7.4	2.1	-	9.5		
Decrease, total	-0.9	-2.5	-0.8	-4.2		

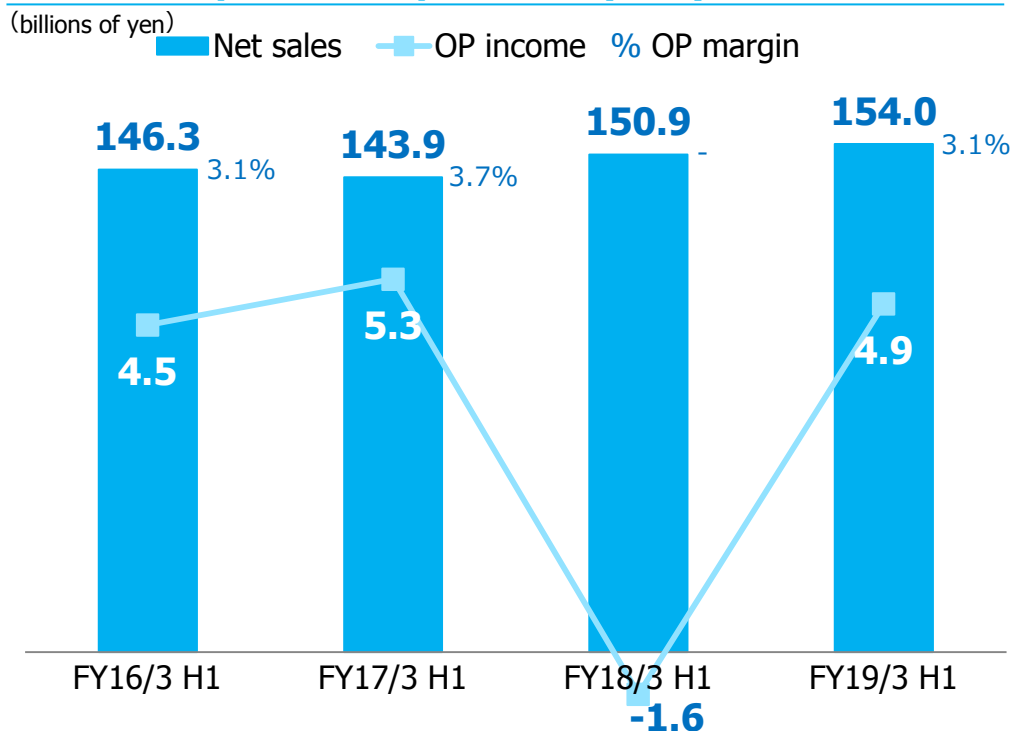
\* "Other" is the sum of "Other" category and "Adjustments". The "Other" category consists of business segments such as wood, forestry, machinery, logistics, electric power selling, golf club, and real estate leasing businesses. "Adjustments" refer to adjustment for elimination of intersegment transactions.

# Consolidated financial results for FY2019/3 H1

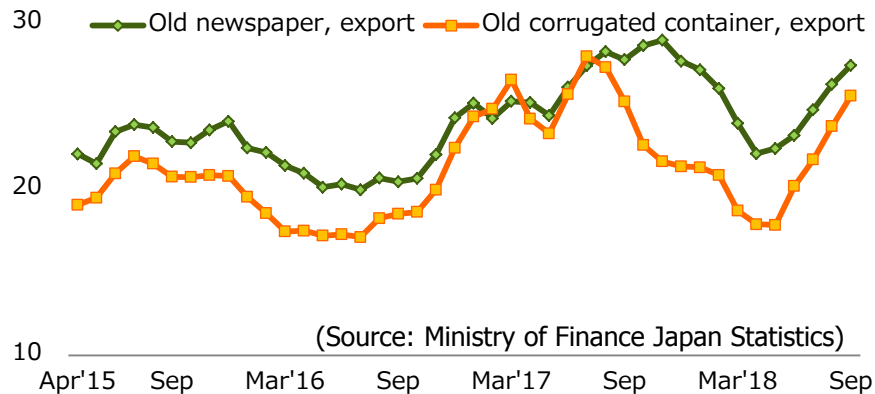
## Business results by segment (P&P)



### Paper and Paperboard (P&P) results



#### A) Recovered paper prices (JPY/kg)



### Variance

<b>Net sales</b>	<b>+3.1</b> <b>+2.1%</b>
<b>OP income</b>	<b>+6.5</b> <b>-</b>

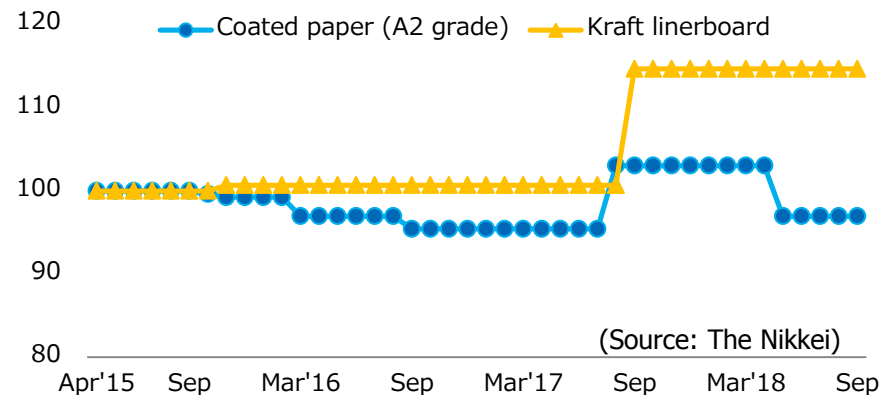
### OP income increase/decrease

Sales and market conditions	+4.0
Prices of raw materials and fuels	-0.9
Mill/factory cost reduction	+0.6
Fixed manufacturing costs	+1.5
Others	+1.3
<b>Total</b>	<b>+6.5</b>

### YoY change in sales volume and value by category

Category	Vol.	Val.	Notes
Newsprint	-	-	- Decline in newspaper circulation
Paper	-	-	- Decline in domestic demand for printing paper
Containerboard & corrugated container	→	+	+ Demand increase in fields of e-commerce and processed food (mainly beverage) + Price revision of containerboard and corrugated container - Impact of typhoons, the West Japan floods and other disasters

#### B) Major products prices (Apr 2015 = 100)



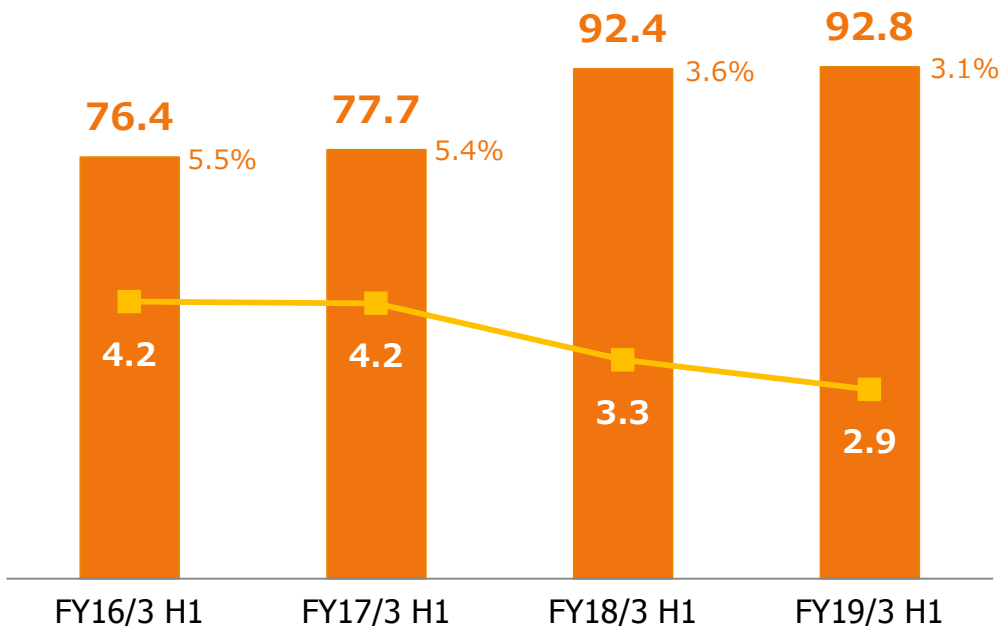
# Consolidated financial results for FY2019/3 H1

## Business results by segment (H&PC)

### Home and Personal Care (H&PC) results

(billions of yen)

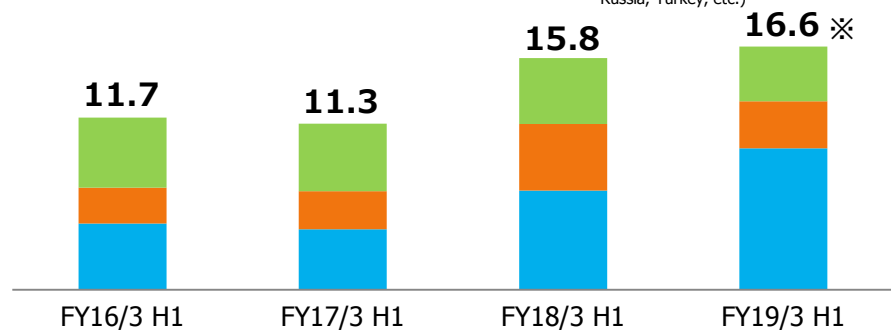
Net sales OP income % OP margin



### H&PC overseas net sales (by country/region)

(billions of yen)

China S.E. Asia Exports (S. Korea, Taiwan, Russia, Turkey, etc.)



※After application of IFRS 15

### Variance

**Net sales** **+0.4**  
**+0.4%**

**OP income** **-0.4**  
**-12.1%**

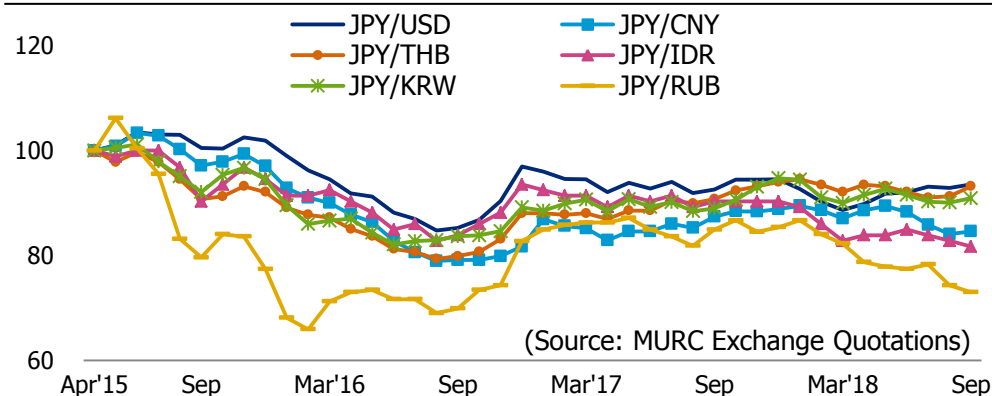
### OP income increase/decrease

Sales and market conditions	+0.2
Prices of raw materials and fuels	-1.2
Mill/factory cost reduction	-0.7
Fixed manufacturing costs	-0.6
Overseas business	+1.9
<b>Total</b>	<b>+0.4</b>

### YoY change in sales value by category

Domestic	Household paper	+ + Strong sales of value-added products
	Adult care	+ + Retail: Acquisition of new users by launching new slim-type pants products, and introduction of new continence care product that adopts a surface sheet made of natural materials + Institutional: New user acquisition rate remained robust
	Baby care	- - Market contraction and decline in inbound demand
	Feminine care	+ + Shift of sales from standard range to high value-added range and improvement in unit sales prices
Overseas	Baby care	+ China: Strong sales of products with high unit price, such as super premium zone and pull-up pants + Thailand: Increased sales in both domestic market and neighboring ASEAN countries - Indonesia: Intensifying competition due to slowdown in economic growth - S. Korea: Shrinking demand from low birth rate
	Others	+ + China: Launched sales of premium toilet rolls + Thailand: Increase in sales of sanitary pads and wet wipes, etc.

### Exchange rates (Monthly average TTM / Apr 2015 = 100)



# Consolidated Financial Forecast for the Fiscal Year Ending March 31, 2019

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billions of yen, %	FY18/3		FY19/3		Variance	
	<i>Net sales %</i>		<i>Net sales %</i>		<i>%</i>	
<b>Net sales</b>	531.3		550.0		18.7	3.5
<b>Operating income</b>	11.1	2.1	18.0	3.3	6.9	62.7
<b>Ordinary income</b>	12.8	2.4	15.0	2.7	2.2	17.4
<b>Profit attributable to owners of parent</b>	4.0	0.7	10.0	1.8	6.0	151.9
<b>Depreciation</b>	31.2		34.0		2.8	9.1
<b>Capital expenditure</b>	39.5		74.8		35.3	89.4
Exchange rate (period-average):	110.9	JPY/USD	110.6	JPY/USD	-0.3	JPY/USD
Dubai crude oil (period-average):	55.7	USD/barrel	72.8	USD/barrel	17.1	USD/barrel
billions of yen, times	18/3-end		19/3-end		Variance	
<b>Net interest-bearing debt</b>	280.0		350.0		70.0	
<b>Net D/E ratio</b>	1.6		1.9		0.3	



## Full year consolidated forecast by business segment

Based on the results up to the second quarter of the fiscal year under review, the Company has revised its forecasts for each business segment.

There is no change in the total consolidated forecast for the full fiscal year.

(billions of yen)

	May 11 Forecast			Nov 8 Revision			Variance		
	Net sales	OP income	OP margin	Net sales	OP income	OP margin	Net sales	OP income	OP margin
<b>Paper and Paperboard</b>	310.0	4.5	1.5%	<b>320.0</b>	<b>9.5</b>	<b>3.0%</b>	+10.0	+5.0	+1.5
<b>H&amp;PC</b>	220.0	12.0	5.5%	<b>210.0</b>	<b>7.5</b>	<b>3.6%</b>	-10.0	-4.5	-1.9
<b>Others</b>	20.0	1.5	7.5%	<b>20.0</b>	<b>1.0</b>	<b>5.0%</b>	-	-0.5	-2.5
<b>Total</b>	550.0	18.0	3.3%	<b>550.0</b>	<b>18.0</b>	<b>3.3%</b>	-	-	-

The Company has revised its forecasts for each business segment. The differences in breakdown are as follows.

	P&P			Major factors for differences
	May 11	Nov 8	Variance	
Sales/market conditions	4.2	<b>9.4</b>	5.2	Price revision of paper and containerboard
Prices of raw materials and fuels	-4.8	<b>-5.2</b>	-0.4	Heavy oil -0.5, others
Production increase, cost reduction	1.1	<b>1.3</b>	0.2	Yield and raw materials composition +0.5 (includes increase in hard-to-recycle recovered paper composition), energy efficiency +0.3, decreased production -0.6, others
Fixed manufacturing costs	1.4	<b>2.2</b>	0.8	Change in fixed cost allocation segment due to absorption-type merger of subsidiary (formerly: EPA) +0.6, others
Others	1.9	<b>1.1</b>	-0.8	Worsening logistics cost -0.5, others
<b>OP income, YoY</b>	<b>3.8</b>	<b>8.8</b>	<b>5.0</b>	

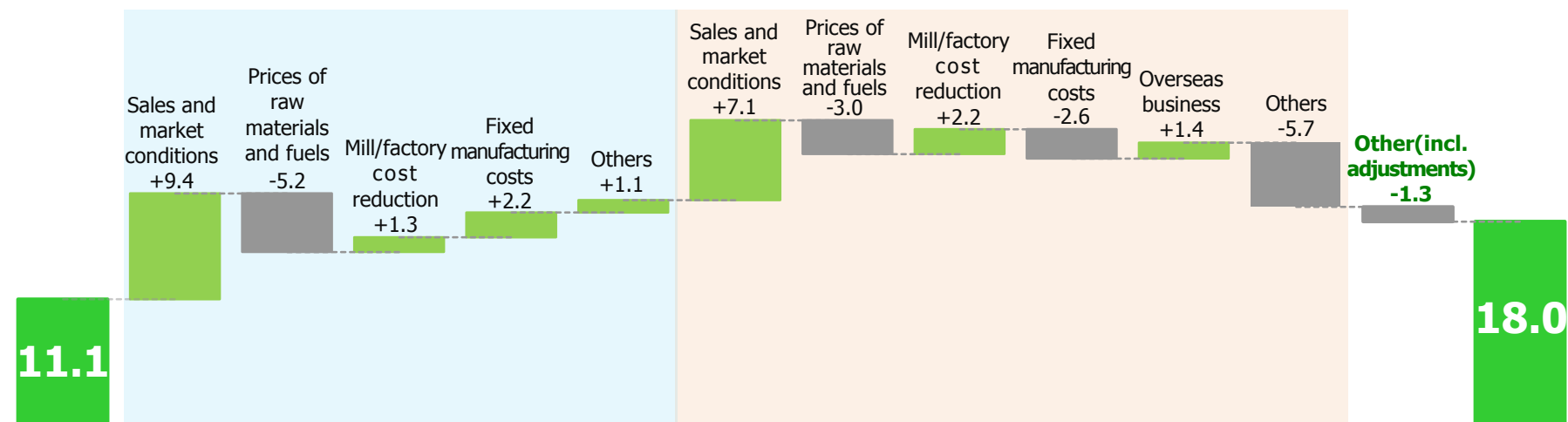
	H&PC			Major factors for differences
	May 11	Nov 8	Variance	
Sales/market conditions	9.7	<b>7.1</b>	-2.6	Price revision of absorbent products business, others
Prices of raw materials and fuels	-2.7	<b>-3.0</b>	-0.3	SAP, woodchip, coal, others
Production increase, cost reduction	1.8	<b>2.2</b>	0.4	Increased production due to the start of the operations of Kawano mill +0.5, others
Fixed manufacturing costs	-2.2	<b>-2.6</b>	-0.4	Change in fixed cost allocation segment due to absorption-type merger of subsidiary (formerly: EPA) -0.6, others
Overseas business	4.0	<b>1.4</b>	-2.6	Mainly due to revision of sales plan for Indonesia and South Korea
Others	-6.7	<b>-5.7</b>	1.0	Decline in logistics cost due to revision of logistics structure, decline in labor cost due to revision of recruitment plan, others
<b>OP income, YoY</b>	<b>3.9</b>	<b>-0.6</b>	<b>-4.5</b>	

## Operating income, YoY: +6.9 bn yen (FY18/3: 11.1 bn yen → FY19/3 forecast: 18.0 bn yen)

(billions of yen)

Paper & Paperboard (P&P), YoY: +8.8

Home & Personal Care (H&PC), YoY: -0.6



FY18/3

FY19/3 forecast

	P&P	H&PC	Other*	Total	FY19/3 forecast	
					P&P major factors	
Sales and market conditions	9.4	7.1	-	16.5	Volume +0.2, price +9.2	Volume +6.2, price +0.9
Prices of raw materials and fuels	-5.2	-3.0	-	-8.2	Coal -3.2, woodchip -1.1, heavy oil -0.8, others -0.1	Pulp -1.4, SAP -0.7, chemicals and others -0.5, woodchip -0.2, coal -0.2
Mill/factory cost reduction	1.3	2.2	-	3.5	Yield and raw materials composition +1.5 (includes increase in hard-to-recycle recovered paper composition), energy efficiency +0.4, decreased production and others -0.6	Increased production +2.5, energy efficiency -0.2, others -0.1
Fixed manufacturing costs	2.2	-2.6	-	-0.4	Maintenance +1.4, labor +0.9, depreciation -0.2, others +0.1	Maintenance +0.3, labor -1.1, depreciation -1.1, others -0.7
Overseas business	-	1.4	-	1.4	-	Overseas subsidiaries profit increase +1.4
Others	1.1	-5.7	-1.3	-5.9	Improved earnings of corrugated container subsidiary +1.4, others -0.3	Logistics cost (sales expansion) -4.4, moving average -1.3
<b>OP income, YoY, total</b>	<b>8.8</b>	<b>-0.6</b>	<b>-1.3</b>	<b>6.9</b>		
Increase, total	14.0	10.7	-	24.7		
Decrease, total	-5.2	-11.3	-1.3	-17.8		

\* "Other" is the sum of "Other" category and "Adjustments". The "Other" category consists of business segments such as wood, forestry, machinery, logistics, electric power selling, golf club, and real estate leasing businesses. "Adjustments" refer to adjustment for elimination of intersegment transactions.

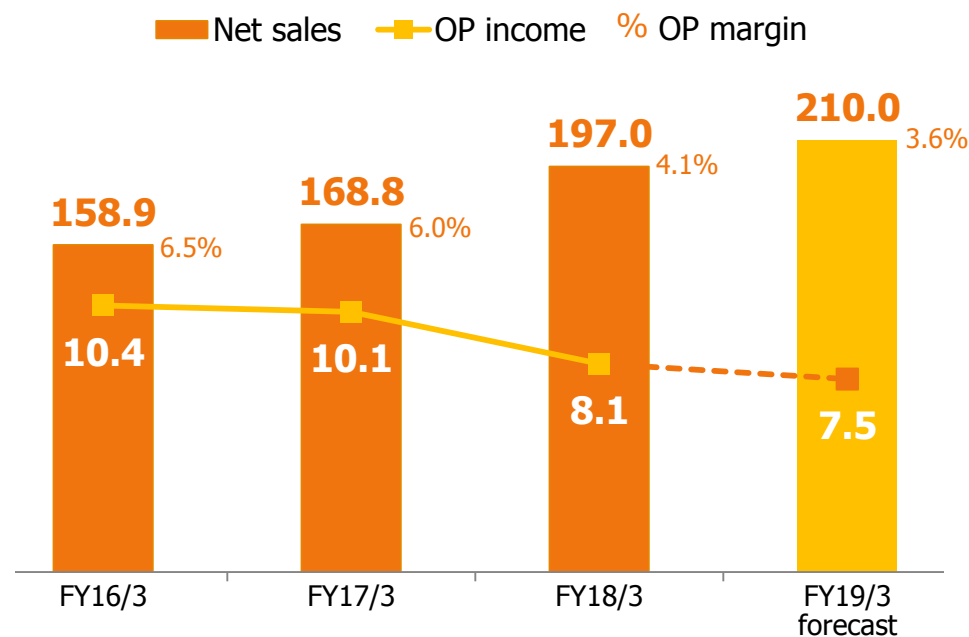
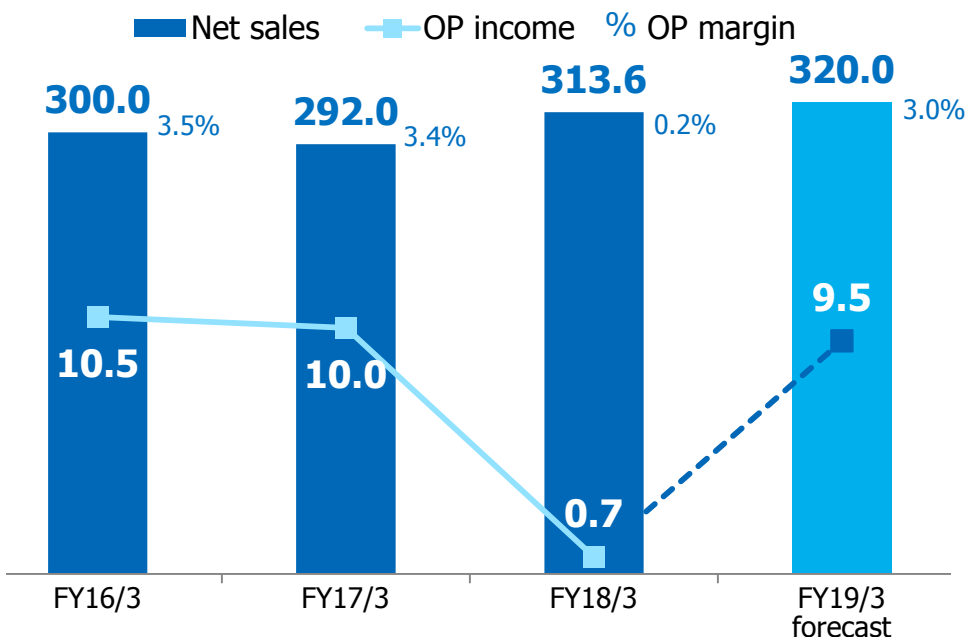
# Consolidated financial forecast for FY2019/3

## Business results forecasts by segment

(billions of yen)

### Paper & Paperboard

### H&PC



#### H1 results

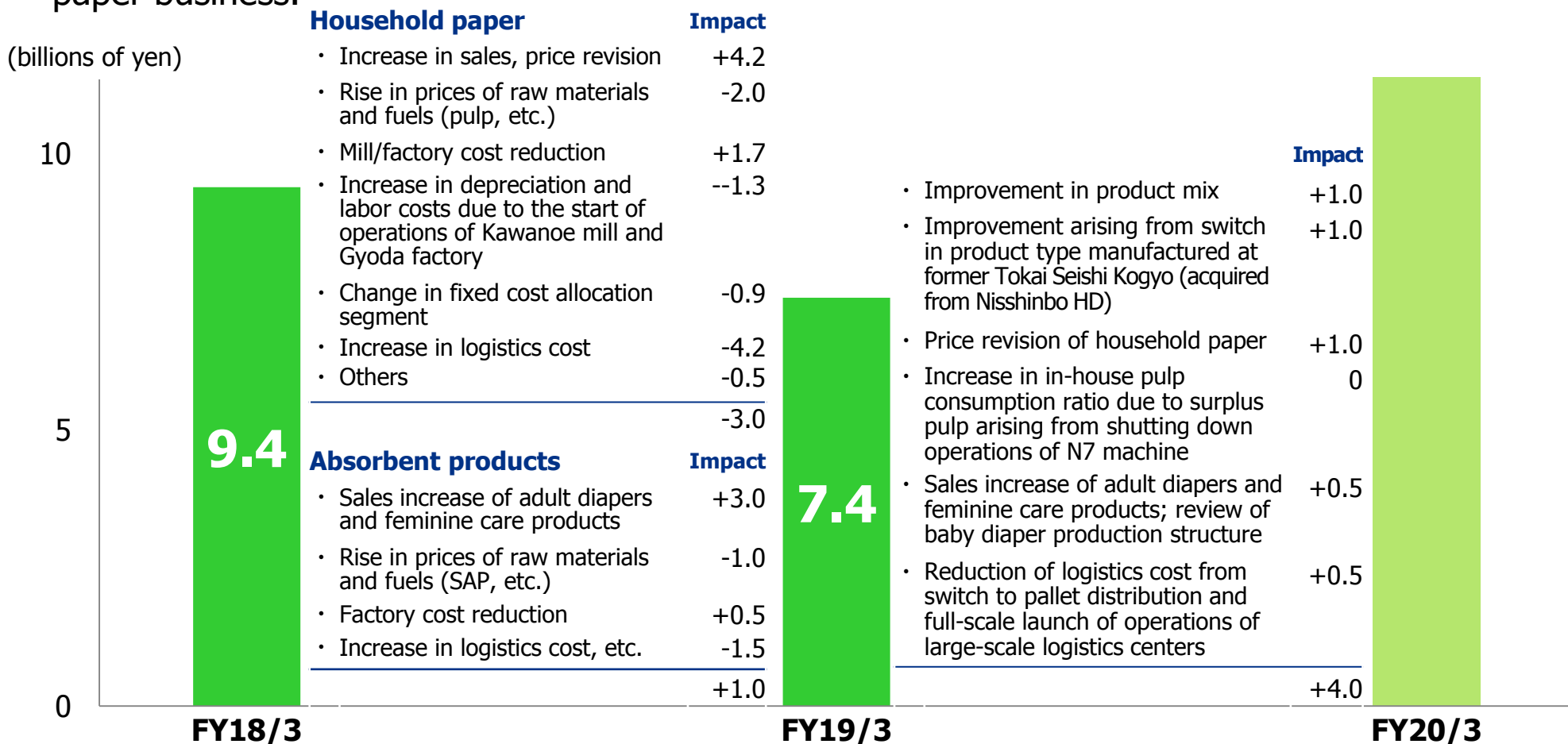
#### H2 forecast

#### Full year forecast

	Net sales	OP income (loss)	OP margin	Net sales	OP income	OP margin	Net sales	OP income	OP margin
<b>Paper &amp; Paperboard</b>	154.0	4.9	3.1%	166.0	4.7	2.8%	320.0	9.5	3.0%
(Results of prev. corresponding period)	150.9	-1.6	-	162.7	2.3	1.4%	313.6	0.7	0.2%
<b>H&amp;PC</b>	92.8	2.9	3.1%	117.2	4.6	4.0%	210.0	7.5	3.6%
(Results of prev. corresponding period)	92.4	3.3	3.6%	104.5	4.8	4.6%	197.0	8.1	4.1%
<b>Other (incl. adjustments)</b>	10.8	0.2	1.6%	9.2	0.8	9.1%	20.0	1.0	5.0%
(Results of prev. corresponding period)	9.5	1.0	10.3%	11.3	1.3	11.5%	20.8	2.3	10.9%
<b>Total</b>	257.7	7.9	3.1%	292.3	10.1	3.5%	550.0	18.0	3.3%
(Results of prev. corresponding period)	252.8	2.7	1.1%	278.5	8.4	3.0%	531.3	11.1	2.1%

## H&PC domestic business operating income, YoY: **-2.0 bn yen** (FY18/3: 9.4 bn yen → FY19/3, expected: 7.4 bn yen)

- Main factors for FY19/3 are the cost increase of raw materials and fuels for household paper products, and the increase in fixed cost due to the start of Kawanoie mill's operations.
- For FY20/3, Daio Paper is expecting mainly an increase in OP income from the household paper business.

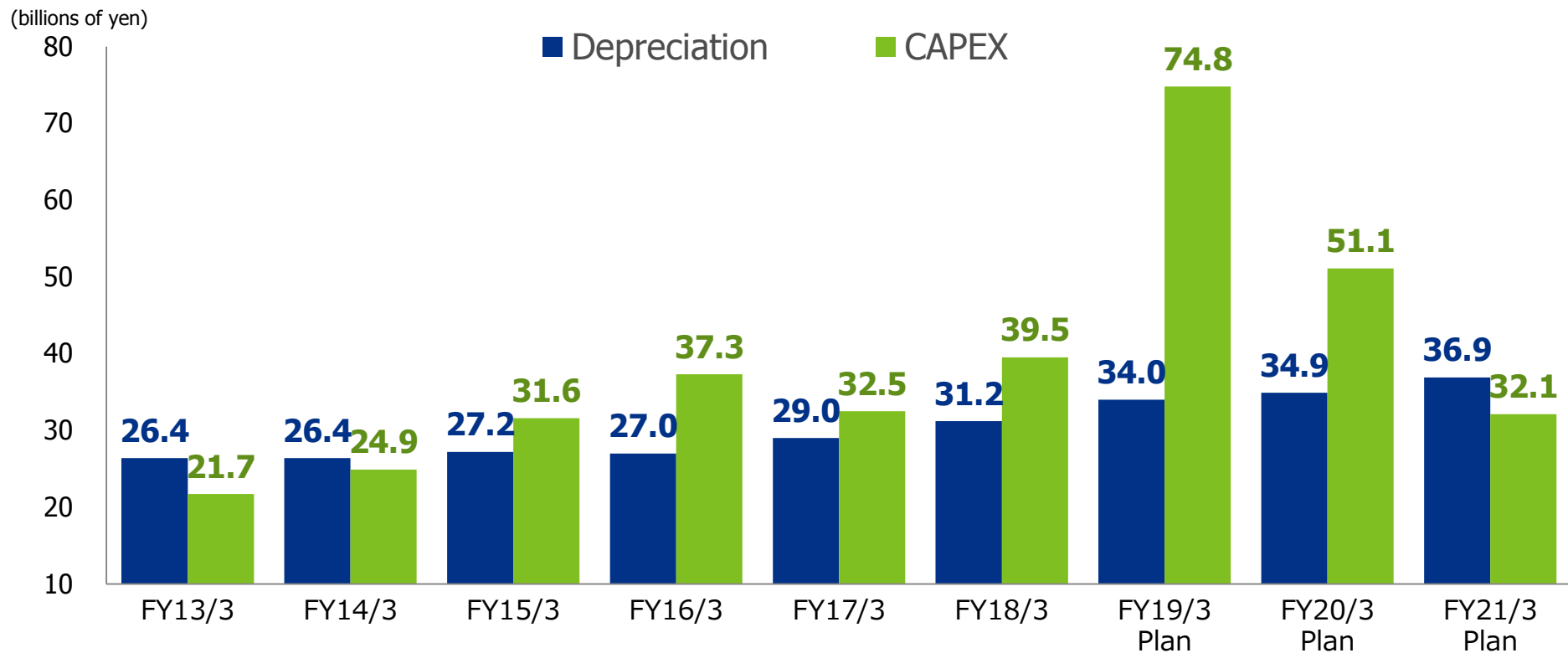


## H&PC overseas business operating income, YoY: **+1.4 bn yen** (FY18/3: -1.3 bn yen → FY19/3, expected: +0.1 bn yen)

Sales region		FY19/3 Main factors	Impact (bn yen)	Key initiatives for the fiscal years including and beyond FY20/3
<b>China</b>	<b>China (EICN)</b>	Sales increase of high value-added products Increase in e-commerce sales	<b>+1.0</b>	Increase sales of premium toilet rolls Increase sales of 雲紗 (“Yunsha”) series targeting third and fourth tier cities
<b>S.E. Asia</b>	<b>Thailand and neighboring (EIT)</b>	Sales increase to neighboring countries Expansion of feminine care products business	<b>+0.9</b>	Accelerate multi-category business expansion in Thailand with feminine care products and wet wipes Increase sales of baby diaper and promote multi-category business expansion in neighboring countries
	<b>Indonesia (EITI/EIMI)</b>	Temporal decline in earnings improvement due to a review of distribution strategy in relation to the business downsizing of its main local distributor	<b>-</b>	Review sales mix by retailer type and sales territory strategy
<b>Export, etc.</b>	<b>S. Korea (EIK)</b>	Decline in number of births	<b>-0.1</b>	Adapt to aging of society and declining birthrate, and accelerate sales growth of feminine care products and adult diapers
	<b>(Taiwan)</b>	Growth in high-end products	<b>+0.1</b>	Shift in sales mix to high value-added products such as pants diapers Diversify product offerings with feminine care products, adult diapers and household paper
	<b>(Others)</b>	Market shift to low-end products due to economic stagnation in Russia Increase in promotional activities in Turkey	<b>-0.5</b>	Strengthen line-up of low-end products Promote switch from tape diapers to pants diapers
<b>Total</b>			<b>+1.4</b>	

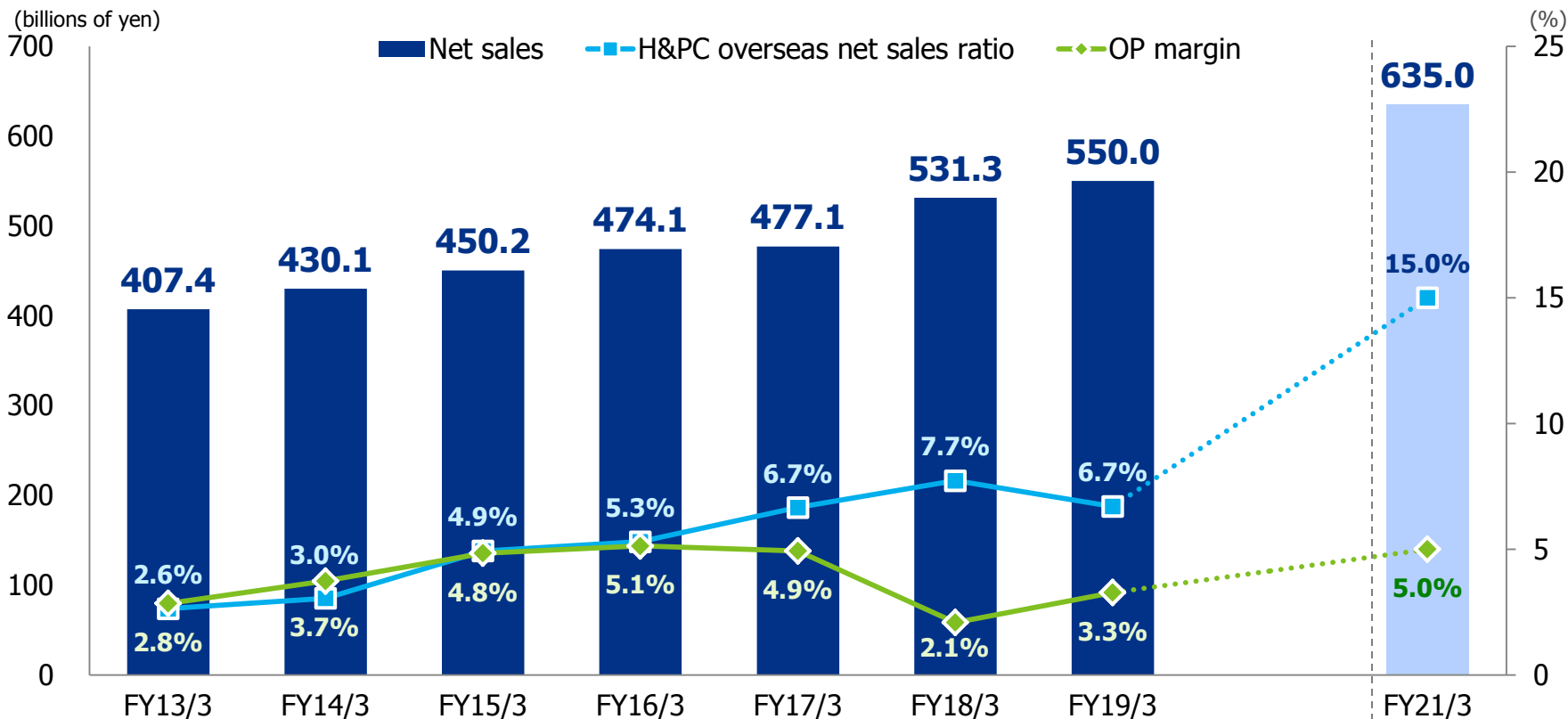
# Consolidated financial forecast for FY2019/3

## Capital expenditure, depreciation



	1st Medium-term Business Plan			2nd Medium-term Business Plan			3rd Medium-term Business Plan		
	FY13/3	FY14/3	FY15/3	FY16/3	FY17/3	FY18/3	FY19/3 Plan	FY20/3 Plan	FY21/3 Plan
<b>Depreciation</b>	26.4	26.4	27.2	27.0	29.0	31.2	34.0	34.9	36.9
<b>3-year cumulative</b>		<b>80.0</b>			<b>87.2</b>			<b>105.8</b>	
<b>CAPEX</b>	21.7	24.9	31.6	37.3	32.5	39.5	74.8	51.1	32.1
<b>3-year cumulative</b>		<b>78.3</b>			<b>109.3</b>			<b>158.0</b>	

# Net sales, overseas net sales ratio, operating income (margin)



1st Medium-term Business Plan

2nd Medium-term Business Plan

3rd Medium-term Business Plan

FY13/3

FY14/3

FY15/3

FY16/3

FY17/3

FY18/3

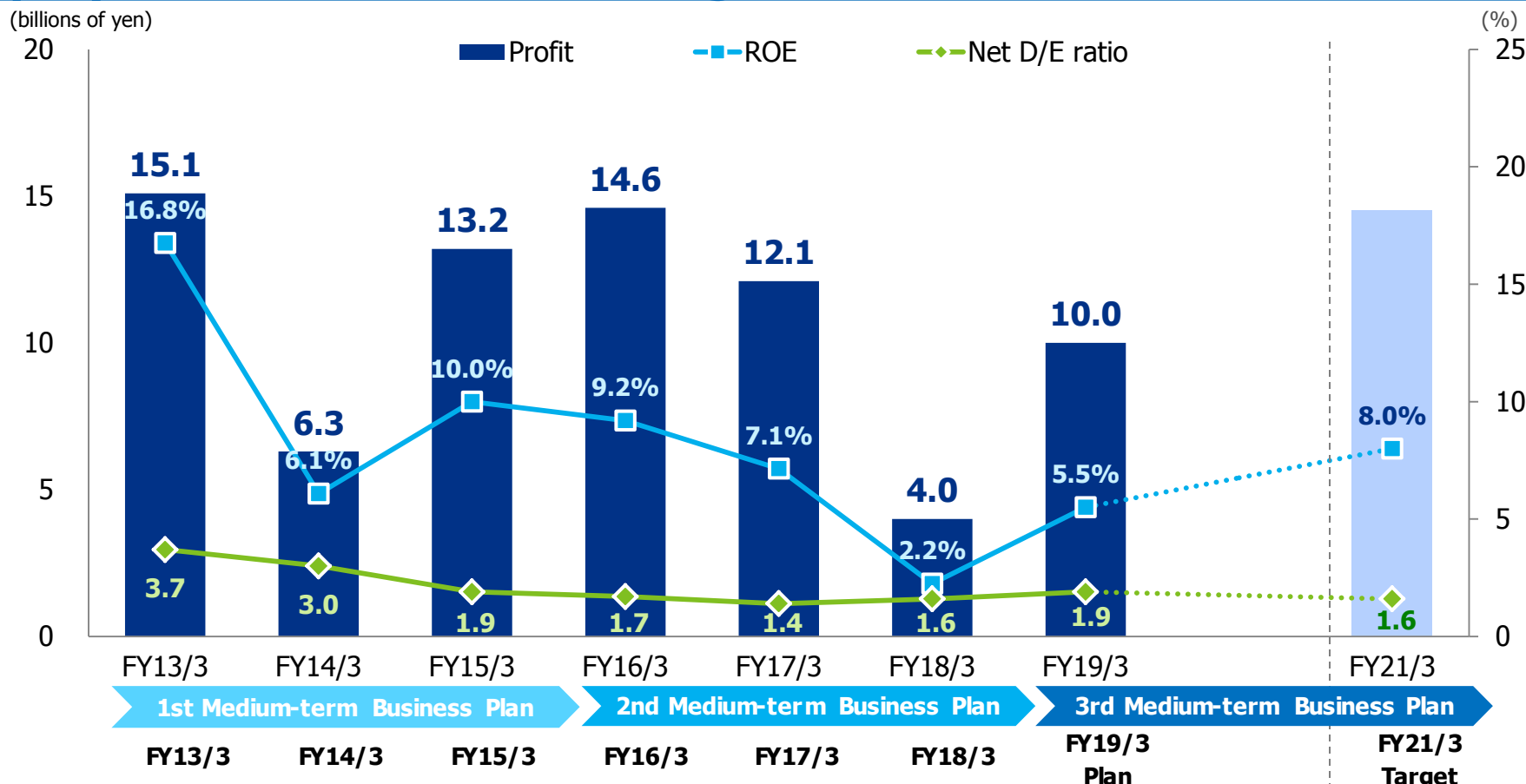
 FY19/3  
Plan

 FY21/3  
Target

<b>Net sales</b>	407.4	430.1	450.2	474.1	477.1	531.3	550.0	635.0
<b>(H&amp;PC overseas sales)</b>	10.7	13.1	22.2	25.1	31.8	41.1	※ 37.0	100.0
<b>H&amp;PC overseas net sales ratio</b>	2.6%	3.0%	4.9%	5.3%	6.7%	7.7%	6.7%	15.0%
<b>OP income</b>	11.6	16.0	21.8	24.3	23.5	11.1	18.0	32.0
<b>OP margin</b>	2.8%	3.7%	4.8%	5.1%	4.9%	2.1%	3.3%	5.0%



# Profit, equity, ROE, net interest-bearing debt, net D/E ratio



**Profit attributable to owners of parent**

**Equity**

**ROE**

**Net interest-bearing debt**

**Net D/E ratio**

Profit attributable to owners of parent	15.1	6.3	13.2	14.6	12.1	4.0	10.0	-
Equity	97.1	109.8	154.5	163.1	176.5	178.0	-	-
ROE	16.8%	6.1%	10.0%	9.2%	7.1%	2.2%	5.5%	8.0%
Net interest-bearing debt	363.5	331.8	292.5	281.5	255.1	280.0	350.0	350.0
Net D/E ratio	3.7	3.0	1.9	1.7	1.4	1.6	1.9	1.6

# Reference materials

Daio Paper Corporation hereby notifies that it has issued green bonds (Unsecured Straight Bonds No. 21 and No.22: 20 billion yen in total) in October 2018.

Green bonds are bonds that align to the Green Bond Principles set by the International Capital Market Association (ICMA), and refer to bonds that companies, municipalities and other organizations issue to procure funds exclusively for projects aimed at solving environmental problems (“Green Projects”).

This was the first green bond issuance in the papermaking and the daily necessities industries in Japan.

As regards the green bond eligibility of the bonds, Daio Paper Corporation has obtained second party opinion from DNV GL Business Assurance Japan K.K.

Funds procured will be used for the following Green Projects.

### **(1) Facility for the effective use of hard-to-recycle recovered paper (Total investments: Approx. 16 billion yen)**

- ◎ Modify existing facility and install new facility for the recycle of hard-to-recycle recovered paper
- ◎ Burn as fuel the residual waste, such as vinyl, that arises from the recycling process of hard-to-recycle recovered paper, and make use of the resulting heat energy for power generation and in the papermaking process

#### **Environmental benefits of the project:**

- 1) Reduction of waste materials
- 2) Reduction of CO<sub>2</sub> emissions

### **(2) Biomass boiler fueled by black liquor Total investments: Approx. 21 billion yen <sup>\*1</sup>**

- ◎ Install new biomass boiler that uses black liquor, a byproduct of the kraft pulping process, as fuel
- ◎ The new boiler to be installed will use 100%<sup>\*2</sup> black liquor, a type of biomass fuel

<sup>\*1</sup> Of the total investments of approximately 21 billion yen, 9 billion yen was procured through the euroyen zero coupon convertible bonds due 2020 issued in September 2015.

<sup>\*2</sup> Fossil fuels will be used only during startup and shutdown of facility.

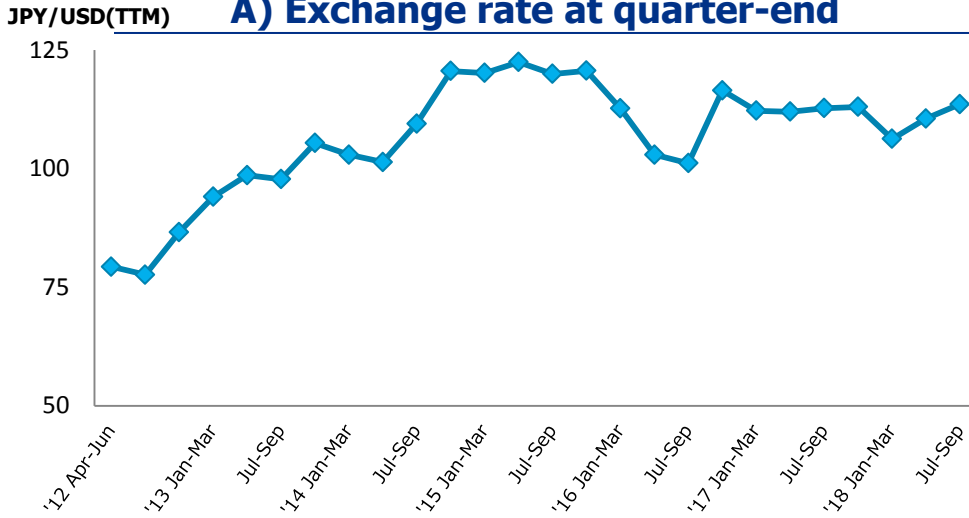
#### **Environmental benefits of the project:**

- 1) Reduction of CO<sub>2</sub> emissions

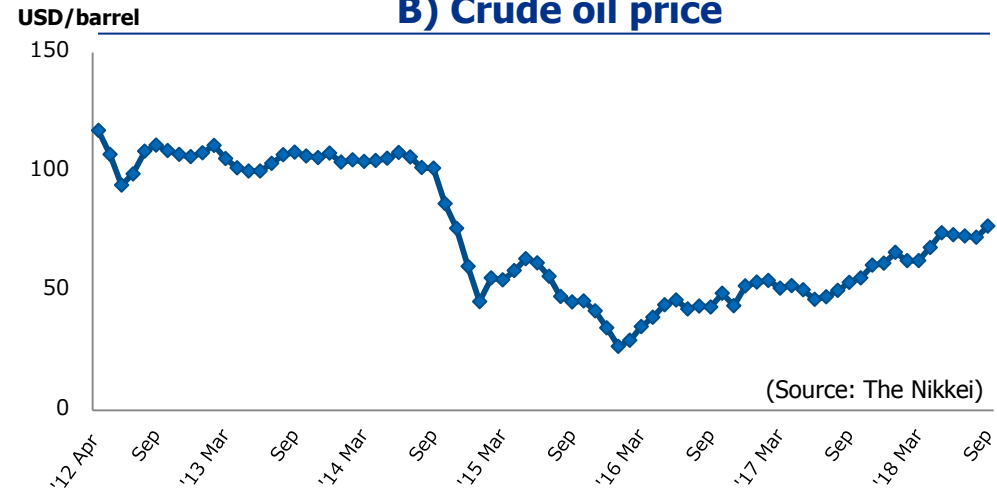
**For more details regarding the Green Projects and the terms and conditions of the bond issuance, please see the following announcements on the company's website.**

- *Issuance of Green Bond.* Released 1 Oct 2018.
- *Regarding the Terms and Conditions of the Issuance of Daio Paper Green Bonds (Unsecured Straight Bonds No. 21 and No. 22).* Released 19 Oct 2018.

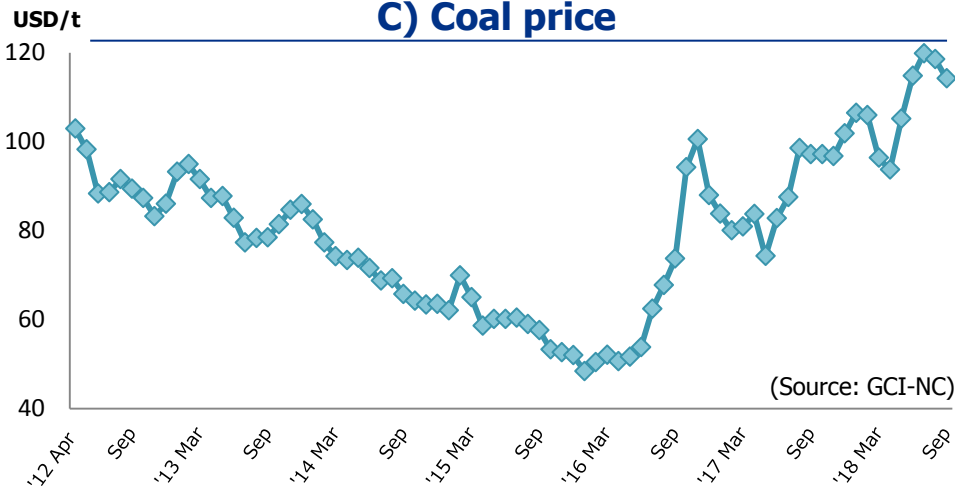
### A) Exchange rate at quarter-end



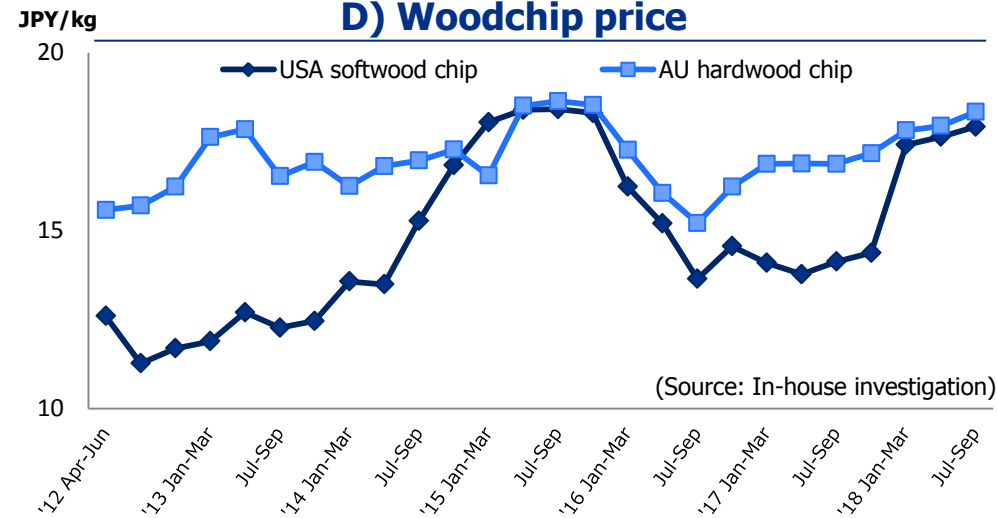
### B) Crude oil price



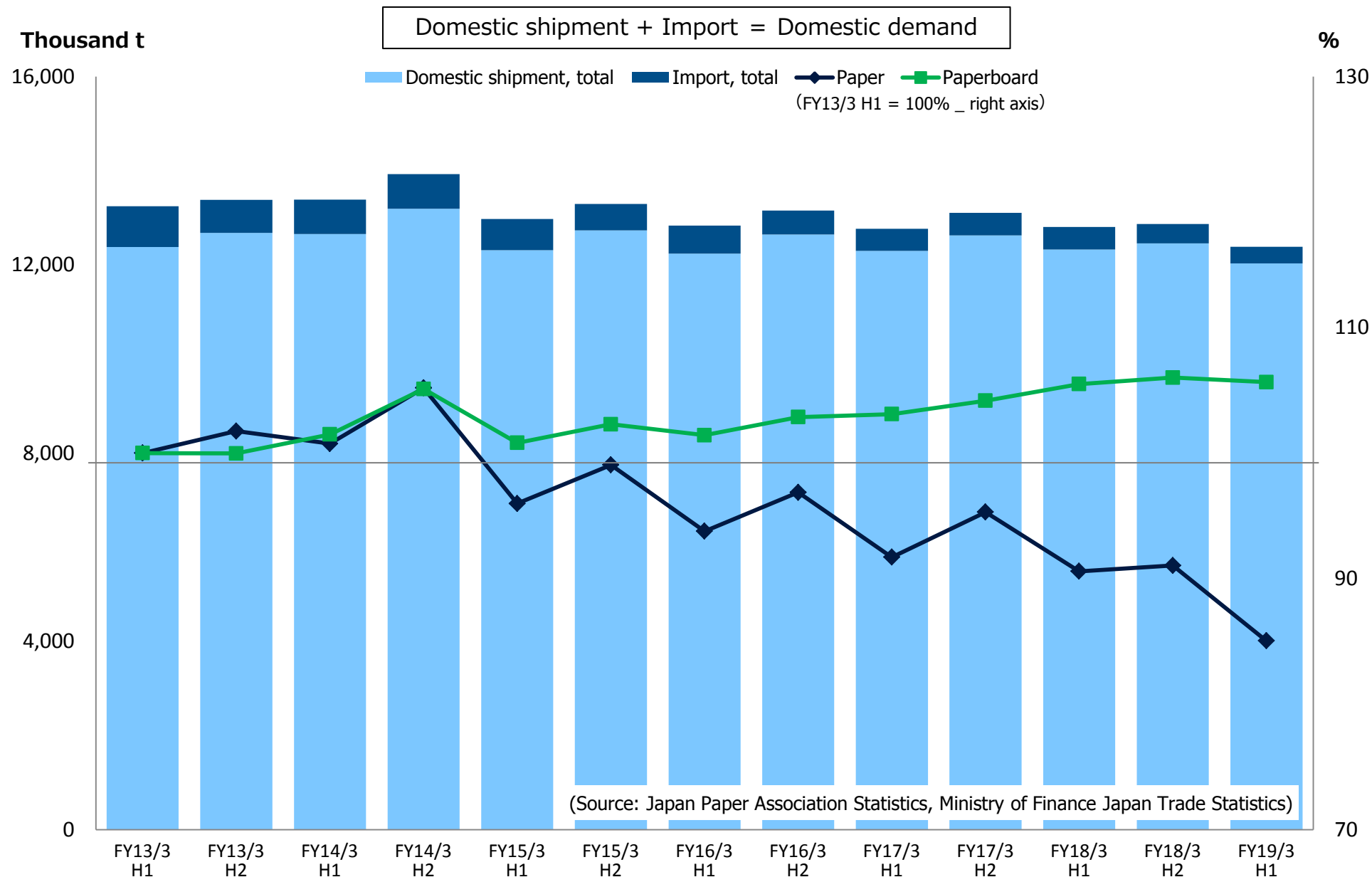
### C) Coal price



### D) Woodchip price



# Reference material 2 Domestic demand for paper and paperboard



Forward-looking statements such as projections and forecasts on business results included in this document are derived by Daio Paper Corporation (the “Company”) based on beliefs as well as assumptions made using information currently available to it at the time of the release (Nov 29, 2018), and are subject to contingencies, risks and uncertainties.

As such, actual future performance and results could differ materially from the statements included herein as a result of latent risks, factors not yet known to the company or not currently considered material to the company and its subsidiaries by the company.