

The Environment

Initiatives to Address Climate Change

Promotion Structure

In addition to the range of impacts generated by global warming and climate change, the Nippon Paper Group believes that those global trends coinciding with the Paris Agreement and the policies of the Japanese government have a significant impact on its operations. For that reason, we continuously examine global trends, and focus our environmental management on pursuing activities which improve both the environment and our business.

As part of its environmental management promotion structure (see page 62), the Group has established its Environment Committee under the Risk Management Committee (see page 54), which is chaired by the president of Nippon Paper Industries. The committee

assesses and analyzes risks and opportunities concerning climate change. Based on its findings, the Management Executive Committee of the company deliberates and decides policies and measures regarding climate change and reflects them in the strategies of Group companies to realize growth throughout the entire Group.

Primary Risks and Opportunities

The issue of climate change is highly uncertain, therefore, long-term response and countermeasures are required. The Group primarily anticipates the following types of risks and opportunities through its assessments and analyses.

Status of Analyses of Major Climate Change-Related Risks

Physical Risk	Responses and Objectives behind Analyses
Difficulty in procuring forest resources from Company-owned forests as well as in logging and transportation of forest resources and the loss of such resources among suppliers due to natural disasters resulting from abnormal weather (including torrential rain, droughts, and fires resulting from high temperatures)	<ul style="list-style-type: none"> Diversification of suppliers Selection and cultivation of trees tailored to the region's climate utilizing breeding techniques
Damage to production sites and disruption of logistics networks due to abnormal weather (including torrential rain, droughts, and fires)	<ul style="list-style-type: none"> Establishment of a business continuity plan (BCP) as a disaster-response measure
Transition Risk	Responses and Objectives behind Analyses
New laws and regulations pertaining to the Company's greenhouse gas emissions, and increased financial burden associated with the implementation of carbon taxes, emissions trading, and other policies	<ul style="list-style-type: none"> Greater use of renewable energy Maintenance of CO₂ sequestered in Company-owned forests and increase in absorption of CO₂ through the use of breeding techniques
Increased costs associated with conversion to non-fossil energy (due to difficulty in securing fuel that can be reasonably procured and necessity of repairs and upgrades to facilities)	<ul style="list-style-type: none"> Utilization of raw material procurement network Utilization of know-how in facility management
Fewer opportunities to procure forest resources due to restrictions on land use	<ul style="list-style-type: none"> Enhancement of wood productivity per unit area through the use of breeding techniques
Reputational Risk	Responses and Objectives behind Analyses
Negative reputation among stakeholders stemming from the continued use of fossil resources	<ul style="list-style-type: none"> Reduction in use of fossil resources in accordance with production system Greater use of renewable energy
Increasing need for the sustainable procurement of woody biomass fuel	<ul style="list-style-type: none"> Implementation and audit of supplier surveys Utilization of forest certifications

Status of Analyses of Major Climate Change-Related Risks

Areas of Opportunity	Market Growth and Other Potential Contributions from Group Strengths
Forest resources and woody biomass	<ul style="list-style-type: none"> Growth of business based on experience and know-how in sustainable forest management Utilization of carbon credit Increases in the value of and sales opportunities for raw materials and products derived from woody biomass
Proprietary breeding techniques	<ul style="list-style-type: none"> Expansion of forest resources that help mitigate climate change Increases in productivity and business opportunities through greater land use
Renewable energy	<ul style="list-style-type: none"> Greater opportunities in power generation business Rise in value of new woody biomass fuel development

Medium- to Long-Term Initiatives

The Nippon Paper Group will engage in activities that minimize its risks while taking advantage of its opportunities by striving to steadily reduce greenhouse gas emissions over the medium term and aggressively mitigate and adapt to climate change over the long term.

From a medium-term perspective, since formulating its Environmental Action Plan (Green Action Plan) in 2006, the Group has been setting quantitative management targets and engaging in specific initiatives for all environment-related matters, including climate change initiatives on a five-year basis.

ESG Data Packet
https://www.nipponpapergroup.com/english/csr/esg_data_packet.html

As we envision the Group in 2030 and 2050, we will work to minimize our greenhouse gas emissions in accordance with our production structure while enhancing our production efficiency and developing and introducing new technologies with a sense of determination.

From a long-term perspective, we will incorporate the advancement of our innovative technologies, generated via our various forms of development in Japan and overseas, into the growth scenario of the Group. Moreover, we actively engage in the development of new pulp and paper materials with cellulose nanofiber and functions, and we will continue to provide woody biomass-derived products and services that accurately address the needs of customers, with the goal of helping realize a low-carbon society.

Medium-term perspective	Long-term perspective
<ul style="list-style-type: none"> Enhance production efficiency Introduce cutting-edge technologies Mitigate impact on supply chain 	<ul style="list-style-type: none"> Introduce innovative technologies Leverage proprietary technologies

Realizing a low-carbon society

Establishment of New Biomass Fuel Office

In the Energy Business, we will direct our attention to the biomass power generation business in order to meet the rising need for a low-carbon society.

On April 1, 2020, the Group established its new Biomass Fuel Office in the forest resource division of the raw materials headquarters. We will move aggressively forward with the development and procurement of woody biomass fuel by harnessing our supply chain for sustainable wood resources, a Group's strength, and accumulate a wide range of information on renewable energy toward the sustainable procurement of fuel in response to climate change.