

MESSAGE *from*

Overcoming Crises through Growth and Transformation to Build the Future through New Challenges

Pursuing Business Structure Transformation Amid a Wave of Global Structural Change

Guided by the slogan “Shaping the future with trees,” NIPPON PAPER GROUP has contributed to better living and cultural progress everywhere it does business since its founding, through manufacturing that harnesses the bounties of nature. Looking back, when I was appointed president in 2019, the world was just beginning to undergo major structural changes, including the escalation of the U.S.-China trade war, and political turmoil in Europe as the U.K. moved toward exiting the EU. Amid the ongoing contraction of the graphic paper market, we have pursued business structure transformation as a comprehensive biomass company, specifically by reorganizing the production system of the paper business and expanding business in growth fields.

As these initiatives began to bear fruit and we felt we were finally starting to see a path to growth for the Group as a whole, we were soon confronted with the crisis of the global COVID-19 outbreak in 2020. The movement of people came to a halt, logistics stagnated, and economic activity around the world was brought to a standstill all at once. Under these conditions, our production and sales activities were also significantly impacted.

The most challenging task that I devoted myself to was the difficult balancing act of protecting the health of employees and their families while ensuring business continuity. To maintain operations with only the minimum necessary structure in place, while thoroughly enforcing infection prevention measures, the head office and our mills pooled their knowledge and worked together to revise our business processes. Faced with the need to rapidly introduce entirely new ways of working, we were once again reminded of the critical importance of the ability to adapt to change.

In 2022, Russia's invasion of Ukraine introduced a new geopolitical risk. We faced a series of fresh challenges, including a sharp rise in raw material and fuel prices and supply chain disruptions. In particular, the unprecedented surge in coal procurement costs became a serious issue that affected the very foundation of the Company's management.

A Crisis Is a Catalyst for Transformation Gratitude to Our Employees for Overcoming Challenges

Amid these dramatic shifts in the external environment, I consistently held to the belief that a crisis is a catalyst for transformation. Viewing each crisis as an opportunity for proactive evolution, I made a conscious effort to make bold decisions without missing the right moment. I strongly felt that it was essential to share these values across the entire organization.

However, in practice, implementing transformation was not easy. Achieving the dual goals of maintaining the existing profit structure while nurturing new sources of revenue required bold management decisions and tireless efforts at the frontlines.

Amid a significant decline in demand for paper since the Lehman Brothers bankruptcy, I believed that a shift in mindset was needed in which the sales divisions would take ultimate responsibility for profitability and focus on generating profits. In 2021, I personally took the lead in introducing a policy to shift the profit center of the Paper and Paperboard Business from the mills to the sales divisions.

The sales divisions began to adopt a sense of ownership over their respective mills and paper machines, and they undertook multiple rounds of product price increases. At the same time, reorganization of production systems was implemented at the mills. During the five-year period of the Medium-Term Business Plan 2025, the Group exited the Pulp and Paper Business at the Kushiro Mill in 2021 and shut down the N6 paper machine at the Ishinomaki Mill in 2022. This was followed by the shutdown of the N1 paper machine at the Akita Mill in 2023. In FY2026/3, we plan to shut down certain production facilities at the Shiraoi Mill and the Yatsushiro Mill. Although the household paper business will be newly launched at the Ishinomaki Mill and the Yatsushiro Mill, the decision to shut down paper machines was a painful one. It imposed great hardship on our employees and caused deep concern in the local communities. We are sincerely grateful for everyone's understanding and cooperation.

Meanwhile, in the Daily-Life Products Business, we took various initiatives such as the acquisition of the liquid packaging board business in North America in 2016, the acquisition of the paperboard package business in Australia, and the

THE CHAIRMAN



TORU
NOZAWA

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

strengthening of our partnership with Tokushu Tokai Paper Co., Ltd. We also advanced many growth strategies, including making capital investments across our Packaging, Household Paper and Healthcare, and Chemical Businesses.

Although the past six years saw the Group caught in a period of turbulence, operating income in its domestic business surpassed ¥30.0 billion for two consecutive years, and we believe our business performance is clearly on a recovery track.

True Corporate Competitiveness Lies in People Support for New Management Will Be Continued

While markets and technologies are constantly evolving, the true source of strength for adapting to change and moving forward lies in the mindset and actions of each individual employee. Transformation is not the responsibility of management alone; it must also be driven by every employee on the frontline. Only when management and frontline employees work together as one can the organization realize its true strength.

I have handed over the baton of the presidency to Mr. Akira Sebe. A wood specialist with deep expertise in raw materials, Mr. Sebe has a strong grasp of both the Company's strengths and challenges. He is also a hands-on leader with an exceptional ability to engage people on the frontlines. Going forward, I believe it will be essential for Nippon Paper Industries to integrate forest resources, its key strength, into its growth strategies, and I have high expectations for Mr. Sebe in this regard as well.

As chairman, I will serve as the chair of the Board of Directors. With an eye on the medium- and long-term direction of the Group's overall management, I will focus on strengthening the governance system, nurturing future leaders, and recruiting and retaining human resources. I sincerely ask for your continued understanding and support for NIPPON PAPER GROUP.

Toru Nozawa

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

MESSAGE *from*



THE PRESIDENT

Becoming a Corporate Group Permanently Needed by Society as a Comprehensive Biomass Company

A Sense of Challenge and Purpose in Leading Transformation at This Critical Juncture Leveraging Knowledge and Experience Gained in Raw Materials Divisions

In June 2025, I was appointed President and Representative Director of Nippon Paper Industries Co., Ltd. I believe that NIPPON PAPER GROUP is now at the greatest turning point in its more than 150-year long history. While I fully recognize the weighty responsibility of leading the Group through this period, I also feel a deep sense of challenge and strong purpose in being part of this pivotal moment and driving transformation forward.

I studied forestry at university. Since joining the Company in 1988, I have built my career primarily in raw materials divisions. I have gained knowledge and experience while working on a variety of themes through raw materials with many people both within and outside the Group, including the stable procurement of raw materials, cost improvement, product quality enhancement, production system revisions, reduction of greenhouse gas (GHG) emissions, and the promotion of recycling. This knowledge and experience now form the foundation of my management perspective. In particular, through years of involvement in forest management and the procurement of woody materials both in Japan and overseas since joining the Company, I have come to deeply appreciate the importance of forest resources and their supply chains, as well as their close connection to the Group's circulation-oriented business model. I believe that the value chain we have cultivated over our long history is the cornerstone of our business, and one of the Group's core assets.

Leveraging this background, I would like to further expand the Group's business, which is based on the broad utilization of forest resources, and drive its continued growth as a comprehensive biomass company shaping the future with trees.

Valuing the Group Mission as a Guiding Principle for Management Making Business Structure Transformation Faster, Broader in Scope, and More Certain

As we launch the new management team, our foremost guiding principle is to value the NIPPON PAPER GROUP Mission as the foundation for management. Our Group Mission is stated as follows: NIPPON PAPER GROUP aims to contribute to better living and cultural progress everywhere it does

business. In addition, to realize this Mission, we have established a four-part Vision: Drive social sustainability through our business, Delight our customers, Instill pride in employees, and Give back to society. Furthermore, we have identified three Values as standards we will emphasize to guide our decisions and actions in achieving the Mission. The three Values are Challenge, Fairness, and Teamwork.

Our Mission to contribute to better living and cultural progress is broad and comprehensive. The Mission is embodied in the four-part Vision, which gives it concrete form. The three Values represent the spirit with which we put the Mission and Vision into practice. Even as we must flexibly transform our activities in a rapidly changing business environment, we must also reaffirm, preserve and share these principles, objectives and standards of judgment as unchanging universal themes within the Group. I am determined to further cultivate a culture in which every individual keeps them in mind as they carry out their daily work.

Building on this foundation, the new management team will continue to accelerate business structure transformation, a key theme for the Group, as its core policy. As demand for graphic paper continues to decline due to factors such as advances in digitalization, the Group has been pursuing business structure transformation by shifting its focus to growth fields centered on the Daily-Life Products Business (including the Packaging Business, Household Paper and Healthcare Business, and Chemical Business). This transformation has made steady progress, with net sales in the Daily-Life Products Business more than doubling over the past 10 years and now accounting for roughly 40% of total net sales. On the other hand, we still have many issues to address, including maintaining the competitiveness of the Graphic Paper Business and further strengthening the profitability of growth fields. In light of this situation, we will keep the Group Mission firmly in mind as we aim to make business structure transformation faster, broader in scope, and more certain.

Overcoming the Crisis through the Actions of Every Employee Redoubling Efforts toward Achieving the Targets of the Medium-Term Business Plan 2025

Looking back on the progress of the Medium-Term Business Plan 2025, which began in FY2022/3 and ends in FY2026/3,

the Group faced an extremely challenging external environment during the first half of the plan. These challenges included sluggish demand due to the COVID-19 pandemic and an unprecedented surge in raw material and fuel prices. In FY2023/3, the Group recorded its first operating loss since listing. The atmosphere within the Group was heavy, and it was an exceptionally difficult period. However, through a concerted Group-wide effort focused on cost reductions and price revisions, we managed to return to profitability in FY2024/3. All Group employees shared a strong sense of urgency, and everyone took personal ownership of the situation, taking concrete action to help overcome the crisis. These efforts included a significant reduction in coal usage, reductions in fixed costs and various other expenses, and multiple price increases on major products, something that had not been achieved for many years. It was this collective resolve and action that enabled the Group to emerge from adversity.

In FY2025/3, as a result of these initiatives, the domestic business achieved operating income of over ¥30.0 billion for the second consecutive year, remaining on track with the Medium-Term Business Plan 2025. Although rebuilding Opal in Australia remains a major challenge, the overseas business, which was previously a drag on earnings recovery, secured overall profitability in the second half and is showing general improvement. In FY2026/3, the final year of the Medium-Term Business Plan 2025, we aim to further accelerate these efforts and achieve the plan's targets.

In the Medium-Term Business Plan 2025, the Group has set the following KPIs: net sales of ¥1,200.0 billion or more, operating income of ¥40.0 billion or more, EBITDA of ¥100.0 billion, and ROE of 5% or more, and a net D/E ratio of 1.7–1.79 times. In comparison, the earnings forecasts for FY2026/3 projects operating income of ¥34.0 billion and ROE of 2–3%, falling short of the profitability targets outlined in the Medium-Term Business Plan 2025. The Group is currently working to increase earnings to improve these figures.

In the Paper and Paperboard Business, the Group will first pursue further cost improvements through stable operations. Regarding the reorganization of the production system for graphic paper, we will shut down one paper machine each at the Shiraai Mill and the Yatsushiro Mill in FY2026/3, as planned, and maintain an overall utilization rate of 90% or more. As a result, the production capacity for graphic paper is expected to be reduced by a total of 870,000 tonnes, or approximately 30% over the five-year period of the Medium-Term Business Plan 2025.

In the Daily-Life Products Business (including the Packaging Business, Household Paper and Healthcare Business, and Chemical Business), we will step up efforts to capture greater domestic market share through a differentiation strategy and to drive overseas sales growth through collaboration with global partners. To achieve these goals, we will strengthen our monitoring framework for the strategic investments made during the period of the Medium-Term Business Plan 2025 and strive to fully maximize the effects of these investments, including the paper machine for household paper installed in Ishinomaki and the expanded functional cellulose production facilities in the Gotsu Mill and a new plant in Hungary.

We will also accelerate our efforts in FY2026/3 to rebuild Opal, which remains a key priority. At the Maryvale Mill, more than two years have passed since Opal withdrew from the graphic paper business due to an unexpected end of eucalyptus wood supply at the end of 2022. Since then, Opal has steadily implemented measures such as reducing fixed costs primarily through workforce optimization and establishing a production system focused on base paper for packaging (the optimization of pulp production facilities). These efforts have gradually produced tangible results, with operating losses shrinking each fiscal year. In FY2026/3, Opal will further strengthen these measures to make further improvements at the Maryvale Mill. Meanwhile, in the packaging business, Opal promoted measures such as the construction of a new corrugated box plant, the upgrading of aging converting machines,

and the rationalization of production sites, leading to a dramatic improvement in productivity. Going forward, Opal will leverage these efforts to increase sales of packaging products, including corrugated boxes. Measures will be implemented without interruption to ensure that a profitable structure is established for Opal as a whole during FY2026/3.

Furthermore, with the understanding of our customers, we plan to properly reflect in selling prices those cost increases that cannot be absorbed despite our best efforts at cost reduction. In particular, these include higher labor and logistics costs. This applies to all our products both in Japan and overseas. We recognize that securing appropriate pricing is critically important to ensuring a stable supply of products.

Drawing on our experience of overcoming the crisis through the efforts of all Group members, we will steadily implement initiatives to increase earnings and make every effort to achieve the FY2026/3 targets of the Medium-Term Business Plan 2025.

Generating Stable Profits through a Circulation-Oriented Business Chain
Envisioning Future Business Domains with a Focus on the Younger Generation

We are currently formulating a new long-term vision and medium-term business plan that will begin in FY2027/3. Looking at social conditions in the future, the business environment is expected to undergo increasingly significant changes, including intensified climate change, population decline and labor shortages in Japan, global population growth, advances in green transformation (GX) and digital transformation (DX) to address these issues, as well as continued conflicts and rising geopolitical risks around the world. In anticipation of these changes, we will re-examine the Group's vision from the perspectives of both contributing to the solution of social issues and achieving sustainable growth as a company.

We view each of the Group's businesses as part of a circulation-oriented business chain and aim to become a corporate group that can generate stable profits by offering a wide range of products and services both in Japan and overseas amid changes in social conditions. Starting from forest resources, the Group's businesses span upstream operations directly related to forests and wood; midstream operations such as the Paper and Paperboard Business, the Chemical and Biomass Material Business, and the Energy Business; and downstream operations that are closer to consumers, including the Packaging Business and the Household Paper and Healthcare Business. In addition, the Group has businesses that cut across these areas, such as distribution, logistics, engineering, real estate, and leisure. We will reclarify the overall structure of this business chain from upstream to downstream operations, organize our strengths and weaknesses, and outline the specific areas we will grow and the directions for growth in each area in the next long-term vision and medium-term business plan. By mapping out the full picture of our business once again, we also hope to enable each employee to clearly understand where they stand within the Group and what roles they are expected to fulfill.

In our review process, in addition to using forecasts, we have also incorporated a backcasting approach that envisions



the future state of society in 2050, considering factors such as demographics, food supply conditions, and global environmental issues. Based on this perspective, we are exploring which business domains to expand into over the next 5 to 10 years, with the younger generation playing a central role in this process, and how these efforts can contribute to the Group's growth. Currently, we are focusing on fields such as agriculture, forestry, and fisheries, food and water, civil engineering and construction, mobility, energy, personal care, and culture and education. We invite you to look forward to our new long-term vision and medium-term business plan.

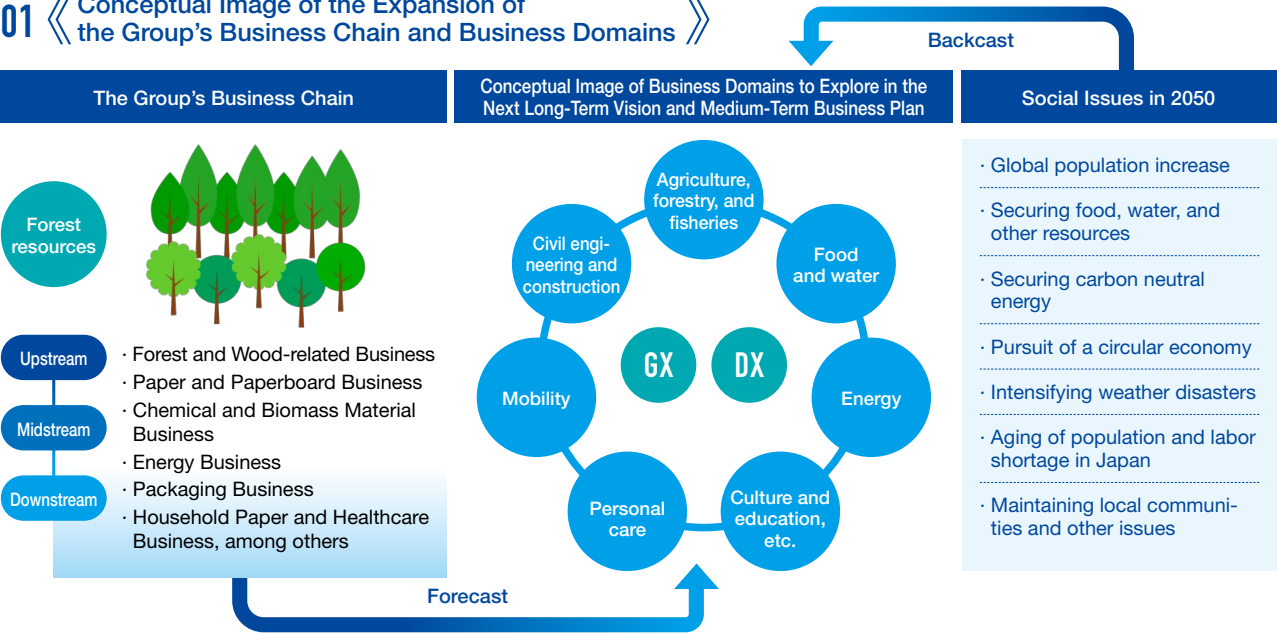
Strengthening the Financial Base by Generating Steady Earnings
Aiming to Enhance Return on Capital by Introducing Management Indicators

As we examine the new long-term vision and medium-term business plan, I would like to touch on the areas I personally consider to be priorities. The first is to improve profitability and strengthen the financial base of the entire Group. In recent years, discussions around our stock price and PBR have highlighted concerns about the Group's low return on capital and weak financial base. I recognize these as critical issues that go to the heart of management. To improve the situation, while advancing the business structure transformation, we must more efficiently generate profits in growth fields centered on the Daily-Life Products Business. Concurrently, we must also maintain competitiveness in the Paper and Paperboard Business.

In the Paper and Paperboard Business, we will promote stable operations, cost improvements, securing appropriate pricing, and the reorganization of production systems. In growth fields, in addition to these efforts, it is important to further expand sales both in Japan and overseas, and to ensure that the effects of past capital investments materialize.

With regard to improving return on capital, we introduced ROIC management by company and ROA management by business on a trial basis in FY2026/3. KPIs linked to improving return on capital were established for each company and business, and progress on these KPIs will be reported to the Board of Directors every quarter. The hurdle rate used in investment decisions has also been revised to reflect the cost of capital, and stricter deliberations are now being conducted. In addition,

01 Conceptual Image of the Expansion of the Group's Business Chain and Business Domains



the Group has launched the policy of total abolition, in principle for cross-shareholdings. We will further streamline our assets and accelerate initiatives to increase asset and capital efficiency. We are firmly committed to establishing a virtuous cycle in which we generate stable profits, strengthen the balance sheet, and lay the foundation for further growth investments.

**Steadily Advance Human Capital-related Reforms
Further Strengthen Group Collaboration**

The second priority is addressing human capital-related issues, such as labor shortages and improving employee engagement, while strengthening the Group's organizational capabilities. Labor shortages have been raised as a risk across the Group. While some parts of the organization have already begun considering and implementing countermeasures, this issue is especially critical and urgent for the Group, which has many shift-based worksites. In addition to promoting labor-saving and automation initiatives through DX and other means, we must identify and address issues related to securing personnel, as well as undertake system reforms that include operational processes and work styles. Although this is not a problem that can be solved in one step, we will engage in thorough discussions and move forward with a well-planned approach.

At the same time, improving the engagement of all employees working in the Group is also important. As mentioned at the beginning, the Group has a four-part Vision. I believe the four parts of the Vision are interrelated and mutually reinforcing. In particular, if we can realize the third part, "Instill pride in employees," this will support the achievement of the other three parts of the Vision and generate a virtuous cycle that further enhances employee engagement. For this, it is essential that we remain a corporate group capable of generating stable profits and that we foster an environment where each employee finds their work rewarding as they strive toward common goals. Meanwhile, as individual circumstances and values continue to diversify, uniform measures alone will no longer suffice. While listening closely to employees, we intend to move forward one step at a time, including through reforms to our organizational culture.

Furthermore, we will work to further strengthen Group collaboration. Looking back over the past few years, following the unprecedented surge in raw material and fuel prices, we were able to share a sense of urgency and common goals Group-wide. As a result, Group collaboration significantly advanced, including expanding the flexible supply of pulp among sites and joint efforts in product sales. I believe that improved communication within the Group has become one of our key strengths. Moving forward, we will continue to work together to enhance Group-wide profitability and strengthen our financial base, while addressing shared challenges such as labor shortages and improving employee engagement. We will further strengthen activities from a Group-wide perspective.

**Promoting Our Green Strategy While Preserving
the Culture of Paper
Aiming to Build a Circulation-oriented Society
and Achieve Corporate Growth**

Under the new long-term vision and medium-term business plan, the Group will continue striving to contribute to the

building of a circulation-oriented society and to achieving sustainable growth as a company. Although there have been some signs of reversion, the global trend toward decarbonization is expected to continue over the long term as the collective will of society. In this context, we believe that the Group's business model, which is based on the expansive use of forest resources, offers significant advantages.

We aim to reduce GHG emissions generated in the production process by the entire Group (Scope 1 and 2) by 54% by FY2031/3, compared to FY2014/3 levels. As of FY2025/3, emissions have been reduced by 41%, and progress is generally in line with the plan. In addition to Company-wide energy-saving efforts and a conversion to alternative fuels to reduce coal usage, the Yatsushiro Mill plans to achieve zero coal use by shutting down its main coal boiler in FY2026/3 in conjunction with shutting down the N2 paper machine. At the Ishinomaki Mill, the Group also plans to drastically reduce GHG emissions by introducing a high-efficiency black liquor recovery boiler in FY2029/3, supported by subsidies funded through GX Economic Transition Bonds. Through these initiatives, the Group aims to steadily achieve its FY2031/3 target and pursue further reductions toward 2035.

I believe that paper is an essential item for realizing our Mission to "contribute to better living and cultural progress everywhere the Group does business." Even as digitalization continues to advance, I am confident that recyclable paper materials made from renewable forest resources as raw materials can contribute to building a circulation-oriented society and cultural progress. As we work to maintain the competitiveness of graphic paper and reduce GHG emissions in the production process, we remain committed to preserving and passing down the culture of paper.

Alongside these efforts, we will focus on expanding the Forest and Wood Business and Biomass Material Business as part of our Green Strategy. The Group has long used domestic wood as a primary raw material. Japan's forestry industry, the foundation of this supply, faces numerous challenges, including labor shortages and low productivity. We will work to ensure the stable procurement of raw materials and expand the domestic wood distribution business by supporting the revitalization of a healthy forestry industry through "logging, using, planting, and nurturing" woods. This will involve efforts including the supply of elite tree seedlings and the introduction of advanced timber harvesting technology. Furthermore, using domestic wood as a raw material, we plan to broaden our



Biomass Material Business beyond paper products to include cellulose nanofiber, bioethanol, feed (Genki Morimori™), and construction and civil engineering materials.

Overseas, we will expand the plantation business by harnessing one of the Company's key strengths: breeding and propagation technologies. At AMCEL in Brazil, we aim to improve CO₂ fixation efficiency by more than 30% by FY2031/3 compared to FY2014/3 levels, and as of FY2025/3, we have achieved a 23.9% improvement. By enhancing productivity, we will work to grow earnings from the plantation business. Looking ahead, we are considering carbon credit projects and developing and utilizing optimal clones for intended applications. By preserving and growing healthy forests and fully utilizing the wood produced from them, we aim to contribute to building a circulation-oriented society and achieving sustainable growth as a company.

**Discussions with a Healthy Sense of Tension
through Strengthened Governance
Aiming for Highly Transparent and Agile
Management**

I feel that we have made steady progress in strengthening governance. In the past few years, frank and open opinions have become more common in discussions in the Management Executive Committee and the Group Management Strategy Committee, both of which are attended by executive officers. Even for large-scale investment projects and the like, in-depth discussions are being held on risk scenarios and how to deal with them. Outside directors also participate in the Group Management Strategy Committee and the monthly Management Executive Committee meetings, among other forums. When necessary, they receive multiple briefings from the relevant divisions, to gain a thorough understanding of the executive team's considerations and the issues at hand. They then attend Board of Directors meetings fully informed and do not hesitate to offer pointed or critical observations. I believe that these forums, managed with high transparency, are fostering discussions marked by a healthy sense of tension.

The Company's management structure consists of four representative directors: the chairman, president, and two executive vice presidents. The chairman, who also serves as the chair of the Board of Directors, is responsible for reinforcing the Group's overall structure, including strengthening governance, and securing and nurturing human resources over the medium to long term. The president, as the CEO, is responsible for overall business execution, but does not handle all issues alone. Instead, certain authority is delegated to the executive vice presidents. While supporting the president, the two executive vice presidents oversee the Biomass Material Business and the Packaging Business, respectively. By clearly defining roles within the management team, we are committed to ensuring close communication and highly transparent decision-making, thereby realizing agile management. Under a sound governance framework, we aim to enhance sustainable corporate value.



**Each Group Employee is a Key Player in
Transformation
Shaping the Future by Uniting the Strength of
All Employees**

I would now like to summarize what I have discussed so far in terms of the three Values the Group emphasizes: Challenge, Fairness, and Teamwork. I believe that Challenge reflects our unwavering determination to achieve the major goal of business structure transformation; Fairness reflects our sincere commitment to legal compliance, safety first, respect for human rights, and earning the trust of all stakeholders; and Teamwork reflects the strength of our organizational capabilities and Group collaboration in pursuit of our goals.

The Group is now undergoing a transformation at a critical turning point. I am determined to embody the spirit of Challenge, Fairness, and Teamwork, take the lead, and do my utmost to drive transformation. However, a company's transformation cannot be achieved by the president alone. I have always believed that the key players in transformation are all of our colleagues working in the Group. It is more important than ever that every employee take ownership, maintain a strong sense of participation, and take concrete action.

To become a corporate group permanently needed by society as a comprehensive biomass company and meet the expectations of all stakeholders, we will unite the strength of all employees to shape the future for NIPPON PAPER GROUP.

A handwritten signature in black ink, appearing to read 'A. Sebe'.

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

NIPPON PAPER GROUP's Value Creation Process

Achieve sustainable growth and build a circulation-oriented society as a comprehensive biomass company

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 based on the 2030VISION, it will achieve its sustainable growth and build a circulation-oriented society that maximizes use of wood resources. In this way, the Group will realize its mission of “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	<ul style="list-style-type: none">Population increase and economic growth in developing countriesMainstreaming of nature-positive economies	<ul style="list-style-type: none">Shift to carbon neutral and circulation-oriented societiesIncreasing awareness of environmental conservation and hygiene	Medium- to long-term risks	<ul style="list-style-type: none">Declining labor force (Japan)Increase in natural disasters, infectious diseases, etc.	<ul style="list-style-type: none">Supply chain disruption due to geopolitical risksRapidly changing market needs and structure
------------------------------------	--	---	----------------------------	--	---



Financial Capital P.28-31
Consolidated total assets ¥1,703.3 billion
EBITDA ¥90.7 billion

Natural Capital P.40-43
P.68-73
Managed forest area Approx. 160,000 hectares

Human Capital P.48-51
Number of employees 15,145

Intellectual Capital P.44-47
Research and development expenses ¥5.3 billion
Patents held 2,289

Manufactured Capital P.34-35
P.39
Number of Group companies 154
Capital investment ¥52.4 billion

Social and Relationship Capital P.75
Collaboration with a wide array of partners

Cultivating and sourcing forest resources in Japan and overseas

Sustainable forest management and wood resources productivity enhancement

- Company-owned forests in Japan and overseas plantations
- Mechanization and automation technologies
- Breeding, propagation and plantation technologies

Wood materials supply chain enhancement, along with Wood Products and Construction-Related Business expansion

Procurement network

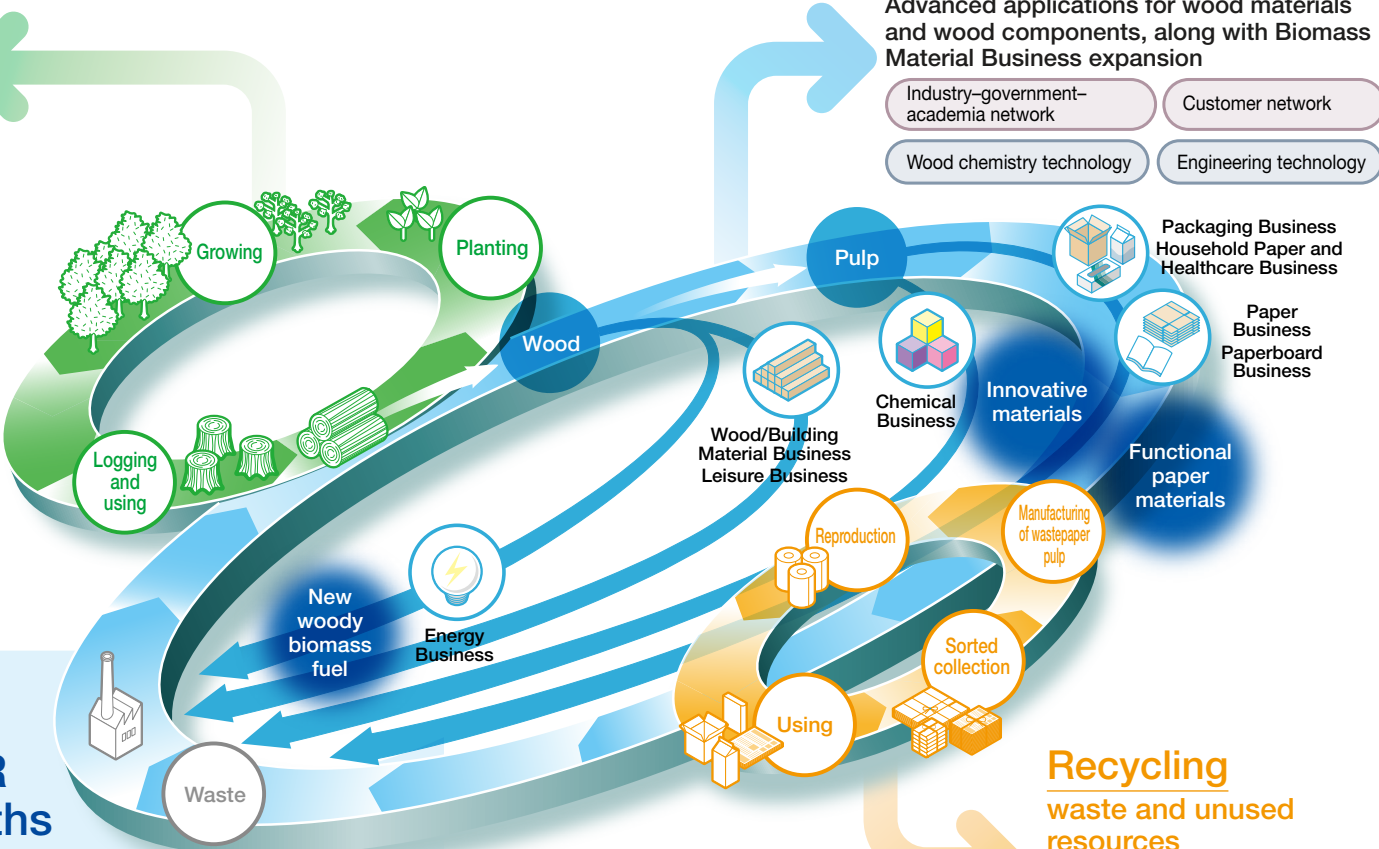
STRONG POINT
NIPPON PAPER GROUP Strengths

Forest resources

Technologies

Networks

Human capital for value creation



Creating added value through proprietary technologies and co-creation

Advanced applications for wood materials and wood components, along with Biomass Material Business expansion

- Industry-government-academia network
- Customer network
- Wood chemistry technology
- Engineering technology

Recycling waste and unused resources

Strengthening of the recycling supply chain and stakeholder collaboration

- Customer and municipality network
- Forward and reverse supply chain industry network
- Recycling technology
- Environmentally-friendly design technology

2030VISION

Economic value

- [Net sales] ¥1,300.0 billion
 - Of which, Daily-Life Products Business: 50% or more
 - New businesses: ¥65.0 billion
 - Overseas sales ratio: 30% or more
- [Operating income margin in the Daily-Life Products Business] 7% or more
- [ROE] 8.0% or more

Social value

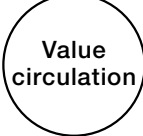
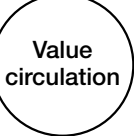
- 54% reduction in GHG emissions (Scope 1+2) (vs. FY2014/3)
- Expand biomass materials and products
- Promotion of recycling of resources
- Reduction of environmental burden
- Preservation of biodiversity
- Enhancement of employee engagement, including promotion of diversity

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

Realizing sustainable growth of NIPPON PAPER GROUP

Building a circulation-oriented society that maximizes use of wood resources

Materiality to realize the Vision in the Group Mission P.24-27



Important Management Resources

NIPPON PAPER GROUP has over the course of many years of business activities accumulated management resources, its source for creating value. These management resources, as the driving force behind sustainable value creation, will generate new value through the Three Circulations business model that realizes carbon neutrality. This value will flow back as management resources, and increased management resources will lead to further value creation.

<div></div> <div>Financial Capital Financial base supporting business</div> <div><div>Inputs</div><div>Consolidated total assets (as of March 31, 2025) ¥1,703.3 billion EBITDA (FY2025/3) ¥90.7 billion</div><div>Characteristics and strengths<ul style="list-style-type: none">Steady progress in business structure transformation</div><div><div>Initiatives</div><ul style="list-style-type: none">Profitability improvement through business structure transformationReduction of interest-bearing debtStrengthening of investment discipline</div><div><div>Related content</div><div>P.28–31 Message from the Executive Officer Responsible for Finance</div></div></div>	<div></div> <div>Natural Capital Sustainable forest management and consideration for the environment</div> <div><div>Inputs</div><div>Managed forest area Approx. 160,000 hectares (about 2.5 times the area of Tokyo's 23 wards) Acquisition rate of forestry certification for company-managed forests 100%</div><div>Characteristics and strengths<ul style="list-style-type: none">Unique breeding and propagation technologies, as well as fields leveraging the aforementioned technologiesSolid supply chainCompany-owned forests with public interest functions</div><div><div>Initiatives</div><ul style="list-style-type: none">Support for revitalization of the forestry industry in JapanExpansion of domestic wood business and overseas plantation businessPromotion of environmental management</div><div><div>Related content</div><div>P.40–43 Green Strategy P.68–73 Nature Conservation</div></div></div>	<div></div> <div>Human Capital Diverse human resources who create value</div> <div><div>Inputs</div><div>Number of employees (as of March 31, 2025) 15,145</div><div>Characteristics and strengths<ul style="list-style-type: none">Fusion of human resources from diverse backgrounds after merger and integration</div><div><div>Initiatives</div><ul style="list-style-type: none">Review of system reforms to secure personnelEnhancement of personnel systems for recruitment, development, retention, and optimal allocationMeasures to improve employee engagement</div><div><div>Related content</div><div>P.48–51 Human Resource Strategy</div></div></div>	<div></div> <div>Intellectual Capital Technologies that support the utilization of wood resources</div> <div><div>Inputs</div><div>Research and development expenses (FY2025/3) ¥5.3 billion Patents held (as of March 31, 2025) 2,289</div><div>Characteristics and strengths<ul style="list-style-type: none">Accumulation and application of a wide range of technologiesInternal and external collaboration in R&DTechnological capabilities to tackle social issues</div><div><div>Initiatives</div><ul style="list-style-type: none">Strengthening of collaboration within the GroupExpansion and enhancement of external networksRapid commercialization of R&D projectsIntellectual property protection and infringement prevention</div><div><div>Related content</div><div>P.44–47 Research & Development</div></div></div>	<div></div> <div>Manufactured Capital Production facilities and sites to create diverse products</div> <div><div>Inputs</div><div>Number of Group companies (as of March 31, 2025) 154 Capital investment (FY2025/3) ¥52.4 billion</div><div>Characteristics and strengths<ul style="list-style-type: none">Diverse production sitesEnvironmentally-friendly production and transportation systemsShared Group human resources and know-how</div><div><div>Initiatives</div><ul style="list-style-type: none">Use of sites close to points of consumptionElevation of know-how by deploying information laterally across production sitesSaving labor, promoting digital transformation, and streamlining logistics</div><div><div>Related content</div><div>P.34–35 Special Feature: Opal P.39 Logistics Initiatives</div></div></div>	<div></div> <div>Social and Relationship Capital Collaboration with a wide array of partners</div> <div><div>Inputs</div><div>Relationships with stakeholders, including customers, business partners, employees, local communities and governments, shareholders and investors</div><div>Characteristics and strengths<ul style="list-style-type: none">Partnerships with diverse stakeholders across industry, government and academiaRelationships with local communities at each business site</div><div><div>Initiatives</div><ul style="list-style-type: none">Strengthening relationships with respective stakeholders through business activitiesCommunication through public relations activities and information disclosure</div><div><div>Related content</div><div>P.75 Stakeholder Engagement</div></div></div>
---	--	--	---	--	---

Value Created by the Three Circulations

NIPPON PAPER GROUP pursues sustainability with respect to both society and the Group by developing its business based on its Three Circulations business model in collaboration with local communities in Japan and overseas. In addition to strengthening its Forest and Wood Business, the Group also aims to further enhance corporate value and realize a sustainable society by developing innovative biomass materials, expanding such businesses, and upgrading its recycling technologies.

Circulation of Forest Resources

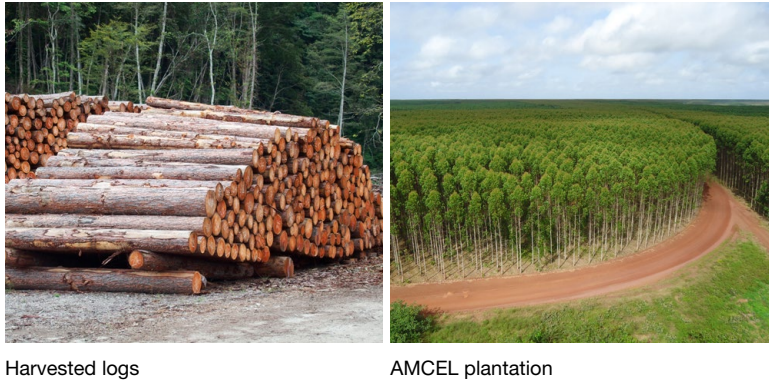
Maximization of forest value through sustainable forest management

The Group is working to expand its Wood Products and Construction-Related Business both in Japan and overseas by advancing its Green Strategy focused on enhancing the value of forest resources and expanding its biomass product portfolio. As a result of these efforts, the business has achieved roughly 4.5-fold growth in operating income over the last decade.

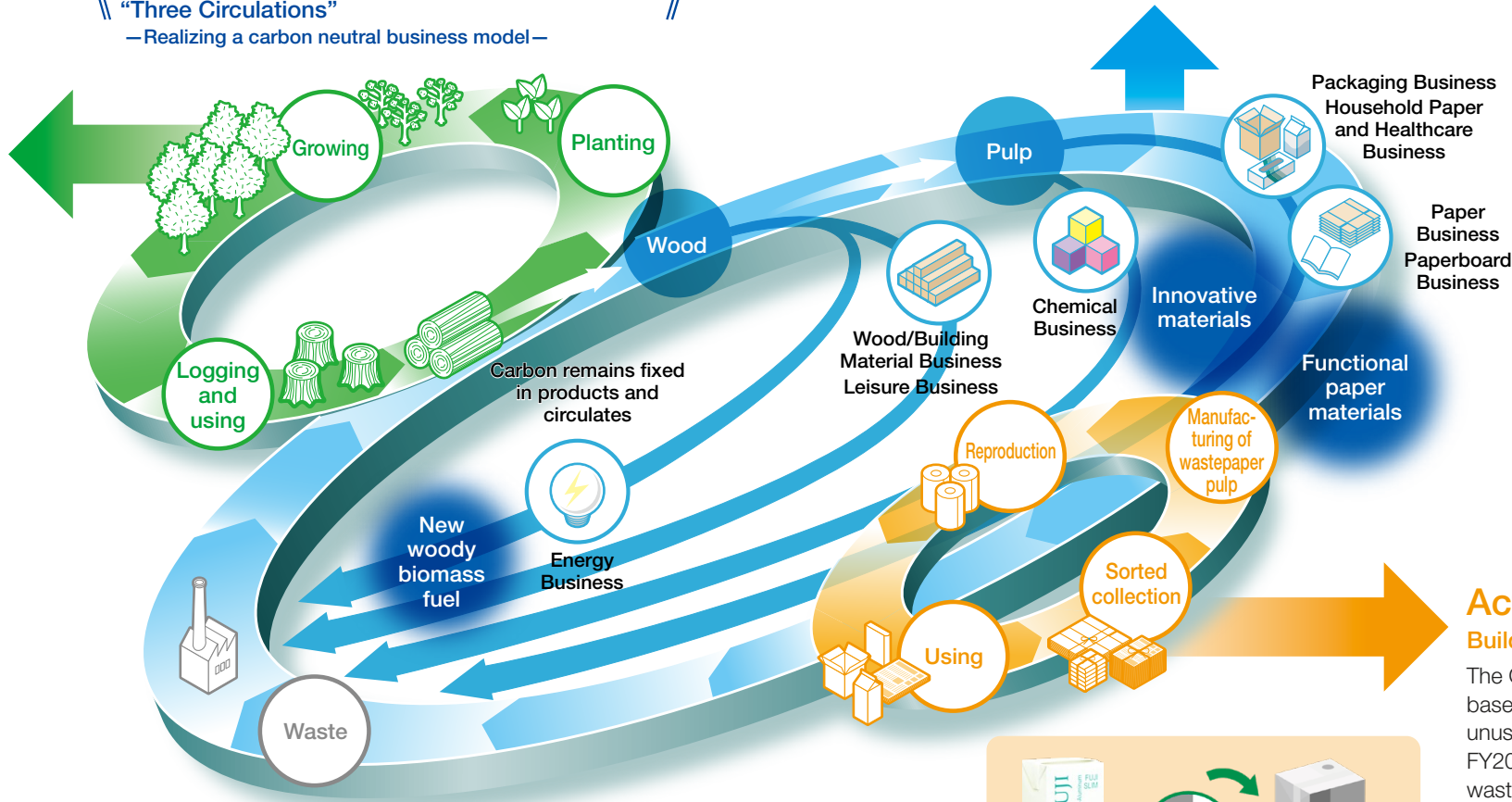
In seeking to further expand this highly profitable business segment, the Group is supporting the forestry industry in Japan by leveraging Company strengths that include one of Japan's largest domestic wood supply chains and its seedling production technologies. These efforts facilitate stable procurement of domestic raw materials and expansion of domestic wood distribution business. The Group also plans to further increase its proportion of domestically sourced wood and broadly utilize the harvested timber in its biomass materials business.

In the overseas plantation business, the Group will enhance its competitiveness in global markets by shortening the selection period for superior trees and increasing forest productivity (increasing CO₂ fixation efficiency) using proprietary breeding and proliferation technologies. In Brazil, forest productivity at plantations has improved 23.9% relative to 2013 levels. In addition, the Group aims to create new revenue streams by providing technical assistance to plantations of other companies and developing its carbon credit business.

P.36-39 Strategy by Business P.40-43 Green Strategy
P.75 Stakeholder Engagement



《NIPPON PAPER GROUP's Business Development as a Comprehensive Biomass Company "Three Circulations"》
—Realizing a carbon neutral business model—



Circulation of Wood Resources

Contributing to building a carbon neutral society by expanding sales of biomass products

The Group is transforming its business structure centered on growth of the Daily-Life Products Business, which encompasses the Chemical, Packaging, and Household Paper and Healthcare businesses. The Daily-Life Products Business accounted for 22% of net sales in FY2016/3, with that proportion expected to increase to 41% in FY2026/3. The Group is making steady progress along its growth trajectory outlined in its 2030VISION in aiming to achieve an operating income margin of 7% or more in the Daily-Life Products Business.

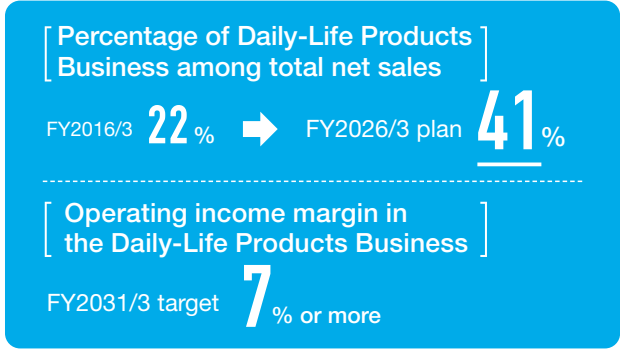
It has achieved ¥20.0 billion in net sales of biomass materials by supplying wood-derived products, including dissolving pulp and functional cellulose, concrete admixture, and cattle feed, across various fields such as food,



cosmetics, and civil engineering, leveraging its wood chemistry technologies that make extensive use of cellulose and other such wood components, along with networks both within and outside the Group.

Going forward, the Group will persist with its aim of establishing a stable earnings base and achieving sustainable growth. To such ends, it will recognize societal imperatives such as more stringent environmental regulations and the transition to a carbon neutral society as growth opportunities, while also advancing the development and commercialization of innovative biomass materials, including bioethanol used as a feedstock for sustainable aviation fuel (SAF) and bio-chemicals.

P.36-39 Strategy by Business P.44-47 Research & Development
P.75 Stakeholder Engagement



Active Product Recycling

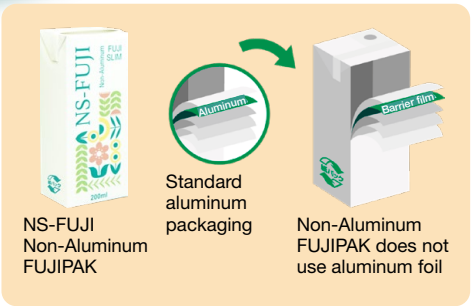
Building a circulation-oriented society through recycling

The Group harnesses recycling technologies to repurpose used paper-based food containers that were previously discarded and other such unused, difficult-to-treat wastepaper as raw materials for paper. In FY2025/3, the Group used 11,908 tonnes of unused, difficult-to-treat wastepaper, contributing to both waste reduction and more effective resource utilization, while also helping to reduce environmental burden.

In collaboration with its business partners, the Group is also advancing closed-loop recycling of wastepaper and enhancing stable raw material procurement systems. Furthermore, it is focusing on development of recyclable, environmentally-friendly products with its sights set on opportunities due to heightened awareness of environmental conservation and the shift toward a circulation-oriented society.

Released in 2014, Non-Aluminum FUJIPAK paper cartons enable long-term storage of beverages at room temperature without the use of aluminum foil. These paper cartons contribute to further improvement of recovery rates because they can be collected through the same recovery routes as conventional gable-top paper cartons.

Going forward, the Group aims to strengthen its competitiveness through consistent use of various resources, while building new recycling businesses by harnessing unused, difficult-to-treat wastepaper and providing environmentally-friendly products.







P.68-73 Nature Conservation P.75 Stakeholder Engagement

Important Issues (Materiality) to Realize the Group Mission

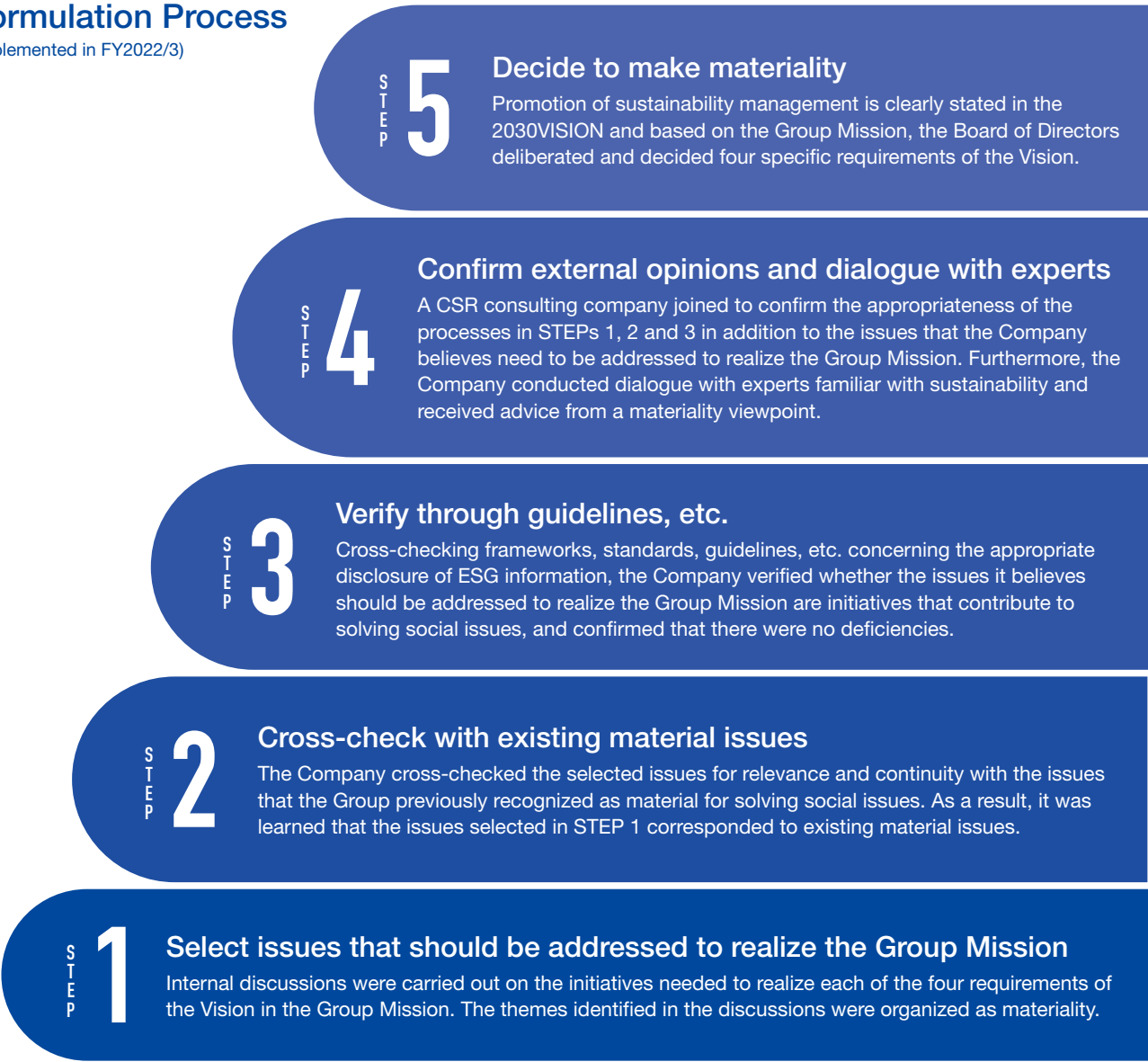
NIPPON PAPER GROUP has clearly identified material issues in order to meet the four requirements of its Vision included in the Group Mission, as it addresses changes in the surrounding environment and is also promoting sustainability management in which it pursues social and environmental sustainability alongside corporate growth.

Mission

NIPPON PAPER GROUP aims to contribute to better living and cultural progress everywhere it does business.

Vision	A Corporate Group That Meets the Following Requirements and is Sustainably Needed by Society	NIPPON PAPER GROUP's Materiality	Reasons for Selection and Contributions to SDGs
	1 Drive social sustainability through our business	Achieve the following through the value chain: <ul style="list-style-type: none">◆ Response to climate change◆ Utilization of sustainable forest resources◆ Preservation of biodiversity◆ Reduction of environmental burden◆ Promotion of resource circulation◆ Respect for human rights	Through business activities based on forest resources, which are natural capital, the Group will work to consider the environment and society throughout the entire value chain, thereby achieving sustainable growth as a “comprehensive biomass company shaping the future with trees.” 
	2 Delight our customers	<ul style="list-style-type: none">◆ Response to changes in the social environment (consideration for the environment, healthcare, etc.)◆ Stable supply of products, enhanced safety	Understanding changes in society and customer needs, and continuing to provide the products that people want will contribute to better living and cultural progress everywhere. The Group aims to be customers' company of choice by ensuring product safety and quality, and by providing a stable supply. 
	3 Instill pride in employees	<ul style="list-style-type: none">◆ Realization of diverse work styles◆ Active participation of diverse human resources◆ Promotion of occupational health and safety	All business activities are supported by people. Through workplace creation where diverse human resources can work cheerfully and with pride, it maximizes the ability to create value and leads to corporate growth. 
	4 Give back to society	In addition to business growth achieved through activities 1 to 3 above, the Group will realize the following: <ul style="list-style-type: none">◆ Promotion of business structure transformation◆ Enhancement of corporate governance◆ Coexistence with local communities and society◆ Communication with stakeholders	To realize the Group Mission, generating stable profits is a prerequisite, and to do that, stronger corporate governance is indispensable. Along with promoting business structure transformation, through stakeholder dialogue NIPPON PAPER GROUP aims to become a corporate group that is needed by society. 

Formulation Process (Implemented in FY2022/3)



Confirmation of Progress on Materiality and the 2030VISION



















































The Group sets key performance indicators (KPIs) (targets to achieve by FY2031/3) under various themes responding to materiality and the 2030VISION, and measures their progress.

Since FY2022/3, discussions on materiality and corresponding KPIs have been conducted by the Management Executive Committee and the Group Management Strategy Committee. Progress and initiatives for each target are verified, materiality is added and KPIs are reviewed, taking into account progress with management's execution toward achieving the 2030VISION.

Similar verification was also carried out for FY2025/3 results, with discussions conducted in the Group Management Strategy Committee meeting held in June 2025 to further deepen debate within the entire Group. As a result of the discussions, while moving ahead on initiatives for FY2026/3, the Group reviewed KPIs for corresponding materiality.

Going forward, deeper discussion will be held throughout the Group on important management themes.

<< Progress of Initiative Themes for Materiality and the 2030VISION >>

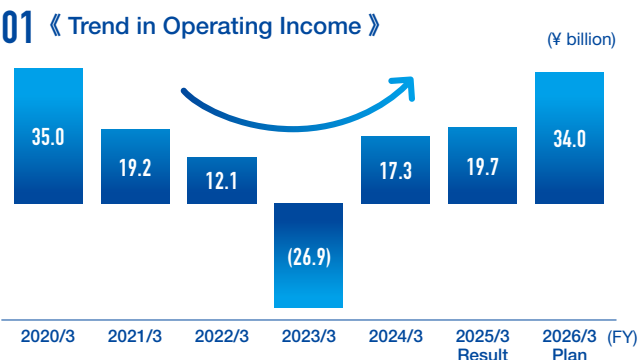
Vision	Materiality (Important Management Issues)	2030VISION		Key Performance Indicators (KPIs) to Achieve by FY2031/3 Scope ---  NIPPON PAPER GROUP  Nippon Paper Industries	Main Progress and Initiative Status in FY2025/3	Integrated Report 2025 Related Pages	Contributions to SDGs		
		Basic Policies	Themes						
Give back to society	Promotion of business structure transformation	Reallocate management resources to growing businesses	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	・ Daily-Life Products Business net sales: ¥457.9 billion (accounting for 39% of overall net sales) ・ Strategic investment in FY2022/3–FY2025/3: ¥122.5 billion (of which 94% was allocated to growing businesses)		  		
			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 (including expansion of biomass products) ・ Target commercialization of CNF by establishing a mass-production structure and manufacturing technologies ・ Promote and expand sales of cattle feed (“Genki Morimori™”) ・ Launch new businesses using pulp manufacturing facilities	・ CNF was adopted by a major manufacturer for cosmetics applications for the first time. Gotsu Mill CNF sales volumes expanded and the facility is now operating a full capacity during day shifts ・ Bioethanol was selected for a New Energy and Industrial Technology Development Organization (NEDO) subsidy for Research and Development of Technologies to Promote Biomanufacturing, and a trial project was started ・ Expanded sales of cellulose cattle feed and started delivery of a portion of the production from Yatsuhiko Mill to the southern Kyushu region				
			Reformation of structure of foundation businesses	Stronger competitiveness of the Paper and Paperboard Business ・ Concentrate graphic paper production sites to about three locations	・ Decided to shut down the No. 8 paper machine at the Shiraoi Mill and the N2 paper machine at the Yatsuhiko Mill. Also decided to shut down one coal boiler at the Yatsuhiko Mill at the same time ・ Advanced cost reductions through energy saving and other measures (actual cost reduction in FY2022/3–FY2025/3: ¥23.0 billion)	 			
			Expansion in overseas markets	Overseas sales ratio of 30% or more ・ Increase net sales and strengthen profitability in overseas business	・ Overseas sales ratio: 28% ・ Opal is revising the production system of its Maryvale Mill while expanding sales, improving efficiency, and promoting streamlining in its packaging business ・ In the Chemical Business, started operation of a carboxymethyl cellulose (CMC) manufacturing plant for lithium-ion batteries in Hungary in March 2025	 			
Drive social sustainability through our business	Response to climate change	Respond to the rapidly changing social landscape, including GHG emissions reduction and environmental issues	GHG reductions	Reduction of GHG emissions through energy saving measures and fuel conversion ・ Reduce GHG emissions (Scope 1 + Scope 2) by 54% compared with FY2014/3 ・ Use non-fossil energy in 60% or more of total energy used ・ Improve total energy intensity in production and logistics by 1% year on year Response to climate change initiatives	・ GHG emissions (Scope 1 + Scope 2) reduction by 41% compared with FY2014/3 ・ Ratio of non-fossil energy usage 44% of total energy usage ・ Nippon Paper Industries total energy intensity in production (compared with 2023): Paper Business –2.8%, Paperboard Business –2.2%, Logistics +3.8% ・ Received government support using GX Economic Transition Bonds and decided to install highly efficient recovery boiler at the Ishinomaki Mill ・ CDP scores (2024 climate B, water B, forests B)	 	     		
	Utilization of sustainable forest resources Preservation of biodiversity		Pursuit of Green Strategy (maximize forest value)	Preserve forest resources, strengthen supply chains and construct a business model for the revitalization of the forestry industry in Japan ・ Construction of a production system for 10.0 million elite tree seedlings/year for forestry ・ Initiatives to create 200,000 t-CO ₂ of J-Credits Improvement of forest productivity and expansion of CO₂ fixation amount by using breeding and proliferation technologies ・ Improve CO ₂ fixation efficiency in overseas plantation areas by 30% compared with 2013 ・ Secure plantation areas, mainly in Asia	・ Launched domestic materials expansion project, conducted interviews on issues and needs in the supply chain ・ Closed seed plantations completed in Shizuoka Prefecture, Tottori Prefecture, and Hiroshima Prefecture, with plans to establish a scion plantation on site at the Akita Mill ・ Expanded production scale for elite tree seedlings in 18 prefectures ・ Completed preparation for project certification, aiming to secure J-Credits equivalent to 71,000 t-CO ₂ for company-owned forests in Japan	 			
				Acquisition and maintenance of forestry certification for all company-owned forests in Japan and overseas	・ Maintained forestry certification (FM) for the total area of the domestic and overseas company-owned forests of Nippon Paper Industries				
				Display public interest functions through appropriate management of company-owned forests in Japan ・ Display public interest functions through preservation of water resources and other resources	・ Conducted forest preservation activities with Coca-Cola Bottlers Japan Inc. in the Sugenuma watershed area (Sugenuma company-owned forest, Gunma Prefecture)				
				Preservation of biodiversity	・ Conducted assessment of impact in accordance with TNFD disclosure ・ Entered consultation with LINTEC Corporation regarding a collaboration in Ho-oh company-owned forest, a site of Nationally Certified Sustainability Managed Natural Sites				
	Reduction of environmental burden		Reduction of environmental burden generated in the manufacturing process ・ 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	・ Reduction rates at production sites in Japan (compared with FY2019/3): SOx 50%, NOx 26%, dust 27%, COD/BOD 35%, SS 17% ・ Final disposal volume of industrial waste materials: 1.6%					
	Promotion of resource circulation		Promotion of recycling of resources ・ Expand the system for stable procurement of wastepaper ・ Build a sorted collection recycling system, utilize 12,000 tonnes/year of unused, difficult-to-treat wastepaper ・ Build a horizontal recycling scheme for paper containers used for food and beverages	・ Unused, difficult-to-treat wastepaper usage volume: 11,908 t ・ Installed shredding and washing plant for paper beverage containers at Group companies and promoted treatment of used paper cups ・ Conducted a demonstration test of horizontal recycling from paper cups to paper cup base paper in collaboration with Japan Airlines Co., Ltd. and TOKAN KOGYO CO., LTD. ・ Concluded an agreement with Nihon Tetra Pak K.K. to cooperate on a study and initiatives to increase the recycling rate for paper cartons					
	Respect for human rights		Respect for human rights Implementation of human rights due diligence	・ Expanded the scope of human rights issue assessments previously only for chip and pulp suppliers to major suppliers of raw materials in the Paper and Paperboard Business to reduce risks related to raw material procurement ・ Conducted surveys on human rights issues at contractors of mills in Japan to address mill-related risks					
	Delight our customers		Response to changes in the social environment	Pursuit of Green Strategy (expand biomass products)	Expansion of biomass products ・ Address the demand for deplasticization (expand products for trend to replace plastic with paper)	・ To promote transition to paper packaging materials, strengthened joint ventures with converters in Japan, and started marketing activities overseas ・ Expanded adoption of School POP® (strawless paper cartons for schools) to 24 prefectures		 	    
			Stable supply of products, enhanced safety	Stable supply of products Product safety and quality control	Engagement in stable production, response to natural disasters (strengthen BCP)	・ Promoted building a framework to prepare for natural disasters and unexpected production troubles			
Assurance of stable transportation and response to logistics issues		・ In accordance with the Act on Advancement of Integration and Streamlining of Distribution Business (implemented in April 2025), conducted measures to reduce the amount of time spent by drivers waiting for cargo to help streamline distribution							
Collaboration, coexistence and co-prosperity with supply chain		・ Thoroughly implemented response to revision of the Act against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors, and renewed partnership-building pledge							
Improvement of the product safety management structure	・ Conducted a survey of quality management and identified issues								
Instill pride in employees	Realization of diverse work styles Active participation of diverse human resources	Reallocate management resources to growing businesses	Enhancement of ease of working and job satisfaction	Enhancement of employee engagement, including promotion of diversity ・ Total working hours of 1,850 hours/year or lower ・ Retention rate after 10 years of employment in FY2031/3 of 80% or higher ・ Ratio of female career-track hires to be 40% or higher by FY2026/3	・ Total working hours: 1,870 hours/year ・ Retention rate of employees who joined the Company in FY2015/3: 70.9% ・ Ratio of female employees among new graduates in career-track recruits for FY2026/3: 47.3%		   		
	Promotion of occupational safety and health		Maximization of utilization of human resources	Assurance of safety and hygiene for working people ・ Serious disaster cases of 0/year	・ Serious disasters: 0 cases				
Give back to society	Enhancement of corporate governance	Stronger functions of the Board of Directors		Improvement of effectiveness of the Board of Directors	・ Ensured the effectiveness of the Board of Directors by deepening discussions from a long-term perspective regarding direction for each business and initiatives, etc.		  		
	Coexistence with local communities and society Communication with stakeholders	Assurance of transparency in corporate management		Public and fair disclosure of Company information	・ Environmental risk communication: 23 cases (production sites in Japan) ・ Small meetings between outside directors and institutional investors: 1 time	 			

Message from the Executive Officer Responsible for Finance



Strengthen Profitability through Business Structure Transformation and Solidify the Foundation for Growth Strategies for the Future

I was appointed as General Manager of the Financial Division in June 2025. Upon assuming this post, I was reminded of the weight of my responsibilities and felt a renewed sense of resolve. Under the Company's Medium-Term Business Plan 2025, operating income of ¥40.0 billion or more and EBITDA of ¥100.0 billion have been positioned as key management targets. I am personally committed to working toward these targets with a strong sense of mission. On the financial front, we will focus on the stable generation of cash flow from operating activities. With regard to investments, we will thoroughly assess their effectiveness, and if the expected effects do not sufficiently materialize, we will take appropriate measures to ensure that returns are generated. Furthermore, Japan's financial markets are transitioning from a prolonged period of zero interest rates to "a world with interest rates." We will strive to further strengthen our financial base, reduce interest expenses, and enhance our cash-generating capabilities. Through this series of initiatives, we will strive to establish a virtuous cycle, enhance shareholder returns, and lay a solid foundation for realizing the growth strategies envisioned by President Sebe.



02 《 Business Results and FY2026/3 Plan 》

(¥ billion)

	FY2024/3	FY2025/3	FY2026/3 Plan
Net sales	1,167.3	1,182.4	1,205.0
Operating income	17.3	19.7	34.0
Domestic	30.4	31.6	30.5
Overseas	(13.1)	(11.9)	3.5

Boldly Implemented Business Structure Transformation through a Company-wide Effort Steadily Entered a Recovery Trajectory

FY2025/3 was a year in which the Company made steady strides toward enhancing its profitability. Net sales were ¥1,182.4 billion, marking the fourth consecutive year of revenue growth since FY2022/3. Operating income was ¥19.7 billion, and EBITDA was ¥90.7 billion, both showing a recovery trend. (Fig. 01) Turning to net income, the Company recorded extraordinary gains such as gains on sale of cross-shareholdings and non-current assets and gain on return of assets from retirement benefits trust, and extraordinary losses such as business structure transformation expenses in the overseas business and impairment losses on domestic mills. As a result, net income was ¥4.5 billion. (Fig. 02)

In the domestic business in FY2025/3, an increase in sales volume and the effect of price revisions in the Daily-Life Products Business contributed positively. The Company posted operating income of ¥31.6 billion, with operating income of ¥30.0 billion achieved in the domestic business for the second consecutive fiscal year. Despite a decline in profit in the Paper and Paperboard Business caused by reduced demand for graphic paper and rising logistics and labor expenses, growth in the Daily-Life Products Business enabled us to maintain overall profitability. We believe this is a significant achievement of our business structure transformation.

In the overseas business, operating loss narrowed from ¥13.1 billion in FY2024/3 to ¥11.9 billion in FY2025/3. The main reasons for the continued loss from FY2024/3 included large-scale maintenance and operational disruptions caused by a cold wave at NDP in North America, and, at Opal in Australia, lower-than-expected sales volume in the packaging business as well as delays in optimizing the production system at the Maryvale Mill. However, the continuation of stable operations at NDP following the large-scale maintenance and the positive effects of various earnings improvement measures at Opal contributed to a turnaround. As a result, the Company recorded operating income of ¥1.6 billion for the overseas business as a whole in the second half of FY2025/3, which it views as a solid step toward rebuilding the overseas business.

In FY2023/3, the Company recorded its first operating loss since listing, due to the impact of the situation in Ukraine and soaring energy prices. This experience was both a major management challenge for the Company and a catalyst that underscored the need to transform its business structure and accelerate the pace of that process. Since FY2024/3, we recognize that, through Company-wide transformation efforts, earnings have entered a recovery trajectory.

Progress and Outlook for the Final Year of Medium-Term Business Plan 2025 On Track to Achieve Targets through Execution of Key Priorities

FY2026/3 is the final year of the Medium-Term Business Plan 2025. It is a critically important year that will lay the foundation for formulating the next medium-term business plan. The Company aims to accelerate growth by achieving the plan's targets: net sales of ¥1,205.0 billion, operating income of ¥34.0 billion,

EBITDA of ¥100.0 billion, and net income of ¥12.0 billion.

In the domestic business of the Daily-Life Products Business, the Company expects increased profit, based on an increase in sales volume of chemical products supported by steady demand; higher sales volume of household paper due to full-capacity operation at Nippon Paper Crecia Miyagi Mill; and the effects of price revisions for paper cartons, household paper, and healthcare products. In the overseas business, we will implement various initiatives, with the top priority of achieving early profitability at Opal. In the packaging business, Opal will continue its efforts to improve productivity and enhance labor efficiency by maximizing utilization of the new corrugated box plant and upgraded converting machines. At the Maryvale Mill, it will work to achieve operational stability by enhancing maintenance and securing optimal operating parameters with technical support from Nippon Paper Industries. Together with stable operations at NDP, the overseas business aims to achieve a turnaround to positive operating income.

The Daily-Life Products Business is serving as the main driver of growth. Accordingly, the Company is advancing multi-faceted initiatives, including revising price strategies, stabilizing operations, improving costs, and realizing the benefits of past capital investments. The business structure transformation, shift to the Daily-Life Products Business, has been steadily progressing. Net sales of the business were ¥220.1 billion in FY2016/3 and have approximately doubled to ¥457.9 billion in FY2025/3. In FY2026/3, net sales are forecast to reach ¥500.0 billion, roughly 2.3 times the FY2016/3 level.

In the Paper and Paperboard Business, profit is projected to decline, reflecting lower demand for graphic paper, as well as rising costs for raw materials, labor, and logistics. While we will respond to the situation as much as possible through self-reliant efforts such as cost improvements, we will also consider raising prices to appropriate, sustainable levels that enable us to maintain a stable supply, in order to cover cost increases we cannot absorb. In the Energy Business, sales and profit are forecast to decrease due to a drop in electricity sales prices in connection with coal prices. However, stable operations will help to ensure a certain level of profit. In the Wood Products and Construction-Related Business, although housing starts are expected to decline, profit is expected to remain high thanks to increased handling volumes of biomass fuel.

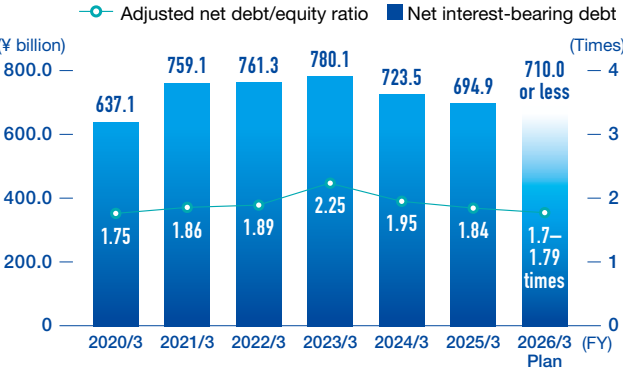
We view the operating income plan of ¥34.0 billion for FY2026/3 as the bare minimum that must be achieved. To absorb further cost increases resulting from pay rises and increasing prices, which have already been reflected in plans, we will pursue cost reductions through cost improvements and consider price revisions. By steadily implementing initiatives aimed at achieving early profitability at Opal, we will build up earnings toward achieving the Medium-Term Business Plan target of ¥40.0 billion in operating income.

Strengthening Our Financial Position by Improving the Profit Level and Reducing Net Interest-bearing Debt

As Japan's financial markets transit to "a world with interest rates," reduction of net interest-bearing debt is necessary to strengthen our financial position.

Net interest-bearing debt was reduced by more than ¥80.0

03 《Trend in Net Interest-bearing Debt and Adjusted Net Debt/Equity Ratio*》



* Adjusted net debt/equity ratio = (Net interest-bearing debt – Equity-type debt) / (Shareholders’ equity + Equity-type debt)
Equity-type debt: The amount of debt financed by hybrid loans that has been recognized as equity credit by ratings agencies (50% of the financed amount)

billion from its peak of ¥780.1 billion at the end of FY2023/3 to ¥694.9 billion at the end of FY2025/3, achieving the Medium-Term Business Plan 2025 target of ¥710.0 billion or less one year ahead of schedule. This was mainly due to progress on improving earnings, with operating income in the domestic business surpassing ¥30.0 billion for two consecutive years in FY2024/3 and FY2025/3. Progress has also been made on initiatives such as the sale of land and buildings in Kita-ku, Tokyo, which was carried out in FY2024/3, and the reduction of cross-shareholdings, which has been a priority in recent years. As a result, the net debt/equity ratio improved to 1.84 times at the end of FY2025/3. The goal is to bring this figure down to 1.7–1.79 times by the end of FY2026/3, with further improvements planned under the next medium-term business plan. (Fig. 03)

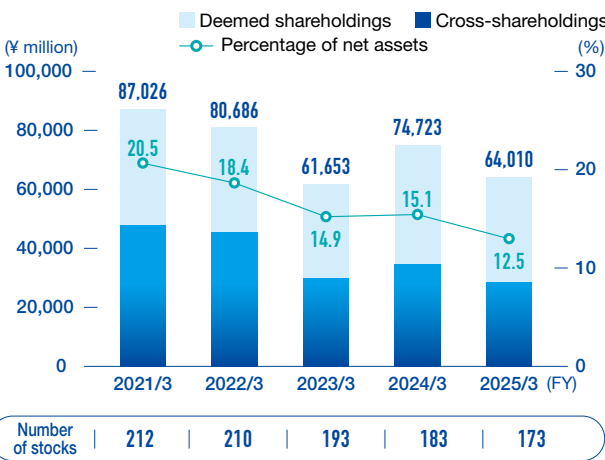
As part of efforts to improve capital efficiency, the Company announced a policy in May 2025 to reduce its cross-shareholdings. After extensive review with advice from outside directors, we adopted the goal of total abolition, in principle for cross-shareholdings. We plan to reduce cross-shareholdings by ¥15.0 billion from FY2026/3 to the end of FY2028/3. Cross-shareholdings worth ¥30.0 billion have been sold over the two years from FY2024/3 to FY2025/3, supporting cash flows. (Fig. 04)

The Group’s policy is to allocate the funds acquired through asset sales and other means primarily to investments needed for sustainable growth, mainly growth investments and environmental investments, and to the reduction of net interest-bearing debt. By focusing on further strengthening its financial position and increasing operating income, the Group aims to enhance cash generation through earnings growth and the reduction of interest-bearing debt, a process it believes will lead to enhanced shareholder returns in the future. (Fig. 05)

Trial Introduction of ROIC by Business Division Aimed at Improving the Low PBR

The Company’s price-to-book value ratio (PBR) remains low. Return on equity (ROE), a component of PBR, was 5.3% in FY2024/3, but declined to 1.0% in FY2025/3. The Company recognizes that its cost of shareholders’ equity should be in the

04 《Status of Cross-shareholdings (Amount Recorded in the Balance Sheet)》



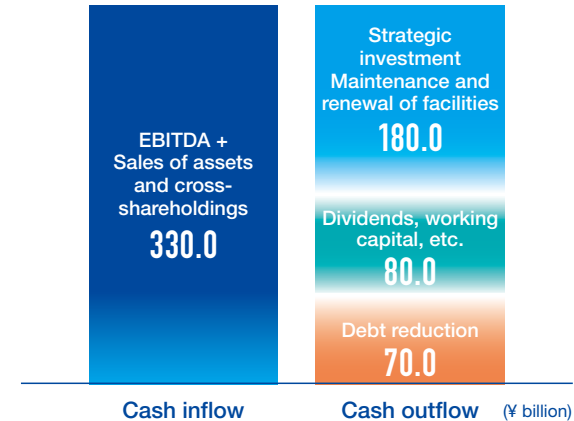
range of around 7–10%, and the current ROE remains below the cost of shareholders’ equity.

The price-to-earnings ratio (PER), another component of PBR, is currently at a relatively high level. This reflects the persistently low level of net income, due to factors such as extraordinary losses recognized in connection with the ongoing business structure transformation. We will work to raise our profit level by achieving an early return to profitability in the overseas business and by expanding earnings in the Daily-Life Products Business. By presenting concrete results from our growth strategies, we seek to improve its recognition in the financial markets.

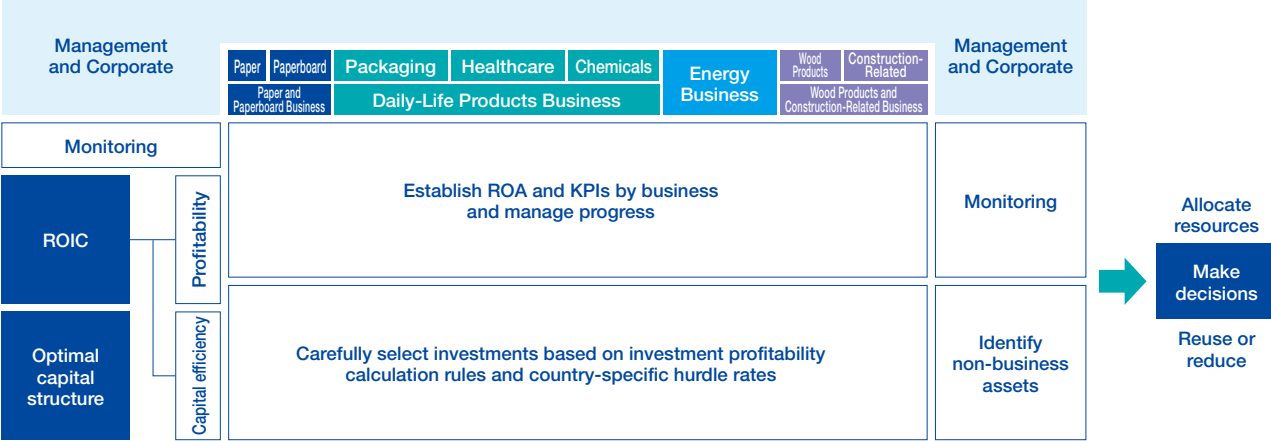
As one initiative to improve PBR, we have adopted return on invested capital (ROIC) and return on assets (ROA) as internal management indicators starting in FY2026/3. A management framework has been introduced for each company and business division to improve these indicators.

We manage ROIC while working to increase internal awareness of its importance and the key points for improving it. ROIC is managed on a consolidated, Group-wide basis and at the individual company level, including Nippon Paper Industries. The Company’s ROIC was 2.1% in FY2025/3 and has remained below the weighted average cost of capital (WACC)

05 《Cash Allocation (FY2024/3–FY2026/3 Plan)》



06 《Introduction of a Capital Efficiency Management Framework》



in recent years. Looking at each business, profitability is an issue in the Paper Business, which has many mills and requires large amounts of invested capital. Accordingly, we believe it is crucial to shift investment toward highly profitable growing businesses. Business structure transformation will be promoted through investment profitability management based on ROIC, which will also be utilized in formulating the next medium-term business plan.

In addition, we have established a framework to promote the efficient management of business assets by defining such assets for each business and adopting ROA by business as a management indicator. Key success factors (KSFs) and key performance indicators (KPIs) that use ROA as a goal have been established at each company and business division, and progress is reported to the Board of Directors on a quarterly basis. By working to improve capital efficiency at the individual company and business division level, we aim to enhance our overall earnings power. In FY2026/3, we will work to establish ROIC as part of a trial implementation. Through continuous monitoring by the Board of Directors, each company and business division will consider more appropriate KPIs, with the aim of fully introducing them under the next medium-term business plan. (Fig. 06)

In June 2025, we updated our material “Actions to Implement Management That Is Conscious of the Cost of Capital and Stock Price.” To improve PBR, it has identified the following initiatives: (1) Enhance profitability, (2) Improve capital efficiency, (3) Review the optimal capital structure, and (4) Raise the expected growth rate. We will work to improve PBR through these initiatives.

Strengthen Environmental Investments Accelerate Reduction of Environmental Impact by Reducing GHG Emissions

We are steadily advancing initiatives to achieve the 2030VISION target of a 54% reduction in GHG emissions compared to FY2014/3 levels. As of FY2025/3, we have already achieved a 41% reduction, demonstrating steady progress toward the target. Looking ahead, we will continue implementing various measures, including improving production efficiency through reorganization of production systems, shutting down coal boilers, advancing energy saving measures, converting fuel

sources, and maximizing black liquor use. In FY2026/3, a coal boiler is going to be shut down at the Yatsushiro Mill, where the N2 paper machine will also be shut down. Furthermore, at the Ishinomaki Mill, with government support through the use of GX Economic Transition Bonds, we plan to shut down one coal boiler in FY2029/3 and install a high-efficiency black liquor recovery boiler. Through such fuel conversion from coal to black liquor, GHG emissions will be substantially reduced.

The environmental investments are expected to deliver dual returns in the form of the long-term improvement of ROIC and enhanced sustainability through better ESG evaluations. These investments not only contribute to the realization of a carbon neutral society, but are also positioned as key initiatives for earning the trust from investors and business partners.

Making FY2026/3 a Year That Serves as a Bridge to Future Growth by Increasing Corporate Value

We believe that FY2026/3 will be an extremely important year for building a foothold toward achieving our 2030VISION. During this year, we will work to achieve the targets of the Medium-Term Business Plan 2025 and lay the groundwork for the next medium-term business plan.

In the domestic business, we will strive to enhance the profitability of the Daily-Life Products Business, which is expected to continue growing. In the Paper and Paperboard Business, we will maintain and strengthen the earnings base through reorganization of our production systems and price revisions. By bolstering business models that lead to the stable procurement of raw materials and expansion of the domestic wood distribution business, we also intend to drive further growth in the Wood Products and Construction-Related Business, which is the Group’s most highly profitable business. In the overseas business, we will accelerate earnings improvement primarily at Opal, achieve early profitability, and meet the expectations of stakeholders.

To achieve its corporate mission of “Contribute to better living and cultural progress everywhere the Group does business,” we will work to maximize its corporate value and promote the continuity and expansion of its business operations.

Progress and Achievements of the Medium-Term Business Plan 2025

NIPPON PAPER GROUP's Medium-Term Business Plan 2025 is a five-year action plan from FY2022/3 to FY2026/3 to resolve and achieve the management issues necessary to realize its vision for 2030.

In FY2025/3, the progress on the plan resulted in a net sales increase of ¥15.1 billion compared to the previous year. Results reflected the emergence of price adjustment effects for household paper and healthcare products, as well as liquid packaging cartons, despite a decrease in sales volume for graphic paper due to the impact of decreasing demand.

Operating income was ¥19.7 billion, increasing ¥2.4 billion from the previous fiscal year. In the domestic business, operating income remained above ¥30.0 billion again after achieving this level in FY2024/3, remaining broadly in line with the trajectory envisaged under the Medium-Term Business Plan 2025. Meanwhile, the overseas business posted a loss of ¥11.9 billion, mainly reflecting ongoing losses at Opal and a large-scale maintenance project

conducted at NDP in the first half. However, in the second half of FY2025/3, the overseas business returned to profitability as NDP continued steady production and sales after the maintenance project and Opal made progress on improving earnings.

Net interest-bearing debt was reduced to ¥694.9 billion by the end of FY2025/3, achieving the target for the end of FY2026/3 of ¥710.0 billion a year early. The Group aims to achieve a net D/E ratio of 1.7–1.79 times in FY2026/3.

FY2026/3 is the final fiscal year of the Medium-Term Business Plan 2025. The Group has articulated three key priorities: business expansion and profitability improvement in the Daily-Life Products Business, improvement of earnings at Opal, and reinforcement of the foundation of the Paper and Paperboard Business. The Group will steadily promote these initiatives while examining and executing further measures to increase earnings, such as cost reduction and price revision, aiming to build up earnings to achieve the plan.

[Comparison of the Medium-Term Business Plan 2025 and the FY2026/3 Plan]

(¥ billion)	Medium-Term Business Plan 2025 Targets	FY2026/3 Plan
Net sales	1,200.0	1,205.0
Operating income	40.0	34.0
Paper and Paperboard	5.0	5.0
Daily-Life Products	20.0	15.0
Energy	3.0	3.0
Wood Products and Construction-Related	8.0	8.5
Other	4.0	2.5
EBITDA	100.0	100.0
ROE	5.0% or more	2–3%
Net debt/equity ratio	1.7–1.79 times	1.7–1.79 times

Concept for FY2026/3

- Ensure implementation of priority tasks for FY2026/3
→ Achieve FY2026/3 Plan
- Consider and implement measures to further improve profitability
→ Achieve Medium-Term Business Plan 2025 targets

Additional profitability improvement measures (including those under consideration)

- Measures against cost increases such as higher wages and prices
→ Further cost reductions and price revisions
- Early realization of investment effects
→ Thorough post-investment follow-up, including verification of the effects of the investment
- Additional measures to bring Opal back to profitability at an early stage

Progress on the Medium-Term Business Plan 2025, 2030VISION

FY	2024/3 Results	2025/3 Results	2026/3 Plan	Medium-Term Business Plan 2025 Targets	2026–2030
Net sales (¥ billion)	1,167.3	1,182.4	1,205.0	¥1,200.0 billion or more	
Percentage of Daily-Life Products Business among total net sales	37%	39%	41%	—	Daily-Life Products Business <ul style="list-style-type: none">▶ Further improve profitability of Opal▶ Continue strategic investment
Overseas sales ratio	26.7%	28.4%		—	Graphic Paper Business <ul style="list-style-type: none">▶ Consolidate graphic paper domestic production sites to approximately three locations▶ Secure profitability through operational stability, cost reductions, maintaining appropriate prices, and reorganization of production systems
Operating income (¥ billion)	17.3	19.7	34.0	¥40.0 billion or more at an early stage	New business and innovative materials <ul style="list-style-type: none">▶ Rapid commercialization▶ Develop new businesses based on pulp and cellulose
Operating income margin in the Daily-Life Products Business	(1.8)%	(1.3)%	3.0%	—	Increase overseas net sales
EBITDA (¥ billion)	84.8	90.7	100.0	Stably ¥100.0 billion	Improve financial position <ul style="list-style-type: none">▶ Compression of interest-bearing debt▶ Expansion of capital▶ Reduce the net debt/equity ratio to 1.5–1.59 times at an early stage, and make further improvements
ROE	5.3%	1.0%	2–3%	5.0% or more	
Net debt/equity ratio	1.95	1.84	1.7–1.79 times	1.7–1.79 times	
Net interest-bearing debt (¥ billion)	723.5	694.9	¥710.0 billion or less	¥710.0 billion or less	
GHG emissions (Scope 1+2) (vs. FY2014/3)	(37)%	(41)%			Measures to reduce GHG emissions <ul style="list-style-type: none">▶ Improve productivity through reorganization of production systems▶ Shut down coal boilers along with reorganization of production systems▶ Fuel conversion and maximization of the use of black liquor▶ Energy saving measures

2030VISION

< Basic Policies >

- ◆ Reallocate management resources to growing businesses
- ◆ Respond to the rapidly changing social landscape, including GHG emissions reduction and environmental issues

Net sales

¥1,300.0 billion

Of which, Daily-Life Products Business 50% or more

New businesses ¥65.0 billion

Overseas sales ratio 30% or more

Operating income margin in the Daily-Life Products Business

7% or more

ROE

8.0% or more

GHG emissions (Scope 1+2) (vs. FY2014/3)

54% reduction

Special Feature: Opal

Embarking on a New Growth Track: Opal's Value Creation Story

Opal has developed its packaging business primarily in the Oceania region, where economic growth is expected, and plays a key role in driving NIPPON PAPER GROUP's Daily-Life Products Business. Opal commits to improving profitability and enhancing corporate value by advancing a differentiation strategy through quality and services that meet customer needs and by expanding sales in its packaging business.



YOSHIFUMI NAGAURA
CEO, Opal

History of Opal

Australia's total population increased by approximately 38% (from 19 million to 26 million) between 2000 and 2022, and it is projected to grow by a further 7 million (26%) by 2055. Driven by this population growth, Australia's nominal GDP expanded continuously for 28 years from 1992 to 2019. With robust consumer sentiment, demand for corrugated boxes is expected to grow steadily. The Group acquired Paper Australia Pty Ltd (hereinafter, "PAPL"), a manufacturer of white paper and brown paper, in 2009. In 2020, with the aim of further expanding its Daily-Life Products Business, the Group acquired the paperboard and paper packaging business of Orora Limited in the Oceania region and integrated it with PAPL's

operations, launching Opal as a comprehensive paper and packaging company with in-house production from paper manufacturing to packaging conversion. Opal's business consists of two segments: paper and packaging. The paper business, supported by Nippon Paper Industries through its technology and expertise in pulp and paper manufacturing, produces brown paper at two sites in Australia: Maryvale Mill (hereinafter, "MV Mill") and Botany Mill. The packaging business, which utilizes that brown paper, offers a comprehensive range of goods and services, including package design, packaging machinery, and maintenance.

Path to Profitability at MV Mill

Due to an unexpected end of wood supply from the state of Victoria, Opal decided in 2023 to exit the white paper business and reposition MV Mill as a packaging paper production facility. Opal has restructured MV Mill by permanently closing two paper machines, converting the continuous kraft mill to produce softwood pulp, and reducing fixed costs primarily through workforce optimization. These measures have been steadily implemented as part of Opal's initiatives to return MV Mill to profitability. Opal is focusing on operational stability, cost optimization, and sales enhancement. For operational stability, Opal seeks to secure optimal maintenance and operational parameters with support from Nippon Paper

Industries. For cost optimization, Opal is working on reducing fixed costs and reviewing all processes, including but not limited to procurement, production, dispatch, and logistics. For sales enhancement, Opal focuses on shifting toward more profitable products and markets. Opal has entered into a secondment agreement with Nippon Paper Industries to involve their employees with diverse backgrounds, including manufacturing, research and development, sales, and corporate functions, for improved business operations and governance. Through these efforts, Opal commits to significant profit improvement at MV Mill.

Opal Timeline



The Packaging Business: Offering Goods and Services to Meet Customer Needs

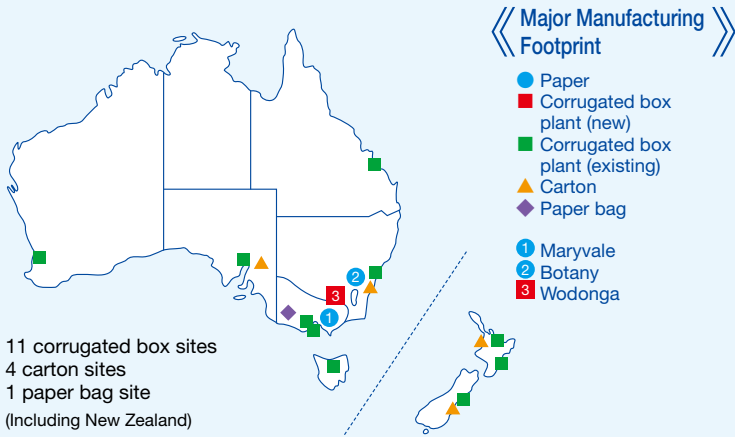
The advantage of Opal's packaging business lies in its integrated model, combining paper production with packaging manufacturing, which enables Opal to provide goods tailored to each customer's needs. Opal offers a wide range of packaging solutions. For fresh and heavy-duty items, it supplies boxes made with kraft liner from MV Mill, which provides superior strength and moisture resistance. For general consumer goods, it offers boxes made from recycled-grade paper, mainly sourced from Botany Mill. Opal delivers optimal solutions customized to customer requirements. Opal can provide bundled offers to customers with a wide range of products, such as paper boxes and paper cartons. In Australia, with the Single-use Plastics Ban enforced by various states, supermarkets are replacing plastic packaging with paper alternatives, including punnets. Opal provides goods and services to customers such as fruit and vegetable producers, including corrugated boxes, packaging machinery, and maintenance services.



CHRIS DALY
Executive General Manager — Packaging



Paper punnet



Medium-to Long-term Growth Strategy for the Packaging Business

The packaging business is accelerating the expansion of corrugated cardboard sales and strengthening profitability by enhancing its integrated model and promoting a differentiation strategy against competitors. Opal commenced operations of the Wodonga corrugated box plant in 2023, located near the border between the states that host Australia's two largest cities, Sydney and Melbourne. As a result, Opal can capture the increasing demand for corrugated packaging driven by population growth and expand distribution into regions where it previously lacked manufacturing capacity and was unable to grow sales. This will allow the development of new sales channels and contribute to revenue growth. In addition, Opal plans to increase production volume and improve

productivity by renewing aging assets at existing plants. This will enable Opal to achieve sales growth in corrugated cardboard that exceeds market expansion, increase its internal paper consumption rate, and strengthen profitability. Opal expects demand for paper-based packaging to increase in environmentally conscious Australia due to the introduction of the Single-use Plastic Ban. Opal delivers value-added solutions by offering bundled packaging options and seamless integrated services tailored to evolving customer needs. The Group aims to scale its global packaging footprint by leveraging Opal's proven technology and operational know-how developed in the Australian market.



Wodonga


Overview of Opal

Principal activities	The manufacture, sale and distribution of paper-based packaging and packaging-related products
----------------------	--

Medium-to Long-term Targets

Net revenue	[FY2026/3 Forecast] Approximately A\$1,920 million	[FY2030/3 Forecast] Approximately A\$2,300 million
-------------	---	---

Strategy by Business

 **Paper Business** [Main products] Newsprint, printing paper, business communication paper, industrial paper, functional specialty paper, functional paper

Strengthening Competitiveness through Production System Reorganization and Expanding Sales of Differentiated Products

The market for newsprint, printing paper, copy paper, and other types of graphic paper is encountering a continued decline in demand amid digitalization as well as entrenchment of remote work and other new lifestyles. Based on this market trend, NIPPON PAPER GROUP will maintain and increase its market share in Japan through differentiation strategies, such as rolling out environmentally-friendly products with low GHG emissions in the production process. Also, to address the decline in demand, the Group is strategically expanding sales through the development of products for overseas as well as by reinforcing its organization and human resources.

The Group is optimizing its production system to match the level of demand, and plans to consolidate its graphic paper production sites in Japan to around three locations by FY2029/3. In FY2026/3, the Group plans to shut down one paper machine at both the Shiraoi Mill and the Yatsushiro Mill. By shifting to other products and expanding new businesses, the Group will advance business structure transformation and labor-saving efforts at mills in order to address the anticipated labor shortages in the future. In terms of reorganization of production systems, this involves both bolstering cost competitiveness and realizing reductions in GHG emissions by significantly reducing its coal consumption in part through fuel conversion of its coal boilers. The Group aims to serve as an enterprise that is the preferred choice of customers.

Link strengths to opportunities

STRENGTHS

- ▶ Technical capabilities and know-how to produce various products
- ▶ Stable supply system and sales channel network covering the entire country

OPPORTUNITIES

- ▶ Rising awareness of environmental issues, including carbon neutrality, and deplasticization (trend toward using paper)

Address challenges and threats

WEAKNESSES

- ▶ High percentage of coal in fuel composition
- ▶ High fixed costs due to extensive facilities

THREATS

- ▶ Accelerating decline in demand for graphic paper due to remote work and other lifestyle changes as well as digitalization
- ▶ Higher labor costs and logistics costs amid a decline in demand
- ▶ Labor shortage at manufacturing sites

 **Paperboard Business** [Main products] Containerboards, white paperboards

Expand Sales by Maximizing Utilization of Kraft Pulp Facilities

In the domestic market, while firm demand for corrugated boxes associated with food, beverages and e-commerce are expected, the market is also prone to effects of diminished consumer spending attributable to a surge in prices, as well as changes in packaging formats and a movement towards lightweight and reduced packaging. In overseas markets, there are expectations for escalating demand, particularly in Southeast Asia, yet the economic stagnation in China has resulted in a continued sluggish export market. In Europe, meanwhile, a certain level of demand is expected amid a transition to paper from plastic packaging due to environmental regulations.

The Group will tap into demand in Japan and overseas by expanding its sales of high value-added products containing a high proportion of kraft pulp manufactured in-house, which is one of the Group's strengths, as well as by developing and rolling out new products such as for heavy goods. The Group is also seeking product differentiation by focusing on developing and extending sales of base paper that addresses environmental issues and logistics challenges. When it comes to addressing logistics challenges in particular, the Group will take actions such as improving transportation efficiency by promoting collaborative logistics and modal shift solutions, while also securing product supply capacity by ensuring appropriate levels of inventories at consumption points. Moreover, the Group seeks to ensure stable supply and secure competitiveness by strengthening its stable procurement system for wastepaper, which serves as a raw material.

Link strengths to opportunities

STRENGTHS

- ▶ Development of high value-added products using kraft pulp manufactured in-house
- ▶ New product development and sales structure based on an integrated efforts of sales and development divisions

OPPORTUNITIES

- ▶ Stable demand related to beverages, food, and e-commerce
- ▶ Demand for switching from other materials due to the adoption of environmental regulations both in Japan and overseas

Address challenges and threats

WEAKNESSES

- ▶ Stability of operations
- ▶ Maintaining sales prices

THREATS

- ▶ Falling demand due to economic deterioration in Japan and overseas
- ▶ Increasing logistics costs
- ▶ Surging raw materials and fuel prices

 **Liquid Packaging Carton Business** [Main products] Liquid packaging cartons, liquid packaging boards

Rigorous Implementation of Differentiation Strategy Leveraging Total System and External Collaboration

Whereas the domestic market has been subject to a trend of contraction attributable to population decline, there has been rising demand with respect to new cartons and filling machines for high value-added beverages. In contrast to the prospect of escalating paper carton demand in overseas markets prompted by a trend of deplasticization, the shift to paper cartons remains limited in Japan as of yet.

By collaborating with strategic partners such as Elopak and Shikoku Kakoki Co., Ltd., the Group has built a system that enables it to go beyond simply developing paper cartons and promote development as a total system supplier, from base paper to paper containers and filling machines. Based on this, the Group is working to expand sales of high value-added paper containers in domestic and overseas markets under a thorough differentiation strategy, and in Japan the Group is seeing growing customer demand for environmentally-friendly products such as the strawless school milk container "School POP®" and the non-aluminum Fujipack. In overseas markets, the Group aims to expand business based on collaboration with the above-mentioned strategic partners, including NDP. In addition, the Group will intensively drive the trend of deplasticization and replacing plastic with paper by promoting recycling of paper cartons (PakUpcycle®).

Link strengths to opportunities

STRENGTHS

- ▶ World-class technology for developing paper cartons and filling machines
- ▶ Presence of powerful strategic partners

OPPORTUNITIES

- ▶ Rising needs for filling systems capable of handling various types of beverages and cartons
- ▶ Rising needs for environmentally-friendly products both in Japan and overseas

Address challenges and threats

WEAKNESSES

- ▶ Developing and securing personnel for overseas expansion

THREATS

- ▶ Uncertainty regarding supply of paper carton base paper due to factors such as conflicts and natural disasters around the world
- ▶ Intensifying competition in the domestic paper carton market
- ▶ Shortage of necessary personnel for business continuation

 **Household Paper and Healthcare Business** [Main products] Facial tissues, toilet rolls, paper towels, adult diapers

Expanding the Lineup of Products That Address Environmental Issues in Anticipation of Diversifying Needs

The domestic market has been experiencing diversifying consumer needs and purchasing behavior due to factors such as an increasing number of single elderly households, rising employment rates among women and elderly people, and growing inbound demand. Additionally, demand has been rising for emergency supplies stockpiled as a means of preparing for natural disasters attributable to climate change, amid a growing awareness of hygiene prompted by the COVID-19 pandemic.

Nippon Paper Crecia cites "maintaining and expanding a hygienic environment" as its purpose, aiming to enable all people to continue leading hygienic lives under all circumstances. It seeks to expand its product lineup to address diversifying needs by developing products suitable for various use scenarios and applications. This includes offering absorbent care products and adult diapers integral to the daily lives of active seniors, universal design products that accommodate inbound tourism needs, and items recommended for inclusion as rolling stock. Also, Nippon Paper Crecia is striving to achieve differentiation by further promoting the expansion of "long-lasting & compact" products, which reduce GHG emissions and respond to consumer needs. Furthermore, Nippon Paper Crecia will expand quantities through the operation of new paper machines, with an eye towards exports. On the cost front, it is increasing the volume of pulp procured within the Group to mitigate the effects of market volatility and is promoting a shift to digital transformation (DX) in its operations.

Link strengths to opportunities

STRENGTHS

- ▶ Technological capabilities and brand power as a pioneer in household paper
- ▶ Development of sustainable products from wood resources

OPPORTUNITIES

- ▶ Heightened awareness of environment and hygiene
- ▶ Increasing demand for products that are friendly to environment

Address challenges and threats

WEAKNESSES

- ▶ Operations and logistics which are partially inefficient
- ▶ Room to increase amount of pulp procurement within the Group

THREATS

- ▶ Increasing logistics costs
- ▶ Labor shortage
- ▶ Exchange rate volatility
- ▶ Intensifying competition due to reinforcement of facilities by competitors



Chemical Business

[Main products] Dissolving pulp, functional cellulose, functional chemicals, functional coating raisins, functional films

Promote Business Growth with Environmentally-friendly Products Utilizing Wood Resources

Demand for environmentally-friendly products is rising amid growing awareness of environmental issues worldwide. In the Chemical Business, the Group has long developed business by comprehensively utilizing sustainable wood resources such as dissolving pulp, lignin, fermentation processes, carboxymethyl cellulose (CMC), cellulose, etc. In the burgeoning electric vehicle (EV) market, the Group has been expanding facilities for high-performance CMC used in lithium-ion batteries. In March 2025, it completed a production site in Hungary and has begun providing samples. Meanwhile, the Group has increasingly been encountering inquiries regarding lignin from wood resources for use as a binding agent, as an alternative to petrochemical and edible binders.

Beyond wood-derived products, the Group is also promoting a shift to high value-added products that meet the increasing environmental requirements of customers. This includes functional coating resin products used for coatings on plastic car parts and inks for packaging film, as well as functional films used in mobile displays, which are experiencing strong sales. Going forward, the Group will focus on developing wood-derived products in response to mounting environmental awareness. By integrating efforts in sales, R&D and production, the Group aims to provide these solutions to both domestic and overseas markets.

Link strengths to opportunities

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none">▶ Product lineup with high shares in niche markets and technological capabilities▶ Extensive lineup of wood-derived products that contribute to achieving a circulation-oriented society	<ul style="list-style-type: none">▶ Global trend toward converting to battery electric vehicles▶ Increasing demand for environmentally-friendly products amid mounting environmental awareness

Address challenges and threats

WEAKNESSES	THREATS
<ul style="list-style-type: none">▶ Investment cost to upgrade production facilities▶ Production with small scale but high cost	<ul style="list-style-type: none">▶ Growing quality requirements and declining value of existing products due to changes in the market environment▶ Offensive maneuvers by overseas manufacturers



Energy Business

[Main products] Electricity sales

Securing Profit through Stable Operation of Renewable Energy Facilities

Frameworks and the environment surrounding electric power are undergoing rapid change amid mounting global demand for renewable energy. Meanwhile, whereas coal prices have come down after a surge in FY2023/3, biomass fuel prices have been trending higher due to factors that include an increase in the number of biomass power plants in Japan. The Group has been striving to secure profit by flexibly adapting to systemic changes and societal transformation, while continually reducing its GHG emissions and cutting costs through fuel conversion of its coal boilers and energy-saving measures.

In response to escalating demand for renewable energy, the Yufutsu Energy Center began commercial operations in February 2023 as a biomass power generation facility with a generation capacity of 75 MW. In December 2023, the Group also completed modifications to its Nippon Paper Industries Ishinomaki Energy Center, a coal-biomass co-firing facility, increasing its biomass co-firing ratio to 42%. Renewable energy capacity of facilities dedicated to power sales has increased to approximately 270 MW. The Group aims to secure profit over the medium to long term based on stable operations by maximizing capabilities in power generation technologies and wood resource procurement that it has cultivated through its existing businesses.

Link strengths to opportunities

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none">▶ Technological capabilities in power generation and infrastructure cultivated over many years▶ Woody biomass fuel procurement capabilities	<ul style="list-style-type: none">▶ Rising demand for renewable energy toward carbon neutrality in 2050

Address challenges and threats

WEAKNESSES	THREATS
<ul style="list-style-type: none">▶ High percentage of fossil fuels in energy composition▶ Issues of cost and social reputation due to use of coal	<ul style="list-style-type: none">▶ Growing opposition to coal consumption▶ Movement to introduce carbon pricing



Wood/Building Material Business

[Main products] Logs, building materials, raw materials and fuel

Further Strengthen Domestic Wood Procurement Foundation and Expand Profitability of the Fuel Business

In Japan, the wood materials-related industry continues to endure challenging conditions amid sluggish demand for newly constructed single-family homes, despite robust demand for wood materials due to redevelopment and rebuilding of housing complexes. Meanwhile, the price of fuel wood chips is trending higher amid expanding demand due to an increase in the number of biomass power plants in Japan.

The Group is further strengthening its domestic wood materials procurement foundation by maximizing its nationwide wood sourcing network, which is one of its strengths. In addition, it seeks to increase distribution volume of domestic wood by supporting the forestry industry in partnership with local forestry business operators. Also in its overseas plantation areas, the Group will use its proprietary breeding and propagation technologies to improve productivity and expand wood materials distribution volume. In terms of sales, it will flexibly adapt to changes in market conditions for wood materials while expanding sales routes of domestic logs and wood products in Japan and overseas, keeping in mind prospective future demand in overseas markets. In the field of fuel, the Group works to increase profitability of its fuel business by seizing sales opportunities with external customers, while consistently supplying biomass fuel to biomass power generation facilities in the Group's Energy Business.

Link strengths to opportunities

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none">▶ Top-class handling volume of domestic wood in Japan▶ Procurement and supply system for wood chips used as fuel	<ul style="list-style-type: none">▶ Movement to expand self-sufficiency of domestic wood▶ Rising demand for biomass fuel due to the increase in biomass power generation facilities

Address challenges and threats

WEAKNESSES	THREATS
<ul style="list-style-type: none">▶ Weakening procurement network of raw materials for paper manufacturing due to declining paper demand and insufficient price competitiveness▶ Lack of price competitiveness given the small scale of business handled by building materials divisions	<ul style="list-style-type: none">▶ Lack of forestry workers and low productivity in the forestry industry▶ Decline in the number of housing starts due to population decline▶ Intensifying competition over procurement of fuel for new biomass power generation

[Column] Logistics Initiatives

NIPPON PAPER GROUP has formed an intra-Group cross-functional project team to address product sales and the procurement of raw materials and fuel. The team works to balance legal and regulatory compliance with cost containment in logistics in part by introducing a truck receiving reservation system at its plants. It builds cooperative relationships with its business partners and accordingly implements measures that include scheduled delivery requests, changes to transportation systems, and establishing new inventory hubs near points of consumption.

Initiatives in the Paper Industry

The Group promotes greater logistics efficiency by arranging mutual use of logistics assets with other companies in the paper industry. In collaboration with Daio Paper Corporation, the Group has implemented a modal shift by utilizing Daio Paper Corporation's cargo ships for transporting products

from the Nippon Paper Industries Nakoso Mill in Fukushima Prefecture to the Kansai region, a route previously served by trucks. Compared to the previous truck-based transport, this has reduced annual GHG emissions by 46.7% and total driving time of truck drivers by 78.8%.

Joint Transport with Other Industries

The Group conducts round-trip transportation between Akita Prefecture and the Tokyo metropolitan area in partnership with DOWA ECO-SYSTEM Co., Ltd. (DOWA) and Japan Freight Railway Company. By coordinating with empty-haul legs of DOWA's 20-foot containers, the Group has shifted to dual-mode transport for containerboard and streamlined long-distance transportation. In addition, the Group has become involved in the Logistics Big Data Lab launched by Hacobu, Inc., and is working toward achieving joint transportation and delivery across different industries by sharing logistics data collected through the

MOVO logistics platform with Kirin Beverage Company, Limited, Sugi Pharmacy Co., Ltd., YKK AP Inc., and ASKUL Corporation.



DOWA container for round-trip transport

Green Strategy

The NIPPON PAPER GROUP's business foundation is forest resources. The Group will nurture healthy, sustainable forests and fully utilize the wood produced without waste, and expand its range of biomass products, while also contributing to the resolution of various social issues in the process. By promoting this Green Strategy, the Group will contribute to better living and cultural progress everywhere it does business.

Green Strategy Scenario

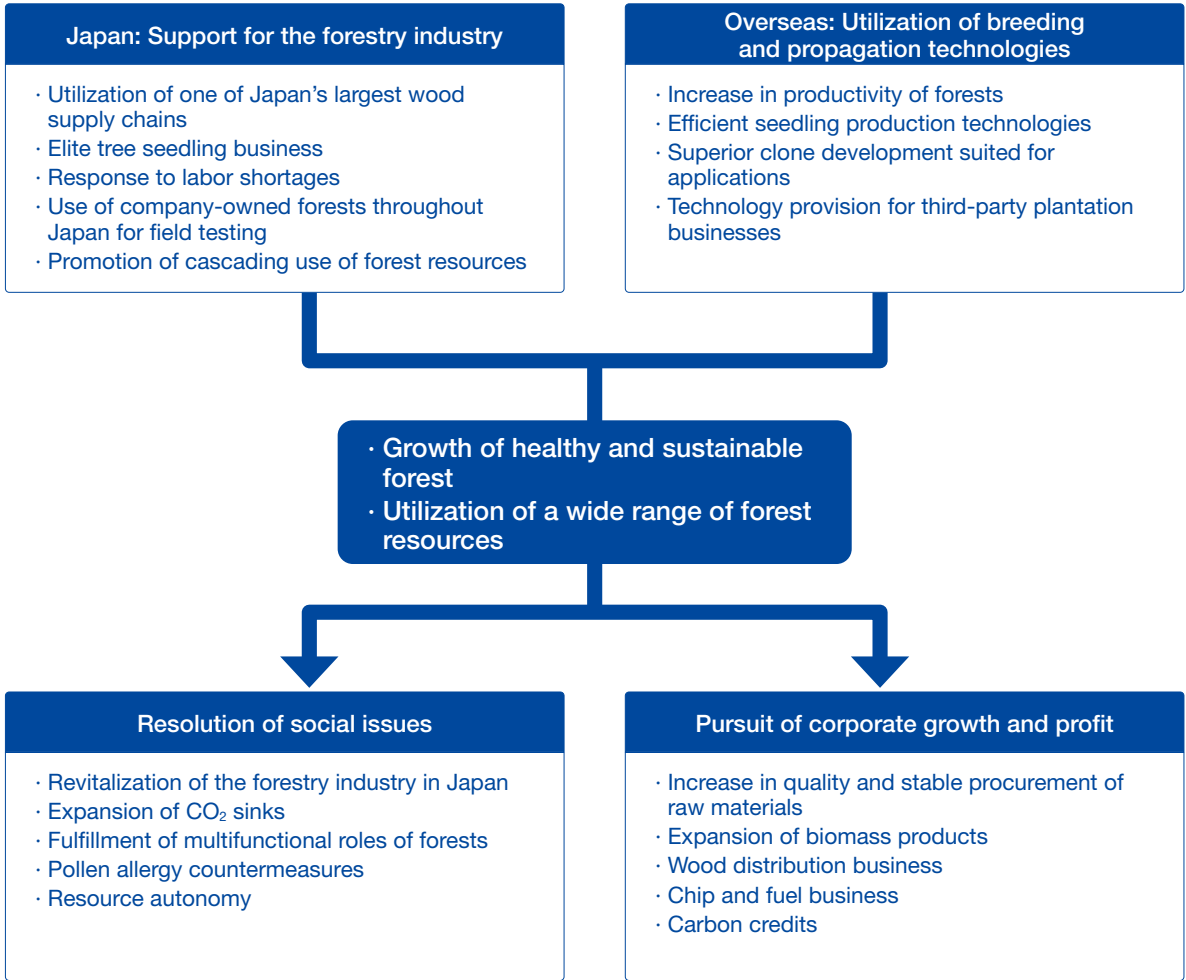
In Japan, the Group's initiatives to support the forestry industry include utilizing our wood supply chain, which is one of the largest in Japan and built with our suppliers; expanding the use of elite tree seedlings and reducing associated forestry work; and conducting trials of forestry technologies using the Company's own forests throughout Japan as test fields. The Group also promotes the cascading use of wood by utilizing low-grade timber produced in the forestry and forest products industries as paper raw materials.

Overseas, the Group aims to increase the productivity of forests through the development of breeding and propagation technologies. Generally, overseas industrial plantation requires a large area of land, and this creates various risks, including disasters such as wildfires and competition with food production. Increasing the productivity of forests is expected to mitigate such risks. Moreover, the Group will also develop breeding technologies and promote the

development of product varieties that have optimal characteristics for biomass products, including paper. Providing these technologies to third-party plantation businesses will help to ensure resources for the Group.

In these ways, the Group will grow healthy, sustainable forests in Japan and overseas, and expand the wood-related business. Moreover, it will expand the production of various biomass products made from raw materials in the form of stably procured forest resources, aiming to achieve corporate growth and the business structure transformation. (→P.46–47 Business Development of Innovative Biomass Material Products)

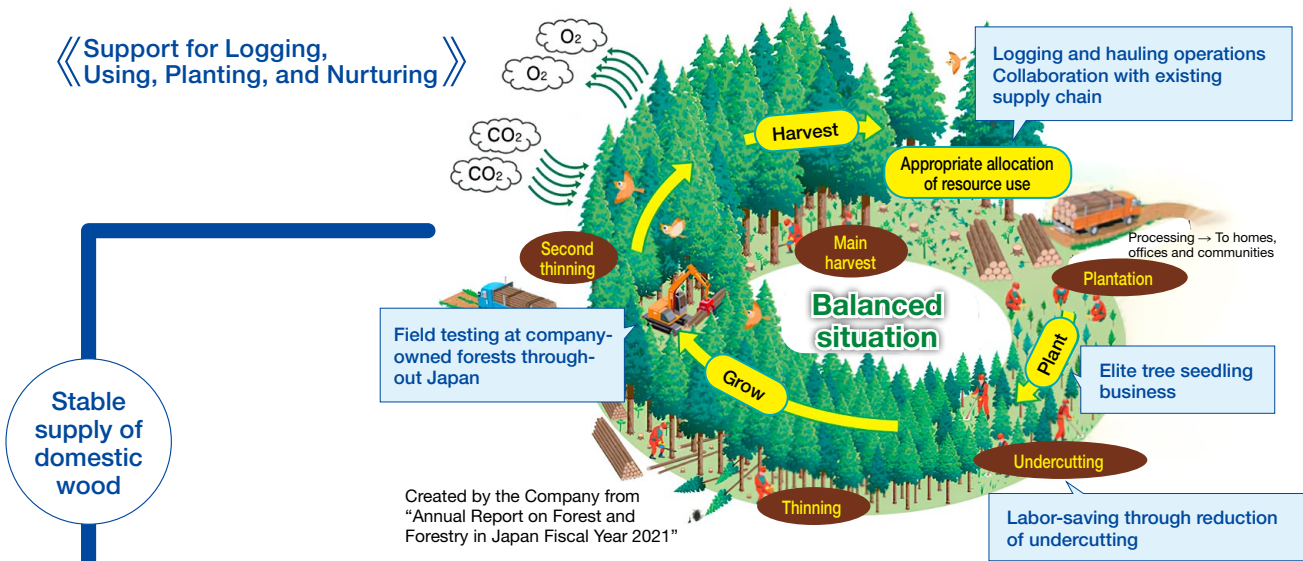
Meanwhile, these various initiatives can also help to resolve social issues in Japan and overseas, such as revitalization of the forestry industry in Japan and expansion of CO₂ sinks. The Group's green strategy is to achieve corporate growth and resolution of social issues simultaneously in this way.



Supporting the Forestry Industry in Japan and Expanding the Domestic Wood Business

Forests cover around 70% of Japan's land area, and the forest resources that grow there are increasing year by year. Meanwhile, to be able to support this abundant forest resource, the forestry industry in Japan faces various issues. The Group will utilize its domestic wood supply chain to

support the forestry industry in Japan through the stages of logging, using, planting, and nurturing, as well as expanding its elite tree seedling business and conducting trials of various forestry technologies in company-owned forests with the aim to achieve a stable supply of domestic wood.



Stable Procurement of Domestic Raw Materials

Domestic Procurement Rate in Raw Materials for Papermaking (FY2025/3)

Industry average*	26 %	Nippon Paper Industries	36 %
-------------------	------	-------------------------	------

* Self-sufficiency rate of wood for pulp and chips (including waste wood chips) from "Pulpwood Supply and Demand Results" by Japan Paper Association



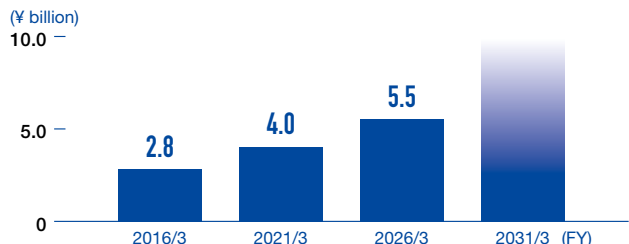
Chip yard

Expansion of Domestic Wood Distribution Business



A truck loaded with logs

Wood Products and Construction-Related Business Operating Income in Japan



Nippon Paper Lumber aims to handle 1 million m³ of domestic wood in FY2026/3

Support for "Logging" – Coordination with Existing Suppliers and Development of Forestry Technologies Utilizing Company-owned Forests in Japan

The Company's own forests are managed by the Group's Nippon Paper Lumber, which will expand its log production operations and strengthen its coordination with existing timber producers and chip suppliers, having built strong relationships with them over many years.

The Japanese archipelago is home to diverse forests

adapted to various terrains and climates, and there is a wide array of forestry technologies for making use of these resources. The Company owns forests throughout Japan from Hokkaido to Kyushu, and it will contribute to improving Japan's overall domestic forestry technologies by using company-owned forests for field testing.

[Support for “Using”—One of Japan’s Largest Domestic Wood Distribution Businesses]

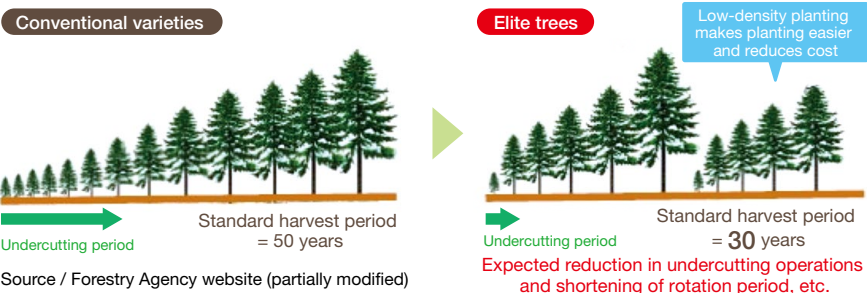
The Company’s rate of domestic wood usage for papermaking is significantly higher than the industry average at 36%, and it implements cascading use of domestic wood. In addition, Nippon Paper Lumber, which provides domestic wood chips, is building and expanding a supply chain for a wide range of forest resources, from logs to chips, and lumber products. It

handles 1 million m³ of wood, one of the largest volumes in Japan, for the Company and others. In this way, the Group is supporting the “using” of domestic wood with the aim of further energizing the forestry industry in Japan and helping to grow the Group’s Forest and Wood-related Business.

[Support for “Planting and Nurturing”—The Elite Tree Seedling Production Business]

Elite trees are mainly varieties of cedar and Japanese cypress with optimal characteristics, developed by public research institutions such as the Forest Research and Management Organization. They grow 1.5 times or more faster than conventional varieties, produce less than half the amount of pollen, have straight trunks, and have equal or better strength. In particular, due to their fast growth in the initial period after planting, they are expected to dramatically decrease the need for undercutting, which is one of the most labor-intensive cultivation operations, thereby reducing costs and enabling

adequate labor to be secured. In addition, elite trees are expected to resolve forestry issues such as enabling a faster investment return since they have a shorter rotation period. The Group has achieved stable production of elite tree seeds, a dramatic shortening of seedling production period, and an increase in yields, among other advantages. Looking ahead, the Group will build a system that produces 10 million elite trees by FY2031/3, and aim to spread them quickly, including in company-owned forests.



Expanding the Overseas Plantation Business Utilizing Breeding and Propagation Technologies

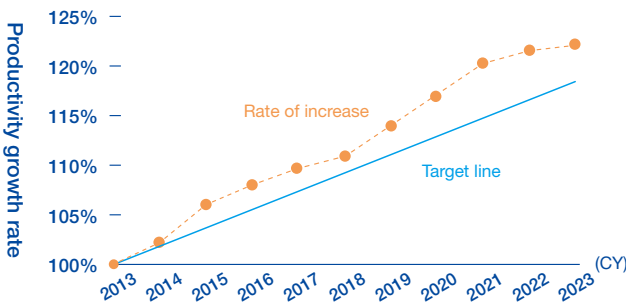
At AMCEL, the Group’s plantation business in Brazil, the Company has been using its proprietary breeding technology to develop superior varieties of eucalyptus and propagation technology. These efforts have doubled the productivity of forest resources per area in the 15 years since the Company acquired the operation, and realized a dramatic improvement in business revenue. Moreover, in recent years, the Group has become the first in the world to implement selective

breeding using genomic information. This has significantly shortened the selection period and the Group aims to achieve further improvements going forward (→P.26–27 Progress of Initiative Themes for Materiality and the 2030VISION). Increasing the productivity of forest resources is a vital aspect of industrial plantation, and the Group will continue to further refine these technologies and deploy them, mainly in Southeast Asia.

Achievements in Overseas Plantation Business, Mainly in Brazil

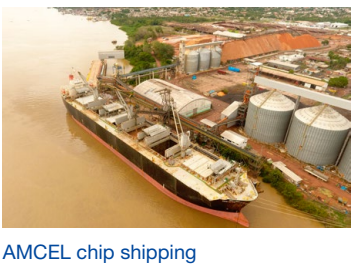
- Shortened the selection period by using genomic information (12 years to 5 years)
- Improved production efficiency and carbon fixation efficiency
- Development of optimal clones for intended use

《 Progress in Productivity Improvement (AMCEL) 》



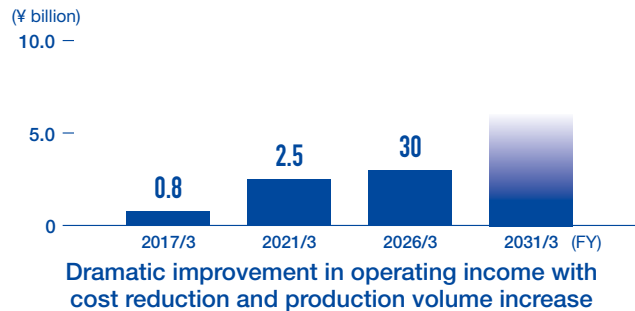
Monetization of Technology

Expand Earnings in the Plantation Business by Improving Productivity



AMCEL chip shipping

《 Overseas Wood Products and Construction-Related Business Operating Income 》



Consideration of New Technology Utilization

- Securing resources through technical assistance to other companies’ plantations
 - Expand to around 100,000 ha, including company-owned forests, etc., mainly in Southeast Asia
 - Allocate part of the increase due to productivity improvement to the Company’s resources
- High value-added paper and biomass products through optimal cloning
 - Assigning optimal wood quality for the target production item
- Launch of carbon credits business
 - Conversion of factors such as reduction in development pressure on natural forests and similar areas due to increases in CO₂ fixation efficiency and productivity into carbon credits



AMCEL plantation

The Value of Forests: Multifunctional Roles

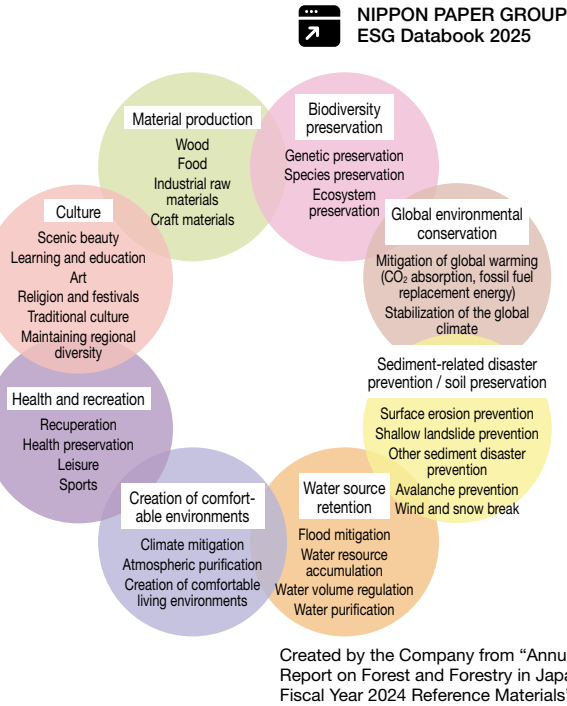
Forests have various roles in addition to wood production, such as water source conservation, disaster prevention, and CO₂ fixation. These are called the multifunctional roles of forests. The Company conducts sustainable forest management of approximately 90,000 ha of company-owned forests throughout Japan, which provide annual benefits equal to around ¥350.0 billion* to society.

* Estimated based on the “Valuation of Ecosystem Services Related to Corporate Biodiversity Conservation Activities” published by the Ministry of the Environment in FY2018/3.



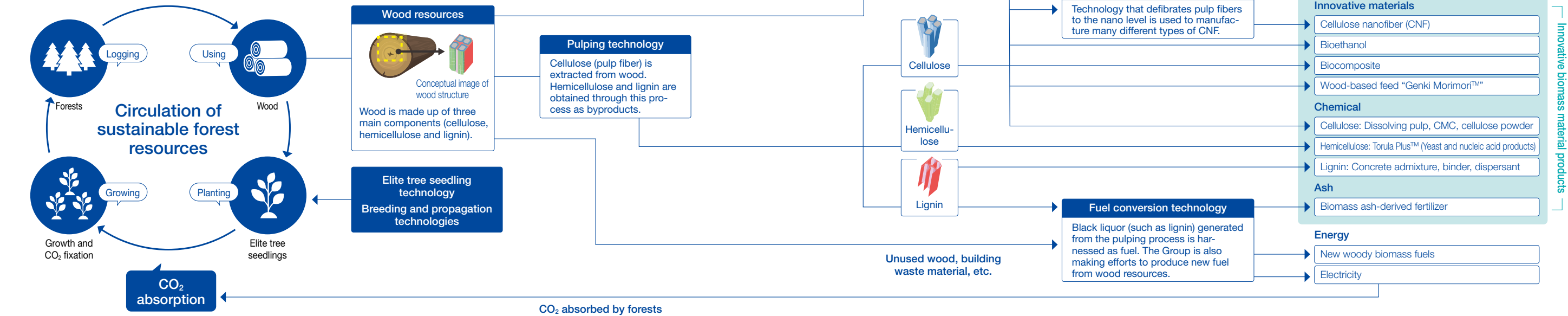
Odaigahara company-owned forest (Nara Prefecture)

Kitayama company-owned forest (Shizuoka Prefecture)



Research & Development

As demand for graphic paper declines, NIPPON PAPER GROUP's business environment is undergoing a dramatic change. Therefore, the Group is expanding the range of applications for wood resources beyond existing fields such as paper, paperboard, liquid packaging cartons and household paper to include fuel, plastic substitutes, electronic materials, mobility materials, agriculture, fisheries and livestock, and civil engineering, based on its technological capabilities accumulated in paper manufacturing. Moreover, through its businesses, the Group is working to contribute to resolutions to social issues, such as building a circulation oriented-society, reducing GHG emissions, and improving Japan's self-sufficiency ratio for food.





TAKASHI OCHI
Senior Managing Executive Officer,
General Manager of the Research
& Development Division
Nippon Paper Industries Co., Ltd.

The Research & Development Division follows a basic policy of fully utilizing wood resources, reducing environmental impact, and contributing to improved living standards. Its goal is to achieve both revenue growth in the Group's existing businesses and a contribution to society. Five laboratories, including the Research Laboratory, the Packaging Research Laboratory, which researches new functions for paper, and the Fuji Innovative Materials Research Laboratory, which primarily researches CNF, coordinate with the research divisions of the Group's associate companies in Japan and overseas, with the Research & Development Division at the center. The Research Laboratory has been working for many years on research regarding basic technologies such as pulping technologies and plantation technologies. The system is structured so that other laboratories develop and commercialize new technologies and products based on these accumulated basic research results.

The Group is engaged in open innovation through cooperation inside and outside the Group as necessary for the development of products in new fields. To increase the speed of its R&D, it has adopted a system that allows flexible formation of teams in each

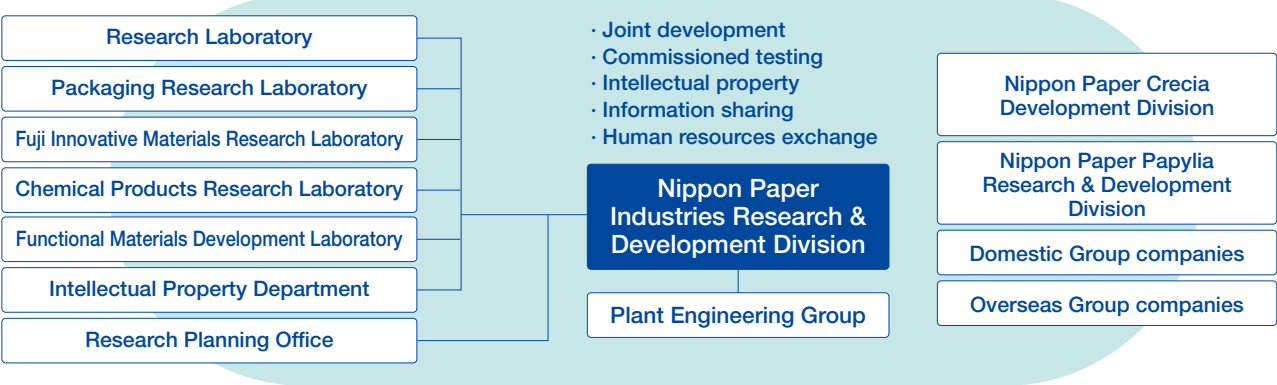
laboratory to enable agile assignment of staff according to the progress of each R&D project. The Group will also make use of Materials Informatics (MI) and AI to drive efficiency gains in its R&D, with the goal of maximizing its research results.

The CNF product Cellenpia® has seen a substantial increase in adoption particularly for applications in the fields of cosmetics and food. The Group has established manufacturing technologies tailored to specific applications and a full-scale supply system with the installation of mass production equipment in FY2018/3 at our Ishinomaki Mill and Gotsu Mill. Furthermore, it has been developing a next-generation electricity storage device as an initiative to manufacture such a device from sustainable resources as an effective measure for reducing GHG emissions, exhibiting prototypes at Expo 2025 Osaka, Kansai, Japan.

Cellenpia®PLAS is a CNF-reinforced resin with CNF evenly distributed in thermoplastic as a reinforcing agent. The Group is carrying out sample work using a demonstration facility at the Fuji Mill and conducting R&D on using its characteristics—high strength, weight-saving, fossil-resource reduction, and recyclability—with the aim of promoting its adoption in the field of mobility, including the automotive field. As a result of these activities, in August 2023, Cellenpia®PLAS was selected for an engine component of a personal watercraft launched by a joint development partner. This was a world-first for mass production of transportation equipment components using CNF-reinforced resin.

The expansion of innovative woody biomass-based products with low environmental impact is an important pillar for the Group's long-term growth. We will carefully assess market needs, aiming to expand its revenue while also contributing to society.

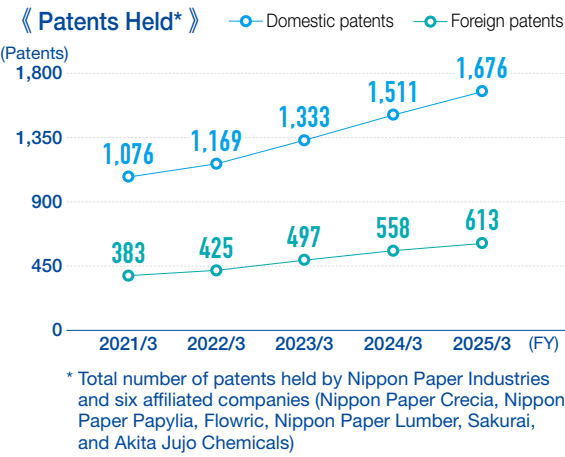
《 Group Coordination with the Research & Development Division as the Central Hub 》



IP Strategies That Maximize the Value of Intellectual Capital

To protect the Group's business and the results of its R&D activities while also contributing to the development of technologies that help solve social issues, the Group's research and development departments and the Intellectual Property Department work closely together, regularly studying research results to strengthen patent applications and rights in growth fields and new business fields. With overseas business expansion in mind, the Group is also focusing on foreign patent applications.

To ensure the Group does not infringe the intellectual property rights of other companies in business development, the Group works with related divisions to examine the intellectual property rights of other companies, accurately identifying the scope of rights to avoid infringement.



Business Development of Innovative Biomass Material Products

Research in the Spotlight

CNF Electricity Storage Body

Discovered at Tohoku University and developed through joint research with the university, CNF electricity storage bodies feature low spontaneous combustion risk and low environmental impact by eliminating the use of rare metals or organic electrolytes, while being capable of rapid charging and discharging unlike a battery.

Currently, the Group has fabricated coin-shaped and laminated-type prototypes for use in devices, and it is evaluating their practical applicability. At Expo 2025 Osaka, Kansai, Japan, the Group has unveiled a prototype device using CNF electricity storage bodies under the entry name “Nanocellulose Japan.”

Looking ahead, the Group will improve its performance while looking to form a partnership for commercialization at an early stage. The aim is to start with small-scale practical applications such as wearables and IoT sensors. Ultimately, the Group will establish their applications as electricity storage devices for large-scale renewable energy such as solar power with the goal of contributing to electric power load leveling.



(Top) An LED lit by a CNF electricity storage body
(Bottom) Display at Expo 2025 Osaka, Kansai, Japan

A Safe Electricity Source for Society with Minimal Environmental Impact

In the area of CNF electricity storage bodies, the Group has established a film-forming method for creating uniform sheets using TEMPO-oxidized ultrafine CNF, resulting in a one-million-fold increase in storage capacity compared to 2021. Since I specialize in wood and high polymers, I had to learn about electrical chemistry starting from the basics to take on the challenge of development that combines knowledge of paper processing technology and electronic materials. The moment that the LED was lit up by a transparent CNF sheet a few microns thick, I felt that the new technology will have real application for society.

However, there are numerous challenges to overcome: making the sheet thickness and surface uniform, ensuring repeatability of performance, and achieving long-term durability. It is also imperative that we achieve mass producibility and reduce costs. A number of potential applications for CNF electricity storage bodies are expected, such as miniature IoT sensors and wearable devices, home and agricultural monitoring equipment, and load leveling for renewable energy. We will continue to develop the technology with a sense of urgency, aiming for practical application in FY2031/3.



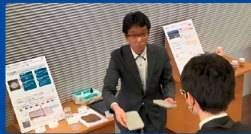
MINORU YADA
Research & Development Division
Fuji Innovative Materials Research Laboratory

Road Map for Innovative Biomass Material Products

	FY2025/3	FY2026/3	FY2031/3
Mobility & Industrial	CNF electricity storage body	Exhibition at Expo 2025 Osaka, Kansai, Japan	Searching for partners to work in performance enhancement, application evaluation, and commercialization
	Bioethanol	Selection as a NEDO Research and Development of Technologies to Promote Biomanufacturing project	Joint venture establishment
	Cellenpia®PLAS (CFN-reinforced resin)	Adoption for use in personal watercraft component	Manufacturing capacity expansion
	CMC for LiBs	Global share 15-20%	Start of operations at Hungary plant
Food & Agriculture	Cellenpia® (CNF)	Numerous adoption for foods and cosmetics	Application in frozen products, entry into make-up market
	Torula Plus®	Sale volume 72 t	Introduction of facility to increase production capacity
	Genki Morimori™	Sales volume 1,300 Bdt	Evidence accumulation
	StarLigno®	Start of use as raw material for concrete admixture, cold asphalt emulsion additive	Use in a wide range of industrial fields utilizing the characteristics of lignin
Construction	Cellenpia®μ (MFC)	Mortar curing agent: start of sales and construction	Utilize distinctive viscosity and water retention properties, etc. to expand fields of application

R&D Presentation Meeting

In April 2025, the Group invited analysts, institutional investors and members of the media to a R&D presentation meeting for the purpose of explaining the role of the Research & Development Division in the Group's ongoing business structure transformation and sharing the latest technology trends. The presentation explained the Group's strategy of expanding new businesses in a wide range of fields by fully utilizing wood resources.



Mobility & Industrial



Bioethanol

Contributing to the Realization of Domestically Produced Clean Energy with Raw Material for Non-fossil Fuel

The scale of Japan's bioethanol market, including the market for automobiles, is projected to reach 5 million kL/year in 2030. Nippon Paper Industries has established a joint venture with Sumitomo Corporation and Green Earth Institute Co., Ltd. to produce and sell bioethanol derived from wood cellulose, using domestically grown timber as a raw material. The project aims to achieve commercial production of tens of thousands of kL per year by around FY2031/3 for blending directly with sustainable aviation fuel (SAF) and gasoline, as well as development into biochemical products.



Cellenpia®PLAS (CFN-reinforced resin)

Pulp-derived Resin Reinforcing Agent to Reduce Environmental Impact and Increase Recycling Performance

CNF is used as a filler mixed into resin to increase its strength and reduce its weight. This material uses pulp from independently certified renewable forest as raw material to create a secondary material suitable for recycling as it does not lose strength even when reshaped. After joint development with Yamaha Motor Co., Ltd., the product has been used for a component of a personal watercraft. The Company has also cooperated with over 20 companies in the automotive field, to study its introduction.



CMC for LiBs

Improving the Safety and Productivity of Lithium-ion Batteries

Carboxymethyl cellulose (CMC) was developed as a binder for the negative electrode of lithium-ion batteries (LiBs). As a specialist brand for CMC, the Company has acquired a 15 to 20% share of the market for CMC for LiBs. Due to the characteristics of CMC, it is able to suppress the causes of LiBs short circuiting and catching fire, while contributing to an increase in productivity. In March 2025, a manufacturing plant started operation in Hungary, and the Company is also promoting development for the next generation of batteries, such as solid-state batteries.

Food & Agriculture



Cellenpia® (Cellulose nanofiber / CNF)

A Food Additive to Extend Use-by Dates and Reduce Food Loss

Cellenpia® is a high purity pulp that has been carboxymethylated to become carboxymethylated CNF that meets the standards for food additives and can also be used for cosmetics and quasi-drugs. When added to food, carboxymethylated CNF forms an ultrafine mesh structure that functions to retain moisture and shape, and to stabilize emulsions. In cosmetics, it creates a high quality, non-sticky texture that has been well received, and it has been adopted in a growing number of products. Going forward, the Company will develop new functions in the frozen foods and make-up markets, and conduct sales activities including at overseas sites, aiming to increase sales to around 100 tonnes per year by 2035.



Torula Plus™

Promoting Livestock Growth and Stabilizing Immunity and Gut Environment

Torula Plus™ is a livestock feed formulated with yeast cell walls and nucleic acid. It is made from hemicellulose obtained during the pulp manufacturing process. During testing, it was found to promote livestock growth and stabilize immunity and the gut environment. Torula Plus™ has a potential demand in Japan of approximately 27,000 tonnes including all eligible livestock. In FY2026/3, the Company will install facilities to increase production, aiming for sales of 410 tonnes by FY2031/3. Going forward, it will also collect evidence regarding productivity increases in the livestock-raising sector, while strengthening the technology follow-up for adopters.



Genki Morimori™

Contribution to Increasing Japan's Overall Food Self-sufficiency through Domestically Produced Wood-based Feed

Genki Morimori™ is a cattle feed made from wood chips obtained from lumber material and so forth procured in Japan. It has a high digestion rate since the lignin has been removed. It offers high energy and reduces the burden on cattle since it is gradually digested. Improvements in milk production, reproductive performance, and fattening performance have been observed. Moreover, since it is made from material produced in Japan, it is expected to reduce reliance on feed imports. In Japan, there is a potential market for 1.5 million tonnes per year, and the Company aims to expand sales to 50,000 tonnes per year by 2030.

Construction



StarLigno®

Contributing to Improved Work Efficiency at Construction Sites and Reduced GHG Emissions

StarLigno® is a chemical additive for civil engineering construction developed using lignin obtained from pulp manufacturing processes. As a concrete admixture, many years of research have succeeded in realizing the dispersal characteristics of a conventional liquid dispersant despite being in powder form. The product maintains the quality of concrete on site while increasing its fluidity, thereby making operations more efficient. By adding it to asphalt emulsifier, it is also possible to produce a cold asphalt mix with enough strength to be used for road surfacing. The Company aims to expand its applications into even wider fields going forward.



Cellenpia®μ (Microfibrillated cellulose (MFC))

Leveraging Characteristics to Reduce Process Steps and Aiming to Expand Applications

MFC has performance somewhere between pulp and CNF. It is able to be manufactured and used by general equipment. It can be sprayed, and leveraging its outstanding moisture retention and dispersion stability properties, the Company has developed a surface mortar spraying method using MFC, through joint research with RAITO KOGYO CO., Ltd. With the ability to suppress cracking, it reduces process steps. The Company aims to widen its applications including an environmentally-friendly weed suppressant, for which sales have already begun.

Human Resource Strategy

NIPPON PAPER GROUP regards human resource strategy as an important issue in its business activities, and it focuses on securing human resources appropriate for future business development. The Group clarifies the basic policy of its human resource strategy based on priority tasks for each business in its Medium-Term Business Plan 2025, and is engaged in recruitment, development, retention, and allocation.

Securing Human Resources: The Top Priority of Management Strategy

A breakdown of the ages of the Company's employees compared to Japan's population distribution by age shows many veteran employees aged 50 and above, while compared to other ages, there tends to be fewer of the middle group aged 30 to 49, the people who bear the future businesses (Diagram 1). In addition, with human resources becoming increasingly fluid in the broader society, in recent years the number of employees leaving has been on the rise even at the Company (Diagram 2).

Given this labor market and the current situation at the Company, the Company regards securing human resources as the top priority of management strategy. To mitigate the risk that a shortage of

human resources will impede the sustainable growth of existing businesses, the maintenance of competitiveness, and the execution of business structure transformation, the Company will act with a sense of speed in executing various policies based on four perspectives (recruitment, development, retention, and allocation) and aim to be a company that continues to be the choice of employees. In addition, the Company will work to secure appropriate human resources and to sustain growth while also optimizing the personnel needed through automation and labor savings at operation sites and the introduction of IoT technology in logistics.

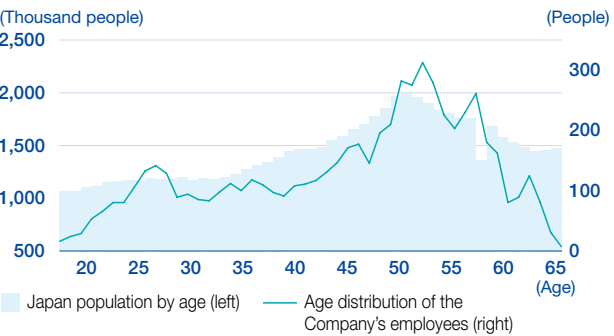


Diagram 1 Japan population by age and age distribution of the Company's employees
(created by the Company from the Population Census of the Statistics Bureau of Japan, Ministry of Internal Affairs and Communications)

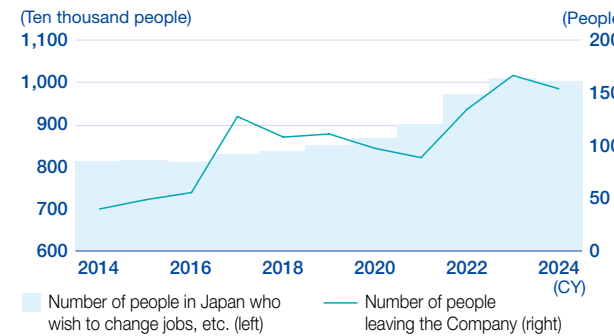


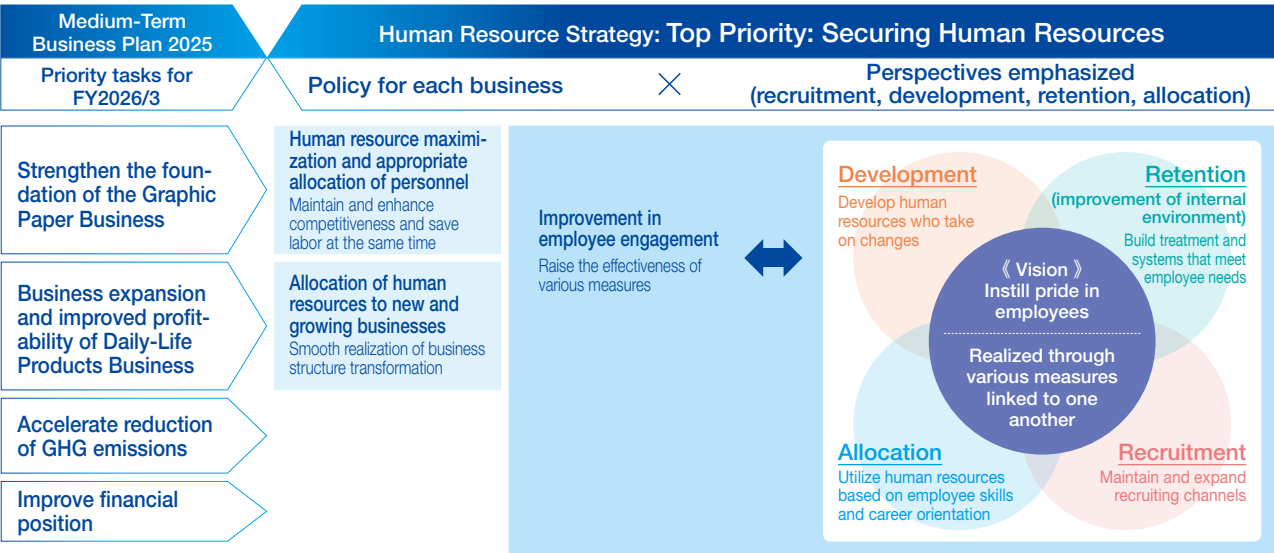
Diagram 2 Number of people in Japan who wish to change jobs and number of people leaving the Company
(created by the Company from the Labour Force Survey of the Statistics Bureau of Japan, Ministry of Internal Affairs and Communications)

Linking Business Strategy and Human Resource Strategy

The Company clarifies the basic policy of its human resource strategy by business segment, and accordingly takes on the priority tasks established in the Medium-Term Business Plan 2025. To strengthen the foundation of the Graphic Paper Business, the Company seeks to maintain and enhance competitiveness and save labor at the same time based on a policy of human resource

maximization and appropriate allocation of personnel. In addition, to expand the Daily-Life Products Business and improve its profitability, the Company has set allocation of human resources to new and growing businesses as a basic policy for ensuring smooth realization of business structure transformation.

《 Human Resource Strategy Linked to the Medium-Term Business Plan 2025 》



Human Capital Investment Policy: To Be a Company That Continues to Be the Choice of Employees

The Company is engaged in measures from the perspectives of recruitment, development, retention, and allocation to secure human resources, the top priority of management strategy, and realize the basic policy of human resource strategy corresponding to the priority tasks by business segment set forth in the Medium-Term Business Plan 2025. These initiatives are not independent of each other, but are organically linked to stay closely aligned with

the growth and career development of individual employees and promote improved engagement to secure human resources over the long term. In order to maximize the potential of its human resources and contribute to the enhancement of corporate value, it is essential to remain the company of choice of employees, and the Company's personnel measures are being carried out as comprehensive initiatives to achieve this goal.

Perspectives Emphasized	Aim	Main Measures	Target
Recruitment Maintain and expand recruiting channels	Acquire human resources even when recruiting becomes more difficult in general	Strengthen mid-career hiring —Systematize and strengthen the rehiring of employees who previously left the Company and hiring based on referrals from employees	All employees
		Promote the hiring of women and foreign nationals —Consider while taking into account the declining workforce population	
Development Develop human resources who take on changes	Develop leaders and specialists to be responsible for new and growth fields	Selective training —Develop employees suitable for business structure transformation	All employees
		Promoting the development of DX professionals —Training and workshops for raising workplace productivity	
		Certification incentive programs and certification allowances —Promote the acquisition of certifications necessary for operations	
Retention Build treatment and systems that meet employee needs	Develop human resources to promote improved employee engagement	Coaching skills training —Strengthen communication within workplaces	Business leaders
		Communication between general managers and junior career-track employees from other divisions —Deepen understanding of management and business structure transformation (P.50-51)	
	Realize materialities of “Realization of diverse work styles” and “Active participation of diverse human resources”	Establishment of career consultation hotline —Establish external consultation hotline related to life events	All employees
		Promote diversity —Introduction of systems (P.50) as well as declaration of goals related to diversity by the managers and cultivation of corporate culture	
		Review and consider systems based on diversifying health issues —Establish a committee for joint labor and management considerations	
	Realize work styles that help secure human resources	Review work styles of shift work employees —Revisions to the shift work cycle being considered	Experts
Allocation Utilize human resources based on employee skills and career orientation	Promote the active participation of locally hired non-management track employees	Expand the career path transition program —Establish career path transition program for excellent candidates for career track positions	Experts
		Newly establish job transition allowance —Change mindset to view transfers in a positive light	
	Appropriate allocation to realize business strategy	Expand transition support program —Special allowance for moving to a different location alone, consideration for return travel expenses, etc.	All employees
		Reallocate human resources for business structure transformation —Allocate human resources with advanced skills in existing business to growing businesses and new business startup	All employees

Notes: 1. Business leaders: Employees in so-called career track positions expected to play a role in driving the Company as a whole while bearing responsibility for a broad range of work in diverse fields through their career path
2. Experts: Employees in so-called non-management track employment positions that serve as specialists in various jobs indispensable to the Company's business operations (three-shift operators, facilities maintenance, etc.) who are primarily hired locally where the head office, sales branches, mills, and business sites are located

Indicators and Targets Associated with Human Resource Development and Employee Retention (Improvement of Internal Environment)*1

The Company has set indicators and goals as shown in the following table to monitor the progress of human resource development and retention (improvements to the internal environment). Going forward, the Company will consider revising and adding more appropriate indicators for monitoring the progress of each policy as necessary, taking into account progress made and changes in the external environment.

Indicators		Targets	Results				
			FY2022/3	FY2023/3	FY2024/3	FY2025/3	Average of Last 4 Years
Retention rate after 10 years of employment (%)		80% or higher	60.3	63.4	50.0	70.9	62.7
Ratio of female career-track hires (%)		40% or higher (by FY2026/3)	39.6	48.8	36.5	47.3	43.0
Total working hours per year (hours)		1,850 hours/year or lower	1,905	1,884	1,872	1,870	1,883
Ratio of annual paid leave taken (%)		70% or higher	73.8	79.0	80.2	78.8	77.9
Ratio of diversity promotion system usage (%)*2		70% or higher	97.8	93.2	84.6	84.4	90.0
(Breakdown)	Ratio of flextime system usage (%)	—	42.1	41.2	43.2	43.2	41.7
	Ratio of system for taking annual paid leave in hourly increments usage (%)	—	9.2	13.3	18.0	22.0	15.6
	Ratio of system to work from home usage (%)	—	96.0	83.4	71.4	69.6	80.1

*1 Targets and results related to indicators are listed for Nippon Paper Industries Co., Ltd. on a non-consolidated basis as it is difficult to manage the progress of consolidated companies with different systems in an integrated manner.
*2 The ratio of employees of head office divisions who used systems that promote diversity (flextime system, system for taking annual paid leave in hourly increments and system to work from home) during the fiscal year under review.

[Analysis of Goals Not Yet Achieved]

Retention Rate 10 Years after Joining

The Company believes this indicator is being impacted by the increased fluidity of human resources in society overall compared to when it was set in 2021. The Company will work to retain human resources by creating and enhancing opportunities for internal communication and improving various programs to raise engagement.

Total Working Hours per Year

This goal was achieved in day-shift departments, but the Company will work to make further reductions and improve operational efficiency. In shift work departments, the goal has not yet been achieved. The Company will work to reduce total hours worked by strengthening recruiting activities and allocating personnel.

Initiatives to Increase Engagement

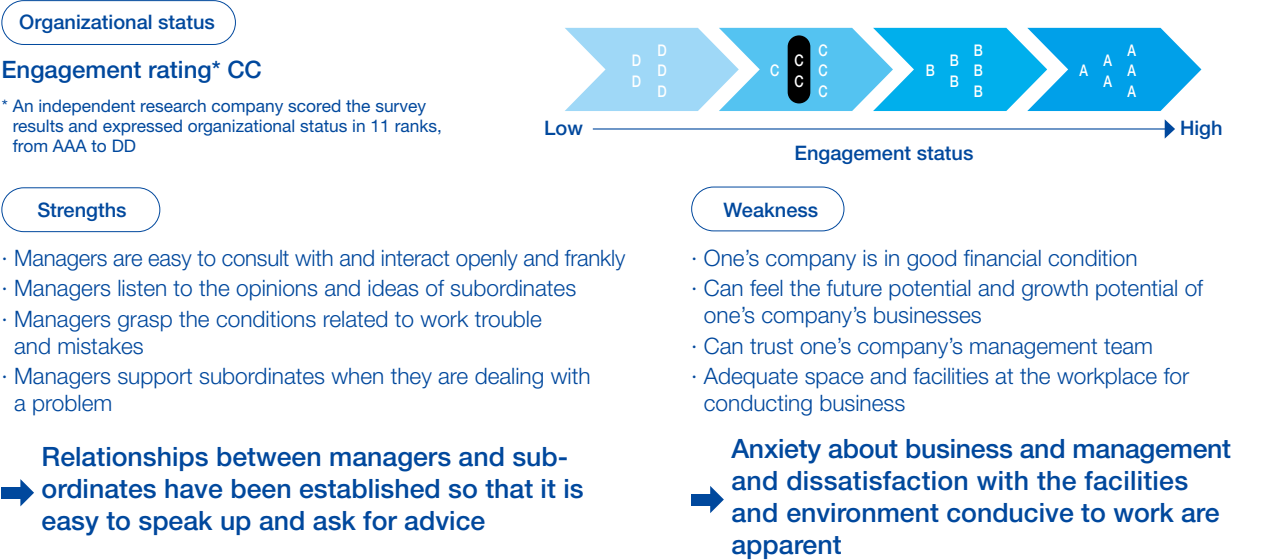
The Company has periodically conducted engagement surveys since FY2020/3. The survey is regarded as an important means for further solidifying a relationship in which both employees and the Company can grow together. The results of the FY2025/3 survey show a certain degree of satisfaction with immediate human relationships, with one's manager and colleagues, and with the work environment, but they also reveal a great deal of anxiety and mistrust in areas related to the Company as a whole, including

anxiety about its financial position and the future growth potential of its businesses. To break out of the current situation and "instill pride in employees," the Company will provide opportunities for dialogue and communication at the workplace in order to unify awareness of the Company's direction and the mission of one's division. Doing so will raise the effectiveness of measures related to recruitment, development, retention, and allocation and help the Company smoothly realize business structure transformation.

Overview of FY2025/3 Employee Engagement Survey

Survey subjects: Employees working at Nippon Paper Industries Co., Ltd.
Number of survey subjects: 5,074 employees (As of November 1, 2024, excludes employees on leave, etc.)
Response rate: 99.5%
Response period: November 29 to December 20, 2024

Overview of Survey Results (Subjectivity of Respondents)



Example of Revitalizing Internal Communications
Communication between General Managers and Junior Career-track Employees of Other Divisions

The Company creates regular opportunities for junior career-track employees to speak in groups with general managers from divisions other than their own, with the aim of increasing retention and engagement. These opportunities give junior employees some distance from their day-to-day duties and encourage them to experience "a different sky," such as the Group's diverse businesses, operating domains, management philosophy, and growth potential.

Program Overview

Period: First period from October 1, 2024 to June 30, 2025 (Second period is currently underway from July 2025.)
Scope: General managers in all 18 divisions and career-track employees aged 25–35 in at least their fourth year with the Company (affiliated with the head office and research laboratory at Oji, Kita-ku, Tokyo)
Method: Divided into groups of one general manager and four to five employees, with opportunities created to meet around one hour per time and at least three times during the period of the program



Participant Feedback Most of the people in our group were from sales departments, and there was a great deal of discussion matters I could bring back to my own work in concrete terms. I learned that there are many different approaches and connections when it comes to sales, so I think we'll be able to collaborate within sales divisions. It's obviously necessary to strive to be a professional in your field, but the Company has broad-ranging business fields, so I felt the need to work across departments as well. I came away with hope for the Company's policy of actively taking measures to retain junior employees. Going forward as well, I would want the Company to continue creating opportunities for communication across divisions.

Jun Aoki
Containerboard Sales Dept.,
Paperboard Sales Div.
Nippon Tokai Industrial Paper Supply Co., Ltd.

Participant Feedback Through dialogue I learned how the Company's management policies and strategies are being implemented in another division. Through this initiative, I felt that it is important to be aware not only of how my own work contributes to the growth of the division, but also of how the business of the division to which I belong is linked to the vision of the organization as a whole, and the role of the division in the growth of the organization. By having this perspective, I think I am able to engage in my work with a broader view and make a major impact on my own career development as well. Going forward, I would want the Company to increase opportunities to promote interactions with employees with differing career backgrounds and perspectives.

Konomi Hashimoto
Paper-Pak Sales Management Dept.,
Paper-Pak Sales Div.
Nippon Paper Industries Co., Ltd.