

Message from the Chairman

**Under our new management team,
we will ramp up our efforts to
transform our business structure
and mutually unify the
Group companies as one.**

Fumio Manoshiro

Chairman & Director
Nippon Paper Industries Co., Ltd.



Launch of Our New Management Team

I am reporting as Chairman & Director, having been newly elected at the Ordinary General Meeting of Shareholders held in June 2019 and approved by the Board of Directors, alongside the newly elected President and Representative Director, Mr. Toru Nozawa.

In FY2019/3, the first year of our Sixth Medium-Term Business Plan, the reorganization of production structure progressed on schedule, and we made multiple decisions related to investments in promising growth areas such as packaging, household paper products and healthcare products, and chemical products. These investments to date are showing steady results, and I am convinced that now the proper preparations have been made for Group growth. I came to the conclusion that the Company should have a new leader as I realized the time was right to refresh the management team and swiftly transform our business structure.

Mr. Nozawa has many years of finance and accounting experience, which has made him highly proficient at making precise readings of actual trends at the front lines of businesses from a financial perspective. Top management has limited opportunities to make direct judgments on site or to assess

local materials, and therefore his abilities are indispensable for leading our Group, and this is what I hold in high regard. I believe he will steer the Group by making full use of the leadership he exerted during his five years as General Manager of the Corporate Planning Division, in which he demonstrated a breadth of knowledge and foresight and gained the trust of those around him.

My Mission as Chairman & Director

While the role of business execution has been assigned to Mr. Nozawa, my mission is to take a supervisory perspective over management to strengthen governance and increase unification in the Group by strongly connecting management to the front lines.

The Company has worked continuously to strengthen its governance system, which includes adopting an executive officer system and introducing outside directors in FY2014/3. Moreover, while establishing our new management, we have taken another step to make steady improvements, increasing the number of outside directors by one to a total of three. As the Chairman of the Board of Directors, and someone who has willfully withdrawn representation rights, I will realize the transparent separation of management oversight and business execution to maintain higher objectivity of the Board of Directors, which will further strengthen governance.

In 2015, we officially stated our corporate philosophy, driven by the belief that in order to become a Group that is trusted by and necessary to society in the future, we need to clarify our significance as a Group and share it with each employee. I am proud that under our slogan, “Shaping the future with trees,” we squarely face the challenges that stand in the way of a sustainable society. As pervasive as our philosophy is throughout the Group, top management will continue to frequently visit our mills and training facilities and instill the essence of it among our employees through comprehensive communication.

As we continue to face a challenging business environment, I will closely work with Mr. Nozawa to further accelerate our efforts, and thereby achieve sustainable growth for the Group as a whole. I ask all of our stakeholders for their further understanding and support.

A handwritten signature in black ink, appearing to read 'F. Manoshiro', with a horizontal line extending to the right.

Chairman & Director
Nippon Paper Industries Co., Ltd.



We will swiftly forge ahead with measures under the Sixth Medium-Term Business Plan toward achieving our operating income target of ¥50 billion as quickly as possible.

Toru Nozawa
President and Representative Director
Nippon Paper Industries Co., Ltd.

My name is Toru Nozawa and I was recently appointed President and Representative Director of Nippon Paper Industries Co., Ltd. After entering the Company in 1981, I dedicated 33 years to its financial areas and then undertook corporate planning duties, including formulation of the medium-term business plan, as the General Manager of the Corporate Planning Division for five years. We will steadily work to “reorganize the production structure of the paper business and make maximum use of in-house facilities” and “expand business in growth areas and achieve early commercialization of new businesses,” the two themes adopted under our Sixth Medium-Term Business Plan. Through these efforts and by advancing the transformation of our business structure, we will accelerate growth of the entire Nippon Paper Group.

01 Review of FY2019/3

In FY2019/3, the first year of the Sixth Medium-Term Business Plan, we recorded net sales of ¥1,068.7 billion and operating income of ¥19.6 billion. While we realized improvements in both ends from the previous year, we were not able to reach our operating income target of ¥25 billion as a result of the price hike in raw materials and decrease in sales volume of paper, which did not live up to our expectations. The paper and paperboard business in particular has continued to face severe business conditions, with an operating deficit for two years in a row. In addition, production structure reorganization costs, impairment loss in the newsprint business, and allowance for environmental costs recognized as a part of total extraordinary loss resulted in a significant loss attributable to owners of parent of ¥35.2 billion in FY2019/3.

We have determined that addressing the costs associated with reorganizing the production structure of the paper business and the impairment loss of the newsprint business are necessary for the Company to continue to grow in the future. While FY2019/3 was a year for steady implementation of sturdy measures toward future growth, in FY2020/3 we will make concerted efforts to drive our business performance upward.

FY2019/3 Consolidated Financial Results and Sixth Medium-Term Business Plan Operating Targets (FY2021/3)

	FY2018/3 Results	FY2019/3 Results	FY2021/3 Targets
Net sales	¥1,046.5 billion	¥1,068.7 billion	¥1,115.0 billion
Operating income	¥17.6 billion	¥19.6 billion	¥47.0 billion
Ordinary income	¥18.6 billion	¥23.9 billion	—
Net income (loss)*1	¥7.8 billion	¥(35.2) billion	—
EBITDA*2	¥78.1 billion	¥82.5 billion	¥110.0 billion
Debt/equity ratio	1.61 times	1.76 times	1.5 times or less
ROA	1.9%	2.2%	3.8%
ROE	1.8%	(8.6)%	At least 5%

*1 Profit (loss) attributable to owners of parent

*2 EBITDA = Operating income + interest income + dividend income + depreciation

02 Reorganizing the Production Structure of the Paper Business

Our ultimate goal for FY2020/3 is to finish reorganizing the production structure of the paper business. Through this reorganization, we will achieve lower fixed costs and higher machine utilization rates, adjusting the business structure to the annually declining demand in order to boost our competitiveness. This restructuring will reduce our annual paper production capacity by 760 thousand tonnes as a result of shutting down eight paper machines and two coating machines, moves we expect will lead to a ¥11 billion improvement in operating income for the paper business. While gaining the understanding of our customers, we will rebalance product grades across our production sites and complete the shutdown of machinery on schedule with the aim of moving the paper and paperboard business back into the black.

03 Our Initiatives in Growth Areas

The Group has identified the packaging, household paper and healthcare, chemical, energy, and wood products businesses as its five growth areas and each business is demonstrating steady growth. In the daily-life products business, we have decided to invest in increasing the capacity of our packaging, household paper products and healthcare products, and chemical businesses in preparation for the anticipated increase in demand going forward. FY2020/3 will be a year of preparation for advancing our construction work aimed at boosting production capacity in order to ensure that our capital investments come to fruition according to plan from FY2021/3.

The energy business made its expected contributions to operating income through the stable operations of the biomass co-firing power generation facility of Nippon Paper Ishinomaki Energy Center, which commenced operations in March 2018. At the Hokkaido Mill (Yufutsu), we decided to utilize its land and facilities as well as the technologies and know-how cultivated through its paper production for the establishment of the Yufutsu biomass power generation business. The business will commence operations in January 2023. The biomass power generation business is also under consideration for the Iwakuni Mill (Yamaguchi) as well. We will pursue stable, long-term growth in operating income by forging ahead with the establishment of the biomass power generation business in which we can fully leverage the Group's capabilities.

In the wood products and construction related business, we see the potential for synergy with the energy business and biomass fuel sourcing. We will accelerate the expansion of our biomass fuel business centered on Nippon Paper Lumber Co., Ltd., which handles a significant volume of domestic lumber products and has developed a robust network for the collection of wood chips.

04 The Potential of Innovative Materials

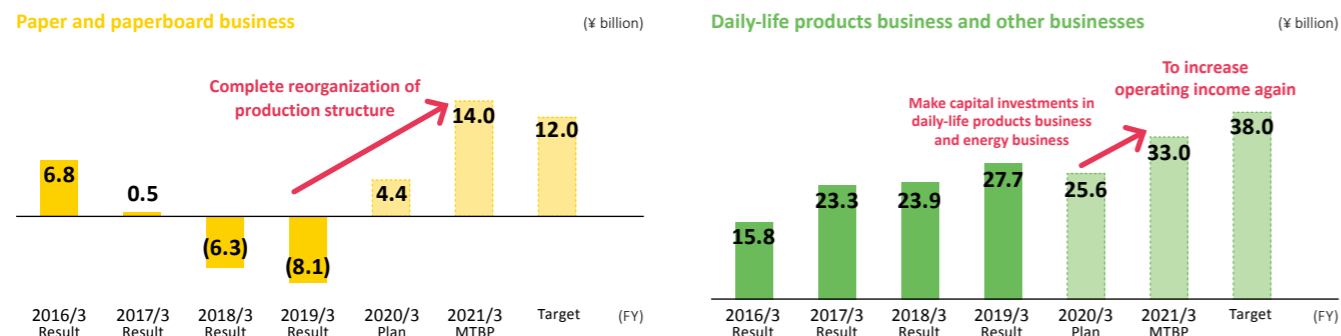
Early commercialization and development of applications that leverage the functions and features of CELLENPIA®, a cellulose nanofiber (CNF) product, SHIELDPLUS®, Minerpa®, and other innovative materials are our matters of priority at the moment.

CELLENPIA® is being gradually adopted in the use of food and cosmetic products. The Company's strengths lie in its ability to create various CNFs, such as TEMPO-oxidized CNFs, carboxymethylated CNFs, and CNF-reinforced plastic. By simply making small adjustments or changes to its process, it is possible to generate CNFs with completely different features. Going forward, we will expand the lineup of CNFs and offer finer solutions that cater to the needs of customers.

SHIELDPLUS® products, which are paper products with moisture- and oxygen-barrier properties, have received extraordinary reviews since their release in 2017. We sense the trend toward reviewing the value of paper products due to marine plastic pollution, and we want SHIELDPLUS® to contribute to the creation of a sustainable society by developing good applications together with our customers who understand the merits and value of paper. The day when using less plastics will change our daily lives is still down the line, but the Olympic and Paralympic Games Tokyo 2020 is a tremendous opportunity for us to let people around the globe know what kinds of paper materials and packaging are used in Japan. We will do our utmost to put various products on the market to take advantage of the opportunity presented by Tokyo 2020.

Progress in Enhancing Competitiveness of Existing Businesses and Transforming Business Structure

Operating Income (Loss) by Business Segment




05 The Driving Force behind Group Growth

The Group's human resources are the valuable assets and the driving force behind its ongoing initiatives toward continuous growth. All of our highly skilled employees challenge each and every task in earnest. They are also fully aware of the spirit of Challenge, Fairness, and Teamwork—the values included in the Group Mission. Going forward, I would like to emphasize the importance in awareness of timeliness. My desire is to establish an organization that promotes the active participation of women and allows our employees to further exhibit their individual strengths and fully utilizes the abilities of our employees, who have a diverse sense of values.

On top of that, we produce a wide range of wood pulp and create not only paper products but also chemicals and various other products from different types of wood pulp. These are our great strengths and the accumulation of these technological capabilities is the key to our growth going forward.

Moreover, we will continue to take a cautious approach to environment- and safety-related matters in order to fulfill our corporate social responsibilities. We have to take additional measures from a safety perspective, aiming for zero occupational accidents. From an environmental point of view, it is imperative to complete PCB disposal. Through the management team's strict management of and communication with the mill managers, department managers, section managers, and section chiefs, we will desperately instill a sense of environmental protection and safety awareness in every employee.



We will contribute to the creation of a sustainable society through the realization of our Group Mission.

06 Realizing the Group Mission

Our corporate philosophy states that “The Nippon Paper Group aims to contribute to better living and cultural progress everywhere it does business.” The paperboard business and growth businesses are contributing to materialize “better living” while the paper business is working to realize “cultural progress.” By successfully operating these wood-based businesses, we believe that we can constantly offer new value and contribute to the creation of a sustainable society. The realization of this Group Mission represents exactly what the Group is trying to achieve.

I believe the companies that can survive are the ones that proactively contribute to the creation of a sustainable society, an urgent challenge for humankind. The Company participates in the United Nations Global Compact and supports the 10 principles covering the four fields of human rights, labor, environment, and anti-corruption.

07 Message to Stakeholders

My No. 1 priority is to reach our operating income target of ¥50 billion, the goal we set out to achieve, as quickly as possible. We believe that this target is imperative for achieving stable growth and for providing returns that meet the expectations of shareholders, business partners, employees, and all other stakeholders. Meanwhile, due to the Company's large amount of debt, we will remain carefully observant of financial discipline.

We constantly revert to our Group Mission and let every employee come up with fresh ideas as a Group toward its realization. Ultimately, I want to evolve Nippon Paper into a corporate group that offers a diverse lineup of products and businesses to the extent where the kind of products Nippon Paper produces and specializes in will not be so obvious anymore.

I ask all of our stakeholders, including shareholders and investors, for your continued understanding and support going forward.



President and Representative Director
Nippon Paper Industries Co., Ltd.

Paper Business



Our Vision

Amid declining demand, we will pursue new paper-related possibilities and applications while establishing a stable profit structure.

Kazumori Fukushima
 Senior Managing Executive Officer
 General Manager
 Printing Paper Sales Division
 Nippon Paper Industries Co., Ltd.

<p>Our Strengths</p> <ul style="list-style-type: none"> • Technological capabilities for creating new products • Production bases and sales (distribution) network throughout Japan • A broad product lineup 	<p>Our Challenges</p> <ul style="list-style-type: none"> • Increasing cost competitiveness of commoditized products • Sales price stabilization • Adjusting production, logistics, and inventory systems to small lot production for a variety of products
<p>Our Opportunities</p> <ul style="list-style-type: none"> • Increasing prevalence of digital printing and growth in printer outsourcing • Rising prevalence of cross-media advertising and publishing • Shift from plastics to paper products 	<p>Our Threats</p> <ul style="list-style-type: none"> • Reduced circulation of print media • Shift to electronic media • Rising logistics unit costs



Printing paper



Business communication paper

FY2019/3 Performance and Challenges

Commencing Efforts to Reorganize the Production Structure of the Paper Business and Realizing Price Revisions as Planned

In FY2019/3, the paper market continued to contract, mainly due to the reduced circulation of newspapers and magazines and sluggish demand for printed advertisements.

Facing an increasing gap between supply and demand, which resulted from stagnating demand over the long term, and sluggish market conditions, it was an urgent task for us to drastically improve our profit structure. Under these circumstances, we commenced efforts to reorganize our production structure with the aim of optimizing our production activities in anticipation of decreasing demand and reducing fixed costs and other expenses. Then, our competitors made announcements to close and convert their facilities one after the other, leading to significant improvements in the supply–demand balance, particularly in printing paper. In regard to the newsprint business, we recorded an impairment loss on fixed assets as we continued to face difficult conditions in our business environment.

In light of the soaring raw material prices and logistics costs, we also pursued efforts to revise the prices of business communication paper and newsprint. We announced these price revisions in November 2018 and made an early settlement, allowing us to reap the benefits, mainly in the fourth quarter. We were also able to revise the price of newsprint. For export products, we gradually revised prices from the start of the fiscal year thanks to increased demands in the overseas market. However, because the sharp rise in raw material prices occurred before the effect of price revisions was realized, we posted unfavorable results in terms of profit.

The production structure reorganization is progressing as planned. However, due to our lineup of numerous business communication and industrial paper products customized for our individual customers, we need to be particularly cautious in confirming quality levels. For newsprint, which is used every day, we need to not only confirm quality but also ensure a stable supply on a daily basis. In order not to inconvenience our customers, we are bringing together all of our technological capabilities and will move forward toward successfully completing the reorganization.

Future Strategies

Focus on Realizing the Effects of Our Production Structure Reorganization and Stabilizing Market Conditions

Since the domestic paper market is expected to continue to contract, we will implement two major initiatives to secure stable profits.

The first is to thoroughly realize cost-reducing effects through production structure reorganization. In addition to cutting fixed costs, we must improve efficiency in a variety of other areas. While our abundant product lineup is one of our strengths, after completing the reorganization, we will need to adapt larger facilities to small lot production for a wide variety of products in an effective manner. We will search for an optimal balance between production efficiency, distribution efficiency, and inventory turnover as we strive to reduce our overall costs.

The second is to achieve market stability. To do this, we must take every measure possible to maintain a sound balance between supply and demand, such as promoting a shift to exports and producing profitable products as necessary, while closely observing the market conditions in both Japan and overseas.

We do not anticipate growth in demand for newsprint and printing paper in both overseas and domestic markets. However, we do expect solid demand for business communication paper and industrial paper, such as labels and packaging paper. As awareness of marine plastic pollution grows around the world, we will expand our sales of paper for packaging materials on a global basis.

Paperboard Business



Our Vision

We will accurately capture users' needs and meet increasing demand for containerboard through unique, differentiated products.

Satoru Muto

President
Nippon Tokai Industrial Paper Supply Co., Ltd.

Our Strengths

- Well-balanced deployment of mills across Japan
- Possession of linerboard machines using self-manufactured softwood kraft pulp
- Substantial research and development capabilities
- Long-standing relationships of trust with containerbox manufacturers and end users
- Sales capabilities to quickly propose solutions

Our Challenges

- Price maintenance
- Securing sales volume
- Reduction of sales cost

Our Opportunities

- Expected growth in demand for containerboard in Japan
- Exports to high-growth Asian markets
- Development of new products using new materials

Our Threats

- Sluggish market growth due to economic deceleration
- Soaring raw material and fuel prices
- Increasing logistics costs
- Deterioration of supply-demand balance



Containerboards

FY2019/3 Performance and Challenges

Realizing Price Revisions as Planned Even in the Face of Soaring Raw Material and Fuel Prices

In FY2019/3, with regard to domestic sales of containerboard, our mainstay product, sales to end users who selected us as their designated supplier were up, while sales to through-process manufacturers and small and medium-sized containerbox manufacturers were down. Exports were solid due to the rise in demand for containerboard in Asia, particularly in China.

In terms of profit, we faced very difficult conditions due to the soaring prices of raw materials and fuel, such as wastepaper, which started in summer 2018. We announced price revisions in October 2018. These revisions were well received by our customers, as we

had hoped. To address increasing logistics costs, we are leveraging our favorably located production bases across Japan to maximize logistics efficiency. Moving forward, we will strive to establish an optimal sales structure through such efforts as reviewing appropriate inventory levels at each production site and consumption area.

In the paperboard business, profits are impacted greatly by price fluctuations of waste containerboard, a key raw material. In addition, we are seeing a trend among competitors to increase their containerboard capacity. We must reinforce our business structure to secure stable profit on a sustainable basis, even when the prices of raw materials drastically fluctuate or when there is an oversupply of paperboards.

Future Strategies

Aim to Enter the E-Commerce Field and Developing New Products

Striving to maintain a stable supply of containerboards, we will promote a broad range of initiatives to be the preferred choice of customers. Specifically, we will thoroughly analyze our customers' preferences and pursue optimal product lineups to meet every customer's needs. Regarding domestic sales, under the assumption that we will be able to maintain our revised selling prices, we will focus on incorporating the steadily rising demand for the e-commerce field. Through such efforts, we will expand sales to end users. By utilizing our meticulous delivery response, one of our great strengths, we will promote sales activities with an awareness of being a trusted partner to our customers.

For exports, we will move forward with efforts while monitoring the balance between supply and demand in Japan. For example, we will continue to conduct sales emphasizing regular customers in Southeast Asia. At the same time, we will strive to acquire new users and establish an agile export structure.

We have positioned the development of new products that ascertain the shift from plastic to paper products around the world as an important strategy going forward. Developing new containerboard is also an urgent task. Under our Group research and development structure, we will create new products with added value and new features through consistent development, production, and sales activities. In these ways, we will leverage our strengths as a specialized containerboard manufacturer. The entire Group will come together to ensure the success of these efforts.

Packaging Business



Our Vision

We will build our liquid packaging business into a world-class business.

Yasuhito Obayashi

Executive Officer
General Manager
Paper-Pak Sales Division
Nippon Paper Industries Co., Ltd.

Our Strengths

- Japan's largest total system supplier for liquid packaging cartons with an eye on global markets

Our Challenges

- Development and sale of next-generation liquid packaging cartons and filling machines
- Development of environmentally friendly barrier packaging leveraging Group strengths

Our Opportunities

- Increased use of paper cartons for high-value-added beverages such as functional beverages that contain solid particles and long fibers
- Shift from plastic materials to environmentally friendly paper cartons

Our Threats

- Intense competition due to entry of other companies into paper carton market
- Contraction of domestic beverage market due to declining of birthrate and aging population, etc.



New-shape cartons with closures



NSATOM® (product in development)

FY2019/3 Performance and Challenges

Increasing Revenue through Expanding Sales of Paper Cartons with Attached Closures and Filling Machines

In FY2019/3, despite the impact of natural disasters such as the torrential rains in western Japan and the earthquake in Hokkaido, sales in the packaging business increased 8% year on year. This increase was due to various factors, including the launch of new-shape milk cartons with closures, increased sales of fruit juice cartons with closures and tea cartons, expanded carton exports, and higher sales of filling machines. We were also able to steadily expand our domestic share in the field of chilled liquid packaging cartons.

Operating income declined compared with FY2018/3 as a result of the rising prices of such raw materials as base paper and ink. Continuing on from the previous fiscal year, the price of base paper increased significantly. In addition, profit was impacted by rising costs of environmentally friendly ink, higher resin prices, and increased transportation costs. Meanwhile, in our production department, we achieved positive results such as improvement in the yield rate, promotion of preventive maintenance, and reduction of downtime.

In September 2018, we announced the development of NSATOM®, the world's first multi-functional aseptic filling machines and uniquely

shaped paper packaging with closures. These machines and packaging are capable of handling solid particles, long fibers, and high-viscous products. The filling machines also enable preventive maintenance through remote operation using IoT, while maintaining highly clean conditions. Although we intend to launch NSATOM® from FY2020/3 onward, we have already received a large number of inquiries from customers. We also simultaneously announced UPN-SEC14S, a state-of-the-art, high-speed chilled filling machine. In addition to being highly sanitary, UPN-SEC14S can attach closures to the cartons and can make use of IoT. We have been receiving a high level of unit orders for this new product.

Meanwhile, overseas, Nippon Dynawave Packaging Co., which handles liquid packaging boards in North America, realized steady growth in sales volumes by leveraging the strength of its stable customer base and supported by the positive impact of increased global demand for beverage cartons. In addition, in March 2019, we acquired 70% of shares in TS Plastics Sdn. Bhd. (TSP), a flexible packaging company in Malaysia. Drawing on the insight TSP has developed in the field of flexible packaging, we will work to expand our businesses in Asia, where the economy continues to develop. At the same time, TSP will develop paper packaging products to serve as the base for the Group's increased focus on paper.

Future Strategies

Aim to Increase Sales by 30% through a Production and Sales Structure That Addresses Market Needs

Under the Sixth Medium-Term Business Plan, the trend of shifting to paper products, which has resulted from the growing issue of marine plastic pollution presents a major business opportunity. On the other hand, competition has been intensifying in the container market due in part to diversifying consumer trends and the declining birthrate and aging population.

In the field of chilled packaging, we have been developing paper cartons with closures, which are highly convenient, and commenced sales of such cartons for beverages and milk, our mainstay applications. Our chilled filling machines, as previously mentioned, attach closures to the paper cartons and realize world-leading levels of cleanliness, functionality, and ease of operation. Many of our customers are making use of these filling machines, promoting the shift toward our new cartons.

Also, in the field of aseptic packaging, we are thoroughly analyzing customer needs and are gradually moving forward with the development of NSATOM®, an aseptic filling system for paper packaging that is expected to help replace plastic and metal containers with paper cartons. Production of NSATOM® is slated to commence within FY2020/3.

Moving forward, we anticipate an increase in functional beverages and shorter product life cycles at convenience stores. In response to these changes, we will build a structure that enables the production of various products in small lots. We will also provide paper containers and filling machines in accordance with customer needs.

Additionally, we will step up efforts in human resources development, working to nurture talented people who can do business globally. At the same time, to address the issue of increasing workloads, we will promote efforts to reduce work burden by introducing a new system and transitioning to AI. In the container market, where innovation is constantly in demand, we are making concerted efforts across all departments to increase sales by 30% by FY2021/3, the final year of the Sixth Medium-Term Business Plan, compared with FY2018/3.

Household Paper and Healthcare Business



Our Vision

We will provide valuable products and brands that contribute to healthy and clean lifestyles.

Kazufumi Yamasaki
President and Representative Director
Nippon Paper Crecia Co., Ltd.

Our Strengths

- Beloved and trusted brands
- Highly competitive mills
- Differentiated, unique products
- Healthcare products that utilize CNF

Our Challenges

- Return of household product prices to appropriate levels
- Use more pulp procured within the Group
- Prompt launch of new production facilities
- Enhancement of logistics efficiency

Our Opportunities

- Inbound demand (overseas tourists visiting Japan for the Olympic and Paralympic Games Tokyo 2020)
- Aging population
- Rapidly growing e-commerce market
- Demand for replacing imported tissues with domestic tissue products to compensate for decline in such imports

Our Threats

- Oligopoly of pulp suppliers in South America
- Facility expansion and reinforcement by competitors
- Intense competition in growing healthcare market
- Soaring logistics costs



SCOTTIE® Four-roll, triple-length "flower pack"



"KLEENEX® Lotion Tissues HADA URURU soft pack 110 pull"



"Poise® Hada Care Pad"



"Hada Care Acty®"

FY2019/3 Performance and Challenges

Realizing Record-High Sales and Returning Prices to Appropriate Levels

In FY2019/3, consumption volumes of household paper products and shipping volumes among domestic manufacturers were solid. However, imported volume of lower-priced household paper drastically decreased in Japan due to a price hike announced by overseas suppliers, resulting in a strong sense of scarcity from the start of 2019.

In May 2018, paper machine No. 1 at Group company Crecia-Kasuga Co., Ltd. commenced operations, thereby expanding our production capacity. However, sales volume also increased thanks to inbound demand, and we continued to find ourselves in a situation where it was difficult to meet demand.

In the healthcare business, as we anticipate the insufficient supply to continue due to a favorable sales environment, we decided to invest in two processing machines, which began operation in May 2019.

Despite achieving record-high sales, operating income declined 50% compared with the previous fiscal year, as profit was significantly affected by rising pulp prices and higher logistics costs. We made the announcement to revise prices at the start of FY2019/3. However, as we were not able to revise prices to the degree we had hoped, we have been carrying out additional revisions since spring 2019 in an effort to address rising costs.

In terms of new products, "KLEENEX® Lotion Tissues HADA URURU Soft Pack," which was launched in 2018, received a high evaluation from the market. Additionally, sales of our unique, differentiated products "SCOTTIE® Four-roll, triple-length flower pack," "Poise® Hada Care Pad," and "Hada Care Acty®" were solid. Going forward, we will continue to strengthen our product development.

Future Strategies

Strengthen Our Supply Structure in Accordance with the Expanding Household Paper Product and Healthcare Market

As the supply–demand situation for household paper products is currently tightening in Japan, there continues to be a sense of tissue shortage at stores. The main cause behind this scarcity is the decline in supply, which resulted from such factors as the decrease in imported tissues and operational incidents at other domestic manufacturers. In FY2020/3, we anticipate a rush of purchasing prior to the consumption tax hike, and the current supply shortage will likely persist.

To strengthen our production capacity, we decided to establish a second paper machine at Crecia-Kasuga, which is expected to begin operations in June 2020. At the same time, we will build a processing structure consisting of four mills in an effort to establish a proper balance between supply and demand for facial tissues, toilet paper rolls, paper towels, and commercial products. By doing so, we will help eliminate supply shortages of tissues in the market. We will also

complete the price revisions we are currently implementing and continue with efforts to strengthen our brand communication. In these ways, we will reinforce our business foundation.

In the healthcare business, amid market expansion brought about by the aging population, our sales continue to expand at a rate that outpaces market growth. Leveraging the two newly installed processing machines of the Kyoto Mill, we will strive to respond to demand increases in the future.

From a cost perspective, there are still concerns over high pulp prices due to the oligopoly of pulp suppliers in South America, and logistics prices are rising due to the shortage of transporters. Responding to these issues is therefore an urgent task for us. For pulp procurement, we are leveraging our Group strengths to expand the use of pulp supplied by Nippon Paper Industries. For logistics, we will introduce pallet-based distribution for household products, which were previously transported through loading and unloading by hand. Through this effort, we will enhance the efficiency of our transportation operations.

Chemical Business



Our Vision

We will provide unique products in global niche markets.

Yozo Igarashi

Executive Officer
General Manager
Chemical Sales Division
Nippon Paper Industries Co., Ltd.

Our Strengths

- A diverse lineup of wood-based products
- A group of unique products in niche markets

Our Challenges

- Enhancement of cost competitiveness of pulp products
- Development of applications for yeast culture products and increasing their sales
- Development of applications for wood-based products

Our Opportunities

- Growth in demand for renewable resources due to re-evaluation of their value
- Growth of global automobile market
- Increase in demand for textiles with rise in global population
- Shift toward making plastic parts out of mono-materials
- Rise in demand for high-performance films

Our Threats

- Shrinking Japanese market
- Sharply rising raw material prices
- Incursion of overseas manufacturers



Example of carboxymethyl cellulose application



Example of functional coating resin application

FY2019/3 Performance and Challenges

Strong Demand for High-Performance Cellulose (CMC) for Lithium-Ion Batteries

The Chemical Business comprises five product groups: dissolving pulp, a raw material for rayon, cellophane, and acetate; cellulose-derived products; chemical products made of wood materials; functional coating resins that are incorporated into paints and inks to serve as adhesion promoters for polyolefin materials; and functional films with different functions depending on coating formulations.

In FY2019/3, both sales and profit declined partly due to the impact of rising raw material and fuel prices. In dissolving pulp, demand for rayon use was robust, but the torrential rain in western Japan forced us to reduce production, leading to reduced sales. In

functional films, sales volume of hard coated film, launched in 2017 for organic light-emitting diode (OLED) displays, was down year on year. The sales volume of lignin, which is used in civil engineering or as a binder agent, decreased slightly. Sales of functional coating resins, on the other hand, were robust thanks to expanding worldwide automotive markets. The sales volume of carboxymethyl cellulose (CMC), a water-soluble polymer made of pulp, also increased for use in lithium-ion batteries. Sales of Stevia sweetener to leading soft drink manufacturers were steady.

Looking ahead, we will introduce measures for improving earnings of dissolving pulp. We also aim to stabilize production and promote sales for high-value-added applications.

Future Strategies

Expand Sales of Unique Wood-Derived Products in Global Niche Markets

We are aiming to expand earnings by providing unique products in global niche markets and building trusted relationships with our customers, leading to the creation of new businesses.

One of our strengths lies in the fact that many of the products we offer are made from wood—a renewable material. We differentiate dissolving pulp, one of our wood-derived products, by maintaining its high quality to meet customers’ needs. Lignin, the main constituent of the cooking liquor produced in the pulping process, is broadly used as an adhesive. We also apply our proprietary technologies to modify lignin and offer it for use in a wide range of fields as a high-performance dispersant.

Demand increased for functional coating resins as adhesion promoters for polypropylene (PP) substrates, which are employed on external automotive components to reduce vehicle weight. We also anticipate greater demand for use in inks. The shift toward plastic

parts made of mono-materials is progressing, which is more attractive from a simple recycling perspective. We anticipate increased demand for functional resins as an indispensable ingredient for reinforcing adhesion between PP substrates and ink layers.

We have decided to build a new facility to boost CMC capacity at the Gotsu Mill. We plan to invest ¥4.7 billion and the new facility is slated to begin operations in November 2020. We aim to shift toward high-value-added, high-quality product areas where demand is likely to grow, such as for use in food products and lithium-ion batteries.

As the flat-panel display market continues to grow, we intend to expand sales of our functional films by accurately grasping customers’ needs and expanding our product lineup.

We will develop new high-performance products through our proprietary technologies. At the same time, we will strive to ensure stable operation at our production sites to meet demand growth and aim to expand overseas sales.

Energy Business



Our Vision

We will generate stable, long-term earnings by expanding businesses utilizing renewable energy.

Mitsuhiro Sugino

Executive Officer
General Manager
Energy Business Division
Nippon Paper Industries Co., Ltd.

Our Strengths

- Power generation technology developed through paper manufacturing
- Power generation capacity of 2,000 MW
- Bases in favorable locations throughout Japan
- Global procurement network for wood resources and knowledge of biomass fuel

Our Challenges

- Establishment of biomass co-firing technology at a higher biomass ratio
- Ongoing promotion of power generation and fuel businesses
- Stabilization and strengthening of existing electric power generation business

Our Opportunities

- Feed-in tariff (FIT) fixed-price system to promote renewable energy
- Global CO₂ emission control standards

Our Threats

- Soaring prices of biomass fuel
- Falling sales prices of electricity
- Changes in energy systems according to government policy



Ishinomaki Hibarino power plant



Yufutsu biomass mono-firing electric power generation plant (rendered image of completion)

FY2019/3 Performance and Challenges

Contributing to Earnings through the Nippon Paper Ishinomaki Energy Center

The Company revised its reportable segments in FY2019/3, and as a result, the Energy Business has been newly classified as a separate segment. This business possesses the Ishinomaki Hibarino Power Plant and other facilities and includes the sale of surplus energy produced at the in-house facilities of each mill. In addition to Ishinomaki, we operate exclusive facilities such as the Akita wind power generation facility, the Otake solar power generation facility, the Komatsushima solar power generation facility, the Yatsushiro biomass generation facility, the Kushiro thermal power generation facility, and the Suzukawa thermal power generation facility.

The Ishinomaki Hibarino Power Plant, operated by Nippon Paper Ishinomaki Energy Center Ltd., began commercial operation as a biomass co-firing power generation facility (149 MW) in March 2018. As performance was extremely stable throughout the year, the plant contributed substantially to earnings of this segment (sales of ¥36.2 billion and operating income of ¥7.9 billion). For fuel, the plant employs unused wood materials from the Tohoku region, chiefly in Miyagi Prefecture, as well as wood pellets procured in North America and Asia. Moving forward, we aim to further increase the biomass ratio.

Meanwhile, the number of large biomass power generation facilities is growing in Japan and Europe. The limited supply of biomass fuel is pushing up its prices. We will strive to stabilize procurement of biomass fuel by diversifying our suppliers.

Future Strategies

Ensure Stable, Long-Term Earnings Focused on the Biomass Mono-Firing Business

We endeavor to reinforce earnings through the stable operation of our existing electric power generation business and the ongoing sale of surplus electricity generated at our in-house facilities. Given the growing global demand for use of renewable energy, we will leverage our ability to source and utilize wood materials to develop new power generation and fuel businesses.

While we are striving to heighten the biomass ratio in terms of fuel and maintain stable operation at the Ishinomaki Hibarino power plant, our priority is on meeting the Sixth Medium-Term Business Plan's target of ¥7.5 billion in operating income as well as considering new renewable energy generation facilities that would help us realize a higher operating income target of ¥10.0 billion. In May 2019, we approved a large-scale project to build another electric power generation facility on the site of the Hokkaido Mill (Yufutsu). Specifically, this will be a biomass mono-firing facility that can generate 74.95 MW,

and we will run it together with Sojitz Corporation. The construction of this facility is slated to commence in March 2020 and operations are scheduled to start in January 2023. We will mainly utilize wood-chips and palm kernel shell (PKS) from overseas as well as unused domestic wood. Furthermore, we are also considering a biomass power generation facility at the Iwakuni Mill.

Through a series of pilot tests, we have been accumulating know-how and technology to effectively utilize several biomass fuels. Taking these advantages into account, we are now working to commercially succeed in the biomass energy business.

Amid the growing global call to reduce CO₂ emissions and a changing resource-procurement situation, the external environment surrounding the Energy Business is experiencing drastic changes. We are striving to respond appropriately to the national government's energy policy and are undertaking initiatives to ensure stable, long-term earnings in the biomass energy business by drawing on the strengths of the Company.

Wood Products and Construction Related Business



Kunihiko Hayama
President and Representative Director
Nippon Paper Lumber Co., Ltd.

Our Vision

We will firmly entrench our position as the leading provider of domestic lumber by volume.

Our Strengths

- Leading procurement network and infrastructure for paper materials and domestic lumber in Japan
- Ownership of 90 thousand hectares of domestic forestland

Our Challenges

- Securing of domestic lumber and expansion of sales channels in order to increase sales
- Establishment of a procurement network to address increased demand for woody fuel

Our Opportunities

- Growth in demand for domestic lumber based on the Forest and Forestry Revitalization Plan
- Growing demand for woody fuel in line with increase in biomass boilers

Our Threats

- Decrease in number of housing starts due to falling birthrate and aging society
- Impact of rise in electric power producers on procurement of raw materials and fuel for paper manufacturing

● FY2019/3 Performance and Challenges

Solid Performance Based on Stable Market for Wood Products

In FY2019/3, the number of housing starts rose slightly year on year, due in part to demand ahead of the scheduled consumption tax hike. Wood products such as timber and lumber—our mainstay business area—benefited from firm demand for plywood and stable market conditions throughout the year, leading to solid segment sales and income. The collection volume of domestic raw materials for paper-making fell, affected by the rising demand for woody fuel used in biomass power generation, which itself is increasing in use.

● Future Strategies

Concentrate on Growing the Domestic Materials Business and Expanding Supplies of Woody Fuel

The outlook for this business remains uncertain, due to concerns that demand would fall off following the October 2019 consumption tax hike. The operating environment is also affected by such factors as shrinking housing demand stemming from a falling birthrate and aging society and the shrinking paper market.

Going forward, we will focus on initiatives involving the growth of businesses that leverage our strength in domestic wood materials and increase the supply of woody fuel used in biomass power generation. In domestic wood materials, by leveraging our existing infrastructure and expertise, we will strive to diversify our procurement sources. To expand our supply of woody fuel, we will build a network for procuring unused resources and make a full-fledged move to provide fuel to new electric power producers. In addition, we will continue working to ensure the stable procurement of palm kernel shells (PKS) by nurturing overseas suppliers.

Other Businesses



Distribution business

● FY2019/3 Performance and Challenges / Future Strategies

Focus on Ensuring Transport Capacity to Build a Stable Logistics System

In FY2019/3, the distribution business experienced rising personnel and fuel costs. Under this severe operating environment, we are striving to secure transport capacity, including by responding to a shortage of truck drivers, in order to build a stable logistics system.

In the future, we intend to expand earnings by sharing operational information among such Group companies as NIPPON PAPER LOGISTICS, Nanko Unyu, and Kyokushin Transport; deepening cooperation across a broad region to facilitate the efficient transportation of Group products; and incorporating products from outside the Group. We will also employ different measures, such as pursuing joint logistics with other companies in our industry and building a logistics system that takes business continuity planning into account.



Leisure business

● FY2019/3 Performance and Challenges / Future Strategies

Bolstering the Appeal of Marunuma Highland and Developing New Businesses

In FY2019/3, the leisure business was affected by early snowmelt, which shortened spring ski season operations, and the unusually sweltering weather reduced the number of visitors to golf driving ranges. However, sales were on a par with the previous year through higher revenues from café renovations.

We plan to expand our facilities at Marunuma Highland to boost its appeal as a resort area. Consequently, we expect to increase the number of visitors and sales per visitor.

In addition, we will strive to augment sales by developing new businesses such as chiropractic and osteopathic clinics in Tokyo and Kyushu.

