

Current Management Issues and Measures



Investors Meeting on May 30, 2013

Nippon Paper Industries Co., Ltd.

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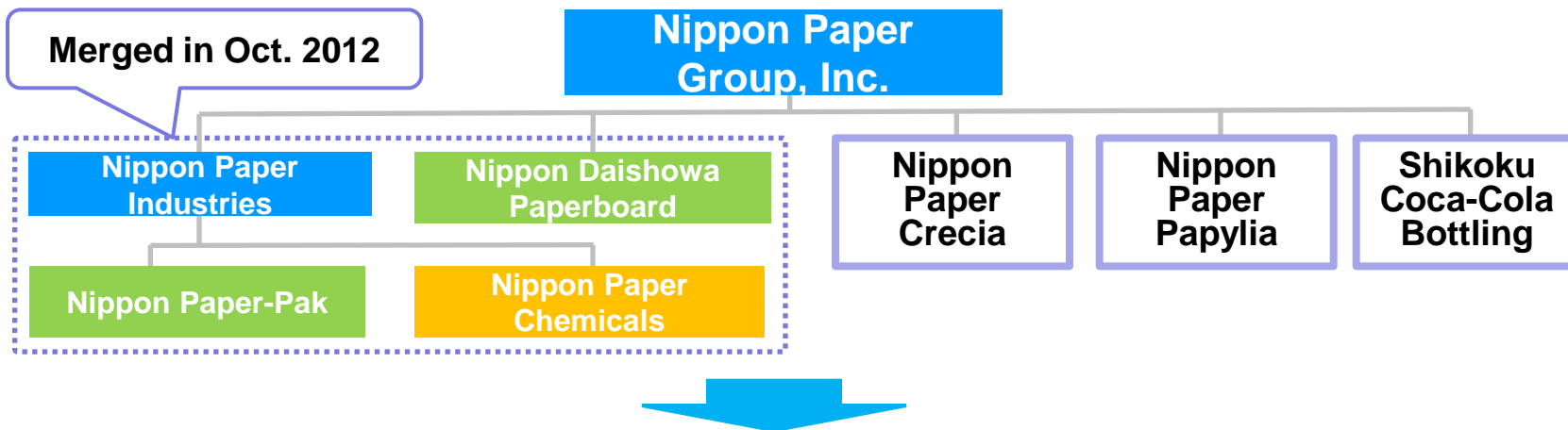
Initiatives by Business Field

4

Initiatives to Transform the Business Structure

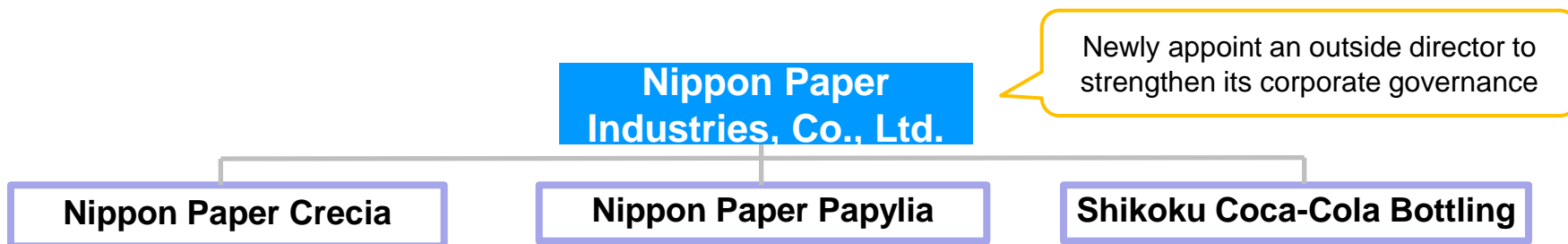
**Consolidated the separated growing businesses
and facilitated optimal allocation of management resources**

Former group structure



Effective from April 1, 2013

**Introduce corporate officer system to separate
management and execution and to make a prompt decision**

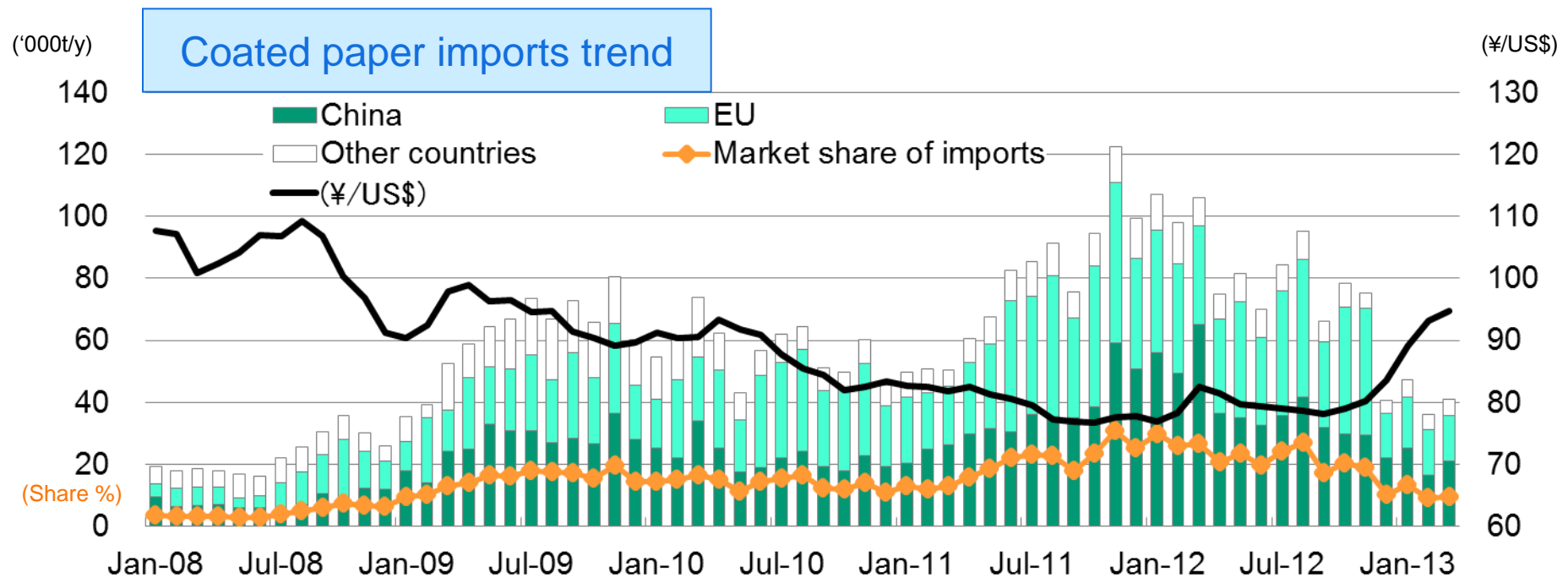


Business Environment

- Worldwide economic slowdown; Paper demand decline in developed countries
- Imported paper penetration after the earthquake; Decline of printing paper price

<After Jan. 2013>

- Drastic depreciation of Japanese yen
 - Input cost rising; Increase of export opportunities; Decrease of imports risk

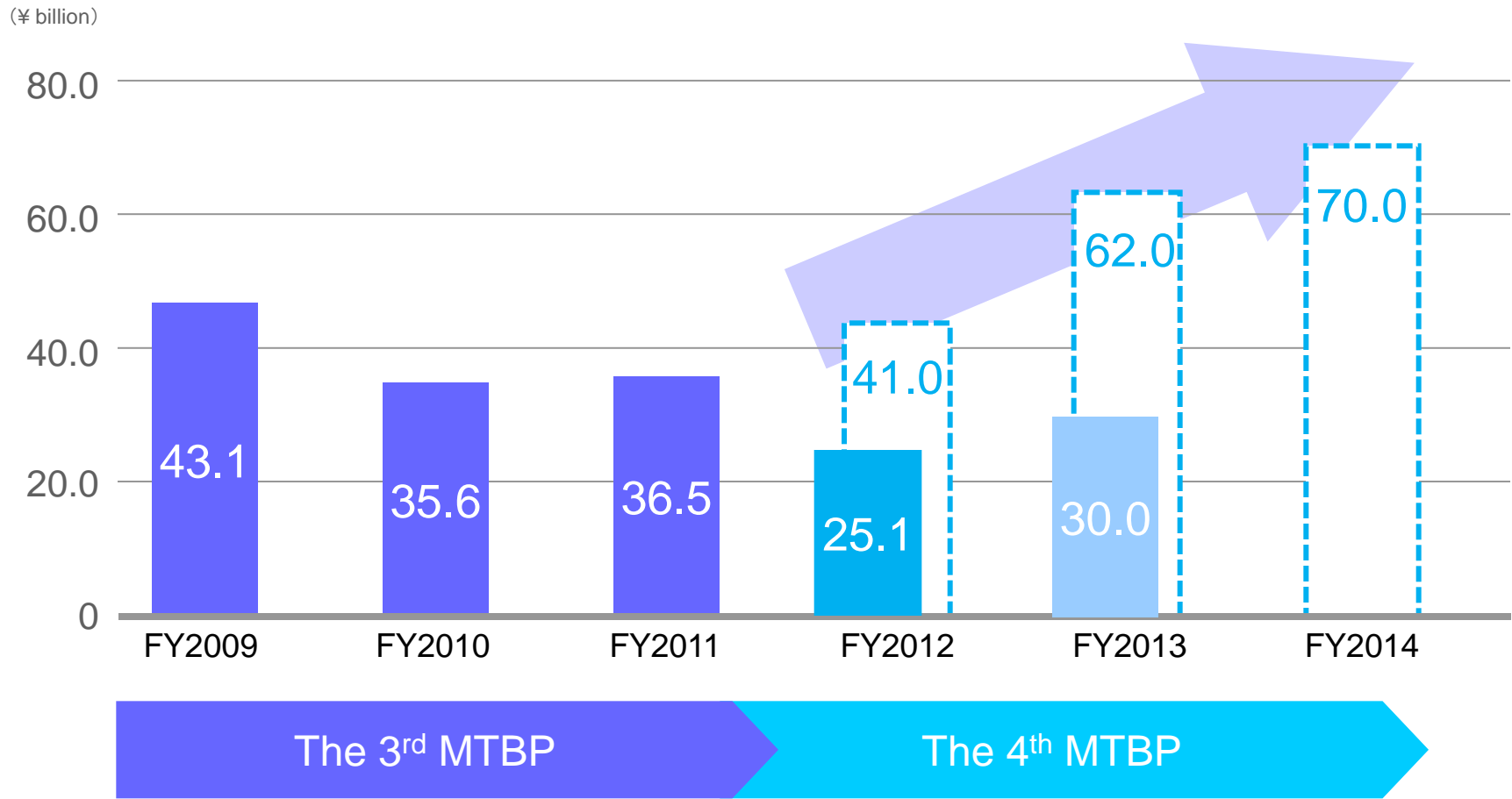


Countermeasures

- Implemented price revisions of printing paper for general market
 - Also examining the opportunities of additional price hike in order to offset the input cost rising
- Strengthening overseas sales
- Reinforcing competitiveness through the additional measures
- Improving financial position by the streamlining of assets
- Accelerating transformation of the business structure

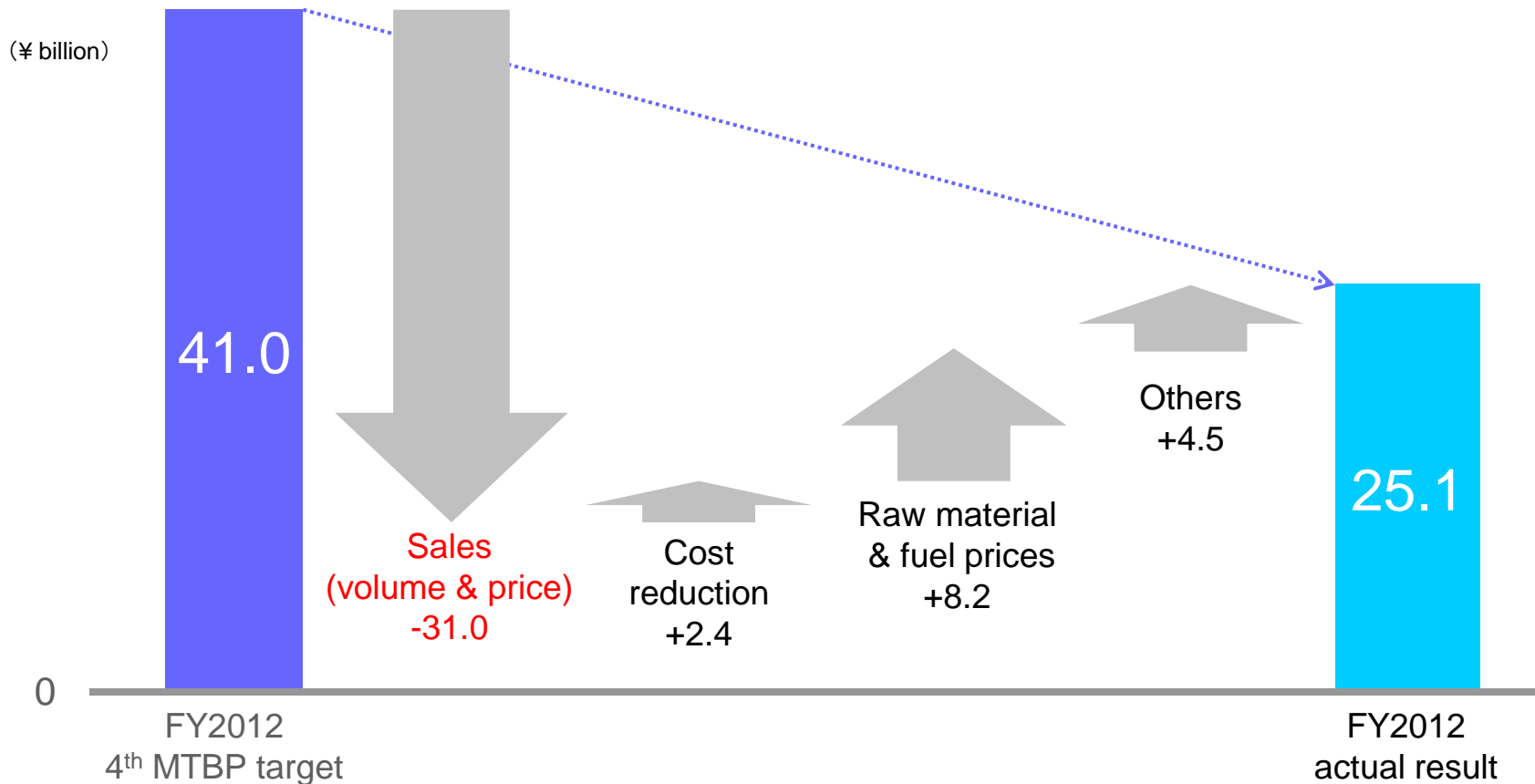
2 Business Environment and Countermeasures: *Operating Income Trend*

Behind the income target mainly due to paper price decline in FY2012 and sharp ongoing FOREX change in FY2013



Cost reduction exceeded the target, but total operating income was below the target mainly due to sales price decline

FY2012 variance analysis for operating income
actual result vs. 4th MTBP target

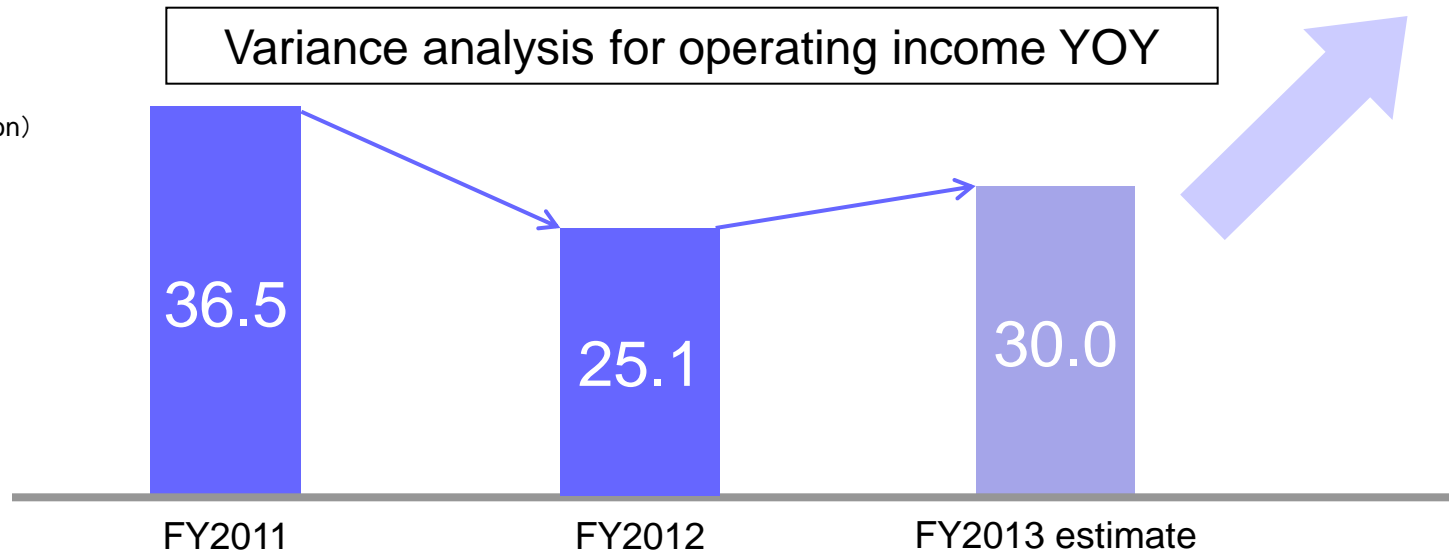


2 Business Environment and Countermeasures: *Variance Analysis (2)*

The keys to improve operating income are continuing cost reduction efforts and price hike to offset the input cost rising

Variance analysis for operating income YOY

(¥ billion)

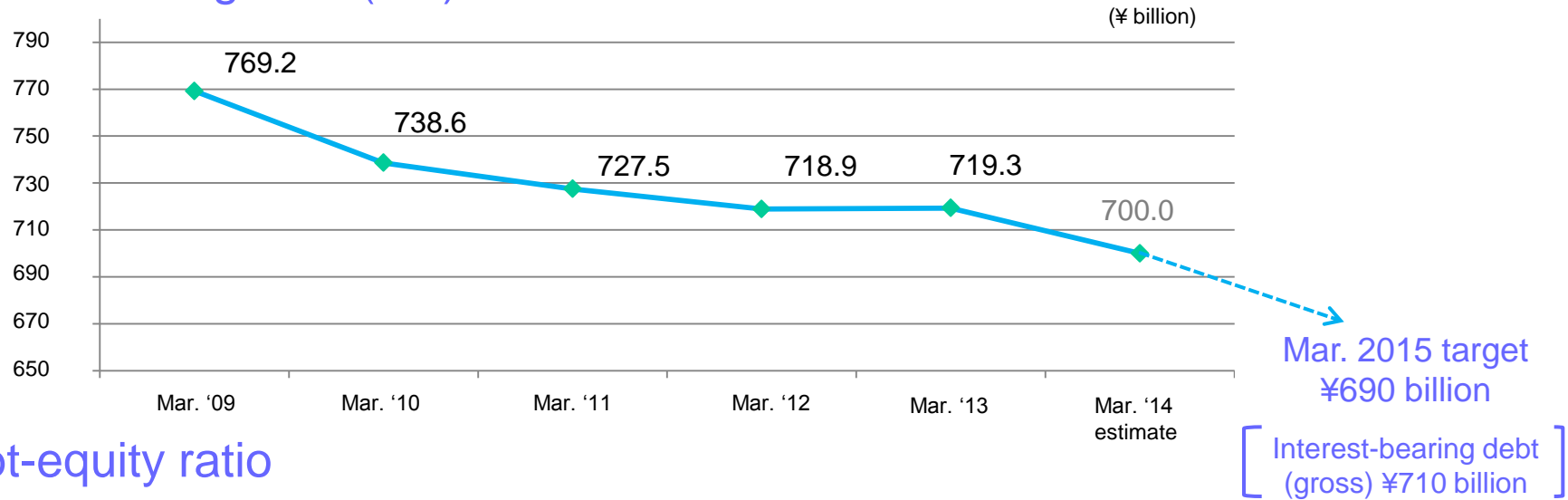


Change factor	FY2011-12	FY2012-13	FY2011-13
Sales	-14.7	+3.8	-10.9
Cost reduction	+17.9	+17.6	+35.5
Raw material and fuel prices	+1.4	-11.2	-9.8
Others	-16.0*	-5.3	-21.3
Total	-11.4	+4.9	-6.5

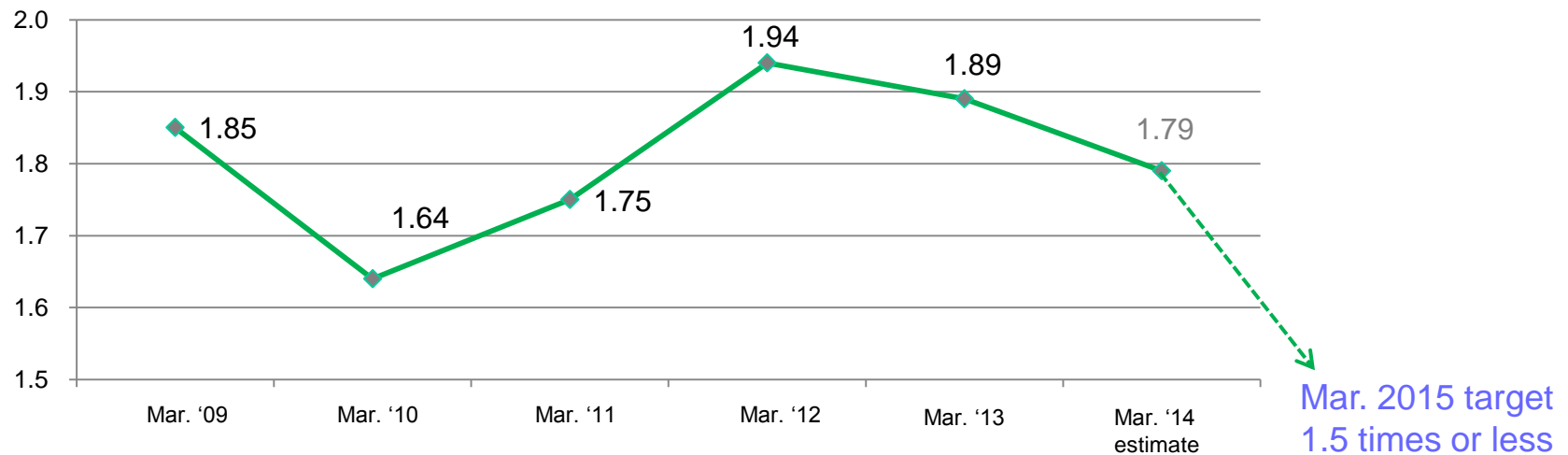
* including the reversal of "fixed costs transferred to extraordinary loss account" booked in FY2011

Improve balance sheet by streamlining assets

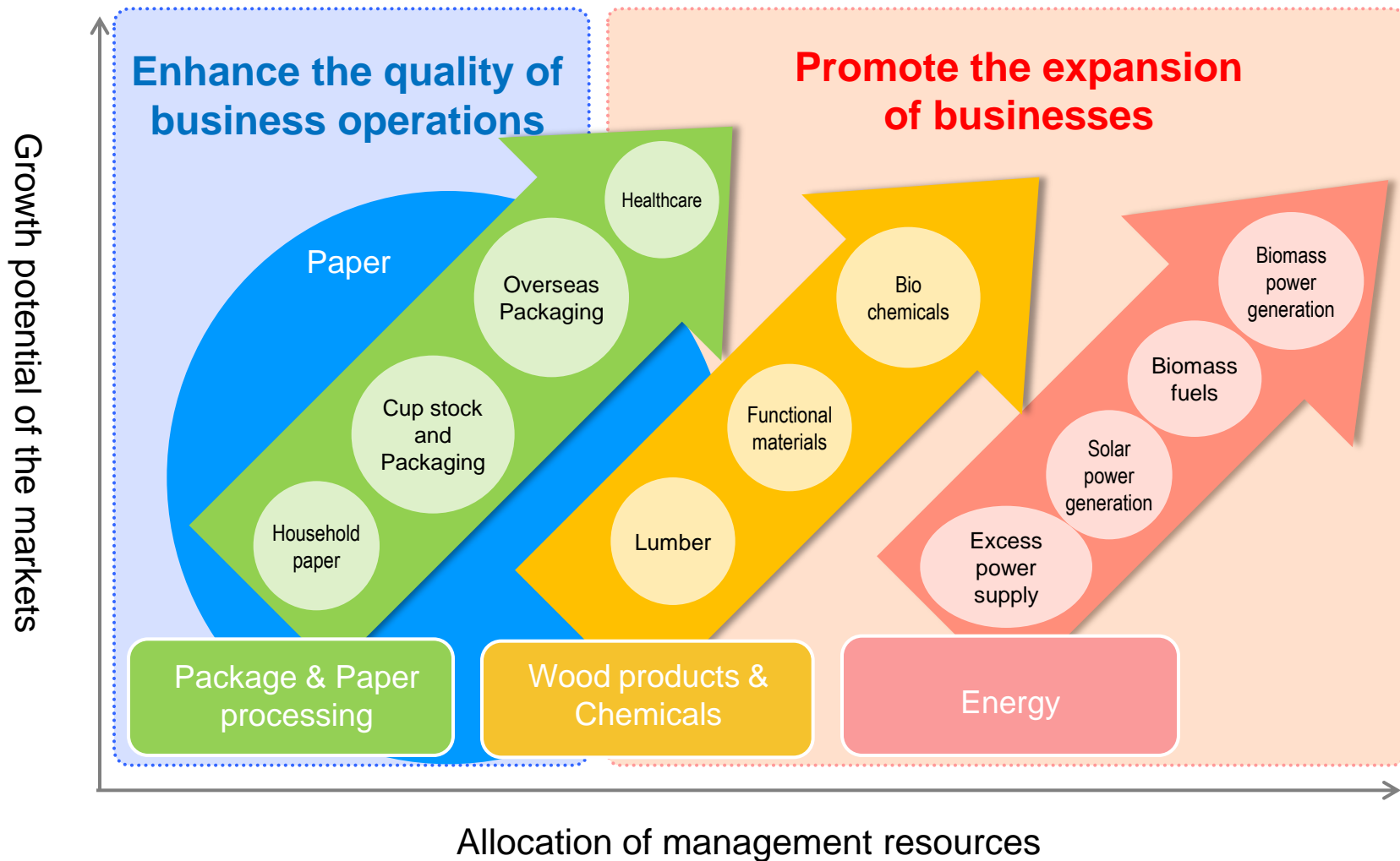
Interest-bearing debt (net)



Debt-equity ratio



Concentrate management resources on the growth fields



Revitalization plan of paper business is progressing favorably

FY2012: ¥13.9 b improvement

FY2013: ¥11.1 b improvement expected

Total ¥25.0 b

		FY2012		FY2013 estimate	
		Benefit (¥ billion)	Progress	Benefit (¥ billion)	Progress
Total		13.9	(Initial plan: ¥12.4 b)	11.1	
Measures	Reduction in workforce	5.9	1,139 job cuts	4.1	175 job cuts
	Variable cost reduction	1.7	100% in-house pulp production (Ishinomaki Mill) Zero oil consumption (Ishinomaki Mill, Yoshinaga Mill) 20% product grade consolidation	3.3	Optimization of pulp production (Iwakuni Mill, Otake Mill) Zero oil consumption (Iwakuni Mill) Logistics cost reduction, maximization of benefit from production transfer
	Fixed cost reduction	6.0	Shutdown of 12 machines	2.8	Contribution throughout the year
	Electric power selling and others	0.3	Electricity supply started in January 2012 (Biomass power generation at Fuji Mill)	0.9	Full fledged expansion of dissolving pulp production (Kushiro Mill)

3 Initiatives by Business Field: *Paper*

Management Issues	Progress / Upcoming measures														
Sales price	<p>⇒ Revised printing paper prices for general market</p> <p>⇒ Considering another price hike to offset the input cost rising</p>														
Sales volume	<p>● Current status</p> <p>⇒ Recovered sales volume by developing new products</p>														
	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="border: none;">FY/Half</th> <th style="border: none;">FY10/2H</th> <th style="border: none;">FY11/2H</th> <th style="border: none;">FY12/1H</th> <th style="border: none;">FY12/2H</th> </tr> </thead> <tbody> <tr> <td style="border: none;">Domestic sales ('000t)</td> <td>2,122</td> <td>1,957</td> <td>1,920</td> <td>2,030</td> </tr> </tbody> </table>				FY/Half	FY10/2H	FY11/2H	FY12/1H	FY12/2H	Domestic sales ('000t)	2,122	1,957	1,920	2,030	
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	Domestic sales ('000t)	2,122	1,957	1,920	2,030										
<p>● Domestic demand forecast</p>															
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<p>● Enlarging exports ('000t)</p>															
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Management issues

Upcoming measures (additional measures)

Strengthening competitiveness

● Sales capabilities

- ⇒ Reshape sales structure (Apr. 2013 onward)
 - Directly link production and sales
- ⇒ Strengthen development and sales of industrial paper and specialty paper
 - Expand sales of high-value-added products, develop new products that take advantage of equipment characteristics

● Cost reduction

- ⇒ Further reduce fixed costs
 - Streamline indirect operations, reduce total labor costs
- ⇒ Strengthen earning power of printing paper for general market
 - Thoroughly review quality design and business processes
- ⇒ Reduce other costs
 - Review logistics costs and maintenance costs

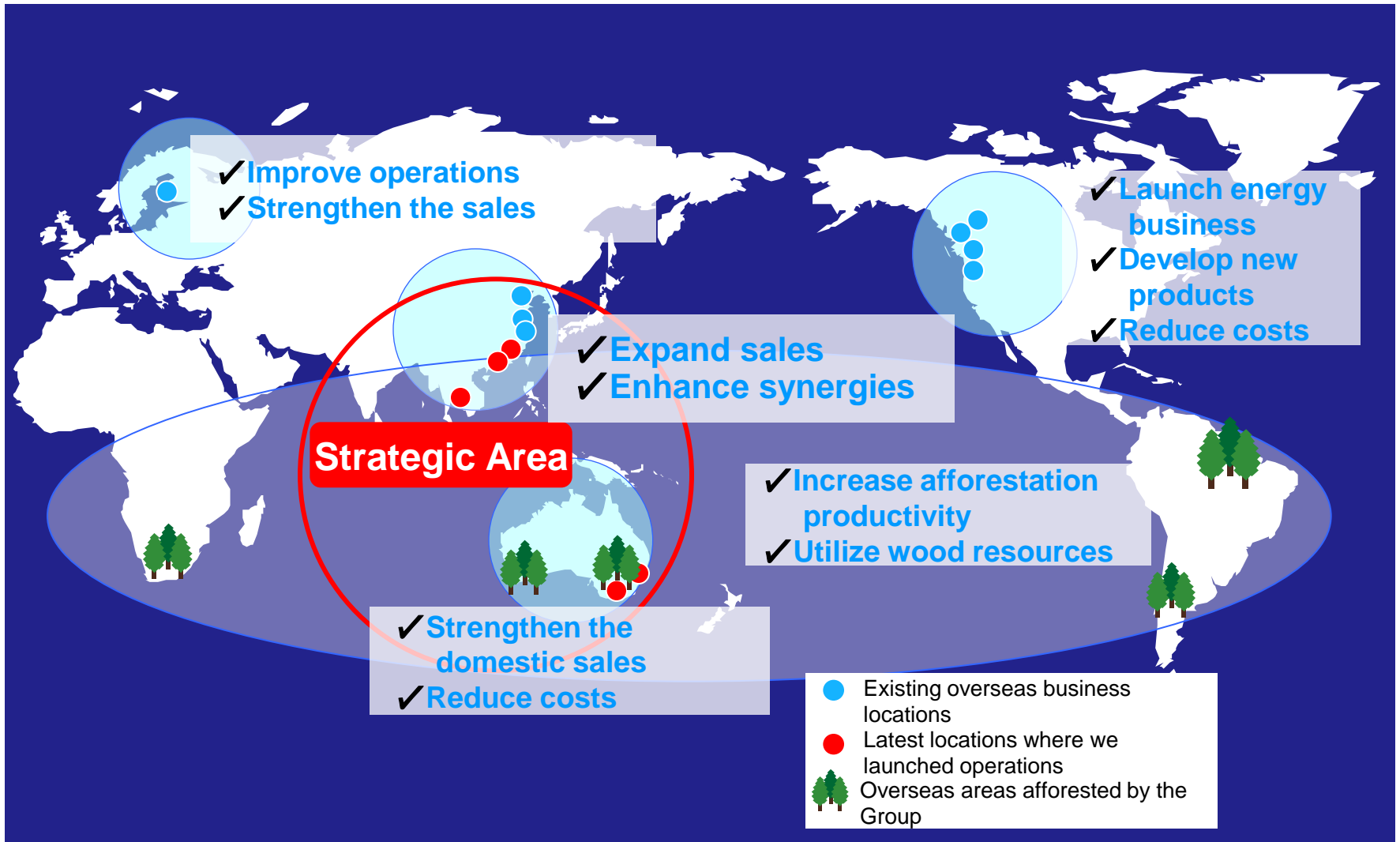
3 Initiatives by Business Field: *Package and Paper Processing*

Business field	Progress / Upcoming measures	
Paperboard	<ul style="list-style-type: none"> ● Energy cost reduction <ul style="list-style-type: none"> ⇒ Yoshinaga Mill: Zero oil consumption (from Jun. 2012) ⇒ Akita mill: Fuel conversion (from Jun. 2013) 	<ul style="list-style-type: none"> ● Expand sales of products attuned to market needs <ul style="list-style-type: none"> ⇒ Soka Mill: Start of operation of equipment for high-quality products (from Jan. 2013)
Packaging cartons	<ul style="list-style-type: none"> ● Sales expansion of aseptic filling system <ul style="list-style-type: none"> ⇒ Started sales of new high speed filler (from Dec. 2012) ⇒ Adopted new functional pack (from May 2013) 	<ul style="list-style-type: none"> ● Procure base paper advantageously <ul style="list-style-type: none"> ⇒ Continue and strengthen measures for promoting in-house production ⇒ Develop paper barrier packaging materials
Household paper products	<ul style="list-style-type: none"> ● Shutdown of the production facilities at Iwakuni Mill in September 2012 <ul style="list-style-type: none"> ⇒ Benefit achieved as planned (¥1.0 b/year) ● Sales of healthcare products increased 50% <ul style="list-style-type: none"> ⇒ +10% YoY growth in FY2012. Further reinforce sales of healthcare products. 	






3 Initiatives by Business Field: *Lumber and Chemicals*

Business field	Progress / Upcoming measures
Chemicals	<ul style="list-style-type: none"> ● Expand dissolving pulp sales ⇒ Increase production by utilizing existing pulp equipment at Kushiro Mill, produce high-value-added lines at Gotsu Works (Start full-scale sales in FY2013) ● Increase production of LCD optical films, expand sales of high-value-added products ⇒ Commercial production using the new coater started in the second half of FY2012; increase in volume in high-value-added for medium-size and compact products field ● Increase production of wood chemicals ⇒ Introduce new equipment at Yufutsu Works, Scheduled to start operation in May 2014 ● Expand sales of functional coating resin ⇒ Introduce new equipment at Iwakuni Works
Lumber and construction materials	<ul style="list-style-type: none"> ⇒ Increase sales volume in line with demand for housing and reconstruction from the disaster ⇒ Strengthen ability to collect biomass fuel

Strengthening earning power of the existing businesses



3 Initiatives by Business Field: Overseas Businesses (2)

Company (country)	Progress situation / Upcoming measures
<p>Australian Paper (Australia)</p>	<ul style="list-style-type: none"> ● Install equipment for recycled pulp (scheduled to start operation in Feb. 2014) Capacity: Approx. 50,000 tons/year Total investment: Approx. ¥5.2 b ● Aim to expand sales of environmentally conscious products 
<p>Siam Nippon Industrial Paper (Thailand)</p>	<ul style="list-style-type: none"> ● Construct a new facility for manufacturing machine glazed paper (scheduled to start operation in summer 2014) Equity stake: Nippon Paper Group 55%, Thai Paper (*) 45% *Wholly-owned subsidiary of SCG Paper <p>Capacity: 43,000 t/y Total investment: Approx. ¥5.5 b</p> <p>Main application</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Packaging</p> </div> <div style="text-align: center;">  <p>Food</p> </div> <div style="text-align: center;">  <p>Healthcare</p> </div> <div style="text-align: center;">  <p>Plywood</p> </div> </div>
<p>Lee & Man Paper (China)</p>	<ul style="list-style-type: none"> ● Sep. 2012: #17 paper machine at Hongmei Mill started operation (coated duplex board 600,000 t/y) ● Sales in Shanghai area through NPG's sales network <ul style="list-style-type: none"> ⇒ Target: 100,000 t/y ⇒ Aim to contribute to NPG's profit by further expanding sales

Company (country)

Progress situation / Upcoming measures

AMCEL
(Brazil)

● AMCEL Overview

Company name: Amapa Florestal e Celulose S.A
 Location: Santana AP, Brazil
 Equity stake: Nippon Paper 100% (from Mar. 2013)
 Forestation area: Approx. 60,000 ha
 (Total land holdings: 300,000 ha,
 Plantable area: 130,000 ha)

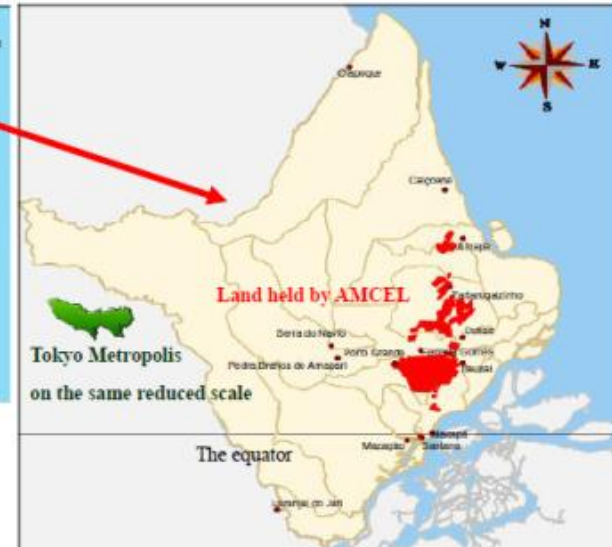
● Strengthen as a stronghold for developing the resource & energy business

⇒ Respond to demand for woody biomass fuel in Europe

【Location map for Amapa】



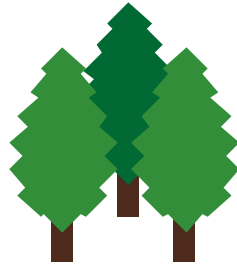
【Location map for land held by AMCEL】



Transform the business structure toward the comprehensive biomass company

Company-owned forests in Japan: 90,000 ha
 Overseas afforested areas: 124,000 ha

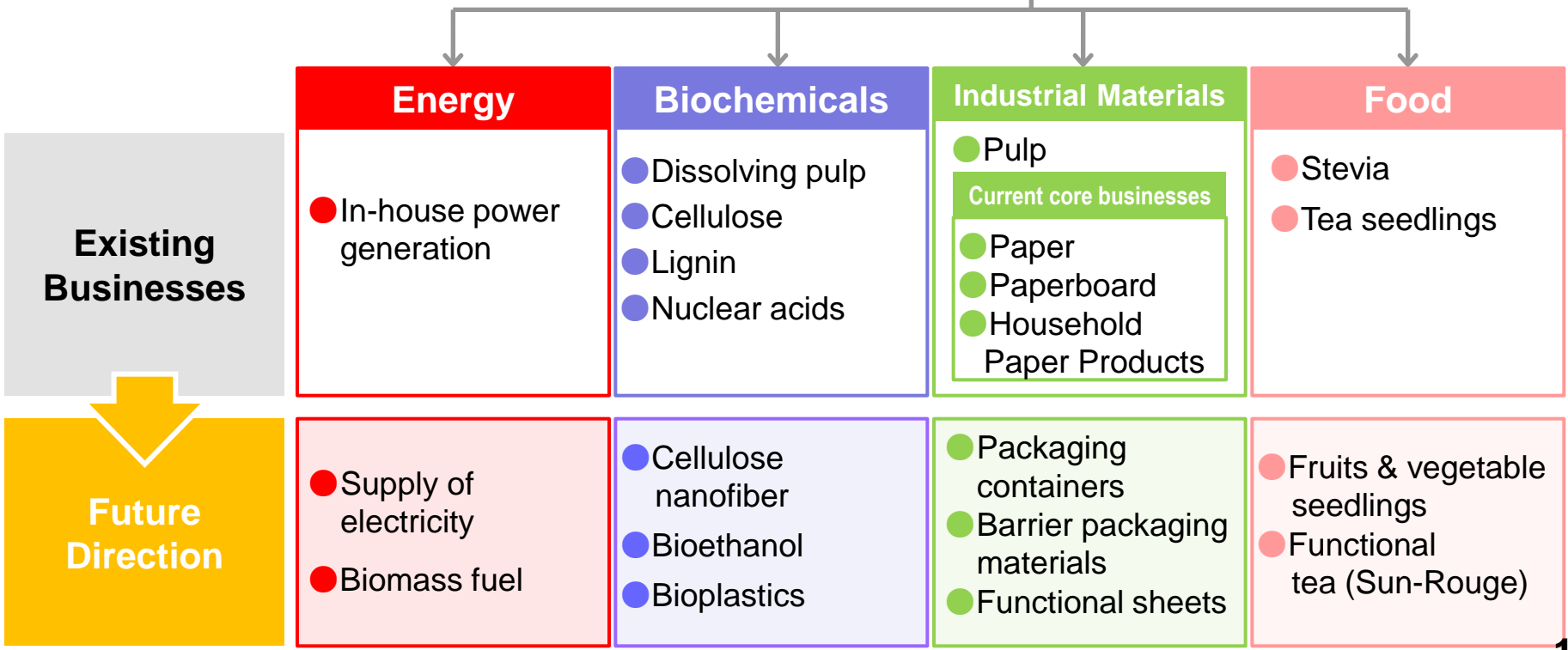
 Total: 214,000 ha



The Group's own biomass resources at home and abroad



Wood and chemical technologies accumulated



Greater Business Opportunities for the Energy Business

External business environment

- Pressure in electricity supply/demand triggered by the Great East Japan Earthquake and the nuclear accident
- Feed-in tariff for renewables
- Increased electricity charges
- Separating electricity generation, transmission and distribution
- Liberalization of electricity markets, including retail

Internal business environment

- Declining domestic demand for paper

Nippon Paper's strengths

- **Electricity supply using existing facilities**
 - Japan's leading power generation capacities except for power utilities (Approx. 1.7 MW)
- **Procurement of wood biomass**
 - Ownership of forest resources (214,000 ha)
 - Japan's foremost wood biomass procurement capability
- **Management resources**
 - Operation and management expertise of power generation facilities using pulverized coal and biomass fuel
 - Long-cultivated wood science and technology
 - Infrastructure and environmental responsive facilities

Future orientation



- Increase electricity sales
- Develop biomass-derived fuel
- Develop new power sources capitalizing on management resources

Initiatives to Develop Energy Business

● Expand electricity supply using existing facilities

- ⇒ Start electricity supply from biomass boilers at Fuji Mill (from Jan. 2012)
- ⇒ Assumed energy saving (Yatsushiro Mill → Contributing to energy saving of Group companies in Kansai area and Shikoku area)

● Expand electricity supply using wood biomass

- ⇒ Expand electricity supply capacity from a biomass boiler at Fuji Mill (from Aug. 2013)
- ⇒ Introduce a biomass boiler at Yatsushiro Mill (scheduled to start power generation in Mar. 2015)

● Introduce photovoltaic power generation and promote development of renewables

- ⇒ Start a mega-solar project at the site of former Komatsushima Mill (Dec. 2014)
- ⇒ Develop new biomass solid fuel
(10-fold improvement of the mixed fuel burning ratio for the existing coal-fired boilers; effective for reducing CO₂ emissions)

● Jun. 2013: Energy Business Department to be reorganized as the Energy Business Division



Biomass boiler No. 3 at Fuji Mill of Nippon Paper Industries



Semi-carbonized pellets made of bark of Cryptomeria

Target sales of ¥50 b or more over the medium term

Biomass power generation project utilizing unused lumber

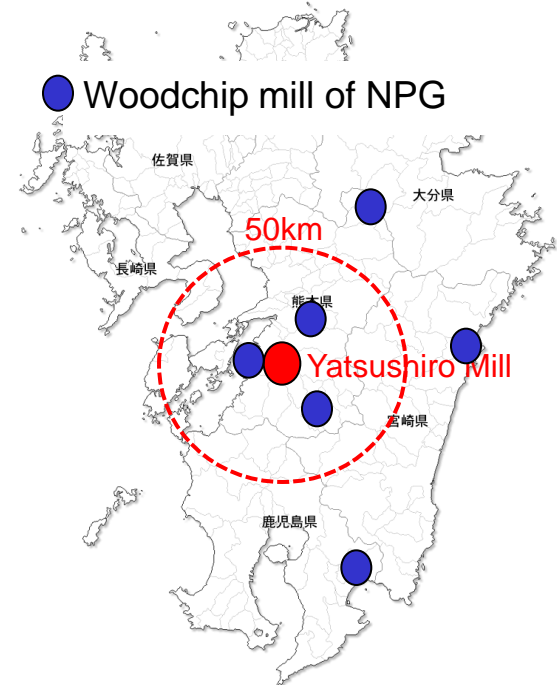
● Facility overview

- Location: Yatsushiro Mill
- Investment: Approx. ¥3.0 b
- Power generation capacity: 5,000 kW
- Fuel: 100% unused lumber (Approx. 70,000 tons/year)
- Start of power generation: Mar. 2015 (plan)



● Project features

Fuel	Collection ability	Leading collection network in Kyushu area
	Transportation cost	Able to collect within a 50km radius centering on Yatsushiro Mill
	Quality	Established know-how, such as control of moisture content and certification of unused lumber
Facilities	Infrastructure	Use of on-site pure water production equipment and wastewater treatment facilities
	Workforce	Use of the existing personnel
Electricity sales rate		33.6 yen/kWh



Mega-solar project using existing infrastructure

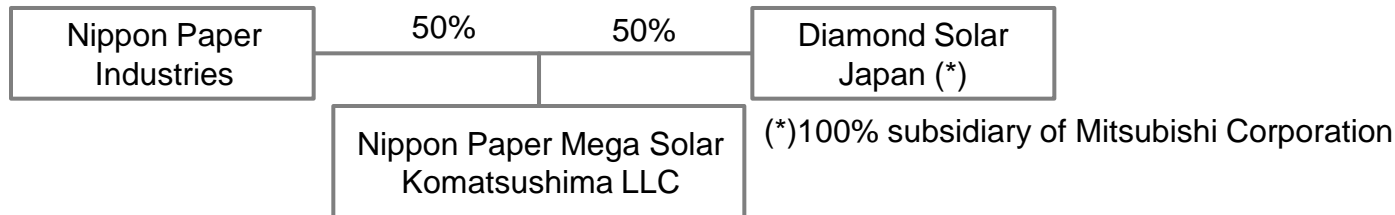
● Facility overview

- Location: Site of former Komatsushima Mill
(Site area: Approx. 250,000m²)
- Power generation capacity: 21MW (solar module capacity)
- Start of power generation: Dec. 2014 (plan)



<Rendering>

● Business scheme



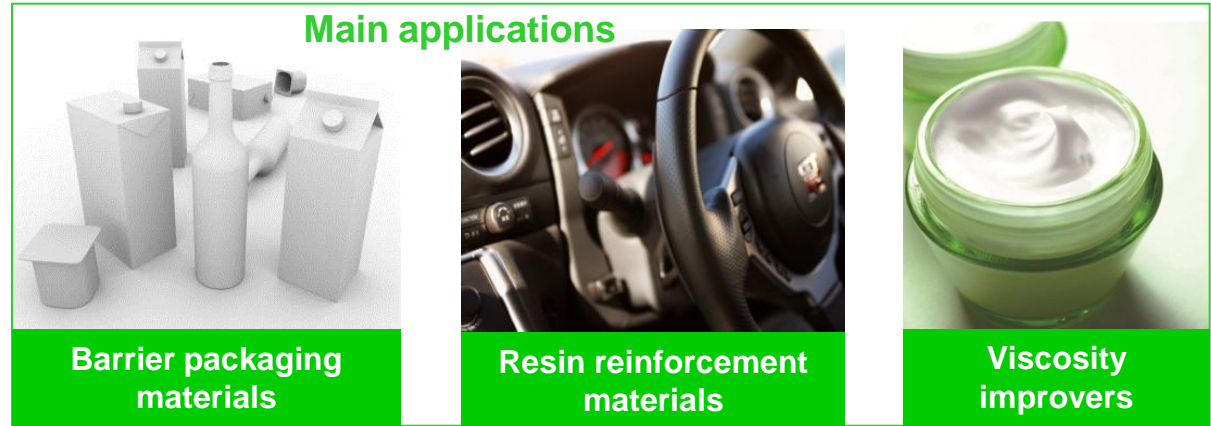
● Project features

Infrastructure	Use of a former mill site and its electricity transmission facilities
Maintenance structure	Maintenance by the existing personnel
Investment	Investment minimized by using project finance Estimated expenditure by NPG: Approx. ¥0.7 b (10% of the total investment amount)
Electricity sales price	42 yen/kWh

Business development for CNF, which is stronger than steel and light as paper

● Features

- Strong and lightweight
- Resilient to temperature change
- Low environmental impact
- High barrier performance



● Construct new verification and production facilities (scheduled to start operation in Oct. 2013)

- Location: Iwakuni Mill of Nippon Paper Industries
- Investment: ¥0.3 b (of which ¥0.2 b is a subsidy*)
- Production capacity: 30 tons/year

* Selected for the Ministry of Economy, Trade and Industry's 2012 innovation site support business, "Subsidies for Maintenance, etc. of Advanced Technology Verification and Assessment Facilities"

Japan's first full-scale facilities to produce cellulose nanofiber by chemical treatment

● Upcoming initiatives

- Establishment of Cellulose Nanofiber (CNF) Business Promotion Office (from Apr. 2013)
- Supply of samples and joint development with users
- Consideration of production facilities for commercial production

Precautions about forward-looking statements, etc.

This presentation document contains statements on the forecasts concerning Nippon Paper Industries, Co., Ltd., and its future plans and management targets. These forward-looking statements are based on the management's assumptions about future events and trends in light of the information currently available, although these assumptions may be incorrect. In addition, various factors could cause actual results of the NPI's operations to differ materially from the statements contained herein.

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