

# Sustainable Procurement of Raw Materials

## 1 Basic Policy

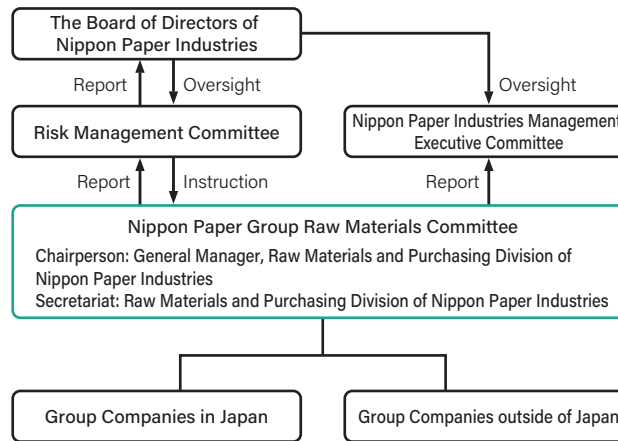
### →P81 Principles and Basic Policies Concerning Raw Materials Procurement

- The Nippon Paper Group revised the “Principles and Basic Policies Concerning Raw Materials Procurement” (hereinafter, “Procurement Policy”) in September 2022.
- In the process of its revision, the Group repeatedly engaged in dialogue with external experts and reflected the opinions of stakeholders in the revised content.
- The Group also communicates the content of the Procurement Policy to suppliers around the world by making both Japanese and English language versions and displaying them on its website.

### →P83 Wood Resources Procurement Guidelines

- To strengthen the procurement system for wood resources, the “Wood Resources Procurement Guidelines” (hereinafter, “Procurement Guidelines”) has been newly established, based on the Procurement Policy revised in September 2022.
- The Group also communicates the content of the Procurement Guidelines to suppliers around the world by making both Japanese and English language versions and displaying them on its website.

## 2 Promotion Structure



- The Group has established the Nippon Paper Group Raw Materials Committee, which is chaired by the general manager of the Raw Materials and Purchasing Division at Nippon Paper Industries. This committee discusses key issues related to raw materials procurement for the entire Group, such as policies on raw materials procurement, and reports on these issues to the Board of Directors through the Risk Management Committee.
- In FY 2022, the Committee reported to the Board of Directors through the Risk Management Committee on issues and strategies related to raw material procurement.

## 3 Sustainable Procurement of wood Resources

### 1. Procurement of wood Resources

- The Group procures wood resources in accordance with the following points based on the Procurement Policy and the Procurement Guidelines.

#### Key points in Nippon Paper Group's procurement of wood resources

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

- The Group has formulated and implemented an [action plan](#) →P14 for sustainable procurement of wood resources into practice.
- The Group uses a forest certification system to confirm that wood resources are being procured appropriately.
- All procured wood resources are certified by FSC® or PEFC. (All procured chips have been produced with wood from forests with an FM certification\*<sup>1</sup> or have undergone a risk assessment for the CoC certification\*<sup>2</sup>.)

\*1 FM (Forest Management) certification: Certification of forests with sustainable forest management

\*2 CoC (Chain of Custody) certification: Certification of certified materials that are properly distributed and processed

#### →WEB Forest Certification (Japanese only)

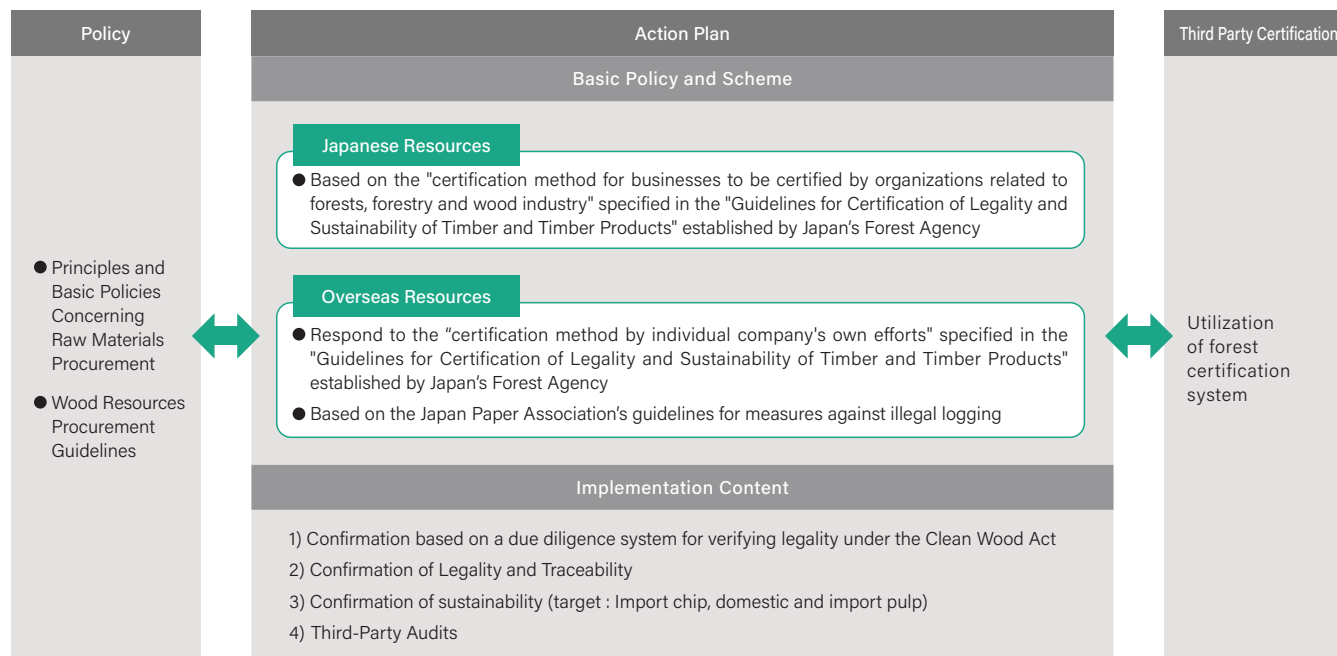
<https://www.nipponpapergroup.com/csr/forest/sustainability/certification/>

## Sustainable Procurement of Raw Materials

### 2. Action Plan for Wood-based Raw Material Procurement

- The Group conducts risk minimization and improvement processes by implementing an action plan established based on the Procurement Policy and the Procurement Guidelines. It works with suppliers to build a sustainable supply chain.
- In the action plan, following the basic policies for Japanese and overseas resources, the Group conducts 1) confirmation based on a due diligence system for verifying legality under the Clean Wood Act, 2) confirmation of legality and traceability, 3) confirmation of sustainability, and 4) third-party audits.
- Before commencing any transactions with new suppliers, the Group conducts on-site inspections and questionnaire surveys to confirm compliance with the Procurement Policies and the Procurement Guidelines and whether there is any risk, the status of acquisition of forest certification, and resource backgrounds.
- In the case of existing suppliers, the Group continues to do business with them after confirming whether there is any risk in executing the action plan.
- Corrective action is taken in the case of suppliers that are deemed to be high-risk or non-compliant with the action plan.
- In FY2022, the Company confirmed compliance with the action plan in all domestic and overseas materials suppliers.

#### Overview of Action Plan



#### Number of Implementation of Action Plan (Nippon Paper Industries, FY2022)

Japanese resources	316 wood chip suppliers, 5 pulp suppliers (Implemented for all suppliers and confirmed compliance with all)
Overseas resources	22 wood chip suppliers, 13 pulp suppliers (Implemented for all suppliers and confirmed compliance with all)

 [→WEB](https://www.nipponpapergroup.com/csr/forest/sustainability/actionplan/index.html) Action Plan for Wood-based Raw Material Procurement (Japanese only)  
https://www.nipponpapergroup.com/csr/forest/sustainability/actionplan/index.html

#### 1) Confirmation based on a due diligence system for verifying legality under the Clean Wood Act

- Nippon Paper Industries, Nippon Paper Papyrus and Nippon Paper Creca have established a Legality Certification Due Diligence System (hereinafter, Legality Certification DDS) manual based on the Clean Wood Act [→P15](#) for the purpose of verifying the legality of the wood resources that they procure.
- The companies use the Legality Certification DDS to conduct due diligence on all wood raw materials procured in Japan and overseas.

 [→WEB](https://www.nipponpapergroup.com/csr/DDmanual.pdf) Legality Certification Due Diligence System Manual (Japanese only)  
https://www.nipponpapergroup.com/csr/DDmanual.pdf

#### 2) Confirmation of legality and traceability (eradicating illegal logging)

- For Japanese resources, in addition to Legality Certification DDS, traceability is assured. Compliance with laws and regulations related to forestry operations, as well as other basic information such as tree species and whether or not forest certification has been acquired, are confirmed in accordance with the Forestry Agency's "Guideline for Verification of Legality and Sustainability of Wood and Wood Products."
- For overseas resources, in addition to the Legality Certification DDS, checks are performed on related documents on a ship-by-ship basis to ensure that the logging areas and suppliers are in compliance with relevant laws and regulations and that shipments do not contain illegally harvested wood and staff assigned to local offices conduct questionnaire surveys and local interviews (to confirm basic information such as laws and regulations related to forestry operations and compliance with these, tree species, and whether forest certification has been obtained, thereby enhancing traceability).

\* In FY2022, it was determined, based on questionnaire responses and shipping and other documents provided by each supplier, that no illegally logged wood chips or pulp were procured from overseas suppliers.

- Confirmation of legality is carried out for new business partners at the start of transactions and regularly on an annual basis for existing business partners.

## Sustainable Procurement of Raw Materials

### 3) Confirmation of sustainability

- The Group confirms sustainability through supplier questionnaire surveys\* (once a year) and local interviews.

\* target: Import chip, domestic and import pulp

- The Group disseminates the Procurement Policies and the Procurement Guidelines in its supplier questionnaires in Japanese and English.

#### Contents of Supplier Questionnaire Survey (Excerpt)

- Confirmation of the Procurement Policies and the Procurement Guidelines.
- Policies or systems have been established for addressing human rights and labor matters.  
(Workers' collective bargaining rights and free association rights, No forced labor, No child labor or discrimination, Being protected in health and safety, Considering the rights of indigenous peoples)
- Fair transactions have been conducted.
- Social contribution initiatives have been undertaken to improve relations with local communities.
- The environment has been considered.  
(Response to climate change issues, reduction of environmental impact, effective use of resources, consideration for water resources)
- Logging and forest management activities that are considered to protect biodiversity have been conducted.
- Biodiversity surveys have been conducted.
- Forest certification has been obtained.

### 4) Third-party audits

All procured wood resources are audited annually by the Japan Paper Association's "Illegal Logging Monitoring Project," and assessed for risks by the due diligence system of forest certification PEFC.

### 3. Response to the Clean Wood Act

Nippon Paper Industries, Nippon Paper Papyrus, Nippon Paper Crecia and Nippon Paper Lumber completed their registrations as both a Type 1 and Type 2 Wood-related Businesses under the Act on Promotion of the Distribution and Use of Legally Harvested Wood (the Clean Wood Act). In compliance with this law, the companies confirm the legality of the covered items they handle.

#### Registration Details

Business registered	Registration number	Effective registration period	Institution conducting registration	Products
Nippon Paper Industries	JIA-CLW-I, II No. 17024	March 19, 2023 to March 18, 2028	Japan Gas Appliances Inspection Organization	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
Nippon Paper Papyrus	JIA-CLW-I, II No. 19001	April 26, 2019 to April 25, 2024		
Nippon Paper Crecia	JIA-CLW-I, II No. 19002	April 26, 2019 to April 25, 2024		
Nippon Paper Lumber	JPIC-CLW-I, II No. 54	July 6, 2023 to July 5, 2028	Japan Plywood Inspection Corporation	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

## 4 Employee Training and Education

### Raw Material Procurement Related Training Sessions (FY2022)

Topics	Target participants	Frequency
Principles and Basic Policies Concerning Raw Materials Procurement, Wood Resources Procurement Guidelines	Staff in charge of forest certification	Once a year, or when staff are replaced
Forest Certification	Staff in charge of forest certification	Once a year, or when staff are replaced

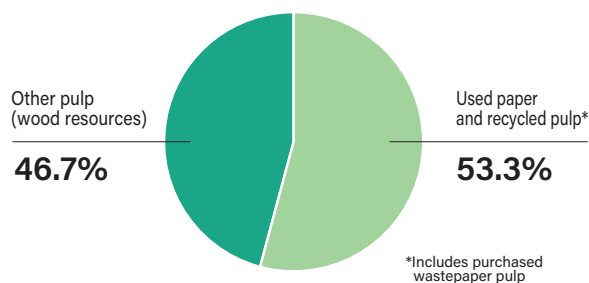
## Sustainable Procurement of Raw Materials

### 5 Nippon Paper Group Raw Materials Procurement

#### 1. Major Raw Materials for Paper Products

The main raw materials for the Group's paper products are pulp derived from wood resources and used paper/recycled pulp.

#### Breakdown of major raw materials for paper products (Consolidated companies in Japan, FY2022)



#### 2. Stable Wastepaper Procurement

The Group continues to maintain the stable procurement system that it has built over the course of many years in cooperation with the wastepaper industry. (Initiatives for Using Wastepaper → P39)

- Building a Closed Loop System
- Circular use of wastepaper in collaboration with local governments
- Collection and utilization of previously unused and difficult-to-treat waste paper such as used food containers

#### Amount of used paper and recycled pulp procured\* (FY2022)

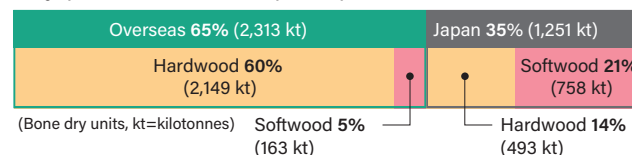
Used paper (kt)	Recycled pulp (kt)	Total (kt)
2,304	10	2,314

\* Target of aggregation: Consolidated companies in Japan excluding Cresia Kasuga

#### 3. Stable Wood Resources Procurement

- The Company procures most of the wood resources as wood chips and some as pulp.
- About 65% of wood chips are procured from overseas, and about 35% from Japan.
- To ensure stable procurement, sources of wood chip imports are diversified between Asia, Australia, and South America, and other parts of the world.
- The Group procures wood resources with proper planning and management.
- The Company and overseas plantation subsidiaries have obtained forest certification for all its company-owned forests.
- To ensure stable procurement using the Group's own resources, the Group is promoting overseas plantation business → P19 and utilizing company-owned forests in Japan. → P17
- In the case of external procurement, the Group has strengthened its supply chain management and built a procurement system that traces back to the forests where wood resources are sourced.

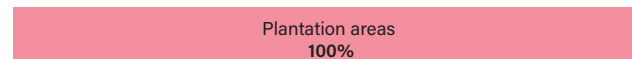
#### Geographic Breakdown of Wood chips for Paper Manufacture (Nippon Paper Industries, FY2022)



#### Hardwood Resource Breakdown (2,642 kt)



#### Softwood Resource Breakdown (921 kt)



\* Natural forests as indicated here refer 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.

#### Countries of origin and tree species for overseas wood chips procured for paper manufacture (Nippon Paper Industries, FY2022)

##### Hardwood

Country	Percentage	Species
Vietnam	34%	Acacia
South Africa	26%	Acacia, Eucalyptus
Australia	19%	Eucalyptus
Brazil	9%	Eucalyptus, Acacia
Thailand	7%	Eucalyptus
Chile	5%	Eucalyptus
Total	100%	

##### Softwood

Country	Percentage	Species
Australia	100%	Pinus radiata

# Sustainable Forest Management

## 1 Basic Policy

Forests possess tremendous value to Nippon Paper Group as a management resource. For this reason, the Group nurtures forest resources on its own while also procuring sustainable wood resources from outside sources. The Group will continue to provide diverse value by appropriately managing its 160,000 hectares of forests in Japan and overseas, leveraging the unique technology and knowledge the Group has cultivated to date.

### The Nippon Paper Group Definition of Sustainable Forest Management

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

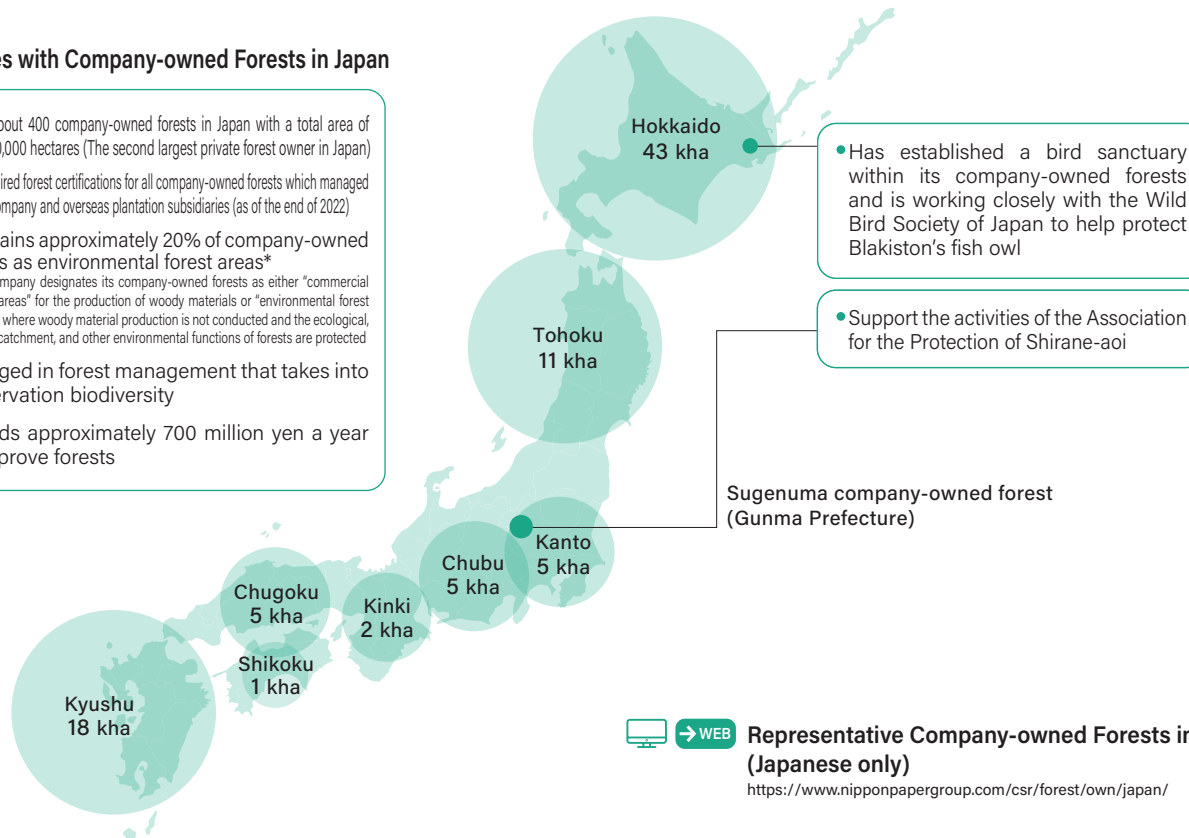
## 2 Utilization of Company-owned Forests in Japan

### 1. Sustainable Forest Management in Company-owned Forests in Japan

Nippon Paper Industries as a company owning forests and utilizing forest resources, aims to enhance the productivity of company-owned forests and carries out balanced and sustainable forest management which can fully demonstrate public interest functions such as forest biodiversity conservation and water source retention.

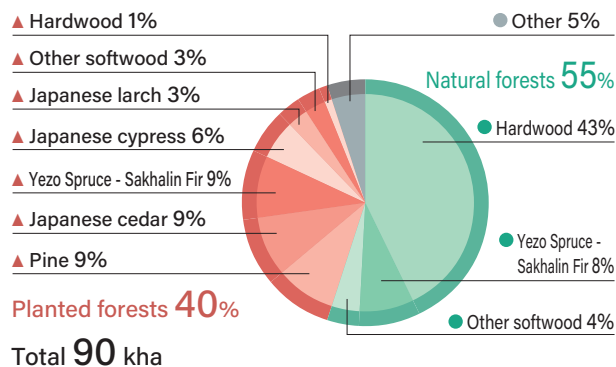
### Initiatives with Company-owned Forests in Japan

- Owns about 400 company-owned forests in Japan with a total area of about 90,000 hectares (The second largest private forest owner in Japan)
- Has acquired forest certifications for all company-owned forests which managed by the Company and overseas plantation subsidiaries (as of the end of 2022)
- Maintains approximately 20% of company-owned forests as environmental forest areas\*  
\* The Company designates its company-owned forests as either "commercial forest areas" for the production of woody materials or "environmental forest areas," where woody material production is not conducted and the ecological, water catchment, and other environmental functions of forests are protected
- Engaged in forest management that takes into preservation biodiversity
- Spends approximately 700 million yen a year to improve forests



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

### Breakdown of Tree Species in Company-owned Forests (as of the end of 2022)



### Forest Certification Status of Company-owned Forests in Japan (Nippon Paper Industries)

Company-owned forests in Japan (by Region)	Certification system name	Date acquired
Hokkaido	SGEC	Dec. 2005
Tohoku	SGEC	Oct. 2007
Kanto, Chubu, Kinki (partial)	SGEC	Oct. 2007*
Kinki, Chugoku, Shikoku	SGEC	Dec. 2006
Kyushu	SGEC	Mar. 2005

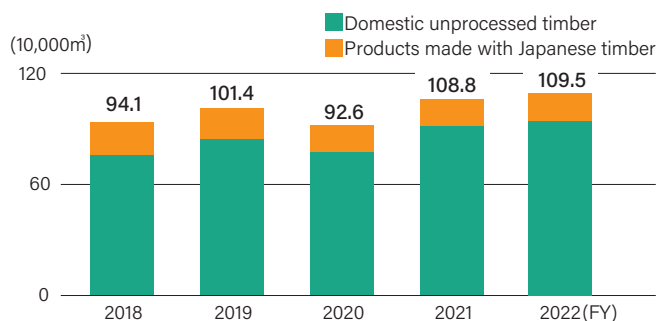
\* Obtained for Kitayama company-owned forest in Shizuoka Prefecture only in December 2003.

## Sustainable Forest Management

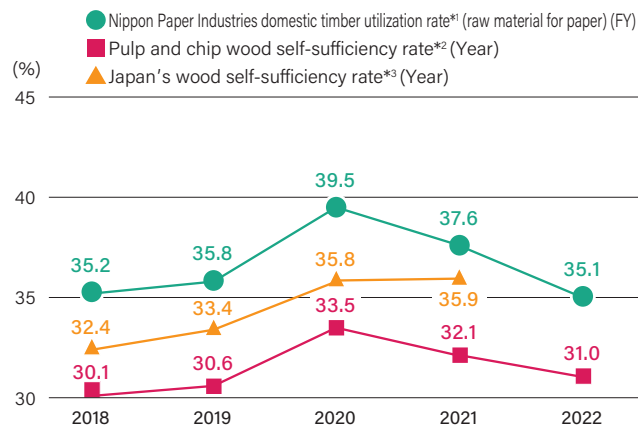
### 2. Invigorating Japan's Forest Industry

- The Group promotes the maintenance of the domestic supply chain and the further use of domestic timber under a forestry policy based on the basic policy of "green growth through the forest, forestry and timber industries" promoted by the Government of Japan.
- The Company is working to increase the percentage of domestic timber as a raw material for paper. This figure was 35.1% in FY2022.
- The volume of domestically produced wood chips used by the Company to make paper accounts for about 10% of the total demand for domestically produced timber, and its usage ratio of domestically produced material is at the highest level in Japan.
- 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 with the goal of "annual sales\* of domestic unprocessed timber of 1 million m<sup>3</sup>."
  - \* Does not include woodchips for paper manufacturing use.
- The Company is also working to utilize company-owned forests throughout Japan as a field in which to support the revitalization of the domestic forestry industry.

#### Domestic Timber Sales Results by Product Type (Nippon Paper Lumber)



#### Domestic Timber Utilization Rate (Nippon Paper Industries)



\*1 It 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.

#### CASE STUDY

##### Expansion of Business of Elite Seedlings for Forestry\* and Utilization of Company-owned Forests (Nippon Paper Industries)

The Company is working on the business of elite tree seedling for forestry in collaboration with the Forestry Agency, municipalities, and seedling traders. In FY2022, In addition to Kumamoto Prefecture, the Company newly opened seed orchards for elite trees of Japanese cedar and Japanese cypress in Shizuoka, Tottori, Hiroshima, and Oita prefectures. In the future, the Company will accelerate nationwide expansion and aim to build a production system of 10 million units by FY2030. The Company is also working to create a model for the revitalization of the domestic forestry industry by planting elite trees in company-owned forests that have been reforested.

\* Strains of Japanese cedar and Japanese cypress with excellent characteristics such as 1.5 times more growth and CO<sub>2</sub> absorption and less than half the amount of pollen production.

#### CASE STUDY

##### Use of Cutting-edge Technology (Nippon Paper Industries, Nippon Paper Lumber)

Nippon Paper Industries and Nippon Paper Lumber are examining the acquisition of forest resource information using a drone and aerial laser and labor saving in and streamlining of forest management in company-owned forests. The companies concluded an agreement on the implementation of cutting-edge technology on-site with Shizuoka Prefecture in May 2022, and will demonstrate cutting-edge technology using company-owned forests in Shizuoka. In addition, in September 2022, the Company realized the efficient creation of J-Credits\* using aerial laser measurement data at the Kazaki company-owned forest (Fuji City, Shizuoka Prefecture).

\* J-Credit Scheme is a system to certify the amount of CO<sub>2</sub> and other greenhouse gas emissions reduced by energy saving and the use of renewable energy or absorbed through proper forest management, as "credit."

##### Public-private Collaboration in the Formation of Large-Scale Forestry Business Complexes (Nippon Paper Industries)

Since 2011, as a private-sector company that owns a forest in the Itsuki region of Kumamoto, the Company has been involved in an agreement to promote forest management in the region, alongside Kyushu Regional Forest Office, Itsuki Village, ITSUKI Forest Owner's Cooperative, and others. Currently, the field environment is a large-scale forestry operation of over 20,000 hectares, and the partnership is engaged in reasonable road building and efficient forestry operations. The Company continued cooperative shipments in FY2022 and aims to increase shipments in the future.

##### Supply of SGEC-Certified Wood (Nippon Paper Industries, Nippon Paper Lumber)

Nippon Paper Lumber received CoC certification of SGEC for the first time in Japan. In 2018, the Company used Nippon Paper Lumber's CoC certification to supply SGEC-certified material from its Kitayama company-owned forest (Fujinomiya, Shizuoka) to the Exhibition Building Wooden Grid Project at the Mt. Fuji World Heritage Center, Shizuoka. This is the first case of acquiring "SGEC/PEFC CoC Project Certification" in Japan. SGEC-certified lumber from company-owned forests was also supplied for use in the construction of the Japan National Stadium, which was completed in 2019.

## Sustainable Forest Management

### 3 Promotion of Overseas Plantation Business

#### 1. Sustainable Forest Management in Overseas Plantation Projects

- The Group manages approximately 70,000 hectares of plantation areas in Brazil and Australia.
- All plantation areas managed by overseas plantation subsidiaries have obtained forest certification (as of the end of 2022).
- The Group conducts its forest management considering the natural environment/ecosystem, local residents, and local culture/traditions.

#### Consideration for the natural environment and ecosystem

- For plantation areas, the Group utilizes grasslands, vacant farms, pastures, and harvested plantation land.
- The Group selects and plants tree species that are suited to local climates and are good as raw materials for paper manufacturing, with a focus on the fast-growing Eucalyptus.
- In order to maintain a balance between areas planted with Eucalyptus and biodiversity in the region, the Group manages plantation areas appropriately with consideration for the landscape, such as retaining native waterside forests where the potential effects on the ecology are significant as riparian forest areas.

- The Group has set up protected areas on company-owned land for biodiversity conservation, and conducts habitat surveys of animals and plants. [→P45](#)

#### Coexistence with local communities

- When conducting new development, the Group carries out environmental and social impact assessments, and gives consideration to indigenous peoples, and provides support for educational activities for local residents.
- The plantation project companies conduct regular visits and meetings for communities surrounding the plantation areas they own, in order to confirm the opinions and demands of local people with regard to their project activities.
- Based on requests obtained through dialogue with stakeholders, the Group establishes procedures for evaluating and reviewing social contribution activity programs.

#### Overview of Overseas Forests under Nippon Paper Group Management (as of December 31, 2022)

Company	Country	Plantation area (10 k ha)	Background
Amapá Florestal e Celulose S.A.(AMCEL)	Brazil	6.5	Wholly owned subsidiary of Nippon Paper Industries
Nippon Paper Resources Australia Pty. Ltd.(NPR)	Australia	0.7	Wholly owned subsidiary of Nippon Paper Industries (Management of PTP, BTP, etc.)

#### Status of Forest Certification Acquisition for Overseas Plantation Projects

Overseas plantation project by operating company	Company	Certification system name (License no.)	Acquisition year
PTP	Australia	Responsible Wood	2006
BTP	Australia	Responsible Wood	2006
AMCEL	Brazil	FSC®(FSC®C001931) CERFLOR	2008 2014



#### Overseas Forests under the Management of Nippon Paper Industries (Japanese only)

<https://www.nipponpapergroup.com/csr/forest/afforest/>

#### Examples of Activities to Coexist with Local Communities

Country	Examples of activities to coexist with local communities	
	Contributions to local communities	Respect for indigenous peoples
Brazil	<ul style="list-style-type: none"> <li>● Vocational training for local residents in communities surrounding plantation areas</li> <li>● Distribution of compost made using bark and biomass residues to farmers around plantations</li> <li>● Financial support for elderly care facilities</li> <li>● Sponsorship and provision of materials to military police environment units (sports classes for children of low-income families)</li> <li>● Partnership with military police (sponsorship of education and sports classes for children from low-income families run by military police)</li> <li>● Financial support for protection of wild animals and environmental education activities</li> </ul>	<ul style="list-style-type: none"> <li>● Designation of areas with indigenous heritage sites identified on company-owned land as permanent protected zones</li> </ul>
Australia	<ul style="list-style-type: none"> <li>● Cooperation with firefighting activities in times of forest fires in the local area, as members of a fire brigade consisting of local plantation-related companies</li> </ul>	<ul style="list-style-type: none"> <li>● Protection of indigenous heritage sites identified in plantation areas</li> </ul>



#### Main Activities for Coexistence with Communities and Society, and Social Contribution Activities

## Sustainable Forest Management

### 2. Improving the Productivity of Forest Resources

- The Group is striving to stabilize woody raw material procurement, improve quality and reduce costs, and improve productivity by utilizing its proprietary technologies.
- By FY2030, the Group plans to expand forests where it can secure resources to around 100,000 hectares, mainly in Asia.

#### CASE STUDY

##### Improved Productivity Utilizing its Proprietary Technologies (AMCEL)

AMCEL is developing eucalyptus plantation trees that grow quickly in tropical regions and are suitable as raw materials for paper manufacturing.

AMCEL has shortened the time required for selection using its proprietary breeding and propagation technologies, and has greatly improved the productivity of its plantations in a short period of time.

The Group has significantly improved business profitability and CO<sub>2</sub> fixation efficiency per unit area by reducing the costs associated with improving productivity.

##### Strategic Partnership Agreement in Indonesian Plantation Project (Nippon Paper Industries)

In March 2022, the Company entered into a strategic partnership with Marubeni Corporation to improve forest stock volume through technical guidance to MHP, Marubeni Corporation's Indonesian plantation company.

The Company aims to increase the number of suppliers of sustainable forest resources in Southeast Asia by increasing forest stock volume through its technical guidance.