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Co., Ltd.

Pursuing Our Vision for 2030 and Being Determined to Achieve Our Group Mission

Boosting Transformation of the Business Structure while Responding to Changes in Society

Nippon Paper Group's Expected Role Remains Unchanged

When I look back at the past year, what sticks out is that the global spread of COVID-19 continued from 2020 without slowing down, and has now entered its third year. In addition, the nature of greenflation*1 has become clear. In association with responses to climate change, the balance of supply and demand for coal has collapsed and sent prices skyrocketing, and it has become clear that we must assume the prices of products and services related to the environment will not decrease going forward. On top of this, there was also the invasion of Ukraine by Russia. Since this issue continues to drag on, we cannot measure the impact it will have on global society and the economy, and are deeply concerned.

When considering these drastic global changes from the perspective of the Group's management, we first clearly recognize that products such as packaging, household paper

and healthcare products and liquid packaging cartons are essential products closely linked to daily life, and that demand will not decrease even if COVID-19 spreads. However, from the perspective of life during and after the COVID-19 pandemic, we must continue to observe society's trajectory. Meanwhile, it is our view that demand for graphic paper, such as newsprint, printing and business communication paper, will continue to decline.

Due to surges in the price of goods resulting from Russia's invasion of Ukraine, we may possibly face an economic recession in the future, and the global economy may begin to shrink, but I have envisioned various business scenarios and am taking action. Circumstances will continue to be tough for the Group, but the role it fulfills as "a comprehensive biomass company shaping the future with trees" will not change. First, we will implement specific measures to address short-term issues, then steadily advance measures to achieve the goals set out in the 2030VISION and Medium-Term Business Plan 2025.

*1 Greenflation: A term created by combining "green," which expresses consideration toward the environment, with "inflation," which means an increase in the price of goods

Message from the President

Unsatisfied with Inability to Achieve Profit Goals despite Increasing Prices in the First Year of the Medium-Term Business Plan

Total global demand increased starting around the summer of 2021. Moreover, costs for raw materials and fuel, logistics, and human resources are rising. Against that background, we firmly resolved to implement price revisions for a great number of products including printing paper, business communication paper and containerboards. We also declared to customers that we would continue to work toward reducing GHG emissions. All employees banded together and gained the understanding of customers through persistent but polite explanations and numerous negotiations. I view this price revision as a tremendous success.

Nevertheless, looking at the first year of Medium-Term Business Plan 2025 now that it has ended, I feel unsatisfied with our inability to achieve the profit goals, and take responsibility as the leader of management. We will accelerate the Group's initiatives in order to keep pace with changes in society and the environment, and quickly get back on track to achieve the targets of Medium-Term Business Plan 2025.

Recovering Graphic Paper and Increasing the Profitability of Growing Businesses Are Urgent Issues

Issues the Group must address in the near term are clear. One is recovering graphic paper. The other is increasing the earnings of businesses other than graphic paper.

For graphic paper, in addition to a decline in demand, many coal boilers are used as power sources in paper mills in Japan, and the surge in the price of coal, which serves as fuel, is causing massive cost increases that were previously unthinkable. Responding to the fact that earnings are being severely harmed, we will improve production efficiency and reduce coal consumption by converting to non-fossil fuels and consolidating production. In the past year, we reduced production capacity by about 500,000 tonnes, but when considering the future decline in demand, I have to say that the number of paper machines is still very high. We must refine the production structure while anticipating a continual decline in demand. In the process, we will not simply reduce production capacity but also define a vision for each paper machine, which includes conversion to packaging paper, while simultaneously promoting the streamlining of facilities at each mill and advancing reorganization of the production structure and reduction of coal consumption together as one.

With regard to business other than graphic paper, we were able to steadily increase sales with a focus on the Daily-Life Products Business, but due to the impact from surging prices for raw materials and fuel, profit ended up decreasing year on year. In businesses such as Packaging, Household Paper and Healthcare, Chemical, and Energy, sales growth and increases

in profit are essential for business structure transformation. Since the latter half of FY2022/3, we have been working on price revisions for many products including household products and liquid packaging cartons, and will first aim to recover the profit which had declined.

In addition, further surges in the price of goods, including fuel prices, which have been affected by the Russian invasion of Ukraine, have surpassed a level that can be absorbed through our internal efforts, so I think additional revisions to product prices are needed. I have already declared similar revisions to some products such as printing paper, and negotiations regarding other products are underway. I will provide customers with a full explanation in order to gain their understanding.

Accelerate the Transformation of the Business Structure by Improving the Profitability of Opal

Next, I will speak about business overall from a medium- to long-term viewpoint.

In 2021, we clearly identified issues to take on in order to achieve our vision for 2030. In the Paper and Paperboard Business, current issues related to graphic paper will be tackled with a sense of urgency. Meanwhile, we will continue to capture steady demand for containerboards and white paperboards both domestically and overseas.

In the Daily-Life Products Business, we set a target for operating income of ¥27.5 billion in Medium-Term Business Plan 2025, which breaks down into ¥17.5 billion domestically and ¥10.0 billion overseas. We have already implemented measures to achieve this target, and will evaluate new measures to expand business even further while ensuring their efficacy.

As for the domestic Paper-Pak, Household Paper and Healthcare, and Chemical businesses, from a production standpoint, reinforcements to facilities are proceeding in line with the plan, while from a sales standpoint, we are expanding sales of unique products that will enable differentiation from competitors such as School POP® strawless milk cartons for schools and shifting toilet paper rolls to long-lasting rolls. As the path for each business is clearly visible, we will concentrate efforts on increasing profitability going forward while continuing to make timely investments in anticipation of demand trends.

As for overseas business, capital investments at Nippon Dynawave Packaging Company, LLC (NDP) in North America, such as in pulp drying machines, have proven effective, leading to increased profits. Since it is assumed that U.S. demand for paper carton boards will continue to be steady amid the trend toward replacing plastics, we will strive for further increases in profit.

Meanwhile, although Opal in Australia was heavily impacted by the COVID-19 pandemic and logistical disruptions, results for FY2022/3 differed greatly from originally expected profit levels. We understand that improving Opal's earnings is a crucial issue in accelerating transformation of the business

structure. In order to capture demand for corrugated boxes in Australia, where continued growth is anticipated, we will move ahead with insourcing production of boards, including conversion of paper machines, while swiftly restoring conditions for profitability by steadily generating synergetic effects.

I visited Opal just the other day. As the COVID-19 pandemic is still ongoing, it was the first time to visit in person in a long time. I felt that corporate governance had been strengthened in the time since my last visit, and that Opal's management policy is fully entrenched throughout Opal. Among investments the Group has made, the investment in Opal was particularly large. As an integrated supplier covering from boards to package converting, Opal will band together as one to establish a solid business foundation in Oceania for starters, and produce results at all costs.

When it comes to the Energy and Wood/Building Material businesses, the keyword is "biomass." At Nippon Paper Ishinomaki Energy Center Ltd., we have carried out renovations to increase the biomass combustion ratio, and are aiming to expand the renewable energy supply. In January 2023, a power generation facility using 100% woody biomass will be launched at Yufutsu Energy Center, LLC. Construction is proceeding smoothly, and the facility will aim to become a profit source at an early stage once operations commence. In addition, against the background of increasing domestic demand for biomass fuel, Nippon Paper Lumber Co., Ltd. will maximize the procurement and sales networks for wood chips for papermaking it has built up nationwide and aims to handle 3.7 million tonnes of fuel in FY2026/3.

However, when continuously making investments toward growth, I am always conscious of maintaining financial discipline. I will be mindful of future financial trends and keep an eye on our cash status.

Endless Pursuit of Achieving the Group Vision

Addressing Climate Change and Accelerating Reduction of GHG Emissions

Since the Company signed the Global Compact in 2004, it has continued to support the Ten Principles covering four areas. In the 2030VISION, we have established a stance to promote sustainability management that will address the demands of society alongside corporate growth through the achievement of the Group Mission. We will accelerate the transformation of the business structure and produce profit, and generate value that helps us build a sustainable society.

In order to realize a sustainable society, the world urgently

Shaping the Possibilities of Cellulose in an Aim Toward the Vision for 2030

In the 2030VISION, we have established sustainable forest resources and cellulose as business foundations, and set out the Three Circulations business model and a green strategy. We will work on maximizing the value of forest resources while advancing the expansion of new businesses and products.

The key to maximizing the value of forest resources lies in the breeding and proliferation technologies which we have uniquely cultivated. By harnessing those technologies, with elite trees, which have excellent growth potential, the Company will be able to both develop forest resources and enable increases in the amount of CO₂ absorption and fixation. We will also work on initiatives to expand the seedling production business nationwide in an effort to proliferate elite cedar and cypress trees and more.

Meanwhile, regarding new businesses and products, we have invested many resources in research and development aimed at broadening the use of cellulose procured from sustainable forests, and are building up a track record. For example, with regard to cellulose nanofibers, based on our experience working to expand sales of chemical products, we are boosting the sales expansion of the Company's unique carboxymethylated CNF, which is manufactured at the Gotsu Mill. Biocomposite, a composite material made from wood resources and resin that helps reduce GHG emissions, is expected to be deployed in various industrial fields such as automotive components. Additionally, we have developed highly digestible cellulose for cattle using domestically produced materials, and this cellulose is being introduced at ranches nationwide. In these and other ways, unconventional uses for cellulose are expanding.

In summary, I am confident that achieving the Group's Vision for 2030 as set out in the 2030VISION will be the path to survival for the Group 10 years down the road. I call on all of the Group's employees to move ahead with confidence.

needs to address the issue of climate change. Alongside its efforts to reduce GHG emissions to date, the Company endorsed the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) in April 2021, and set a target for FY2031/3 of reducing GHG emissions by 45% compared with FY2014/3 on the path to achieving carbon neutrality in 2050. However, since global trends toward carbon neutrality are moving even faster, I believe the Group must also answer the call, and have appointed the General Manager of the Technical & Engineering Division as the person in charge of promoting environmental management, including reduction of the Group's GHG emissions. Currently, we are

Message from the President

holding many discussions to further initiatives ahead of schedule. To be specific, we will swiftly shift from coal to waste-oriented fuels while considering significant reductions in coal consumption alongside reorganization of the Paper Business's production structure. Furthermore, it is well understood that energy saving is the challenge for the paper industry overall to achieve carbon neutrality in 2050. Within the Company, we will set our sights on introducing new technologies that can be implemented practically and expected to result in energy saving as well as new endeavors for water saving. On top of this, we will continue to harness black liquor by expanding uses of cellulose.

Aiming to Be a Corporate Group Where Diverse Personnel Can Thrive

Human resource training is essential to realize our Group Vision and contribute to solving social issues. In our Group Mission, among the four requirements set out as an ideal corporate vision, we have established the requirements of "delight our customers" and "instill pride in employees." I have contemplated these two requirements for a long time.

Delighting our customers involves assessing customers' concerns and proposing countermeasures and solutions while demonstrating a scientific foundation based on knowledge and expertise. The Group is transforming through the development of new business so that market-oriented concepts can arise. I also believe that there is a firmly established stance of working in collaboration with other companies and university-affiliated research institutes on issues that the Group cannot solve alone.

Instilling pride in our employees requires situations in which our employees feel a sense of corporate growth, including earnings. In addition, it is necessary to create a workplace where personnel with diverse viewpoints can engage actively. Up until now, the Group has repeatedly carried out mergers and consolidation, so it already has a corporate culture of diversity among personnel as a foundation. I feel that this serves as a unique trait and strength of the Group. On the point of motivating each and every employee as a member of a diverse workforce, I would like everyone to broaden their horizons beyond their positions or tasks. To this end, we will concentrate on education for personnel development.

Additionally, I feel that having employees take charge of new businesses, which includes utilizing the internal side occupation program that Nippon Paper Industries began earnestly in April 2022, is an effective way of generating motivation among employees. Everyone will become highly motivated and be willing to accept challenging tasks.

This was established as a management issue in the 2030VISION and Medium-Term Business Plan 2025, but we will work even harder than before on personnel reassignment in order to advance business structure transformation. That will bring opportunities to take on new challenges amid collaborations with external organizations and Group businesses.

Experiences of success from those challenges will emerge that convey job satisfaction, which I think will give rise to a never-before-seen shift in the mindset of employees.

Generating Changes in Conduct through Dialogue with Employees

From the perspective of personnel, FY2022/3 was a year in which I personally concentrated on talks with employees amid the COVID-19 pandemic. When the 2030VISION and Medium-Term Business Plan 2025 were formulated in May 2021, I made the entire Group aware of the necessity for acceleration, while also conducting 46 sessions of open discussion with approximately 700 employees of the head office and mills over a span of more than six months beginning in June 2021. I wanted everyone to be on the same page, so I directly asked employees whether they understood the 2030VISION and Medium-Term Business Plan 2025, and explained that I would be observing each employee's individual efforts.

Many different conversations arose from the open discussions, such as issues that appear to be the harmful effects of a vertically-divided organization. As for things that I felt should be changed, action was taken immediately and changes are being made.

This also led to discussions with employees from the sales departments about our financial performance. Over the course of those discussions, there was a change in awareness which made us realize we would have to work on raising product prices with unwavering determination, and I feel that this change resulted in persistent action during negotiations about the price of paper. This also applies to other businesses.

I had the feeling that everyone was diligent, and had the tendency to make sure everything was arranged perfectly before taking action, so I spoke about the value of aggressively moving things forward. I also intended to communicate the importance of breaking down walls between each company and generating profit as an overall group. I feel that barriers between organizations have collapsed in a positive way, and changes are occurring in the awareness and actions of employees.

Working Tirelessly on Strengthening Governance

In 2021, the Company significantly changed its way of thinking about management. For many years, mills were positioned as the profit centers in the Paper Business. However, I decided that, in order to accelerate the transformation of the business structure, the sales divisions would act as the profit center and take responsibility for the ultimate profit and loss, much like other business divisions.

From the perspective of demonstrating the monitoring functions of the Board of Directors, I selected chief officers from the departments for raw materials, technology, research and

development, and logistics whose roles are to bridge each division in the entire Group, and determined that they would file regular reports with the Board of Directors on a quarterly basis, an initiative which was implemented starting in the fall of 2021. I also determined a person to be responsible for the execution of business duties and clearly identified a structure to steadily promote countermeasures, particularly in regard to important management issues such as reducing GHG emissions and reorganizing the production structure of the Paper Business.

Meanwhile, from the perspective of strengthening the Company's governance, I would like to mention that we are doing as much as possible to increase opportunities for outside directors to observe the entire Group and offer their opinions.

When promoting management strategies including investments, the Company periodically holds Group Management Strategy Committee meetings, and engages in discussions from various angles that feature participation by not only those from relevant divisions but a wide variety of people such as presidents from main Group companies and our outside directors. Outside directors also attend the meetings of the Management Executive Committee, which makes decisions about the execution of management projects and files reports, when monthly results are reported. I also make sure to talk openly with outside directors about matters that may be thought of as unpleasant. I am proud to say that sharing information frankly with outside directors in this way is leading to enhanced discussions within the Board of Directors. In reality, many opinions have been provided by outside directors, and even in occasions aside from the Board of Directors meetings, there has been an increase in opportunities for outside directors and executive officers to exchange opinions about various projects and topics.

Growing as a Company that Generates Profit Based on the Group Mission

The thing that I bear in mind as the most important above all else is achieving the Group Mission. I tell myself that I must not lose my strong sense of duty to achieve the Group Mission under any circumstances, no matter how harsh business conditions may be. That is what it means to continually grow as a comprehensive biomass company.

Within the 2030VISION, we once again defined what it means to be a comprehensive biomass company in concrete terms that are easily understood: "A company group that consists of multiple businesses which generate stable profits and realize better living and cultural progress. It achieves this by using diverse technologies and know-how to maximize the use of renewable wood resources. This provides a wide range of products that help form a circulation-oriented society, supporting profit growth." I always emphasize this as the essence of being a "comprehensive biomass company" in various situations both inside and outside the Company.

This is a repeat of what I have already said, but to achieve the Group Mission, we will head in the intended direction as a united Group, without deviating from our axis as a comprehensive biomass company, and be fully committed to achieving growth as a company and job satisfaction for employees. In order to do so, I will stand at the head of all Group employees as the president and lead the way forward.

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





Firmly moving ahead to accelerate the transformation of the business structure and striving to improve corporate value

Tomoyasu Itakura

Director, Executive Officer, and General Manager, Financial Division
Nippon Paper Industries Co., Ltd.

Amidst a Harsh Business Environment, I Feel Top-Line Growth Is Certain

Let us look back at the first year of Medium-Term Business Plan 2025 from a financial perspective. Financial targets for Medium-Term Business Plan 2025 call for net sales of ¥1,100.0 billion and operating income of ¥40.0 billion or more in FY2026/3, the final year of the plan. The Nippon Paper Group has stated it will reach its target for operating income "at an early stage," and is aiming to achieve this before FY2026/3.

We believe that if we can achieve operating income of ¥40.0 billion, EBITDA will reach a level of approximately ¥100.0 billion, and we will meet the goal of stably generating ¥100.0 billion EBITDA. Additionally, we will improve the net debt/equity ratio, another target, to 1.5 times by applying the cash we have obtained to investment toward growth and repayment of interest-bearing debt. We aim for ROE of 5.0% or more, and believe this can be achieved if we exceed this profit level. The aim of Medium-Term Business Plan 2025 is to achieve these

targets at an early stage, and lead the way to a stable condition in terms of both cash and income.

As a starting point for Medium-Term Business Plan 2025 at the time when financial results were announced in May 2021, the target for operating income for the first year was ¥25.0 billion. We made price revisions to many products in response to the subsequent global surge in raw material and fuel prices. However, operating income in FY2022/3 only reached ¥12.1 billion as the positive impact on the profit front because those revisions will only start to appear in FY2023/3. This was an extremely grim figure to kick off Medium-Term Business Plan 2025, and resulted from changes in the environment that were far greater than anticipated.

Nevertheless, net sales, which were projected to be ¥1,030.0 billion, totaled ¥1,045.1 billion, and I feel that top-line growth is certain. The situation is that profit is not following the growth of net sales, so I have renewed my determination to steer the Group forward securely through cost measures or other means.

Working with Full Determination on the Three Important Issues

Although there is an emerging sense of recovery from the COVID-19 pandemic, the situation between Russia and Ukraine appears to have no end in sight, and changes in the external environment, such as differences between Japanese and U.S. interest rates and fluctuations in exchange rates, are becoming more drastic. Under these circumstances, we will get back on track to achieving the targets of Medium-Term Business Plan 2025 as quickly as possible by enacting bold measures to build a business foundation that is not susceptible to fluctuations in the external environment in order to achieve operating income of ¥40.0 billion or more at an early stage.

Recently, the major challenges have been rebuilding the foundation of the Paper Business and expanding the earnings of growing businesses such as the Daily-Life Products Business. In FY2023/3, we will make additional revisions to product prices, while advancing the following three items as important issues. First is accelerating the reduction of coal consumption. Global trends toward a reduction of greenhouse gas (GHG) emissions have been picking up speed, and the Group itself is determined to accelerate reduction measures. On top of this, the recent surge in coal prices has become a significant drag on earnings. The Group had previously been purchasing approximately 300,000 tonnes of Russian coal per year, but has stopped making new purchases. Under normal circumstances, I imagine the Group would have increased the amount of coal purchased from other regions, but it is working to reduce its consumption without purchasing an alternative from another region by coming up with various ideas involving machine operation and inventory management. This initiative

will not come to fruition easily, but reducing coal consumption will lead directly to improvements in earnings, so the Group will move ahead proactively. Also, the Group is already shifting to fuels other than coal and implementing steady energy-saving countermeasures in order to reduce coal consumption over the medium to long term. Nippon Paper Industries produces kraft pulp (KP), which serves as a raw material for paper, but if the Group improves the operational rate of the recovery boiler that uses black liquor, a byproduct of that production process, as fuel, it will be possible to reduce the burden of coal boilers. By harnessing this strength that is unique to the paper industry, we can positively move forward toward reducing GHG emissions.

The second issue is further acceleration of the transformation of the Paper Business, as demand for graphic paper, particularly for newsprint and printing and business communication paper, is expected to decrease even further going forward. This will be achieved through a combination of reevaluation of the production structure, steady cost reductions such as cutting fixed costs, and improvements to production efficiency. As for the areas in which we are unable to absorb the cost increases even through self-help efforts, we will once again conduct price revisions, and move full speed ahead toward structural transformation. As the transformation of the Paper Business is essential to build a competitive business foundation, we will work with extraordinary determination.

The third important issue is improving the profitability of Opal. In FY2022/3, operating income was impacted by COVID-19 and logistics turmoil, and ended up with the unfortunate result of a loss. However, results indicate a trend toward gradual recovery. For instance, synergetic effects between the former Australian Paper and the paperboard and fiber-based packaging business acquired from Orora Limited are being manifested. First of all, in

Trends in Net Sales (FY2018/3–FY2022/3 Results and Medium-Term Business Plan 2025 Targets)

(¥ billion)

Business	FY2018/3 Results	FY2019/3 Results	FY2020/3 Results	FY2021/3 Results	FY2022/3 Results	MTBP 2025 Targets
Paper and Paperboard	675.8	674.0	646.7	568.3	532.1	490.0
Daily-Life Products	258.4	266.2	270.2	317.9	386.5	460.0
Energy	17.8	36.2	33.0	33.4	31.8	45.0
Wood Products and Construction-Related	62.8	59.8	61.6	59.9	64.5	75.0
Other	31.7	32.5	32.3	27.8	30.2	30.0
Total	1,046.5	1,068.7	1,043.9	1,007.3	1,045.1	1,100.0

* Results for FY2018/3 to FY2020/3 have been restated to reflect the segment classification of results for FY2021/3 onward.

Message from the Executive Officer Responsible for Finance

FY2023/3, we will achieve a turnaround, and aim for expansion of profit in FY2024/3 and beyond. Specifically, in order to address demand for corrugated boxes in Australia, where future growth is anticipated, we will move ahead with constructing a new corrugated box plant, and work on price revisions in order to fire back in response to cost increases such as rising fuel prices. The entire Group will offer backing support in order to harness the strengths of its integrated packaging production system from raw material procurement to manufacturing.

Actively Conducting Strategic Investment That Will Lead to Growth

From the perspective of strategic investment to achieve “accelerate the transformation of the business structure” as adopted in Medium-Term Business Plan 2025, investment toward growth is key above all else. Transformation of the business structure was advocated in the Sixth Medium-Term Business Plan as well. In FY2022/3, in contrast to the ¥532.1 billion in net sales from the Paper and Paperboard Business, net sales from other businesses such as the Daily-Life Products Business was ¥513.0 billion. The breakdown of total net sales has shifted to approximately 50/50. We have furthered investment and product development in line with increased market demand, and in the Household Paper Business, are

shifting all toilet paper rolls to long-lasting rolls. In the Chemical Business, we have undertaken construction to handle increased production of functional coating resin products and high-performance cellulose in response to demand. The outcome of investments, including these, will fully emerge beginning in FY2023/3. Near-term profitability may seem disappointing, but when looking ahead to future sustainable growth, we must definitely not stop investment toward growth. We will continue timely investments while assessing the status of demand and the market, envisioning sowing seeds in the early stages of the five-year period of Medium-Term Business Plan 2025 and reaping the rewards in the second half.

Of course, while we boldly conduct these strategic investments, it is a given that we will uphold financial discipline. With regard to the target of reducing the net debt/equity ratio to 1.5 times, we will regulate financial discipline while aiming to achieve this in the latter half of Medium-Term Business Plan 2025. Based on that understanding, in order to concentrate efforts on investment toward growth, we will carefully select investments related to existing business, while working to improve our balance sheets by reshaping our asset portfolio along with securing cash by advancing sales of assets such as cross-shareholdings.

The areas where we will actively conduct investment going forward include the aforementioned Household Paper and

Chemical Businesses, as well as the Packaging Business. For the domestic Packaging Business, the Group signed a licensing agreement with Elopak ASA for the Oceania region in March 2022, and will aim to expand sales routes primarily in Australia. We believe that the Daily-Life Products Business, which consists of the Packaging, Household Paper and Healthcare, and Chemical Businesses, will serve as a pillar of our growth, and that we must actively conduct investment in these three areas.

Meanwhile, there is a need to actively conduct investment aimed at reducing GHG emissions. In consideration of earnings not in the near term but in the future, this will become an indispensable initiative which includes technological revolution.

We must not simply shut down existing facilities, but replace them with businesses or facilities in anticipation of growth, and continue investment in order to establish a structure that will boost earnings while turning the dual wheels of foundation businesses and growing businesses in a well-balanced manner.

Accumulate Profit through Transformation of the Business Structure

Through these initiatives, we will accelerate the transformation of the business structure and realize improvements in corporate value. We view keeping the net debt/equity ratio at 1.5 times as a minimum goal. First of all, we will improve the ratio to 1.5 times during Medium-Term Business Plan 2025, and generate cash by securely producing operating income of ¥40.0 billion or more. By applying this to investments in growth, we will build a business structure of high earnings.

In order to do so, we intend to liquidate idle assets and reduce interest-bearing debt, while accumulating net income. Currently, the Paper Business is still experiencing difficulties, and we are not generating enough cash to invest capital. Although net income will be constrained by temporary costs associated with the shutdown of the N6 paper machine at the Ishinomaki Mill and the withdrawal from the paper and pulp business at the Kushi Mill, we understand that accelerating the transformation of the business structure at an unprecedented level going forward is an issue that must be addressed.

That is precisely why we must create a blueprint aimed at reorganizing the Paper Business and shifting to growing businesses as soon as possible, and present it to those both inside and outside the Company including investors and shareholders. In that sense, we will aim to achieve full-scale improvements to ROE in the final year of Medium-Term Business Plan 2025, and have declared that we will concentrate efforts on improvement while dealing with “hardships” in the first half of the plan. That is one point I hope everyone can understand.

Furthermore, as an indicator to evaluate and measure corporate value, we are internally advancing considerations

toward the implementation of ROIC (return on invested capital). Currently, the Paper and Paperboard Business, which has a large amount of invested capital, is not generating profit as expected, but we think that increasing the amount of invested capital aimed at growth and raising profit generated from that business is the objective of ROIC. From that perspective, the growth of the Daily-Life Products Business, including Opal, which is one of the important issues in the current fiscal year, will lead to improvements to ROIC.

Address Strengthening Profitability with Unwavering Determination

We are strongly aware that improvement to corporate value is the most important issue to meet the expectations of shareholders. We are currently still in a transitional period, including the transformation of the business structure, so we have not yet reached the stage at which we can confidently tell shareholders that we can provide sufficient returns. We intend to increase capital efficiency with a sense of urgency, and enhance shareholder equity by accumulating profit.

In that way, we are focused on profitability in Medium-Term Business Plan 2025. In order for us to get back on track out of the current harsh conditions as soon as possible for Medium-Term Business Plan 2025, we will implement measures ahead of schedule. That result will lead to improvements in corporate value and meet the expectations of shareholders, so we intend to intently pursue all possible means and present results.

To bolster profitability and improve corporate value, we are working on the three important issues with unwavering determination in the current fiscal year. At present, we are in a period of instability, and feel a strong sense of crisis. However, if we persevere and are able to securely get back on track for Medium-Term Business Plan 2025, I think we will be able to move toward the future growth. I believe it is my duty to show our stakeholders that we are on a firm path, and intend to work hard with strong determination.

Financial Strategy

Financial Policy

The Nippon Paper Group’s financial policy is to enhance cash-flow generation capabilities by carrying out appropriate fund procurement to finance investments that enable sustainable growth, while maintaining a sound financial position.

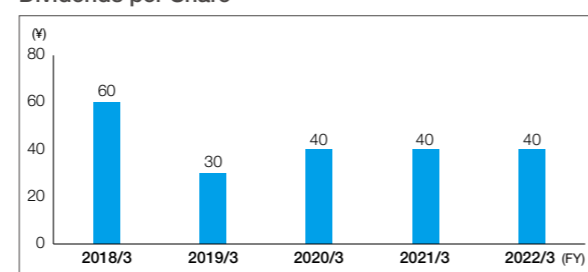
Fund Procurement Policy

In the course of undertaking fund procurement, the Nippon Paper Group strives to diversify its procurement methods to ensure stable financing. Concurrently, the Group seeks to extend repayment terms and standardize repayment amounts. Specifically, the Group procures funds through various sources when necessary, including borrowings from financial institutions and the issuance of commercial paper and corporate bonds, by estimating their amount based on the capital investment plan for the entire Group. Moreover, in order to maintain the liquidity of fund procurement, the Group has concluded commitment line agreements of ¥50.0 billion in total with major financial institutions.

Shareholder Return Policy

The Nippon Paper Group’s basic policy on shareholder returns is to continuously provide stable dividends based on a comprehensive consideration of business results, increases in internal reserves, and other factors, and by taking into account the Group’s management soundness and increases in shareholder value over the long term. The Group will put internal reserves to good use in expanding its business and strengthening its management foundation going forward, as it strives to increase its corporate value.

Dividends per Share



Policy on Ensuring Financial Stability

Nippon Paper Industries closely monitors (1) EBITDA, (2) the net debt/equity ratio, and (3) the debt repayment period as important indicators of financial discipline. The Company seeks to maintain stable credit ratings and improve them by upholding and enhancing financial discipline. The Company believes that keeping stable credit ratings and improving them are important management issues. Please refer to page 30 for the Company’s targets under Medium-Term Business Plan 2025.

As of July 2022, the credit ratings acquired by the Company are as follows.

	Long-term Bonds	Short-Term Bonds (CP)
Rating and Investment Information, Inc.	BBB+	a-2
Japan Credit Rating Agency, Ltd.	A	-

The Nippon Paper Group's Value Creation Story

Sustainable growth as a comprehensive biomass company

The Nippon Paper Group has formulated the Nippon Paper Group 2030VISION from its materiality and the Three Circulations business model. By maximizing use of management resources and conducting business activities grounded in the basic policies of the 2030VISION, it will achieve its sustainable growth and build a circulation-oriented society that maximizes use of wood resources. This will enable the Group to realize its mission of "The Nippon Paper Group aims to contribute to better living and cultural progress everywhere it does business."

Medium- to long-term business opportunities and risks anticipated by the Group

Medium- to long-term opportunities

- Shift to a carbon-neutral society
- Population increase and economic growth in developing countries
- Increased consumer awareness of health and hygiene
- Growth of e-commerce

Medium- to long-term risks

- Progress of digital transformation
- Declining population in Japan
- Increase in natural disasters
- Trends in environmental laws and regulations
- Emergence of geopolitical risks

Mission

Contribute to better living and cultural progress everywhere the Group does business

Input

Important management resources

Intellectual capital
Technologies developed from using wood resources

Natural capital
Wood resources procured from Japan and overseas

Social and relationship capital
Collaboration with a wide array of partners

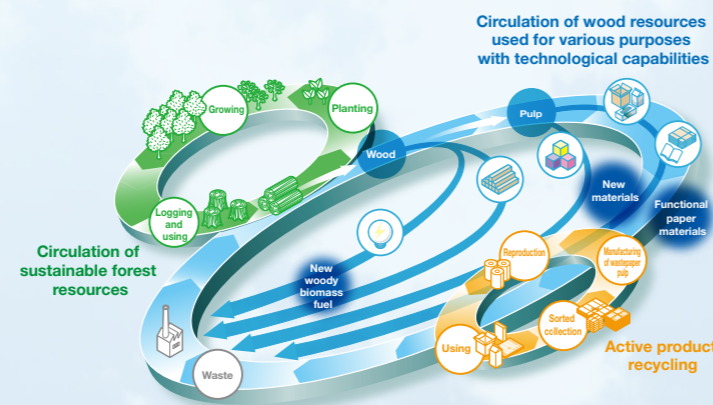
Human capital
Diverse human resources who create value

Financial capital
Financial base supporting business

Manufactured capital
Production facilities and sites to create diverse products

Materiality
to realize the Vision in the Group Mission

Carbon-neutral business model
realized through the Three Circulations



Nippon Paper Group 2030VISION

Basic policies

- 1 Reallocate management resources to growing businesses
- 2 Respond to rapid changes in the social landscape such as GHG reduction and environmental issues

Output

Creations from business

Products and services that contribute to formation of a circulation-oriented society

Outcome

Value created

- Realizing sustainable growth for the Nippon Paper Group
- Build a circulation-oriented society that maximizes use of wood resources

Value circulation

Customers

Business partners

Shareholders and investors

Employees

Local communities

Global environment

Profit returns and contributions to stakeholders

Important Management Resources

The Nippon Paper Group has over the course of many years of business activities accumulated management resources, its source for creating value. As the value creation capital of the Group, they are the driving force behind the Three Circulations, the business model to realize carbon neutrality, and achieving sustainable growth for the Group as a comprehensive biomass company.

Intellectual Capital Technologies Developed from Using Wood Resources

The Group has accumulated technologies for breeding, propagation, and plantations to produce its own wood resources that form raw materials. The Group possesses R&D capabilities that enable it to create various biomass products from wood resources, and aims to make competitive new businesses and materials through collaboration with such partners as companies in other industries, universities and research institutions. For intellectual property, focus is being placed on patent applications in growing fields and new business fields, as well as on expanding global business, and the number of overseas patent applications is increasing.

Main technological developments Maximizing the value of forests

Breeding, propagation and plantation technologies

- 2017 Developed DNA marker technology to select eucalypt plantation trees based on DNA data
 - 2019 AMCEL developed eucalypt plantation trees with outstanding growth and CO₂ absorption features
 - 2022 Signed a strategic partnership agreement with Marubeni Corporation and aim to forest growing stock through technical guidance provided to Marubeni's plantation business company in Indonesia
- ⇒ **Promoted enhanced forest productivity and expanded the CO₂ fixation amount**

Expand biomass products

Papermaking and coating technologies*2

- 2016 Developed SHIELDPLUS® paper barrier packaging material
 - 2019 Developed Lamina® heat-sealable paper for packaging without using plastic film
 - 2020 Developed SHIELDPLUS II with improved resistance to bending of barrier properties and adapted for rotogravure printing
- ⇒ **Packaging responding to needs in the trend to replace plastic with paper**

Biorefinery technology*3

- 2019 Developed Genki Morimori® highly digestible cellulose for feedlot cattle made from wood resources
 - 2022 Jointly developed lignin-additive concrete with Obayashi Corporation and Flowric Co., Ltd.
- ⇒ **Paved the way for applications of wood resources such as pulp**

Nano-defibrillation technology*4

- 2010 Research on practical application of TEMPO-oxidized CNFs adopted for use in a NEDO project
 - 2016 Developed carboxymethylated CNF useable in food and cosmetics applications
 - 2021 Succeeded in world's first LED lighting verification after working on development of CNF electricity storage bodies
- ⇒ **Promote widespread development of CNF applications**

*2 Technology to make pulp fiber (cellulose) into a uniform sheet and apply coating depending on the type of paper
*3 Technology to chemically process the three main components of trees (cellulose, hemicellulose and lignin)
*4 Technology to defiber pulp fibers to the nano level

Natural Capital Wood Resources Procured from Japan and Overseas

Wood resources that form the basis of the Group's business are procured from sustainably managed forests. In addition, the Group has built a network in Japan and overseas to procure a stable and continuous supply of wood resources.

■ Managed forest area (as of December 31, 2021)	Approx. 160,000 hectares (Domestic Company-owned forests)
	Approx. 90,000 hectares (Overseas plantation areas)
	Approx. 70,000 hectares
■ Forest certification rate in Company-owned forests	100%
■ Wood chips procured by Nippon Paper Industries for use in paper (FY2022/3)	3,453,000 BD tonnes*5

*5 Bone dry tonnes

Social and Relationship Capital Collaboration with a Wide Array of Partners

The Group has, through its many years of business development, built partnerships with a diverse range of stakeholders spanning industries, the public sector and academia, including business partners, customers and suppliers, governments and public administrations and universities and research institutes. It aims to further strengthen these relationships and expand business.

Initiative examples

- **Participating in a project subsidized by the New Energy and Industrial Technology Development Organization (NEDO) to develop CNF-related technologies together with manufacturers such as UBE Corporation and Sumitomo Rubber Industries, Ltd.**
- **Forging a capital and business alliance agreement with Shikoku Kakoki Co., Ltd. in 2019 to expand the packaging business. In addition to acquiring a portion of shares in Elopak ASA, a Memorandum of Understanding was signed in 2022, and based on a licensing agreement with Elopak, a local subsidiary was established to conduct sales of paper cartons and filling machines in the Oceania region.**
- **Promoting recycling together with companies and NPOs from 2021 in Hamamatsu City, Shizuoka Prefecture, by conducting a demonstration project for recycling used paper cartons.**

Human Capital Diverse Human Resources Who Create Value

The Group's strength is the fusion of human resources from different backgrounds after mergers and integrations. The Group has over 16,000 employees in Japan and overseas, and by strengthening employee engagement, it promotes creation of organizations in which these human resources can maximize their abilities.

■ Number of employees (consolidated) (as of March 31, 2022)	16,129
■ Ratio of employees at overseas consolidated subsidiaries (as of March 31, 2022)	37.1%
■ Training time per employee*6 (FY2022/3)	17.6 hours

*6 Applies to Nippon Paper Industries Co., Ltd. Training conducted under jurisdiction of Personnel Department, Head Office/Per participant

Financial Capital Financial Base Supporting Business

Of the ¥350.0 billion in strategic investments the Group plans to make by FY2031/3, approximately 80% will be allocated to growing businesses to accelerate the transformation of the business structure and strengthen earnings capabilities. In addition, by ensuring stable EBITDA of ¥100.0 billion, it will strengthen the financial base.

■ Consolidated total assets (as of March 31, 2022)	¥1,639.3 billion
■ Shareholders' equity (as of March 31, 2022)	¥426.9 billion
■ EBITDA (FY2022/3)	¥81.5 billion

Manufactured Capital Production Facilities and Sites to Create Diverse Products

The Group has production sites in Japan and overseas, and efficient production activities are carried out through cooperation among Group companies. The foundation business's land and facilities can be used as a resource to expand growing businesses.

■ Number of Group companies (as of March 31, 2022)	159
	(Domestic affiliated companies) 116
	(Overseas affiliated companies) 43
■ Capital investment amount (FY2022/3)	¥58.1 billion

Initiatives for Materiality and the 2030VISION

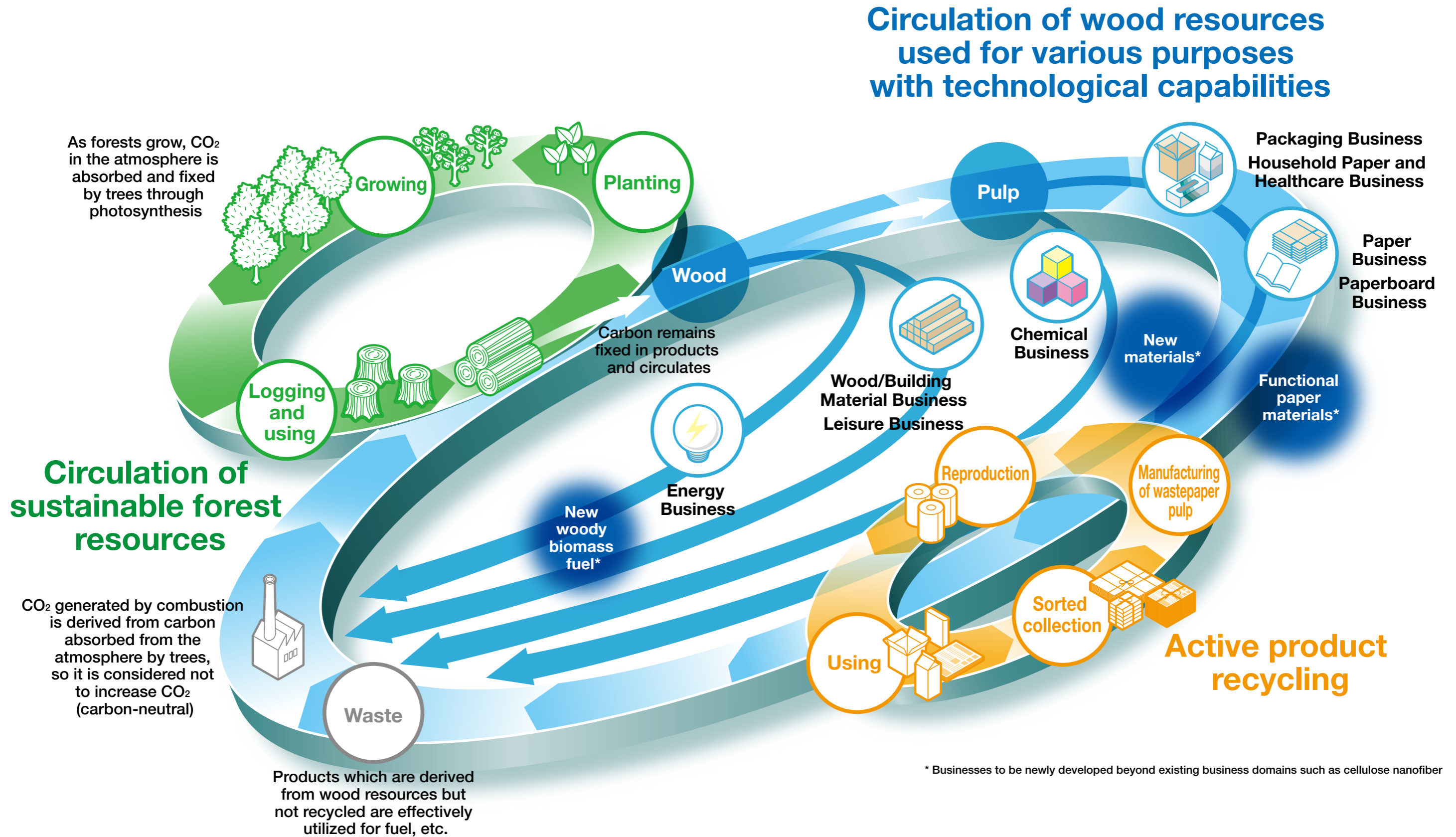
The Nippon Paper Group will pursue sustainability management through initiatives under themes responding to Materiality and the 2030VISION, aiming to realize the Group Mission.

Vision	Materiality (Important Management Issues)	2030VISION Themes	Key Performance Indicators (KPI) to Achieve by FY2031/3 Scope ■ Nippon Paper Group ■ Nippon Paper Industries Co., Ltd.	Main Progress and Initiative Status in FY2022/3	Integrated Report 2022 Related Pages
① Drive social sustainability through our business	Response to climate change	GHG reductions	Reduction of GHG emissions through energy-saving measures and fuel conversion <ul style="list-style-type: none"> Reduce GHG emissions (Scope 1 + Scope 2) by 45% compared with FY2014/3 Improve total energy intensity in production and logistics by 1% year on year Use non-fossil fuels in 60% or more of total energy used 	<ul style="list-style-type: none"> GHG emission volume (Scope1 + Scope 2) Reduction by 20% compared with FY2014/3 Changed Nippon Paper Industries total energy intensity in production (compared with 2020): Paper business -6%, Paperboard business -1.3%, Logistics +2.6% Ratio of non-fossil fuels usage 46% of total energy usage 	→ P.28-29 → P.68-69
			Response to climate change initiatives	<ul style="list-style-type: none"> Participated in the 2021 Ministry of the Environment Scenario Analysis in line with the TCFD recommendations Endorsed the GX League Basic Concept in June 2022 	→ P.68-69
	Utilization of sustainable forest resources Preservation of biodiversity	Pursuit of a green strategy (maximize value of forest resources)	Improvement of forest productivity and expansion of CO₂ fixation amount by using breeding and proliferation technologies <ul style="list-style-type: none"> Improve CO₂ fixation efficiency in overseas plantations by 30% compared with 2013 Secure plantations, mainly in Asia 	<ul style="list-style-type: none"> Conducted ongoing R&D on selection of elite plants, etc. Concluded a strategic partnership agreement in March 2022 with Marubeni Corporation for its plantation business in Indonesia 	→ P.24-25 → P.64-65
			Utilization of Company-owned forests in Japan to revitalize domestic forestry <ul style="list-style-type: none"> Expand elite tree seedling production business for forestry 	<ul style="list-style-type: none"> Obtained certification as a specified proliferator of elite trees such as cedar and cypress (Shizuoka Prefecture, Tottori Prefecture, Hiroshima Prefecture and Oita Prefecture) Signed an agreement with Shizuoka Prefecture in May 2022 for on-site implementation of advance technology in forestry and provide Company-owned forests in Shizuoka Prefecture as the fields for implementation 	→ P.24-25 → P.64-65
			Acquisition and maintenance of forestry certification for all Company-owned forests in Japan and overseas	<ul style="list-style-type: none"> Maintained 100% forest certification acquisition rate in Company-owned forests in Japan and overseas 	→ P.64-65
	Reduction of environmental burden	Reduction of environmental burden	Reduction of environmental burden generated in the manufacturing process <ul style="list-style-type: none"> Reduce air pollutants by 15% and water pollutants by 15% compared with FY2019/3 Keep final disposal volume of industrial waste materials at domestic production sites at 2% or lower 	<ul style="list-style-type: none"> Reduced at domestic production sites (compared with FY2019/3): SOx 34%, NOx 22%, dust 21%, COD/BOD 23%, SS 9% Final disposal volume of industrial waste materials: 2.1% 	→ P.66-67
			Promotion of recycling of resources <ul style="list-style-type: none"> Build a system for stable procurement of wastepaper Promote collection and utilization of unused, difficult-to-treat wastepaper such as food and beverage containers 	<ul style="list-style-type: none"> Started a collaboration to build a circulation system for wastepaper recycling with Yatsushiro City, Kumamoto Prefecture and Otake City, Hiroshima Prefecture Decided in September 2021 to introduce recycling facilities at Fuji Mill for paper containers used for food and beverages, such as paper cups and paper cartons (Scheduled to be operational in October 2022) 	→ P.28-29
Respect for human rights	Respect for human rights	Implementation of human rights due diligence	<ul style="list-style-type: none"> Formulated the Nippon Paper Group Human Rights Policy in May 2022 Conducting a human rights risk assessment since February 2022 by a working group on respect for human rights 	→ P.59	
② Delight our customers	Response to changes in the social environment	Pursuit of a green strategy (expand biomass products)	Expansion of biomass products <ul style="list-style-type: none"> Respond to demand to move away from plastic and reduced plastic use (Expand products for trend to replace plastic with paper) 	<ul style="list-style-type: none"> Expanded adoption of School POP® (strawless paper cartons) (FY2023/3 forecast: 13 prefectures, over 170 municipalities) Established the NPG Product promotion center in June 2022 to strengthen market-oriented approach 	→ P.26-27
	Stable supply of products, safety improvement	Stable supply of products Product safety and quality control	Engagement in stable production, response to natural disasters (strengthen BCP) Establishment and improvement of a product safety management structure	<ul style="list-style-type: none"> Carried out building reinforcement work (Iwanuma Mill), water intake facility submergence prevention work (Gotsu Mill) Established crisis response headquarters regulations at main Group companies (Applicable companies: 32) 	→ P.56-58
③ Instill pride in employees	Realization of diverse work styles Active participation of diverse human resources	Enhancement of ease of working and job satisfaction Maximization of utilization of human resources	Enhancement of employee engagement, including promotion of diversity <ul style="list-style-type: none"> Total working hours of 1,850 hours/year or lower Retention rate after 10 years of employment of 80% or higher Ratio of women managerial-track employees to be 40% or higher by FY2026/3 	<ul style="list-style-type: none"> Total working hours: 1,905 hours Retention rate of employees who joined the Company in FY2012/3 65% Ratio of women among new graduates in managerial-track recruits FY2023/3 40% Acquired Eruboshi certification in February 2022 (Certification stage 2) 	→ P.70-71
	Promotion of occupational safety and health		Assurance of safety and hygiene for working people <ul style="list-style-type: none"> Serious disaster cases of 0/year 	<ul style="list-style-type: none"> Serious disaster cases in FY2022/3: 0 	→ P.58
④ Give back to society	Promotion of business structure transformation	Expansion of growing businesses	Net sales target of ¥1,300.0 billion, of which Daily-Life Products Business has 50% or more Investment of approximately 80% of the strategic investment budget of ¥350.0 billion in growing businesses	<ul style="list-style-type: none"> Daily-Life Products Business net sales: ¥386.5 billion (Accounting for 37% of overall net sales) Strategic investment in FY2022/3: ¥43.0 billion (of which 99% was allocated to growing businesses) 	→ P.30-31
		Early positive contribution from new businesses and innovative materials	Expansion of new uses of cellulose and commercialization of innovative materials Net sales target of ¥65.0 billion for new businesses <ul style="list-style-type: none"> Establish structure to mass-produce CNF and manufacturing technologies (FY2024/3) Launch new businesses using pulp manufacture facilities 	<ul style="list-style-type: none"> Expanded practical adoption of CNF in food and cosmetics applications Launched actual sales of "Genki Morimori®" wood-based feed in FY2023/3 Rolled out sample works at biocomposite exhibition, etc. 	→ P.26-27
		Reformation of structure of foundation businesses	Stronger competitiveness of the Paper and Paperboard Business <ul style="list-style-type: none"> Reduce costs Build an ideal production structure 	<ul style="list-style-type: none"> (Paper) Kushiro Mill withdrew from the pulp and paper business and the Ishinomaki Mill reduced production capacity by approximately 500,000 tonnes by halting the N6 paper machine (Paperboard) Conducted investment to raise logistical efficiency (Otake Mill) and improve quality (Fuji Mill) (Operational stability) Reduced production cutbacks by approximately 60% from the FY2020/3 level by improving facility health, focusing on power and recovery and fiberlines 	→ P.40-41
		Expansion in overseas markets	Overseas sales ratio: 30% or more	<ul style="list-style-type: none"> Overseas sales ratio in FY2022/3: 27% Opal decided to construct a new box plant in the state of Victoria (Scheduled to be operational in FY2024/3) Acquired shares in Elopak ASA, accelerated overseas rollout of domestic Packaging Business 	→ P.42-43
	Enhancement of governance	Stronger functions of the Board of Directors	Improvement of effectiveness of the Board of Directors	<ul style="list-style-type: none"> Enhanced the agenda for the Personnel & Remuneration Advisory Committee 	→ P.50-55
Coexistence with local communities and society Communication with stakeholders	Assurance of transparency in corporate management	Public and fair disclosure of Company information	<ul style="list-style-type: none"> Environmental risk communication in FY2022/3: 19 cases (Domestic production sites) Meetings between outside directors and institutional investors in FY2022/3: 2 times 	→ P.37	

Nippon Paper Group's Business Development as a Comprehensive Biomass Company

"Three Circulations"

The Nippon Paper Group will achieve a carbon-neutral business model through the Three Circulations as a comprehensive biomass company shaping the future with trees.



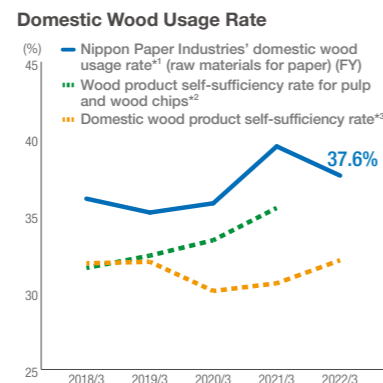
Pursue Maximization of Forest Value through Company-Owned Forests in Japan and Overseas

Forests not only provide value as a raw material source for the Nippon Paper Group, a comprehensive biomass company shaping the future with trees that provides various products, they also create important value for society and the environment. The Group will leverage the unique technologies and knowledge it has cultivated until now while continuing to provide diverse value through the appropriate management of the approximately 160,000 hectares of forests it owns in Japan and overseas.

Value Created through the Circulation of Forest Resources



Plantation areas with a vast improvement in productivity (Left: Before improvement Right: After improvement)



^{*1} Calculation includes waste wood chips from domestic sawmills
^{*2} Source: "Yearbook of Pulp and Paper Statistics," Ministry of Economy, Trade and Industry
^{*3} Source: "Wood Demand and Supply Chart" (Self-sufficiency ratio of wood for industrial use), Ministry of Agriculture, Forestry and Fisheries

Monetary Value of Public Interest Functions of Company-Owned Forests in Japan

Approx. **¥350.0 billion**

Estimates based on the 2017 ecosystem service value evaluation related to corporate biodiversity preservation activities published by the Ministry of the Environment

Expansion of CO₂ Sinks Using Forests

Nippon Paper Industries is engaged in research and development as it believes that improving forest productivity (which means raising the CO₂ fixation efficiency rate) is important for maximizing the value of forests. Securing wood resources and raising productivity will promote the stable procurement of woody raw materials and raise quality and lower costs while contributing to the realization of carbon neutrality by expanding CO₂ sinks.

Improving the CO₂ fixation efficiency rate by strengthening unique breeding and propagation technologies

The Company aims for a 30% improvement in the CO₂ fixation efficiency rate at overseas plantation areas by FY2031/3 (compared with 2013) by further strengthening unique breeding and propagation technologies to improve forest productivity.

Securing new wood resources

The Company aims to expand forest resource reserves by 100,000 hectares, mainly in Asia, by FY2031/3.

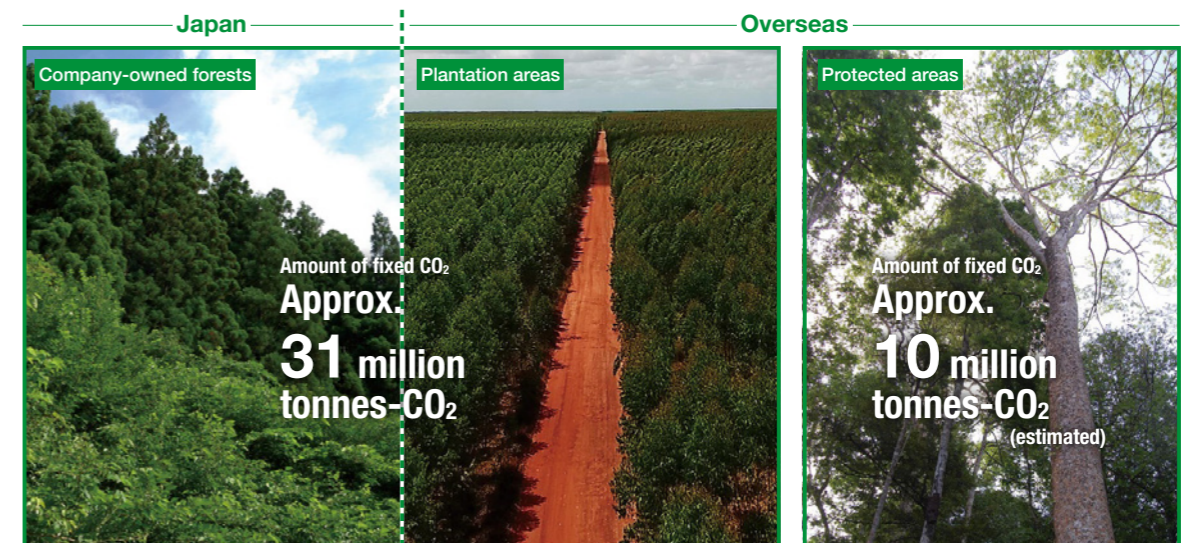
The Company and Marubeni Corporation signed a strategic partnership in March 2022 and aim to improve forest growing stock through technical guidance provided to PT. Musi Hutan Persada (MHP), Marubeni's plantation business company in Indonesia.

The Group's Concept of Forests as CO₂ Sinks

The Company logs and plants trees in Company-owned forests in Japan and overseas based on a business plan for the purpose of using forest resources.

In 2021, the net increase in Company-owned forests in Japan and overseas plantations was approximately 250,000 tonnes-CO₂ (net absorption: absorption volume—logged volume) and the total amount of fixed

CO₂ at the end of 2021 was approximately 31 million tonnes-CO₂. In addition to this, the amount of fixed CO₂ due to forests in the environmental protection areas set up by the overseas plantation business is estimated at approximately 10 million tonnes-CO₂. The Company will continue to study and consider the value and functions of these protected areas.



Expansion of the Elite Tree^{*4} Seedlings Business for Forestry

The Nippon Paper Group is working in collaboration with the Ministry of Agriculture, Forestry and Fisheries, local governments and seedlings businesses to contribute to the revitalization of domestic forestry through expansion of the seedlings business for forestry by providing elite tree seedlings. In addition, when reforesting Company-owned forests, seedlings from elite and other trees produced within the Company will be used and sequentially planted to raise the value of Company-owned forests.



Production of elite tree seedlings

^{*4} Strains of trees such as cedar, cypress, larch, etc. that have excellent characteristics such as 1.5 times or greater growth and half or less the amount of pollen production

Circulation of Wood Resources Used for Various Purposes with Technological Capabilities

Generating Products that Will Realize the Creation of a Circulation-Oriented Society with Solid Technology that Maximizes Use of Wood Resources

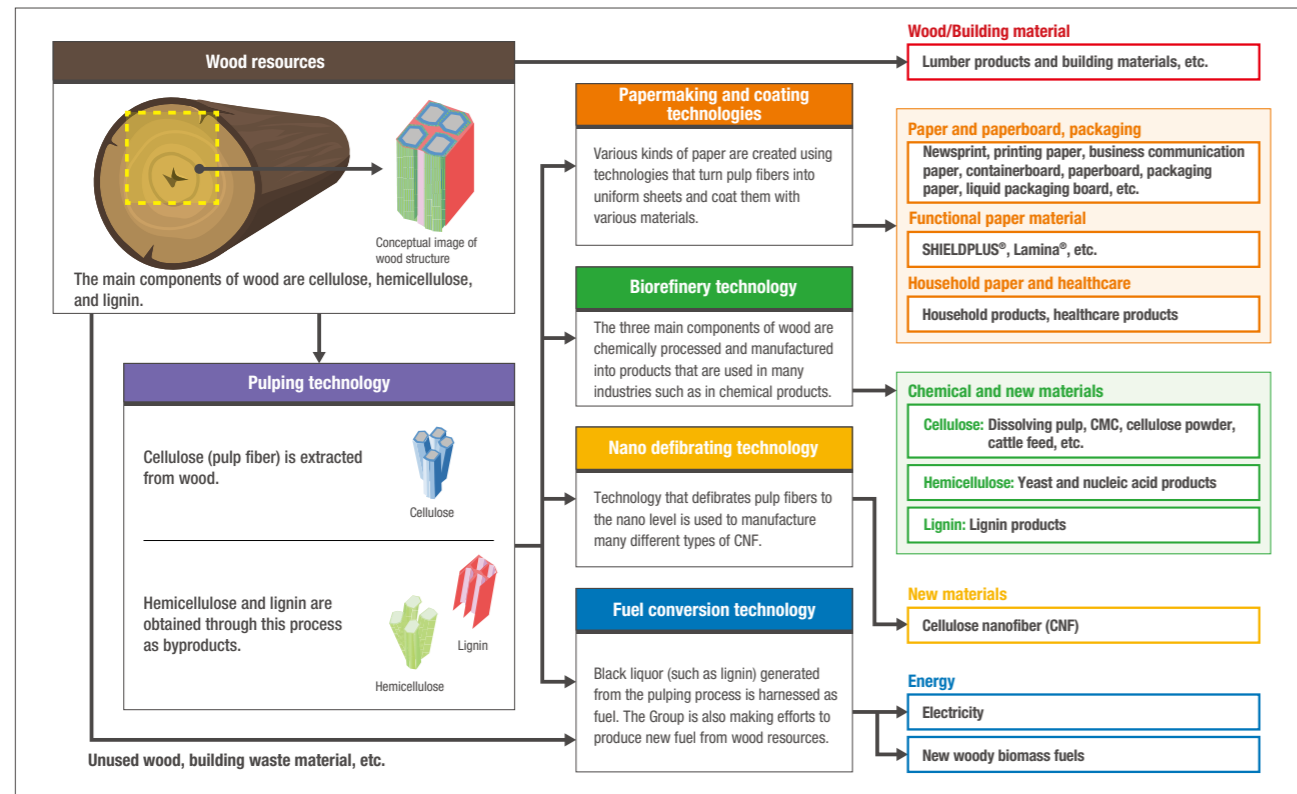
The Nippon Paper Group develops business that utilizes renewable wood resources at many stages, based on the accumulation of a wide range of technologies, including pulping, and know-how. It will strive to boost profitability while contributing to the creation of a carbon-neutral society by expanding the provision of products and services generated from wood resources as “a comprehensive biomass company shaping the future with trees.”

Value Created through the Circulation of Wood Resources



* Replacing fossil-derived products with biomass products utilizing wood resources will increase the CO₂ fixation amount for society overall.

Products and Services Generated from Technology that Maximizes Use of Wood Resources



Development and Sales Expansion of Biomass Products

The Group develops not only paper but also a variety of biomass products that use wood resources as a raw material. It is thought that if biomass products are widely popularized in society and sales can be expanded, the use of those products could lead to CO₂ fixation. Therefore, the Group aims for business growth harnessing technological capabilities and contributions toward the creation of a carbon-neutral society.

Expanding Sales of Environmentally Friendly Paper Carton (School POP®)

Sales of School POP® strawless milk cartons for school lunches are accelerating amid the global trend toward replacing plastics with paper. These products, which are compatible with traditional filling machines and feature improved functions such as ease of opening and drinking, were developed in June 2020, after which they were first adopted in Kochi Prefecture, and their adoption has expanded to 13 prefectures and over 170 municipalities as of April 2022. Approximately 1.4 billion paper cartons are used annually for milk in Japanese school lunches, but in FY2023/3, it is expected that over 200 million School POP® cartons will be supplied in one year, making up 15% of the total amount. If one straw weighs 0.5 g, then approximately 100 tonnes of disposable plastic can be reduced, and this product's

contribution to fostering environmental awareness in educational settings has also been positively evaluated. The Group began production at three locations in 2022, and aims to expand sales further by establishing a structure capable of supplying the entire country.



Expansion of regions where strawless cartons are used in school lunches through the popularization of School POP®

Accelerating the Commercialization of Cellulose Nanofiber (CNF)

The Group is developing applications for CNF, formed from pulp defibrated to the nano level. As for TEMPO-oxidized CNF and carboxymethylated CNF, for which mass production has begun, the Group is continuing to work on expanding its lineup in anticipation of an increase in the number of adoptions and development of new functions. Facilities at the Gotsu Mill, which produces carboxymethylated CNF, are expected to achieve full operation through an expansion of successful adoptions primarily concentrated in food products and cosmetic uses, and CNF business will be developed in earnest as the Company's unique business. For CNF-reinforced resin, the Group promotes technological development and sample works, and aims for these products to be used at an early stage. In terms of uses in development, the electrical storage properties of CNF were discovered through the results of collaborative research with Tohoku University in 2021. Following this, the Group succeeded at carrying out the world's first

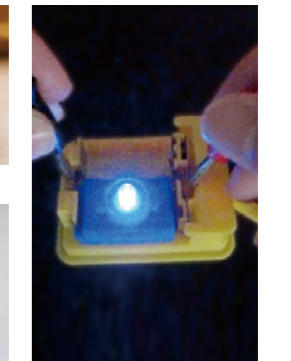
LED lighting verification outside of an academic experiment, and is aiming to exhibit a prototype at Expo 2025 in Osaka, Kansai. It will continue to accelerate initiatives toward early commercialization by strengthening collaboration both inside and outside the Company.



Dorayaki from TAGONOTSUKI CO., LTD.



Cosmetic product BIOFEAT from Nippon Paper Papylia



LED lighting that relies on a CNF-based electricity storage body

Development of Cattle Feed (Genki Morimori®)

The Group has developed cattle feed from wood resources by utilizing its cultivated pulping technology. Highly refined and high-quality cellulose is singularly extracted through the treatment process to remove lignin from wood, which makes it possible to obtain stable quality, creating an easily digestible and effective source of energy. The fact that it is produced domestically and can be supplied throughout the year is also a strength. In addition to increased milk yield and improvements in

breeding, the feed has also been shown to promote the health of fattened cattle. The Group will promote these strengths and results and work to increase adoption by ranches.



Genki Morimori®

Using Hard-to-Recycle Unused Wastepaper

For many years, the Nippon Paper Group has actively used wastepaper as raw material for paper production. Going forward, by simultaneously addressing customer needs for replacing plastic with paper and the recycling of paper products, the Group intends to increase demand for biomass products, which in turn will expand the market for replacing plastic with paper. For that reason, Nippon Paper Industries will construct a collection system for used paper cartons for food, which were hard to recycle, and aim to expand sales of biomass products.

Value Created through Product Recycling



Makoto Hasegawa
General Manager, Recycling Promotion Office, Technical & Engineering Division
Nippon Paper Industries Co., Ltd.

The Company is further developing the market for replacing plastic with paper and working to expand sales of biomass products by promoting recycling of paper that had previously been hard to recycle, such as used paper cartons for food.

In October 2022, the Company will begin operating recycling facilities for paper cartons for food and beverages, such as paper cups, at its Fuji Mill. It uses the high-quality, intensely white recycled pulp produced at these facilities as raw material for paper, and provides paper products in a wide variety of areas including paper, paperboard and household paper. In doing so, it aims to further develop the market for replacing plastic with paper. It also plans to annually collect and use 12,000 tonnes of wastepaper, including paper cartons that are hard to recycle, in 2030.

On the other hand, there are two major issues involved with this recycling promotion. One is the construction of a collection system for used paper cartons for food. For example, it is up to municipalities to decide whether used paper cartons are counted as trash or recyclable resources. In addition, the food

residue that adheres to the paper cartons may cause decomposition and unpleasant smells, so the cartons must be washed. With the support of Hamamatsu City in Shizuoka Prefecture, the Company has been conducting verification tests for the separation and collection of used paper cartons from homes in the city since April 2021. It has also been conducting verification tests to wash and collect used paper cups at places such as event spaces in Tokyo and Hokkaido. Through these tests, it has been studying the establishment of a separation and collection scheme for paper cartons. Additionally, it is working to establish a collection system together with customers, such as B-to-C paper carton manufacturers and retailers with close ties to consumers as the key to raising awareness of recycling paper cartons among consumers.

The other issue is promoting the use of recycled pulp. The entire Group must establish new sales strategies that involve engaging with customers to develop products with environmental appeal and broaden the range of applications. The Group has received feedback from customers desiring a visual depiction of recycling and products generated from collected paper cartons, and will work to provide paper products that offer recycling as a new value.

Going forward, the Group will broaden initiatives aimed at promoting active product recycling together with customers, and advance business expansion and the use of new resources through mutually beneficial relationships.

Initiatives for Carbon Neutrality

Utilizing Accumulated Technology and Experience and Further Reducing Coal Consumption

The Nippon Paper Group aims for sustainable Group growth and the realization of a circulation-oriented society that maximizes wood resources.

In response to the surge in coal prices, the Group is accelerating initiatives for reducing coal consumption that will lead to earnings improvements and carbon neutrality.



Yasuhito Murakami
Executive Officer
General Manager, Technical & Engineering Division
(In charge of GHG emissions reduction and promotion of environmental management)
Nippon Paper Industries Co., Ltd.

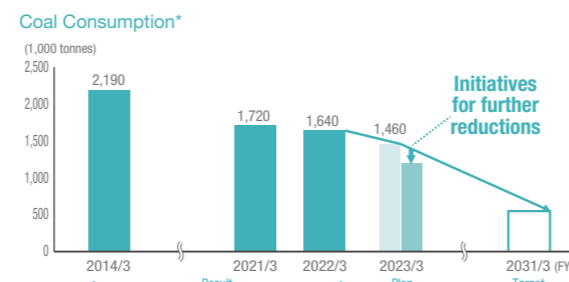
The manufacturing process of creating products from wood resources requires a large amount of energy, so fuel procurement is an important management issue that affects earnings.

The Group took the global oil crisis as an opportunity to achieve cheap, stable procurement, and converted to a mix of fuels primarily focused on coal

with high calorific value. Meanwhile, it has accumulated a great amount of know-how regarding biomass power generation by utilizing woody biomass fuel and non-fossil-type waste-oriented fuels in order to reduce GHG emissions in manufacturing processes. In recent years, it has also been working on reviewing the production structure of the Paper Business, and plans to reduce coal

consumption to 1.46 million tonnes in FY2023/3, but is working on reducing this amount even further through additional measures.

Prices for raw materials and fuel began to surge in the latter half of FY2022/3, and the price of coal in particular skyrocketed in response to the Russian invasion of Ukraine, dealing a direct blow to the Group's earnings. As an emergency measure to improve earnings, within the Group, the technology and sales departments have been intensively collaborating on operations that limit coal



* Scope: Nippon Paper Industries (amount consumed internally)

consumption to the fullest extent while maximizing production efficiency by, for example, narrowing down the number of production items. Additionally, from the perspective of carbon neutrality as a way of addressing climate change, the Group must realize the scenarios from the 2030VISION ahead of schedule.

Technology and Operational Experience Will Accelerate Energy Conversion

In addition to coal, prices for crude oil, natural gas, and woody biomass fuel have been surging around the world with companies scrambling to compete, but the Group will continue its shift away from coal to domestic waste-oriented fuels.

Through construction and operation of various biomass power generation facilities, the Group has accumulated know-how covering operational stability such as adapting combustion to fuels with different calorific values and forms and technology that limits the adhesion and corrosion of ash with a low melting point at areas of heat transfer within facilities. In addition, with regard to the three circulating fluidized bed boilers at the Akita, Fuji, and Otake Mills, where the percentage of coal consumption is currently high, the Group is considering remodeling the facilities to increase the ratio of waste-oriented fuels used. It will also work on fuel procurement that maximizes its internal procurement network.

Maximizing the permissible use of black liquor generated from the pulp manufacturing process is also one of the Company's key strategies. Using pulp to create a large number of biomass products other than paper and

paperboard, black liquor, a carbon-neutral fuel, will increase in abundance and be used to accelerate energy conversion.

Undertaking Energy Saving with New Ideas

Energy saving is an incredibly important measure in energy-intensive industries. The Group has set a target of improving total energy intensity in manufacturing by one percentage point or more per year, but this will not be easy.

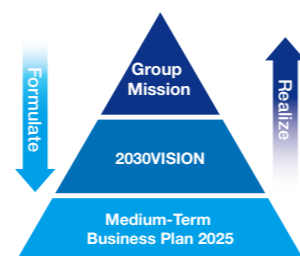
However, right now as energy costs are rising, it is critical to limit the consumption of fuel and electricity through higher energy efficiency. For instance, although using a large volume of water in the papermaking process is necessary from the standpoint of paper quality, a significant amount of energy is lost. Going forward, we will incorporate new technologies, and I think that we will require new ideas to simultaneously maintain and improve water and energy saving as well as quality. We will once again review the energy saving measures that we have undertaken up to this point while identifying the causes of energy loss in various processes, and proactively advance effective measures to save energy.

Based on the presumption of surging prices for raw materials and fuel, the Group will establish operational structures that reduce coal consumption such as fuel conversion and energy saving, as well as advance the reorganization of the Paper Business's production structure in an integrated manner. By pursuing both cost and quality using flexible ideas and reducing GHG emissions, we aim to be a company that is trusted and chosen by customers.

Progress on Medium-Term Business Plan 2025

The Nippon Paper Group formulated the 2030VISION as a guideline that clarifies its goals for 2030 and business challenges to realize the Group Mission. Medium-Term Business Plan 2025 is an action plan established for the five years from FY2022/3 to FY2026/3 to realize the 2030VISION.

Although the business environment encompassing the Group is changing rapidly and dramatically, it is aware of the current situation and challenges and will rapidly propose and implement measures to realize Medium-Term Business Plan 2025.



Basic Policy

Medium-Term Business Plan 2025 has the basic strategy to accelerate the transformation of business structure and reallocate management resources to growing businesses, accelerate enhancing profitability of new businesses and reinforce competitiveness of foundation businesses.

This medium-term business plan is positioned as an extremely important initiative to set the Group on a growth

trajectory, placing greatest emphasis on a sense of speed in each business within growth sectors, identifying demand trends and advancing appropriate measures. Moreover, by maximizing utilization of resources at each production site in the paper business, it aims to enhance investment efficiency and pass on the technical skills and know-how of Nippon Paper Group employees.

Progress in the First Year

In FY2022/3, net sales increased steadily, but operating income decreased compared with the previous fiscal year due to the impact of the spread of COVID-19 and surging raw materials and fuel prices. As a result, EBITDA and ROE remained below the levels of the previous year.

However, in the foundation businesses, progress on reduction of paper production capacity went as planned, and measures incorporated in the medium-term business plan for new and growing businesses were implemented. Moreover, in the latter half of FY2022/3, price revisions were carried out for

many products, including paper, paperboard, household paper and paper carton products.

	FY2020/3 Results	FY2021/3 Results	FY2022/3 Results	MTBP 2025 Targets
Net sales (¥ billion)	1,043.9	1,007.3	1,045.1	¥1,100.0 billion
Operating income (¥ billion)	35.0	19.2	12.1	¥40.0 billion or more at an early stage
EBITDA (¥ billion)	97.8	86.9	81.5	Stably ¥100.0 billion
Net D/E ratio (times)	1.75	1.86	1.89	1.5 to 1.6 times
ROE	3.7%	0.8%	0.5%	5.0% or more

Our Understanding on Current Business Environment (Risks and Opportunities)

The unstable global situation caused by the Russian invasion of Ukraine is showing signs of being prolonged and disruptions in the supply chain, including congestion of maritime transportation, are causing dramatic rises in prices. Even in Japan, the business environment encompassing the Group has changed significantly as prices for fuel and raw materials have surged

and the yen has continued to weaken dramatically beyond expectation. While advancing initiatives to leverage opportunities such as growing demand to replace plastic with paper, the Company is also keenly aware of the importance of responding appropriately to pressing risks such as surging prices for fuel and raw materials and shrinking demand for paper.

Changing Business Environment	Risks	Opportunities
Prolonged Ukrainian impact (continued disruption to the global supply chain)	· Lingering high fuel and raw material prices, including for coal	· Increased sales opportunities for items such as lumber and pulp
Inflation and foreign exchange fluctuations (possible recession)	· Acceleration of shrinking demand for paper · Rise in various costs	· Improvement in export environment due to the weak yen
Continued congestion of maritime transportation	· Rise in logistics costs · Sluggish fuel and raw material procurement and product shipment	· Recovery in demand for domestic products
Further escalation of requirements to reduce GHG emissions	· Selection of products based on the amount of GHG emissions · Rushed introduction of a carbon tax	· Enhanced value of forest resources · Expanded market for biomass products · Establishment of a system for carbon credits
Acceleration of elimination and reduction of plastic	· Reversion to plastic use through such means as establishment of reuse technologies	· Replacing plastic with paper and rising demand for biomass products
Entrenchment of new lifestyle patterns brought about by COVID-19	· Further reduction in demand for graphic paper due to such factors as advances in digitalization	· Expanded sales opportunities for household products addressing increased consumer awareness of health and hygiene

FY2023/3 Important Issues

The business environment for the paper business is becoming increasingly harsh due to the soaring price of coal, and reducing coal consumption is not only an issue in regard to decreasing GHG emissions, but also directly relates to earnings. In addition, growing businesses may secure a certain level of earnings under this harsh environment, but Opal's earnings

have been slow to recover and early measures are essential. To improve these situations, in FY2023/3, the Company will make additional revisions to product prices including paper, paperboards, and liquid packaging boards, while tackling the following three important issues.

Important Issues	Main Initiatives
(1) Accelerate reduction of coal consumption	<ul style="list-style-type: none"> · Limit or temporarily shut down coal boilers · Consolidate maintenance shutdowns of production facilities
(2) Structural reform of the Paper Business	<ul style="list-style-type: none"> · Reduce variable and fixed costs not bound by conventional concepts · Maximize production efficiency in such ways as narrowing down product grades · Propose plans to reorganize the production structure from a medium- to long-term perspective
(3) Improve the profitability of Opal	<ul style="list-style-type: none"> · Firmly capture sales opportunities through market growth · Assure emergence of synergistic effects · Strengthen the integrated packaging production system

Strengthen New and Growing Businesses

New and growing businesses generally progressed as planned, including development of new products, promotion of expanded sales and launching operation of new facilities. Going forward, the aim is to achieve Medium-Term Business

Plan 2025 by steadily realizing the effects of each of these measures and expanding earnings by responding to changing trends in demand and the economic environment, and striving to respond to new needs that help resolve social issues.

Business	Main Progress in FY2022/3	Main Initiatives for FY2023/3 Onward
Paperboard	<ul style="list-style-type: none"> · Expanded sales of kraft linerboard with high burst strength 	<ul style="list-style-type: none"> · Expand distribution functions through Diamond Trading Inc. · Develop high-value-added products utilizing proprietary kraft pulp
Domestic Packaging	<ul style="list-style-type: none"> · Expanded adoption of School POP®, strawless milk cartons · Launched operations of state-of-the-art CI flexo printing press 	<ul style="list-style-type: none"> · Expand sales of high-value-added products such as NSATOM® · Deepen relations with Elopak ASA, pursue new business opportunities · Strengthen collaboration with NDP
Overseas Packaging	<ul style="list-style-type: none"> · Appearance of synergistic effects · Acquired new, large-scale contract for copy paper 	<ul style="list-style-type: none"> · Firmly capture sales opportunities through market growth · Assure emergence of synergistic effects · Strengthen the integrated packaging production system by constructing a new corrugated box plant, upgrading equipment at existing corrugated box plants, etc.
	<ul style="list-style-type: none"> · Expanded pulp sales due to operation of pulp drying machine · Launched operations of the metal belt calendar 	<ul style="list-style-type: none"> · Develop high-value-added products in collaboration with the domestic Packaging Business · Maximize sales volume of dry pulp
Household Paper and Healthcare	<ul style="list-style-type: none"> · Shifted all toilet paper rolls to long-lasting rolls 	<ul style="list-style-type: none"> · Maximize pulp utilization within the Group · Improve quality through unique technologies, launch new products
Chemical/New Materials	<ul style="list-style-type: none"> · Increased production capacity of functional cellulose-coated resins · Expanded application of cellulose products, including CNF · Succeeded in verification of an LED light in a CNF electricity storage body 	<ul style="list-style-type: none"> · Develop markets for new cellulose products and establish manufacturing technologies at an early stage · Assure emergence of capital investment effects
Energy	<ul style="list-style-type: none"> · Commissioned by NEDO for an outsourcing project to research CCUS · Converted the Suzukawa Energy Center to a biomass mono-firing power plant 	<ul style="list-style-type: none"> · Operations at Yufutsu Energy Center
Wood/Building Material	<ul style="list-style-type: none"> · Expanded sales of biomass fuel 	<ul style="list-style-type: none"> · Expand the domestic log handling volume · Further strengthen the biomass fuel/non-fossil fuel businesses

Promoting Change and Acceleration through Proactive Statements Aimed at Sustainable Growth



As the social environment undergoes drastic changes, the Nippon Paper Group is working to accelerate the transformation of the business structure as “a comprehensive biomass company shaping the future with trees,” and governance must be strengthened even further. In this roundtable discussion, Makoto Fujioka, Yoko Hatta, and Yutaka Kunigo spoke from the perspective of outside directors.

Leadership by the Board of Directors sought in an age of uncertainty

— In an age of uncertainty, what do you think about the role of the Board of Directors in corporate management?

Fujioka: Unimaginable circumstances, whether it be the COVID-19 pandemic or Russia’s invasion of Ukraine, have had an extensive impact on corporate activities. We need to fully comprehend that we have entered an age in which the unthinkable has actually occurred.

In the business world, a common perception about the age of “VUCA” (Volatility, Uncertainty, Complexity, Ambiguity) began to spread in the 2010s. In other words, the pandemic and the emergence of geopolitical risks are not coincidental or temporary phenomena. I believe that the economy and society were already undergoing a paradigm shift, and that the various problems occurred due to the previously mentioned impacts. Even though we are in an age which has an extremely

uncertain business environment as I explained, companies need to squarely address the issues, generate social value, and achieve sustainable growth. The role of the Board of Directors, which is the core of corporate governance, is becoming increasingly significant.

It is important to consider the specific roles of the Board of Directors from three perspectives. First, although sudden shifts require short-term action, in ordinary times, the Board of Directors takes a long-term view and ascertains the direction society and the economy are headed. Second, it creates a resilient, flexible management structure capable of responding immediately in emergencies. Third, it views unforeseen circumstances, occurring in what seems like a constant stream, as both threats and business opportunities. Based on these perspectives, I think the Board of Directors is required to fulfill the role of a guide, ushering the Company in the right direction. It does this by continuously collecting information about the business environment with its antenna raised high and monitoring management.

The approach to utilize outside directors is advancing

— How do you evaluate Nippon Paper Industries’ Board of Directors?

Hatta: I was appointed as an outside director in 2019, but prior to that, agenda items were circulated just before Board meetings which then proceeded quietly, with hardly any discussion, and agenda items being merely approved according to their drafts. However, my impression is that things have changed quite a bit. The opinions of outside directors are being sought considerably more, and opportunities for outside directors to ask questions are also increasing. Against a market environment in which demand for paper is continuing to decrease significantly, I feel that the awareness of a crisis which requires the Company to change is growing much stronger.

Kunigo: Since consideration of the 2030VISION and Medium-Term Business Plan 2025 began, President Nozawa earnestly listened to the opinions of outside directors who said that strategic discussions were necessary, and we became able to have various kinds of discussions. There is now a structure in which, aside from Board of Directors meetings, outside directors also attend meetings of the Group Management Strategy Committee and Management Executive Committee, and are able to ask questions. I am convinced that the Company is incredibly open.

Actually, since Medium-Term Business Plan 2025 was initiated, outside directors have been consulted beforehand in many cases about projects that have yet to be drafted as agenda items. Opinions regarding projects currently under consideration on the execution side are heard, so I think the Company has a rare openness. Additionally, I feel the fact that information is being shared beforehand in such a way leads to constructive dialogue at Board of Directors meetings.

Fujioka: I have been serving as an outside director for six years, but feel that the Company has truly changed over that time. Discussions have become incredibly active, explanations about projects are given successively even outside the monthly Board of Directors meetings, and opportunities for discussion have been increasing right before my eyes. There have been some months where I worked on the Company’s business for nine days out of the month. Since 2021, quarterly operational reports have been made by each chief officer and discussions have taken a medium- to long-term perspective at Board of Directors meetings. I think this is a very important change when it comes to creating and enhancing corporate value.

— What type of roles do you think you fulfilled as outside directors at Board of Directors meetings in FY2022/3? Also, what kind of stance did you take when making statements?

Hatta: Overall, there were many opportunities to ask questions. Naturally, there were some questions which the executive side was unable to explain, but there were many opportunities for outside directors to question things that had not yet been noted. Also, requests for follow-up reports on important

projects after they had been decided were accepted, and we were able to thoroughly monitor each project.

What I am mindful of is questioning those on the execution side from my end to confirm whether an environment is being established that will make it possible to implement the project and whether there are any bottlenecks that will hinder progress. At that time, I make sure to include the phrase “Please work on it with a sense of urgency.” Currently, in addition to the pandemic, the unimaginable has occurred through Russia’s invasion of Ukraine, affecting the entire world. It is precisely because I am keenly aware of this age of uncertainty that I believe acceleration is critical no matter what I do.

Kunigo: Over the course of the year, I made sure to serve as the “watchman of the medium-term plan” at all costs. I examine whether measures incorporated in Medium-Term Business Plan 2025 are being achieved or if progress toward achievement is being made. That is the perspective I hold to be most valuable.

Additionally, I make sure to employ my abundant prior experience and offer my opinions with an outside viewpoint as an expert when it comes to initiatives involving energy and decarbonization, including capital investment in infrastructure.

Fujioka: I have reviewed the minutes of the meetings over the past year, and have come to make statements from various angles, including some statements about issues that appear difficult, from a medium- to long-term perspective, in order to further improve the Group’s value. I naturally make statements not only at Board of Directors meetings but also when the execution side is at the planning stage, many of which have been incorporated into actual measures.

For instance, when the 2030VISION and Medium-Term Business Plan 2025 were formulated, I suggested it would be necessary to spread awareness to every single employee on-site to achieve them. Then on the day when the medium-term business plan was announced, President Nozawa himself broadcast a video message to all employees. On top of this, an employee survey was conducted, and the responses have been used to spread awareness of Medium-Term Business Plan 2025 and the 2030VISION. Furthermore, when I proposed the necessity for highly in-depth discussions directly with the president outside Board of Directors meetings, he personally explained the policies aimed at achieving the medium-term business plan before the Personnel & Remuneration Advisory Committee, and opportunities were made for outside directors to ask questions about points of concern and offer their opinions. Beginning in FY2023/3, the number of meetings held increased from the original two times per year to four, which has led to an increase in opportunities for discussion.

Seeking development of management personnel qualified through diverse business experience

— From a medium- to long-term perspective, experience in what areas and what types of skills are required of personnel responsible for the Group’s management?



Kunigo: The Group is making efforts to drastically change its business structure under Medium-Term Business Plan 2025, so I think that people who have gained experience through a wide range of businesses are ideal. In particular, in order to expand the Daily-Life Products Business further, it will be a requirement that such people possess accumulated experience in a business that deals closely with consumers.

Meanwhile, in terms of temperament, leadership that rallies those around them is a must. As the Group’s organization is flat, leadership that continuously increases involvement is extremely critical. One more important thing is of course tenacity since

the current management environment is harsh.

Hatta: I think being able to see from diverse perspectives and accurately assess what must be achieved and being able to use that skill as an axis for progress is important. However, they will not be able to listen flexibly to other people’s opinions if they are too self-assertive, so I think someone who is confident in their way of thinking and has a strong determination to take responsibility while being able to listen to the opinions of those around them is necessary for the Group’s management. It is also important to be able to take initiative with a sense of urgency.

Fujioka: There are certainly skills required by each division such as sales, research and development, and technology. Additionally, what I want to look for is the ability to develop business. The ability to implement and develop innovative changes from new perspectives is surely necessary even in existing businesses, and in the Daily-Life Products Business, the ability to create new businesses and develop them overseas will become valuable. In addition, in order to make close contact with customers and develop business after gathering information, I think the ability to cross divisions and collaborate with others, including partner companies, will become necessary.

If cases emerge in which the Group, as a comprehensive biomass company, exits the traditional paper business and conducts business broadly in new developing markets, the range and number of management personnel with those abilities will surely become important. For that reason, I think it will be necessary for the Company to invest in personnel development, and enable these people to accumulate experience from the standpoint of taking on responsibility in a range of business divisions, such as managerial experience in overseas businesses or subsidiaries, from a young age.

Measures undertaken in the first year of the plan were largely praised

Looking ahead, “speed” and “lateral communication” will become necessary

— How do you evaluate the progress of the 2030VISION and Medium-Term Business Plan 2025 in the past year as outside directors?

Kunigo: Due to the impact of unthinkable environmental changes, it is true that we are seeing nothing but unfavorable figures. However, the key point to focus on is whether or not the Group can fully apply managerial resources and not use the pandemic or the invasion of Ukraine as excuses. On that point, my evaluation is that measures are being achieved to a certain extent. I also have the impression that steady progress is being made on non-financial initiatives as well.

I fully agree with Chairman and Director Manoshiro and President Nozawa that there is a need to accelerate the speed at which measures are undertaken. Despite the impact from the prolonging of the COVID-19 pandemic and the invasion of Ukraine, the orientation of the measures undertaken in Medium-Term Business Plan 2025 is accurate. However, in addition to the decline in paper demand, we have been forced to address the surge in coal prices, which is precisely why I think acceleration is most crucial. In addressing important management issues, we must make efficient use of people, items, and money. By having people accelerate the speed of decision-making and increasing the circulation of items and money, we should be able to improve the efficiency of limited managerial resources.

For instance, the Group’s coal boiler facilities are massive in scale, and changing the way they are handled overnight would be difficult. For that reason, in order to rapidly decrease coal consumption, leadership must be demonstrated. More to that point, if unprecedented leadership, by not only the president but the entire management class, can be demonstrated, decision-making will accelerate even further. For important management issues such as reducing GHG emissions, the Company clarified the responsibilities of executive officers in June 2022. I have very high hopes that those officers will promote the acceleration of information gathering and decision-making.

Hatta: In an internal company survey conducted after the formulation of the 2030VISION and Medium-Term Business

Plan 2025, feedback was received from those concerned about a further decline in paper demand going forward. Meanwhile, although I understand the importance of acceleration, it will be difficult to maintain that mindset, and even if those at the top are rushing around, those below will not keep up. In order to accelerate, we must ensure that all employees share a sense of crisis, and maintain their commitment to working together. In perceiving social and economic trends and taking action appropriately as a company in the capital intensive industry that owns massive facilities, a large amount of cash is naturally required, and marketing ability is critical to generating cash and transforming the business structure. I think it will be difficult to produce results immediately, but steadily making efforts is important.

— In last year’s integrated report, you said that one of the Group’s issues was “lateral communication.” Have you seen improvements to this in the past year?

Hatta: It appears that the employees have developed a strong tendency to work hard solely on managing their own positions in a business model involving the mass production of paper. Through Medium-Term Business Plan 2025, all employees recognized the necessity of lateral communication and realized that action must be taken, but just like before, the mindset that the Company should sustain its own position remains. To break free of that mindset, efforts are being made to cooperate horizontally across organizations, such as launching a team to collaborate on research, technology, logistics, and more. The team issues a report every quarter, and I feel it has started to serve a purpose. Amid an environment where change is inevitable, these gradual adjustments are reassuring.



Kunigo: This ties into the conversation about consulting outside directors about projects before they are drafted as agenda items, but I feel that there is strong enthusiasm toward listening to external opinions.

Fujioka: I strongly feel that sharing of awareness toward innovative changes and enthusiasm for those changes is rising. That is perhaps why the number of agenda items being brought to the Board of Directors is on the rise. The level of activity throughout the Company overall is undoubtedly increasing. Amid what has of course recently been a harsh business environment, although the results

of these efforts may not become visible immediately, I am confident that they will emerge in the medium to long term.

Maximizing managerial resources, honing sales abilities, and expecting a transformation into a true comprehensive biomass company

— What kind of expectations do you all have for the future growth of the Group?

Hatta: It is important now to harness the advanced potential of wood and explore future business development. In order to do so, I think it will be extremely difficult if the Group continues to employ conventional methods. I think utilizing the capabilities of young people and making concrete efforts as a unified group while proactively incorporating diverse opinions through active discussion will lead to acceleration.

Kunigo: First of all, I often speak about harnessing the expertise of operators at manufacturing sites. Second, because many of the Company’s products use materials from the uppermost stream, differentiating the products themselves is difficult, and the reality is that profit margins are slim. For precisely that reason, we expect to expand our business in wood resources, especially cellulose, and actively shift downstream, closer to consumers. Additionally, as for the point of using Company-owned forests, I think they have further potential.

Fujioka: I spoke about this in last year’s roundtable discussion, but I have strong expectations that the Company will transform into a true comprehensive biomass company based on its slogan of “shaping the future with trees.” Wood is itself a renewable resource, and the Company will be able to help form a circulating economy through the development of businesses utilizing that wood. In other words, by developing business, it will be able to improve the very social value it provides. With the human resources, technological capabilities, and wood resources it owns and manages and the partnerships it has built up in a wide range of areas, the Group could make it happen. I believe that effectively exploiting these managerial resources will make it possible to realize its Vision and become a unique and meaningful company. For that reason as well, it will be necessary to strengthen collaboration with a focus on sales departments across the entire Group and improve sales capabilities.

