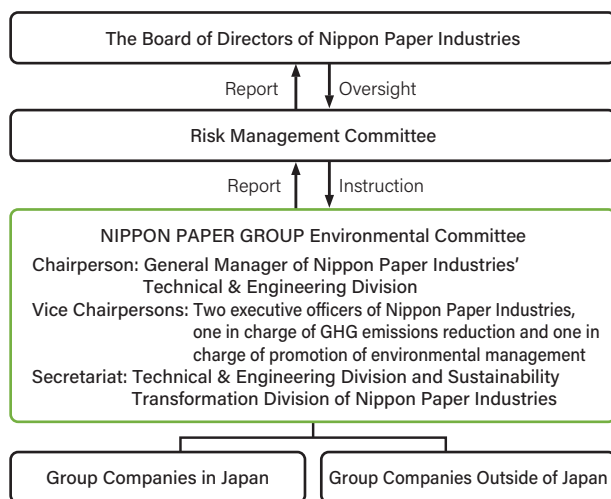


# Environmental Management

## 1 Basic Policy

**→ P94** NIPPON PAPER GROUP Environmental Charter

## 2 Promotion Structure



- NIPPON PAPER GROUP's management risks related to the environment are identified, and countermeasures are implemented by the NIPPON PAPER GROUP Environmental Committee. The committee is chaired by the General Manager of the Nippon Paper Industries' Technical & Engineering Division, who is the Representative Director of the Company.
- The Committee consists of major Group companies in Japan that have production sites.
- Under the supervision of the Board of Directors, the Committee manages, evaluates, and deliberates on the achievement status of environmental targets based on the NIPPON PAPER GROUP Environmental Charter.
- Once a year, the operational status and deliberations of the Committee are reported to the Board of Directors through the Risk Management Committee.

- In FY2024, the Committee reported to the Board of Directors through the Risk Management Committee on environmental law violations and risks related to the transition to a carbon neutral society.

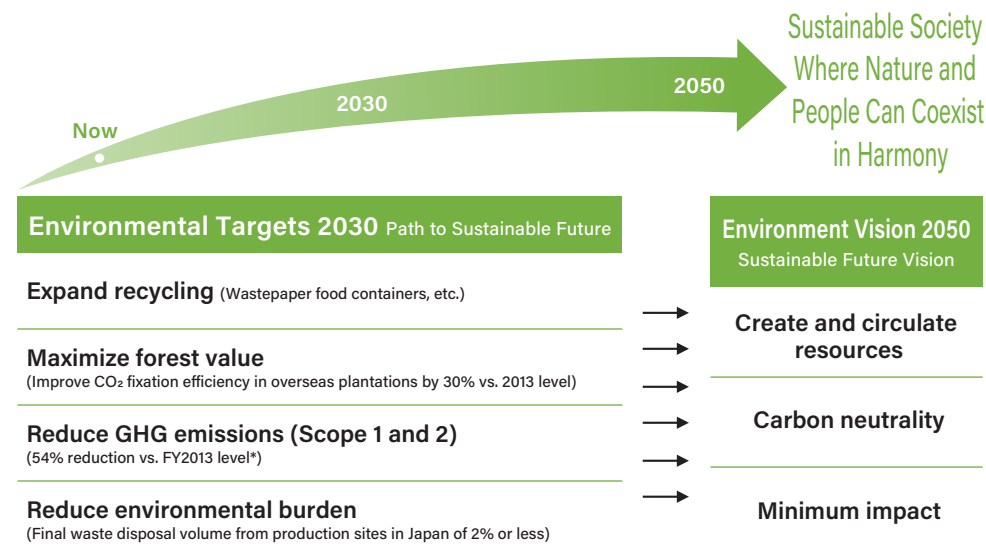
## 3 NIPPON PAPER GROUP Environmental Vision 2050, NIPPON PAPER GROUP Environmental Targets 2030

- The Group has set a vision for 2050 and the ideal state of the Group in 2050, and is working on the Environmental Targets 2030 formulated to achieve it.
- In the Environmental Targets 2030, the Group will promote the reduction of greenhouse gas (GHG) emissions, the maximization of forest value, the expansion of recycling, and the reduction of environmental burden throughout the value chain in order to realize a sustainable society.
- The Group aims to achieve a sustainable society where people and nature coexist by providing products that have a low environmental impact throughout their life cycle.

**NIPPON PAPER GROUP Environmental Charter**

**[Philosophy]**

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.



\* Emissions related to production except for the Energy Business field

## Environmental Management

### NIPPON PAPER GROUP Environmental Vision 2050 (Sustainable Future Vision)

#### 1. Carbon Neutrality

##### Reduce greenhouse gas emissions to virtually zero.

- Minimize greenhouse gas emissions through the efficient use of energy and the use of renewable energy sources.
- Minimize greenhouse gas emissions in the value chain through collaboration with stakeholders.
- Become carbon neutral by offsetting residual emissions through CO<sub>2</sub> absorption and fixation in forests and CO<sub>2</sub> removal technologies.

#### 2. Creation and Circulation of Resources

##### Create sustainable forests that preserve biodiversity and procure and supply resources.

- Maintain and expand forests with multifaceted value and maximize forest value.
- Procure and supply a variety of woody biomass resources that can be used as raw materials for various products.

##### Promote the utilization of woody biomass resources to contribute to better living in a circulation-oriented society.

- Provide a variety of materials and products made from woody biomass resources.
- Promote resource circulation and product recycling as a social infrastructure.

#### 3. Minimum Impact

##### Minimize the environmental impact of the Group's business activities.

- Minimize the input and output of resources that impact the environment.
- Provide society with products and services that have a low environmental impact throughout their entire life cycle.

## Environmental Management

### Progress and Status of Initiatives in NIPPON PAPER GROUP Environmental Targets 2030 (FY2024)

#### 1. Reduce greenhouse gas emissions

Reduce greenhouse gas emissions through fuel conversion and energy conservation measures.

Target	Progress and status of initiatives
<ul style="list-style-type: none"> <li>Reduce direct greenhouse gas emissions by 54% from FY2013 levels*<sup>1</sup>.</li> </ul>	The Group reduced GHG emissions (Scope 1 and 2) by 41% compared with FY2013 levels (progress rate: 76%).
<ul style="list-style-type: none"> <li>Accelerate fuel conversion and increase the ratio of non-fossil energy use to at least 60%.</li> </ul>	The non-fossil energy ratio to energy used was 44% (progress rate: 73%).
<ul style="list-style-type: none"> <li>Improve total energy consumption per unit of production and distribution by 1% from the previous year.</li> </ul>	Compared with 2023, the total energy consumption per unit of Nippon Paper Industries in its production processes decreased by 2.8% in the Paper Business and 2.2% in the Paperboard Business, while increasing by 3.8% in logistics processes.
<ul style="list-style-type: none"> <li>Reduce greenhouse gas emissions from product transportation in the Paper and Paperboard Business in Japan by 23% relative to FY2020 levels through modal shift and other measures*<sup>2</sup>.</li> </ul>	Greenhouse gas emissions from product transportation in the Paper and Paperboard Business in Japan decreased by 15% relative to FY2020 levels (progress rate: 66%).
<ul style="list-style-type: none"> <li>Collaborate with stakeholders to reduce indirect greenhouse gas emissions.</li> </ul>	The Group calculated Scope 3 emissions from major pulp and paper companies in Japan, identified categories where efficient reductions are possible, and began considering reduction measures.

\*1 Emissions related to production except for the Energy Business field

\*2 Applied to Nippon Paper Industries

#### 2. Promote the creation and circulation of resources

Promote the protection and cultivation of forest resources and biodiversity-conscious forest management.

Target	Progress and status of initiatives
<ul style="list-style-type: none"> <li>Improve CO<sub>2</sub> fixation efficiency in overseas forest plantations by 30% compared to 2013 levels.</li> </ul>	In AMCEL (Brazil), the chip productivity, used as an indicator for CO <sub>2</sub> fixation efficiency, increased by 23.9% compared to FY2013.
<ul style="list-style-type: none"> <li>Obtain and maintain forest certification for all company forests in Japan and overseas.</li> </ul>	The Company and overseas plantation subsidiaries have obtained and maintained forest certification (FM) (FSC* <sup>1</sup> , PEFC, and SGEC) for all of the company-owned forests in Japan and overseas.
<ul style="list-style-type: none"> <li>Ensure the traceability and sustainability of all woody biomass resources used.</li> </ul>	The Group has worked to confirm sustainability and enhance traceability by making use of forest certification systems, and through other efforts. The wood chips and pulp used for papermaking in FY2024 were all made from wood approved by FSC* <sup>2</sup> or PEFC (including controlled wood and controlled sources).
<ul style="list-style-type: none"> <li>Promote the use of domestic forest resources.</li> </ul>	The use of domestic wood at all Nippon Paper Industries mills reached 36.0% in FY2024 (based on actual purchases).

\*1 FSC\* Logo License No. FSC\* C023383 (AMCEL: Brazil)

\*2 FSC\* Logo License No. FSC\* C001751 (Nippon Paper Industries)

Promote the circulation of resources.

Target	Progress and status of initiatives
<ul style="list-style-type: none"> <li>Work to build a recycling system that promotes resource circulation.</li> </ul>	The Group is working with our customers, including processing manufacturers, to establish a recycling scheme for hard-to-use paper products made from laminated paper, which has been a material that could not be recycled. In consultation with various local authorities, the Group has established its own collection routes for paper waste and has begun to achieve results in the recycling of used release paper, beverage paper cups, and other materials.
<ul style="list-style-type: none"> <li>Utilize 12,000 t/year of unused wastepaper which has been difficult to recycle, through the development of recovered paper utilization technology.</li> </ul>	The actual use of unused and difficult-to-treat wastepaper was 11,908 tonnes in FY2024. (Breakdown: 4,680 tonnes of wastepaper for food and beverage containers, 7,228 tonnes of other difficult-to-use wastepaper)

#### 3. Reduce environmental burden

Reduce the environmental burden of manufacturing processes.

Target	Progress and status of initiatives
<ul style="list-style-type: none"> <li>Reduce air pollutants by 15% and water pollutants by 15% compared to FY2018 levels.</li> </ul>	Reduction rate at production sites in Japan: SO <sub>x</sub> 50%, NO <sub>x</sub> 26%, dust 27%, COD/BOD 35%, and SS 17%
<ul style="list-style-type: none"> <li>Reduce the final disposal of industrial waste at production sites in Japan to 2% or less.</li> </ul>	The final disposal of industrial waste at production sites in Japan was 1.6%.
<ul style="list-style-type: none"> <li>Provide society with products and services that have minimal environmental impact throughout their entire life cycle.</li> </ul>	By replacing mechanical pulp with chemical pulp, the Company has developed and launched the "N.Polaris43 Yuki <sup>®</sup> ," a publication paper product, which reduces GHG emissions during production by approximately 17% compared to conventional products.

## Environmental Management

### 4 Strengthening Environmental Compliance

The Group is strengthening its environmental compliance from a preventive standpoint, using a two-pronged approach of building systems to prevent problems and establishing a framework that ensures all problems are covered, and engaging in its business activities while giving priority to legal compliance.

#### Two-Pronged Approach

##### (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 the environmental management system
- Engaging in environmental communication and active information disclosure

### Environment-related\* Fines and Penalties

Environment-related fines and penalties (FY2024)	0 Yen
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\* Laws and regulations regarding the environment of water intake, wastewater, air, and waste

### 1. Building a Workplace that Emphasizes the Importance of the Environment (Environmental Compliance Training)

To promote the creation of workplaces that emphasize the importance of the environment, the Group is working on systematic environmental training for employees.

- Encourage employees to obtain qualifications related to pollution prevention and to participate in external training to acquire specialized knowledge.
- Photo contest "NIPPON PAPER GROUP Eco Photo Award" (Environment Month every June)
- Environmental e-Learning
- Dissemination on the in-house portal site of environmental education materials and environmental information from each mill and office (FY2024: Posted 8 environmental education materials)

#### Achievements in Environment-related Employee Education (FY2024)

Topic/Title	Target participants	Number of participants	Number of sessions
Basic Course on Life Cycle Assessment	Sales Department staff (Nippon Paper Industries)	319	1

### 2. Strengthening the System for Identifying Applicable Laws and Regulations

To respond appropriately to revisions to environment-related laws and regulations, the Group uses a law search system and other means to share information on revisions of laws and their trends and has established a system to ensure compliance with laws and regulations.

### 3. Implementing Measures from Both the Facility and Technology Perspectives

- The Group extracts the risk of environmental accidents from two perspectives: the possibility of an accident and its impact on the environment, and introduces equipment and measurement equipment necessary for preventing 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.

### 4. Enhancement of the Environmental Management System

- The Group conducts regular environmental audits based on "The Approach to Environmental Management for Pollution Prevention," which is the action guideline for environmental management efforts issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.
- Audits are double-checked by an internal audit by each mill or office, and by an audit by the environmental department at head office.
- In addition to document audits (confirmation of management records for wastewater and other waste materials) and on-site audits (confirmation of facilities such as chemical tanks), the environmental department at head office accompanies internal audits by the Management Audit Office to strengthen audits of the environmental management of Group companies.
- The Group thoroughly manages its environmental impact, including factory wastewater and exhaust gases, on a daily basis through regular measurements by third parties and, at some of the mills, constant monitoring using measuring equipment and inspectors' measurements.

## Environmental Management

### 5. Engaging in Environmental Communication and Active Information Disclosure

- The Group has also established the "NIPPON PAPER GROUP Risk Communication Guidelines" and is implementing initiatives based on the guidelines.
  - Risk communication for local residents and local governments held at each mill/office (in principle, held at least once a year)
  - Preliminary briefing session on the environmental impact of construction and operation when introducing large equipment, etc.
- The Group tries to listen to the opinions of all, including accepting opinions and questions on its website, establishing complaints and inquiries desks at mills, and utilizing an environmental monitor system to request information from local residents.
- When a complaint is received, the Group moves swiftly to determine possible causes, and implement emergency and permanent solutions.
- The Group also explains to the person who lodged the complaint what happened and what was done to resolve the situation, so that they can be satisfied that the Group has responded appropriately.

#### Environment-related Complaints in Japan (FY2024)

Complaints	Noise/Vibration	Odor	Dust and mist dispersal	Smoke	Other	Total
Number	1	1	2	0	0	4

### 5 Acquisition of Major Environmental Certifications and Awards

#### Status of ISO 14001 Certification Acquisition (as of March 31, 2025)

Company name	Mills/Operating division/Production subsidiaries
Nippon Paper Industries	Asahikawa Mill, Siraoi Mill, Akita Mill, Ishinomaki Mill, Iwanuma Mill* <sup>1</sup> , Nakoso Mill, Ashikaga Mill, Soka Mill, Fuji Mill, Gotsu Mill, Otake Mill, Iwakuni Mill, Yatsushiro Mill, Higashimatsuyama Mill
Nippon Paper Crecia	Tokyo Mill, Kaisei Mill, Koyo Mill, Kyoto Mill
CreCIA Kasuga	Shin-Fuji Mill
Nippon Paper Papyrus	Harada Mill, Suita Mill, Kochi Mill
N&E	Head Office Plant
NP Trading	Head Office, Sapporo Branch Office, Chubu Branch Office, Kansai Branch Office, Chugoku Branch Office, Kyushu Branch Office, Shizuoka Sales Office
Nippon Paper Ishinomaki Technology	Head Office (Excluding Power Section, Machinery Section I, and Construction Section I)* <sup>2</sup>
Opal	Opal Kiwi Packaging Auckland, Opal Kiwi Packaging Christchurch, Opal Kiwi Packaging Hastings, Opal Australian Paper Maryvale Mill
Jujo Thermal	Kauttua
Siam Nippon Industrial Paper	Siam Nippon Industrial Paper
Nippon Paper Liquid Package Product	Egawa Mill, Miki Mill, Ishioka Mill

\*1 Certified for production of pulp and paper such as newsprint paper, second and lower grade paper

\*2 Certified for the design and construction related to civil engineering, architecture, electrical equipment, mechanical equipment, steel structures, pipe work, and related incidental work (excluding construction work ordered by NIPPON PAPER GROUP)

- Nippon Paper Industries has obtained ISO 14001 certification for 100% of its production sites.

#### Status of Eco-Action 21 Acquisition (as of March 31, 2025)

Company name	Mills/Operating division/Production subsidiaries
Akita Jujo Chemicals	Head Office Plant

#### External Awards for Environmental Conservation Activities (FY2024)

Company name	Award
Nippon Paper Industries	"The Minister of Agriculture, Forestry and Fisheries' Award," from the 33rd Grand Prize for the Global Environment Award
Nippon Paper Industries	"The National Forestry Extension Association President's Award," Competition of Forestation with Low Pollen Trees 2024