

# New Mid-Term Management Plan

FY2020.03 - FY2022.03 (3 years)

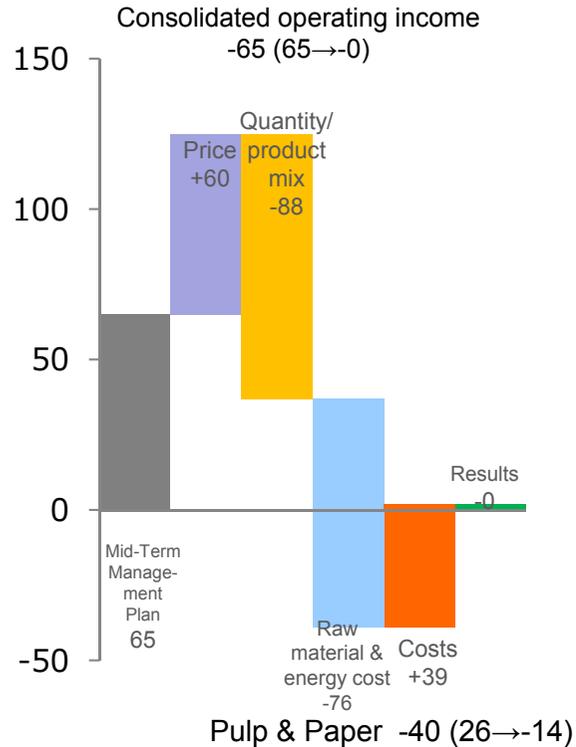
# **Second Mid-Term Management Plan Review**

The period of the Second Mid-Term  
Management Plan

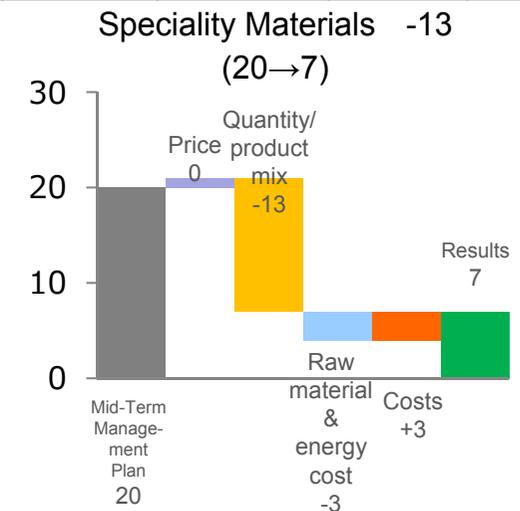
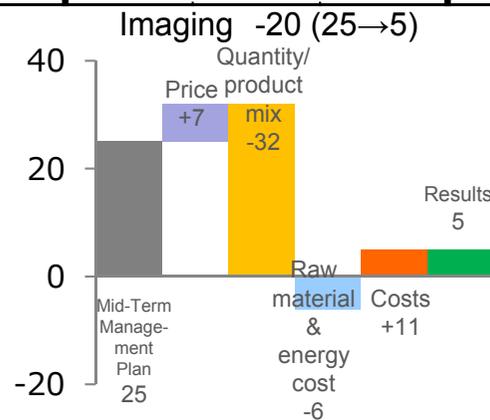
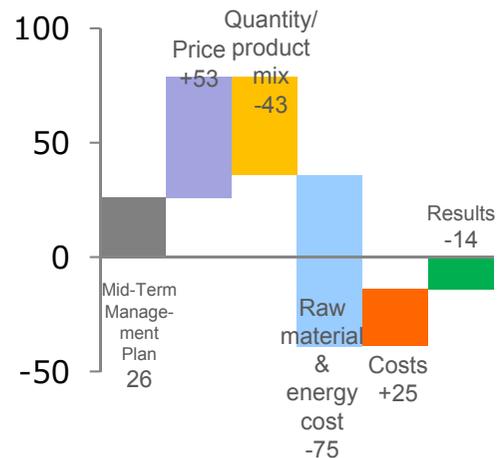
(Unit: 100 Million Yen)

	2016/3 Result	2017/3 Result	2018/3 Result	2019/3 Result (a)	2019/3 Plan (b)	Variance (a - b)
Sales	2,163	2,020	2,015	2,040	2,300	-260
Operating income	39	43	18	-0	65	-65
Ordinary income	22	27	7	-9	45	-54
Interest-bearing liabilities	1,388	1,257	1,193	1,046	1,250	204 decrease
D/E ratio	2.8	2.3	2.0	1.6	2.3	0.7 improvement
Employee	3,697	3,734	3,723	3,668	—	—

(Consolidated operating income for the term ended March 2019, unit: 100 million yen)



	Mid-Term Management Plan	Results	Variance	Price	Quantity/product mix	Raw material & energy cost	Costs	Total
Pulp & Paper	26	-14	-40	53	-43	-75	25	-40
Imaging	25	5	-20	7	-32	-6	11	-20
Speciality Materials	20	7	-13	0	-13	-3	3	-13
Others	2	2	0	0	0	0	0	0
Risk	-8	0	8	0	0	8	0	8
<b>Total</b>	<b>65</b>	<b>-0</b>	<b>-65</b>	<b>60</b>	<b>-88</b>	<b>-76</b>	<b>39</b>	<b>-65</b>
(In Germany)	-	-	-	(51)	(-7)	(-38)	(-6)	(0)



## ① Structural Reform of Printing Paper Business

- A steep rise of raw material & energy cost
- The quantity/product mix worsened due to the decline in demand.
- We stopped the operation of the paper machines No. 4 in the Hachinohe Mill.
- We revised the prices of printing paper.
- We adopted the transportation adjustment payments system.
- The operation in Germany secured a certain level of profits.

## ③ Developing New Businesses

- Collaboration with Oji Group is proceeding steadily to inaugurate the biomass power generation business and household and consumer paper business.
- We are installing new equipment to establish the functional film business, and we are continuing the cultivation of the IJ transfer paper market.
- A steady growth of the water treatment membrane supporting bodies, for products related to non-woven fabrics

## ② Improving Profit Base

- Our alliance with Fujifilm consumed time to achieve high quality base paper and couldn't achieve the planned targets.
- Sales expansion for thermo rewrite and tape base paper targeting overseas were healthy.

## ④ Strengthening Business Foundation and Financial Ground That will Support the Group's Earning Power

- Streamlining of business operation by integrating the accounting departments in the group, unifying fund procurement, etc.
- Dealing with personnel affairs with the new operation base
- Achievement of the targeted decrease in interest-bearing liabilities and D/E ratio
- Reduction of labor costs by soliciting voluntary retirement

## Household and Consumer Paper Business

(Printing Paper Business)

### MPM Oji Home Products Co., Ltd.

(Financing: 70% from Mitsubishi Paper Mills and 30% from Oji Nepia)

- Product type: Tissue paper and toilet paper
- Production volume: Approx. 18,000 tons per year
- Investment amount: Approx. 6 billion yen



## Kyoto's new coating machine

(Imaging Business)

- Product type: Functional films (Electronics-related products, etc.)
- Sales: Approx. 2 billion yen
- Investment amount: Approx. 1.5 billion yen



## Inclined-wire paper machines

(Specialty Materials Business)

- Product type: Inorganic fiber paper, paper wiper, synthetic fiber paper
- Installed in Fuji factory, KJ Specialty Paper Co., Ltd.



## Biomass power generation business

### **MPM Oji Eco Energy Co., Ltd.**

(Financing: 45% from Mitsubishi Paper Mills and 55% from Oji Green Resources)

- Production Capacity: Approx. 75,000kW  
(Power generation capacity)
- Sales: Approx. 11 billion yen per year
- Investment amount: Approx. 24 billion yen



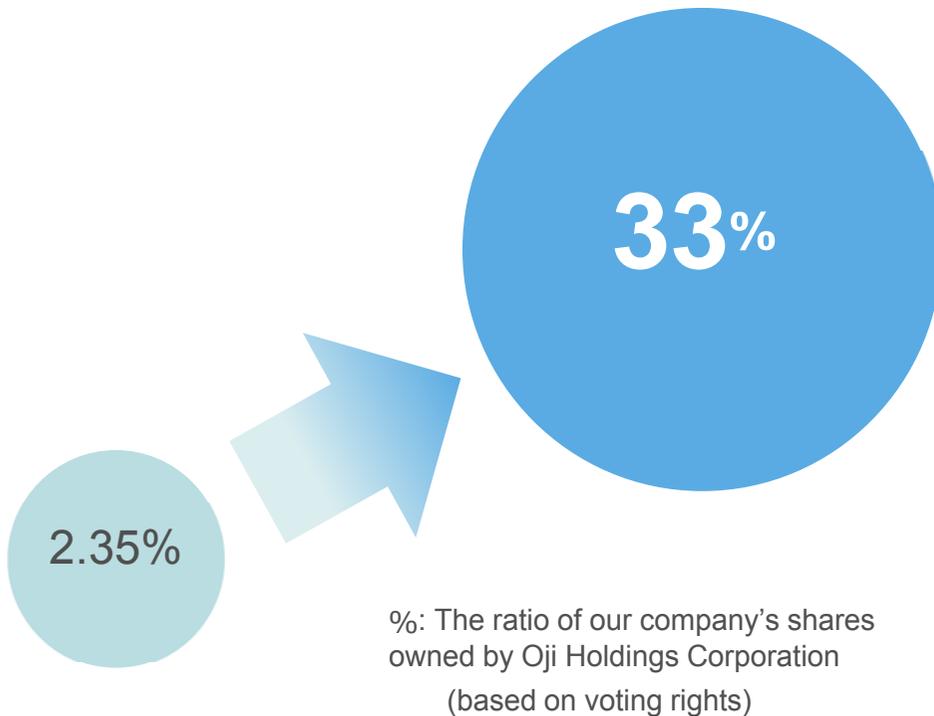
# **New Mid-Term Management Plan**

## Second Mid-Term Management Plan

Capital alliance

Oji Holdings holds 33% of our company's shares

⇒ Our company became Oji Holdings' equity-method affiliate



## New Mid-Term Management Plan

Business alliance

Broadening and cementing of business alliances

Biomass power generation business  
Household and consumer paper business  
Communication paper field



Synergy encompassing all business fields



Achieve a synergy effect of 2.5 billion yen or more by the final year of the plan

- Equipment investments for joint venture businesses, etc.
- Reducing the costs for raw material & energy
- Reducing the supply and logistics costs
- Reducing the chip procurement and logistics costs
- Streamlining of production system, etc.

## Period

FY 2020 to FY 2022 (3 years)

## Basic Principles

Strengthening and diversifying the business base for a new stage

## Key strategies

- 1 To establish a robust management base through the alliance with Oji Group
- 2 To make structural reforms and enrich existing businesses
- 3 To diversify the business base by fostering new profit pillars

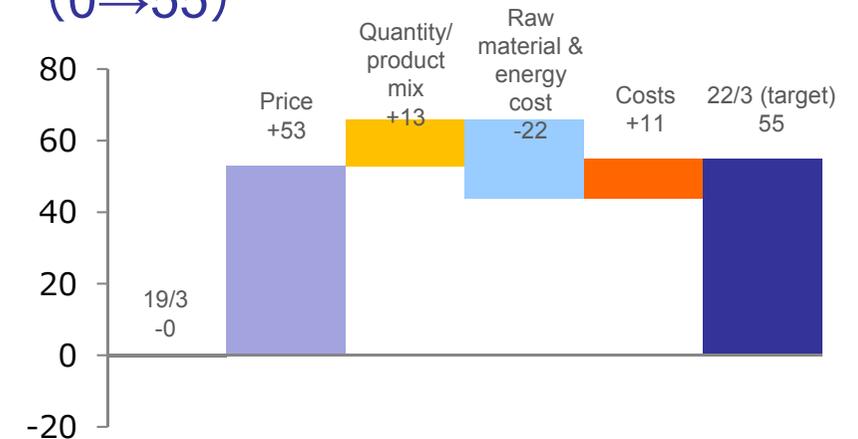
● Management targets value

Targets of the New Mid-Term Management Plan

(Unit: 100 million yen)

	2019/3 Result (a)	2022/3 Plan (b)	(b) - (a)
Sales	2,040	<b>2,200</b>	+160
Operating income	-0	<b>55</b>	+55
Ordinary income	-9	<b>60</b>	+69
Interest-bearing liabilities	1,046	<b>980</b>	66 decrease
D/E ratio	1.6	<b>1.3</b>	0.3 improvement

● Change in operating income +55 (0→55)



● Reference

\$1 = ¥110

€1 = ¥130

Crude oil price in Dubai is \$65 per barrel

● Management targets value (for each segment)

Sales	2019/3 Result (c)	2022/3 Plan (d)	(d) - (c)
Pulp & Paper	1,568	<b>1,640</b>	+72
Imaging	353	<b>395</b>	+42
Speciality Materials	175	<b>220</b>	+45
Others	148	<b>155</b>	+7
Adjustment	-204	<b>-210</b>	-6
Total	2,040	<b>2,200</b>	+160

Operating income	2019/3 Result (e)	2022/3 Plan (f)	(f) - (e)
Pulp & Paper	-14	<b>24</b>	+38
Imaging	5	<b>10</b>	+5
Speciality Materials	7	<b>18</b>	+11
Others	3	<b>4</b>	+1
Adjustment	-1	<b>-1</b>	0
Total	-0	<b>55</b>	+55

● Investment Plan

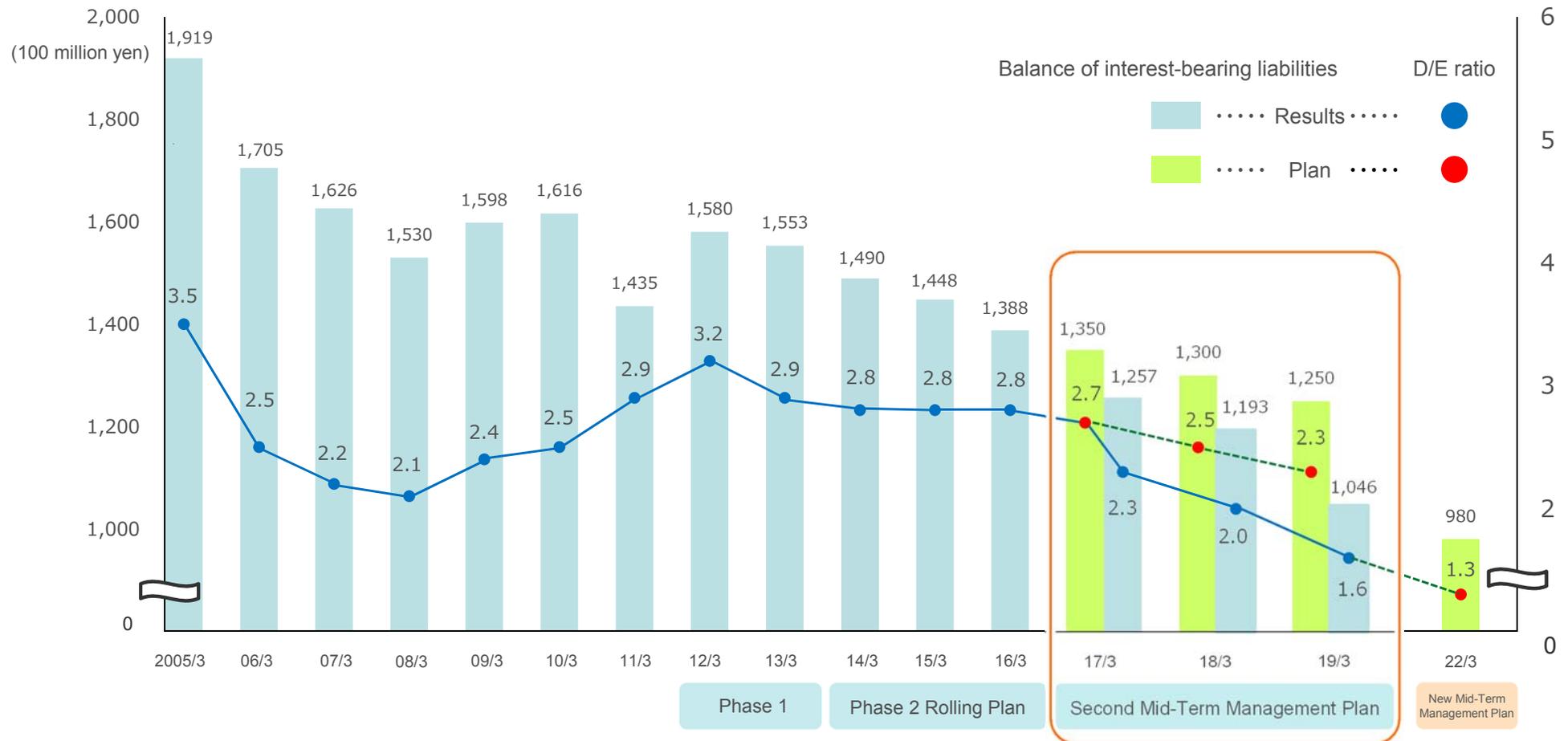
Approval Base (Unit: 100 million yen)

Investment plan	3 years for mid-term plan
Strategic investment	<b>100</b>
Investment in maintenance and improvement	<b>150</b>
Total	<b>250</b>

Main content of strategic investment

- Hachinohe: To improve the efficiency of the production facilities
- Hachinohe : Handling new products
- Kitakami: Handling new products
- Takasago: Installing new non-woven fabrics machines, etc.

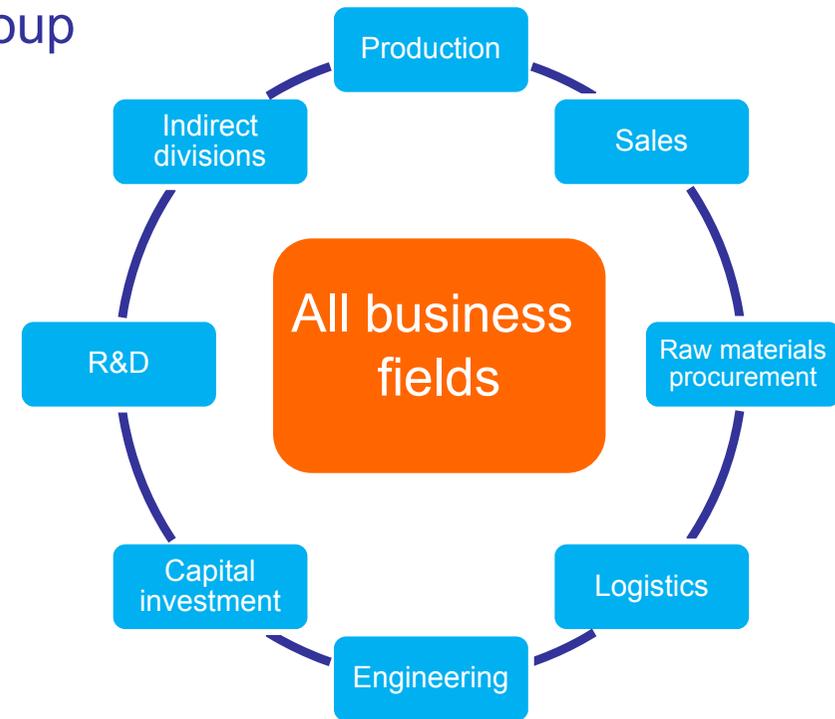
	2016/3 Result	2017/3 Result	2018/3 Result	2019/3 Mid-term Plan Targets	2019/3 Result	Second Mid-term Plan's Improved Results	2022/3 New Mid-term Plan Targets	New Mid-term Plan's Improvement Target
Interest-bearing liabilities	138.8 billion yen	125.7 billion yen	119.3 billion yen	125 billion yen	104.6 billion yen	20.4 billion yen reduction	98 billion yen	6.6 billion yen reduction
D/E ratio	2.8	2.3	2.0	2.3	1.6	0.7 improvement	1.3	0.3 improvement



## Broadening and cementing of the effect of the capital and business alliances with Oji Group

### (1) Basic strategy

- We aim to enhance our competitiveness by rapidly improving efficiency and cutting down costs by building strong cooperative relationships in all business fields.
- We will stabilize the management base and reduce interest-bearing liabilities further by strengthening the financial ground.



### (2) Goal

- The goal of the business alliance by the final year of the plan (the term ending March 2022) is to achieve an operating income of 2.5 billion yen or more.
- To strengthen the business base by expanding the alliances in multiple businesses and enhancing synergistic effects.
- To strengthen the financial ground (interest-bearing liabilities are 100 billion yen or less; D/E ratio is 1.3.)

## ◆ Stabilizing the profitability of the Printing Paper Business

### (1) Basic strategy

- Early exertion of the effect of the alliance with Oji Group
- Marketing that prioritizes profit
- Changing the product lines

### (2) Major policies

- **To mutually strengthen OEM**
- **To change the sales policies of Mitsubishi Paper Sales Co., Ltd.**

**(Shift to the distributor of Oji Paper Co., Ltd. in January this year)**

- To reduce procurement and logistics costs including mutual utilization of warehouses and logistics systems.
- To establish a production system according to the demand trend and improve production efficiency.
- To reduce costs for buying raw material & energy.



Manufacturing facilities of household and consumer paper (above) and products (below)



## To make structural reforms and enrich Imaging Businesses

### (1) Basic strategy

- To expand our alliance with Fujifilm further
- To secure profit from the maturing existing products by actively expanding into overseas markets

### (2) Major policies

- To cement our alliance with Fujifilm to increase the volume of base paper
- To expand the application scope of ink-jet paper and promote sales in emerging economies
- To expand sales of flexographic and screen printing market in Asia



Kyoto's new coating machine

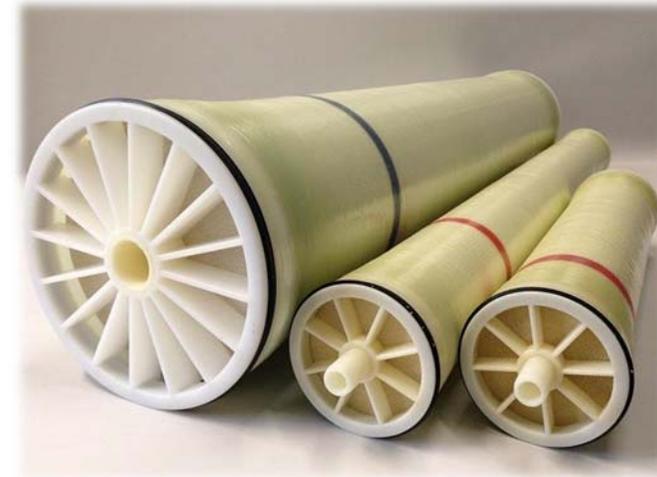
## To make structural reforms and enrich the Speciality Materials Business

### (1) Basic strategy

- To expand sales of non-woven-fabrics-related products and install more paper machines
- To expand sales in Asian and European markets

### (2) Major policies

- To increase sales of base materials for RO membrane, MBR membrane, and Olefin membrane
- To supply battery separators to Beijing National Battery Technology Co., Ltd. on a full-scale basis
- To expand sales of decorative sheet base paper in Southeast Asia
- To expand sales of tape base paper in Europe
- To make an early launch of new products manufactured by the new inclined-wire paper machines



Water treatment element



China national standards filter evaluation device  
(Installed in Chinese subsidiaries)

● The new businesses we are preparing for industrialization (Imaging)

Domain	Possible applications	Features	Goals during the Mid-Term Plan
Materials for the electronics industry	 <p>Dry film resist products</p>	<ul style="list-style-type: none"> <li>➤ High chemical resistance</li> <li>➤ High resolution</li> <li>➤ The etching of difficult-to-process insulating resin is possible.</li> </ul>	<ul style="list-style-type: none"> <li>• To expand the lineup of dry film resists and handle custom orders</li> <li>• To launch the system for processing advanced insulating materials</li> </ul>
Electro-conductive films	 <p>Touch panel</p>	<ul style="list-style-type: none"> <li>➤ Silver mesh films that are compatible with large touch panels</li> </ul>	<ul style="list-style-type: none"> <li>• To increase new customers for the bonded products with high added value that meet customers' needs</li> </ul>
IJ transfer paper	 <p>Dye printed textile</p>	<ul style="list-style-type: none"> <li>➤ The newly developed IJ transfer paper for textile</li> </ul>	<ul style="list-style-type: none"> <li>• To expand the sales of sublimation transfer paper (for polyester fabric)</li> <li>• To commercialize thermo-compressed transfer paper (for cotton and nylon)</li> </ul>

● The new businesses we are preparing for industrialization (Speciality Materials)

Domain	Possible applications	Features	Goals during the Mid-Term Plan
Carbon nanotube related	 Electro-conductive paint	<ul style="list-style-type: none"> <li>➤ High electro-conductivity</li> <li>➤ High heat generating</li> <li>➤ High transparency</li> </ul>	<ul style="list-style-type: none"> <li>• To handle carbon nanotube dispersion liquid, paint and film for preventing electrostatic buildup and for heat generation</li> </ul>
Thin film materials shielding electromagnetic waves	 Electro-conductive non-woven fabric	<ul style="list-style-type: none"> <li>➤ Extremely thin shielding material of 10μm thickness</li> <li>➤ High-strength and high shielding properties</li> <li>➤ Superior applicability in electronic circuit boards</li> </ul>	<ul style="list-style-type: none"> <li>• To make base material and launch products with electro-conductive non-woven fabrics</li> </ul>
Recycled carbon fiber non-woven fabric "Carboplas Ripro"	 Non-woven sheet	<ul style="list-style-type: none"> <li>➤ Proactive use of recycled materials</li> <li>➤ Uniformity on par with virgin materials</li> <li>➤ Conductivity and shielding properties</li> </ul>	<ul style="list-style-type: none"> <li>• To develop acoustic diaphragms, heating elements, friction materials, electromagnetic wave shielding materials, reinforcing materials for CFRP, etc.</li> </ul>

● Plastic replacement business

Domain	Possible applications	Features	Goals during the Mid-Term Plan
Barrier paper	 <p>Food package</p>	<ul style="list-style-type: none"> <li>➤ It combines barrier property, heat sealability, etc. that are required for food packaging with coated paper only</li> <li>➤ A paper material that has defibering properties, which make it biodegradable and recyclable</li> </ul>	<p>(It has been successfully introduced in Germany and has been adopted by many leading food manufacturers in Europe, and a development project is ongoing to introduce it to multiple global companies.)</p> <ul style="list-style-type: none"> <li>• To start the expansion into the Asian region including Japan in the first half of this term</li> <li>• To plan domestic production</li> </ul>
Bleached kraft paper	 <p>Paper bags, etc.</p>	<ul style="list-style-type: none"> <li>➤ A bleached kraft paper that takes advantage of the manufacturing technologies we've been cultivating over many years; gives it superior suitability for printing and bag manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• To expand sales as bleached kraft paper in the Asia region including Japan</li> <li>• To develop high added value products such as barrier paper based on the bleached kraft paper</li> </ul>

The statements concerning expected numbers and business forecasts in this document have been prepared based on predictions of the economic environment in the future and information available at the present point in time. The actual numbers in our financial results and performance in the future may differ.