# Progress of the Fifth Medium-Term Business Plan

Investor Meeting on May 24, 2016

NIPPON PAPER INDUSTRIES CO., LTD.

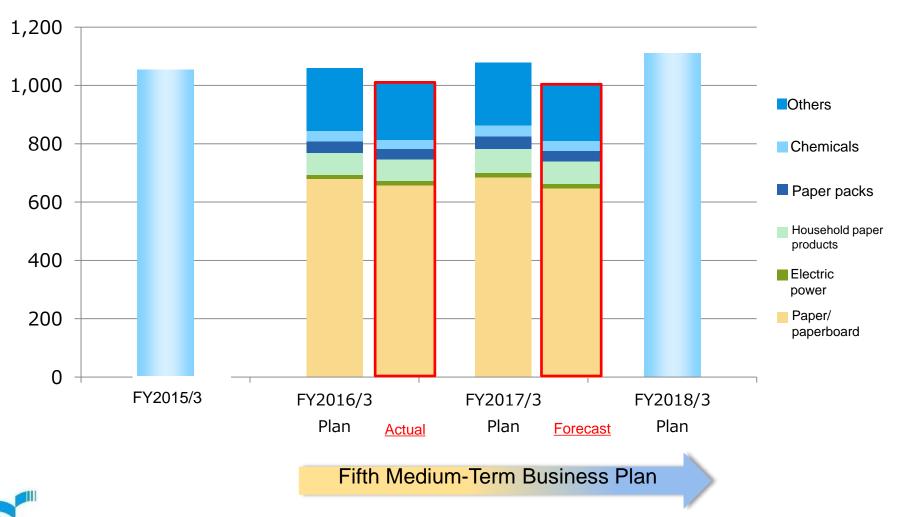


Shaping the Future with Trees

#### Net Sales (by Business Segment)

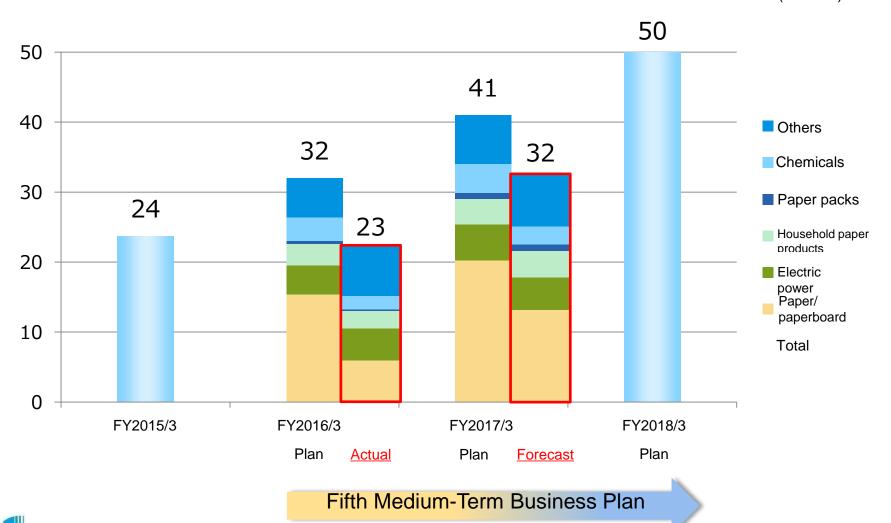
## <u>New measures will be necessary in the next two years to reach net</u> sales of ¥1,110.0 billion

(¥ billion)



#### **Operating Income (by Business Segment)**

## <u>New measures will be necessary in the next two years to reach</u> <u>operating income of ¥50.0 billion</u>

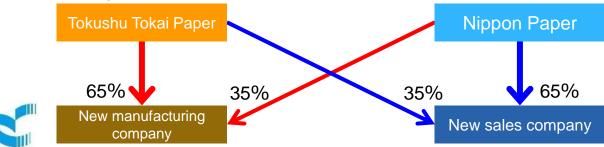


(¥ billion)

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Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
<ol> <li>Maintain top share of newsprint and printing paper</li> <li>Quality design to meet user needs</li> <li>Strengthen sales organization</li> </ol>	<ul> <li>Introduce "Paper Planet" product management system for printing/business communication/industrial paper (Will be rolled out gradually from FY2016)</li> <li>Product development to meet customer needs         <ul> <li>U-LITE Dry (Launched in Oct. 2015) and others</li> </ul> </li> </ul>	¥3.9 billion
<ul> <li>2. Strengthen sales of industrial paper and containerboard</li> <li>Strengthen linkage with downstream businesses</li> <li>Implement sanitary measures for food applications</li> <li>Expand exports and reinforce global sales structure</li> </ul>	Business alliance with Tokushu Tokai Paper (Concluded an integration agreement on April 25, 2016)	¥6.3 billion

• Diagram of Business Alliance (Shareholding ratios are after completion of the business integration scheme)





## Secure stable earnings by increasing the competitiveness of mills

Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
<ul> <li>3. Improve the distribution system</li> <li>Promote direct delivery, minimize inventories in consumption areas</li> <li>Optimize distribution bases</li> </ul>	<ul> <li>Reduced distribution costs by establishing new warehouses (Akita Mill, Ishinomaki Mill, Iwakuni Mill)</li> </ul>	¥1.4 billion
<ul> <li>4. Increase cost competitiveness</li> <li>Variable costs <ul> <li>Stabilize operations</li> <li>Design special investment plan to improve earnings</li> <li>Fuel conversion</li> <li>Procure low-cost raw materials</li> </ul> </li> <li>Fixed costs <ul> <li>Promote collaboration</li> <li>Streamline operations</li> <li>Allocate personnel to growth areas</li> </ul> </li> </ul>	<ul> <li>Stabilized operation and reduced costs of pulp facilities (Akita Mill, Ishinomaki Mill)</li> <li>Kiln fuel conversion (Hokkaido Mill – Shiraoi, Ishinomaki Mill)</li> <li>Integrated Fuji Mill and Yoshinaga Mill (April 2015)</li> <li>Integrated Soka Mill and Ashikaga Mill (April 2016)</li> </ul>	Special allocation ¥20.0 billion (FY2014-16 total)



## Improve profitability of overseas businesses

Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
<ol> <li>Stabilize operations through total rationalization and cost reductions         <ul> <li>Decommission paper machines, close mills</li> <li>Switch to low-cost materials, in-house production of DIP</li> <li>Renew aging facilities</li> </ul> </li> </ol>	<ul> <li>Australian Paper: Comprehensive profit improvement plan (during FY2017/3)</li> <li>Closure of Shoalhaven Mill (FY2016/3)</li> <li>Reduction of head office staff, negotiations with unions, negotiation of raw material and fuel prices</li> <li>Stabilization of operations with personnel support</li> </ul>	¥1.3 billion
<ul> <li>2. Change product lineup and promote new businesses</li> <li>Upgrade production organization for high-value-added products</li> <li>Shift to profitable product lineup</li> <li>Stabilize the electric power sales business</li> <li>Strengthen collaboration with SCG (Expand sales of kraft paper and semi-glassine)</li> </ul>	<ul> <li>Jujo Thermal: Turnaround of thermal paper business         <ul> <li>Accommodate high-value-added products (updated backcoating equipment) (Fall 2015)</li> <li>Raised prices of thermal paper products in Europe (Winter 2015)</li> </ul> </li> <li>Nippon Paper Industries USA: Transform product portfolio from full dependency on telephone directory paper         <ul> <li>Accelerated shift to production of industrial paper and paper towels OCC dissolution equipment (began operating in Sept. 2015) Paper towel production equipment (began operating in Nov. 2015)</li> <li>Established stable operation of electric power sales business</li> </ul> </li> <li>Established Vietnam office         <ul> <li>Enhanced marketing functions in Asia</li> <li>Set up base for expansion of business areas</li> </ul> </li> </ul>	¥0.9 billion ¥1.0 billion



# Energy

# Expand power generation from renewable energy sources with biomass, solar and wind

Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
<ol> <li>Steadily execute projects now under way</li> <li>Ensure optimal and stable operation, and establish business operation frameworks</li> <li>Steadily collect biomass fuels</li> <li>Continue cooperation with partners and local communities</li> </ol>	<ul> <li>Began operation of biomass power generation facilities at Yatsushiro Mill (June 2015)</li> <li>Suzukawa thermal power generation (September 2016 startup planned)</li> </ul>	¥3.0 billion (Total project cost)
<ul> <li>2. Start commercial operation of Ishinomaki thermal power generation facility</li> <li>Carry out construction and startup according to schedule</li> <li>Establish stable collection system for biomass fuels</li> <li>Cooperate with partners</li> </ul>	<ul> <li>Began construction in November 2015</li> <li>Proceeding on schedule for startup in March 2018</li> </ul>	¥40.0 billion (Total project cost)
<ul> <li>3. Quickly work out specifics of plans currently under consideration</li> <li>Develop concrete plan for commercialization of Akita thermal power generation facility and other projects</li> <li>Study business development strategies for PPS and other businesses</li> </ul>	<ul> <li>Akita thermal power generation currently under review         <ul> <li>Environmental assessment is being conducted</li> </ul> </li> <li>Launched Akita wind power generation business         (January 2018 startup planned)</li> <li>Decided to expand Komatsushima solar power         generation facilities         (September 2016 startup planned)</li> </ul>	



#### • Key Projects and Startup Schedules

Site	Energy source	Output (MW)	FY16/3	FY17/3	FY18/3	FY19/3 and onward
Komatsushima	Solar	21		In ope	ration	
March 2016 pi	ress release	40		2016/9		
Komatsushima	Solar phase II	13				
Yatsushiro	Biomass	5	2015/6	In o	peration	
Suzukawa	Coal	102		2016/5 → <b>2</b>	016/9	
Ishinomaki	Coal & biomass	135	Construc	tion began 201	5 <b>/11</b> 2018/3	
Akita	Coal & biomass	112	Plan under revi	ew Establish	nment, construction, test	FY19/3 operation
March 2016 pi	ress release	7			2018/1	
Akita	Wind	/				
New project				Revi	ew of plan	



## Energy

# Expand into energy-related businesses using existing technologies and resources

Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
<ul> <li>4. Develop biomass fuels</li> <li>Establish torrefaction and other technologies</li> <li>Develop concrete commercialization plan</li> </ul>	<ul> <li>Woody biomass fuel (torrefied pellets)</li> <li>Will install demonstration plant in Thailand (Production to begin in spring 2017)</li> <li>CfFA<sup>®</sup> high-quality fly ash</li> <li>Installing production facilities at Ishinomaki Mill (Construction began in Dec. 2015)</li> </ul>	¥0.9 billion

#### Woody biomass fuel (torrefied pellets)

- •Will conduct demonstration production on a scale of 8,000 tonnes annually as part of joint research with SCG's fibrous chain business in Thailand
- ·Mixed combustion experiment with pulverized coal boiler at Kushiro Mill



- ·Go/no go decision on commercialization planned in Dec. 2017
- Commercial production facilities with yearly capacity of 80,000 tonnes envisioned

## CfFA<sup>®</sup> high-quality fly ash

- ·Will manufacture concrete admixture from coal boiler combustion ash
- •Sales began in April 2016 on the scale of 10,000 tonnes per year. We plan to develop this business based on local production for local consumption.



**Torrefied pellets** 



CfFA® production facilities



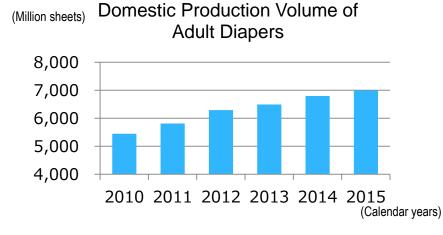
### Aim for long-term growth in the expanding healthcare market

Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
<ol> <li>Reinforce Healthcare production and sales</li> <li>Focus development on the Kyoto Mill as our core mill</li> <li>Increase sales personnel</li> <li>Increase product development personnel and expand lineup</li> <li>Develop overseas business and promote exports</li> </ol>	<ul> <li>Focused investment in Nippon Paper Crecia Kyoto Mill (Completion in FY2017/3)</li> <li>Kyoto Mill will serve as our core mill</li> <li>Will boost profitability with product development and efficient production</li> <li>Launched "Hada Care" series of products</li> <li>Hada Care Acty adult diapers (October 2015)</li> <li>Poise<sup>®</sup> Hada Care Pad light incontinence pads (April 2016)</li> <li>Began exports of diapers for babies to China</li> </ul>	¥2.7 billion

◆ Hada Care products using highly effective deodorant sheets made with functional cellulose nanofiber







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# **Expand the value chain beyond the materials business**

Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
<ol> <li>Enhance cost-competitiveness of commodity-type products</li> <li>Increase production efficiency</li> <li>Promote the use of the Group's own base paper</li> </ol>	<ul> <li>Completed construction to increase production capacity (Scrap and Build) at Egawa Paper-Pak and Miki Paper-Pak (January 2016)</li> </ul>	¥2.1 billion
<ul> <li>2. Expand sales</li> <li>Realign organization, review region- based organization</li> <li>Upgrade overseas sales organization, open sales channels</li> </ul>	<ul> <li>Began carton exports to develop sales channels in Southeast Asia</li> </ul>	
<ul> <li>3.Strengthen product development</li> <li>Strengthen Product Development Dept. (Package Research Lab)</li> <li>External collaboration</li> </ul>	<ul> <li>Concluded license agreement with Elopak (Mar. 2016)</li> <li>Will introduce Elopak's newly designed chilled beverage containers with spouts and caps</li> <li>Established Packaging Communication Center and Packaging Research Laboratory (April 2016)</li> </ul>	
<ul> <li>Newly designed chilled beverage containers with spouts and caps</li> <li>Pure-Pak<sup>®</sup> Sense         <ul> <li>Looks and feels different with embossed "first touch zone" near gable top</li> <li>New "easy-to-fold" lines enable consumers to squeeze out high-viscosity contents by folding the carton</li> </ul> </li> </ul>	Pure-Pak <sup>®</sup> Curve • Elegant curved panel on one side of the carton • The curved panel can be use for brand differentiation or advertising	

## Packaging

## Expand the value chain beyond the materials business

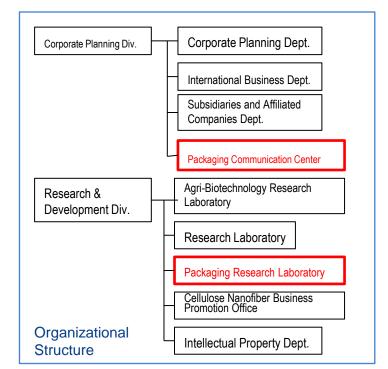
#### • Strengthening our organizational structure for business expansion in the packaging field

ORoles of the Packaging Communication Center and Packaging Research Center

- Marketing organization and technology development organization that work together to solve customers' packaging challenges
- Develop functional paper & plastic composite materials, supported by 3D converting technology
- Promote commercialization of our original packaging developed with design thinking
- Hub functions that link to packaging bases in the Group



Material ConneXion<sup>•</sup> Tokyo



#### ◆ SHIELDPLUS paper-based material for wrapping



#### Expand the biorefinery business using wood resources as raw materials

Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
<ol> <li>Boost competitiveness of Gotsu Mill Build foundation as a core mill</li> <li>Improve power generation efficiency</li> <li>Improve chip yard</li> <li>Renew warehouse</li> </ol>	<ul> <li>Focused investment in Gotsu Mill</li> <li>Improving power generation efficiency by renovating turbines (Completion planned in FY2018/3)</li> </ul>	¥1.5 billion
<ul> <li>2. Expand sales and increase production</li> <li>Expand sales of high-value-added products</li> <li>Increase black liquor treatment capacity at Gotsu Mill</li> <li>Expand production facilities for all product varieties</li> <li>Increase exports</li> </ul>	<ul> <li>Expanding dissolving pulp production capacity at Gotsu Mill (Completion planned in March 2017)</li> <li>Expanding sales of microcrystalline cellulose</li> </ul>	¥2.6 billion
<ul> <li>3. Seek out M&amp;A opportunities</li> <li>Promote alliances with other companies</li> <li>Develop business outside Japan</li> </ul>	Continued to explore M&A opportunities	



#### Expand the biorefinery business using wood resources as raw materials

Key Tasks in 5th MTBP	Main Initiatives to Date	Investment
Early commercial application of cellulose nanofiber (CNF)	<ul> <li>Installation of CNF production facilities with capacity of 500 tonnes per year at Ishinomaki Mill (April 2017 startup planned) <u>May 18 press release</u></li> <li>Respond to growing use of functional cellulose nanofiber</li> </ul>	¥1.6 billion
	<ul> <li>Development of practical applications in addition to functional CNF</li> </ul>	
	Strengthen provision of samples for promising applications	
	Promote reduction of manufacturing costs with mass production	
	<ul> <li>Planning practical application of functional additive by the end of this year</li> </ul>	
	Aiming for practical application of functional transparent film and nano composite material within the next several years	





## **Steadily execute measures as basic policy for FY2017/3**

Key Tasks	Main Contents		
Maintain operating rates of domestic mills	<ul> <li>Expand exports to make up for declining domestic demand</li> <li>Issue: Erosion of export profitability due to yen appreciation</li> <li>Response: Make further cost reductions</li> </ul>		
Improve profitability of overseas businesses	<ul> <li>Stabilize operations</li> <li>Carry out profit improvement measures</li> </ul>		
Steadily realize the benefits of measures we have taken	<ul> <li>Energy, Chemicals, Healthcare and Packaging</li> <li>Strengthen business in growth areas</li> </ul>		
Additional measures	<ul> <li>M&amp;A in growth areas</li> <li>Examina further cost reductions (manufacturing logistics, calco)</li> </ul>		
Regain FY2016/3 shortfall of ¥9.0 billion	<ul> <li>Examine further cost reductions (manufacturing, logistics, sales)</li> <li>Realize benefits from business alliance with Tokushu Tokai Paper</li> <li>Consider optimal domestic/overseas production structure, including review of unprofitable businesses</li> </ul>		
review of unprofitable businesses			



By enhancing the competitiveness of existing businesses and transforming our business structure, we will aim for net sales of  $\pm$ 1,110.0 billion and operating income of  $\pm$ 50.0 billion in FY2018/3

# **Continue to review and effectively utilize assets**

(¥ billion)

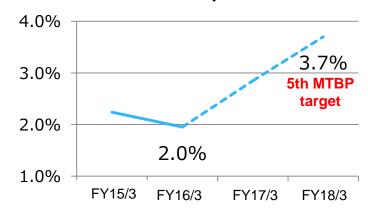
		March 31, 2015	March 31, 2016	Increase (decrease)
Tota	al assets	1,495.6	1,390.0	(104.7)
	Cash and deposits	84.1	112.5	28.4
	Inventories	163.1	158.1	(5.0)
	Other current assets	237.3	232.3	(5.0)
	Property, plant and equipment & intangible assets	734.4	684.6	(49.8)
	Investments and other assets	276.7	203.4	(73.3)

 ROA (Return on assets)
 2.2%
 2.0%
 (0.2%)

#### • Review of unprofitable and non-core businesses



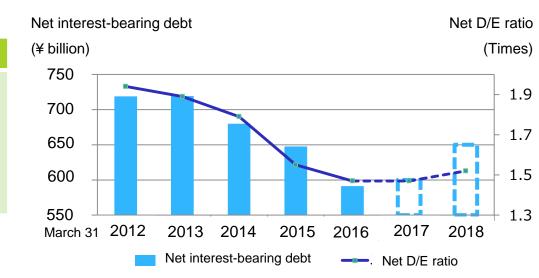
- Sale of SEFE (Australian plantation business company) (Dec. 2015)
- Exit from household wrapping film business (end of March 2017)



#### Net interest-bearing debt and net debt/equity ratio

#### **Future Policy**

Net interest-bearing debt at end of March 2016 was ¥591.3 billion, with a net debt/ equity ratio of 1.47 times. At the end of March 2018, we anticipate net interest-bearing debt at the same level as the end of March 2015 (¥650 billion).



#### Dividends

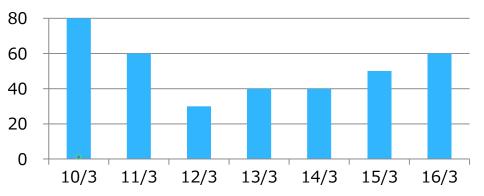
#### **Future Policy**

FY2016/3 dividends totaled ¥60 per share.

(¥30 interim dividend, ¥30 year-end dividend)

We intend to maintain stable dividends.

#### **Dividends per Share**





## 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.

