1ST HALF FY2022/3 FINANCIAL REVIEW

November 5, 2021



Consolidated Statement

	1st Half FY2021/3	1st Half FY2022/3	Variai	nce
	Results	Results	Amount	%
Net sales	467.4	508.4	41.0	8.8%
Operating income	4.0	8.1	4.1	104.3%
Ordinary income	-2.1	9.7	11.8	
Net income *	-8.0	2.2	10.2	_

^{*} Profit attributable to owners of parent

- Net Sales increased against last year. Though the application of accounting standard for revenue recognition from the current fiscal year provided the negative impact, that was outweighed by the impact of two positive contributors, the demand recovery from Covid-19 and acquisition of Orora Limited's paperboard and fiber-based packaging business in Australia and New Zealand at the end of April 2020.
- Higher raw material and fuel prices results in challenging business environment. Nevertheless, operating income increased compared to the last 1H because it recorded the acquisition-related expenses of Orora Limited's paperboard and fiber-based packaging business in Australia and New Zealand in the previous year.



Results by Segment

		Net sales		Operating income			
	1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance	1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance	
Paper and paperboard	272.5	261.4	-11.1	-2.0	-0.2	1.8	
Daily-life products	140.5	189.7	49.2	6.0	1.8	-4.2	
Energy	16.4	14.8	-1.6	3.4	1.1	-2.3	
Wood products and construction related	25.5	28.5	3.0	2.4	3.5	1.1	
Others	12.5	14.0	1.5	0.0	1.9	1.9	
Acquisition-related expenses	-	_	_	-5.8	-	5.8	
Total	467.4	508.4	41.0	4.0	8.1	4.1	



1st Half FY2022/3 vs. 1st Half FY2021/3 Variance Analysis

Volume, Sales Price	3.2	
Raw material and fuel prices	-4.0	Woodchip 0.2, Wastepaper -0.1, Pulp -0.8, Oil -1.1, Coal -1.2, Others -1.0 (Price -3.4, FOREX -0.6)
Cost reductions, etc.	1.1	Cost reductions 1.7, Repair costs -0.9, Permanent machine shutdown at Kushiro Mill 1.1, Labor costs 0.0, Logistics cost -0.8
Others	1.5	Overseas business -0.4, Depreciation 0.7, Retirement benefit expenses -0.7, Inventory value adjustment, etc. 1.9
Paper and paperboard business	1.8	
Daily-life products business	-4.2	Domestic -2.1:Household paper and Healthcare -2.1, Overseas -2.1: Opal -2.2, NDP 0.3, Others -0.2
Other businesses	6.5	Energy -2.3, Wood products and construction related 1.1, Others 1.9, Acquisition-related expenses 5.8
Operating income	4.1	
Non-operating income	7.7	Net financial cost -0.6, Equity in earnings of affiliates 2.3, FOREX 4.9, Others 1.1
Ordinary income	11.8	



Paper and paperboard business

(¥billion)

	Net sales			Operating income	
1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance	1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance
272.5	261.4	-11.1	-2.0	-0.2	1.8

• Paper(Domestic)

- Sales volume of newsprint decreased by 7.9% due to a partial halt of operations at Iwanuma Mill following the earthquake off the coast of Fukushima Prefecture.
- Sales volume of domestic printing paper increased by 8.6% due to a reactionary decline in demand in the previous 1H.

• Paperboard(Domestic)

• Domestic sales volume increased by 3.4% due to a recovery in demand for industrial products and steady demand for processed foods and mail-order products.

• Oversea business

• Sales volume of Jujo Thermal and SNP increased due to a rebound to the decline in demand in the previous 1H, but operating income decreased due to the rise in raw material and fuel prices.



Daily-life products business

(¥billion)

		Net sales	Operating income			
	1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance	1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance
Domestic	83.8	90.5	6.7	6.2	4.1	-2.1
Overseas*	56.7	99.2	42.5	-0.2	-2.3	-2.1
Daily-life products business total	140.5	189.7	49.2	6.0	1.8	-4.2

Domestic

- In domestic Paper-pak business, sales volume slightly decreased compared to the previous 1H. Demand for milk cartons for school meal recovered, but demand for milk cartons for home-use and juice cartons declined.
- In Household paper and Healthcare business, net sales increased compared to the previous 1H due to a rebound to the decline in demand, and integration of sales functions of hand towels with Try-Fu Co., Ltd. However, operating income declined due to higher raw material and fuel prices.

Overseas

- Opal's sales volume of corrugated boxes decreased due to Covid-19.
- Both net sales and operating income of Nippon Dynawave Packaging (NDP) increased due to higher pulp sales volume because dry pulp machine is well running.

^{*}Including goodwill amortization costs related to acquisition of Orora Limited's paperboard and fiber-based packaging business in Australia and New Zealand.



Energy business

(¥billion)

	Net sales			Operating income	
1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance	1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance
16.4	14.8	-1.6	3.4	1.1	-2.3

• Both net sales and operating income declined due to the completion of rapidly changing mitigation measures in the Feed-in tariff (FIT) fixed-price system to promote renewable energy.

Wood products and construction related business

(¥billion)

	Net sales			Operating income	
1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance	1 st Half FY2021/3 Results	1 st Half FY2022/3 Results	Variance
25.5	28.5	3.0	2.4	3.5	1.1

• Both net sales and operating income increased due to soaring prices because of shortage of timber on a global scale, as well as an increase in the number of new housing starts.



onsolidated Balance Sheets			(¥billion)
	Mar.31, 2021	Sep.30, 2021	Variance
Total assets	1,547.3	1,552.7	5.4
Cash and time deposit	69.7	56.8	-12.9
Inventories	173.7	188.7	15.0
Other current assets	290.4	280.5	-9.9
Property, equipment, and intangible fixed asset	806.7	8.00.8	-5.9
Investment and other assets	206.8	225.9	19.
Total liabilities	1,122.6	1,115.0	-7.6
Interests bearing liabilities	828.9	817.9	-11.0
Other liabilities	293.7	297.1	3.4
Total net assets	424.7	437.7	13.0
Shareholder's equity	362.1	359.2	-2.9
Total liabilities and net assets	1,547.3	1,552.7	5.4
	Mar.31, 2021	Sep.30, 2021	Variance
Net interest-bearing debt	759.1	761.1	2.0

	Mar.31, 2021	Sep.30, 2021	Variance
Net interest-bearing debt	759.1	761.1	2.0
Adjusted Net D/E ratio * (times)	1.86	1.88	0.02

^{*} Adjusted Net D/E ratio= (Net interest-bearing debt- Equity-type debt)/(Shareholders' Equity + Equity-type debt) Equity-type debt: The amount of debt procured by Hybrid loans that has been recognized as equity credit by rating agencies (50% of the procured amount raised)



Consolidated Statement

(¥billion)

	FY2021/3 Results	FY2022/3 Revised Forecast	FY2022/3 Previous Forecast	Variance
Net sales	1,007.3	1,030.0	1,030.0	0.0
Operating income	19.2	14.0	25.0	-11.0
Ordinary income	12.3	14.0	19.0	-5.0
Net income *	3.2	1.0	1.0	0.0

^{*} Profit attributable to owners of parent

•Prices of raw materials and fuels such as coal, oil, and chemicals have soared globally. Current prices are much higher than our initial forecast. We will make efforts to revise sales prices of printing paper, business communication paper and industrial paper, but operating income and ordinary income are expected to fall below the previous forecast.

FY2022/3 Forecast



Results by Segment

		Net sales		Operating income			
	FY2021/3 Results	FY2022/3 Revised Forecast	Variance	FY2021/3 Results	FY2022/3 Revised Forecast	Variance	
Paper and paperboard	568.3	535.0	-33.3	2.5	-4.5	-7.0	
Daily-life products	317.9	380.0	62.1	7.9	6.5	-1.4	
Energy	33.4	30.0	-3.4	6.9	2.5	-4.4	
Wood products and construction related	59.9	55.0	-4.9	6.5	6.5	0.0	
Others	27.8	30.0	2.2	1.4	3.0	1.6	
Acquisition- related expenses	_	_		-6.0	_	6.0	
Total	1,007.3	1,030.0	22.7	19.2	14.0	-5.2	

FY2022/3 Forecast



Major assumptions

■ Annual decline in domestic sales volume (YoY)

	Revised	Revised Forecast			Forecast
	2nd Half	Full year		2nd Half	Full year
Newsprint	-4%	-6%		-6%	-8%
Printing	-7%	0%		-5%	1%
Business communication	-1%	1%		-2%	1%
Containerboard	-2%	-1%		-2%	-1%

■Major raw material prices and FOREX

	Revised Forecast (2nd Half)	Previous Forecast (Full year)
FOREX(USD)	JPY 115/USD	JPY 108/USD
FOREX sensitivity(USD)	+600 million yen/year due to 1 yen appreciation	+500 million yen/year due to 1 yen appreciation
Coal (Australian coal benchmark price)	Taking into account the most recent market conditions	USD 85/t
Crude oil (Dubai)	USD 85/BL	USD 60/BL
Wastepaper	Current level continues	Current level continues 17

FY2022/3 Forecast



FY2022/3 Forecast vs. FY2021/3 Variance Analysis

Volume, Sales Price	5.7	
Raw material and fuel prices	-22.7	Woodchip -2.9, Wastepaper -1.0, Pulp -1.6, Oil -2.7, Coal -9.0, Others -5.5 (Price -20.5, FOREX -2.2)
Cost reductions, etc.	3.7	Cost reductions 3.5, Repair costs -0.6, Permanent machine shutdown at Kushiro Mill 3.5, Labor costs 0.0, Logistics cost -2.7
Others	6.3	Overseas Business -0.9, Depreciation 2.6, Retirement benefit expenses -1.3, Inventory value adjustment, etc. 5.9
Paper and paperboard business	-7.0	
Daily-life products business	-1.4	Domestic -5.2 : Household paper and Healthcare -4.6, Others -0.6 Overseas 3.8 : Opal 2.2, NDP 2.1, Others -0.5
Other businesses	3.2	Energy -4.4, Wood products and construction related 0.0, Others 1.6, Acquisition-related expenses 6.0
Operating income	-5.2	
Non-operating income	6.9	Net financial cost -0.3, Equity in earnings of affiliates 3.4, FOREX 3.9, Others -0.1
Ordinary income	1.7	

REFERENCE MATERIALS

Sales Volume(Paper & Paperboard) *



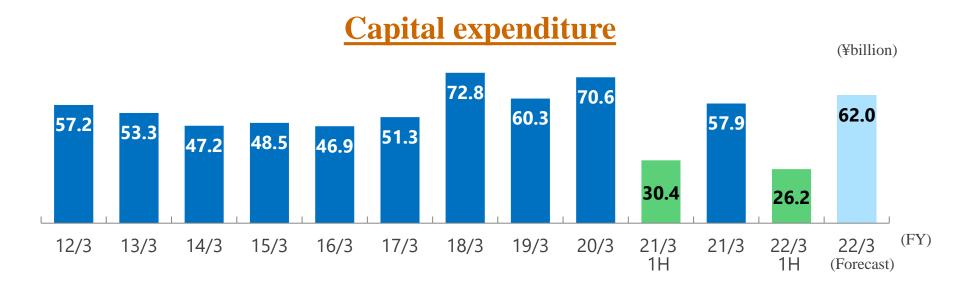
('000 tonnes)

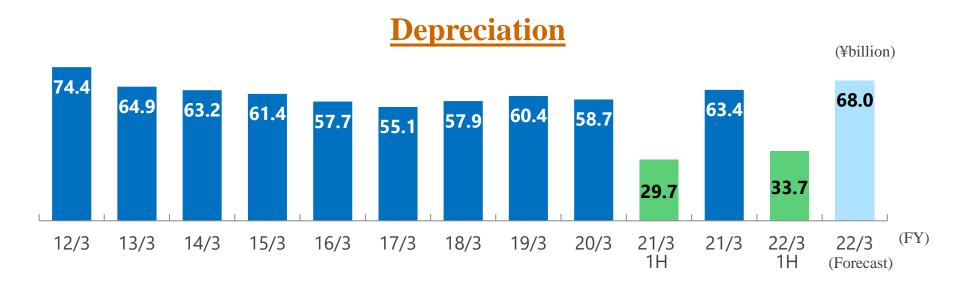
					(000 tonnes)
	1H FY20/3	1H FY21/3	1H FY22/3	against FY21/3	against FY20/3
Newsprint	415	345	317	-7.9%	-23.5%
Printing paper	740	545	592	8.6%	-20.0%
Business communication paper	252	209	212	1.6%	-15.5%
Others	180	146	159	8.8%	-11.6%
Domestic sales (paper)	1,587	1,245	1,281	2.9%	-19.2%
Export (paper)	161	112	131	16.9%	-18.9%
Paper total	1,748	1,357	1,412	4.0%	-19.2%
Container board	821	801	828	3.4%	0.9%
Folding box board and others	173	147	163	10.8%	-5.8%
Domestic sales (paperboard)	994	947	991	4.6%	-0.3%
Export (paperboard)	84	87	93	6.9%	10.1%
Paperboard total	1,078	1,034	1,084	4.8%	0.5%
Grand total (paper and paperboard)	2,825	2,391	2,495	4.4%	-11.7%

^{*} Sales Volume Total of Nippon Paper Industries Co., Ltd., Nippon Paper Papylia Co., Ltd., Nippon Paper Crecia Co., Ltd., and Shin Tokai Paper Co., Ltd. (excluding sanitary paper)

Capital expenditure, Depreciation







Net sales Trends by Segment



						, ,			
		FY2	021/3		FY20	22/3	FY2022/3		
	1Q	2Q	3Q	4Q	1Q	2Q	1st Half Results	2nd Half Forecast	
Paper and paperboard	134.7	137.8	148.9	146.9	131.1	130.3	261.4	273.6	
Daily-life products	63.3	77.2	91.7	85.7	91.9	97.8	189.7	190.3	
Energy	7.6	8.8	7.7	9.3	6.4	8.4	14.8	15.2	
Wood products and construction related	12.4	13.1	16.1	18.3	14.2	14.3	28.5	26.5	
Others	5.8	6.7	7.1	8.2	6.9	7.1	14.0	16.0	
Acquisition- related expenses	_	_	_			_		_	
Total	223.8	243.7	271.4	268.4	250.5	257.9	508.4	521.6	

Operating income Trends by Segment



	FY2021/3				FY202	22/3	FY2022/3		
	1Q	2Q	3Q	4Q	1Q	2Q	1st Half Results	2nd Half Forecast	
Paper and paperboard	-1.1	-0.9	1.8	2.7	0.1	-0.3	-0.2	-4.3	
Daily-life products	3.0	3.0	0.8	1.1	1.4	0.4	1.8	4.7	
Energy	1.4	2.0	1.8	1.7	0.5	0.6	1.1	1.4	
Wood products and construction related	1.1	1.3	1.4	2.7	1.9	1.6	3.5	3.0	
Others	0.2	-0.2	1.0	0.4	0.9	1.0	1.9	1.1	
Acquisition- related expenses	-0.3	-5.5	-0.1	-0.1	_			_	
Total	4.3	-0.3	6.7	8.5	4.8	3.3	8.1	5.9	



Domestic Shipment volume and Import / Export (Paper& Paperboard)

('000 tonnes)

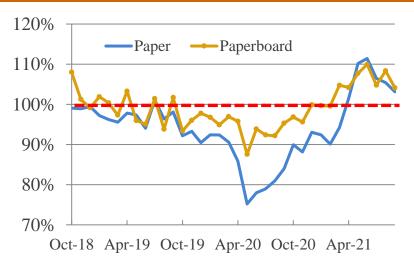
							-	(0	oo tomics)
1H FY2022/3	Domes	stic ship	ments	Exports			Imports		
	volume	against FY21/3	against FY20/3	volume	against FY21/3	against FY20/3	volume	against FY21/3	against FY20/3
Newsprint	982	-2.0%	-17.2%	0	_	_	1	-35.1%	23.6%
Printing & business communication paper	2,775	9.6%	-18.1%	287	55.2%	11.3%	349	4.3%	-41.0%
Coated paper *	1,457	13.2%	-20.7%	218	60.5%	16.4%	119	15.9%	-63.3%
Uncoated paper	763	8.2%	-13.4%	54	44.9%	-1.0%	20	-2.8%	-42.8%
Business communication paper	556	2.6%	-17.1%	14	24.8%	-7.1%	211	-0.7%	-9.9%
Other papers	1,513	5.9%	-6.0%	159	19.4%	1.5%	29	30.4%	6.1%
Paper total	5,270	6.2%	-14.8%	446	40.2%	7.6%	379	5.7%	-38.9%
Container board	4,547	5.4%	-0.0%	503	20.1%	133.1%	19	-18.4%	-14.0%
Folding box board and others	1,020	11.2%	-5.7%	35	112.8%	166.8%	132	8.3%	-7.3%
Paperboard total	5,566	6.4%	-1.1%	538	23.6%	135.0%	151	4.0%	-8.2%
Paper and paperboard total	10,836	6.3%	-8.3%	983	30.6%	52.9%	530	5.2%	-32.5%

^{* &}quot;Bitoko-shi" paper is included in coated paper.

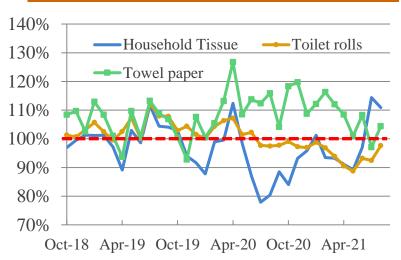
Source: Japan Paper Association, Trade Statics of Japan



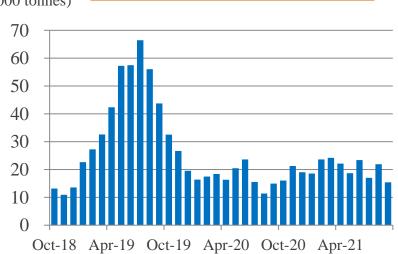
Domestic shipment of paper industry(YOY)



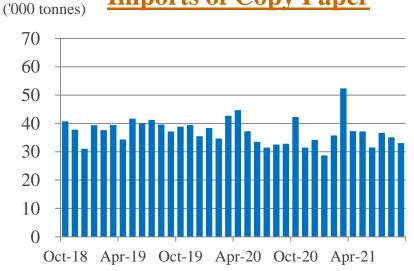
Production of sanitary paper (YOY)



('000 tonnes) Imports of Coated Paper

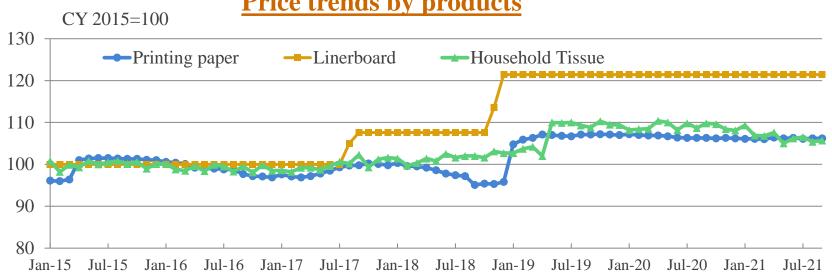


Imports of Copy Paper

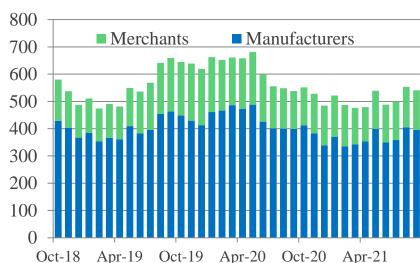




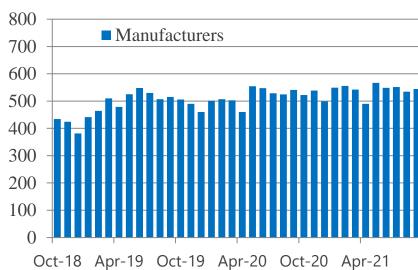




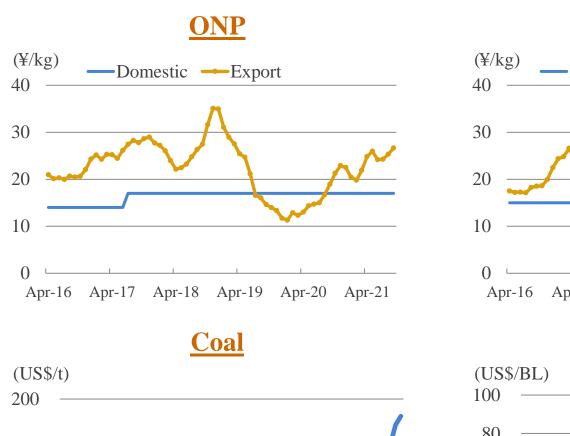




('000 tonnes) Containerboard inventory

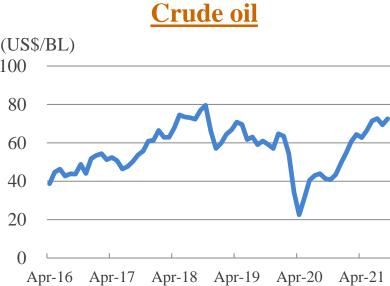








(US\$/t) 200 150 100 Apr-16 Apr-17 Apr-18 Apr-19 Apr-20 Apr-21





The Nippon Paper Group aims to contribute to better living and cultural progress everywhere it does business.

<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.