



NIPPON PAPER GROUP
CSR Report
2020

Shaping the Future with Trees

Nippon Paper Group CSR Report 2020

The Nippon Paper Group issues CSR reports to provide stakeholders with a broad overview of its efforts to meet its corporate social responsibilities (CSR). The Group also publishes an integrated report to communicate about our long-term value creation.

Our CSR disclosure has been prepared in accordance with the GRI Standards: Core option.

Period Covered

Fiscal 2019: April 1, 2019–March 31, 2020

Includes information from before April 1, 2019 and after March 31, 2020.

Dates are indicated in such cases.

Scope of Organizations Covered

The reporting entity is Nippon Paper Industries Co., Ltd. Data, however, were compiled as of March 31, 2020 for Nippon Paper Industries Co., Ltd. and all 50 of its consolidated subsidiaries.

Scope of Environmental Coverage

The scope of the report covers the basic environmental policies, systems, environmental accounting and environment performance and other data for the 16 companies, including 2 non-consolidated subsidiaries with production facilities, named below. All major production locations are included.

Consolidated: Nippon Paper Industries Co., Ltd.; Nippon Paper Crecia Co., Ltd.; Nippon Paper Papyrus Co., Ltd.; Paper Australia Pty Ltd.; Jujo Thermal Oy; Siam Nippon Industrial Paper Co., Ltd.; Nippon Seitai Corporation; Nippon Paper Lumber Co., Ltd.; N&E Co., Ltd.; Daishowa Uniboard Co., Ltd.; Nippon Paper Development Co., Ltd.; GAC CO., LTD.; Amapá Florestal e Celulose S.A.; Nippon Dynawave Packaging Co.

(The contribution to total consolidated sales of the companies listed here was 93%.)

(Sales data for trading companies that are members of the Nippon Paper Group and sell products made by the Group to outside buyers are included.)

Non-consolidated: Nippon Paper Liquid Package Product Co., Ltd. and Akita Jujo Chemicals Co., Ltd.

Referenced Guidelines

- Environmental Reporting Guidelines (2018) of the Ministry of the Environment
- Sustainability Reporting Standards issued by the Global Reporting Initiative (GRI)
- United Nations Global Compact
- SASB sustainability accounting standards
- ISO 26000, etc.

*Guideline comparison table

<https://www.nipponpapergroup.com/english/csr/gri/>

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Nippon Paper Industries Co., Ltd. has declared its support for the ten principles of the United Nations Global Compact, covering the four areas of human rights, labor, environment, and anti-corruption.



→ Global Compact Network Japan

<https://www.ungcn.org/>

Disclaimer

This report includes not only statements of fact and historical data but also plans, forecasts and estimates (forward-looking statements) based on the business plans and policies of the Nippon Paper Group. These forward-looking statements are the result of assumptions or judgments based on currently available information as this report was prepared. It should be noted that forward-looking statements may differ significantly from actual results due to the impacts of a number of important factors.

Pursuing Our Ultimate Goal of Realizing a Sustainable Society

The Nippon Paper Group will realize its “vision” together with all of its stakeholders.



Toru Nozawa
President Nippon Paper Industries, Co., Ltd.

Group Mission

Mission	Values
The Nippon Paper Group aims to contribute to better living and cultural progress everywhere it does business.	Challenge : Embrace new challenges Fairness : Be fair Teamwork : Champion teamwork
Vision	Slogan
<ol style="list-style-type: none"> 1. Drive social sustainability through our business 2. Delight our customers 3. Instill pride in employees 4. Give back to society 	Shaping the future with trees.

Firstly, I would like to take this opportunity to express our sympathies to all of those infected (or otherwise affected) by the COVID-19 coronavirus, and our sincere respect to all of the healthcare professionals working to overcome it. I would also like to express our heartfelt sympathies to those effected by the heavy rainfall of July, 2020.

Responding to Disease Pandemics and Natural Disasters

In addition to gathering information since the time when concerns first arose over the spread of the COVID-19 virus in Japan and abroad, the Nippon Paper Group has established a response headquarters (headed by myself as president and representative director) and taken countermeasures in accordance with national and local-government policies, from the perspectives of preventing infections among Group employees and fulfilling our responsibility to supply products through business continuity.

In response to the damage caused by the heavy rains during July 2020, also, we made efforts based on our past experiences to ensure the safety of our employees, and to minimize impact to the shipping of our products.

Although we were affected by the COVID-19 pandemic and natural disasters during the first half of 2020, the diligent efforts of group employees enabled us to maintain our supply chain and continue the stable supply of products.

Main Responses to the COVID-19 Pandemic

- Thorough day-to-day health management
(Checking body temperature before going to work, and refraining from attendance in the event of fever or when otherwise unwell)
- Thorough hand washing, hand sanitizing and coughing etiquette
- Encouraging working from home and staggered working hours (start and finish times)
- Ban on domestic and overseas business trips
- Thorough avoidance of the Three Cs
- Agile procurement of financing
(The group has secured around 100 billion yen in liquidity on hand)

Reflecting on My First Year as President

While my basic approach to management has not changed since my days as the general manager of the Corporate Planning Division, I truly believe the world looks a whole lot different from where I stand now. Since taking over the reigns as president of Nippon Paper Industries Co., Ltd., I have been reminded of the fact that the sustainability of a company hinges on its various stakeholders.

In terms of our FY2020/3 results, we achieved a 78% increase in operating income over the previous fiscal year. On the whole, I believe we succeeded in meeting the FY2020/3 targets laid out in our Sixth Medium-Term Business Plan for our domestic Paper and Paperboard Business and other businesses in Japan.

Conversely, we were not able to achieve the targets for our overseas businesses due to the impact of the trade dispute between the United States and China and other factors. While we were able to record brisk results for both functional films and functional resins, our results in the Chemical Business fell below our targets due to the deteriorating market for dissolving pulp and other factors. I would like to see improvements in these areas as soon as possible.

Further, as a result of severe equipment failures that led to the shutdown of a couple of mills, in FY2020/3 we were unable to reach our targets for cost improvements in the Paper and Paperboard Business. We find this extremely unfortunate and therefore will place priority on repairing our boilers, power generators, and a series of pulping facilities, which represent the lifeline of our mill operations, as well as working to respond in a timely manner before operations are affected through the determination of the operating sites.

Meanwhile, we have continued to conduct capital investment in our growth businesses, an initiative we began undertaking as part of our Fifth Medium-Term Business Plan, and these efforts began to gradually bear fruit in FY2020/3.

A prominent example of this is in the Household Paper and Healthcare Business. Our Fuji Mill (in Shizuoka Prefecture) has been currently undergoing the transformation of its business from printing paper to household paper. The installation of our second paper machine at Crecia-Kasuga Co., Ltd. on the site of the Fuji Mill, alongside our first paper machine installed in 2018, through a merger between Nippon Paper Crecia Co., Ltd. and Kasuga Paper Industry Co., Ltd., has enabled us to respond to the growing demand for household paper as a daily necessity.

Major Investments in Growth Areas

	Details		Amount	Year of Completion
Packaging	Installation of dry pulp machine, etc.	Nippon Dynawave Packaging Company, LLC	¥14.4 billion	FY2021/3
Household paper and healthcare	Expansion of healthcare processing machines	Nippon Paper Crecia Co., Ltd.'s Kyoto Mill	¥2.0 billion	FY2020/3
	Establishment of paper machine No. 1	Crecia-Kasuga Co., Ltd.	¥6.1 billion	FY2019/3
	Establishment of nonwoven manufacturing facility	Nippon Paper Crecia (within Nippon Paper Industries' Fuji Mill)	¥4.6 billion	FY2020/3
	Establishment of paper machine No. 2	Crecia-Kasuga Co., Ltd.	¥8.0 billion	FY2021/3
Chemical	Enhancement of production of SUPERCHLON® No. 1	Nippon Paper Industries' Iwakuni Mill	¥1.7 billion	FY2019/3
	Enhancement of production of SUPERCHLON® No. 2	Nippon Paper Industries' Iwakuni Mill	¥2.4 billion	FY2022/3
	Upgrading of CMC manufacturing facility	Nippon Paper Industries' Gotsu Mill	¥4.7 billion	FY2021/3
Energy	Yufutsu biomass power generation facility		¥34.1 billion	FY2023/3

(The projects listed above were completed or resolved to be undertaken during the Sixth Medium-term Business plan.)

While our outlook for the future remains uncertain due to the impact of COVID-19, we will continue to implement various measures toward achieving the Group's target operating income of ¥50.0 billion.

Moreover, our EBITDA in FY2020/3 was ¥97.7 billion. I believe an EBITDA of ¥100.0 billion or more would allow us to repay our loans payable while investing certain amounts in future growth, as well as enabling us to fulfill the expectations of all stakeholders, including shareholders, customers and business partners, and employees. We are in fact nearing that level. Moreover, we will continue to generate stable cash flows as we move forward.

Our Ongoing Growth: Adapting to Changes in Society

Society's focus on the global environment as well as on health and hygiene has been increasing in recent years. While the emergence of COVID-19 has certainly had an impact in one sense or another, I realize, it seems as though new forms of value that center on the environment, rather than economic gains, are coming to the forefront particularly among the younger generation.

I believe a paradigm shift—global changes in society—is taking place and ascertaining such a shift will lead to new business opportunities.

We have already begun setting our sights on such opportunities, including the commercialization of our long-length toilet paper rolls as our main products. We are aggressively marketing the appeal and promoting the sales of Nippon Paper Crecia's SCOTTIE® four-roll, triple-length flower pack, which offers the same length for one-third the volume of conventional toilet paper rolls and thereby occupying limited space, in addition to environmental features, such as the reduction of CO2 emissions through improved transportation efficiency and reduced use of packaging materials.

Envisioning the State of the Paper Business beyond the Next Decade

Among the Nippon Paper Group's range of businesses, the biggest challenge in terms of its operating environment is paper for use as an information medium. When COVID-19 materialized this spring and everyone was required to stay home, we witnessed an instant spread of information and communication technology (ICT), which spurred a severe decline in demand for graphic paper such as newsprint and printing paper. I feel that this has sped up the decline in demand, which had already been taking place due to the impact of the aging of Japan's society and digitization, by two to three years. We will continue with our steadfast approach of contributing to the growth of society through the stable supply of our products. However, we will need to respond in an even timelier manner in the years ahead, and therefore we are currently working to map out our vision beyond the next 10 years. Guided by this vision, which we are drawing up together as a group, we will examine our approach going forward and take the appropriate measures as necessary.



Opal Botany Mill (containerboard mill)

Accelerating the Transformation of Our Business Structure

While addressing the issues in our Paper Business, we will adapt to the pace of changes taking place in society and continue with our ongoing efforts to transform our business structure. The key to achieving this is the development of our overseas business and the creation of new businesses and products.

In May 2020, we consolidated the newly established Opal into the Group to form an integrated Packaging Business. Comprising the business units of Paper Australia Pty. Ltd. and Orora Limited, this integrated structure has widened our potential for future expansion as a comprehensive manufacturer of packaging materials. While our debt has increased for the time being due to this acquisition-related expense, we will be firm in our approach of investing in growth areas while taking financial discipline into account.

I am firmly convinced that the development of our overseas business is indispensable to our growth as a corporate group. Our global network continues to expand with business sites in the United States, Europe, Asia, and Oceania. As we proceed forward, we will take a proactive stance to continue to expand our operations while assessing the global trend toward environmental conservation.

In addition, we need to create new businesses and products that cater to society's increasing focus on the environment. As outlined in our vision under the Group Mission, how we reflect our accurate understanding of customer needs in our products and businesses is critical. We have seen a the increasing adoption of SHIELDPLUS® and CELLENPIA®, which we have continued to promote to date. These products have already advanced from their stage of development toward their commercialization, to provide new value together with customers to society.



Tenshi no(Angel) Bath Powder (produced by MAX Co.,Ltd.) bathing powder adopts ShieldPlus™ for its packaging

Leveraging the Group's Strengths over the Long Term:

Woody Biomass Technology and Recycling Technology

Amid the impact of climate change and the spread of infectious diseases, it is imperative that we fully and effectively utilize wood resources more than ever to tackle such global issues from a long-term perspective.

As wood resources can be generated on their own, we are producing a variety of products derived from cellulose and other ingredients. They also offer biodegradable and recyclable benefits after their use.

The Group's strengths lie in its accumulation of afforestation technology and technology for manufacturing an array of pulp from wood. We also possess technology for effectively utilizing wood ingredients.

Additionally, we have been developing the unique technology and accumulating know-how for selecting and cultivating superior trees that grow faster among the same species and for mass producing superior seedlings derived from selected trees and utilizing these technologies for afforestation operations overseas.

The application of these technologies can expand the fixed volume of carbon dioxide, thereby helping mitigate climate change.

Our recycling technology is also our strength. In addition to recycling newspaper, printing paper, and containerboards, we recycle paper cartons into household paper and used paper cups into containerboards. We are also pioneering technology for utilizing difficult-to-process wastepaper.

We believe that the Group's business model, which pursues the recycling of biomass, is itself friendly to the environment. As we look ahead, the strengthening of our research and development system will be critical for expanding the potential of biorefineries.

Realizing Our Philosophy will Help Realize a Sustainable Society

The Group will draw on its strengths based on the utilization of wood resources while restructuring its businesses with significant energy consumption and reducing greenhouse gases. In regard to specific targets, we will continue to promote our slogan of "shaping the future with trees" and contribute to the global mission of realizing a low-carbon society as we strive to "drive social sustainability through our business," one component of our vision.

In 2004, the Company participated in the United Nations Global Compact and declared its support for 10 principles covering four fields. We believe that our initiatives for realizing the Group Mission align with the objectives of the compact.

Utilizing Human Resources and Our Safety-First Approach

When I was appointed president, I expressed my desire to fully maximize component of the vision of our human resources with diverse values. In that respect, I feel that "instill pride in employees," one component of the vision of the Group Mission, is very important. Although it will not be an easy task, amid the increasing need for diverse work styles, we must establish a framework that allows our employees to take joy in the work they do.

Moreover, because we operate a manufacturing business, safety is of the utmost priority. Based on our mission of "realizing zero work-related accidents within our mills," we will ensure that all employees working at our mills are fully aware of the risks involved in our day-to-day operations.

Message to Stakeholders

During this past year, I endeavored to accelerate the pace of management decision-making by conducting one-on-one meetings with the general managers of various divisions and presidents of main Group companies for about one hour each month.

As a comprehensive biomass company that shapes the future with trees and pursues the establishment of biorefineries, we are currently designing a concrete growth path for the Group 10 years into the future and seek to realize the vision we have set forth under our Group Mission together with all of our stakeholders.

I ask everyone for their continued understanding and support going forward.



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

Steps Towards Achieving the Group Mission

The Nippon Paper Group articulated its Group Mission in 2015.

The Group Mission defines the social significance of the Group's existence, which is uninfluenced by the times or environmental changes. The Group regards contributing to better living and cultural progress for people wherever it does business as its mission.

The Group Vision for achieving this mission is to become a corporate group that is persistently needed by the society.

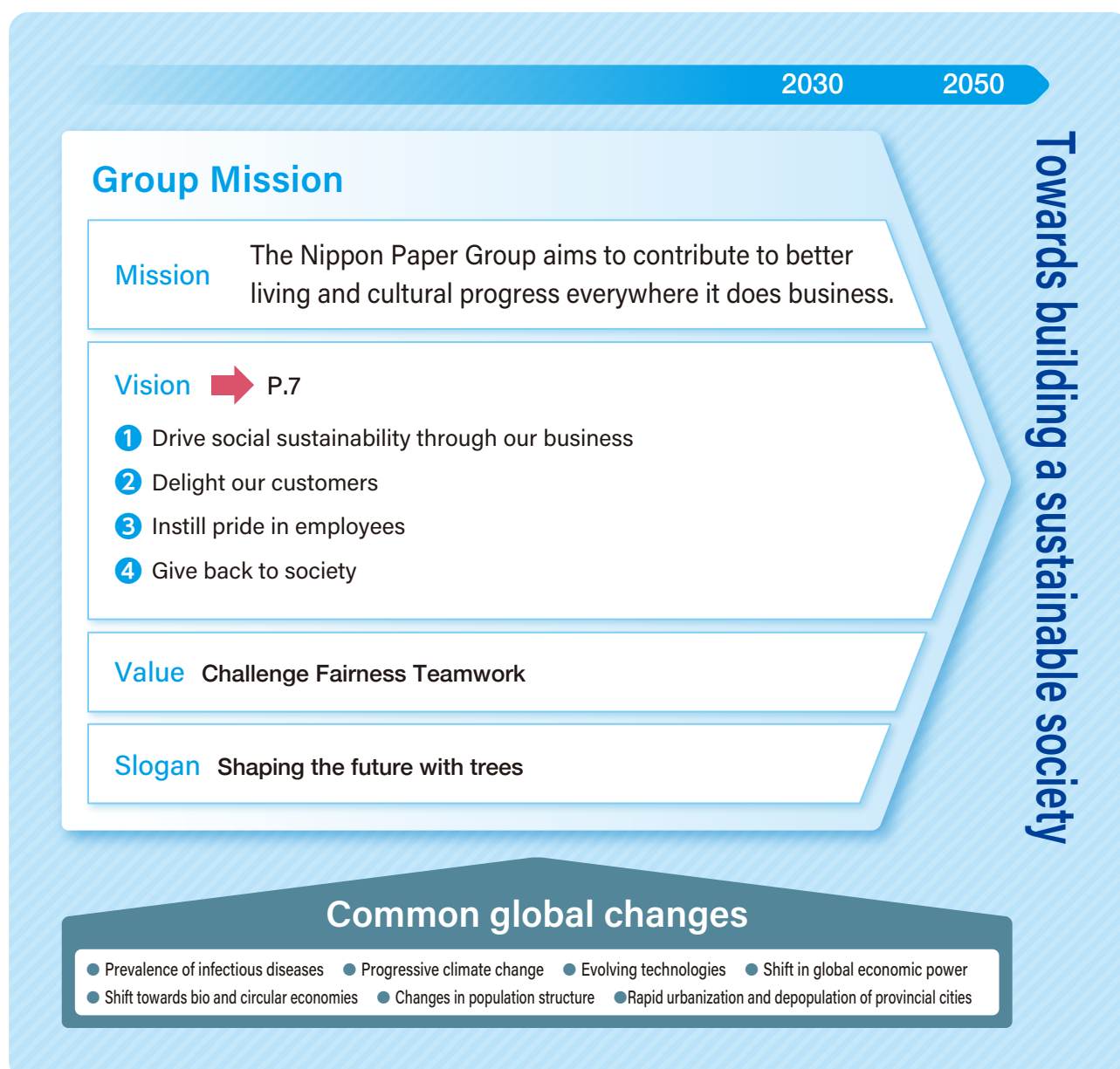
In order to pursue the four specific requirements, The Group has identified three values that should be emphasized by each employee of the Group, who are the main actors in the pursuit of the Group Vision.

The slogan "Shaping the future with trees" expresses the Group's strengths in technology to utilize wood biomass, and the possibilities of its wide range of business area.

By delivering a stable supply of paper—made using trees as a raw material—to society over the course of many years, the Group has contributed to the advancement of society and culture.

Based on our accumulated technical expertise in papermaking, the Group will continue to develop new products from wood and use it as energy to further expand the possibilities of wood in the future.

In this way, all of the activities carried out by the Nippon Paper Group from the perspective of fulfilling its Group Mission conform with global trends and directions aimed at building a sustainable society.



Steps Towards Achieving the Group Mission

Specific Initiatives to Achieve Our Vision

The Nippon Paper Group believes that its Group Mission of contributing to better living and cultural progress everywhere it does business can be achieved through the advancement of initiatives that specifically fulfill the four requirements set forth in its Vision.

The four requirements set forth under the Nippon Paper Group's Vision of the kind of organization that it aims to become—as a corporate group that is persistently needed by society—are closely interrelated.

Generating stable profits and "giving back to society" as a corporate group is a major prerequisite for the other three requirements.

"Instilling pride in our employees" so that they engage cheerfully in their work enables us to cater accurately to customer needs and "delight our customers." This, in turn, enables us to generate profits, and by extension contribute to the creation of a sustainable society through our business activities, "driving social sustainability through our business."

Under the slogan of "Shaping the future with trees," the Group takes a medium- to long-term view, discussing specific themes and promoting initiatives to achieve each requirement of its Vision.

Illustrative image of the initiatives for achieving the four requirements of the Group's Vision



Shaping the Future with Trees

Making Effective Use of the Characteristics of Wood Resources

From a long-term perspective, initiatives to achieve the creation of a resource-circulating society are essential for building a sustainable society in balance with economic activities.

The Nippon Paper Group's businesses are developed based on its technological capabilities that enable it to maximize the use of wood biomass under the slogan, "Shaping the future with trees."

Trees are a renewable resource that can be planted and nurtured.

Through photosynthesis, they also fix carbon in their body by taking in carbon dioxide, which is one of the causes to global warming, and producing oxygen.

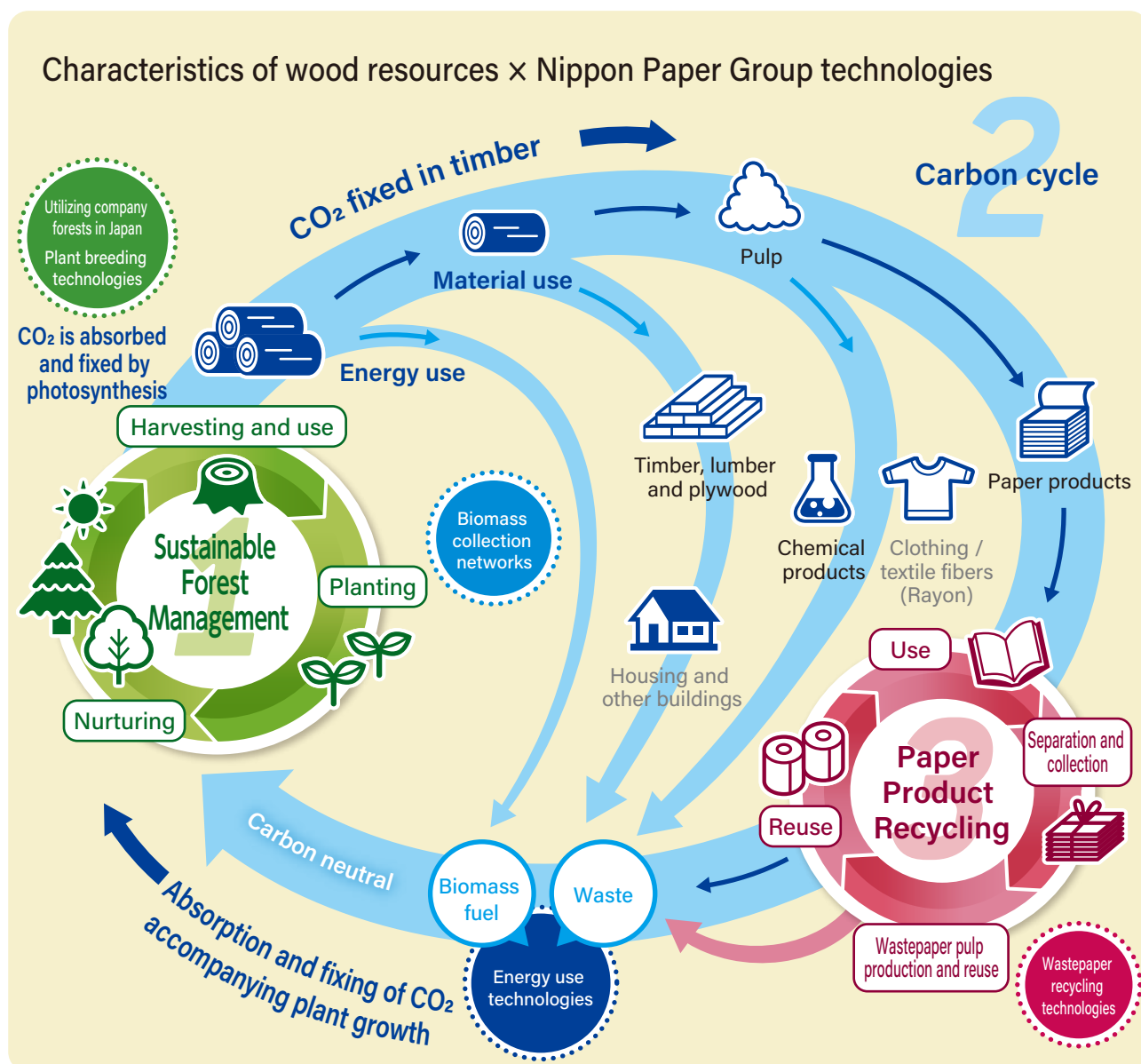
Even though trees are used as a resource and processed into products such as wood and paper, carbon continues to be fixed.

During incineration, carbon dioxide is emitted, which can be offset as essentially absorbed from the atmosphere (carbon neutral).

Over the years, the Group has accumulated technology and know-how for the sustainable use of forests as a resource by planting and cultivating seedlings repeatedly after harvesting in Japan and abroad.

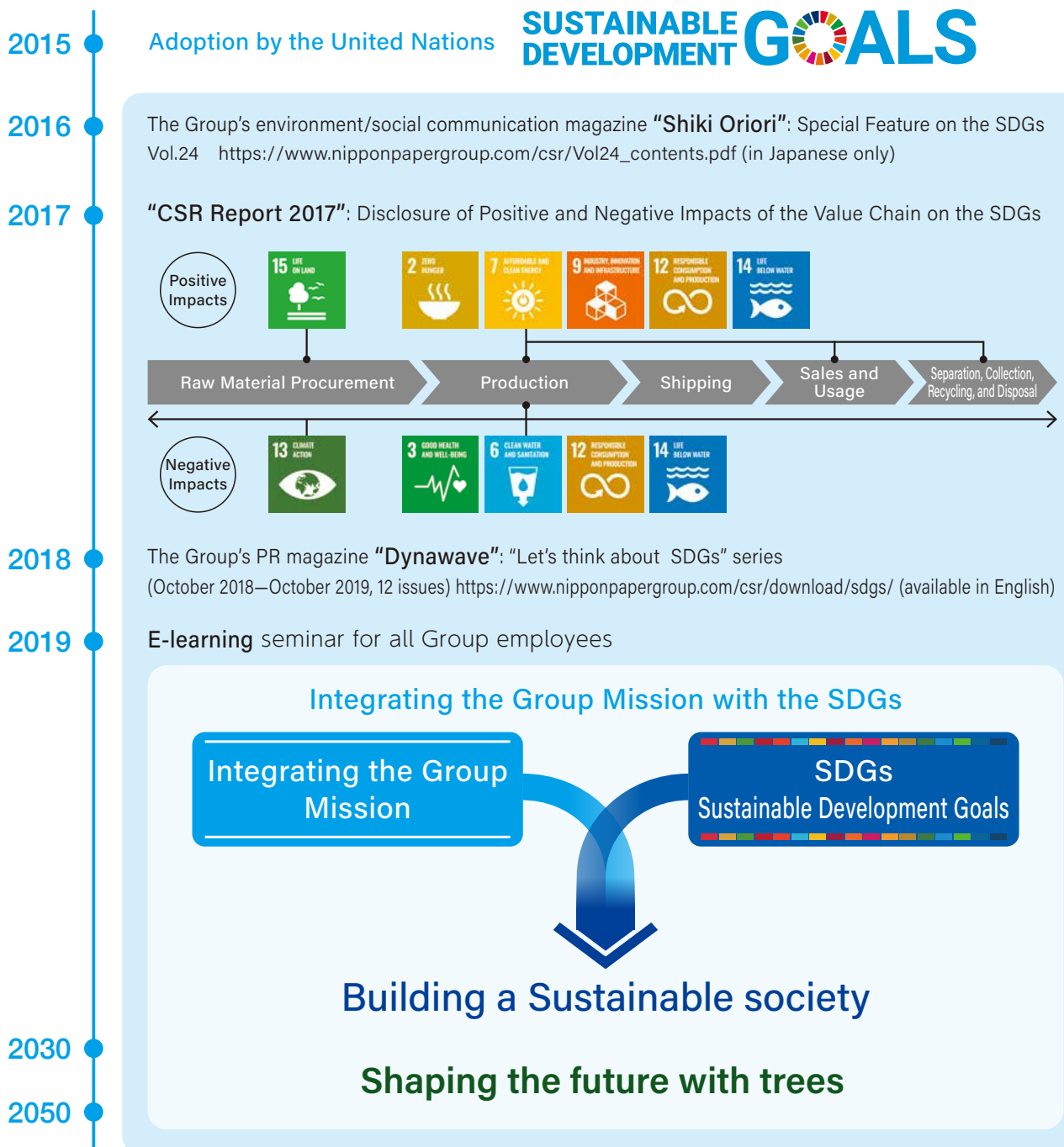
In addition, the Group has accumulated technologies to utilize wood components without waste and to recycle them to a higher degree.

Moving forward, we will continue to develop technologies for utilizing trees as a wood resource.



SDG Initiatives

Defined as “development that fulfills the hopes of current and future generations,” sustainable development entails the commitment of all individuals and organizations, including companies, to work toward the achievement of the Sustainable Development Goals (the SDGs), a set of goals adopted by the United Nations in 2015 that addresses economic, social, and environmental issues.



➔ Nippon Paper Group and SDGs in the value chain
https://www.nipponpapergroup.com/english/csr/NPG_SDGs_ValueChain_e.pdf



Social Issues from a Value Chain Perspective

The Nippon Paper Group seeks to achieve its Group Mission, working under its slogan of "Shaping the future with trees." (See P.6 "Steps Towards Achieving the Group Mission")

Based on this perspective, the Group's initiatives relating to the seven core subjects of ISO26000 in the its value chain are summarized below, as management responsibilities; forest management and raw material procurement responsibilities; environmental responsibilities; responsibilities to customers; human rights, employment and labor responsibilities; and responsibilities to communities.

Nippon PaperGroup Social Responsibilities ● ISO26000 Core Subjects	Initiatives in Our Value Chain				
	Raw Material Procurement	Production	Shipping	Sales and Usage	Separation, Collection, Recycling, and Disposal
Management Responsibility ● Organizational Governance ● Fair Operating Practices (P.15 - P.27)	<ul style="list-style-type: none"> Corporate governance Risk management Thorough Compliance Appropriate information disclosure Personal information management Dialogues with Stakeholders 				
Forest Management, Raw Material Procurement, ● The Environment (P.28 - P.38)	<ul style="list-style-type: none"> Sustainable procurement of raw materials (Efforts to procure certified material, confirm legitimacy, pursue afforestation overseas, obtain certifications for company-owned forests, and use domestic materials) Protection and nurturing of company-owned forests 				
Environmental Responsibility ● The Environment (P.39 - P.55)		<ul style="list-style-type: none"> Reduction of environmental impacts Development and manufacturing of environmentally and socially conscious products 	<ul style="list-style-type: none"> Increase in load efficiency Shortening of transportation distances 		<ul style="list-style-type: none"> Promoting recycling
Responsibility to Customers ● Consumer Issues (P.56 - P.64)		<ul style="list-style-type: none"> The Stable Supply of Products Ensuring quality and safety 		<ul style="list-style-type: none"> Enhancement of product safety Enhancement of product value Identifying customer needs Appropriate disclosure of product information Addressing customer questions and opinions 	<ul style="list-style-type: none"> Promotion of wastepaper collection together with customers
Human Rights, Employment and Labor Responsibility ● Human Rights and Labor Practices (P.65 - P.79)	<ul style="list-style-type: none"> Confirmation of suppliers' action in respecting human rights 	<ul style="list-style-type: none"> Hiring practices that respect human rights Securing diversity in the workforce Human resource development Occupational safety and health disaster preparedness 	<ul style="list-style-type: none"> Ensuring safety during transportation (Promotion of traffic safety) 		
Responsibility to Communities ● Community Involvement and Development (P.80 - P.86)	<ul style="list-style-type: none"> Symbiosis with local communities in overseas forest plantations Utilizing company-owned forests to contribute to local communities and society 	<ul style="list-style-type: none"> Symbiosis with areas neighboring production bases 	<ul style="list-style-type: none"> Reduction of impacts of shipping 		<ul style="list-style-type: none"> Working with local communities to promote wastepaper collection

: issues identified as important from a CSR perspective

Of the initiatives listed above, Nippon Paper Industries Co., Ltd's CSR Division has identified issues that are considered to have a major impact from the perspectives of (1) Group business operations, (2) economic, environmental and social aspects, and (3) stakeholders' views. These issues are raised as themes in the 2020 CSR Report. The content of the 2020 CSR Report has also been reported to the Management Execution Committee by the head of the CSR Division.

➡ Identifying CSR issues

https://www.nipponpapergroup.com/english/csr/NPG_CSR_ISSUES_e.pdf



Response to the COVID-19 Pandemic

We respectfully offer our condolences to the bereaved families of those who have passed away as a result of the COVID-19 pandemic, and our heartfelt sympathies to those still suffering from the disease.

We also offer our sincere respect to all the healthcare professionals and many others making valiant efforts to prevent the further spread of the pandemic.

The Nippon Paper Group is also making efforts in accordance with the policies and countermeasures established by national and local government, to prevent the spread of the disease and ensure business continuity.

Basic Policy on Response to COVID-19

The Nippon Paper Group carries out measures against COVID-19 in accordance with the following basic policy.

1. Place the highest priority on human lives
2. Cooperate with the national and local governments and follow their guidance and recommendations
3. Prevent the outbreak of diseases in-house
4. Continue to maintain business operations

Framework for Responding to the COVID-19

In response to the COVID-19 pandemic, the Nippon Paper Group established an infection prevention headquarters headed by the president of Nippon Paper Industries Co., Ltd., and developed a framework for gathering information regarding COVID-19, and deliberating and deciding on responses to Group management issues.

The infection prevention headquarters was maintained even after the nationwide lifting of the declared state of emergency. Although it was subsequently dissolved on June 19, 2020, after the nationwide lifting of travel restrictions, the Group continues to make thorough efforts to prevent the spread of infection, in accordance with its infection prevention response guidelines.

We are also flexibly increasing our cash reserves to cope with declining sales and prolonged economic turmoil because of the sharp downturn in the economy.

The Board of Directors of Nippon Paper Industries

Covid-19 infection prevention headquarters

General manager: President and representative director of Nippon Paper Industries

Vice general manager: Executive Vice President of Nippon Paper Industries

Members: General managers of Nippon Paper Industries, and Group companies

Head of secretariat: General Manager of CSR Division,

Specific Initiatives

Thorough Health Management for all Employees and Their Families

In addition to conducting daily checks of employees' state of health—such as by checking for fever and requesting that employees thoroughly manage their own physical condition, we have also established and are implementing response procedures for cases where there is reason to suspect COVID-19 infection, or other abnormalities in employees' state of health. In addition, we have also established guidelines on measures to prevent infection (including thorough hand washing, regular ventilation and prohibition of business trips as a general rule) and made them well known among employees. We have also distributed masks to all Group employees to help reduce the risk of infection and ensure business continuity.

Initiatives to Prevent the Spread of Infection in the Workplace

Head office divisions and branches are operating a work-from-home system.

Even from June onward, after the lifting of the declared state of emergency, we have maintained a ratio of around 50% of employees working from home, and are limiting the numbers of employees at our mills and offices to a necessary minimum.

When working on site, we ask employees to avoid crowded times when commuting by staggering their working hours. We are also making efforts to ensure thorough washing of hands, proper coughing etiquette and avoiding the Three Cs (closed spaces, crowded places, and close-contact setting), including dispersal of seating such as by making use of conference rooms.



Panels installed between desks to prevent the spread of infection



Hand sanitizer installed in the elevator hall

Support for the Healthcare Workplace

The Nippon Paper Group has supplied professional work wear and disinfectant wet towels (from among the products offered by Nippon Paper Crecia Co., Ltd.) in response to the shortage of medical supplies accompanying the increase in the number of people infected with COVID-19.

① KleenGuard A40 Coveralls: total 12,500 suits

(Disposable coveralls providing PPE Category III protection to the levels specified for Type 5 & 6 by CEN; water pressure resistance: 1840 mm)

Supplied to: the Japan Organization of Occupational Health and Safety through Keidanren (Japan Business Federation), Nagasaki Prefectural Government, Hokkaido Prefectural Government, and other governmental agencies



② CRECIA Antibacterial Wet Wipes: 100 cases of wet towels (bucket type) and 100 cases of refills

(EPA Group IV Quaternary Ammonium Compounds, Ag⁺ Antibacterial agent, bucket type)

Supplied to: Tokyo Metropolitan Government



➔ News release: Provision of PPE and Wet Wipes to Help Combat the COVID-19 Coronavirus

<https://www.nipponpapergroup.com/info/2020/info200428004688.html>

Impact to Supply of Products

The Nippon Paper Group supplies a wide range of products that are essential in enabling people to live with peace of mind. We are working to ensure business continuity and fulfill our responsibility to supply products to our customers by implementing thorough measures to prevent the spread of infection.

Business Overviews of the Nippon Paper Group

Paper and Paperboard Business



Main Products and Services

Paper Business

- Newsprint
- Printing paper
- Business communication paper
- Industrial paper
- Specialty paper
- Functional paper

Paperboard Business

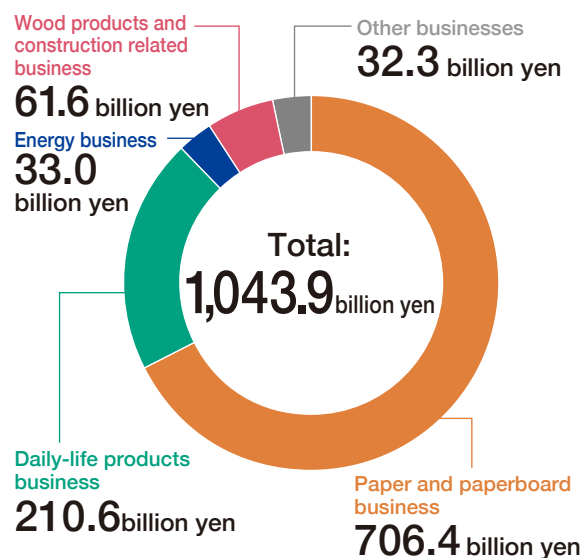
- Containerboards
- White paperboards

Target customers

Newspaper companies, publishers, printing companies, stationery manufacturers, government agencies, etc.



Net Sales for FY2019



Daily-life Products Business



Main Products and Services

Packaging Business

- Liquid packaging boards
- Liquid packaging cartons

Household paper and healthcare Business

- Facial tissues
- Toilet paper rolls
- Products for mild incontinence
- Adult diapers

Chemical Business

- Dissolving pulp
- Chemical products
- Cellulose products
- Functional coating resin products
- Functional films

Target customers

Beverage manufacturers, mass retailers, hospitals and nursing care facilities, general enterprises and consumers, etc.



Wood Products and Construction Related Business



Main Products and Services

Lumber and construction materials

- Lumber
- Building materials
- Raw materials and fuel for paper manufacturing

Construction related

Target customers

Building material manufacturers, house builders, construction companies, general consumers, government agencies, etc.



Other Businesses



Main Products and Services

Warehousing and logistics Leisure facilities operation

- Ski resorts
- Bowling alleys

Target customers

General enterprises and consumers, etc.



Energy Business



Main Products and Services

Energy Sales

Target customers

Electric power companies

Major Operating Companies and Production Sites

Consolidated Subsidiaries (As of March 31,2020)

Paper and Paperboard Business

Nippon Tokai Industrial Paper Supply Co., Ltd., Nippon Paper Papyrus Co., Ltd., NP Trading Co., Ltd., Kitakami Paper Co., Ltd., Kokuei Paper Co., Ltd., SUN OAK Co., Ltd., Paper Australia Pty. Ltd. (and 11 subsidiaries), Jujo Thermal Oy, Siam Nippon Industrial Paper Co., Ltd., Nippon Paper Industries USA Co., Ltd., Dyna Wave Holding Asia

Daily-life Products Business

Nippon Paper Crecia Co., Ltd., Crecia-Kasuga Co., Ltd., Flowric Co., Ltd., Nippon Seitai Corporation, Kyoei Seitai K.K., Nippon Dynawave Packaging Company, LLC

Energy Business

Nippon Paper Ishinomaki Energy Center Ltd.

Wood Products and Construction Related Business

Nippon Paper Lumber Co., Ltd., Iwakuni Marine Transport Co., Ltd., NIPPON PAPER UNITEC CO., LTD., Kokusaku Kiko Co., Ltd., Nippon Paper Ishinomaki Technology Co., Ltd., N&E CO., LTD., Daishowa Uniboard Co., Ltd., Nanei Co., Ltd., Nichimoku Fancy Materials Co., Ltd., Amapá Florestal e Celulose S.A. (and two subsidiaries), Nippon Paper Resources Australia Pty. Ltd.

Other businesses

Nippon Paper Development Co., Ltd., Nippon Paper Logistics Co., Ltd., NIPPON PAPER LOGISTICS CO., LTD., Kyokushin Transport Corporation, Nankou Unyu., Sakurai Co., Ltd., Hotoku Co., Ltd., GAC Co., Ltd.

Group Companies (As of March 31,2020)

	Japan	North America	Oceania	Asia	Europe	South America	Africa	Total
Consolidated Subsidiaries	29	3	8	4	3	3	0	50
Non-Consolidated Subsidiaries	59	0	0	10	1	0	0	70
Affiliates	32	0	0	3	1	1	1	38
Equity-method affiliates	9	0	0	1	0	0	0	10

Production Sites (As of July 1,2020)

● : Nippon Paper Industries Co.,Ltd. ■ : Consolidated subsidiaries. ▲ : Non-consolidated subsidiaries.

Paper and Paperboard Business

- Nippon Paper Industries Co.,Ltd.
 - ① Kusiro Mill
 - ② Asahikawa Mill
 - ③ Shiraoi Mill
 - ④ Akita Mill
 - ⑤ Ishinomaki Mill
 - ⑥ Iwanuma Mill
 - ⑦ Nakoso Mill
 - ⑧ Kanto Mill (ashikaga)
 - ⑨ Kanto Mill (soka)
 - ⑩ Fuji Mill
 - ⑪ Otake Mill
 - ⑫ Iwakuni Mill
 - ⑬ Yatsushiro Mill
- Nippon Paper papyrus Co.,Ltd
 - ⑭ Harada Mill
 - ⑮ Suita Mill
 - ⑯ Kochi Mill
- Opal
 - ⑰ Maryvale Mill, Botany Mill and 25 manufacturing facility
- Jujo Thermal Oy
 - ⑱ Kauttua Mill
- Siam Nippon Industrial Paper Co.,Ltd.
 - ⑲

Daily-Life Products Business

- Nippon Paper Industries Co.,Ltd.
 - ① Shiraoi Mill
 - ② Ishinomaki Mill
 - ③ Higashimatsuyama Mill
 - ④ Gotsu Mill
 - ⑤ Iwakuni Mill
- Nippon Paper Crecia Co.,Ltd.
 - ⑥ Tokyo Mill
 - ⑦ Kaisei Mill
 - ⑧ Kyoto Mill
 - ⑨ Koyo Mill
- Crecia Kasuga Co.,Ltd.
 - ⑩ Shinfuji Mill
- ▲ Nippon Paper Liquid Package Product Co.,Ltd.
 - ⑪ Egawa Mill
 - ⑫ Ishioka Mill
 - ⑬ Miki Mill
- Nippon Seitai Corporation
 - ⑭ Asahikawa Mill
 - ⑮ Maebashi Mill
 - ⑯ Saitama Mill
 - ⑰ Niigata Mill
 - ⑱ Kyoto Mill
 - ⑲ Kyushu Mill
- Kyoei seitai k.k.
 - ⑳ Hokkaido plant
 - ㉑ Koganei plant
- Nippon Dynawave Packaging
 - ㉒
- ▲ Akita Jujo Chemicals Co.,Ltd.
 - ㉓ Head Office Plant

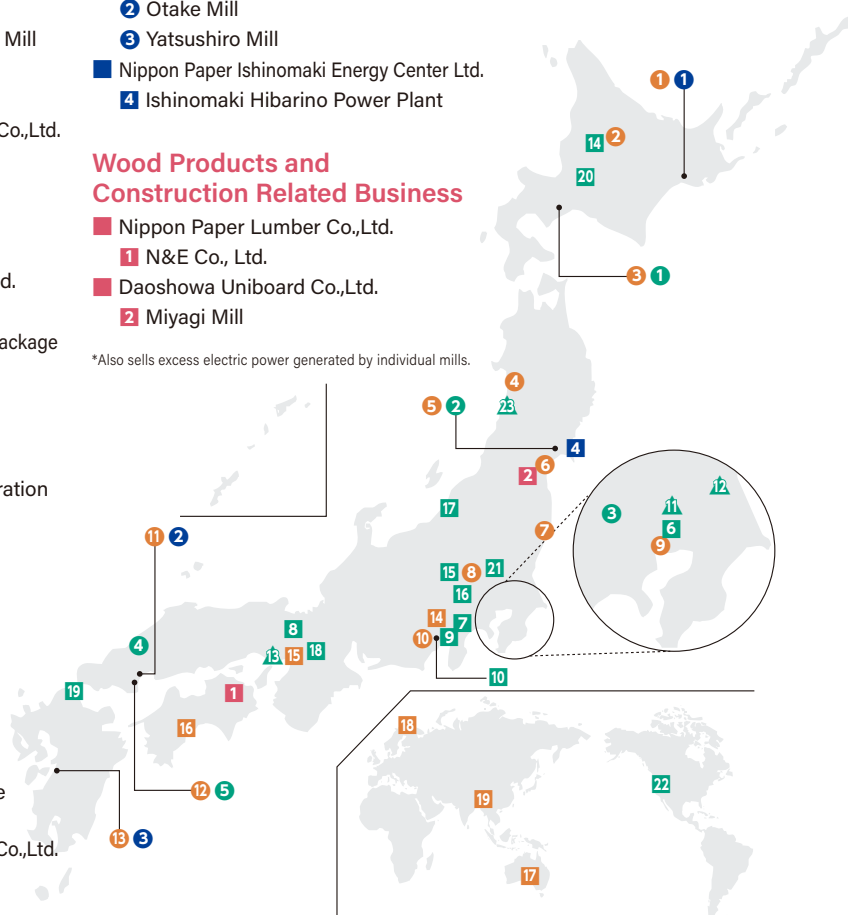
Energy Business

- Nippon Paper Industries Co.,Ltd.*
 - ① Kusiro Mill
 - ② Otake Mill
 - ③ Yatsushiro Mill
- Nippon Paper Ishinomaki Energy Center Ltd.
 - ④ Ishinomaki Hibarino Power Plant

Wood Products and Construction Related Business

- Nippon Paper Lumber Co.,Ltd.
 - ① N&E Co., Ltd.
- Daishowa Uniboard Co.,Ltd.
 - ② Miyagi Mill

*Also sells excess electric power generated by individual mills.





Compliance training for corporate officers
(August 2019)

Management Responsibility

The opinions of stakeholders are important for bringing attention to issues that could affect the Nippon Paper Group's coexistence with society and efforts to grow sustainably.

* Please refer to page 47-55 of the Nippon Paper Group Integrated report 2020.
https://www.nipponpapergroup.com/english/ir/Integrated_Report_E2020_03.pdf

Materiality	Related Indicators	State of Efforts (fiscal 2019)
Thorough Compliance	Thorough awareness with the Nippon Paper Group Action Charter / Codes of Conduct	Conducting compliance training (43 training sessions conducted at 25 Nippon Paper and Group company locations, with around 950 employees participating.
	Acceptance of internal reports (whistleblowing) by appropriate management of information	The Nippon Paper Group helpline received 46 whistleblower reports
Dialogues with Stakeholders	Constructive dialogues with shareholders and other investors	Held one management briefing and 136 individual meetings, to gain greater understanding with regard to the Group's management policies
	Engaging in regular communication with local community residents to share environmental risks	Engaged in risk communication with residents in communities surrounding mills in Japan (26 times)

Corporate Governance

The Group aims to achieve sustainable growth and increase its medium to long-term corporate value.

Basic Stance

As the leader of the Nippon Paper Group, in 2015 the Company established its Corporate Governance Policy based on the Group Mission. The Company has determined the policy as guidelines for its basic stance related to corporate governance, aimed at achieving sustainable growth and medium- to long-term increases in corporate value.

Our highest management priority is to achieve even greater transparency toward shareholders and other stakeholders and engage in fair business practices. The Company has adopted an executive officer system and is working to strengthen the oversight function of its Board of Directors to ensure the separation of business execution and management oversight. In addition, the Company is implementing growth strategies, monitoring businesses under its control, and promoting compliance.

Furthermore, the Company is acting in accordance with all of the fundamental principles of Japan's Corporate Governance Code.

→ Corporate Governance Policy

<https://www.nipponpapergroup.com/ir/20200515CGC.pdf>

→ Corporate Governance Report

(Updated on July 1st, 2020)

<https://www.nipponpapergroup.com/english/ir/20200701ecg.pdf>

Corporate Governance Structure

Board of Directors

In May 2006, the Company formulated its Basic Policy for Establishing the Internal Control System.

The role of the Company's Board of Directors in the implementation of the internal control system is stipulated in the Corporate Governance Policy.

The Company's Board of Directors shall bear the supervisory function of management as a whole and make the most appropriate decisions for the Company through decisions, etc. on the execution of important business issues that are to be made under laws, regulations and the Articles of Incorporation by the Board of Directors. The Board of Directors shall also supervise the status of the execution of duties by the President & Representative Director and other Corporate Officers. In view of the importance of environmental and social challenges related to sustainability, the Board of Directors shall raise awareness of officers and employees, to strive to facilitate the sustainable development of society and enhance the corporate value of the Group, by promoting active efforts to resolve challenges while giving consideration to stakeholders.

Moreover, the Company's Board of Directors shall ensure a balance of knowledge, experience, abilities, and diversification by having it composed of inside directors who have excellent abilities to execute and manage each business in their charge, and outside directors who have specialized knowledge and extensive experience. In fiscal 2019, outside directors comprised one-third of the members on the Board of Directors and one female outside director and one female outside statutory auditor were appointed.

→ Basic Policy for Establishing the Internal Control System

(Notice of the 96th Ordinary General Meeting of Shareholders, P.46)

<https://www.nipponpapergroup.com/english/ir/syosyututieng20200601.pdf>

Management Executive Committee

In principle, the Management Executive Committee of Nippon Paper Industries meets once a week to deliberate on important management related matters under the authority of the President.

Membership of the said committee is basically composed of the President and other directors (excluding outside directors) and general managers who do not serve as directors.

In addition, the meetings of the Management Executive Committee, held once a month, are attended by outside directors and general managers of the Company's mills in order to share information on monthly financial results among the management.

Group Management Strategy Committee

Nippon Paper Industries' Group Management Strategy Committee meets as necessary to deliberate on management strategies by business segment and other important matters related to the Group.

Membership of the committee is composed of the Company management and presidents of major companies of the Nippon Paper Group.

Statutory Auditors and Board of Statutory Auditors

The statutory auditors of Nippon Paper Industries attend important meetings such as meetings of the Board of Directors, the Management Executive Committee, and the Management Strategy Committee. They strictly supervise directors' business execution, and strictly audit the Company's overall business activities to ensure their legality and fairness.

The Board of Statutory Auditors presides over the Nippon Paper Group Statutory Auditor Liaison Committee and holds meetings regularly to discuss audit policies and methods and exchange information with corporate auditors at each Group company to reinforce the alliance and audit functions of the Group.

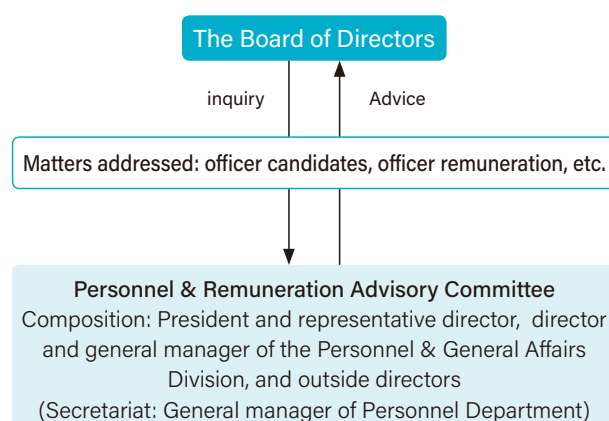
Management Audit Office

Nippon Paper Industries' Management Audit Office, which is directly under the President's control, conducts an internal audit of the Company and each Group company and a comprehensive evaluation of the maintenance and operation of the internal control system as it relates to financial reporting. The internal audits are conducted in terms of legality and rationale from fair and independent perspectives.

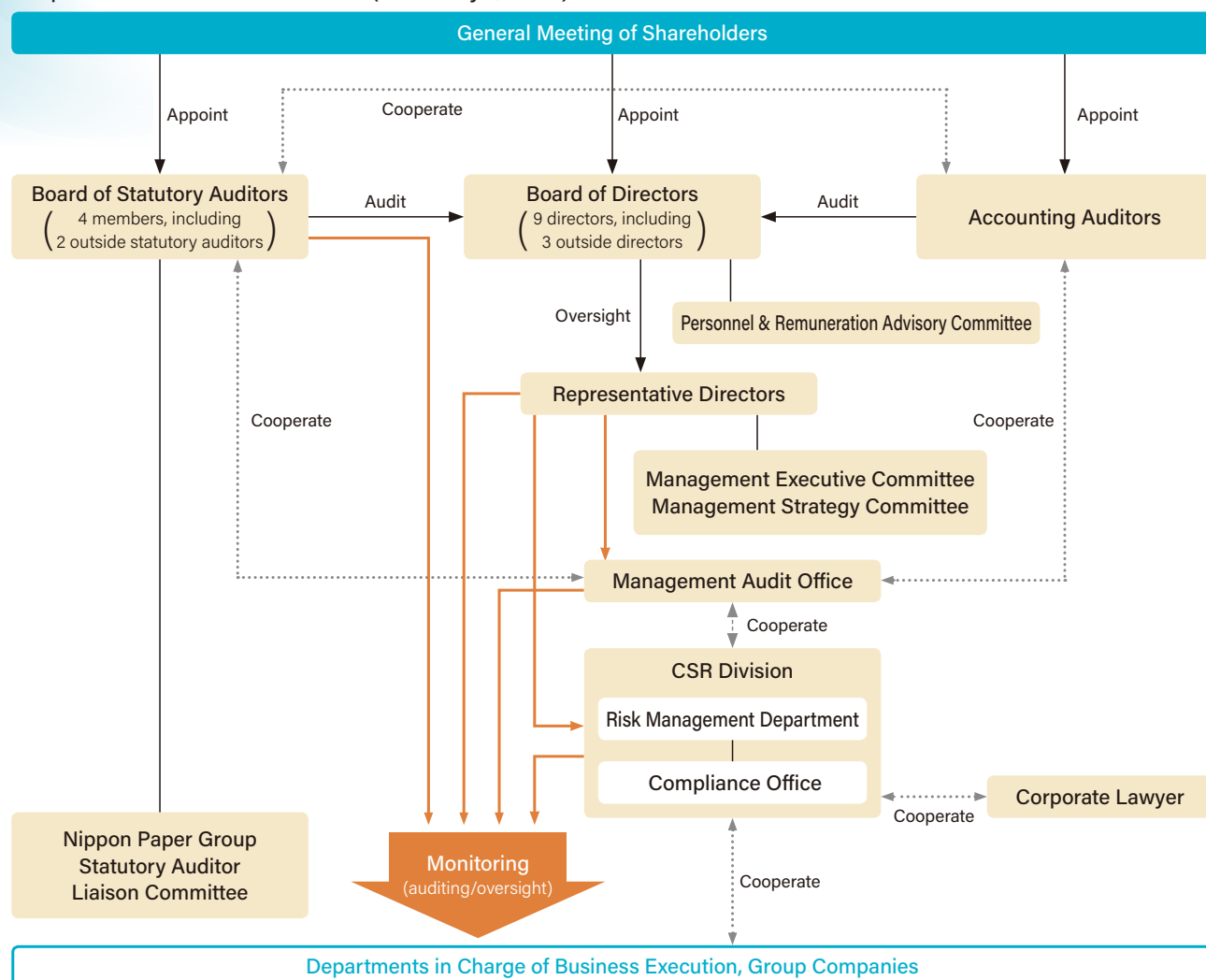
Personnel and Remuneration Advisory Committee

As stipulated in the Corporate Governance Policy, the Personnel and Remuneration Advisory Committee of Nippon Paper Industries receives inquiries from the Board of Directors on matters such as the selection process, qualifications, and reasons for nomination of director and statutory auditor candidates, the criteria for determining the independence of independent outside officers, and the remuneration system for directors and statutory auditors. The committee responds to such inquiries after considering their appropriateness and taking into account its assessment of the Company's business performance and other factors. The committee comprises the President and Representative Director, the Director and General Manager of the Personnel & General Affairs Division, and outside directors, and shall proceed with its studies while receiving appropriate involvement and advice from independent outside directors. The Board of Directors shall, after receiving recommendations from the Personnel & Remuneration Advisory Committee, make a decision on nominations for directors and statutory auditors, compensation for directors, etc.

Structure and Functions of the Personnel & Remuneration Advisory Committee



Corporate Governance Structure (As of July 1, 2020)



Management responsibility

Corporate governance

Corporate Governance Summary (As of July 1, 2020)

Type of Organization	Company with a Board of Statutory Auditors
Chairman of the Board of Directors	Chairman and Director: Fumio Manoshiro
Number of Directors	9 (including 3 outside directors)
Number of Statutory Auditors	4 (including 2 outside statutory auditors)
Number of Appointed Independent Officers	5 (3 outside directors and 2 outside statutory auditors)
Board of Directors' Meetings Held in FY2020/3	Number of meetings: 14 Average rate of attendance by directors: 98.4% (outside directors: 97.4%) Average rate of attendance by statutory auditors: 100%
Board of Statutory Auditors' Meetings Held in FY2020/3	Number of meetings: 13 Average rate of attendance by statutory auditors: 100%
Independent Accounting Auditor	Ernst & Young ShinNihon LLC

Independent Officers

The Company designates as independent officer, all outside officers who meet the requirements for an independent officer. When appointing candidates for outside director and outside statutory auditor, the Company judges their independence by taking into consideration whether they satisfy the independence criteria provided by the Tokyo Stock Exchange and the requirements for externality (having not served as director, employee, etc. of the Company and its subsidiaries in the past) provided for by laws/regulations, in addition to considering the existence of any conflict of interests with general shareholders.

Outside Directors

Makoto Fujioka	Mr. Fujioka was Deputy Director-General of the Ministry of International Trade and Industry (currently the Ministry of Economy, Trade and Industry) and Ambassador Extraordinary and Plenipotentiary stationed in the United Arab Emirates. He has also acted as an executive of a private company. He is expected to supervise and advise from an objective perspective on the execution of duties of the Company's other directors using his wide knowledge and international awareness gained through his experience in both the public and private sectors.
Yoko Hatta	Although Ms. Hatta has never been engaged in corporate management directly, it is expected that she will draw on her broad work experience at international accounting firms and considerable expertise in international tax practices, etc. and her experience as an outside statutory auditor of the Company (from June 2016 to June 2019) to supervise and advise from an objective perspective on the execution of duties by the Company's other directors.
Yutaka Kunigo	Mr. Kunigo engaged in a wide range of areas at Tokyo Gas Co., Ltd., such as engineering, personnel affairs, procurement, sales, and overseas operations. He is expected to supervise and advise in his objective capacity on the execution of duties of the Company's other directors using his extensive experience and wide knowledge accumulated through his experience in managing the company as its executive.

Outside Statutory Auditors

Takafumi Okuda	Although he has never been engaged in corporate management directly, the Company determines that his abundant experience and deep knowledge that he has accumulated as a legal professional in a judicial organization will enable him to act as an auditor of the Company and audit the execution of business activities by the Company's directors from an independent and objective perspective and contribute to improving the soundness and transparency of the Company's management.
Nanako Aono	The Company determines that Ms. Aono's experience in serving as a director and statutory auditor at private sector companies in a wide range of fields and the extensive knowledge she has accumulated as a certified public accountant will enable her to audit the execution of business activities by the Company's directors from an independent and objective perspective and contribute to improving the soundness and transparency of the Company's management.

Evaluation of Effectiveness of the Board of Directors

To continuously strengthen its functions, the Company's Board of Directors has been conducting self-evaluations of its effectiveness since FY2016/3.

Once per year, the Secretariat of the Board of Directors conducts a survey of the directors and statutory auditors regarding management and the discussions held at its meetings. The director in charge reports the findings from the survey to the Board of Directors, which analyzes and evaluates the effectiveness of the Board of Directors through deliberations, etc. on reported contents and works toward its improvement based on the results thereof.

Outline of the Results of the FY2020/3 Analysis and Evaluation

The Board of Directors analyzed and evaluated the effectiveness of the Board of Directors based on self-evaluations in the form of a questionnaire survey. The Board of Directors found that the five viewpoints of "Composition of the Board of Directors," "Agenda items to be submitted to the Board of Directors' Meetings," "Conduct of Board of Directors' Meetings," "Training of directors and statutory auditors," and "Information provision to, and support system for, outside directors" were broadly appropriate on the whole. With regard to strengthening support to facilitate activities of outside officers, which was previously highlighted as a theme, efforts were made to realize improvements, such as enhancing the content of the minutes taken at the Board of Directors' Meetings and prior briefings on important matters, as well as inviting outside officers to attend internal meetings, including meetings of the Group Management Strategy Committee.

The Board of Directors will continue to enhance its functions through such measures as expanding the items reported to the Board of Directors.

Compensation for Directors

The Board of Directors decides compensation for directors after receiving a report from the Personnel and Remuneration Advisory Committee (page 17).

Monthly Compensation

Base monthly compensation for directors shall be decided according to his/her job responsibilities in the Company. Of that, 70% shall be fixed and the remaining 30% shall be paid with increases or decreases based on the preceding business year's business performance.

As a standard, 60% of the performance evaluation is based on non-consolidated results (year-on-year increase/decrease in net sales, ordinary income, and ROA), while 40% is based on the Group's consolidated performance (the degree to which net sales, operating income, and ROA meet Medium-Term Business Plan targets). The Company does not provide bonuses or retirement benefits. In addition, a certain amount of the monthly compensation will be allocated to the acquisition of the Company's shares through contributions to the executive shareholding association. The acquired shares will continue to be held during the director's tenure in the Company.

Regarding outside directors and outside statutory auditors, monthly compensation shall be fixed. In light of their responsibilities, contributions to the executive shareholding association are on a voluntary basis.

Introduction of Stock Compensation Plan

The Company has introduced Board Benefit Trust (BBT) as a stock compensation plan. The objective of BBT is to further clarify the link between the compensation provided to directors and the Company's share value and thereby increase directors' motivation to contribute to improving the Company's medium- to long-term performance and increasing its corporate value by sharing the benefits and risks associated with share price fluctuations with shareholders. (This resolution was approved at the 95th Ordinary General Meeting of Shareholders held on June 27, 2019.)

Total Amount of Remuneration, etc., for Directors and Statutory Auditors for FY2020/3*1

Category	Number of executives	Total amount of remuneration, etc.
Directors	11*2	¥383 million
Statutory auditors	6*2	¥56 million

*1 Figures are rounded down to the nearest million yen.

*2 Amounts include two directors and two statutory auditor who resigned during FY2020/3.

(Reference) Overview of Inside Director Remuneration (FY2020/3)

	Fixed Remuneration	Performance-Based Remuneration	Board Benefit Trust
Method	Cash payment		Points granted
Payment Allowance	with in ¥700 million per year		with in 25,000 points per year (1 point = 1 share)
Payment Period	Monthly (no bonuses or retirement benefits)		Director resignation (cumulative points are converted to shares)
Calculation Method	Determined according to their respective responsibilities in the Company, with 70% of the amount to be paid as a fixed amount	Determined according to their respective responsibilities in the Company, with 30% of the amount to be varied depending on the business results of the preceding fiscal year	Points to be granted based on directors' respective positions
Performance Standards	—	60%: non-consolidated performance (net sales, ordinary income, ROA) 40%: consolidated performance (net sales, operating income, ROA)	—
Others	Fixed amount contributed to Nippon Paper Industries executive shareholding association		—

Note: Monthly remuneration is fixed for outside directors and corporate auditors.

Successors to the President

Nippon Paper Industries cultivates candidates for succession to President by placing them in increasingly important roles as directors, executive officers, and other important executive positions. Personnel matters related to directors and executive officers who are future presidential candidates are deliberated by the Personnel and Remuneration Advisory Committee, which is an advisory body that reports to the Board of Directors. Upon receiving this report, the Board of Directors screens and deliberates the report, and then decides on candidates.

Through this process, the Board of Directors supervises the cultivation of candidates to become the next President in a systematic and ongoing manner.

The process for appointment and dismissal of the President is the same as the decision on candidates for directors, in that the Personnel and Remuneration Advisory Committee conducts a review and submits a report based on consultations with the Board of Directors.

Cultivation of Director Candidates

From the standpoint of securing human resources capable of managing the Company in the future, we make a point of exposing employees—particularly those in career-track positions—to various positions and rotation to different offices. We also make an effort to appoint employees as early as possible to positions as managers and other important posts and positions in which they assist management, such as the top management of affiliated companies and overseas subsidiaries. In this manner, we strive to develop a robust base of employees with highly sophisticated expertise and work experience, cultivating them for selection as the next generation of director candidates.

Policy for Training Directors

To support directors' execution of duties, the Company provides directors with information on matters necessary for their roles and functions (such as economic conditions, industry trends, legal compliance, corporate governance, finance and accounting) on an ongoing basis. We also ensure opportunities to participate in external training based on the desires of individual directors.

Message from an Outside Director

"Perspective on the Group's Medium -to Long-Term Growth"

Makoto Fujioka Outside Director



Creating Value through the Use of Wood

The Nippon Paper Group has proactively developed an array of businesses based on its slogan, "Shaping the future with trees." I believe that this slogan provides a simple yet accurate description of the Group's distinctiveness as a company as well as its stance toward social value and medium -to long-term growth. The Group's distinctive strengths lie in its wealth of technology and expertise for maximizing the use of trees, a renewable resource. Moreover, the Group owns expansive forests in Japan and overseas and engages in sustainable forest management and raw material procurement. I am convinced that by taking advantage of its management resources and capabilities to create value through the use of wood and in turn, respond to the renewed demand of society, the Nippon Paper Group will be able to realize sustainable growth.

Transformation of Business Structure and Strengthening of Competitiveness

In its current medium-term business plan, the Group identified the packaging, household paper and healthcare, chemical, and energy businesses as growth areas and is working to expand its operations in a variety of ways according to its basic policy mentioned earlier. Similarly, the Group is concentrating its efforts, from a longer-term perspective, on the commercialization of new functional materials derived from pulp, such as cellulose nanofiber, a cutting-edge biomass resource.

Meanwhile, the Group must address the issue of shrinking domestic demand for its existing Paper Business as a result of advancements in IT and other factors. I feel that the Group has been making progress in this area by reorganizing the production structure of the Paper Business and thereby improving profitability. However, as domestic demand in this business is expected to contract even more going forward, proactively transforming its business structure and strengthening its competitiveness will be critical to its future success.

Helping Realize a Sustainable Society

As a member of society, companies must unite with society and evolve together.

In recent years, the intensification of climate change and marine plastic pollution have emerged as global issues. In light of this, demand and expectations for the use of wood resources, which are renewable, have been growing. Because of its ability to develop and roll out new paper materials and products, the Nippon Paper Group can create and deploy a range of businesses that cater to such new forms of social needs. I believe that by leveraging such capabilities, the Group is enhancing its corporate value over the long term and realizing more opportunities to contribute to the development of a sustainable society.

Swiftly Adapting to the Rapidly Changing Operating Environment

In order to continue growing as a company amid this rapidly changing environment, the Group must respond to issues in a timely manner. For instance, from the time marine plastic pollution started gaining greater attention as a new concern in society, the Group did not hesitate in establishing its Paperising Promotion Office and developing and rolling out new environment-friendly products, such as its paper straws.

In such ways, I look forward to seeing the Group continue to harness its ability to adapt, swiftly and flexibly, and respond to the rapidly changing operating environment.

Dialogue with Stakeholders

We make use of various opportunities to engage in dialogues.

Basic Stance

Nippon Paper Industries Co., Ltd. has established a policy for constructive dialogues with shareholders, etc. under its corporate governance policy. We value constructive dialogues with shareholders and other stakeholders, and endeavor to secure various opportunities to hold such dialogues.

The Nippon Paper Group's Action Charter and Codes of Conduct also include the provision that the company will fairly and proactively disclose company information to all interested persons involved with the company. The Group has also formulated and is implementing a basic policy on the disclosure of information (disclosure policy).

→ Corporate Governance Policy

<https://www.nipponpapergroup.com/english/ir/ECGC20200515.pdf>

→ Corporate Governance Report (last updated July 1, 2020)

<https://www.nipponpapergroup.com/english/ir/202000701ecg.pdf>

→ Disclosure Policy

<https://www.nipponpapergroup.com/english/ir/disclosure/policy/>

Annual General Meeting

Nippon Paper Industries Co., Ltd. works to energize its general shareholders' meetings and ensure smooth exercising of shareholders' voting rights.

When preparing notices for the convocation of general shareholders' meetings, we take care to ensure that they are clear and straightforward to read and understand, and that they communicate necessary information to our shareholders.

For our 96th annual general shareholders' meeting held on June 25, 2020, we ensured timely disclosure by sending notices of convocation early—17 days prior to the date of the meeting—and disclosing details of the notices on our website seven days earlier.

We have also adopted a "smart voting" website for shareholders to exercise their rights using a smartphone, making it possible for shareholders to exercise their voting rights via the Internet.

In order to prevent the spread of COVID-19, we requested participating shareholders to wear masks when visiting the meeting venue. We also checked participants' temperatures, provided alcohol-based hand sanitizer, and arranged seating to ensure ample space between seats.

We also simplified the meeting agenda to shorten the overall length of the meeting itself.



Checking temperatures in front of the entrance of the venue

IR Activities

The Corporate Planning Dept, which is responsible for IR activities, collaborates with Treasury & Accounting, Personnel & General Affairs, CSR, Public Relations and various other divisions and strives to gain understanding of the Group's management policies through constructive dialogues with shareholders and investors.

The Corporate Planning Division conducts business analyses and gathers opinions from the perspectives of capital providers, in order to promote sustainable growth and enhance its corporate value of the Nippon Paper Group over the medium to long term.

The division also sends weekly IR reports to top-level management, senior management and relevant departments, gives regular reports to the Board of Directors, and makes other efforts to ensure that this information is reflected in actual management activities.

Results of activities aimed at institutional investors and analysts in fiscal 2019

Management briefings	1 time
Operating results briefings	4 times
Mill tours	1 time (Higashimatsuyama Mill)
Individual meetings	136 time

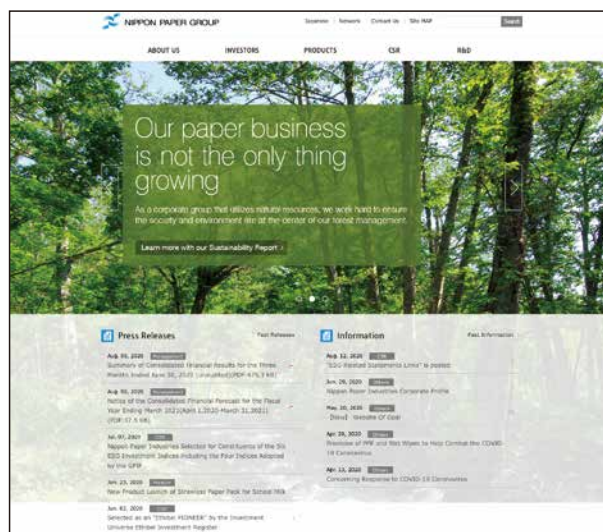
Shareholder Newsletters, Website and Risk Communication

Nippon Paper Industries Co., Ltd. mails shareholder newsletters to shareholders twice a year.

Our website communicates information to a wide range of stakeholders as and when it becomes available. We also receive a broad range of questions and opinions via the Contact Us and Application Form (Request for Materials) sections on a wide range of topics including business management, environmental issues, products and CSR activities; which are then answered by the relevant divisions.

The Group has also established the Nippon Paper Group Risk Communication guidelines.

We work to communicate with local governments and communities with regard to environmental issues and create opportunities for explaining the environmental impact if work accompanying the introduction and inspection of large-scale equipment and facilities.(Please refer to P.42)



→ Nippon Paper Group website

<https://www.nipponpapergroup.com/english/>

CSR Seminar

Nippon Paper Industries Co., Ltd. holds CSR seminars for suppliers and other stakeholders, selecting themes from among a variety of social issues.

At our 8th CSR seminar held in January 2020, the Company handled the theme of "Let paper do what it can do"—one of the Nippon Paper Group's keywords—set against the backdrop of developments taking place around the world, including the shift away from the use of plastics and the response to climate change.

On the day, the Group invited Mr. Toshio Arita, head of Arita Packaging Consultant Office, to give a special lecture entitled "Expectation and Future Outlook for Sustainable Packaging" on the role of the paper in sustainable societies, primarily in the field of packaging. The seminar was attended by around 350 people.



Scene from the CSR seminar

Contact points for dialogue with stakeholders

Stakeholder	Major point of contact	Means of communication
Employees and others(executives, permanent employees, part-time employees, employee families)	Human resource sections	Labor-management councils, labor-management committees, etc.
Customers(business enterprises, consumers, etc.)	Sales section, Product safety sections Customer assistance channels	Individual interviews, inquiries to customer relations sections, etc.
Society and local residents(local communities,NPOs/ NGOs, municipalities, the media, students,etc.)	Responsible section within mills and branches	Environmental explanatory meeting, risk communication, environmental monitoring system, mill presentation meetings,etc.
	Responsible section within each business segment	Interviews, etc.
	Social contribution sections	Social contribution activities, etc.
	Public relations sections	Press releases, interviews, etc.
Business partners(suppliers, subcontractors, etc.)	Procurement sections Human resource sections	Individual interviews, supplier surveys, etc.
Shareholders(shareholders, investors, etc)	General affairs sections IR sections	General shareholders' meetings, shareholder communications, explanatory meetings, annual reports, IR site, IR information mail, etc.

Risk Management

The Nippon Paper Group aims to prevent the occurrence of business risks and minimize impact in the event of the occurrence of such risks.

Basic Stance

The Nippon Paper Group has set up a Risk Management Committee, chaired by the President and Representative Director, operating under the supervision of the Board of Directors of Nippon Paper Industries.

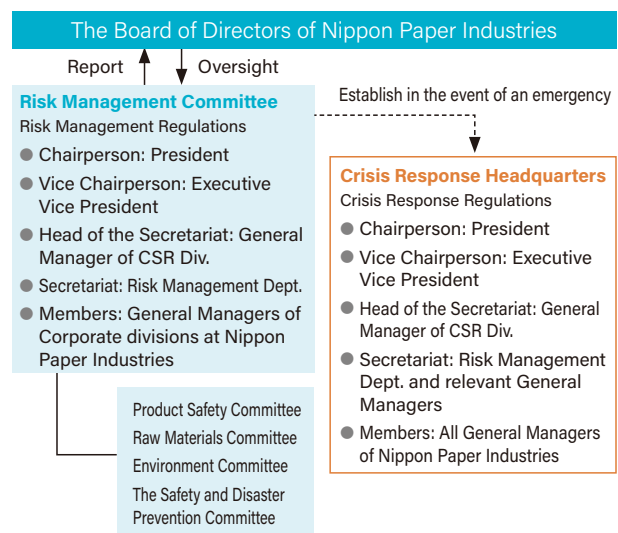
To try to avoid management-related risks, and to minimize the impact of those which do occur, we have formulated our risk management and crisis response regulations to operate under any circumstances.

Risk Management Promotion Structure

The Risk Management Committee consists of members including the chairmen of corporate divisions at Nippon Paper Industries, while the Risk Management Department within the CSR Division serves as its secretariat. The committee, in collaboration with various other committees as appropriate, identifies and assesses the Group's risks on a regular basis, while considering and deliberating on risk prevention and mitigation measures and reporting them to the Board of Directors.

In the event of an emergency, a crisis response headquarters will be established.

The Risk Management Committee conducts inspections and reviews regularly to enable the timely execution of initial responses and business continuity plans (BCPs) in the event of earthquakes, typhoons, infectious diseases, and other risks requiring emergency responses.



Specific Initiatives

Responses to Natural Disaster Risk

The Group has drawn on past experiences with earthquakes, such as the Great East Japan Earthquake, torrential rains, and other natural disasters to revise our initial response manual. In addition, the Group engages in thorough group-wide measures to prepare for the event of a disaster that may occur while coping with the spread of COVID-19 by addressing every possible need such as the stockpiling of necessary goods.

Response to COVID-19

In response to the spread of COVID-19 infections, Nippon Paper Industries is implementing group-wide countermeasures with a basic policy of (1) Place the highest priority of on human life, (2) Cooperate with the national and local governments and follow their guidance and recommendations, (3) Prevent the outbreak of diseases in-house, and (4) Continue to maintain business operations, based on the Management Manual for New Influenza and Other Infectious Diseases, drawn up in 2009. (see P.11-12)

Response to Climate Change

There is a high degree of uncertainty regarding the problem of climate change. Dealing with it will be difficult and will require long-term commitment. While recognizing the risks related to climate change as a management issue, the Group will also look to seize opportunities and will examine approaches to mitigate risks. (see P.45-50 "Response to Climate Change")

Compliance

In addition to complying with laws, the Group also engages in its activities with a high standard of ethics and social decency.

Basic Stance

In its "Nippon Paper Group Charter of Conduct" the Nippon Paper Group stipulates that "We shall abide by the letter and the spirit of laws and regulations, and comply with the highest ethical standards and social codes of conduct, both in Japan and abroad."

The Group also believes that "Compliance" is to meet the expectations and trust of society by not only complying with laws and regulations, but also by complying with the "rules" required by society, including "social norms" such as good sense, common sense, and customs.

Following our policy of corporate governance, we aim to put the Nippon Paper Group Code of Conduct and the Code of Conduct of the Nippon Paper Co., Ltd. into practice by raising our employees' understanding of compliance through training and awareness-raising activities.

Compliance Structure

We continue to promote compliance-related initiatives through the establishment of the Compliance Office, as a specialized unit within the CSR Division of Nippon Paper Industries, and collaborations with the Legal Affairs Office of the General Affairs Department, Management Audit Office, Human Resources Department, and other relevant sections as required.

Each Group company appoints a person to be in charge of compliance within its organization and to work in unison through the use of venues such as the Group Compliance Liaison Meetings, which are held by the Compliance Office, with the aim of ensuring compliance throughout the Group.

The Group's compliance activities are reported on by the chairman of the CSR Division once per year at the Board of Directors' Meetings.

Implementing compliance education

The Nippon Paper Group conducts compliance training on an ongoing basis.

The content of the training is designed to be practical and relevant to the actual conditions at each site, such as by inviting a lecturer from a specialized external risk management companies to hold group discussions.

In fiscal 2019, 950 people participated in this training.*

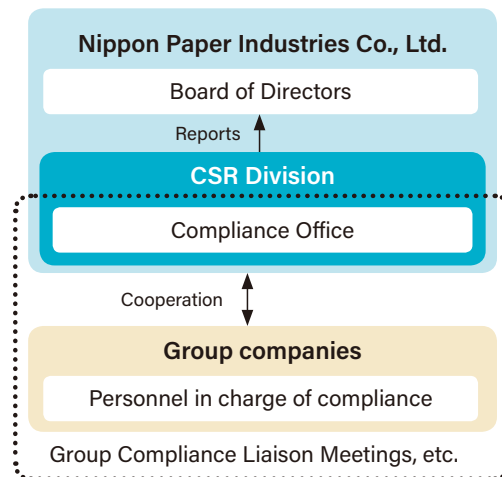
In addition to compliance training for new employees and newly appointed managers at major Group companies, compliance training for executives at Nippon Paper Industries and Group companies, as well as compliance training for managers in charge of human resources and compliance at Group companies are also provided.

*Note that group training sessions have been suspended as of February 2020, from the standpoint of preventing the spread of the COVID-19.

The Nippon Paper Group's Action Charter

1. We shall pursue a sustainable growth for the future to contribute to society through our business activities.
2. We shall abide by the letter and the spirit of laws and regulations, and comply with the highest ethical standards and social codes of conduct, both in Japan and abroad.
3. We shall conduct our business in a fair, transparent and liberal manner.
4. We shall win the trust of customers through the development and provision of socially useful and safe products and services.
5. We shall disclose corporate information positively and fairly to all stakeholders of the Group.
6. We shall actively address environmental issues, and shall endeavor to conserve and enhance the environmental state of our planet.
7. We shall maintain consistency between corporate development and the personal contentment of individual employees, and create a company filled with dream and hope.

Compliance Structure



Internal Whistleblower System

The Nippon Paper Group has established a "Nippon Paper Group Helpline" that enables Group employees to report any problems directly, or confidentially, or to seek advice outside the chain of command on any workplace matter that may cause problems relating to laws, social norms including human rights, or corporate ethics. The Compliance Office serves as the point of contact within the Group, while points of contact have also been established outside the Group. We distribute the "Nippon Paper Group Compliance Card" and make it known to all employees, (including subcontractors and temporary workers).

The "Nippon Paper Group Helpline" ensures that whistleblowers do not suffer any disadvantages by thoroughly protecting the whistleblower's privacy, and anonymity. The Compliance Office reports on the status of whistleblowing to the Company's Audit & Supervisory Board Members and Management Executive Committee on a quarterly basis.

Quantity of Reports to the Helpline

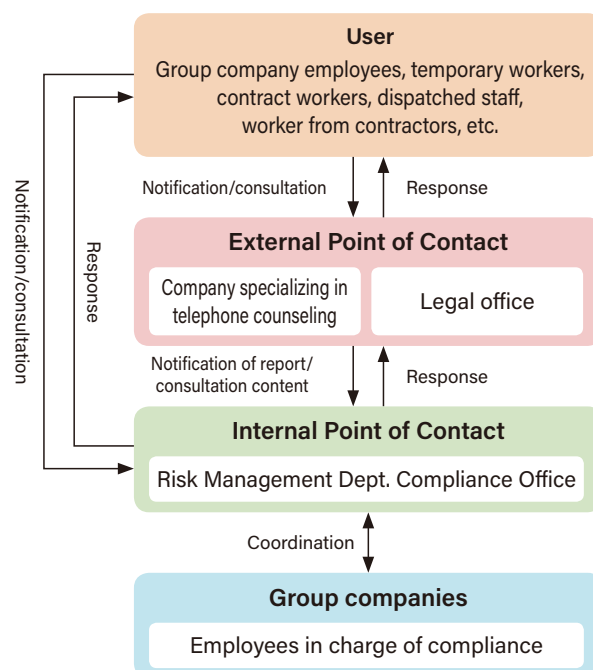
Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019
19	11	32	33	46

Personal Information Protection

Nippon Paper Industries has established regulations and manuals that clearly state the system and basic rules for the handling of personal information, and appropriately handles the personal information of customers, business partners and employees in accordance with these rules.

In accordance with the Personal Information Protection Law, the Company tracks and manages the personal information held by each department in its possession, including the timing and purpose of use, in a control ledger. These ledgers are reviewed annually for proper management such as by eliminating the personal information when its retention period has expired.

Flow of the help line system



Respect for Intellectual Property

The Nippon Paper Group places great importance on intellectual property rights in all its business activities, including research and development, and the Group adheres strictly to all applicable laws and regulations. Intellectual property rights education programs are conducted for Group employees, led by employees of Nippon Paper Crecia and Nippon Paper Crecia's Intellectual Property Department as well as outside patent attorneys. A total of 298 employees attended 11 programs during fiscal 2019.

Prevention of Bribery of Public Officials and Promotion of Compliance with Competition Laws

In the Nippon Paper Group Charter of Conduct and the Nippon Paper Code of Conduct, Nippon Paper Industries clearly states the prevention of bribery and compliance with competition laws as one aspect of its commitment to fair, transparent, and free corporate activities.

The Group's corporate philosophy also commits "fairness" as one of the values by employees of the Nippon Paper Group. In November 2017, the Group established basic policies on Prevention of Bribery of Public Officials and Compliance with Competition Laws, in order to ensure more thorough compliance with laws in relevant countries throughout the entire Group, including overseas locations.

Based on these basic policies, the Group is working to enhance and improve our risk management regarding the prevention of bribery and compliance with competition laws, including giving compliance training to all group's employees. In fiscal 2019, the Group was subject to no legal actions whatsoever involving incidents of corruption or public legal cases regarding corruption, anti-competitive behavior, anti-trust, or monopolizing practices.

➔ Nippon Paper Codes of Conduct

<https://www.nipponpapergroup.com/english/about/charter/>

➔ Nippon Paper Group's Basic Policy on Prevention of Bribery of Public Officials

https://www.nipponpapergroup.com/english/about/Basic%20Policy%20on%20Prevention%20of%20Bribery_EN.pdf

➔ Nippon Paper Group's Basic Policy on Compliance with Competition Laws

https://www.nipponpapergroup.com/english/about/Basic%20Policy%20on%20Compliance%20with%20Competition%20Laws_EN.pdf



AMCEL S.A. (Brazil)
company-owned forest

Forest Management and Raw Material Procurement Responsibility

The Nippon Paper Group endeavors to use and recycle every bit of the renewable wood resources it harvests, based on a foundation of sustainable forest management.

In addition, we preserve biodiversity through sustainable forest management. Because forests act to sequester CO₂, our use of wood resources actually contributes to the fight against global warming.

Materiality	Related Indicators	State of Efforts (fiscal 2019)
Sustainable procurement of raw materials	Maintenance of forest certifications for all company-owned forests inside and outside Japan	Maintained and continued forest certifications for 100% of company-owned forests
	Ensure that all wood materials for pulp and paper are endorsed under forest certification systems	100% of wood materials procured for pulp and paper were assessed under forest certification systems
	Conduct 100% of questionnaire-based surveys for auditing overseas chip and pulp suppliers	Conducted 100% of surveys (overseas chip suppliers: 23, pulp suppliers: 23)
	Maintain a domestic timber utilization rate that exceeds the wood self-sufficiency rate in Japan.	Achieved a domestic timber utilization rate that exceeds the wood self-sufficiency rate in Japan (35.8%)

Policy and Management

Practicing sustainable procurement of raw materials in ways that consider environmental and social concerns in line with our philosophy and basic policy

Basic Stance

Woodchips and wastepaper, as recycled material, are the main raw materials for pulp and paper. Procurement of these materials entails the support not only of suppliers in and outside of Japan, but also the communities and government authorities of local production areas. Taking into consideration relationships with the environment and society, the Nippon Paper Group recognizes the importance of working closely with suppliers to establish a sustainable supply chain that incorporates production area forest ecosystem, local community, occupational safety and health as well as other concerns.

Philosophy and Basic Policy

The Nippon Paper Group established its Philosophy and Basic Policy Concerning Raw Materials Procurement in 2005. Based on this philosophy and basic policy, we use supply-chain management to practice sustainable raw material procurement that is both environmentally and socially conscious. Moreover, we promote dialogue with stakeholders as we strive to take our environmentally and socially conscious raw material procurement to greater levels of achievement.

We are also communicating the content of this Philosophy and Basic Policy to suppliers around the world by preparing both Japanese and English language versions and displaying them on our website.

As defined in this Philosophy and Basic Policy, we ensure that the entire supply chain has appropriate human rights and labor practices. We also request that our suppliers pay care and consideration to human rights and labor practices, and conduct regular questionnaire surveys and interviews to audit important suppliers regarding these concerns. (see P.32)

Philosophy and Basic Policy Concerning Raw Materials Procurement

(formulated on October 5, 2005)

Philosophy

We are committed to establishing a reliable raw materials procurement system through global supply chain management in consideration of the environment and society.

Basic Policy

1. Environmentally friendly raw materials procurement
 - (1) We procure woodchips, lumber and pulp from forests under sustainable forest management.
 - (2) We use and deal in no illegally logged lumber and we support the eradication of illegal logging.
 - (3) We make active use of recycled materials to help build a recycling-oriented society.
 - (4) We make appropriate procurement of chemical substances in compliance with relevant laws and regulations.
 - (5) We build traceability systems to ensure the above policies are practiced throughout the supply chain.

2. Socially aware raw materials procurement

- (1) We pursue fair deals with suppliers on equal terms.
- (2) We ensure that the entire supply chain has appropriate human rights and labor practices.

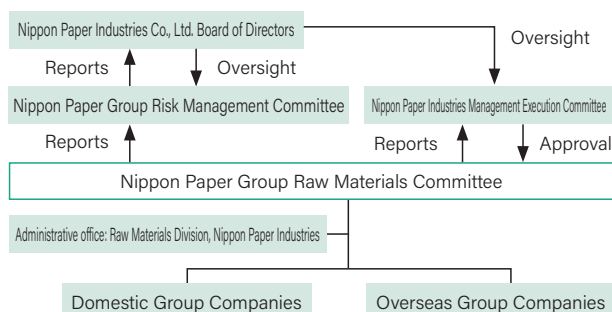
3. Promotion of dialogues with stakeholders

- (1) We engage in dialogues with stakeholders to improve the quality of our raw materials procurement in constant consideration of the environment and society.
- (2) We proactively disclose information so that our initiatives are better known.

Framework for Promoting Raw Materials Procurement Management

The Nippon Paper Group established the Raw Materials Committee, chaired by the general manager of the Raw Materials and Purchasing Division at Nippon Paper Industries. This subcommittee deliberates on a wide variety of important issues concerning raw material procurement, including the Group's overarching procurement policy.

<Promotion Framework>



Sustainable Procurement of Wood Raw Materials

Practicing sustainable forest management and resource procurement using certifications as benchmarks

Basic Stance

Based on its Philosophy and Basic Policy Concerning Raw Materials Procurement, the Nippon Paper Group engages in sustainable procurement of raw materials with consideration for environmental and social concerns. In addition to checking the legality of materials, our procurement of wood raw materials emphasizes sustainability, clear identification of the origin of wood resources, and full accountability with regard to these aspects.

Key points of sustainable wood resources procurement

- Sourcing from sustainable forests(sustainability)
- Clearly identifying the origin of timber(traceability)
- Maintaining full accountability(accountability)

Sustainable Forest Management and Procurement

Forestry management considers not only economic, but also environmental and social sustainability. The Nippon Paper Group defines sustainable forest management as:

- 1) Biodiversity is preserved.
- 2) The productivity and soundness of the forest ecosystem is maintained.
- 3) Soil and water resources are conserved.
- 4) Diverse social needs are satisfied.

Proper planning and management are important factors in the sustainable management of forests. A considerable amount of time is required to cultivate trees to their maturity. In putting together a viable sustainable forest management plan, it is important to consider factors including the areas allocated to afforestation and harvesting, the rate of growth, the surrounding environment and the impact on society.

Landscape concerns related to efforts to protect waterside forests and address other such needs must also be examined. Taking full advantage of its expertise in forest management, the Group is promoting proper planning and management.

Based on its accumulated experiences, the Nippon Paper Group engages in appropriate planning and management of its company-owned forests both in Japan and overseas, and procures wood raw materials from its own forests.

We also obtain third-party forest certification regarding the sustainability of these forests.

With regard to procurement from external suppliers, we are working to enhance our supply chain management capabilities with consideration for environmental and social concerns, and to build a procurement system that enables us to trace wood raw materials back to the forests that they were sourced from.

At the same time, we also utilize forest certification schemes as a tool to check that procurement of wood raw materials is being conducted appropriately.

➔ About Forest Certification <https://www.nipponpapergroup.com/csr/forest/sustainability/certification/>

Overview of major forest certification programs

Certification program name	Details and features
PEFC - Program for the Enforcement of Forest Certification A program that promotes mutual recognition of the forest certification programs of individual countries	<p>PEFC based its sustainability benchmark on a board consensus expressed in intergovernmental processes and guidelines. It provides a mutual recognition system that endorses compatibility and comparability of the responsible forest management systems of individual countries. PEFC has adopted the FM and CoC certification systems.</p> <p>Examples of certifications mutually approved by PEFC(for forest owned by Nippon Paper Industries Co., Ltd.) RW(Responsible Wood): Australia /CERTFORCHILE: Chile/CERFLOR: Brazil</p> <p>SGEC engages in an evaluation based on seven criteria while taking into consideration Japan's natural environment as well as its social customs and culture. Mutual certification with PEFC was approved in June 2016.</p> <p>FSC* is a non-profit international member-based organization that certifies that forests are being managed in compliance with its 10 principles. FSC* has adopted the FM and CoC certification systems.</p>
SGEC - Sustainable Green Ecosystem Council A forest certification program established in Japan	<p>SGEC engages in an evaluation based on seven criteria while taking into consideration Japan's natural environment as well as its social customs and culture. Mutual certification with PEFC was approved in June 2016.</p>
FSC® - Forest Stewardship Council® A forest certification program based on unified global standards(License No. FSC C001751)	<p>FSC is a non-profit international member-based organization. Performs FM and CoC* certification of forests based on its ten key principles.</p>

*FM and CoC certification

The forest certification system is composed of two components-the Forest Management (FM)component, which certifies that forests are responsibly managed, and the Chain-of-Custody(CoC)component, which certifies that products from certified forests have been properly processed and distributed. Under the FM certification system, a third party certifies that the management of forests is being undertaken in a sustainable manner based on various objective benchmarks including (1)compliance with regulatory requirements and system frameworks,(2)maintenance and preservation of forest ecosystems and biodiversity,(3)respect for native and local residence right,and(4)maintenance and improvement of forest productivity. CoC certification is a system covering all operators engaged in the processing and distribution of timber materials. In addition to tracking products(certified woodchips)from certified forests in each process including processing and distribution,CoC certification confirms that a risk assessment of all non-certified woodchips has been undertaken. Products display a certification mark in the event that all operators have acquired CoC certification across all processes.

Eradicating Illegal Logging

Nippon Paper Industries Nippon Paper Papyrus and Nippon Paper Creca have established a Legality Certification Due Diligence System Manual for the purpose of verifying the legality of the wood raw materials that they procure. The companies carry out due diligence and verify that all of wood raw materials procured both in Japan and overseas are sourced from legally felled trees.

These checks are carried out at when commencing a new transaction to procure wood resources, and on a regular annual basis for existing sources.

In fiscal 2019, the Group carried out due diligence and verified the legality of all of its wood raw materials.

→ Legally Certified Due Diligence Manual

[https://www.nipponpapergroup.com/csr/forest/sustainability/DDmanual20180806.pdf\(Japanese only\)](https://www.nipponpapergroup.com/csr/forest/sustainability/DDmanual20180806.pdf(Japanese only))

About the Clean Wood Act

In March 2018, Nippon Paper Industries Co., Ltd. completed its registrations as both a Type 1 and Type 2 Wood-related Business under the Act on Promotion of the Distribution and Use of Legally Harvested Wood (the Clean Wood Act), which took effect in May 2017. Nippon Paper Papyrus Co., Ltd. and Nippon Paper Creca Co., Ltd. also completed their registrations in April 2019. In compliance with this law, the companies confirm the legality of the covered items*¹ they handle. Also, in July 2018 Nippon Paper Lumber Co., Ltd. completed its registrations as both a Type 1 and Type 2 Wood-related Business, confirming the legality of the covered items*² it handles.

*¹ Wood pulp and copier paper, form paper, coated paper for inkjet color printers, uncoated printing paper, coated printing paper, and tissue paper and toilet paper that use wood pulp

*² Logs, sawn boards and square timbers, single and sliced veneers, plywood and laminated veneer lumber and laminated wood, wood materials for wooden pallets, chips, or flakes

→ About the Clean Wood Act

<https://www.rinya.maff.go.jp/j/riyou/goho/summary/summary.html>

<Individual companies' registration details>

Business registered: Nippon Paper Industries Co., Ltd.
Registration number: JIA-CLW-I, II No. 17024
Effective registration period: March 19, 2018 to March 18, 2023

Business registered: Nippon Paper Papyrus Co., Ltd.
Registration number: JIA-CLW-I, II No. 19001
Effective registration period: April 26, 2019 to April 25, 2024

Business registered: Nippon Paper Creca Co., Ltd.
Registration number: JIA-CLW-I, II No. 19002
Effective registration period: April 26, 2019 to April 25, 2024

Institution conducting registration (for the three companies indicated above): Japan Gas Appliances Inspection Organization

Business registered: Nippon Paper Lumber Co., Ltd.
Registration number: JPIC-CLW-I, II 54
Effective registration period: July 6, 2018 to July 5, 2023
Institution conducting registration: Japan Plywood Inspection Corporation

Action Plan for Wood-Based Raw Material Procurement

The Nippon Paper Group has put in place its Action Plan for Wood-based Raw Material Procurement, in keeping with the Group's Philosophy and Basic Policy Concerning Raw Materials Procurement. This action plan provides a roadmap that incorporates checks on the legality of woodchips, and consideration for human rights, labor, local communities, and the preservation of biodiversity, allowing the Group to practice CSR procurement.

This action plan also helps enhance traceability and the use of forest certifications with respect to woodchips procured from overseas, while placing a key emphasis on trade association certification of the legality of woodchips produced in Japan.

Through annual forest certification audits and audits performed by the Japan Paper Association's illegal logging monitoring project, Nippon Paper Industries has third parties perform objective assessments to determine whether it is conducting wood raw material procurement in accordance with its procurement policy. Advice obtained through these assessments are then actively used to make improvements.

→ Action Plan for Wood-Based Raw Material Procurement

<https://www.nipponpapergroup.com/csr/forest/sustainability/actionplan/>

Sustainable wood resource procurement scheme

Philosophy and Basic Policy Concerning Raw Materials Procurement(see page 29)

Action Plan for Wood-based Raw Material Procurement

	Japanese Resources	Overseas Resources
Basic Policy and Scheme	<ul style="list-style-type: none"> Based on verifications by organizations approved by forest, timber or lumber industry organizations specified in the Guideline for Verification of Legality and Sustainability of Wood and Wood Products established by Japan's Forest Agency in connection with government procurement initiatives to fight illegal logging in accordance with the Law on Promoting Green Purchasing. 	<ul style="list-style-type: none"> Verifications by individual companies using their own approaches, as provided in the Guideline for Verification of Legality and Sustainability of Wood and Wood Products. Based on the Japan Paper Association's guideline for measures against illegal logging.
Confirmation of Legality and Traceability	<ul style="list-style-type: none"> Confirmation based on a due-diligence system (DDS) for verifying legality under the Clean Wood Act Traceability based on the Guideline for Verification of Legality and Sustainability of Wood and Wood Products established by Japan's Forest Agency Confirmation of basic information relating to forest operations. Information examples include compliance with laws and regulations, tree species, and whether forest certifications have been obtained. 	<ul style="list-style-type: none"> Document verifications are performed on a vessel-by-vessel basis to ensure that the area where the wood was harvested and the supplier of the wood are in compliance with relevant laws, and that no illegally harvested wood is included. On-site checks by employees assigned to local offices Questionnaires and local interviews (Every effort is made to enhance traceability by confirming compliance with statutory requirements regarding forest management, tree species, and the acquisition of forest certifications. <p>※In fiscal 2019, it was determined, based on questionnaire responses and shipping and other documents provided by each supplier, that no illegally harvested woodchips or pulp were procured from overseas suppliers.</p>
Confirmation of sustainability	<p>Based on information from sources such as results of supplier surveys and local interviews, the following has been confirmed.</p> <ul style="list-style-type: none"> Policies or systems have been established for addressing human rights and labor matters*. Social contribution initiatives have been undertaken to improve relations with local communities. Biodiversity surveys have been conducted. Areas requiring special consideration to protect biodiversity have been identified and logging and forest management activities have been modified appropriately. 	
Independent Audits	<p>The following have been implemented for all procured wood resources.</p> <ul style="list-style-type: none"> Annual audits by the Japan Paper Association's illegal logging monitoring project. Annual risk assessments based on the due diligence system of the Programme for the Endorsement of Forest Certification (PEFC), a Forest certification organization. 	

Implementation Results for the Action Plan for Wood-based Raw Material Procurement (Fiscal 2019)

	Procurement in Japan	Procurement Overseas
Coverage and Results	<p>377 chip suppliers, 7 pulp suppliers (Implemented for all suppliers) Confirmation of conformance with the above action plan</p>	<p>23 chip suppliers, 16 pulp suppliers (Implemented for all suppliers) Confirmation of conformance with the above action plan</p>

* Survey and interviews include ensuring that workers have collective bargaining and free association rights and, that all workplaces are free of discrimination, forced labor and child labor, and that workers' living conditions, remuneration and working hours are all acceptable, and that health and safety are protected.

Third-Party Sustainable Forest Management Validations

Forest certification system: System for the certification by third-party organizations that forests are being sustainably managed

At Nippon Paper Industries Co., Ltd.,

- All company-owned forests in Japan and overseas have received forest certifications.
- All wood-based raw materials have been certified by the PEFC or FSC® (All procured chips have been produced with wood from forests with an FM certification or have undergone a risk assessment for the CoC certification.)

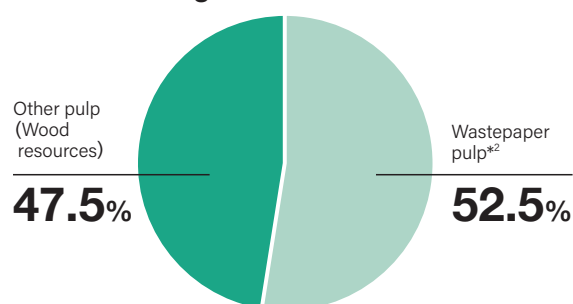
Current Status of Raw Materials Procurement

In addition to actively promoting the use of recycled paper, we procure wood resources from sustainably managed forests.

Current Status of Paper Raw Materials Procurement

The Nippon Paper Group is engaged primarily in the manufacture of paper products. 52.5 percent of the raw materials are composed of recycled paper and the remaining 47.5% consists of such wood resources as woodchips.

Breakdown of main raw materials for paper manufacturing*1 (Fiscal 2019)



*1 Consolidated Group companies in Japan
*2 Includes purchased wastepaper pulp

Initiatives aimed at stable wastepaper procurement

The importance of wastepaper collection is growing year by year, as a measure for recycling resources in addition to reducing the amount of actual waste output. For the Japanese paper manufacturing industry, too, wastepaper is an

essential resource that accounts for over half of all raw materials used.

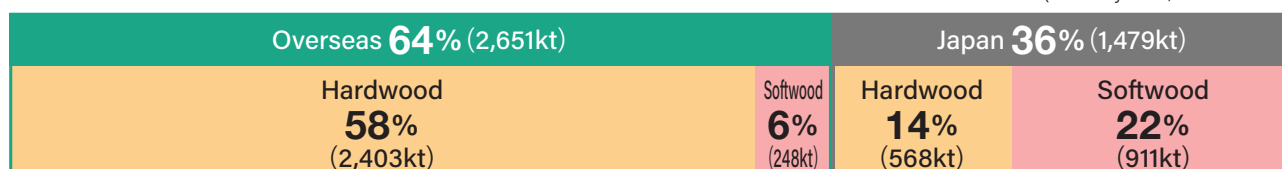
The Nippon Paper Group continues to maintain the stable procurement system that it has built over the course of many years in cooperation with the wastepaper industry. We are also promoting the shift towards the use of paper products in place of plastic, as a response to the issue of environmental pollution due to disposable plastic waste which has gained attention in recent years. At the same time, we are working to build a new recycling cycle utilizing used paper cups and other paper waste. The Group is engaged in various initiatives to make stable, long-term use of collected waste newspaper as a recycled resource for producing newsprint. As one such initiative, Nippon Paper Industries has created a new procurement system (referred to as a "Closed Loop System") in which it directly purchases wastepaper collected by newspaper companies. Through initiatives such as this, we are contributing to maintaining and further expanding our paper recycling system.

Initiatives aimed at stable wood resource procurement

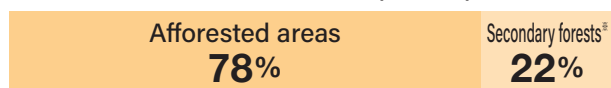
Most of the wood raw materials Nippon Paper Industries Co., Ltd. procures consist of woodchips, with pulp making up the rest. Over 60% of the woodchips we use come from overseas sources and less than 40% from domestic. To ensure stable overseas procurement, sources of woodchip imports are diversified among Australia, South America, and other parts of the world.

Geographic breakdown of wood raw materials (chips) procured by Nippon Paper Industries Co.,Ltd.(FY2019)

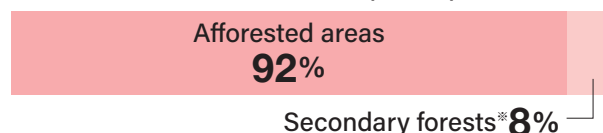
(Bone dry units, kt=kilotonnes)



Hardwood resource breakdown(2,971kt)



Softwood resource breakdown(1,159kt)



※ Natural forests as indicated here refers to either wood sourced from forests certified under certification schemes, wood sourced from secondary forests, or lumber waste wood chips that can be judged to be sustainable.

Tree species and countries of origin for overseas woodchips procured by Nippon Paper Industries Co.,Ltd. (Fiscal 2019)

Hardwood

Country	Percentage	Species
Vietnam	30%	Acacia
Australia	22%	Eucalyptus
South Africa	19%	Acacia
Brazil	16%	Eucalyptus,Acacia
Chile	11%	Eucalyptus
Thailand	1%	Eucalyptus
Malaysia	1%	Acacia
Total	100%	

Softwood

Country	Percentage	Species
Australia	65%	Pinus radiata
U.S.A.	26%	Douglas fir
Russia	9%	Yezo spruce
Total	100%	

Forest Management and Raw Material Procurement Responsibility

Protecting and Nurturing Japan's Wood Resources

Maintaining a focus on forest management that takes into consideration the characteristics of each region in an effort to promote sound growth

Sustainable Management of Company-Owned Forests in Japan

Nippon Paper Industries owns approximately 90 thousand hectares of forest in around 400 locations in Japan, the second largest private-sector holdings of forests in the country. SGEF Forest Certifications (see P.30) have been obtained for all of these forests.

For the Nippon Paper Group, forests are not only an important business resource. As a corporate group shaping the future with trees, we recognize and work to manage the integrity of the multifaceted functions forests play within society.

Maintaining company-owned forests in Japan

Nippon Paper Industries allocates approximately 0.6 billion yen each year to the maintenance and management of company-owned forests, which entails the clearing of undergrowth and thinning.

As a company which has continued to benefit from and grow through forests and forest products, we are committed to balanced, sustainable forest management that allows forests to fulfill their multifaceted functions - including ones that benefit biodiversity preservation and watershed conservation - despite the fact that forests within Japan are not currently economically viable because of the stagnant price of domestic timber.

Environmental forest designations, biodiversity-conscious forest management

Nippon Paper Industries designates its company-owned forests as either "commercial forest areas" for the production of wood materials or "environmental forest areas," where wood-material production is not conducted and the ecological, water catchment, and other environmental functions of forests are protected. The company appropriately manages both forest types for their respective purposes.

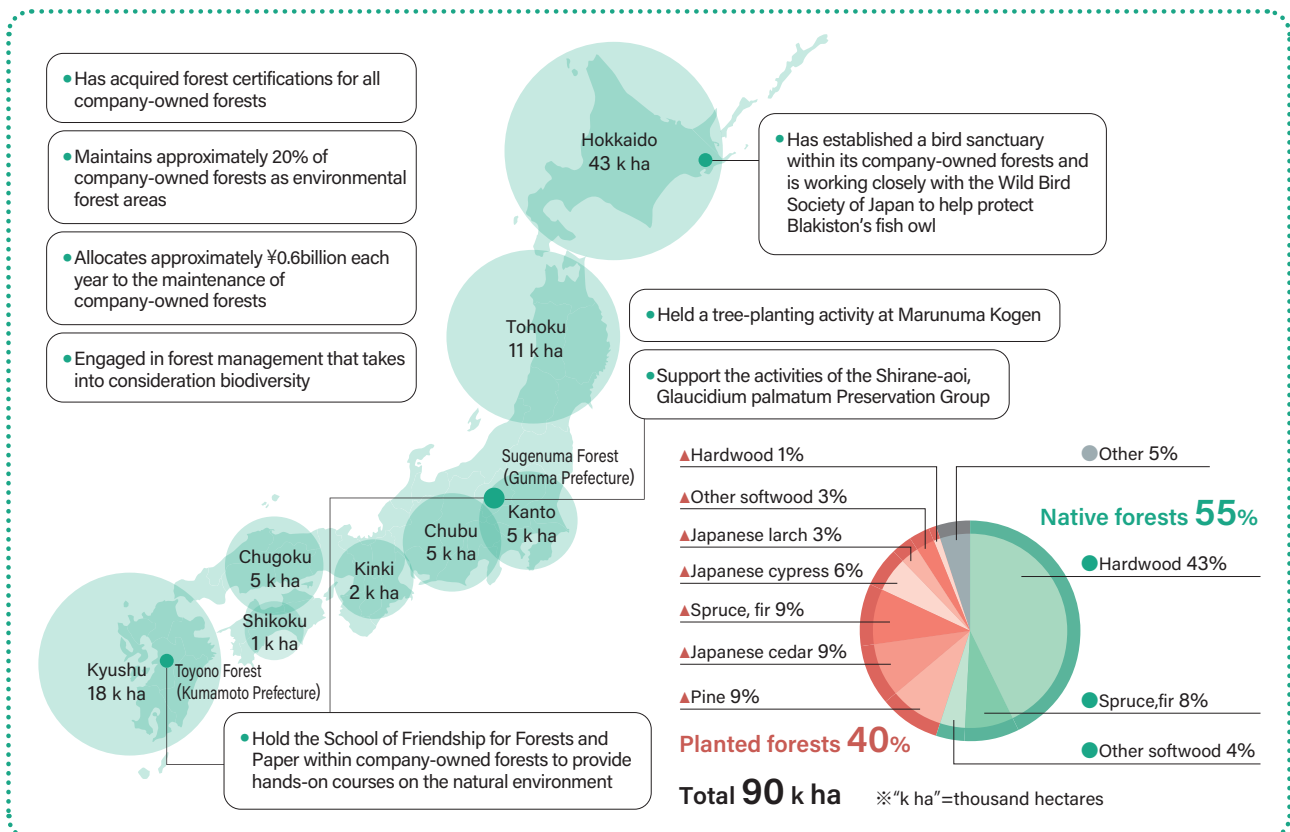
Environmental forest areas make up 18 thousand hectares—around 20%—of the company-owned forests, and are home to a wide variety of plant and animal species.



The Sugenuma company-owned forest includes an environmental forest area. (Mt.Nikko-Shirane)

→ Representative domestic company-owned forests

<https://www.nipponpapergroup.com/csr/forest/own/japan/>



Invigorating Japan's Forest Industry

Although Japanese forest—in particular artificially planted forests—are reaching resource maturity and approaching their regeneration logging period, they are not being sufficiently maintained and utilized in wood production.

In recent years, however, they are beginning to regain their former vitality due to factors such as the growing movement towards utilization of domestically produced wood resources and new demand for use as biomass fuel. The Japanese government is also working actively to make forestry a growth industry and promote appropriate management of forest resources.

Boosted by these promotions, the Nippon Paper Group is also engaged in various efforts to contribute to the effective utilization of domestic company-owned forest assets and the sound and sustainable development of the Japanese forestry industry.

Promoting the use of domestic timber

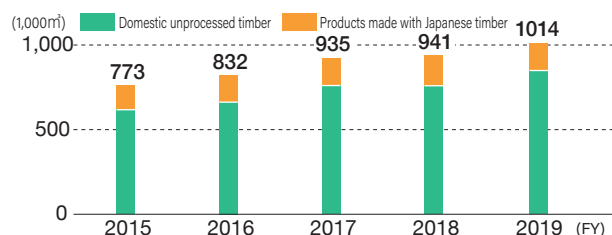
With its network for domestic timber collection in Japan and its ability to handle a comprehensive lineup of products—ranging from good quality timber for lumber use to lower grade timber for use as wood chips for paper manufacture and wood biomass fuels—Nippon Paper Lumber is actively developing its domestic timber business.

The company has set the objective of handling 1 million m³ of domestic timber*, and has worked to increase its actual sales year by year. In fiscal 2019, the figure reached approximately 1.01 million m³.

Nippon Paper Lumber will continue working to develop new applications and boost exports in order to utilize domestic timber and meet its goal of handling 1 million m³ of domestic unprocessed timber in fiscal 2020.

*Does not include woodchips for paper manufacturing use.

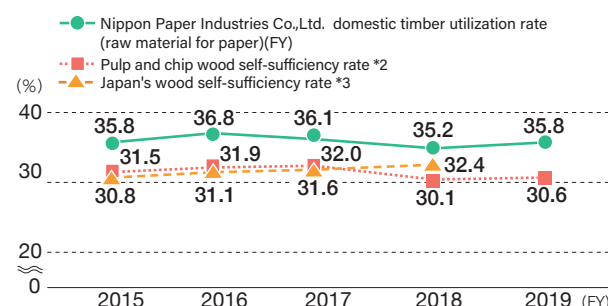
Domestic timber sales results by product type (Nippon Paper Lumber Co., Ltd.)



Efforts to use more domestic wood as a raw material for paper

Nippon Paper Industries Co., Ltd. is working to increase the percentage of domestically produced wood it uses to make paper. This figure rose to 35.8% in fiscal 2019. We aim to carry on with our efforts to help invigorate Japan's forest industry by using Japanese timber whenever possible.

Domestic timber utilization rate*1 (Nippon Paper Industries Co., Ltd.)



*1 The domestic (Japan) timber utilization rate includes sawmill residues.

*2 Source : Yearbook of Paper and Pulp Statistics issued by the Ministry of Economy, Trade and Industry of Japan.

*3 Source : Supply and Demand of Lumber (Lumber material self-sufficiency rate) issued by the Forest Agency of Japan

Organizing private-sector forest owners in Kyushu

Increasing the competitiveness of Japan's forest industry requires that forest owners work not by themselves but together with owners of neighboring forests to undertake work such as road building and logging, and measures to protect against damage by wildlife.

In 2011, Nippon Paper Industries Co. Ltd. signed an agreement with the Kyushu Regional Forest Office; Oji Forest & Products Co., Ltd.; Sumitomo Forestry Co., Ltd., and others to promote forest management in the Itsuki region of Kyushu. Since then it has entered into additional agreements, which together with the one mentioned above, cover four areas of Kyushu and involved efforts toward public-private cooperation in forest management.

Moreover, in 2016, the company entered into an agreement to promote forest management in the Mt. Fuji Seiroku area, on the west side of Mt. Fuji, together with the Shizuoka District Forest Office, a part of the Japanese Forestry Agency's Kanto Regional Forest Office; the Fuji Agriculture and Forestry Office of Shizuoka Prefecture; the city of Fujinomiya; and others. These agreements serve as a proof of concept for public-private collaboration in a centrally managed work model.

CASE Contributing to Japanese Forestry Using Proprietary Technologies

Currently, the number of artificially planted forests in Japan that have reached their regeneration logging period is increasing. But despite expectations for the regeneration logging and reforestation of these forest areas, there are concerns over the nationwide shortage of seedlings available for reforestation purposes.

Through its overseas afforestation projects, Nippon Paper Industries has established a technology for producing cuttings even from branches and shoots as short as 10cm in length (normally, shoots of around 40cm in length are used).

Because this method enables the production of large volumes of quality seedlings in a short period of time, it enables Nippon Paper Industries to stabilize the supply of seedlings and contribute to making forestry in Japan a growth industry.

Nippon Paper Lumber has applied this technology to create a large-scale seed orchard in Japan's Kyushu region (Hitoyoshi, Kumamoto) and produce seedlings of specified Japanese cedar mother trees*, and is now expanding its sapling production

operations across the country.

Nippon Paper Industries has also begun using these Japanese cedar mother tree seedlings in its company-owned forests, and is utilizing them to enable sustainable forest management.



Seedlings grown from cuttings of specified Japanese cedar mother trees

*Specified mother trees:
Trees that are deemed suitable for harvesting cuttings to produce good-quality seedlings.
They are designated by the Minister of Agriculture, Forestry and Fisheries for meeting specified criteria such as growth rate and wood quality.

CASE Supply of SGEC-Certified Wood

Distributing forest produce marked with a forest certification mark requires all business operators who take ownership of the products during the distribution process—from initial sourcing in an FM-certified forest to the final product stage—to have obtained CoC certification.

(see P.30)

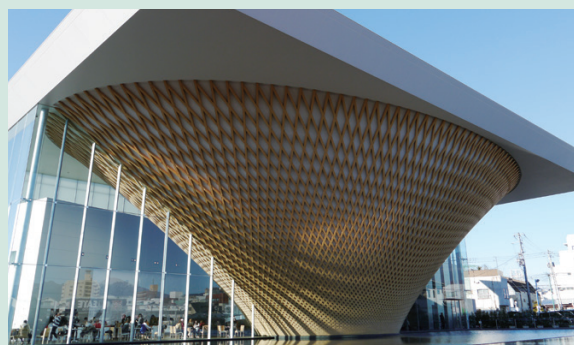
Nippon Paper Industries (NPI) has continued to maintain forest certification of all of its company-owned forests both in Japan and overseas, and has obtained FM certification for its domestic forests under Japan's own SGEC forest certification scheme. Nippon Paper Lumber (NPL) was the first company in Japan to acquire SGEC CoC certification, and is capable of delivering SGEC-certified wood from source forests—including those owned by NPI—to end users.

For example, in 2018, NPI utilized NPL's CoC certification to supply SGEC-certified Japanese cypress from its Kitayama company-owned forest

(Fujinomiya, Shizuoka) to the Exhibition Building Wooden Grid Project at the Mt. Fuji World Heritage Center, Shizuoka.

Through local and cross-industrial cooperation between the forestry, processing, distribution and construction industries, the center became the first building in Japan to acquire SGEC / PEFC CoC Project Certification. The Nippon Paper Group is proud to have played a part in this achievement.

The Nippon Paper Group also supplied SGEC-certified lumber from NPI company-owned forests for use in the construction of the Japan National Stadium, which was completed in November, 2019.



Mt. Fuji World Heritage Center, Shizuoka

➔ About Forest Certification

<https://www.nipponpapergroup.com/csr/forest/sustainability/certification/>

Overseas Afforestation

Growing trees as a renewable resource, and coexisting with local communities

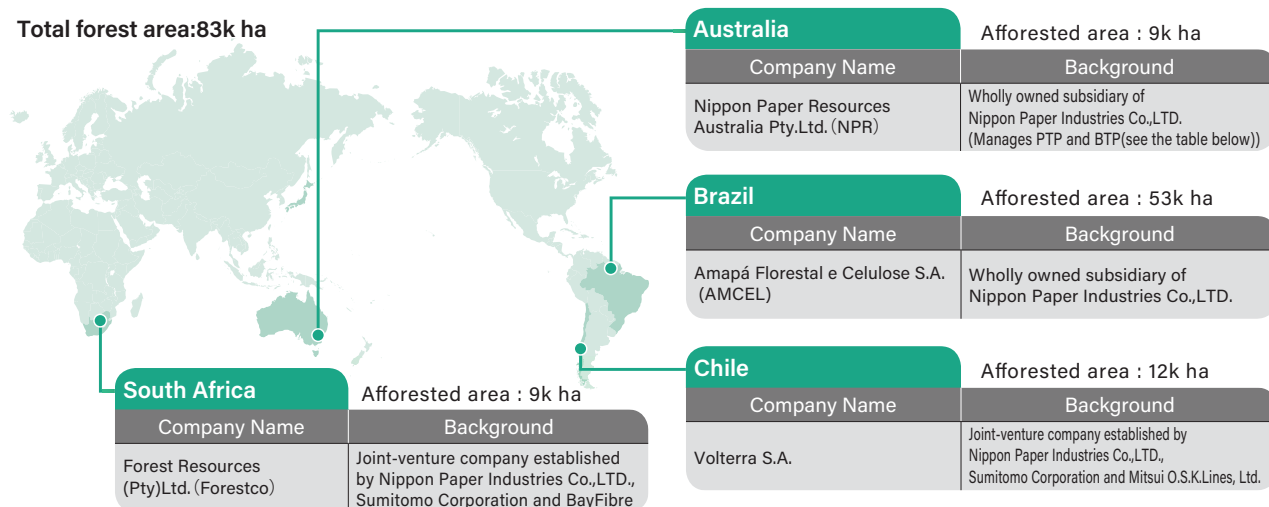
Tree Farm Initiative

In similar fashion to the cultivation of crops in the field, the Tree Farm Initiative achieves sustainable procurement of raw materials through repeated cycles of growing and harvesting trees. The Tree Farm Initiative manifests Nippon Paper Industries Co., Ltd.'s concept for overseas afforestation projects.

→ **Tree Farm Initiative** <https://www.nipponpapergroup.com/csr/forest/afforest/>

Presently, the Company oversees 83 thousand hectares (as of December 31, 2019) of afforested areas in Brazil, Chile, Australia, and South Africa.

Overview of overseas forests under Nippon Paper Group management (as of December 31, 2019)



Sustainable Management of Overseas Afforested Areas

Recognizing the importance of mutual development, the Nippon Paper Group strives to build positive ties with the local communities in and around its forests.

In accordance with our Philosophy and Basic Policy Concerning Raw Materials Procurement (see P.29), we pay particular attention to the concerns of local residents while taking into consideration the cultures and traditions of each region, as well as the natural environment and ecosystems; and contribute to local economies by creating employment opportunities and providing support for educational activities.

Nippon Paper Industries has also acquired and continues to maintain forest certification for all of the overseas afforestation projects that it manages.

Forest certification status

Status of forest certification acquisition for overseas afforestation projects

Overseas plantation project by operating company	Certification system name (License no.)	Acquisition year
PTP (Australia)	Responsible Wood	2006
BTP (Australia)	Responsible Wood	2006
Volterra (Chile)	FSC®(FSC®C120260) CERTFORCHILE	2014 2007
Forestco (South Africa)	FSC®(FSC®C012171)	2003
AMCEL (Brazil)	FSC®(FSC®C023383) CERFLOR	2008 2014

→ **About Forest Certification** <https://www.nipponpapergroup.com/csr/forest/sustainability/certification/>

Afforestation projects that help the local ecology

The Nippon Paper Group performs afforestation work on grasslands, former farms and pastures and on harvested plantation land. We select species, focusing mainly on fast-growing Eucalyptus, according to individual climatic conditions and materials available for making paper.

In order to maintain a balance between areas planted with Eucalyptus and the biodiversity needs of each region, we implement appropriate measures and keep native waterside forests where the potential effects on the ecology are large.



Tree planting that preserves riparian forests. (Right) The blue area indicates riparian forests.

Biodiversity-Conscious Forest Management

Afforestation project companies in each location engage in afforestation projects that pay consideration to biodiversity, have established protected zones on company-owned land for the protection of biodiversity, and are engaged in initiatives such as wildlife (animal and plant) habitat researches. (see P.53 - 54)

Coexistence with Local Communities

When conducting afforestation projects, it is important to ensure peaceful coexistence with surrounding local communities. The Group emphasizes the importance of consideration for, and dialogue with, local communities. For example, afforestation project companies in Brazil and Chile conduct regular visits and meetings for communities surrounding the afforestation areas they own, in order to confirm the opinions and demands of local people with regard to their project activities.

Procedures have also been established for assessing and reviewing social contribution activity programs run by these companies based on requests received from local residents via these communication activities.

Examples of Activities to Coexist with Local Communities

	Contributions to Local Communities	Respect for indigenous peoples
Brazil	<ul style="list-style-type: none"> ● Vocational training for local residents in communities surrounding afforestation areas(see P.85) ● Sponsorship of sports classes for children from low-income families(see P.86) ● Vocational training for women living in local communities (makeup, accessory making, etc.) ● Sponsorship of education and sports classes for children from low-income families run by military and police ● Financial support for protection of wild animals and environmental education activities ● Donation of life jackets distributed as part of a campaign to prevent water-related accidents 	<ul style="list-style-type: none"> ● Designation of areas with indigenous heritage sites identified on company-owned land as permanent protected zones(see P.84)
Chile	<ul style="list-style-type: none"> ● Participation in programs donating seedlings to farmers ● Distribution of Christmas presents to local elementary school pupils as one aspect of local community exchange activities ● Donation of sports mats for an activity project aimed at encouraging people in neighboring communities to maintain and improve their health 	<ul style="list-style-type: none"> ● Donation of water/sewage tanks and pipes to residents of an indigenous community district neighboring an afforestation area(see P.84) ● Participation in a project to resurface and expand roads, and provision and installation of fencing materials in an indigenous community district neighboring an afforestation area ● Protection of the native habitat of a rare herb used for medicinal purposes by indigenous people (on company-owned land), and opening of land to enable its use by indigenous people
Australia	<ul style="list-style-type: none"> ● Cooperation with firefighting activities in times of forest fires in the local area, as members of a fire brigade consisting of local afforestation-related companies 	<ul style="list-style-type: none"> ● Protection of indigenous heritage sites identified in afforestation areas(see P.84)



A Blackston's fish owl living in a company-owned forest

Environmental Responsibility

The Nippon Paper Group contributes to the building of a sustainable recycling-oriented society by minimizing environmental impacts at every stage of its value chain.

* Please refer to page 62-69 of the Nippon Paper Intergrated Report 2020.
https://www.nipponpapergroup.com/english/ir/Integrated_Report_E2020_03.pdf#page=9

Materiality	Related Indicators	State of Efforts (fiscal 2019)
Climate change initiatives	Reduce greenhouse gas emission by 10% compared to the fiscal 2013 result	14% reduction
Promoting recycling	Increase waste recycling rate to 98% or higher	97.3%
Preserving biodiversity	Give consideration to biodiversity in company-owned forests by maintaining and continuing forest certification	Maintained and continued certification for 100% of company-owned forests

Policy and Management

We are putting in place a Group-wide environmental management system based on our Environmental Charter and engaging in environmentally friendly corporate activities.

Basic Stance

The Nippon Paper Group provides diverse products and services to society through the effective utilization of wood from trees, which are a renewable resource. At the same time, the Group also uses large amounts of energy, water and other resources in its business activities. For this reason, the Group believes that it is an important responsibility for us as a corporate group to push ahead with initiatives to reduce environmental impact, manage chemical substances, make effective use of water resources, preserve biodiversity, and combat climate change.

The Group has established the Nippon Paper Group Environmental Charter, based on which it engages in corporate activities that pay consideration to biodiversity across its entire value chain, from a long-term perspective, in order to contribute to the creation of a resource-circulating society.

The Nippon Paper Group Environmental Charter

(Established on March 30, 2001, and revised on March 30, 2007)

Philosophy

The Nippon Paper Group is committed to helping preserve the global environment over the long term and contributing to the development of a recycling based society by carrying out its corporate activities in recognition of the importance of biodiversity.

Basic Policy

1. Act to counter global warming
2. Protect and develop forest resources
3. Increase use of recycled resources
4. Comply with environmental statutes and work to minimize our environmental impact
5. Develop environmentally friendly technologies and products
6. Engage in active environmental communication

Environmental Management Promotion Structure

The company has established a Risk Management Committee under the supervision of the Board of Directors of Nippon Paper Industries and headed by its president (see P.25).

The Nippon Paper Group Environmental Committee (which is chaired by the company's executive officer responsible for environmental issues) drives the practical implementation of the philosophy and basic policies of the Nippon Paper Group Environmental Charter by managing the progress of environmental action plans at each Group company.

It also assesses and considers environment-related risks and opportunities and reports to the company's Board of Directors through the Risk Management Committee.

The Management Executive Committee (MEC) deliberates and makes decisions on environmental policies and strategies with regard to risks and opportunities assessed and considered by the Environmental Committee. By reflecting these in Group business strategies, the MEC seeks to achieve growth for the Group while aiming to maintain a balance between environmental and economic aspects.

The company has also established a New Product Development Committee.

This committee utilizes Group technologies and resources and works to develop products derived from wood biomass that contribute to achieving the creation of a low-carbon society while meeting accurately to customer needs.

The Group is also enhancing its environmental management system through collaborations between its head office, mills and environment-related divisions. For example, the company has introduced a system that enables centralized management of the state of emissions of atmospheric pollutants emitted from the boilers at its mills, and is working to ensure legal compliance and reduce environmental impact through simultaneous monitoring both at head office and at the mills themselves.

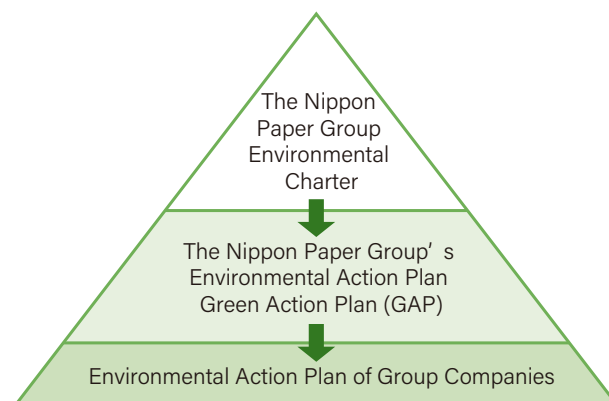
System to Promote Environmental Management



Environmental Action Plan (Green Action Plan)

The Nippon Paper Group has established an environmental action plan—the Green Action Plan—in accordance with the six basic policies expressed in its Environmental Charter. Since the establishment of this action plan in 2006, the Group set quantitative and qualitative management targets every five years relating to response to climate change and all manner of other environmental issues, and carried out specific initiatives to achieve those targets.

Based on this, Group companies have each established their own environmental action plans to reflect their own individual business characteristics. Their efforts to fulfill these plans are improving our effectiveness towards achieving the targets of the Green Action Plan.



→ Green Action Plan 2020

https://www.nipponpapergroup.com/english/mt_pdf/Green%20Action%20Plan%202020.pdf

Introducing environmental management systems

In order to promote environmental management, the Group is introducing various environmental management systems, including ISO14001 and Eco-Action 21. Nippon Paper Industries has obtained ISO 14001 certification for 100% of its production locations (as of March 31, 2020).

→ Conditions with regard to ISO14001 and Eco-Action 21 certifications.

https://www.nipponpapergroup.com/english/csr/esg_data_packet.html

Strengthening Environmental Compliance

Two-Pronged Approach

The Nippon Paper Group is strengthening its environmental compliance from a preventive standpoint, using a two-pronged approach of establishing frameworks for preventing problems and ensuring that no problems are missed, and engaging in its business activities with a priority on legal compliance.

In fiscal 2019, the Group was not subject to any adverse dispositions with regard to compliance with environment-related laws, etc. (including fines, cancellation of licenses, or orders to suspend operations or use of equipment).

1. Building Systems to Prevent Problems

- Building a workplace that emphasizes the importance of the environment (environmental compliance training)
- Strengthening the system for identifying applicable laws and regulations
- Implementing measures from both the facility and technology perspectives

2. Establishing a Framework that Ensures All Problems are Covered

- Enhancement of environmental audits
- Enhancement of environmental management system
- Engaging in environmental communication and active information disclosure

Systems to Ensure that the Laws and Regulations to be Complied with are Identified

To respond accurately to wide-ranging and relatively frequent changes in environmental legislation, the Group has developed a framework which uses a legal and regulatory search system to search for and share information on revised laws and relevant trends, and ensure a reliable approach to legal compliance.

Introducing Equipment and Measurement Devices to Prevent Environmental Accidents

The Group identifies risks of environmental accidents and assesses both their probability and their potential impact on the environment, and accordingly introduces equipment and measuring devices necessary to prevent such accidents. Each Group company is engaged in continuous measures to prevent large-scale leaks of oil or chemical agents, including the installation of liquid containment barriers (oil fences, etc.) and measuring devices.

Environmental Communication

The Group has also established the Nippon Paper Group Risk Communication Guidelines. The Group conducts environmental risk communication with residents and local government authorities in accordance with these guidelines. In cases such as the installation of large-scale facilities, we also hold explanatory meetings beforehand to provide a better understanding of any environmental impact from installation work and operation of the installed equipment.

Responses to Opinions and Complaints

In addition to receiving opinions and inquiries via its website, the Nippon Paper Group has established a complaint and inquiry contact at each of its mills. We have also adopted environmental monitoring systems and take other steps to encourage input from local residents. When a complaint is received, we move swiftly to determine possible causes, and implement emergency and permanent solutions. We also explain to the person who lodged the complaint what happened and what we did to resolve the situation, so that they can be satisfied that we have responded appropriately.

Complaints	No.
Noise	8
Dust and mist dispersal	2
Odor	2
Vibration	1
Smoke	25*
Other	0
Total	38

* Between June and August 2019, there was a problem in which white smoke descended from the recovery boiler at Nippon Paper Industries Co., Ltd.'s Akita Mill. And for a while many complaints (including inquiries) were made by local residents. Explanations of the situation were given by Akita Mill, and inspections and maintenance of equipment are being conducted to resolve the problem.

Environmental Audits Emphasizing Legal Compliance and Risk Control

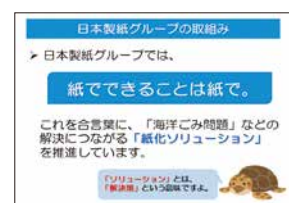
Based on the "Environmental Management for Pollution Prevention," an action guideline for environmental management issued by the Ministry of the Environment (MOE) and the Ministry of Economy, Trade and Industry (METI), the Group conducts double-checking of compliance with laws and regulations through internal audits by each business site and environmental audits by the Head Office's environmental department. A system of mutual audits between Group companies has also been put in place as an additional step to enhance monitoring of risks.

Environmental Education and Training for Employees

The Nippon Paper Group provides basic to specialized environmental education covering topics such as wastewater treatment plant operation. In addition, the Group encourages employees to participate in external training and take advantage of other opportunities to gain pollution prevention qualifications and expertise. To help elevate the environmental protection awareness of employees, we also hold the Nippon Paper Group Eco-Photo Contest and conduct environmental e-learning. These activities take place in the month of June – Environment Month in Japan. In 2019, over 7,200 Group employees participated in our environmental e-learning program, which focused on the problem of marine plastic waste.



Environmental e-learning slides



Reduction of Environmental Impacts

Assessing environmental issues from multiple perspectives and reducing our environmental impacts

Basic Stance

In supplying the products and services needed by society, it is impossible to eliminate the environmental impact of corporate activities.

However, as set forth in the Nippon Paper Group Environmental Charter, the Group can contribute to the creation of a resource circulated recycling-based society by minimizing these impacts by as much as possible.

At the same time as energy and water are used in the manufacturing process, wastes, greenhouse gasses, air pollutants such as sulfur oxides (SOx) and nitrogen oxides (NOx), and effluent containing organic substances are generated.

The Group has introduced equipment and technology to remove these substances and aims to reduce emissions to less than the legally mandated standards or those agreed upon with local governments, thereby reducing the environmental impact as much as possible.

Key Environmental Performance Indicators

https://www.nipponpapergroup.com/english/csr/esg_data_packet.html

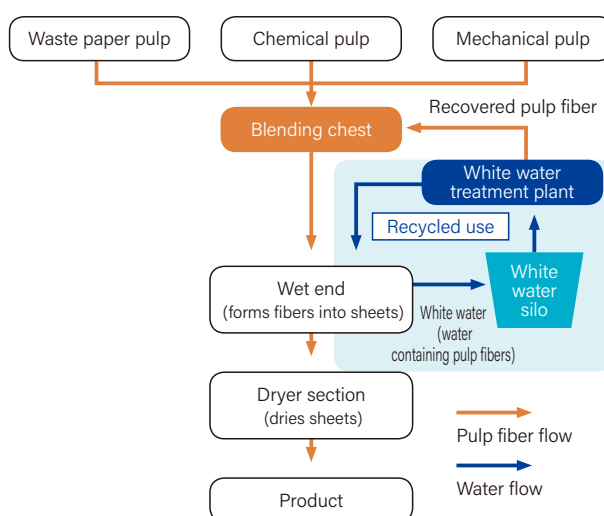
Effective Use of Water Resources

The manufacturing of paper requires large volumes of water. One example is the wet end of the papermaking process, in which pulp fiber from woodchips and wastepaper is dispersed in water to eventually create thin sheets.

The Nippon Paper Group's papermaking process efficiently and effectively uses water resources, which are a form of natural capital. It does this by recovering "white water," which contains very fine pulp fibers from the wet end of the papermaking process, removing the fibers through a treatment process, and then sending the removed fibers to the pulp blending chest and returning the water to the wet end of the manufacturing process.

At present, we have received no information from local government authorities or residents to indicate that the mills operated by Nippon Paper Group companies are having an environmental impact as a result of their water intake, and water risks in Japan are low.

Water Recycling System



Controlling Chemical Substances

The Nippon Paper Group examines the chemical substances it uses in its production processes in accordance with its Chemical Substance Management Guidelines. We do this in exercising risk management that monitors how much of these substances we use and how much we release into the environment.

We disclose information on our management, release, and transfer of PRTR*-controlled substances to local stakeholders through environmental risk communications at each of our mills and other production sites. In fiscal 2019, the Nippon Paper Group released 141 tonnes of PRTR-controlled substances and transferred 80 tonnes.

With regard to polychlorinated biphenyl (PCB) waste stored Nippon Paper Industries which was announced in January 2019, the company is cooperating with local government authorities to process the waste appropriately.

* The Pollutant Release and Transfer Register (PRTR) is a system for monitoring the movement of chemical substances posing risks to human health or ecosystems. Under the PRTR system, businesses track the amounts of these chemicals they have released into the environment or transferred to other business locations and report this information to government authorities.

Amounts of substances subject to the PRTR Law released and transferred

https://www.nipponpapergroup.com/english/csr/esg_data_packet.html

Preventing Soil Pollution

The raw materials and chemicals used by Nippon Paper Group mills contain almost no heavy metals, trichloroethylene or other soil contaminants. Fiscal 2019 was another year in which there were no instances of contaminated soil generated at Group companies.

Preventing Noise and Vibration

The Nippon Paper group is engaged in efforts utilizing IoT technologies to prevent the occurrence of noise and vibrations.

CASE Development and Introduction of "e-musen junkai" (e-wireless patrol) system

Pulp and paper mills use large machines incorporating numerous motors and other rotating parts that generate noise and vibration.

Nippon Paper Industries and NIPPON PAPER UNITEC have developed—and are now operating—the "e-musen junkai" (e-wireless patrol) system, which uses wireless sensors to constantly monitor equipment for signs of abnormalities. This system uses IoT technology to accumulate temperature and vibration acceleration data on machinery and equipment in operation. Analyzing

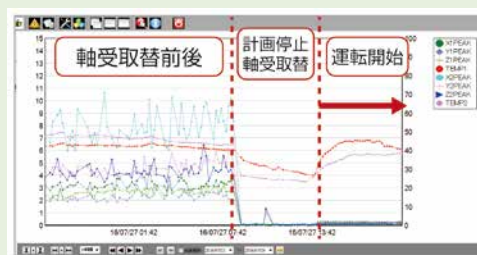
trends in this data enables us to discover abnormalities early on. By discovering abnormalities at an early stage, this system helps to prevent the occurrence of equipment problems and avoid vibration, noise, and other causes of complaints. In addition to introducing this system at all NPI mills, we have also commenced sales to external clients, including customers in Thailand as of fiscal 2019 (see P.61).



An e-wireless patrol device installed on an electric drive motor at Shiraio Mill.



An e-wireless patrol device*



An example of monitoring using the e-wireless patrol system

Climate Change Initiatives

* Please refer to Integrated Report, P. 62-69. https://www.nipponpapergroup.com/english/ir/Integrated_Report_E2020_03.pdf#page=9

Contributing to the creation of a low-carbon society through initiatives to reduce greenhouse gas emissions

Basic Stance

The issue of climate change carries a high degree of uncertainty. It is a difficult problem that will require long-term responses and countermeasures to tackle. Moving forward, the Nippon Paper Group will contribute to the creation of a low-carbon society by working both in the medium term to steadily reduce greenhouse gas emissions, and in the long term to attempt the challenges of mitigating and adapting to climate change.

Medium-term scope

- Improving productivity
- Introducing new technologies
- Management in the supply chain

Long-term scope

- Introducing innovative technologies
- Utilizing the Group's proprietary technology

Achieving the Creation of a Low Carbon Society

Organizational Structure to Respond to the Problem of Climate Change

In addition to the various impacts brought about by climate change due to the progression of global warming, the Nippon Paper Group also regards global developments and Japanese government policies based on the Paris Agreement as factors with an important impact on its management; and therefore engages in environmental management which seeks to maintain a balance between environmental and economic aspects.

As one aspect of its system for implementing environmental management (see P.40), the Group has established the Nippon Paper Group Environmental Committee, under the Risk Management Committee (headed by the president of Nippon Paper Industries) The committee assesses and considers risks and opportunities relating to climate change.

Based on these assessments and considerations, the Management Executive Committee (MEC) deliberates and makes decisions on policies and strategies regarding climate change. By reflecting these in Group business strategies, the MEC seeks to achieve growth for the Group while aiming to maintain a balance between environmental and economic aspects.

Medium-term initiatives

From a medium-term perspective, the Nippon Paper Group established an environmental action plan—the Green Action Plan—in 2006. Since the establishment of this action plan, we have set quantitative and qualitative management targets every five years relating to response to climate change and all manner of other environmental issues, and carried out specific initiatives to achieve those targets. (See Data Section)

Moving forward, with a view to 2030 and 2050, the Group will aim to minimize greenhouse gas emissions in accordance with its production structure, and work proactively to improve production efficiency and introduce new technologies.

From a long-term perspective, the Group will work to incorporate the progress of new, innovative technologies created through various development efforts—both in Japan and overseas—into its scenarios. The Group is In addition, the Group is actively developing cellulose nanofibers and new pulp and paper materials with added functionality, and will continue to contribute to the realization of a low-carbon society through the provision of products and services derived from woody biomass that accurately meet the needs of customers.

*Please also refer to P.62-69 of our Integrated Report 2020.

→ Nippon Paper Integrated Report 2020.

https://www.nipponpapergroup.com/english/csr/esg_data_packet.html

New Biomass Fuel Office established

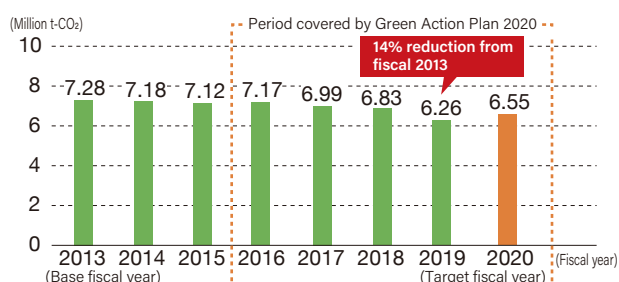
Nippon Paper Industries is investing its energies into the biomass power generation business, in order to cater to growing needs in the energy business field for a low-carbon society.

On April 1, 2020, the company established the new Biomass Fuel Office, under the Raw Materials Division's Forest Materials Department. Moving forward, the office will aim to actively advance the development and procurement of wood biomass fuels utilizing the advantages of the company's supply chain for sustainable wood resources, and procure sustainable fuels in response to climate change by gathering a wider range of information regarding renewable energy.

Reduction of Greenhouse Gas Emissions

In its environmental action plan—the Green Action Plan 2020 (see P.41)—the Nippon Paper Group has established the objective of reducing greenhouse gas emissions by 10% in comparison with the fiscal 2013 level. In fiscal 2019, the Group reduced our emissions by 14% in comparison with the fiscal 2013 level due to the beneficial effects of equipment consolidations / updates and other energy-saving investments, and continued efforts to shift to non-fossil fuel energy.

Progress of the Green Action Plan 2020 Environmental Action Plan Greenhouse gas emissions*1 (Japan*2)



* 1 Sum total of Scope 1 and Scope 2 figures (for individual scope figures, see ESG data packet)
https://www.nipponpapergroup.com/english/csr/esg_data_packet.html

* 2 Companies subject to the Act on the Rational Use of Energy at consolidated and non-consolidated subsidiaries in Japan

The Three Pillars of Reducing Greenhouse Gas Emissions

Achieving the creation of a low-carbon society requires major reductions in greenhouse gas emissions. At the same time as making efforts based on the Japan Business Federation (Keidanren) and Japan Paper Association's Action Plan for a Low Carbon Society, the Nippon Paper Group is working proactively to reduce greenhouse gas emissions based on an understanding of its business characteristics, which include high energy consumption and ownership of forest resources.

Specifically, we are working to reduce greenhouse gas emissions at each stage of our value chain through three key initiatives: shifting to alternative fuels (fuel conversion), promoting energy saving in production and logistics processes (energy saving) and absorbing and fixing CO₂ through the appropriate management of company-owned forests (carbon sequestration).

Achieving the Creation of a Low Carbon Society

Nippon Paper Group initiatives to reduce greenhouse gas emissions

Reduction of greenhouse gas emissions from business activities

Absorption and sequestration of CO₂ in company-owned forests

Fuel conversion

Energy saving

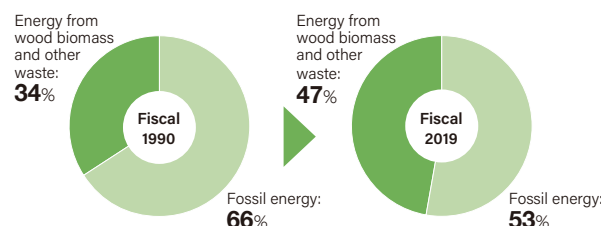
Carbon sequestration

Fuel Conversion

The Group uses black liquor (produced as a by-product of the production of pulp) and construction waste materials as wood biomass fuels. At the same time, it appropriately procures wood biomass through its domestic and overseas wood biomass collection network for utilization as a renewable source of energy. So far, too, the Group has installed two types of boilers—high efficiency boilers, and boilers capable of burning construction waste and other biomass fuels, used tires, RPF* and other waste fuels. In fiscal 2019, the domestic Group's fossil energy usage ratio (calorie conversion) for its overall use of fuels fell to 53%. Moving forward, the company will continue to push ahead with fuel conversion initiatives and further reduce our use of fossil fuels.

* An abbreviation for "Refuse derived paper and plastics densified Fuel." RPF is a high-grade solid recovery fuel primarily composed of wastepaper and waste plastics, mostly from industrial waste for which material recycling is quite difficult.

Fossil energy usage ratio (calorie conversion) of all fuels used by the Nippon Paper Group (Japan)



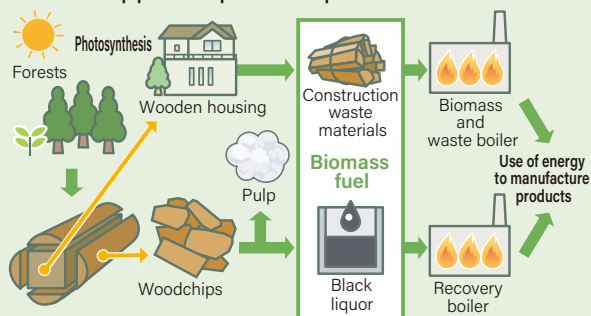
The Nippon Paper Group is one of the Leading Corporate Users of Wood Biomass Energy in Japan

The Group is working to increase its use of black liquor and other wood biomass fuels.

The amount of wood biomass energy used by the group in fiscal 2019 was equivalent to around 4%* of all non-fossil energy supplied in Japan (excluding nuclear and hydroelectric power). *

* Estimated by Nippon Paper Industries Co., Ltd. based on domestic primary energy supply data (finalized data for fiscal 2018) published by the Agency for Natural Resources and Energy

Forms of Biomass Energy Utilization at the Nippon Paper Group



CASE Use of Torrefaction Technology and Wood Biomass Fuels

Nippon Paper Industries Co., Ltd. has established a torrefaction technology which is useful in manufacturing new wood biomass fuel as an alternative to coal for thermal power stations. Torrefaction is a technology that carbonizes woody biomass at a relatively low temperature. This has been developed for the production of fuels which remain relatively high in calories, are easy to crush, and have developed a water resistance that makes them suitable for outdoor storage. The Company has established a torrefaction technology that contributes to the production of new woody biomass fuel to serve as an alternative to coal for thermal power generation.



New wood biomass fuel samples

CASE In-house Production of Solid Fuel from Waste

Nippon Paper Industries's Otake Mill converts the paper sludge*1 and wastepaper residues*2 produced in the manufacture of linerboard and corrugated medium (for containerboard) into solid form on site, and uses it as a form of energy to drive the mill itself. In fiscal 2019, the mill produced 4,200 BD tons*3 of fuel. Self-production of fuel from waste leads to reductions in coal usage, and also contributes to reducing the amount of waste sent for final disposal through the recycling of waste.

*1 A sludge produced in the manufacture of paper. It contains mainly cellulose fibers and minerals drained during the paper dewatering / drying process.

*2 Foreign matter produced when processing wastepaper.

*3 As of April 2019, the mill has also begun accepting waste plastic refuse from the city of Otake as a raw material.



Solid fuel produced from wastepaper residues

Promoting energy-saving in manufacturing and logistics processes

Rollout of Energy-saving Initiatives from the Paper and Paperboard Business at Japan and Overseas Locations

The Nippon Paper Group has been working continuously to implement energy saving at its paper mills in Japan for many years. We endeavor to increase the effectiveness of these efforts by seeking to share examples of effective initiatives with other mills. In recent years, energy-saving knowledge obtained through efforts at mills in Japan was also been applied at the paper mills of overseas Group companies in countries such as Australia and Thailand.

CASE Overseas Deployment of Energy-saving Examples in the Dryer Part

In recent years, Nippon Paper Industries Co., Ltd.'s Asahikawa Mill has achieved energy-saving benefits by working to reduce the amount of steam used in the dryer sections of its paper machines, which dry sheets of pulp and finish them into paper. This is to use chemicals to create a water-repellent film inside the hollow equipment to repel water condensation and increase the efficiency of heat transfer.

Based on this example, Siam Nippon Industrial Paper(Thailand) has adopted the same method, and is working to verify the energy-saving benefits of this approach.

Green Logistics

The Nippon Paper Group is working to implement green logistics that will lead to reductions in greenhouse gas emissions, from the two perspectives of improving loading efficiency and shortening transportation distances.

Achieving the Creation of a Low Carbon Society

Logistics-related initiatives

Improving loading efficiency

Shortening transportation distances

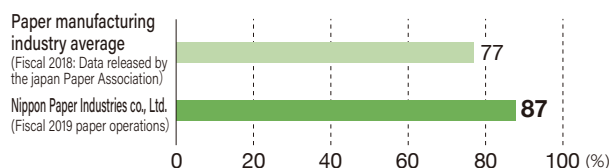
Promoting a modal shift to rail or marine transportation

Pursuing direct delivery and joint delivery

From the perspective of improving loading efficiency, the Group is advancing its use of modal shift transportation, using mainly rail and non-international marine transport to move large volumes of cargo over long distances with every trip. Nippon Paper Industries is maintaining a high modal shift rate*, at 87% for its paper business.

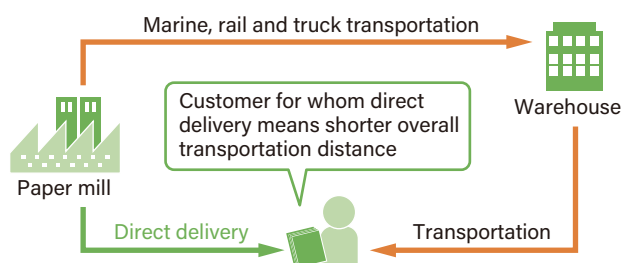
* The percentage of rail or marine (including coastal shipping and ferries) transport in general cargo transported over 500 kilometers.

Comparison of modal shift rates



The entire Group is also working together with logistics service providers to bypass warehouses and deliver products directly to customers. These efforts enable us to shorten overall transportation distances and increase transportation efficiency, contributing to the reduction of CO₂ emissions.

Reducing the total distance by direct delivery from paper mills



Obtaining Green Management Certifications

Under the Green Management Certification system, certifications are awarded and registered by the Foundation for Promoting Personal Mobility and Ecological Transportation. Companies that undertake at least a certain minimum level of initiatives based on the Green Management Promotion Manual are eligible for these certifications. Within the Group, 16 business locations of 8 Group companies have obtained* Green Management Certification. The Nippon Paper Group is actively implementing ecological driving, vehicle inspection and maintenance, reduction of vehicle disposal and waste generation, proper waste handling and recycling, and other practices consistent with green management.

* Of those locations that have obtained certification, 15 locations at 8 companies have obtained Green Management Certification Long-Time Commendation, which is awarded to business locations that have been certified and registered for 10 years continuously since the date of their initial registration (in the first year).



Green Management Certification logo
(Left: trucking business, right: warehouse business)

Green Management Certifications* (As of July 1, 2020)

Company
NIPPON PAPER LOGISTICS, Kyokushin Transport, Nanko Logistics Support, Hotoku, NP Unyu Kanto, NP Unyu Fuji, NP Unyu Kansai, and NP Unyu Iwakuni

* Consolidated and non-consolidated subsidiaries in Japan

Longer-length Toilet Paper Rolls for Improved Transportation and Storage Efficiency

The SCOTTIE® Flowerpack four-roll, triple-length (double), which was launched by Nippon Paper Crecia in 2016 (see P.64) was created through the application of technical development that has enabled toilet paper of up to three-times the previous length* to be wrapped onto a single roll, while at the same time maintaining product quality. In addition to saving space in the home and in stores, and reducing the amount of cores and packaging used, this also leads to a reduction in CO₂ emissions during transportation due to increased logistics efficiency. The rolls are also well-suited to use as supplies in readiness for disasters.

* In comparison with the SCOTTIE® Flowerpack 12-roll, double length,



Absorbing and Sequestering CO₂ through Proper Management of Company-Owned Forests

Trees absorb and fix CO₂ in the body from the atmosphere. Forests are also referred to as a storehouse for carbon, and conservation of forests through appropriate management contributes to the fight against global warming. The Nippon Paper Group manages 173 thousand hectares of forests, consisting of 90 thousand hectares in Japan and 83 thousand hectares across four overseas countries (see P.34-38). Based on the concept of sustainable forest management, the Group appropriately manages these forests and maintains the CO₂ absorption and sequestration capabilities of the trees. Forests owned by the Group continuously fix approximately 32 million tonnes of CO₂. In this way, we are helping to prevent global warming by limiting the release of CO₂ into the atmosphere.

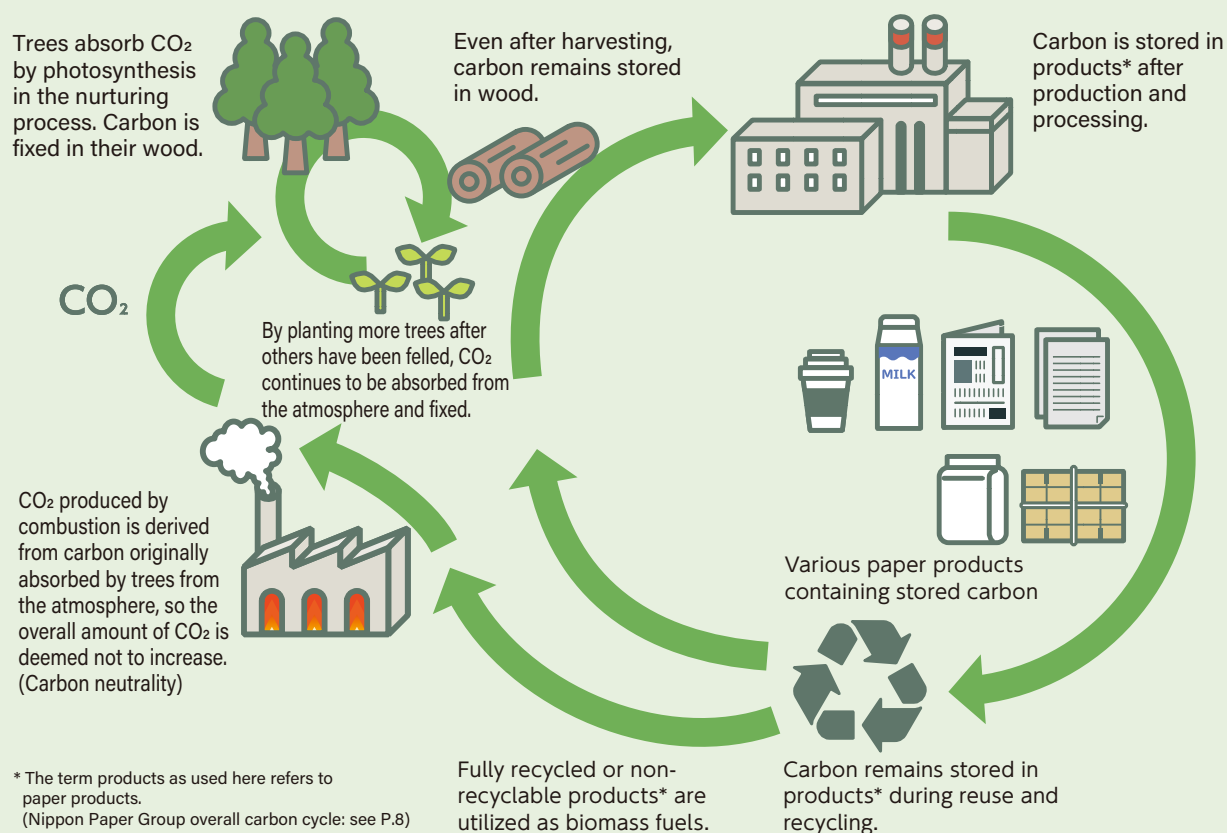
The Characteristics of Wood Resources: The Carbon Cycle

Trees, which the Group has been using for many years as a major raw material, are a renewable resource that can be planted and grown, and at the same time, they can continue to fix the CO₂ absorbed by photosynthesis as carbon.

After being harvested and processed into various wood-derived products, CO₂ is retained in a fixed state, and once it is used as a product, it can be reused and recycled appropriately, thus enabling CO₂ to be fixed for longer period of time.

Finally, they can be used as carbon-neutral biomass fuels, which do not cause an increase in atmospheric CO₂ concentration.

CO₂ absorbed from the atmosphere is continuously stored in products



Quantifying CO₂ Absorbed by Appropriately Managed Company-owned Forests as Credits and Contributing to Offsetting Initiatives

The J-credit system is a system under which the government certifies the amount of reduction and absorption of greenhouse gases such as CO₂ emissions as credits.

The Nippon Paper Group engages in appropriate management of its company-owned forests with the aim of achieving sustainable forest management. The greenhouse gas absorption effects of its partial tree thinning projects have been certified with J-Credits. The supply of these credits as forest-derived credits is contributing to attempts at carbon offsetting in local communities.



A forest where tree thinning projects have been certified under the credit scheme (Sudagai company forest, owned by Nippon Paper Lumber)



An on-site certification survey

Environmental Responsibility

Promoting Recycling

Contributing to the development of a recycling-based society

Basic Stance

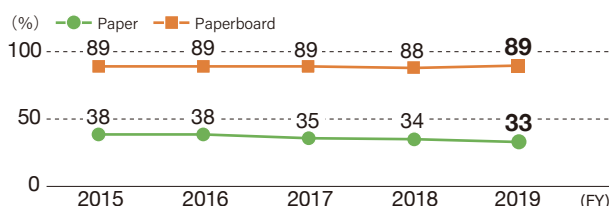
In its Environmental Charter, The Nippon Paper Group highlights the basic policy of increasing the use of circulating resources and aims to contribute to the development of a sustainable resource circulating society.

The Group provides a variety of products through the effective utilization of wood from trees, which are a renewable resource, and engages in recycling by reusing these products as raw materials after use. At the same time, we are also advancing the circular resource usage of not only products themselves but also the byproducts generated in production processes as resources, with the aim of minimizing the volume of waste sent for final disposal.

Initiatives for Using Wastepaper

Despite efforts to secure forest resources as a raw material for paper through sustainable forest management, there is a limit to the possible volume of supply, and paper manufacturers continue to utilize wastepaper as an essential and indispensable resource. The price of wastepaper as a resource is affected by international market conditions. As demand for newsprint and printing paper has declined in recent years, there is a decreasing trend in the amount of waste newspaper generated in Japan, and it is becoming more difficult to procure sufficient amounts of wastepaper as a material. Despite this, the Group is continuing to further expand its use of wastepaper and working to develop technologies that will enable the use of types of wastepaper which are currently difficult to recycle.

Trend of used paper utilization rate in Japan



Closed Loop Initiatives

In order to make long-term, stable use of collected waste newspaper as a recycled resource and raw material for newsprint, Nippon Paper Industries has constructed a closed loop scheme in which it purchases wastepaper directly from newspaper companies, which are its customers.

Collection and Recycling of Paper Cups

In recent times, the problem of marine plastic waste has become the focus of increased media attention, and interest in paper materials is growing from the perspective of reducing the amount of disposable plastic used. Nippon Paper Industries collects paper cups used at its head office and recycles them into material for containerboard at its Kanto Mill (Ashikaga). Since this initiative was launched in September 2019, we have collected a total of around 100,000 cups (as of July 31, 2020).

In this way, we are advancing initiatives not only to convert materials into paper but also to collect and recycle paper cutlery (such as paper cups and plates), in cooperation with other companies and organizations.

Collection and Recycling of Paper Cups at Nippon Paper Industries (NPI) head office



Collected paper cups



Cups are transported to NPI's Kanto Mill (Ashikaga)



Cups are broken down at the mill



A new roll of containerboard

Paper-Pak Carton Collection and Recycling

Nippon Paper Industries(NPI) is a member of the Committee for Milk Container Environmental Issues. The Committee has set the goal of increasing the paper beverage carton collection rate to at least 50% by 2020. In December 2019, the collection rate for fiscal 2018 was finalized at 42.5%, a decrease of 0.9 percentage points in comparison with the previous fiscal year.

The company is gradually installing Paper-Pak collection boxes at Group company sites and is working to increase employee awareness of Paper-Pak recycling.

In addition, the company has positioned the collection of paper cartons as an activity that enables society as a whole to make effective use of resources, and is working with collection companies to strengthen the efforts to promote recycling at various facilities and schools.

2017, the company has also commenced collection activities using a proprietary method, primarily in Nerima City, Tokyo. In fiscal 2019, three tonnes of Paper-Paks were collected and used as a raw material for household paper products.



An explanation of Paper-Pak collection and recycling at EcoPro 2019

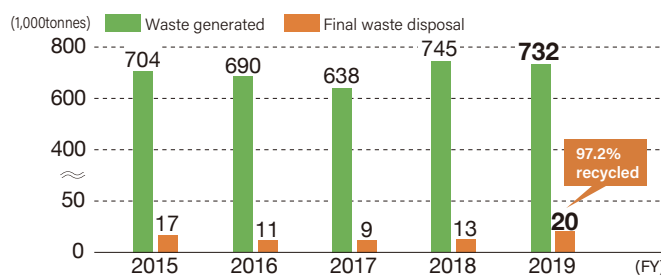
Recycling Industrial Waste

In its environmental action plan—the Green Action Plan 2020 (see data section https://www.nipponpapergroup.com/english/csr/esg_data_packet.html) the Nippon Paper Group has set the objective of achieving a waste recycling rate of at least 98%.

In order to reduce the amount of industrial waste sent to landfill and other forms of final disposal, we have advanced initiatives such as revising production processes and making effective use of boiler ash as civil engineering material. As a result of these initiatives, in fiscal 2019, we achieved a recycling rate of 97.2%.

Progress in Implementing the Environmental Action Plan - Green Action Plan 2020

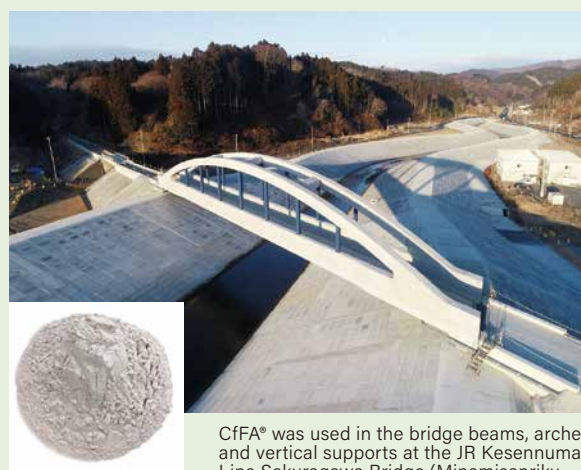
Waste generated and final waste disposal in Japan



Making and Selling CfFA® (Carbon-free Fly Ash), a Concrete Admixture that makes Effective Use of Coal Fly Ash

Nippon Paper Industries(NPI) is manufacturing CfFA®—a concrete admixture made from heat-modified fly ash, which is a byproduct from the coal-fired thermal power plant (a self-supply power generation facility) at its Ishinomaki Mill—and selling it as a construction material.

CfFA® consists of fly ash from which unburned carbon, which can have a negative effect on the quality of concrete, is removed. It has the characteristic of offering consistent quality. Until now, it has been used for earthquake recovery construction (bridges and seawalls, etc.) primarily in the Tohoku region of Japan, and in precast concrete and other concrete products, where it is adopted for increasing durability and prolonging the life of structures. Moving forward, NPI will continue in its aim of having CfFA® contribute to the development of infrastructure.



CfFA®

CfFA® was used in the bridge beams, arches and vertical supports at the JR Kesennuma Line Sakuragawa Bridge (Minamisanriku, Motoyoshi District, Miyagi)

Environmental Responsibility

Preserving Biodiversity

Advancing initiatives to ensure harmony with business activities

Basic Stance

The business activities of the Nippon Paper Group are largely dependent on and also have various impacts on forests, which nurture biodiversity. The Group recognizes that the sustainable use of forests is fundamental to the ongoing existence and advancement of our business.

The Nippon Paper Group's Environmental Charter (see P.40) states that the Group will engage in corporate activities that recognize the importance of biodiversity.

The Group established its Basic Policies on the Preservation of Biodiversity, established in April 2016, and is engaged in efforts to preserve biodiversity through its global supply chain.

The Group is working to preserve biodiversity through its main business activities, as well as activities utilizing its resources and technologies.

Preserving Biodiversity

Nippon Paper Group initiatives

Initiatives implemented in the conduct of our core business activities

- Protection of forest biodiversity
- Reduction of environmental impacts of production activities

Initiatives leveraging our resources and technologies

- Use of company-owned forests
- Use of proprietary technologies

Basic Policy on the Preservation of Biodiversity

(Established April 1, 2016)

■ Principle

The Nippon Paper Group, a corporate group to which forest resources are of fundamental importance, appreciates the natural gifts bestowed by biodiversity and, by preserving biodiversity, aims to help create a sustainable society that can continuously enjoy ecosystem services.

■ Basic Policy

1. Recognizing the protection of biodiversity as a critical social issue, we will work to pursue business activities that are in harmony with the sustainable use of ecosystem services.
2. In supply-chain management, we acknowledge the impacts on biodiversity of cross-border use of ecosystem services, and will manage our ecosystem service usage properly
3. In an effort to reduce environmental impacts on biodiversity, we will actively work to recycle and save resources.
4. We will promote the development of technologies, products, and services that contribute to the preservation of biodiversity and the sustainable use of ecosystem services.
5. Endeavoring to raise employees' awareness of biodiversity, and collaborating with stakeholders, we will contribute to the building of a society that nurtures biodiversity

Basic Policy on the Preservation of Biodiversity

Biodiversity surveys (Domestic company-owned forests and overseas conservation areas/protected forests)
Biodiversity surveys (Domestic company-owned forests and overseas conservation areas/protected forests)
Topography confirmation of riparian forests and other areas, fixed-point surveys of forest ecosystems, etc. (Ex.)
Regular surveys in overseas protected area, surveys of Blakiston's fish owls conducted with the Wild Bird Society of Japan, ornithological and vegetation surveys in the company-owned Kitayama Forest in Shizuoka Prefecture

Matters to consider or confirm when performing forestry operations

- <Japan> **Commercial forest areas**
Adjustment of Location and Timing for Forestry Operations
Preserving Blakiston's Fish Owl Habitat while Pursuing Forestry Operations
Presence of endangered species including in prefecture Red Lists*
- <Overseas> Performance of commercial operations that are considerate of local biodiversity

*List of threatened animal and plant species.

Particularly sensitive areas

<Japan>

Environmental forest areas :

Limiting logging and maintaining existing forest ecosystems

Riparian forests :

Preserving biodiversity by prohibiting logging

Protected areas :

Protection of the Blakiston's fish owl by prohibiting logging

<Overseas>

Conservation area / Protected forests* :

Preserving biodiversity by prohibiting logging

*Areas not designated for afforestation. Riparian forests are managed as part of these areas.

Third-Party Sustainable Forest Management Validations

Forest certification programs

Forest certifications have been awarded to Nippon Paper Industries in recognition of its practice of biodiversity-friendly forest management in all of its company-owned forests in Japan and overseas.

Initiatives in Our Core Business Activities

The Nippon Paper Group works to reduce its impact on biodiversity in its manufacturing processes of paper and other products, such as by processing wastewater and reducing greenhouse gas emissions. In implementing sustainable forest management (see P.30-32), too, the Group conducts researches of biodiversity in its company-owned forests and engages in initiatives aimed at preserving that biodiversity.

CASE Preserving Blakiston's fish owl habitat while Pursuing Business Activities - Collaborating with the Wild Bird Society of Japan

In 2010, Nippon Paper Industries entered into an agreement with the Wild Bird Society of Japan where approximately 126 hectares of forestland owned by the company in Hokkaido was identified as a sanctuary for Blakiston's fish owl. This sanctuary is home to three confirmed braces of this endangered species.

In May 2015, we signed a memorandum of understanding* for the pursuit of business activities while preserving Blakiston's fish owl habitat in company-owned forests in Hokkaido. After collaborative surveys conducted in an

atmosphere of mutual trust, we have clearly documented standards for methods and timing for continuing lumber production, while also protecting habitat and breeding activity, without establishing protected areas.

In 2020, the Group engages in activities to assist the breeding activities of Blakiston's fish owls by installing several artificial nesting boxes in company-owned forests in Hokkaido, in cooperation with the Wild Bird Society of Japan (see P.85).

*The Group was awarded the Biodiversity Action Award 2015 as part of The United Nations Decade on Biodiversity.

Fiscal Year	Survey Description
2010	Large trees suitable as Blakiston's fish owl habitat
2011	Bird species habitat
2012	Nesting survey focusing on white-tailed eagles and Steller's sea eagles, and an audio survey of nocturnal bird species
2013	Mammals and Blakiston's fish owl habitat
2014	Geographic activity scope of the Blakiston's fish owl
2015-	Blakiston's fish owl habitat, other bird species habitat



(Photo courtesy of the Wild Bird Society of Japan)

Blakiston's fish owl

Standing 70 to 80cm high and weighing 3 to 4.5 kg, Blakiston's fish owl is the world's largest owl, with a wingspan of 180 cm. Formerly numbering over 1,000 and found throughout Hokkaido, Blakiston's fish owls are now found mainly in the eastern parts of Hokkaido, with confirmed numbers of around 160, making up 70 braces. Blakiston's fish owl was identified as a national protected species in 1971, and placed on the Red List of critically endangered species by Japan's Ministry of the Environment.

CASE Conducting Biodiversity Research Overseas (AMCEL S.A., Brazil and Volterra S.A., Chile)

AMCEL S.A. (Brazil) owns approximately 300thousand hectares of land and has set aside 170thousand hectares as a conservation area. Volterra S.A. (Chile) owns approximately 19thousand hectares of forests and has designated about 5thousand hectares as

protected forests. These conservation areas include forests of high conservation value and are home to large numbers of plant and animal species, some of which are rare or endangered.

Initiatives by afforestation companies in South America

Fiscal Year	Description
AMCEL S.A.	
Regular water inspections	Installation of equipment for monitoring the quality and level of water in the afforestation area, and performance of regular water inspections
Wild animal and plant habitat researches in afforestation areas	AMCEL conducts habitat researches and monitoring of wild animals and fish in afforestation areas in a joint effort with multiple research institutions, including the Federal University of Paraná and the Federal University of Amapá.
Monitoring of vegetation in protected areas	AMCEL conducts continuous monitoring researches of vegetation in protected areas by outsourcing to the State of Amapá Environmental Research Organization.
Volterra S.A.	
Wildlife surveys in the company's Protected forests	Volterra conducts regular researches of animal life in protected forests, such as by installing cameras at fixed points. It checks on several rare mammal and bird species, such as the puma and the southern pudu, which is designated as a Near Threatened (NT) species. In 2019, the company launched a joint research project on rare animal life, with the University of Concepción.
Regular river surveys	To research impacts of forest operations on ecosystems, surveys of river water quality and biodiversity are performed on a regular basis in company-owned afforested areas.

AMCEL initiatives



Monitoring wild animal life



Monitoring Vegetation

Volterra initiatives



A southern pudu (a Near Threatened (NT) species)



Checking water quality

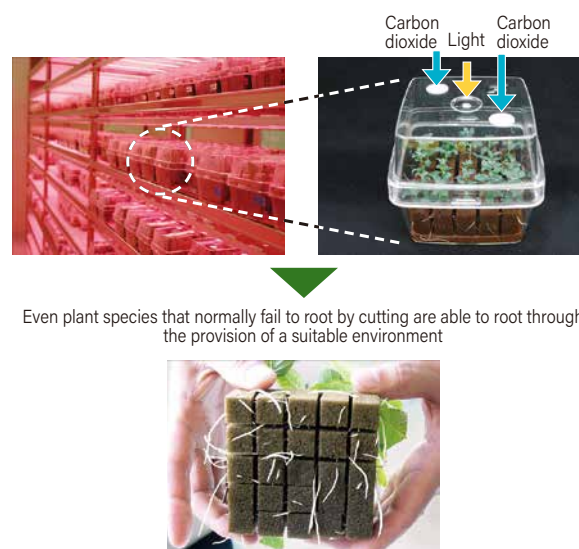
Initiatives Leveraging Our Resource and Technologies

Leveraging Proprietary Rooting Technologies

Nippon Paper Industries (NPI) has made use of its proprietary root forming technologies in the conservation of precious plant species through activities to preserve biodiversity.

The technology the company has developed creates an environment in which photosynthesis is vigorous and promotes plant rooting, making it possible to produce seedlings even for plants that have been difficult to root using conventional methods.

Utilization of this technology has enabled the propagation and nurturing of successor trees for endangered plant species and prominent cherry tree varieties in throughout Japan, contributing to the preservation of history and culture.



CASE Supporting the Activities of the Shirane-aoi wo Mamoru Kai

Shirane-aoi (*Glaucidium palmatum*: Japanese wood poppy) is designated as a "Threatened II" species for Gunma Prefecture. To protect this plant species, the Shirane-aoi Preservation Group was set up in December 2000, mainly at the initiative of Gunma Prefectural Oze High School and the residents of Katashina in Tone-gun, Gunma. As recognition of its achievements to date, it received the Greenery Day Minister of the Environment's Prize for Meritorious Service Related to the Natural Environment in April 2014.

On the part of the Nippon Paper Group, Nippon Paper Development—which manages Nippon Paper Industries's

Sugenuma Forest—has supported the operation of the Shirane-aoi Preservation Group since its initial establishment, and has made a portion of the Sugenuma Forest available to the group as a restorative plantation site for Shirane-aoi. Since 2002, Group employees have participated as volunteers in planting, seed collection, and other activities.



Planting Japanese wood poppies

Case Study Eradicating Invasive Plant Species from Iriomote Island ~Cooperation with the Iriomote Island Ecotourism Association

In August 2017, Nippon Paper Industries(NPI) entered into an agreement with the Forestry Agency Kyushu Regional Forest Office Okinawa District Forest Office to carry out forest conservation activities such as the eradication of non-native plants on approximately nine hectares of national forest of Iriomote Island. It has since been engaged in such efforts through cooperation with the Iriomote Island Ecotourism Association, which conducts activities for conserving and ensuring the continuity of the nature and traditional culture of the island. Iriomote Island is covered with highly diverse forests, including Japan's largest mangrove forest and subtropical broad-leaved trees, providing a habitat for precious animal and plant species such as the Iriomote wild cat, which has been designated a special national treasure (a Critically Endangered IA species). However, large numbers of invasive non-native plants have been found over an extensive area.

The company is therefore cooperating with the local people of Iriomote Island to eradicate non-native plant species such as the Bay Biscayne creeping-oxeye, and conducting continuous surveys

to detect their reappearance; harnessing experience gained through many years of forest management of company-owned forests and activities for the conservation of Blakiston's fish owl (a Critically Endangered IA species) carried out in collaboration with the Wild Bird Society of Japan.



The Bay Biscayne creeping-oxeye* is propagating on the island



A removed Bay Biscayne creeping-oxeye

* A plant in the Asteraceae (sunflower) family which originated from the Americas, but was introduced throughout Okinawa for greenifying slopes and embankments, etc. It has strong propagating capabilities, and there are concerns over its impact on local ecosystems.



Display of Nippon Paper Group paper packaging products (at Japan Pack 2019, a Japan packaging industry show)

Responsibility to Customers

The Nippon Paper Group aims to achieve its Group Mission by responding accurately to customer needs and providing products and services that contribute to building a sustainable society. As an essential prerequisite for this, we believe that providing a stable supply of products that are indispensable to everyday life while assuring safety and quality is our basic responsibility to our customers.

* Please refer to page70-71 of the Nippon Paper Integrated Report 2020.

https://www.nipponpapergroup.com/english/ir/Integrated_Report_E2020_03.pdf#page=13

Materiality	Related Indicators	State of Efforts (fiscal 2019)
Enhancement of product safety	Enhancement of the product safety management system Establishment of a product safety management system for new products	Held two meetings of the Product Safety Committee Revised brand management guidelines for brands used for food products and conducted audits of mills producing products under those brands
	Establishment of a product safety management system for new products	Identified risk management items
	Enhanced FSSC 22000 management system for Paper-Pak products	Revised product crisis management manual in response to the revised standard and renewed FSSC 22000 certifications. Conducted product recall drills
Enhancement of product value	Forest certification marks on all Paper-Pak products supplied to customers by fiscal 2020	Expected performance: approximately 1 billion units (performance last fiscal year: approximately 500 million units)

Policy and Management

Basic Stance

The Nippon Paper Group aims to increase its social and economic value and achieve its Group Mission (see P.6) by responding accurately to customer needs and providing products and services that contribute to building a sustainable society.

The Group engages in a broad spectrum of businesses including paper, films, healthcare products, chemical products, lumber, and construction materials. The Group believes that providing a stable supplies of products that are indispensable to everyday life while assuring quality and safety is the essential prerequisite for these efforts, and the basis for fulfilling its responsibility to customers.

The Group is therefore engaged in efforts to build a system that will enable us to maintain stable supply during both ordinary times and times of emergency.

Product Safety Management System

The Nippon Paper Group pursues quality that can answer persistently to the trust of its customers based on its Philosophy and Basic Policy on Product Safety.

Philosophy and Basic Policy on Product Safety

(established on October 1, 2004, revised on August 1, 2014)

Philosophy

We pledge to work to improve safety at every stage of the life cycle of our products, from design to manufacture, supply, and disposal, and to provide products and services that the public can trust.

Basic Policy

1. To provide safe products and services in response to the continued trust of our customers.
2. To respect related laws and standards in order to guarantee the safety of our products and services.
We pursue safety not only as expected under Japanese laws but also from a global perspective.
3. To provide customers with precise information on the safety, features, and correct usage of our products.
4. To set up a product and service safety management structure and ensure that all employees have a thorough awareness of the importance of product safety.

Nippon Paper Industries has established a Risk Management Committee (see P.25) under the supervision of its Board of Directors, which drives risk management activities for the entire Group, including product safety issues.

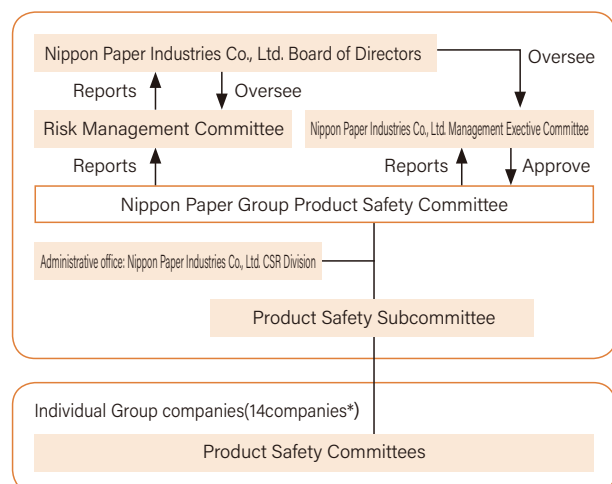
It has also established the Nippon Paper Group Product Safety Committee, chaired by the General Manager of its CSR Division. The committee oversees all matters relating to Group product safety. It discusses and makes decisions on activity policies and strategies, and other important product safety matters for the entire Group, and reports to the Risk Management Committee.

The Group has also established a Product Safety Subcommittee under the Nippon Paper Group Product Safety Committee. The subcommittee monitors and manages the state of activities at each Group company. Drawing on exchanges of information and opinions among Group companies, the subcommittee also deliberates on optimal responses to matters of concern, and reports to and obtains rulings from the Product Safety Committee.

As of the last fiscal year, overseas group companies have also been added to the subcommittee.

Each Group company has also established its own Product Safety Committee or similar organizational unit, and engages in product safety activities.

Product Safety Management System



*Nippon Paper Industries, Nippon Paper Crecia, Nippon Paper Papylia, Nippon Paper Lumber, Daishowa Uniboard, Nippon Seitai Corporation, Kyouei Seitai K.K., NP Trading, Nippon Paper Development, Opal, Jujo Thermal Oy, Siam Nippon Industrial Paper, Dyna Wave Holding Asia, Akita Jujo Chemicals

Identifying Customer Needs

Nippon Paper Group engages in proactive communication to identify customer needs across a wide range of areas, from day-to-day sales activities to quality patrols by engineering staff.

We receive numerous inquiries from customers about the tree species, countries of origin, and legality of our raw materials. In response, we explain measures we have put in place to address these matters and provide information on third-party evaluations of our activities (see P.30-32).

We reply to customers engaged in CSR procurement* with questionnaires and other materials concerning our CSR initiatives. We are also registered as a supplier with a global platform for disclosure of information relating to CSR procurement.

We also actively invite customers for inspections and tours of mills and plants to give them a view of our production facilities and gain an understanding of our production activities.

*Activities whereby an enterprise attempts to fulfill its social responsibilities when procuring raw materials across its entire supply chain by demanding that suppliers engage in environmental and social initiatives.

CASE Registration with a Global CSR Procurement Platform

The Nippon Paper Group is also registered as a supplier with EcoVadis*, a global information platform for CSR procurement. The Group's CSR initiatives have been evaluated in the top 25% of companies registered with EcoVadis, and earned the Group a silver medal.

In fiscal 2019, Nippon Paper Liquid Package Product Egawa Mill registered with Sedex*, and has since undergone SMETA audits which audit businesses' CSR assessments.

*EcoVadis (a French-based company), Sedex (a British-based NGO)

Both organizations operate global information platforms established for the purpose of promoting CSR procurement by businesses.



CASE Nippon Paper Industries, Paper-Pak Sales Division

Nippon Paper Industries' Paper-Pak Sales Division conducts technical lectures (Paper-Pak School) and Paper-Pak production plant tours for customers (dairy and beverage companies) providing them with information on how to properly use filling machines. At the same time, the division continuously strives to improve its products based on valuable feedback from customers.



Technical lecture



Visitors practice maintenance on filling machines

CASE Nippon Paper Crecia

The customer consultation desk offers a system whereby the opinions and questions of customers can be utilized for the further development and improvement of products.

Nippon Paper Crecia is investing its energies into not only catering to customer requests but also uncovering potential needs from various perspectives, constantly pursuing ease-of-use in products, and increasing quality and added value from a customer viewpoint, without being constrained by preconceived ideas.

System for Advancing New-product Development

The Nippon Paper Group has established its New Product Development Committee to accelerate business structure transformation. New product development teams operating under the committee identify research themes and present them in committee meetings held every three months. For themes approved by the committee, formal projects are established and provided with human, financial, and other resources.

The committee is chaired by the General Manager of the Corporate Planning Division and its membership is composed of the president of Nippon Paper Industries and the other members of the Management Execution Committee. Depending on the meeting agenda, presidents of subsidiaries or affiliates, and heads of relevant divisions, may participate in committee meetings in order to speed progress toward commercialization.

System for Advancing New-Product Development

New Product Development Committee

Chairperson: General Manager of Nippon Paper Industries Co., Ltd's Corporate Planning Div.

Committee members: Members of Nippon paper Industries Co., Ltd's Management Execution Committee

Other meeting participants (as needed): Presidents of subsidiaries or affiliates, heads of relevant divisions, etc.

New Product Development Team

Product Safety and Quality Management

Approach toward Product Safety

The Nippon Paper Group complies with rules for the management of chemical substances both in Japan and overseas, and works to ensure product safety using management methods that match the characteristics of its business and products. With regard to food-related products in particular, we engage in management in accordance with legal regulations on food safety, management systems and standards.

Product Safety Management Approach

Overall level

Management of chemicals contained in products

Food related

Guidelines for paper and paperboard intended for direct contact with food

Specification of brands and production facilities subject to safety management measures; implementation of measures to prevent contamination by insects and other foreign objects and ensure promotion of hygiene management through enhancement of facilities and management systems; management of chemical substances based on Japan Paper Association voluntary standards; and confirmation of the functional status of the above measures

HACCP (Hazard Analysis and Critical Control Point)

A hygiene management methodology that ensures the safety of products through the establishment of management criteria based on identification and analysis of hazards that could occur at all stages of the food product manufacturing process; clarification of important management points for the prevention of those hazards; and constant monitoring, measurement and recording of data to ensure compliance with those criteria

ISO22000 food safety management system

An international standard for food safety management systems which incorporates the HACCP hygiene management methodology

FSSC 22000 food safety standard

A food safety management system certification scheme integrating the ISO 22000 international food safety management system standard, the ISO/TS 22002 prerequisite program on food safety, and other requirements

Acquisition of HACCP certifications (as of March 31, 2020)

Company Name	Mill, Operating Division
Akita Jujo Chemical *1	

*1 Akita Prefecture HACCP certification, food additives

Acquisition of ISO22000 certifications (as of March 31, 2020)

Company Name	Mill, Operating Division
Nippon Paper Papylia	Kochi Mill *2

*2 Production of liquid filter papers and food packaging papers that come into direct contact with food

Acquisition of FSSC 22000 certifications (as of March 31, 2020)

Company Name	Mill, Operating Division
Nippon Paper Industries	Gotsu Mill*3
Nippon Paper Liquid Package Product	Egawa Mill, Miki Mill, Ishioka Mill
Nippon Dynawave Packaging	

*3 CMC (carboxymethyl cellulose), cellulose powder, stevia and licorice sweeteners (all for use in food)

Halal Certification Obtained

In March 2017, halal certification*4 was obtained for the nucleic acid (RNA-M) and dissolving pulp produced at the Gotsu Mill. The same certification was obtained for CMC (carboxymethyl cellulose) in October of the same year. As a result, the Gotsu Mill can now sell halal products required by Muslims both in Japan and overseas.

4 Halal certification

Halal certification is presented for products that, upon inspection of raw materials, production processes, ingredient and product storage conditions, and other matters, have been determined to be in keeping with Islamic law. Products exported to Islamic countries should be Halal certified.

Response to Revision of the Food Sanitation Act and Positive Listing

The Positive List System was established on June 1, 2020, in order to further increase the safety of equipment, containers and packaging made from synthetic plastics. The system enables the use of only substances that have been evaluated as safe for equipment, containers and packaging for food product use. Relevant Nippon Paper Group products (including paper pack containers for liquids) conform to this system.

➔ About the positive list system

https://www.mhlw.go.jp/stf/newpage_05148.html (Japanese only)

Quality Management Initiatives

Each Nippon Paper Group company works to acquire ISO 9001 international quality management standard certification as necessary and engages in quality management suited to the characteristics of its products.

→ ISO 9001 certification status

https://www.nipponpapergroup.com/english/csr/esg_data_packet.html

Quality Audits at Companies Making Paper Containers for Liquids

Nippon Paper Industries (NPI)'s Paper-Pak Sales Division is working to create new value on a day-to-day basis while pursuing functionality in food packaging, through continuous quality control and engineering support for the business locations of Nippon Paper Liquid Package Product which operates its production locations. In an independent initiative to enable customers to choose its products with peace of mind, under various NPI strategies relating to product safety, the Paper-Pak Sales Division holds on-site quality meetings at its business locations and product safety and hygiene audits on an annual basis.

The division is working to improve quality by sharing and rolling-out the most important items relating to food safety—including quality management, chemical substances, microorganisms, foreign objects and legal compliance—across the board.

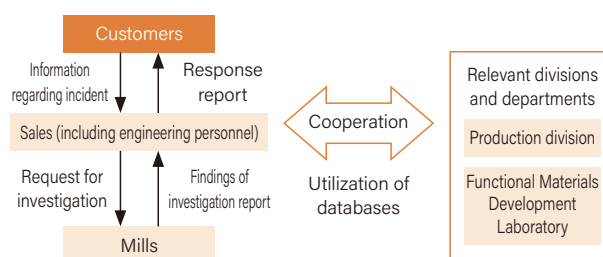
Paper and Paperboard Division Quality Assurance Initiatives

Nippon Paper Industries has adopted a Service Engineer (SE) system to shorten the distance between customers and production facilities. Under this system, SEs listen directly to customers' voices. They do this, for instance, by visiting customers and conducting quality patrols in which they observe printing and processing lines where paper is used. To create even closer customer relationships, we revamped our quality assurance systems in 2013, assigning technical experts to sales divisions. In addition, to enable swift responses to diverse customer needs, regular quality-information meetings and other means are used to promote collaboration between sales and technical divisions.

Responding to Instances of Defective Products

For defective products, action is taken by individual Group companies.

In the Paper and Paperboard Division of Nippon Paper Industries Co., Ltd., for example, sales technicians act as the central contact point, working with the relevant mill and head office departments to develop solutions by using tools such as a database of safety-related problems.



Response in the event of product defects (paper and paperboard business division)

At Nippon Paper Crecia Co., Ltd., which sells consumer products, contact information for the Customer Service Office is provided on all products and the Customer Service Office itself is placed directly under the president to ensure that all issues raised by customers are reported. Furthermore, the company's website is configured to accept customer queries and comments. The company consistently acts in good faith to ensure that customers are fully satisfied.

Verification and Audit of Wastepaper Pulp Blending Ratios and Use of Thinned Wood

Nippon Paper Industries has established a management system for providing customers with guarantees that products are made with a certain percentage of wastepaper pulp content and with wood from forest thinning.

Steps are taken to manage and review production procedures at each of the Group's mills, based in part on the standards and criteria of the ISO 14001 environmental management system. The proper operation of content management systems is confirmed in internal and external audits, and customers verify that products are being manufactured to content specifications.

The Stable Supply of Products

Initiatives to Ensure Stable Production

To secure on-demand-supply, we devote considerable effort to maintaining stable production by securing reliable procurement of raw materials, and systematically maintaining and upgrading our production facilities. Sales departments and production units coordinate their activities to provide customers with reliable supplies of products by developing flexible production plans that avoid waste, and managing inventories appropriately.

The Nippon Paper Group also works to ensure stable production during normal times, and has its Risk Management Committee (see P.25) formulate business continuity plans for each of its businesses in order to create a system which will enable it to limit damage and recover swiftly in times of disaster and other emergencies.

CASE

Business Continuity Management System

(Nippon Paper Industries Co., Ltd. Paper-Pak Sales Division)

Nippon Paper Industries' Paper-Pak Sales Division has developed its own business continuity guidelines and established its own management system, so that it can maintain production even in times of emergency. The division is moving ahead with the selection of priority items for emergencies and procurement of key raw materials from multiple manufacturers. It has also diversified its production across multiple production sites to lower its disaster risk exposure.

CASE

Earthquake and Disaster Response Guidelines (newsprint business)

Newspapers are a highly public information medium, so the need for the stable supply of newsprint is especially strong. The Japan Paper Association's Newsprint Committee has therefore established guidelines for response to earthquakes and other disasters in readiness for such emergencies.

In the event of damage to production equipment and facilities or disruption to communication and transportation systems as a result of a major disaster, paper companies follow these guidelines to maintain the smooth supply of newsprint.

Stabilization of Operations

The pulp and paper industry is a prime example of a process industry, where the stable operation of equipment has a direct impact on the stable supply and quality of products. Maintaining equipment is therefore critical, and proper maintenance depends on monitoring for signs of abnormalities in machinery by conducting vibration and temperature checks.

CASE

Development and Introduction of "e-musen junkai" (e-wireless patrol) System

Nippon Paper Industries (NPI) and NIPPON PAPER UNITEC have developed—and are now operating—the "e-musen junkai" (e-wireless patrol) system, which uses wireless sensors to constantly monitor machinery and equipment for signs of abnormalities. In the past, signs of abnormalities have been discovered mainly by people patrolling production facilities. This approach depended greatly on unquantifiable skills and expertise in the form of the experience and intuition of those checking production facilities. With the e-wireless patrol system, IoT technology is used to accumulate temperature and vibration acceleration

data on equipment in operation, enabling us to monitor trends in this numerical data. Responding appropriately when an abnormal trend is detected helps to prevent equipment problems and stabilize operations (see P.44).

NPI is installing the e-wireless patrol system at all of its domestic mills and actively selling it to companies outside the Group. In response to requests from domestic clients, as of fiscal 2019, it has also commenced overseas sales in Thailand.

➔ "e-musen junkai" (e-wireless patrol) system webpage (Sales company: Sakurai Co., Ltd.)

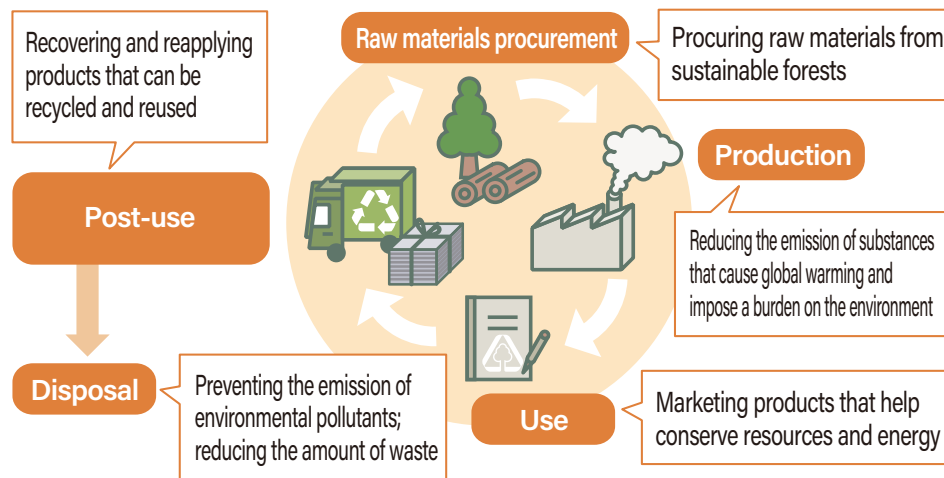
<http://www.sakurai.co.jp/landing/e-musen/index.html> (Japanese Only)

Products that Contribute to Building a Sustainable Society

Basic Stance

Nippon Paper Group products use wood raw materials, which are renewable biomass resources, and are also recyclable. This gives them a high affinity with the concept of building a sustainable society. Based on this, each Group company strives to develop products that are cognizant of the environment at every stage, beginning with raw material procurement and proceeding through production, consumption, post consumption, and disposal. For example, replacing plastic products with paper alternatives increases the biomass ratio and makes their raw materials sustainable. They can also be recycled after use, which enables reductions in the quantity of waste produced. By devising inventive shapes to improve loading efficiency, the use of paper can also lead to a reduction in CO₂ emissions during transportation.

Environmental Consideration from the Product Life Cycle



CASE

Obtaining Certifications for Paper-Pak products (Nippon Paper Industries Co., Ltd.,)

Nippon Paper Industries (NPI)'s Paper-Pak Sales Division obtained CoC certifications from the FSC® (FSC® C128733) and PEFC (PEFC/31-31-171) international forest certification organizations in February 2016. It took this step to enhance appreciation of Paper-Pak products and improve the company's brand image by promoting the environmental

advantages of Paper-Pak products over other types of containers, such as plastic bottles and metal cans. The division is working with the aim* of supplying Paper-Pak products marked with the forest certification symbol to all customers by fiscal 2020.

*NPI was able to place forest certification logos on approximately 1 billion Paper-Pak products in fiscal 2019, up from approximately 500 million in fiscal 2018.

CASE

SPOPS® New Style Refill Containers (Nippon Paper Industries)

Nippon Paper Industries has developed and commercialized SPOPS®, a replaceable paper container designed to take the place of plastic pouches for refills of shampoo and other products. The container eliminates the need for pouring from a pouch into a dispenser; product refills are accomplished simply by replacing a cartridge (see figure). SPOPS® reduces the amount of time required for refills, its shape minimizes the amount of liquid residue leftover and offers greater stability enabling more compact storage, improving usability for customers. Since February 2019, the product has been adopted for body soap and other hotel amenities, as we move toward with full-scale sales activities.



POINT Environmentally Friendly Point

SPOPS® helps to minimize marine plastic waste, improves recyclability and reduces packaging volume (improving transportation efficiency)



<https://www.nipponpapergroup.com/products/package/development/spops.html> (Japanese only)

CASE SHIELDPLUS® Series Paper Barrier Materials (Nippon Paper Industries)

Utilizing its paper manufacturing and coating technologies developed over the course of many years in the industry, Nippon Paper Industries (NPI) has developed SHIELDPLUS®: an environmentally-friendly packaging material with similar barrier properties to plastic. Performing as well as existing products, SHIELDPLUS® offers outstanding barrier properties and can be used as a substitute for other barrier films. Sales of the product began in November 2017, and it has since been adopted as a packaging material for confectioneries and daily use products. Nippon Paper Group company Jujo Thermal (Finland) has also made capital investments with the aim of beginning full-scale production in Europe.

NPI is also engaged in development efforts with a view to mass production of SHIELDPLUS PREMIER®, which offers an

even higher level of barrier performance.



[Example of use] Motto Yasashii Ukai Senbei rice cakes (Nagaraen Co., Ltd.)



[Example of use] Cacao 70% chocolate (Conche)



POINT **Environmentally Friendly Point**
SHIELDPLUS® helps to minimize marine plastic waste and improves recyclability

→ https://www.nipponpapergroup.com/products/package/thick_paper/post.html#adopt (Japanese only)
<https://www.nipponpapergroup.com/english/products/shieldplus/>

CASE LAMINA® Heat Shield Paper that Enables Packaging to be made from Paper Alone (Nippon Paper Industries)

Nippon Paper Industries has applied its paper manufacturing and coating technologies developed over the course of many years in the industry to develop LAMINA®: a packaging material that enables the creation of packaging using only paper, without the use of plastic. This packaging material uses paper as the base material, and enables the creation of packaging without laminate processing. LAMINA® can be used for a wide range of applications, including

food products that do not require barrier-type packaging, secondary packaging, daily use items and magazines.



POINT **Environmentally Friendly Point**
LAMINA® helps to minimize marine plastic waste and improves recyclability

→ https://www.nipponpapergroup.com/products/package/thick_paper/lamina.html (Japanese only)

CASE NSATOM® New Aseptic Filling System for Paper Containers (Nippon Paper Industries)

Nippon Paper Industries (NPI) and Shikoku Kakoki have developed and launched NSATOM®: an aseptic filling system for paper packaging that supports filling with solid-particle, long-fiber and high-viscosity products.

With its innovative shape, the newly developed NSATOM® satisfies needs for solid particle, long-fiber and high-viscosity products in response to growing consumer health-oriented

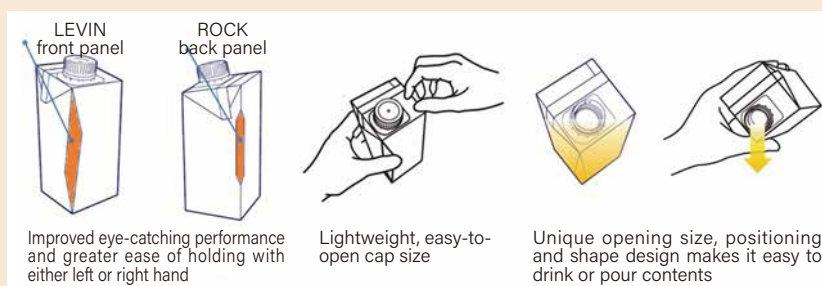
attitudes. It also offers portability due to its resealable design. Moving forward, NPI will propose these paper packages for a wide range of applications, as an alternative to plastic containers.



POINT **Environmentally Friendly Point**
NSATOM® helps to minimize marine plastic waste and improves recyclability



NSATOM® products



→ https://www.nipponpapergroup.com/products/paper_pak/nsatom/nsatom.html (Japanese only)

CASE MinerPa® New Functional Material (Nippon Paper Industries)

Nippon Paper Industries has applied its many years of experience with technologies for manufacturing pulp and inorganic materials to develop MinerPa®: a new material in which particulate minerals are densely bonded to the surface of wood pulp (cellulose fiber).

Using wood pulp—which is a recyclable natural fiber—as its basic raw material, MinerPa® is a functional material that offers the unique formability of pulp together with various functions derived from minerals, including deodorizing / antibacterial properties, flame retardancy, X-ray radiation

shielding effects and antiviral properties.

In fiscal 2018, a demonstration plant was established at Fuji Mill (Fuji, Shizuoka Prefecture), and is now scaling up demonstrative trial production.

This facility has an annual production capacity of at least 450 tons, and the company has established a system for the full-scale distribution of samples with an eye toward commercialization.

➔ [https://www.nipponpapergroup.com/research/organize/minerpa/\(Japanese only\)](https://www.nipponpapergroup.com/research/organize/minerpa/(Japanese%20only))
https://www.nipponpapergroup.com/csr/Vol26_Econtents.pdf



POINT Environmentally Friendly Point

New material based on renewable tree fiber

CASE SilFeel® and NPNatural™ Paper Straws (Nippon Paper Industries)

In response to rapidly growing demand for alternatives to plastic in recent years, Nippon Paper Industries (NPI) has developed highly durable paper straws with a pleasant texture. Sales of these straws began in 2019. (Straws produced in Japan are called SilFeel®, while those produced overseas are called NPNatural™.)

SilFeel® straws have already been adopted at numerous stores, including restaurants, cafes and shopping center food courts. They were also awarded a prize in the daily use item category of the 32nd Shogakukan DIME trend awards in 2019.



POINT Environmentally Friendly Point

SilFeel® helps to minimize marine plastic waste, improves recyclability and uses paper from certified forests*

*Paper sourced from forests that have been certified by a third party as implementing sustainable forest management.



[Example of use] AlohaTable (photograph obtained with cooperation from AlohaTable Daikanyama)

➔ <https://www.nipponpapergroup.com/products/paperstraw/>

CASE Scottie® Flowerpack Four-roll, Triple-length (double) Long-lasting Toilet Paper (Nippon Paper Crecia)

Nippon Paper Crecia has developed and launched a longer lasting toilet paper roll, which increases usability for customers and also contributes to reducing environmental impact.

The Scottie® Flowerpack four-roll, triple-length (double) pack offers rolls that are three times longer than previous versions. This reduces the time and effort of replacing spent toilet paper rolls and reduces the amount of storage space required, enabling more effective use of available space. The rolls are also compact and highly portable, offering greater usability for customers. The product also contributes to reducing

environmental impact*, such as by reducing the need for secondary materials such as toilet roll cores and cutting CO₂ emissions by improving loading efficiency during transportation.

*Comparison with Scottie® Flowerpack 12-roll (double) pack.



Scottie® Flowerpack four-roll, triple-length (double)

➔ <https://scottie.crecia.jp/3bai/smp/> (Japanese only)



POINT Environmentally Friendly Point

Resource saving and improved loading efficiency (transportation efficiency)



Most outstanding team at the 27th company-wide Presentation Conference

Human Rights, Employment and Labor Responsibility

Large numbers of people work in the Nippon Paper Group's expansive company-owned forests and large-scale production sites. Securing their safety and health is the Nippon Paper Group's top priority. The Nippon Paper Group aims to be an organization where a diversity of people can exercise their individual strengths, inspire each other, and help each other achieve new depths of knowledge.

* Please refer to page 72-75 of the Nippon paper Integrated Report 2020.
https://www.nipponpapergroup.com/english/ir/Integrated_Report_E2020_03.pdf#page=14

Materiality	Related Indicators	State of Efforts (fiscal 2019)
Occupational Safety	Prevention of injuries to any person at a mill site (elimination of serious accidents)	One serious occupational incident (on October 27, 2019)
Maintenance of a Vigorous Organization	Developing an organization where diverse employees can demonstrate their capabilities	Introduced four new personnel schemes, focused primarily on support for employees with childcare and nursing care commitments (as of April 2020)

Policy and Management

Basic Stance

The Nippon Paper Group respects human rights and aims to develop a working environment that makes the most of a diverse range of human resources, across its entire value chain.

Work-style reform has also received much attention in recent years, and we are moving proactively to help ensure that employees can maintain a high level of work-life balance.

The Group's manufacturing locations also have large-scale machinery, and work tasks that carry dangerous risks.

The Group is working to maintain and improve working environments to enable employees to work with peace of mind, by seeking to ensure thorough safety and accident prevention measures.

Philosophy and Basic Policy

Gaining the trust of society and fulfilling our responsibilities requires that each and every Nippon Paper Group employee acts with high moral standards and strong motivation.

Promoting employee awareness and behavior consistent with that belief, helping individual employees improve their capabilities, and rewarding performance are among our most important responsibilities.

The Group established its Philosophy and Basic Policy on Human Rights, Employment and Labor based on this understanding.

The Group publishes its policies in two languages (Japanese and English) and communicates them on its website to its suppliers around the world.

Philosophy and Basic Policy on Human Rights, Employment and Labor

(established on October 1, 2004)

Philosophy

Respecting fundamental human rights at all times and making the most of the individuality and capabilities of a diverse range of human resources, we aim to create a company overflowing with dreams and hope.

Basic Policy

1. Respect for human rights

We pledge to respect fundamental human rights and not to engage in any behavior that disregards such rights, including discrimination based on matters such as nationality, race, place of birth, sex, religion, medical conditions or disabilities, sexual harassment and the abuse of power. We also pledge to manage personal information appropriately in order to prevent infringements on privacy.

2. Prohibition of forced and child labor

We pledge not to force any employees to carry out unreasonable work. We also pledge not to employ children aged under the minimum employment age stipulated in local laws and regulations.

3. Promotion of personnel training and skill development

We pledge to promote personnel training and skill development programs to help improve individual employees' abilities and skills through the establishment and maintenance of structures to make the most of the individuality and capabilities of a diverse range of human resources.

Initiatives in Respect of Human Rights

Exchanging Opinions with Amnesty International Japan

In 2014, Nippon Paper Industries Personnel and Forest Materials departments each met with Amnesty International Japan to share opinions.

Based on the exchange of views, the company recognized social issues related to human rights and examined the themes we should address.

As a result, in 2015, the company embarked on an examination of human rights issues at subcontractors in Japan and on-site investigations with the objective of auditing overseas wood chip suppliers.

Since then, too, The company has continued to engage in regular exchanges of opinions with Amnesty International Japan.

CASE Paying Attention to Human Rights Issues at Affiliated Companies in Japan

Nippon Paper Industries conducts surveys on human rights issues at affiliated companies in Japan.

In fiscal 2015, the company had these affiliates perform self-checks and, beginning in fiscal 2016, each of these companies began to deliver survey results and make various improvements.

In fiscal 2019, the company also conducted follow-up surveys to ascertain the state of their initiatives, in order to promote voluntary self-improvement at each company.

CASE Concern for Human Rights Across the Supply Chain

The Nippon Paper Group's Philosophy and Basic Policy on Raw Materials Procurement clearly states that the Group will take human rights and labor considerations into account throughout the entire supply chain, and conducts surveys and interviews with suppliers for auditing purposes. (see P.32).

In particular, with regard to the supply chain of wood chips for paper making, Nippon Paper Industries' main raw material, the procurement personnel directly visit major and new overseas suppliers of wood chips to confirm the status of human rights considerations, including measures to address health, hygiene, safety, disaster prevention and local environmental issues.

In the company's overseas afforestation operation, the company is promoting forest management that takes into account the culture and traditions of local residents. (see P.38).

Table of On-Site Surveys of Overseas Chip Suppliers Conducted

Year of Survey	Country	Results
Fiscal 2015	South Africa	No problems found.
Fiscal 2016	Vietnam Australia	No problems found.
Fiscal 2017	Vietnam United States	No problems found.
Fiscal 2018	Vietnam Chile	No problems found.
Fiscal 2019	Malaysia Russia	No problems found.

Education and Training

In pursuit of personnel management cognizant of human rights, the Nippon Paper Group has employees responsible for personnel matters participate in training courses hosted by government agencies.

Nippon Paper Industries conducts e-learning training for all of its management personnel to raise their awareness with regard to human rights, including preventing harassment.

As of June 1, 2020, in light of the establishment of legislation on measures for the prevention of power harassment, the company has also revised parts of its work regulations, and is calling on all employees to help prevent harassment in the workplace.

Human Rights, Employment and Labor Responsibility

Occupational Safety and Health

Basic Stance

In 2004, the Group established its Philosophy and Basic Policy on Safety and Disaster Prevention to create a workplace in which all employees can work in good health and with peace of mind. In accordance with this policy, employees and management work together on such key themes as ensuring safety and health and preparing for disaster.

Although completely eliminating all risk from the workplace is not possible, maintaining an unwavering daily commitment to uncovering and minimizing risks is essential. Consistently engaging in sound management while responding to the trust of employees is also important for building a pleasant and comfortable workplace that helps to maintain and improve employees' health. Based on this understanding, the Group has created labor safety and health systems and is working continuously to prevent accidents and provide safe, pleasant working environments.

Philosophy and Basic Policy on Safety and Health Measures

(Established on October 1, 2004)

Philosophy

In addition to acknowledging that it is the company's duty to guarantee safety and health, and to strive to develop pleasant, improved working conditions, we pledge to work ceaselessly to prevent any and all accidents, minor or major.

Basic Policy on Safety and Health

1. To respect the Industrial Safety and Health Law.
2. To establish self-imposed standards and step up daily management.
3. To set up a management structure and clearly define roles, responsibilities, and authority.
4. To strive to improve safety and health training.
5. To develop and maintain a safe, pleasant working environment.

Basic Policy on Safety and Risk Prevention

1. To respect laws and regulations pertaining to safety and risk prevention.
2. To establish self-imposed standards and step up daily management.
3. To set up a management structure and clearly define roles, responsibilities, and authority.
4. To strive to improve safety and risk prevention education and training.
5. To work in cooperation with related government and local communities and share information.

System to Promote Occupational Safety and Health

Nippon Paper Industries Co., Ltd. has established a Risk Management Committee under the supervision of its Board of Directors (see P.25).

It has also established the Safety and Disaster Prevention Committee, chaired by the General Manager of its Technical and Engineering Division. The committee coordinates and promotes Group-wide occupational safety and health, disaster prevention and security measures, and reports its activities to the Risk Management Committee.

The company works in cooperation with labor unions to ensure safety and health, based on various agreements. It also conducts regular joint occupational safety and health meetings for personnel in charge of safety and health at its head office, mills, and labor unions, in order to manage the progress of annual safety and health management plans.

Each mill and office also has its own individual Safety and Health Committee and Safety and Health Promotion Council.

The Health and Safety Committee plans and promotes specific health and safety activities at mills and offices based on company policies and measures.

Meanwhile, each Safety and Health Promotion Council carries out on-site safety and health management

activities in collaboration with partner companies and subcontractors with employees working on site at Group facilities.

The Nippon Paper Group's System to Promote Occupational Safety and Health



Examples of organizations for safety at a mill site

Mill Manager

Safety and Health Committee

Safety and Health Promotion Council

(Organized by mills and cooperative associations)

Occupational Safety and Health Management System

In 2009, the Nippon Paper Group implemented its own system (NPSS*) for continuously pursuing occupational safety and health management activities at the organization level.

Under NPSS, the company incorporate specific ongoing and voluntary activities at each mill and business site into safety and health plans in accordance with company policies and measures relating to safety and health. The system is helping to improve safety and health levels through the prevention of occupational accidents, promotion of worker health, and creation of comfortable working environments.

Nippon Paper Industries conducts Annual Mill Safety Audits to assess the progress of related initiatives under safety and health plans for individual mills and business sites, and seeks to make improvements and bolster safety levels throughout the company. The audits are conducted at least once a year. Since 2010, the company has expanded the scope of Mill Safety Audits to include Group companies and conducted them as mutual exchange safety audits. By doing so, the Group seeks to improve the level of our audits by promoting closer communication among Group companies.

※Nippon Paper Occupational Safety and Health Management System



Safety audit

Efforts regarding Hygiene and Health

The Nippon Paper Group strives to keep its employees healthy and to detect health problems in their early stages. For example, at Group companies that are members of the Nippon Paper Industries Health Insurance Union, examinations focusing on lifestyle diseases are performed together with regular physical examinations. In addition, industrial physicians regularly visit workplaces and the Group uses the results of these visits in efforts to improve working environments. The Group also provides medical examinations for the spouses of employees.

Tackling Mental Health

Nippon Paper Industries has organized Internet-based mental health care and counseling services for all employees. Under this system, employees are asked to complete an annual survey designed to detect needs for mental health care services.

Responding to Work Tasks with a High Risk of Injury

The Nippon Paper Group strives to prevent injuries and diseases by reducing risks in work where the potential of an explosion or fire, or injury or disease, is a concern. We manage our facilities in accordance with the Industrial Safety and Health Law and other laws and regulations, and monitor our workplace environments. In locations where chemical substances are handled, we investigate the dangers and toxicity of these substances and use what we learn to take appropriate risk measures and manage residual risks.

Efforts regarding Safety and Disaster Prevention

Safety Education

In its efforts to ensure high awareness with regard to occupational safety, the Nippon Paper Group invests considerable efforts into safety training for all employees, including those in management positions. Nippon Paper Industries formulates annual Occupational Safety and Health Management System plans at each of its mills and offices.

In line with these plans, each business location then implements various grade-specific safety and health training programs covering various stages of an employee's career, from safety and health training at the time of initial hiring through to supervisor training. By constantly renewing safety awareness in this way, we are endeavoring to achieve and maintain accident and disaster-free workplaces.

Ensuring Thorough Safety on Site

Based on its mission of eliminating all personal injuries within its mills*, Nippon Paper Industries conducts safety patrols and safety training in collaboration with labor unions and subcontractors with employees working on site at its facilities.

In safety patrols, we provide instructions and guidance for immediately correcting unsafe conditions. As a principal employer, we also provide information, reference materials, venues, and other resources for safety education, and conduct checks to verify that safety training is being conducted properly.

The company also seeks to enhance on-site workplace safety management by subcontractors through encouraging and providing guidance on voluntary safety activities, including risk prediction, risk assessments and the state of occurrence of occupational accidents.

*This mission includes all stakeholders on Nippon Paper Group premises including Group employees, employees of subcontractors working on site, visitors from outside and service business operators entering and leaving the premises.



Safety patrol

Preparing for Natural Disasters and Fires

In preparation for natural disasters, each location of the Nippon Paper Group has created disaster preparedness manuals reflecting local hazard map information and the characteristics of their particular operations and geographic location. They also cooperate with local fire departments and other public safety authorities to conduct regular disaster preparedness training.

At Nippon Paper Industries, individual business locations undergo regular disaster prevention surveys by a company specializing in risk assessment.



First-aid training for responding to injured personnel as part of accident prevention and disaster readiness training

Raising Awareness of Traffic Safety

The Nippon Paper Group seeks to instill awareness of traffic safety in its employees by participating in traffic safety training, lectures and traffic safety campaigns hosted by local police stations.



Course using a test vehicle to teach traffic safety

Status of Occupational Accidents

While the Nippon Paper Group endeavors to ensure safe operation with safety as the top priority at all of its business locations, we are still dissatisfied with the numbers of occupational accidents occurring.

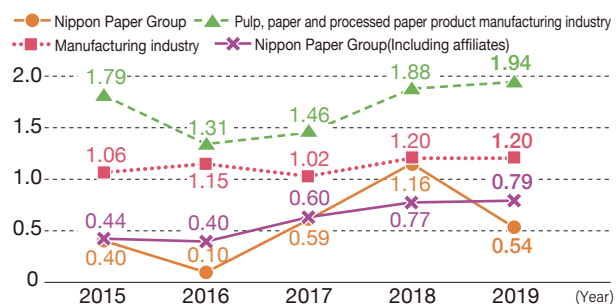
In 2019, one serious occupational accident occurred within the Nippon Paper Group (including subcontractors)*. The frequency rate for occupational accidents requiring time off from work rose to 0.79, and the occupational accident severity rate also worsened to 0.33, due to occupational accidents involving Group employees, subcontractors and construction company employees working on site at our facilities.

For these reasons, as of this July, Nippon Paper Industries has formulated a Medium-Term Safety Activity Plan featuring three core concepts: (1) developing safe working environments, (2) managing risks, and (3) training personnel to work safely. The company has also established a Safety Action Plan (2020-2025) for creating a safe working environment, such as by utilizing AI and IoT technologies, and is working to create a foundation for preventing occupational accidents.

*Manufacturing locations of Nippon Paper Industries, Nippon Paper Crecia, Nippon Paper Papyrus, and Nippon Paper Liquid Package Product

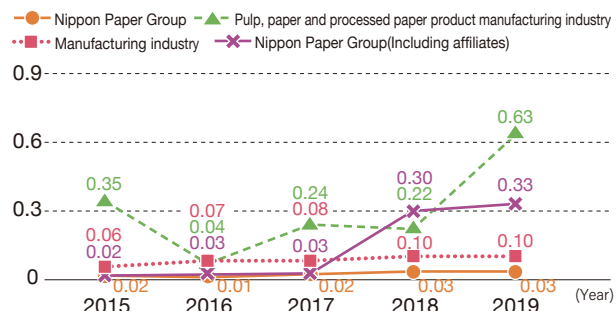
Frequency rate for lost-worktime injuries

Indicates how often occupational accidents occur, within term, the number of accidents causing injuries or deaths per million work hours.



Occupational accident severity rate

Indicates the seriousness of occupational accidents, in terms of the number of workdays lost per 1,000 work hours.



Fatal In-House Accident

On October 27, 2019, a fatal accident occurred at the Hokkaido Paper Mill of Nippon Paper Industries Co., Ltd.

Overview of the Accident

Location : Pulper for improperly finished paper, Processing Section, Nippon Paper Hokkaidoshiko Co., Ltd.

Victim : 44-year-old subcontractor who had worked at the company for 22 years and 6 months

Operation : Repulping of improperly finished paper

Situation : It is thought that the employee fell into the pulper when leaning over to push in a piece of waste paper that had become caught on the pulper's intake feed.

Countermeasures:

- Implement safety measures to prevent employees from falling into pulper intake feeds.
- Implement measures to prevent waste paper from becoming caught when being fed into pulpers.
- Continue to investigate similar work tasks and countermeasures for similar equipment within the company.

Maintenance of a Vigorous Organization

Based on its respect for fundamental human rights and individuality, the Nippon Paper Group consistently recruits new graduates and actively employs women, senior citizens and people with disabilities.

Basic Stance

Employees with different personalities stimulating one another and helping each other deepen their knowledge serve to invigorate the workplace. Amid forecasts of a drop in Japan's working-age population, diversification of workforces is becoming increasingly vital to ensuring ongoing growth. Our aim is to be a vigorous organization emphasizing the spirit of Challenge, Fairness, and Teamwork - the values included in the Group Mission the Nippon Paper Group definitively stated in 2015.

Recruitment and Employment

The Nippon Paper Group employees approximately 13,000 people in and outside of Japan. In its efforts to fulfill its responsibilities to local communities, which form the base for its corporate activities, the Group strives to ensure stable employment while continuously recruiting new employees.

Furthermore, based on its Philosophy and Basic Policy on Human Rights, Employment and Labor (see P.66), the Group engages in discrimination-free recruitment and employment.

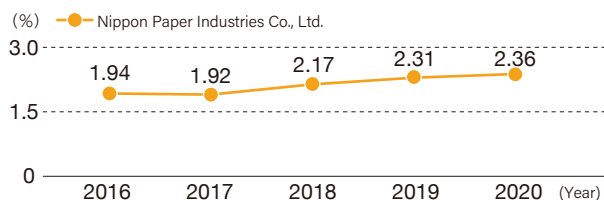
The Group employs a selection process that bases decisions on test and interview results. Factors such as nationality, place of birth, gender and names of schools attended have no place in selection decisions.

Recent and Future Hiring of People with Disabilities

Nippon Paper Industries participated actively in recruitment interview events hosted by local municipalities and organizations. As a result, our percentage employment of people with disabilities was 2.36% as of April 1, 2020, exceeding the statutory employment rate, which was revised to 2.2% in April 2018.

As this statutory employment rate is slated to rise to 2.3% by April 2021, the company will continue working to maintain and increase percentage employment at our business locations.

The rate of employment of people with disabilities (as of April 1 of each year)



Promoting the Employment of Elderly Persons

The Nippon Paper Group has implemented its Reemployment after Retirement System to respond to the needs of a super-aged society and to facilitate the passing on of skills.

In fiscal 2002, Nippon Paper Industries introduced a reemployment system to allow employees to work up to the age of 65. Furthermore, in response to the amended Law Concerning Stabilization of Employment of Older Persons, which took effect in April 2013, we have prepared rules that will allow employees of retirement age to continue working based on their desire and skills, at least until they begin to receive pensions.

Performance in reemploying workers who reach the mandatory retirement age*

Fiscal years	2014	2015	2016	2017	2018	2019
Nippon Paper Ind. Employees seeking reemployment	112	172	185	46	168	95
People reemployed	112	172	185	46	168	95
Consolidated companies in Japan People reemployed	309	327	331	227	332	296

*Figures are for the Nippon Paper Group's consolidated companies in Japan, including management positions.

Mid-career Hiring Initiatives

In addition to making effective use of human resources within the company, Nippon Paper Industries also engages in the recruitment and hiring of mid-career personnel.

In order to drive a shift in our business structure, we are endeavoring to proactively recruit human resources from outside the Group with special insights / knowledge and experience to enable us to assign the necessary personnel to the required positions as soon as possible.

We believe that the active contribution of personnel with a variety of knowledge and experience will lead to the revitalization of the organization and by extension the advancement of the company as a whole, and will continue in our efforts to hire new personnel in the future.

Employment data

	Units	FY2019
No. of employees on a consolidated basis ^{*1, 2}	Persons	12,592
Men	Persons	11,118
Women	Persons	1,474
Overseas	Persons	2,504
Men	Persons	2,158
Women	Persons	346
Percent of upper management from The local community	%	89.3%
Part-time workers ^{*1, 2}	Persons	519
Men	Persons	296
Women	Persons	223
New graduates hired ^{*3}	Persons	182
Men	Persons	146
Women	Persons	36
Mid-career hires ^{*3}	Persons	222
Men	Persons	199
Women	Persons	23
Average age of employees ^{*1, 3}	Age	43.7
Men	Age	43.6
Women	Age	43.7
Average years of employment ^{*1, 3}	Years	19.2
Men	Years	19.3
Women	Years	17.8
Turnover rate ^{*1, 3} (Includes employees leaving at the mandatory retirement age)	%	4.6
Dispatched workers ^{*1, 3}	Persons	108
Men	Persons	47
Women	Persons	61

*1 Fiscal year end

*2 Data scope: Consolidated companies

*3 Data scope: Consolidated companies in Japan

Employees by Age Group

(Nippon Paper Industries Co., Ltd., March 31, 2019)

	Units	Less than 30	30 to 50	Over 50	Total
No. of employees	Persons	891	2,974	1,457	5,322
Men	Persons	834	2,770	1,329	4,933
Women	Persons	57	204	128	389

Numbers¹ of overseas subsidiaries and employees by region (as of December 31, 2019)

	No. of companies	Men	Women	Total
North America	3	450	80	530
Australia	8	983	141	1,124
Asia	13 ^{*2}	867	359	1,226
Europe	4	146	50	196
South America	3	455	60	515
Total	31	2,901	690	3,591

*1 Including non-consolidated subsidiaries

*2 Does not include NP Trading (Ho Chi Minh) Co., Ltd. (established in February 2020).

Overseas Subsidiary Employees by Type of Employment (as of December 31, 2019)

	Units	Full-time	Temporary	Total
North America	Persons	529	1	530
Australia	Persons	1,124	0	1,124
Asia	Persons	749	477	1,226
Europe	Persons	189	7	196
South America	Persons	515	0	515
All overseas subsidiaries	Persons	3,106	485	3,591

Promoting Work-Life Balance

The Nippon Paper Group is working to create a workplace environment that allows employees to reach their full potential while balancing work, family and private life needs.

Nippon Paper Industries, for example, has introduced flextime hours for its head office, research facilities, branch offices and the administrative sections of its mills.

As an emergency response to suppress the spread of COVID-19 cases, we have also implemented work from home measures on the company-wide scale.

The company has been conducting a trial telecommuting program in-house for some time now, but it has decided that a permanent telecommuting system is desirable from the perspective of our business continuity plan (BCP), and the company is considering making it a permanent fixture.

Work-style Reform Approaches

Nippon Paper Industries is striving to reduce the overall number of hours workers spend on the job. This is a work-style reform intended to create vibrant workplace environments where employees can work healthily and actively.

We believe that helping individual employees to maintain a desirable work-life balance through work-style reforms and improvements in business processes will give rise to surpluses of time and energy that can ultimately be linked to further growth for the Company.

Reducing Overall Working Hours

Nippon Paper Industries has set the goal of reducing average annual working hours for its workforce to less than 1,850 hours per person.

In fiscal 2018, we conducted management training for general managers that included business process reviews. Having undergone this training, the managers are now working to clarify job instructions at their worksites and reduce workloads by reviewing business processes.

In fiscal 2017, we augmented our work timetable management system—which covers all employees, including management personnel—with the addition of a function that keeps track of the times at which personal computers are turned on and off; and are analyzing and checking this data in detail to ascertain the actual state of employee working hours.

As a result of these efforts, average total working hours for all employees in fiscal 2019 stood at 1,894 (a reduction of 29 hours in comparison with fiscal 2018). While not achieving the target, this figure represents a significant reduction in working hours.

For managers, who were particularly prone to working long hours, the number of hours decreased significantly to 2,003 (a decrease of 62 hours compared to fiscal 2018) from fiscal 2018 to fiscal 2019, due in part to efforts to foster management awareness, including the implementation of e-learning programs on team management and diversity promotion.

The company also set and achieved targets for employees taking annual paid leave and leaving work by 7:00pm.

The company is continuing to review its personnel system to promote the use of paid leave. For example, the company has abolished the cap on the number of times employees can take their annual paid leave in half-day increments and introduced a system for taking expired accumulated annual leave (leave to be saved) in half-day increments (but only for childcare or nursing care purposes).

Moving forward, we will continue to implement work-style reforms aimed at achieving these goals.

Helping Employees Balance Work and Child Care

The Nippon Paper Group revised its action plan, in April 2016, and strives to support its employees in maintaining work and child-care balance in accordance with Japan's Act on Advancement of Measures to Support Raising Next Generation Children. As one example, Nippon Paper Industries has implemented systems that exceed the provisions stipulated under Japan's Child Care and Family Care Leave Act. This includes extensions to the exemption period for overtime working hours, the application period for child care and paid leave for child rearing. Based on these actions, we have been designated by Japan's Minister of Health, Labour and Welfare as a company that supports child rearing and have obtained the right to display the Kurumin mark.

Data on balancing work and personal lives

	Units	FY2019
Employees taking child-care leave *1	Persons	23
Men	Persons	2
Women	Persons	21
recently giving birth	%	100
who returned to work	%	100
Employees taking maternity/paternity leave *1	Persons	203
Men	Persons	184
Women	Persons	19
Average number of days taken for maternity/paternity leave *1		
Men	Days	3.8
Women	Days	67.9
Employees taking nursing-care leave *1	Persons	1
Total number of working hours *2	Hours	1,885
The rate of annual paid leave taken by employees		
Consolidated companies in Japan	%	74.4
Non-management employees of Nippon Paper Industries	%	76.6

*1 Data scope: Consolidated companies in Japan

*2 Data scope: Non-management employees of Nippon Paper Industries

Initiatives to Help Employees Balance Work with Nursing Care Commitments

Nippon Paper Industries has established schemes that exceed the provisions stipulated by Japanese law with regard to nursing-care leave and other considerations for supporting employees in maintaining a balance between work and care-giving commitments.

In April 2020, as one aspect of these support measures, the company issued a Nursing Care Handbook summarizing information necessary for achieving a balance between works and nursing care, including preparation towards care-giving, necessary actions and details of support offered by the company and by society. The handbook has also been posted on the company's internal intranet to enable employees to access it at any time.

Active roles for diverse personnel

From the perspective of revitalizing organizations and securing human resources in a society with a declining birthrate, the importance of having a diverse workforce is becoming more important.

CASE Diversity Management Seminar (Nippon Paper Industries)

Nippon Paper Industries held its fourth diversity management seminar in September 2019.

In the first part of this two-part seminar, the Personnel Department introduced the Company's efforts to reform its work style and revitalize its organization.

In the second part, Yojiro Hashimoto, CEO of ToBeings Co., Ltd., spoke about the diversification of working styles and people in the age of 100 years of life, the nature of leaders, and hints on how to build a strong organization that delivers results.

Approximately 100 employees participated in the seminar on the day, and were able to deepen their learning through discussions among themselves.



Diversity management seminar

Developing an Environment where Diverse Employees can Demonstrate their Capabilities

Nippon Paper Industries is working to develop a workplace environment in which employees from a diverse range of backgrounds, of various ages and genders, and with childcare and care-giving responsibilities, can fulfill their potential.

As one aspect of these efforts, as of April 2020, the Company has introduced the following four new schemes, aimed primarily at supporting employees with specific circumstances such as childcare and nursing-care commitments.

- System that allows employees to take the preserved leave in half-day units.
- System that allows employees to apply the preserved leave for short-term childcare.
- Providing financial assistance for non-household head employees when they are assigned to transfer alone.
- System to allow employees to take leave when accompanying their spouse's overseas assignment.

The company will continue to consider and implement measures that contribute to the realization of flexible work styles and diversity.

Responding to the Act on Promotion of Women's Participation and Advancement in the Workplace

In working to create conditions that enable women to advance their careers, Nippon Paper Industries Co., Ltd. established in April 2016 an Action Plan based on the Act on Promotion of Women's Participation and Advancement in the Workplace.

Action Plan based on the Act on Promotion of Women's Participation and Advancement in the Workplace

(Adopted by Nippon Paper Industries Co., Ltd. in April 2016)

1. Make women at least 25% of new graduate hires for career-track positions.
2. For career-track women hired 8 to 12 fiscal years ago*, achieve an average continuous employment rate that is at least 80% that of the rate for men.
3. To expand the range of roles performed by women at production sites, identify issues that would arise with the assignment of women to each workplace, consider solutions for these issues, and develop concrete plans for the workplaces to which women will be assigned.

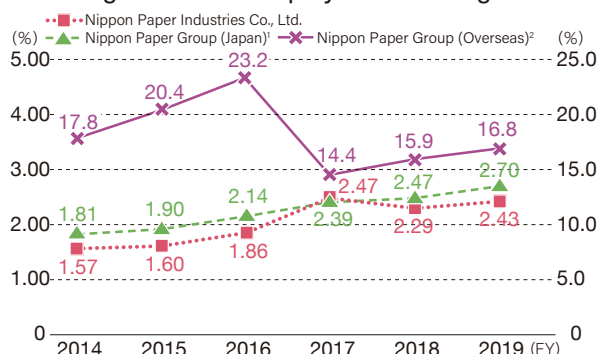
* Women who joined the company during the fiscal years 2004 to 2008.

Female Management Participation and Recruiting

At Nippon Paper Industries a large proportion of jobs is in mill settings and so low recruitment of women in the past is a major reason for their low participation in our management ranks now. To remedy this situation, and double the participation of women in management by fiscal 2020, we are expanding the range of workplaces to which women are assigned.

At the same time, we are implementing support measures for the establishment of female career-track positions and working to develop female candidates for managerial positions.

Percentage of female employees in management



exclude associate directors, employees commissioned for specific purposes, employees on temporary assignment from other companies, and other non-full-time personnel to percentage of only full-time employees.

*1 Figures are for the Nippon Paper Group's consolidated companies in Japan.

*2 Includes all managers of section and higher level organizational units as of December 31.

Hiring of new graduates for career-track positions (Nippon Paper Industries Co., Ltd.)

Fiscal years	2014	2015	2016	2017	2018	2019
Career-track hires	34	52	61	56	53	50
Women	6	11	11	14	13	13
Men	28	41	50	42	40	37
Percent women (%)	18	21	18	25	25	26

Initiatives Aimed at Developing Human Resources

Training Personnel to Match the Group's Ideal Vision

In its Group Mission, the Nippon Paper Group lists its key values as Challenge, Fairness and Teamwork. Under its sixth Medium-Term Management Plan, the Group raises the themes of (1) reorganizing production network to make maximum effective use of its own equipment and facilities in the paper business, and (2) expanding businesses in growth areas and making new businesses competitive at an early stage. Nippon Paper Industries is working to enhance its training and development of leaders who will help drive this transformation.

When hiring new personnel, the Group looks for human resources who are equipped with the abilities to continue attempting new challenges, to exercise fair judgement and to engage in teamwork by involving those around them, and the mental strength to overcome difficulties.

In training leaders, we make it our goal to develop "autonomous human resources" with the spirit of challenge and the ability to think what must be done and carry it out. In this way, we are enhancing our development of human resources with a global perspective capable of attempting new challenges.

Leadership Training System

Nippon Paper Industries trains its career-track employees through OJT (on-the-job training), planned rotations and OFFJT (off-the-job training, including grade-specific training and selective training programs).

Rotation is operated as a system for fostering leaders with broad perspectives who do not become fixated on a single issue, by transferring them to various positions both within and outside their department, and at affiliate companies in a planned manner.

OFFJT is used as a career development program. In addition to grade-specific training until they are promoted to management roles, employees are also dispatched to overseas business locations under the company's overseas assignment system.

After employees are promoted to management positions, the company also conducts training for further promotion, and selective training with the purpose of developing employees into candidates for senior management roles.

Network for Career-track Women

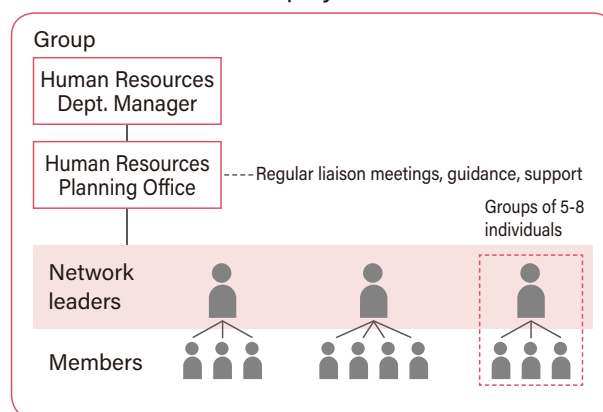
Nippon Paper Industries has created a company-wide network for career-track women bridging across all of its workplaces. Within the network, leaders collaborate with the Human Resources Planning Office to help other network members to address career-building concerns.

Between fiscal 2017 and 2019, the company engaged in a second phase of Group activities.

In activities in this phase, the company collected opinions regarding existing schemes and recommendations for improvements, and ran collective group training for all network members.

Through the network, the company also conducts career training aimed at helping female career-track employees overcome career-building challenges with the assistance of their immediate supervisors.

Female career-track employee network



The Five Pillars of Human Resources Development

The Nippon Paper Group provides its employees with fair learning opportunities, and has developed a system for enabling those with motivation and abilities to further increase their skills, with a focus on five key points.

1 Support for self-development and voluntary skill acquisition

The Nippon Paper Group supports employee self-development and voluntary skill acquisition through means such as group training and rewards for acquiring professional qualifications. In addition, job-level-based training, such as that for new hires and new managers, is conducted jointly by Group members to promote the development of employees throughout the Group. And training is pursued from a broad perspective; joblevel-based training at mills, for example, is conducted not just for a single mill but together with neighboring mills.



Internal training session

Furthermore, Group employees can meet self-determined skill needs by taking any of approximately 240 correspondence courses and joint training. Every employee is offered not only the ability to choose courses they want to take but also precious, mutually stimulating opportunities for joint training with colleagues from other Group companies.

Training time for individual employees
(Consolidated companies in Japan)

5.7 hours/year

2 Assignment of the right people to the right positions

Nippon Paper Industries periodically surveys employees to ascertain what kind of job assignments they wish to have. Based on the results of these surveys, every effort is made to match employee strengths with job types.

In addition, the Nippon Paper Group has implemented an internal recruitment system. Under this system, individual employees can consider their skills and how they want to develop their career, and then apply for a position posted by a Nippon Paper Group member.

3 Development of employees capable of acting on a global stage

In order to develop human resources with a global perspective with a view to future overseas expansion, the company and other Group companies are also developing open application overseas study schemes.

We operate international student dispatch schemes sending students to universities abroad, and overseas assignment schemes sending employees to work at overseas business locations relating to the Group and its operations.

In fiscal 2019, we ran a short-term internship program for overseas Group locations, and recruited applicants by open application.

Six employees were dispatched to six different locations in the United States, Australia, China, Vietnam, India and Finland.

Nippon Paper Industries Co., Ltd. is also seeking to enhance the level of its awareness-raising and training activities to enable all of its career-track employees will be capable of taking on assignments on the global stage.

4 Reinforcement of production frontline capabilities

Human resource capabilities at the production frontline represent the heart of the manufacturing process. The Nippon Paper Group passes on to each generation the technologies and skills nurtured over a lengthy period to maintain and improve the capabilities of its human resources. Nippon Paper Industries created a committee to strengthen frontline capabilities in fiscal 2006. Nippon Paper Industries has organized and is operating systems under which technologies and skills that should be carried forward at individual production sites are identified, and training is prioritized based on analyses of the strengths and weaknesses of, and skills needed by, individuals.

5 Support for the planning of lives and careers

Given the hike in the public pension eligibility age, implementation of a defined-contribution pension system, and increasing diversification of lifestyles, employees must consider a number of factors when planning their careers and life after retirement. Therefore, core companies within the Nippon Paper Group offer Life Plan Seminars and other types of seminars to enhance employee understanding of each company's and the government's programs, as well as the need to develop meaningful life plans that include health management.

CASE Overseas Assignment System (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries Co., Ltd. has implemented an overseas assignment system for career-track technical employees. The purpose of this system is to develop human resources capable of working overseas. Participants spend a year and a half at a North American, Australian, or other overseas location to experience work at these operations. They also use this time to improve their language skills. Through this system, participants improve their professional skills and work to understand different cultures and lifestyles by living and working overseas. They also enhance their awareness of the need to build careers as people capable of working in a global arena.



On overseas assignment (Nippon Dynawave Packaging Co.)

CASE Implement Small Group Activities Globally

The Nippon Paper Group engages in small group activities both in Japan and overseas.

In these activities, employees form small groups and work together to achieve improvements in areas such as business operations and quality, and to reduce costs.

In fiscal 2019, Nippon Paper held its 27th company-wide presentation meeting, while the Group held its 11th presentation meeting, with participation by 12 Group companies located in Japan and overseas.

The presentations helped attendees to better understand operations in their respective workplaces, and to share examples of good practices from other workplaces both in Japan and abroad.



"11th Group Presentations Competition"

Fair Evaluation and Compensation

As part of its efforts to practice fair and transparent personnel evaluations, Nippon Paper Industries lays out clear evaluation criteria and conducts review sessions, in which managers provide feedback on performance evaluations, for all nonmanagement employees. Review sessions are an opportunity to ensure that employees understand and accept evaluation results and for setting the skill development direction for individual employees. For decisions on promotions to management and other positions, the assistance of outside companies specializing in human resource assessment is called upon to enhance objectivity.

Industrial Relations

The Nippon Paper Group strives to maintain a sound relationship with its employees. Labor unions have been formed at Nippon Paper Industries and the majority of its consolidated subsidiaries. Irrespective of the existence of a labor union, however, every effort is made to maintain smooth industrial relations at all Group companies.

For example, under the shared objective of building a better company, Nippon Paper Industries Co., Ltd. has established a series of dedicated committees on labor-management issues, covering areas such as the operation of labor and management agreements, and staffing adjustment measures. These committees engage in sincere discussions with mutual respect for the positions of both labor and management.

Agreements between labor and management provide the basis for a variety of initiatives, as well as efforts to improve workplace environments.

In addition to these efforts, regular central meetings of leadership from both sides provide a forum to discuss diverse issues including corporate management and working conditions.

With regard to these central meetings, also, as of fiscal 2020 the Company has sought to review and revise the way in which meetings are held in order to increase the amount of time allocated to discussions, and endeavored to ensure a more lively exchange of opinions between leaders on both sides.

At Nippon Paper Industries, there are 4,791 labor union members (as of March 31, 2020). Workplaces are union shops and all of the employees covered by collective bargaining agreements are union members.

Discussions of working conditions

Changes to working conditions, such as alterations to personnel systems and personnel downsizing, are carried out on the basis of prior discussions between labor and management, after they have been thoroughly discussed.

In fiscal 2019, we launched a dedicated labor-management committee for the introduction of measures for promoting diversity. Through efforts such as this, the company is working to ensure unity labor-management consensus through frank exchanges of opinions between both sides.

Nippon Paper Group companies do not unilaterally impose changes on their employees.

Routine communication is critical for gaining the understanding of employees with regard to company actions.

The Group strives to provide information to employees and labor unions on a day-to-day basis, and to create opportunities for dialogue, such as in explaining financial results.

Guaranteed wage

In order to protect the stability of its employees' lives, the company guarantees wages above the levels required by laws and regulations regarding minimum wages.



Shirane-aoi (Japanese wood poppy)
planting activities

Responsibility to Communities

As a comprehensive biomass company creating new products and growing its businesses, the Nippon Paper Group manages broad expanses of forests and owns large-scale production sites, so it has significant impacts on local communities and the people who live and work in them.

Coexistence with these communities is critical to our own continued existence.

* Please refer to page 76 of the Nippon Paper Integrated Report 2020.

https://www.nipponpapergroup.com/english/ir/Integrated_Report_E2020_03.pdf#page=16

Materiality	Related Indicators	State of Efforts (fiscal 2019)
Coexistence with Local Communities and Society	Communication to gain the trust of local communities and society	Welcomed local schools, neighborhood associations and other groups for mill tours, and interacted with members of local communities by engaging in other activities, such as joint sponsorship of events
	Gaining understanding from the stakeholder	Gathered opinions and evaluations from stakeholders connected with our activities (by conducting questionnaires and other surveys)

Policy and Management

The Nippon Paper Group engages in a variety of social contribution activities to garner the trust of and remain close to local residents

Basic Stance

As one of its members, the Nippon Paper Group aims to contribute to society as a whole. While continuing to provide needed products, we would like to play a useful role in protecting the global environment, and in the advancement of culture and local communities. We are confident that building a consistent track record along these lines will earn the trust of society and allow us to continue our business activities in coexistence with local communities. The initiatives we engage in, both inside and outside Japan, include cleanups of the areas around our mills and plants, support for employment in afforestation areas, and other locally focused activities; and hosting of the School of Friendship for Forests and Paper, mill tours, and other activities making use of Group-owned forests and other Group resources.

Philosophy and Principles for Social Contribution Activities

(established on April 1, 2004)

Philosophy

As a member of society, we shall proudly promote activities that contribute to social development.

Principles

1. We shall pursue activities that contribute to cultural heritage and development.
2. We shall pursue activities that contribute to conservation and improvement of the environment.
3. We shall pursue activities that contribute to the development of communities.

Specific activity themes

- Increase the community involvement of Group company mills and overseas affiliates
- Promote activities that effectively utilize the resources and expertise of each Group company
- Promote corporate citizenship activities in which our employees play an active role
- Effectively use the company-owned forests in Japan (about 90,000 hectares)
- Employ effective PR inside and outside the Group

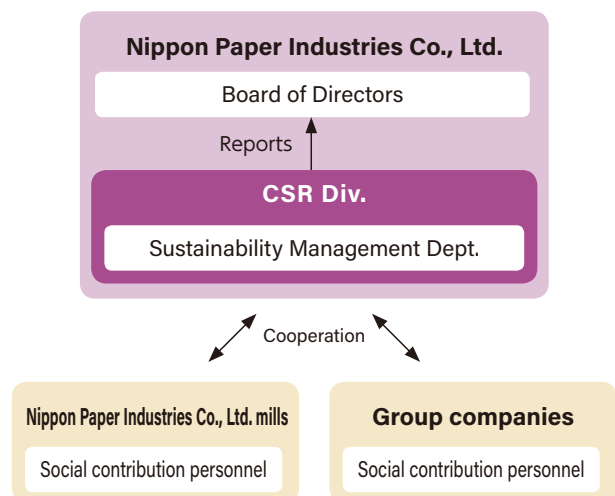
Structure for promoting social contribution activities

Nippon Paper Industries Co., Ltd.'s CSR Div. acts as the administrative office in driving the Nippon Paper Group's social contribution activities.

The central focus of these activities is on those relating to the Group's forests in Japan. For example, annual activity plans including volunteer participation in the School of Friendship for Forests and Paper and the Shiraneaoi Preservation Group, joint surveys in cooperation with the Wild Bird Society of Japan, and activities to eradicate alien species from Iriomote-jima Island are all administrated by the CSR Div.

The Division is also responsible for considering and executing new activities, such as the collection of used paper cups at Nippon Paper Industries Co., Ltd.'s head office, which began in fall 2019. Personnel responsible for social contribution activities at each of Nippon Paper Industries Co., Ltd.'s mills and other Group companies engage continuously in locally focused activities in their local communities.

The CSR Div. collaborates with mills and group companies to ascertain the state of these social contribution activities, and reports the state of their execution to the Board of Directors of Nippon Paper Industries Co., Ltd.



The Nippon Paper Group's principal social contribution activities

Principal activities	Specific examples	Page
Local community activities		
Cleaning activities	Appreciation event at Asahiya Zoo	—
Local community safety and disaster prevention	Children's "emergency 110" patrol project (110 is the number to dial for emergency assistance in Japan)	—
	Traffic safety initiatives	70
	Participation in fire brigades	—
Preserving local community cultures	Supporting Asukayama Takigi Noh plays	—
Respect for indigenous peoples	Making wild herb habitats available to indigenous peoples*	—
	Protecting indigenous heritage sites*	84
	Designating indigenous heritage sites as permanent protected zones*	84
	Donating materials to district inhabited by indigenous peoples*	84
Holding and participating in local events	Participating in and sponsoring local events	—
	Opening of recreational facilities to the public	—
	Holding summer festivals and other events	—
Social welfare activities	Copier-paper sale in support of the Pink Ribbon Campaign	—
	Participating in and cosponsoring social welfare events	—
	Purchasing products made by social welfare groups	—
Providing awareness-raising opportunities	Holding of CSR lectures (public seminars)	24
Advancing science and technology	Supporting the Fujihara Foundation of Science	85
Disaster relief activities	Donations of money and emergency supplies	12
Environmental activities		
Utilizing company- owned forests	Marunuma Highland Tree-Planting	83
Preserving biodiversity	Conducting business activities while protecting Blackiston's fish owl habitat	54
	Improving breeding conditions for the Blackiston's fish owl by installing artificial nesting boxes	85
	Supporting the activities of the Shiraneaoi Preservation Group	55
	Eradicating invasive plant species from Iriomote Island	55
Promoting recycling activities	Operating the Recycle Plaza Shiyukan	—
	Recycling Paper-Pak containers	52
Accountability to local communities	Environmental risk communication	42
Educational activities		
Providing opportunities o tour group companies and their mills	Programs that welcome junior high school students for opportunities to experience a workplace	—
Utilizing company-owned forests	Holding the School of Friendship for Forests and Paper	83
Employment support	Internships, and programs that welcome students for opportunities to experience a workplace*	—
	Holding seminars to meet the requests of local people*	85
Classes taught by employees	Cooperation in teaching school classes	—
Music appreciation	Inviting students to concerts	86
Providing educational opportunities through sports	Cosponsoring the Fukuchiyama Marathon	—
	Supporting sports classes for children from low-income families*	86
Providing products to classrooms	Provision of paper products, printed materials and publications	—

→ The Nippon Paper Group's principal social contribution activities

*Overseas activities

<https://www.nipponpapergroup.com/csr/society/activity/> (Japanese only)

Utilizing Company-Owned Forests

CASE Conducting the annual School of Friendship for Forests and Paper*1 (Nippon Paper Industries, Nippon Paper Development)



Children listening to explanations by a member of staff

The School of Friendship for Forests and Paper is a hands-on course on the natural environment utilizing forests (approximately 90,000 hectares) owned by Nippon Paper Industries in Japan. With the aim of introducing participants to the beauty and abundance of forests owned by the company, the school is also an opportunity to experience the connection between forests and paper, an essential item for everyday life. This initiative was first launched in the Sugenuma forest of Gunma Prefecture in October 2006.

The common programs that make up the school draw heavily on the knowledge and experience of employees. With Group employees serving as

guides, Comments from parents and guardians included, "It was a great opportunity to get to know the forest."

Since its inception at the Sugenuma company-owned forest, through fiscal 2019, the school has been conducted 24 times, for a total of 800 participants, including parents and children, and students from local schools.

the school has been conducted 24 times, for a total of 800 participants, including parents and children, and students from local schools.

In fiscal 2018 and 2019, we also co-sponsored and participated in an FSC® Forest Week*2 event, providing opportunities to learn about forest certification and other aspects of forest management.

*2 FSC license number: FSC®-C001751



Children's picture diaries of the event



A ceremonial photograph of all involved parties

➔ School of Friendship for Forests and Paper

<https://www.nipponpapergroup.com/morikami/> (Japanese only)

CASE Marunuma Highland Tree-Planting 2019 held*1 (Nippon Paper Industries)

Nippon Paper Industries Co., Ltd. is engaged in initiatives aimed at preserving thriving forests for future generations.

As part of that effort, tree-planting activities were begun in the company's Sugenuma Forest in Gunma Prefecture in May 2010. The eighth iteration of this activity—the Marunuma Highland Tree Planting 2019—took place in fiscal 2019. Around 90 people, both from the Nippon Paper Group and otherwise, participated in the event.



Participants planting trees

*1 Although the event was cancelled in fiscal 2020 due to the impact of the COVID-19 pandemic, we will continue to engage in social contribution activities utilizing company forests in the future.

Respect for indigenous peoples

CASE Protecting Indigenous Heritage Sites (Australia, Nippon Paper Resources Australia Pty. Ltd.)

In 2016, ancient aboriginal stone tools were discovered on the PTP plantation, one of the Australian plantation projects managed by Nippon Paper Resources Australia Pty. Ltd. (NPR).

Experts performed an on-site survey, and in 2017 the area was registered as an aboriginal heritage site. In 2018, a sign forbidding unauthorized access was erected to help preserve the site.

Moving forward, the company will formulate a cultural heritage site management plan for future harvesting at the plantation.

Dialogue with local aboriginal organizations will be continued, and the company will cooperate in preserving the site in its current condition.



Stone tool discovered on the PTP plantation



Sign to help preserve the site

CASE Designating Indigenous Heritage Sites as Permanent Protected Zones (Brazil, AMCEL S.A.)

Heritage site excavation surveys carried out on a 16,000 hectare piece of land owned by AMCEL S.A. between August 2013 and January 2014 resulted in the discovery and retrieval of 21 archaeological artifacts.

AMCEL has designated the entire area as a permanent protected zone, and is working to ensure the preservation of the site in collaboration with local government and research institutions.

The company is also conducting educational activities, such as by holding educational lectures on cultural heritage at schools in the city of Tartarugalzinho.



Signboard installed at the site



Educational lecture on cultural heritage

CASE Donating Materials to District Inhabited by Indigenous Peoples (Chile, Volterra S.A.)

Volterra S.A. participated in a local indigenous society project, donating funds to replace a deteriorated sewage tank and piping in a district populated by indigenous people next to one of its company forests.

The company also participated in a road repaving and expansion project in the district and provided and installed fencing materials.

These activities lead directly to improvements in the living environment for people in the district.

Through activities and dialogues such as these,

Volterra will continue to deepen the level of relationships and mutual understanding with people living in these indigenous districts.



Tank and piping donated by Volterra



Fence installed by Volterra

Advancing science and technology

CASE Supporting the Fujihara Foundation of Science (Nippon Paper Industries)

Considered the "Nobel Prize of Japan," the Fujihara Award, presented by the Fujihara Foundation of Science, a public interest incorporated association, recognizes outstanding contributions to science and technology by Japanese scientists.

Inheriting the spirit of Ginjiro Fujihara, the founder of Nippon Paper, for contributing to the science and technology promotion in Japan, Nippon Paper Industries lends financial support to the Foundation

to promote science and technology.

At the 61st Fujihara Awards Ceremony, held in August 2020, Keisuke Suzuki, Honorary Professor at the Tokyo Institute of Technology and Institute Professor of its Organization for Fundamental Research, and Noboru Mizushima, Professor at the Graduate School of Medicine, The University of Tokyo, were presented with award certificates, medals, and prize money of 10 million yen each.

Preserving biodiversity

CASE Improving Breeding Conditions for the Blackiston's fish owl by Installing Artificial Nesting Boxes in Cooperation with the Wild Bird Society of Japan (Nippon Paper Industries)

Since 2010, Nippon Paper Industries Co., Ltd. has been working to ensure a balance between its business activities and the preservation of the habit for Blackiston's fish owls in its company forest in Hokkaido. In 2020, the company will engage in activities to assist the breeding activities of these owls by installing several artificial nesting boxes in its company forest in cooperation with the Wild Bird Society of Japan (see P.54).

Blackiston's fish owl is one of the world's largest species of owl. In Japan, its habitats range from Hokkaido to the Northern Territories (the Kuril Islands). Until the beginning of the 20th century, the owls were distributed across the entire area of Hokkaido. With the decrease in the number of trees to

build nests due to deforestation, and the decline in numbers of fish to feed on as a result of river improvement and the construction of erosion control dams, the owls are currently classified as a Critically Endangered IA species; at the highest risk of becoming extinct.

To continue living, Blackiston's fish owls require abundant natural habitats with plentiful supplies of food and large trees suitable for nesting.

Moving forward, Nippon Paper Industries Co., Ltd. will continue to engage in activities to preserve abundant forests that suitable habitats for Blackiston's fish owls, which can also be regarded as a symbol of biodiversity.

Employment support

CASE Holding Lectures in line with the Requests of People in the Local Community (Brazil, AMCEL S.A.)

AMCEL owns vast areas of land, including afforestation areas, and is working to deepen its level of cooperation and dialogues with residents of local communities.

As one aspect of these efforts, the company asks local people what they would like to learn for vocational and lifestyle purposes, and continuously holds lectures on these themes.

In fiscal 2019, experts invited by AMCEL gave lectures on the themes of information processing and sewing, in the four districts of Santana, Ferreira Gomes, Tartarugalzinho and Itaubá.

The lecture courses ran for between four and 15 days and were attended by over 360 people, and were well received.



Scenes from some of the lectures

Music appreciation

CASE Inviting Pupils and Students to Sakkyo Pops Concert (Nippon Paper Industries, Nippon Paper Crecia)

Nippon Paper Industries Co., Ltd. specially invited around 450 local elementary school pupils, junior high school and high school students and music teaching staff, and people affected by the Hokkaido Eastern Iburi Earthquake to its "Nippon Paper Kleenex® presents Sakkyo Pops Concert Vol. 17" event at the Sapporo Concert Hall 'Kitara.'

The concert is held in a joint effort between Hokkaido's only professional orchestra, the Sapporo Symphony Orchestra and the Hokkaido Shimbun Press. Nippon Paper provides a special sponsorship for the purpose

of supporting the cultural arts in Hokkaido, while Nippon Paper Crecia contributes as a product sponsor. The first part of this 17th edition of the event commemorated the 50th anniversary of the Apollo moon landings, with performances of numerous pieces of music dedicated to the moon and stars.

In the second part, Japanese singer and composer Hiroshi Itsuki—who was also celebrating 55 years of his career in entertainment—captivated the audience with both new and old songs written by himself.

Providing educational opportunities through sports

CASE Supporting Sports Classes for Children from Low-income Families (Brazil, AMCEL S.A.)

AMCEL supports sports classes for children in local communities.

In fiscal 2019, the "Judô" (judo class) and "Peixinhos Voadores" (swimming class) programs were held, with around 100 children participating.

The activities are conducted by the environmental patrol of the Amapá state police, with the objective of encouraging the healthy development of children in low-income families through sports classes and preventing them from becoming involved in crime or drug abuse.

AMCEL supports these initiatives every year by providing equipment such as judo uniforms mats and inflatable swim rings.



Judo class



Swimming class



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Shaping the Future with Trees



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External evaluation

Main ESG indices adopted



2020 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)



2020 CONSTITUENT MSCI JAPAN
ESG SELECT LEADERS INDEX

Environmental rating



DBJ Environmental Rating
The Development Bank of Japan rated us in their
highest rank ("Environmental consideration is
particularly advanced").December 2018



Top level "AAA"
"ESG / SDGs evaluation-type found procurement":
Awarded by Sumitomo Mitsui Banking Corporation