



**NIPPON PAPER GROUP**

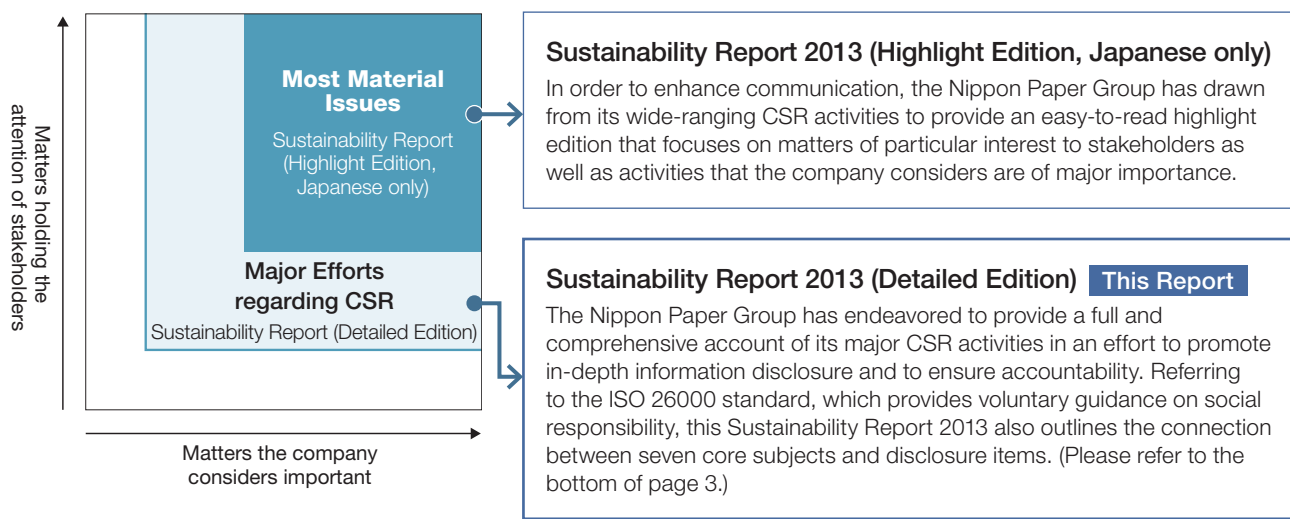
# Sustainability Report 2013

Detailed Edition



# Editorial Policy

The Nippon Paper Group has this year published an English-language detailed edition sustainability report to provide both in-house and external stakeholders an in-depth account of the Group's corporate social responsibility (CSR) activities. In addition, the Group has published an annual report covering the economic and financial aspects of the Group's activities.



## The Selection of Reporting Items

The selection of reporting items was made taking into consideration matters holding the attention of stakeholders and items that the company considers are of major importance. Selection was also based on an exhaustive review of issues of priority to society drawing on a wide variety of sources including past questionnaire surveys, guidelines and other requirements, daily communication activities and SRI research.

## Period Covered

April 1, 2012–March 31, 2013

Includes information from before April 1, 2012 and after March 31, 2013. 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, 2013 for Nippon Paper Group, Inc. and all 47 of its consolidated subsidiaries.

On April 1, 2013, Nippon Paper Group, Inc. merged with Nippon Paper Industries Co., Ltd., with the latter as the surviving company.

## Environmental Coverage

The scope of the report covers the basic environmental policies, systems, environmental accounting and environment performance and other data of the 22 companies whose names are shown at right, which include all major production bases. Also included within the scope of the report is data for six non-consolidated subsidiaries of the aforementioned major production bases.

## Disclaimer

This report includes statements of fact and historical data as well as 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.

Consolidated: Nippon Paper Group, Inc.; Nippon Paper Industries Co., Ltd.; Nippon Paper Crecia Co., Ltd.; Nippon Paper Papylia Co., Ltd.; SHIKOKU COCA-COLA BOTTLING CO., LTD.; Nippon Paper Lumber Co., Ltd.; NP Trading Co., Ltd.; Nippon Paper Development Co., Ltd.; Kitakami Paper Co., Ltd.; Nippon Paper Industries USA Co., Ltd.; Nippon Seitai Corporation; GAC Co., Ltd.; PAL WOOD MATERIAL CO., LTD.; PAL CO., LTD.; N&E Co., LTD.; Daishowa Uniboard Co., Ltd.

**(The contribution to total consolidated sales of the companies listed here was 89%.)**

Non-consolidated: Akita Jujo Chemicals Co., Ltd.; SOKA PAPER-PAK CO., LTD.; EGAWA PAPER-PAK CO., LTD.; MIKI PAPER-PAK CO., LTD.; ISHIOKA KAKO CO., LTD.; Nakoso Film Co., Ltd.

The company names above apply for the period covered by this report.

## Referenced Guidelines

- *Environmental Reporting Guidelines* (2012) of the Ministry of the Environment
- *Sustainability Reporting Guidelines* (Version 3.1) issued by the Global Reporting Initiative (GRI)
- United Nations Global Compact
- ISO 26000, etc.

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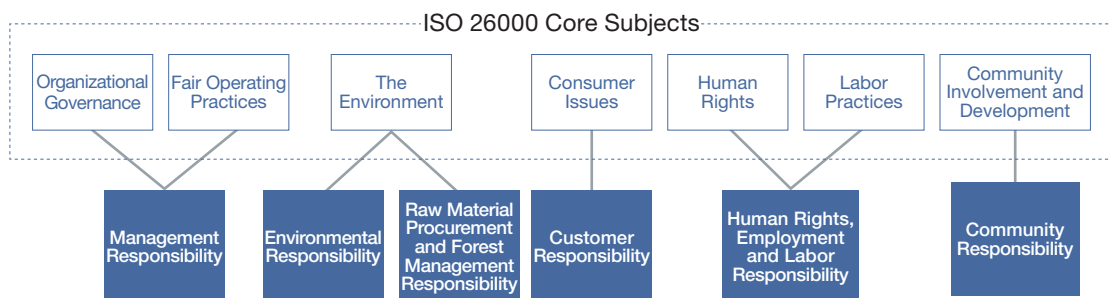
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Note: As of October 1, 2013, the Paperboard Division was reorganized into the Containerboard Sales Division and the Duplex Board and Industrial Paper Sales Division. The information contained in this report is on the operations of the Paperboard Division through the end of September 2013.

## The Connection between the Seven Core Subjects of ISO 26000 and Disclosure Items

The Nippon Paper Group refers to ISO 26000 in its efforts to fully grasp the needs of society and engage in comprehensive information disclosure. The connection between the disclosure items of the Group's Sustainability Report 2013 (Detailed Edition) and the seven core subjects of ISO 26000 is presented as follows. Recognizing that the Nippon Paper Group, which relies heavily on timber as a source for manufacturing paper and related products, has a particularly close association with forests compared with other industries, this report includes a section on raw material procurement and forest management that is independent of the section on the environment. In addition, steps have been taken to comment on the Group's responsibility with respect to management encompassing organizational governance as well as fair operating practices and responsibility with respect to human rights, employment and labor covering human rights and labor practices.



# The Nippon Paper Group will realize sustainable growth as a comprehensive player in biomass businesses, and pioneer a new future together with society.

### Accelerating our business structure transformation, we have launched a new Nippon Paper

Under its Fourth Medium-Term Business Plan, covering the three fiscal years of 2012 to 2014, the Nippon Paper Group is aiming not only to strengthen its core paper business, but also to transform its business structure in order to create new value and achieve sustainable growth as a comprehensive player in biomass businesses.

In order to carry out this plan successfully and rapidly, the Group has reorganized itself. As an initial step, the Group's main operating companies—Nippon Daishowa Paperboard Co., Ltd., NIPPON PAPER-PAK CO., LTD., and Nippon Paper Chemicals Co., Ltd.—were merged with Nippon Paper Industries Co., Ltd., as the surviving company, as of October 1, 2012. Then, in April 2013, Nippon Paper Industries Co., Ltd. and Nippon Paper Group, Inc., a pure holding company, were merged to create the new operating holding company, Nippon Paper Industries, Co., Ltd. The new entity combines the core paper, paperboard, paper-pack, and chemical businesses with holding company functions in a flat organization. This will allow us to allocate business resources to high-priority areas, while enhancing a spirit of Group unity, and ultimately see our efforts result in creating new areas of growth.

In fiscal 2013, to strengthen our corporate governance, we adopted an executive officer system and also appointed an outside director. The executive officer system was introduced to accelerate management decision-making by having executive officers focus on running businesses and manufacturing facilities, while leaving supervision and the setting of the Group's overall direction to the Board of Directors. Meanwhile, the appointment of an outside director was undertaken in response to the demands of the times and society. The presence of an outside director enhances the management oversight function and introduces a different and objective perspective to management decision making.

### Growing as a comprehensive biomass business through the sophisticated use of wood resources

The Nippon Paper Group exercises stewardship for company-owned forests in Japan and afforestation areas overseas. The total area of 214,000 hectares is about as large as the entirety of the Tokyo Metropolis. Forests have many functions and, properly managed, constitute sustainable resources that can be part of the solution to social issues such as global warming, biodiversity preservation, and resource depletion. The Nippon Paper Group, by manufacturing various products using forest resources as raw materials, has accumulated a wealth of wood science technologies. Looking to the future, we are working to create new products and services by applying these technologies in innovative ways.

In energy, we are pressing forward with Japan's first biomass power generation facility fueled entirely with unused woody materials at our Yatsushiro Mill, and working to develop new biomass fuels. At the same time, we have installed a test production facility at our Iwakuni Mill, in Yamaguchi Prefecture, to promote the practical application of cellulose nanofiber. This biochemical project has the potential to open up new possibilities for utilizing wood fiber. Production of cellulose nanofiber began in October 2013 and samples will be provided to various industries to accelerate the development of applications. In the field of industrial materials, we are progressing with the development of products such as packaging materials in the form of paper treated with special coatings that impart gas barrier properties. And in agricultural and food materials, we are pursuing ways to grow medicinal plants with our own rooting and seedling cultivation technologies. Through these initiatives, the Nippon Paper Group is moving forward as a comprehensive player in biomass businesses.

I am confident that, by accelerating the transformation of our business structure and achieving sustainable growth as a comprehensive player in biomass businesses, we will contribute to the solving of social problems and ultimately the development of a sustainable society.

## Taking a broader perspective and helping to build a sustainable society, while engaging in continuous dialogue with stakeholders

The Nippon Paper Group places great value on dialogue with its stakeholders. We use this ongoing dialogue to enhance our CSR management by identifying what is expected and demanded of us. We then respond appropriately through our business activities, in order to coexist with society.

It is important to us to take a broad view of the various social issues that are growing concerns for people throughout the world. We closely monitor them as they change, and try to work with society to overcome them. That is why Nippon Paper Industries Co., Ltd. has become a supporter of and participant in, the United Nations Global Compact, which sets out 10 Principles with respect to human rights, labor standards, the environment, and the prevention of corruption.

Business conditions are constantly changing and there are many social issues that need to be addressed. The Nippon Paper Group, as a comprehensive player in biomass businesses, is committed to applying the technologies it has accumulated over its long history, and, with the proactive and dedicated efforts of its diverse workforce, to pioneer a new future together with society.

In this report, you will see the directions and initiatives we are pursuing under the Group goals of realizing more sophisticated uses of wood and addressing social issues in the context of the value chain. We are working toward achieving these goals in order to help build a sustainable society, while taking into account the expectations and needs of our stakeholders. We welcome candid comments and opinions and extend our sincere appreciation for your continued support and understanding.



芳賀義雄

**Yoshio Haga**

President  
Nippon Paper Industries Co., Ltd.

# Toward More Sophisticated Use of Wood

## To Build a Sustainable Society

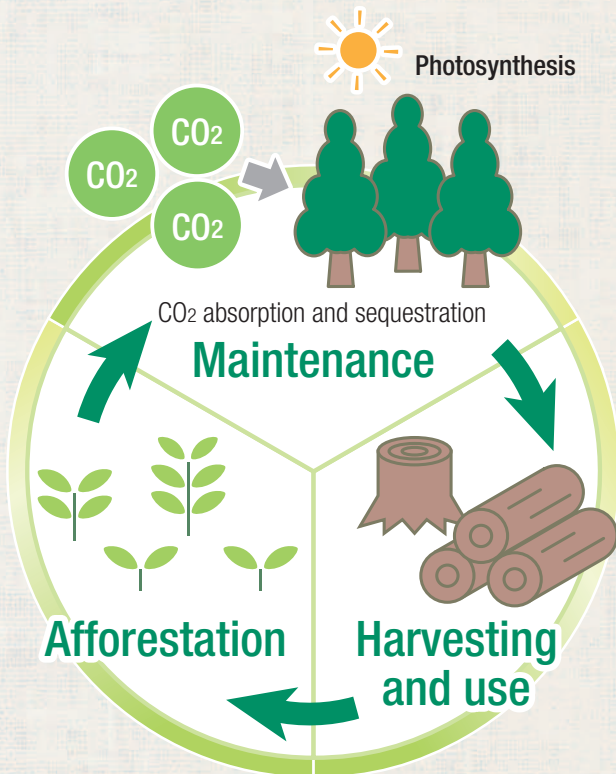
### Applying the Unique Characteristics of Wood and Forests to Help Solve Social Issues

The Nippon Paper Group uses wood and forests—renewable resources—in the pursuit of a broad array of businesses. By further honing the technical capabilities we have developed in the course of our business activities and using these resources in more sophisticated ways, we will help to solve social issues beginning with global warming and resource depletion.

#### On a Foundation of Sustainable Forest Management

Wood is a renewable resource. Unlike such exhaustible resources as oil and minerals, wood can be used on a continuous basis through proper forest management which entails planting, harvesting, and maintenance.

The Nippon Paper Group procures woody resources from its own and other forests in Japan and abroad. We have obtained forest certifications<sup>1</sup> for all of our own forests and are working to increase external procurements from certified forests. Through these efforts, we are promoting sustainable forest management, which benefits both the environment and society.



**Utilizing sustainable resources**  
After harvesting, steps are taken to regenerate forests through replanting as well as coppicing, which entails the growth of shoots that sprout from stumps into new trees. In this manner, every effort is being made to ensure a permanent source of forests.

<sup>1</sup> Forest certification systems: Systems under which inspections and certifications are carried out by third parties to provide assurance that environmentally, socially, and economically sustainable forest management is being practiced.

#### Using Expert Knowledge of the Characteristics of Wood and Forests

##### Characteristics of wood and forests

##### CO<sub>2</sub> absorption and sequestration from the atmosphere

Trees absorb and sequester CO<sub>2</sub> from the atmosphere and are a major repository of carbon. This carbon is retained even after trees have been processed into wood and used as construction materials and paper. Products derived from wood materials, therefore, help reduce CO<sub>2</sub> in the atmosphere and prevent global warming.

##### Potential as an alternative to fossil resources

Wood is a renewable resource that can be increased through planting and cultivation. The use of wood as an alternative to plastic and other petrochemical products, and the application of construction material waste as well as timber from tree thinning as non-fossil biomass fuels, can help prevent both resource depletion and together with global warming.<sup>2</sup>

##### Outstanding recycling properties

Paper products are well recognized for their recycling properties. In this context, Japan was quick to establish a mechanism to collect and utilize recycled paper. This effective use of resources contributes significantly to the creation of a recycling-based society.

##### Protecting ecosystems through forests

In addition to preventing global warming and protecting watersheds, forests perform a wide variety of functions such as providing shelter for diverse living creatures. The proper management and cultivation of forests therefore plays a major role in biodiversity conservation.

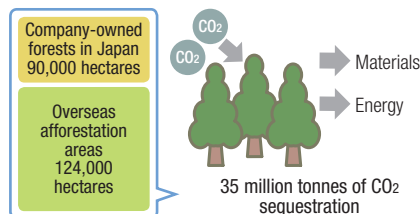
<sup>2</sup> The CO<sub>2</sub> emitted from the burning of woody biomass fuel is recognized as not increasing the overall concentration of atmospheric CO<sub>2</sub> because the emitted CO<sub>2</sub> was originally absorbed by trees in their growth process. Woody biomass fuel is carbon neutral.

## Continued Initiatives Leading to Solutions for Social Issues

### Initiatives of the Nippon Paper Group

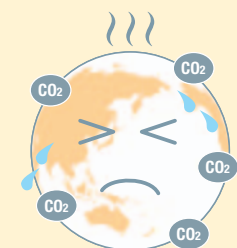
#### CO<sub>2</sub> sequestration totaling approximately 35 million tonnes through the management of company-owned forests in Japan and overseas

The Nippon Paper Group owns and manages forests totaling 90,000 hectares in Japan and 124,000 hectares abroad. Around 35 million tonnes of CO<sub>2</sub> is sequestered in these forests. The Nippon Paper Group provides society with a wide variety of products made from wood originating from these forests.



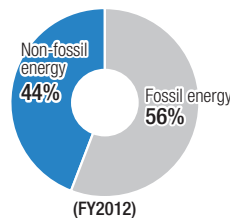
### Solving social issues

#### Preventing global warming



#### Non-fossil energy accounting for 44% of energy consumed

Of the energy used by the Nippon Paper Group, 44% is comprised of black liquor<sup>3</sup> from the pulp-making process, wood construction waste and other biomass fuels, and fuels derived from discarded tires, RPF, and other waste materials. As well as using biomass fuel, the Nippon Paper Group is also making advances in the development of biomass materials that can be used in place of petrochemical products (see page 11).

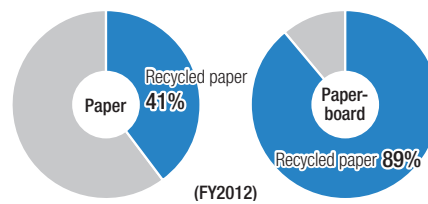


#### Addressing the depletion of resources



#### Recycled paper utilization rate: paper 41%; paperboard 89%

The Nippon Paper Group is working diligently to increase the waste paper recovery rate with the support of customers and the general public. In addition to bolstering its recycled paper processing capabilities, the Group is striving to improve the quality of pulp made from recycled paper and to increase the number of applications.



#### Approximately 20% of company-owned forests in Japan maintained as “environmental forest areas”

Nippon Paper Industries has designated approximately 20% of its Japanese forest as “environmental forest areas.” In these areas, logging for commercial purposes is prohibited and forest biodiversity and water resources are protected. These environmental forest areas include national park lands in Akan, Nikko, and other places as well.



Mount Nikko Shirane in the company-owned Sugenuma Forest in Gunma Prefecture

#### Biodiversity conservation

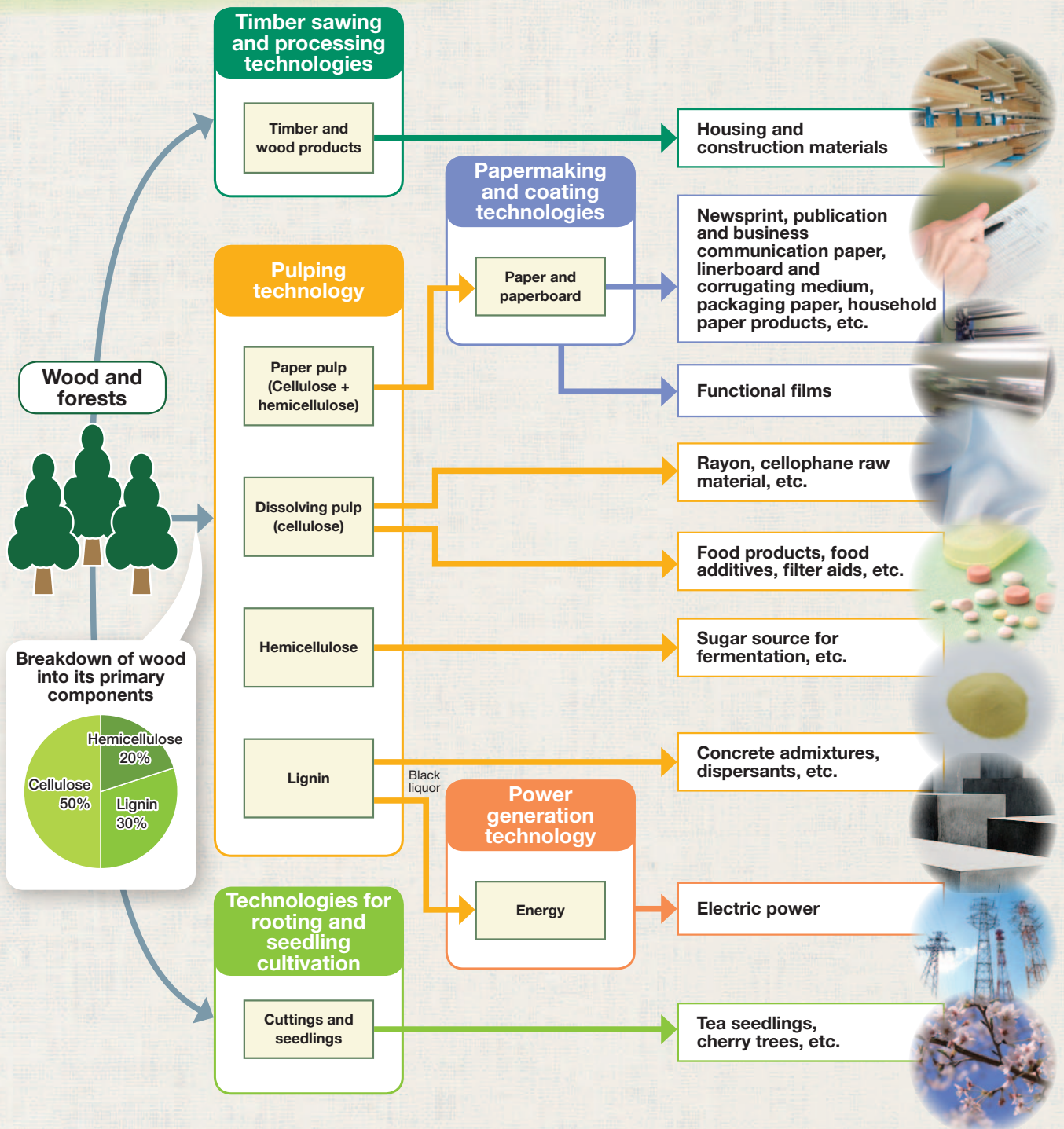


<sup>3</sup> Black liquor: A byproduct of pulp manufacturing. Composed mainly of lignin, but also substances like cellulose and hemicellulose.

# Pushing the Boundaries of Technologies for the Multidimensional Application of Wood

As a comprehensive player in biomass business, Nippon Paper Group uses every component of wood, not only the cellulose that forms the wood fiber, but also hemicellulose and lignin. To achieve this, we have accumulated technologies in various areas such as sawmilling, lumber processing, pulping, papermaking/coating, power generation and seedling nursery. We continually strive to refine these technologies and to develop new ones and new products that use wood in sophisticated ways.

## Based on a Wide Variety of Wood- and Forest-Related Technologies



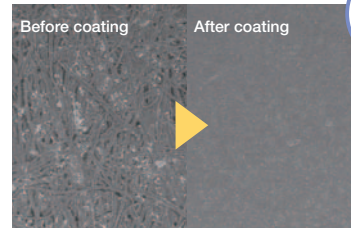


## Toward the Creation of New Businesses Based on Even More Advanced Ways of Using Wood

### Papermaking and Coating Technologies

#### ▶▶▶ Industrial materials field

While paper is easy to process, the fact that it is porous means it can be permeated by gases and liquids. The Nippon Paper Group, in its effort to expand the uses of paper, has taken up the challenge to develop paper packaging materials with gas barrier properties equal to those of petroleum-based films. Using coated paper production technologies to apply a coating that forms a thin, uniform barrier on a rough paper surface, we succeeded in developing a paper base with excellent barrier properties never before achieved.



Paper surface photographed with an electron microscope

→P. 11

### Pulping Technology

#### ▶▶▶ Biochemical field

Extracting cellulose fiber from wood is called pulping. The Nippon Paper Group makes effective and broad use of not only cellulose but also other substances known as lignin and hemicellulose. In addition, Nippon Paper Industries Co., Ltd. is working hard to commercialize cellulose nanofiber, which is the world's most advanced biomass nanomaterial and expected to be used in various applications.



Transparent sheet made from cellulose nanofiber

→P. 11

### Power Generation Technology

#### ▶▶▶ Energy field

The black liquor that is a byproduct of the pulping process is an excellent biomass fuel. Black liquor has long been burned in boilers at paper mills to produce steam and electricity. Going forward, we aim to supply electricity with our own power generation know-how and private power generation facilities, which are among the largest in Japan and to commercialize new biomass fuels.



Nippon Paper Industries Co., Ltd.'s environmental and social communication magazine *ShikiOriori*  
<http://www.nipponpapergroup.com/contents/200195057.pdf> (Japanese only)



Power plant at Nippon Paper Industries Co., Ltd.'s Fuji Mill

→P. 10

### Technologies for Rooting and Seedling Cultivation

#### ▶▶▶ Agricultural and food fields

Through our afforestation business, we have developed "cuttings cultivation technology in container" and seedling cultivation technologies. Applying these technologies to agricultural products, we are developing business fields in agricultural and food materials businesses. Utilization of "cuttings cultivation technology in container", which maximizes the ability of plants to photosynthesize, enables rapid mass production of plants previously considered to be difficult to cultivate.



High-value-added Sunrouge tea seedlings

→P. 11

### ◆ Comment ◆



## Allocating Management Resources to Areas with High Market Growth Potential

Fumio Manoshiro, General Manager of the Corporate Planning Division, Nippon Paper Industries Co., Ltd.

Through the October 2012 merger of its operating companies (see page18–19), Nippon Paper Industries Co., Ltd. has created a new corporate structure. In the future, therefore, we will be able to allocate management resources to areas that include packaging, chemicals, and other promising growth areas, and energy-related and other new business areas through our core paper business. We are anticipating growth not only in Japan but also in the greater East Asian market.

We aim to grow as a comprehensive player in biomass businesses by creating synergies between our company-owned forests in Japan and abroad, and the wood science technologies we have developed in making paper.

# Steadily Broadening Our Operations as a Comprehensive Player in Biomass Businesses

Energy, biochemicals, industrial materials, and agriculture and food are the diverse areas in which technology development by the Nippon Paper Group is producing results. Here, we report on some examples.

## In the field of energy

### Business Development Applying Biomass Resources and Infrastructure

Nippon Paper Industries Co., Ltd. established its Energy Business Division in June 2013 as an organizational measure aimed at expanding its energy business.

Energy development will be pursued via the following three strategies and the company will seek to expand its earnings by establishing itself as a government-authorized Power Producer and Supplier (PPS).

1. Expand the supply of surplus power from existing facilities
2. Develop and incorporate the use of renewable energy
3. Develop new electric power sources by leveraging existing assets

Implementation of the Feed-in Tariff Scheme for Renewable Energy in 2012 greatly expanded opportunities for the energy business. Over the medium-term, the company's goal is to record sales of 50 billion yen in the energy business.

#### Supply of Surplus Power from the Fuji Mill's Biomass Boiler

Nippon Paper Industries Co., Ltd.'s Fuji Mill obtained certification for its biomass boiler under the PPS Law in 2012 and began selling surplus power to electric utilities. In March 2013, it received certification and began supplying power under the Feed-in Tariff Scheme for Renewable Energy, and in August 2013 expanded its power supply capacity.



Fuji Mill  
No. 3 Biomass Boiler

#### Mega-Solar Project at the Site of the Former Komatsushima Mill

Nippon Paper Industries Co., Ltd., together with Mitsubishi Corporation, will undertake of a mega-solar project at the site of the company's former Komatsushima Mill in the Tokushima Prefecture city of Komatsushima. At 21,000 kW, this project will be the largest solar power generation facility in Shikoku. Construction is scheduled to start in the fall of 2013 and power sales are slated to begin in January 2015.

The location of the project is among the best in Japan for amounts of sunlight received on a yearly basis. In operating the project, the company will make the most of the outstanding location, the extensive infrastructure already in place, and its many years of power generation technology.

#### Biomass Power Generation from Unused Wood at the Yatsushiro Mill

Nippon Paper Industries Co., Ltd. is progressing with the installation of a 5,000 kW woody biomass power generation facility at its Yatsushiro Mill, with plans to begin supplying power in March 2015. This will be the first power plant in Japan to be fueled only with forest thinnings and other unused wood.

The wood to be used as fuel will be stably sourced from within a 50 km radius of the Yatsushiro Mill by employing a collection network already in place for gathering woodchips used as a raw material for making paper.

#### • 2013 Purchase Prices under the Feed-in Tariff Scheme for Renewable Energy

Category	Purchase Price (1 kWh, including tax)
Power from methane fermentation gas	40.95 yen
<b>Power from combustion of unused wood</b>	<b>33.60 yen</b>
Power from combustion of general wood materials	25.20 yen
Power from combustion of waste (other than woody waste)	17.85 yen
Power from combustion of recycled wood	13.65 yen

#### Development of a New Biomass Solid Fuel with the Potential to Boost the Mixed Fuel Burning Ratio for Biomass

Nippon Paper Industries Co., Ltd. has succeeded in developing a new biomass solid fuel that uses a semi-carbonization technology\* for woody biomass.

In the past, efforts to use woody biomass as a fuel in pulverized coal-fired boilers—the most commonly used type of coal-fired boiler—could achieve a mixed fuel burning ratio of no more than about 2–3% because it was impossible to efficiently pulverize woodchips and wood pellets. In tests, the biomass solid fuel the company has developed has been shown to increase successfully the mixed fuel burning ratio to 25% (by weight).

\* Technology that, through carbonization at relatively low temperatures, maximizes the residual calorific value of the fuel and results in better pulverization and storage properties.



New biomass solid fuel

In the field of biochemicals

## Aiming to Commercialize Cellulose Nanofiber

The term “cellulose nanofiber” (CNF) refers to microfibrils that are isolated from pulp and as small as 4 nanometers (billionths of a meter) in width. Their dimensional change in response to temperature changes are as small as those of glass fiber, they are stronger than steel but as light as paper, and they excel in transparency and oxygen barrier properties. They also demonstrate unique rheological behavior in water. CNF is expected to fulfill various roles in industrial materials such as reinforced resins used in automobiles and electronics, and additives for foods and cosmetics.

Nippon Paper Industries Co., Ltd. established its Cellulose Nanofiber Business Promotion Office in April 2013. The mission of this new unit is to establish mass-production technology and develop applications to accelerate the commercialization of CNF. Construction

of a pre-commercial CNF production plant has been completed at the Iwakuni Mill, and operations started in October 2013. This facility will have an annual CNF production capacity of 30-plus tonnes. Product samples are already being provided to various industries to accelerate application development.

 Nippon Paper Industries Co., Ltd.'s environmental and social communication magazine *ShikiOri*  
<http://www.nipponpapergroup.com/contents/200201679.pdf>  
 (Japanese only)



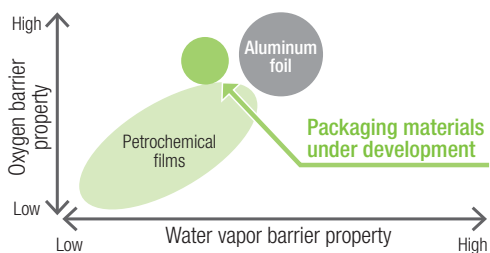
In the field of industrial materials

## Development of Eco-Friendly Paper Packaging Materials

Nippon Paper Industries Co., Ltd. has succeeded in developing packaging paper that, with its special coating, offers high gas barrier properties. It can be expected that applications for this product will include food packaging and other such uses previously out of the question for a paper packaging material.



New paper packaging material

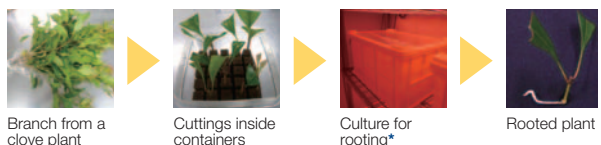


In the fields of agricultural and food materials

## Propagation of Medicinal Plants by Utilization of “Cuttings Cultivation Technology in Container”

Stable supplies of many of the plants used as raw materials, both for traditional Chinese medicines and for modern pharmaceuticals, have been difficult to achieve by cultivating cuttings. Nippon Paper Industries Co., Ltd., using supplies of medicinal plants from the Research Center for Medicinal Plant Resources, National Institute of Biomedical Innovation, worked on ways to cultivate these plants by using its own technique for cultivating cuttings in containers.

As a result, rooting of 12 species of medicinal plants was successfully achieved by November 2012. Looking ahead, efforts will focus on broadening the application of this technology to efficiently produce medicinal plant seedlings and boost domestic production.



\* Application of light, 1,000 ppm CO<sub>2</sub>, and nutrients in a cultivating room

◆ Comment ◆

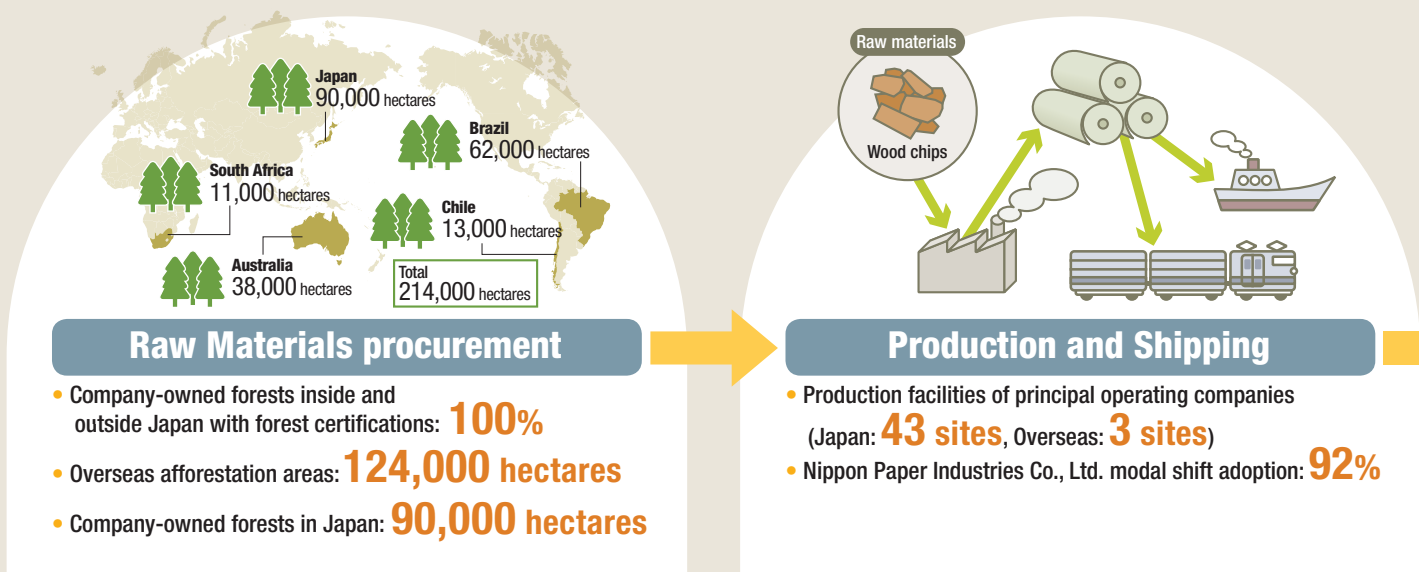


### Knowledge and Skills at the Disposal of People

Yozo Igarashi, Research and Development Division General Manager, Nippon Paper Industries Co., Ltd.

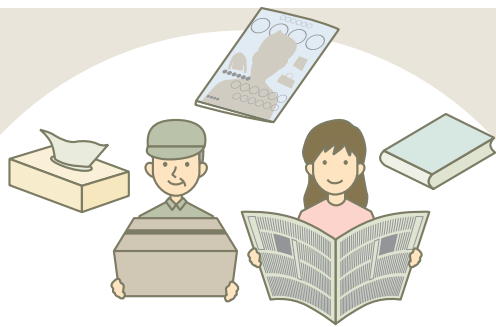
I think the current conditions surrounding paper show that the fate, the success or failure, of not only the Nippon Paper Group but also the pulp and paper industry as a whole, depends on developing advanced applications for wood. The mission of the Research and Development Division, which is concerned in the activities of all of our new businesses, is to have its members bring all of their knowledge and expertise to bear on working with other divisions to make businesses successful. We will create the R&D conditions to allow all of the members of the Research and Development Division to fully exercise their knowledge and expertise.

# Addressing Social Issues via the Value Chain



## Overview of the Nippon Paper Group's Initiatives Addressing Social Issues

Social Issues	ISO 26000 Core Subjects	Pages in Sustainability Report 2013	Raw Material Procurement
Management Responsibility	Organizational Governance, Fair Operating Practices	<ul style="list-style-type: none"> <li>Highlight Edition PP. 16–17</li> <li>Detailed Edition PP. 17–28</li> </ul>	←
Environmental, Raw Material Procurement, and Forest Management Responsibility	The Environment	<ul style="list-style-type: none"> <li>Highlight Edition PP. 18–27</li> <li>Detailed Edition PP. 29–64</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable forest resource procurement (Efforts to procure certified material, confirm legitimacy, pursue afforestation overseas, obtain certifications for company-owned forests, and use domestic materials)</li> <li>Protection and nurturing of company-owned forests in Japan (Biodiversity protection and other efforts to maintain the diversity of roles played by forests)</li> </ul>
Customer Responsibility	Consumer Issues	<ul style="list-style-type: none"> <li>Highlight Edition PP. 28–29</li> <li>Detailed Edition PP. 65–84</li> </ul>	←←
Human Rights, Employment and Labor Responsibility	Human Rights, Labor Practices	<ul style="list-style-type: none"> <li>Highlight Edition PP. 30–31</li> <li>Detailed Edition PP. 85–94</li> </ul>	<ul style="list-style-type: none"> <li>Confirmation of suppliers' actions in respecting human rights (Conduct of an annual supplier survey)</li> <li>Respect for human rights in the company's forest management (Consideration of the rights of indigenous people, prohibitions against forced labor and child labor, etc.)</li> </ul>
Community Responsibility	Community Involvement and Development	<ul style="list-style-type: none"> <li>Highlight Edition PP. 32–33</li> <li>Detailed Edition PP. 95–101</li> </ul>	<ul style="list-style-type: none"> <li>Coexistence and co-prosperity with communities adjacent to overseas afforestation areas (Job creation, education support, contributions to local environments, cultural preservation, promotion of safety and disaster preparedness, etc.)</li> <li>Contributions that make use of company-owned forests for the benefit of local areas and communities (Environmental education that makes use of company-owned forests, etc.)</li> </ul>



## Sales and Usage

### Domestic production share for principal products\*

Newsprint:	<b>35.4%</b>	Sanitary paper:	<b>11.8%</b>
Publication paper, business communication paper:	<b>29.0%</b>	Paperboard:	<b>15.3%</b>

\* Based on data from the Paper and Paperboard Statistics Yearbook 2012 published by the Japan Paper Association.



## Separation, Collection, Recycling, and Disposal

### Recycled Paper Usage (Japan)

Paper:	<b>41.3%</b>
Paperboard:	<b>89.4%</b>

## Value Chain Initiatives

Production	Shipping	Sales and Usage	Separation, Collection, Recycling, and Disposal
Corporate governance, CSR management, thorough compliance, effective information disclosure, and stakeholder dialogue			
<ul style="list-style-type: none"> <li>Efforts to fight climate change</li> <li>Lowering of environmental burden (Water quality, atmosphere, waste, noise, vibration, odor, etc.)</li> <li>Proper management of chemical substances</li> <li>Development and production of eco-friendly products*</li> </ul>	<ul style="list-style-type: none"> <li>Increase in load efficiency (Promotion of modal shifts)</li> <li>Shortening of transportation distances (Pursuit of direct delivery and reorganization of distribution warehouses)</li> </ul>	<ul style="list-style-type: none"> <li>Provision of eco-friendly products</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of recycled paper usage (Strengthening of waste paper processing capacity, expansion of use of unutilized waste paper, improvement of recycled paper pulp quality)</li> <li>Promotion of waste paper collection</li> </ul>
<ul style="list-style-type: none"> <li>Stable supplies of products</li> <li>Ensuring quality and safety</li> </ul>		<ul style="list-style-type: none"> <li>Ensuring safety in use</li> <li>Pursuing customer satisfaction</li> <li>Appropriate disclosure of product information</li> <li>Addressing customer questions, complaints, and opinions</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of waste paper collection together with customers (Support for recycling organizations, establishment of waste paper collection facilities, etc.)</li> </ul>
Dealing with Climate Change			
Appropriate information disclosure, promotion of communication, and environmental education activities			
<ul style="list-style-type: none"> <li>Respect for basic human rights</li> <li>Hiring practices that respect human rights</li> <li>Securing diversity in the workforce</li> <li>Human resource development</li> <li>Ensuring occupational safety and health, and disaster preparedness</li> </ul>	<ul style="list-style-type: none"> <li>Ensuring safety in shipping (Promotion of transportation safety)</li> </ul>	<ul style="list-style-type: none"> <li>Management of customers' personal information</li> </ul>	
<ul style="list-style-type: none"> <li>Coexistence and co-prosperity with areas surrounding mills (Job creation, education support, contributions to local environments, cultural preservation, promotion of safety and disaster preparedness, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Reduction of impacts of shipping (Promotion of transportation safety, adoption of low-emission vehicles, promotion of noise abatement measures)</li> </ul>		<ul style="list-style-type: none"> <li>Working with local communities to promote waste paper collection</li> </ul>
Promotion of appropriate information disclosure and communication			

\* Refer to the Special Feature section (PP. 6-11) for information on a few of these products.

# Outline of the Nippon Paper Group

## Company Profile (As of April 1, 2013)

**Corporate Name** Nippon Paper Industries Co., Ltd.  
**Address** 4-6 Kandasurugadai, Chiyoda-ku, Tokyo, Japan  
**Capital** ¥104.873 billion  
**Incorporation** August 1, 1949  
**Listing** Tokyo Stock Exchange (Securities code 3863)  
**Telephone** +81-3-6665-1111

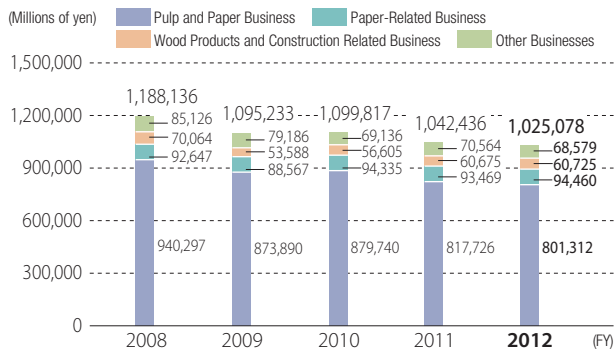
## Group Companies (As of March 31, 2013)

Category	Breakdown by Region							Total
	Japan	North America	Australia	Asia	Europe	South America	Africa	
Consolidated subsidiaries*	34	3	5	3	2	0	0	47
Non-consolidated subsidiaries	77	1	1	6	1	1	0	87
Affiliates	36	2	0	2	2	1	1	44
Equity-method affiliates	7	2	0	0	2	0	0	11

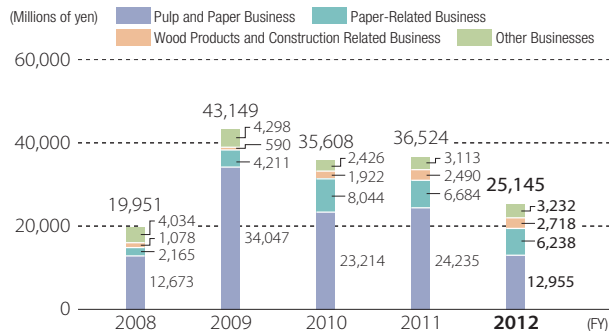
\* As of March 31, 2013, includes Nippon Paper Industries Co., Ltd. as a subsidiary of Nippon Paper Group, Inc.

## Major Financial Indicators Trends

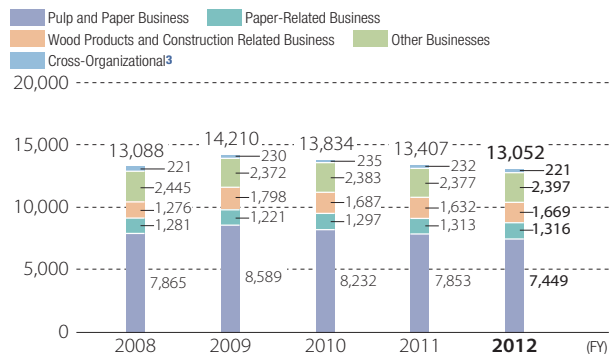
### Consolidated Net Sales<sup>1</sup>



### Consolidated Operating Income<sup>1</sup>



### Employees (Consolidated)<sup>2</sup>

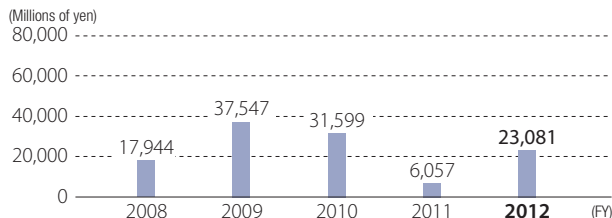


<sup>1</sup> The Nippon Paper Group reclassified its business segments in FY2010. Figures up to FY2009 represent data for business segments prior to reclassification.

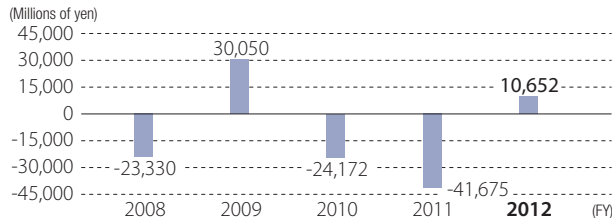
<sup>2</sup> Fiscal year-end data

<sup>3</sup> "Cross-organizational" means employees responsible for multiple divisions.

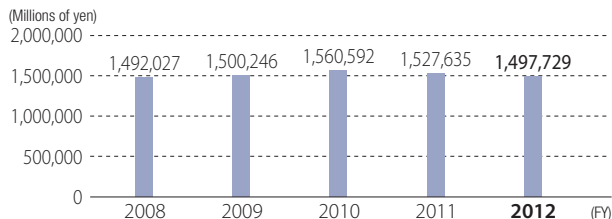
### Consolidated Ordinary Income



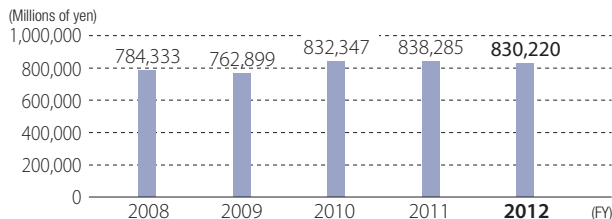
### Consolidated Net Income (Loss)



### Total Assets



### Interest-Bearing Debt



**Business Details, Major Customers and Markets of the Nippon Paper Group** (as of March 31, 2013)\*

**Pulp and Paper Business**

Manufacture and sale of paper, paperboard, household paper products and pulp

**Consolidated Subsidiaries**

Nippon Paper Industries Co., Ltd., Nippon Paper Crecia Co., Ltd., Nippon Paper Papyrus Co., Ltd., Kitakami Paper Co., Ltd., Daishowa North America Corporation, Nippon Paper Industries USA Co., Ltd., NP Trading Co., Ltd., Kokuei Paper Co., Ltd., Dyna Wave Holding Asia, SUN OAK CO., LTD., Paper Australia Pty. Ltd., and seven other companies

**Major Products**

- Newsprint, printing and publication paper, business communication paper and related products
- ◆ Specialty paper (thin paper, high-performance paper)
- ◆ Linerboard and corrugated medium, white paperboard, tube and core paper, packaging paper, base papers
- ▲ Household paper products (facial tissue, bathroom tissue, paper towels, adult diapers)
- ◇ Electric power supply

**Paper-Related Business**

Manufacture and sales of processed paper products and chemical products

**Consolidated Subsidiaries**

Nippon Paper Industries Co., Ltd. (Paper-Pak Division, Chemical Division), Nippon Seitai Corporation, FLOWRIC CO., LTD., and Sakurai Co., Ltd.

**Major Products**

- ◆ Liquid-packaging cartons and paper packaging containers
- ◆ Heavy duty bags (paper bags and resin bags)
- ◆ Functional films (for liquid crystal displays and other applications)
- ◆ Dissolving pulp, functional chemical products (sweeteners, seasonings, ingredients for pharmaceuticals, paints)
- ▲ Kitchen wraps

**Wood Products and Construction Related Business**

Procurement and sales of lumber; manufacture and sales of construction materials, and civil engineering-related businesses

**Consolidated Subsidiaries**

Nippon Paper Lumber Co., Ltd., South East Fiber Exports Pty. Ltd., NIPPON PAPER UNITEC CO., LTD., Kokusaku Kiko Co., Ltd., PAL WOOD MATERIAL Co., Ltd., PAL CO., LTD., N&E CO., LTD., Daishowa Uniboard Co., Ltd., Kunimoku House Co., Ltd., Nippon Paper Ishinomaki Technology Co., Ltd., Nanei Co., Ltd., Nichimoku Fancy Materials Co., Ltd., and Nippon Paper Resources Australia Pty. Ltd.

**Major Products / Business**

- Housing and construction materials (posts, flooring, doors)
- Housing
- ▲ Woodchips and recycled paper
- Construction-related

**Other Businesses**

Beverage business, leisure business, and warehousing and transportation business

**Consolidated Subsidiaries**

Nippon Paper Development Co., Ltd., GAC Co., Ltd., NIPPON PAPER LOGISTICS CO., LTD., Kyokushin Transport Co., Ltd., NANKO UNYU CO., LTD., Hotoku Co., Ltd., SHIKOKU COCA-COLA BOTTLING CO., LTD., SHIKOKU SAWAYAKA SERVICE CO., LTD., CANTEEN CO., LTD., SHIKOKU COCA-COLA VENDING CO., LTD., SHIKOKU CUSTOMER SERVICE CO., LTD., SHIKOKU COCA-COLA PRODUCTS CO., LTD., and DYNAFLOW CO., LTD.

**Major Products / Business**

- Printing
- ▲ Beverages
- ▲ Sports and leisure facilities
- ▲ Insurance and leasing
- ▲ Real estate
- Greening and landscaping work
- ◇ Warehousing and transportation

**● Paper Media**

**Product Applications**  
Newspapers, books, magazines, leaflets, postcards, notebooks, printer paper, various paper slips



**Principal Customers**  
The corporate sector including newspaper, publishing, printing, stationary and related companies; the public sector including public agencies and offices

**▲ Paper Manufacturing**

**Principal Customers**  
Paper manufacturers



**◆ Container and Packaging**

**Product Applications**  
Beverage containers, container board products, paper boxes, envelopes, paper bags, wrapping paper



**Principal Customers**  
Beverage manufacturers, manufacturers of a variety of paper processing products

**◆ Food and Chemical Products**


**Product Applications**  
Paints, rayon fibers, seasonings, pharmaceuticals



**Principal Customers**  
Manufacturers of beverages, food, chemicals

**◇ Energy**

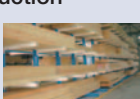
**Principal Customers**  
Power Utilities



**■ Housing and Construction**


**Product Applications**  
Housing, furniture

**Principal Customers**  
Construction materials, housing and construction companies, general consumers



**▲ Daily Necessity, Food and Service**

**Principal Customers**  
General consumers




**○ Civil Engineering**

**Principal Customers**  
Administrative agencies



**◇ Logistics**

**Principal Customers**  
Manufacturing companies



\* On April 1, 2013, Nippon Paper Group, Inc. merged with Nippon Paper Industries Co., Ltd., with the latter as the surviving company. Information is as of March 31, 2013, the day preceding the merger.

Major Operating Companies and Production Sites (As of March 31, 2013)

**Pulp and Paper Business**

- Nippon Paper Industries Co., Ltd.
  - 1 Kushiro Mill
  - 2 Hokkaido Mill (Asahikawa)
  - 3 Hokkaido Mill (Yufutsu)
  - 4 Hokkaido Mill (Shiraoi)
  - 5 Ishinomaki Mill
  - 6 Iwanuma Mill
  - 7 Nakoso Mill
  - 8 Fuji Mill
  - 9 Iwakuni Mill
  - 10 Yatsushiro Mill

◆ Nippon Paper Industries Co., Ltd. (Paperboard Division)

- ◆ 11 Akita Mill
- ◆ 12 Soka Mill
- ◆ 13 Ashikaga Mill
- ◆ 13 Yoshinaga Mill
- ◆ 15 Otake Mill

■ Nippon Paper Crecia Co., Ltd.

- 16 Tokyo Mill
- 17 Kaisei Mill
- 18 Kyoto Mill
- 19 Koyo Mill

▲ Nippon Paper Papylia Co., Ltd.

- ▲ 20 Harada Mill
- ▲ 21 Suita Mill
- ▲ 22 Kochi Mill

◆ Kitakami Paper Co., Ltd.

- ◆ 23 Ichinoseki Mill

● Nippon Paper Industries USA Co., Ltd.

- 24 Port Angeles Mill

● Paper Australia Pty. Ltd.

- 25 Maryvale Mill
- 26 Shoalhaven Mill

**Paper-Related Business**

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

- 1 SOKA PAPER-PAK CO., LTD.
- 2 EGAWA PAPER-PAK CO., LTD.
- 3 MIKI PAPER-PAK CO., LTD.
- 4 ISHIOKA KAKO CO., LTD.
- 5 Nakoso Film Co., Ltd.

◆ Nippon Paper Industries Co., Ltd. (Chemical Products Division)

- ◆ 6 Gotsu Mill
- ◆ 7 Iwakuni Mill
- ◆ 8 Higashimatsuyama Mill
- ◆ 9 Yufutsu Mill

■ Nippon Seitai Corporation

- 10 Asahikawa Mill
- 11 Maebashi Mill
- 12 Saitama Mill
- 13 Niigata Mill
- 14 Kyoto Mill
- 15 Kyushu Mill

▲ Akita Jujo Chemicals Co., Ltd.

- ▲ 16 Head Office Plant

**Wood Products and Construction Related Business**

● PAL WOOD MATERIALS CO., LTD.

- 1 PALTEC Co., Ltd.
- 2 N&E CO., LTD.

◆ Daishowa Uniboard Co., Ltd.

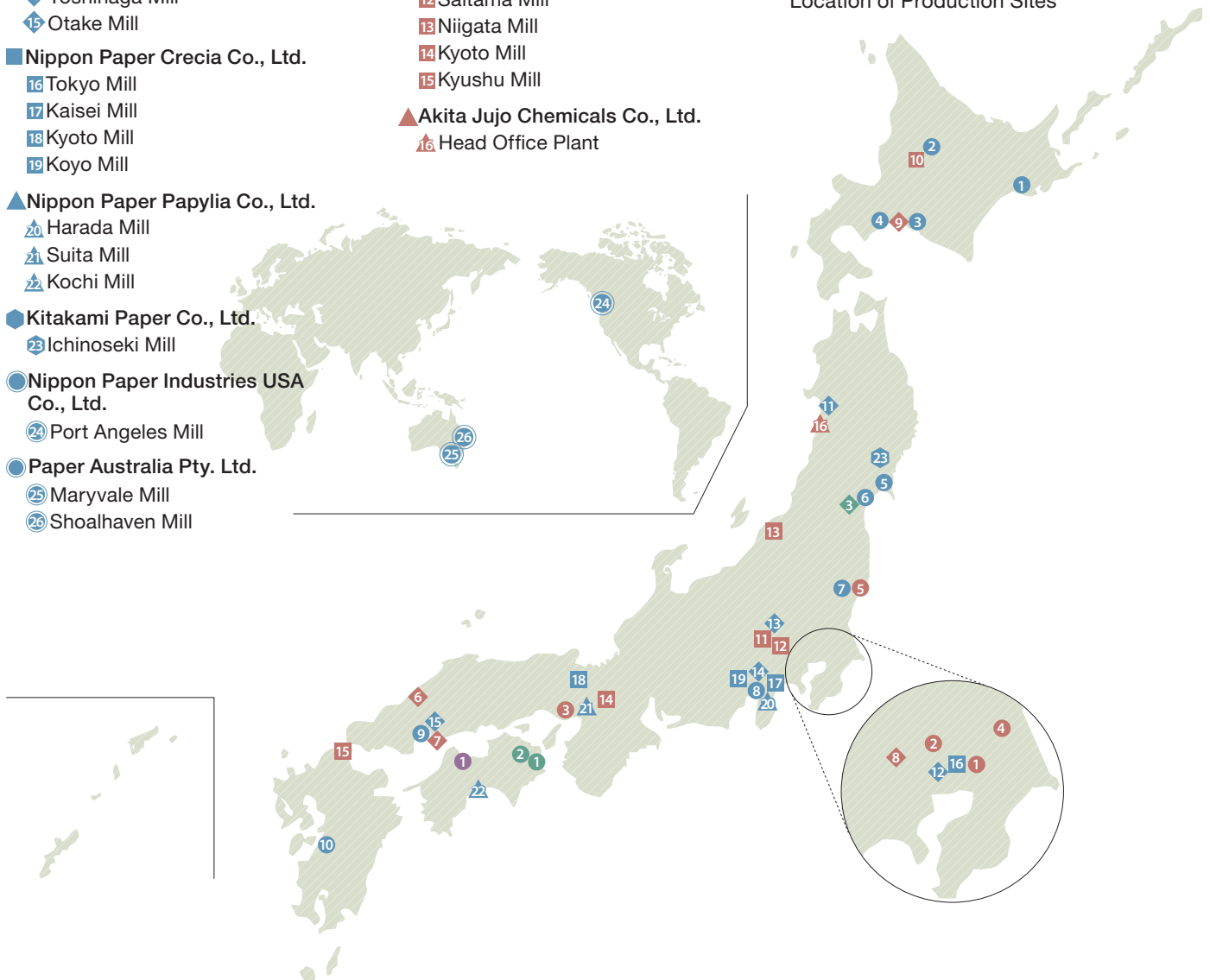
- ◆ 3 Miyagi Mill

**Other Businesses**

● SHIKOKU COCA-COLA BOTTLING CO., LTD.

- 1 SHIKOKU COCA-COLA PRODUCTS CO., LTD. Komatsu No.2 Plant

Location of Production Sites





# Management Responsibility



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# Group Governance

As an operating holding company, Nippon Paper Industries Co.Ltd. audits and supervises the business activities of Group companies.

## Reorganization and Strengthening of Governance

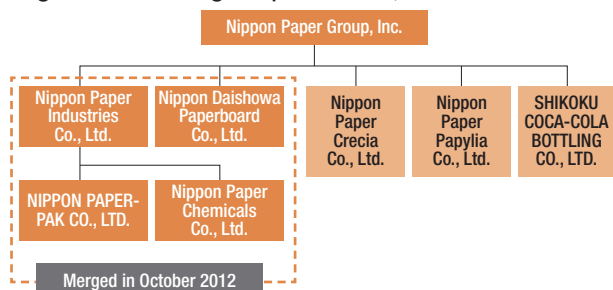
Upon adopting an operating holding company structure, Nippon Paper Industries Co., Ltd. also implemented an executive officer system and appointed an outside director.

The company's highest management priorities with regard to shareholders and all other stakeholders are to ensure high levels of transparency and to exercise management with fairness.

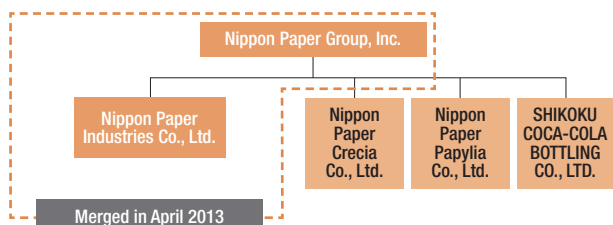
As of April 1, 2013, the Nippon Paper Group, by way of a reorganization, transitioned from a pure holding company structure to one with an operating holding company. Until the reorganization, Nippon Paper Group, Inc., which was a pure holding company, functioned as a control tower for the Group's management. As such, it advanced the Group's growth strategies, audited and supervised the activities of Group operations, and built various functions for promoting compliance. With the reorganization, these functions have been taken over by Nippon Paper Industries Co., Ltd.

To secure a separation of business execution and management, Nippon Paper Industries has adopted an executive officer system and, in June 2013, appointed an outside director. These steps were taken in an effort to further enhance and clarify management oversight functions.

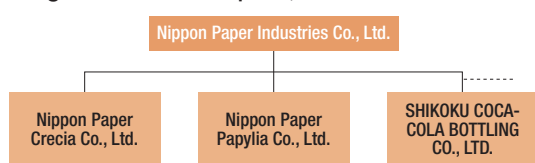
### Organization through September 30, 2012



### Organization as of October 1, 2012



### New organization as of April 1, 2013



## Corporate Governance Structure

Our Group governance system is based on a board of directors and corporate auditors structure.

### ● Board of Directors

The company's Board of Directors comprised eight internal directors and one external director, for a total of nine directors, as of September 30, 2013. It is responsible for determining the basic policies of the Group companies, deciding on matters pertaining to laws and regulations, Articles of Incorporation, and other critical management issues, and monitoring the executive aspects of Group companies.

### ● Management Execution Committee and Management Strategy Committee

In conjunction with the transition to an operating holding company structure and adoption of an executive officer system, two committees—the Management Execution Committee and Management Strategy Committee—were established directly under the Board of Directors, in April 2013, to take the place of the Group Management Committee.

The Management Execution Committee meets weekly to support the business execution activities of the representative directors, and undertake discussions of important operational matters. The Management Strategy Committee meets as needed to discuss management strategies for particular business areas, and other matters of importance for the Group.

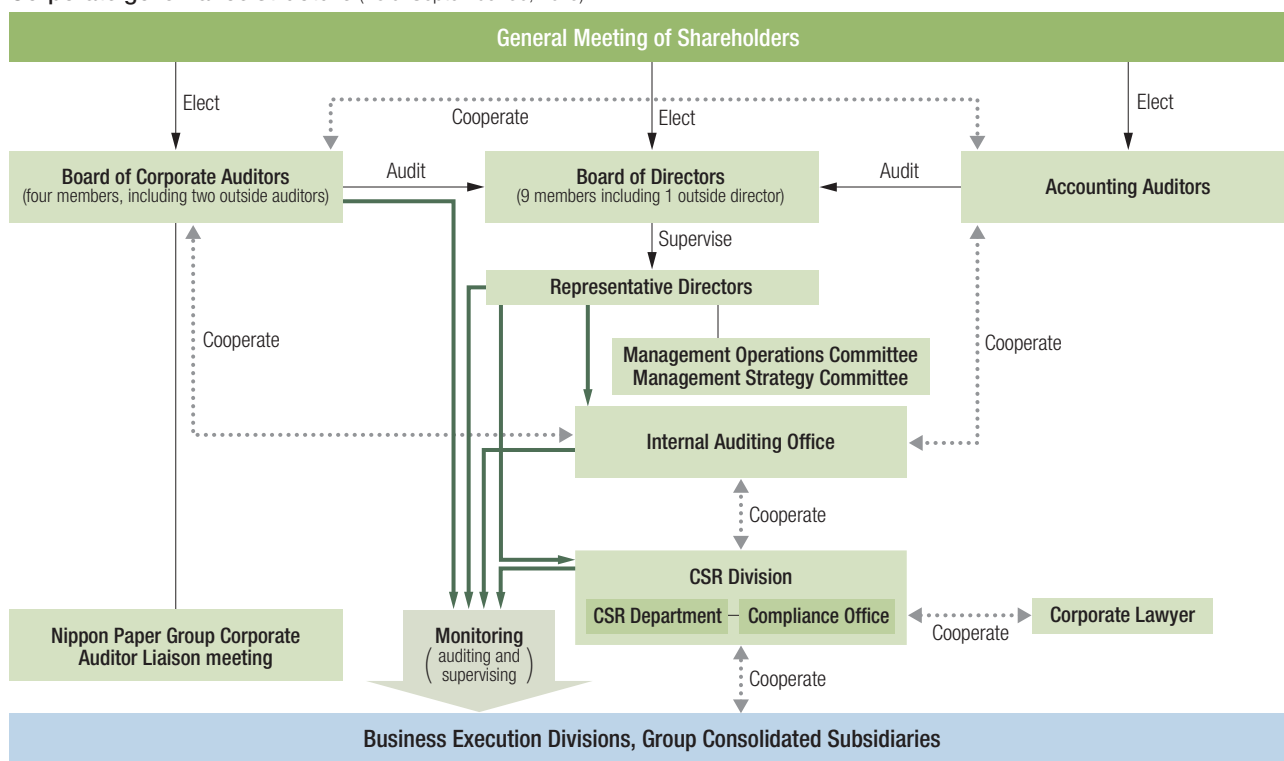
### ● Board of Corporate Auditors

The Board of Corporate Auditors monitors the company's management. Two of the four auditors comprising the board are outside auditors responsible for strengthening the board's monitoring and auditing functions from a third-party perspective.

Corporate auditors attend meetings including those of the Board of Directors, Management Execution Committee, and Management Strategy Committee, and closely monitor the execution of duties by directors. They verify that all company operations are conducted in an appropriate manner and in compliance with statutory and regulatory requirements, and offer their opinions and comments to directors and employees.

The Board of Corporate Auditors also coordinates closely with the auditors of Group companies to ensure that Group activities remain consistent with all laws and regulations and are conducted in an appropriate manner. The Nippon Paper Group Corporate Auditor Liaison Meeting, which is composed of the standing corporate auditors of the Group's 10 principal companies, holds meetings three times a year to discuss and exchange information about basic policies and priority issues, and deliberates actions to be taken going forward.

**Corporate governance structure** (As of September 30, 2013)



**Internal Auditing Office**

The Internal Auditing Office evaluates the internal audit and financial reporting control systems of each Group company.

Internal audits are conducted in a fair and independent manner. The office evaluates the activities of Group companies and offers advice and recommendations for achieving business objectives and management targets, safeguarding assets, and enhancing corporate value for the sound and continuous development of the Group as a whole.

**Internal Control System**

**Complying with statutory and regulatory requirements**

In accordance with the Company Act and related regulations, effective internal control systems have been constructed and systems for ensuring compliance with laws and the Articles of Incorporation have been established and implemented.

To comply with the internal control reporting system requirements stipulated under the Financial Instruments and Exchange Act of Japan, the Internal Auditing Office assesses the status and operation of financial reporting internal controls. Covered by these assessments are the 24 consolidated subsidiaries of Nippon Paper Group Inc. —at an overall company level—and two major operating Group companies—at a more detailed level paying particular attention to net sales, accounts

receivable and inventory administration processes, which are of special import to business objectives. This evaluation helped confirm the efficacy of the Group’s internal control and financial reporting systems as of the end of fiscal 2012.

**Compensation Paid to Directors**

**Determined on the basis of roles, responsibilities and performance**

Compensation paid to directors is essentially composed of two parts. Seventy percent is paid as a base component and the remaining 30% is, in principle, linked to the business results of the preceding fiscal year.

In view of their responsibilities, compensation paid to corporate auditors is limited to a fixed amount. This amount is determined through a process of deliberation by the auditors.

The payment of compensation to directors and corporate auditors is restricted to the total amounts approved at the general meetings of shareholders.

**Directors’ total compensation**

Officer class	Total compensation payable
Directors	¥800 million per year
Corporate auditors	¥120 million per year

# CSR Management

The CSR Division executes corporate social responsibility initiatives.

## Basic Stance

### Working to build a sustainable society in line with the Group vision

The Nippon Paper Group has established the overarching vision of becoming a world-class corporate group. This vision is based on the ideals of achieving superior, stable profits, winning the trust of customers, having positive, forward-looking employees, and preserving corporate ethics. While adhering strictly to a policy of compliance, the Group works to achieve the vision. We work to meet the expectations and requirements of stakeholders and fulfill our corporate social responsibility from a variety of perspectives.

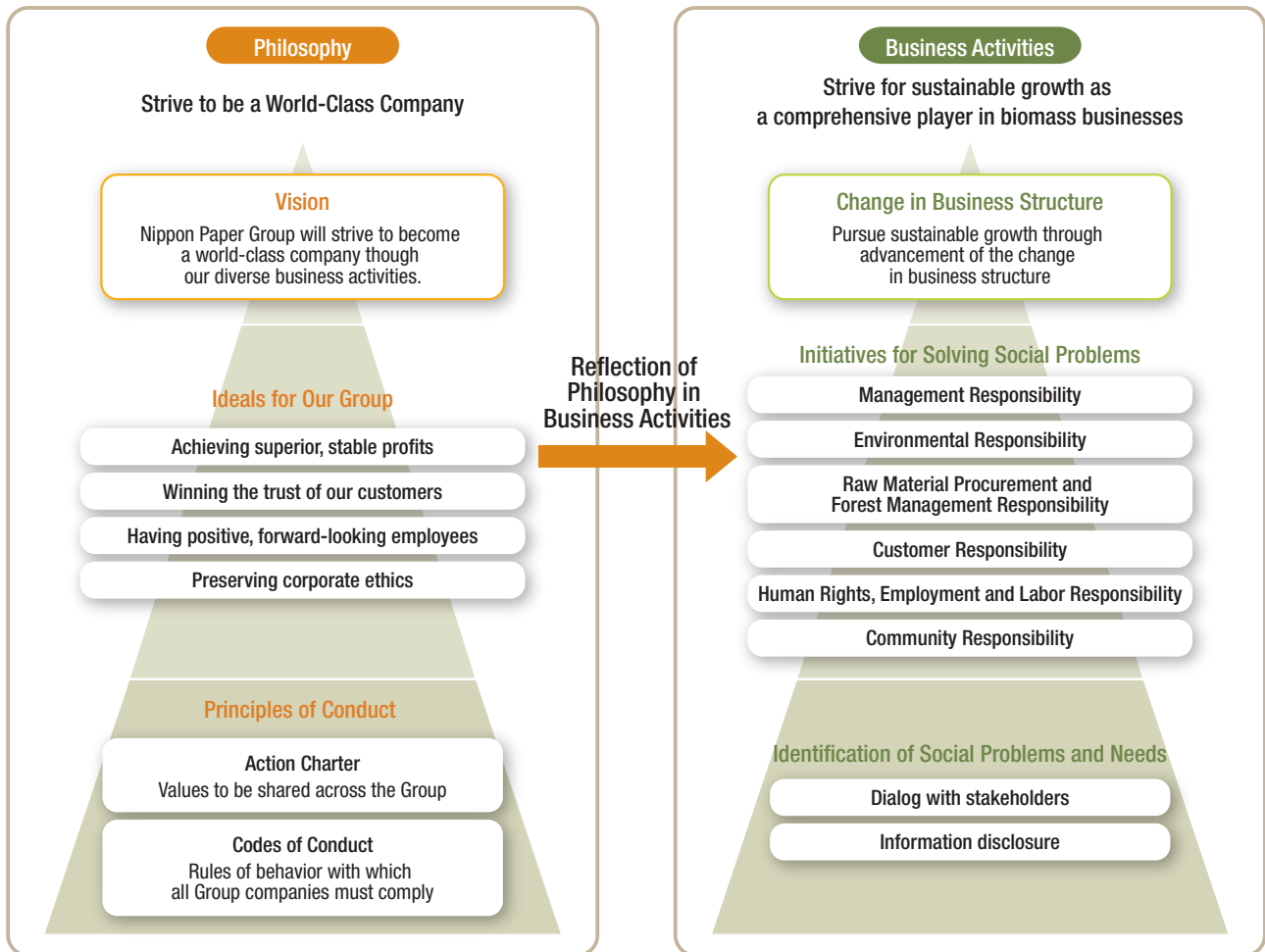
With information disclosure and ongoing dialog with stakeholders, we will face up to the vast array of social issues from the broadest possible perspective. On this basis, we engage in activities aimed at building a sustainable society.

## Management Structure

### Overseeing corporate social responsibility through a dedicated CSR Division

Nippon Paper Industries Co., Ltd. established the CSR Division to oversee the CSR activities of the Group as a whole. The CSR Department and Public Relations Office were set up within the CSR Division. The CSR Department promotes Group-wide CSR activities based on the shared values embodied in the Action Charter and works closely with the various divisions and departments responsible for operations relating to the environment, raw material procurement, product safety as well as occupational safety and health.

The Compliance Office serves as the facilitator and driving force behind Group-wide efforts to ensure comprehensive compliance.



### Action Charter

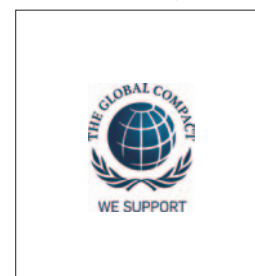
1. We shall pursue a sustainable growth for the future to contribute to society through our business activities.
2. We shall abide by the letter and the spirit of laws and regulations, and comply with the highest ethical standards and social codes of conduct, both in Japan and abroad.
3. We shall conduct 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.

Accordingly, we are working to build relationships and share CSR-related information with other companies, international organizations, governmental institutions, labor organizations, and NGOs in countries around the world, and contributing to various activities.

#### ● The United Nations Global Compact

The United Nations Global Compact is an initiative put forward by Kofi Annan in 1999 when serving as United Nations Secretary-General. The initiative identifies 10 principles covering the four fields of human rights, labor, environment and anti-corruption. Signatories to the compact voluntarily pledge to practice the 10 principles outlined in the Global Compact, aiming at the sustainable growth of society.

Nippon Paper Industries Co., Ltd. announced its decision to support the aforementioned 10 principles and joined as a signatory in November 2004.



**WEB** Global Compact Network Japan  
<http://www.ungcjin.org/> (Japanese only)

### Collaborative Initiatives

#### Seeking to Connect to and Work with External Parties

The Nippon Paper Group places harmony between economy, environment and society at the heart of its business activities.

#### Major organizations with which the Nippon Paper Group has an affiliation

(As of April 1, 2013 Except where noted, information is for Nippon Paper Industries Co., Ltd.)

	Organization	Overview of the organization and its activities
Global	The United Nations Global Compact Network Japan	Member organizations support the ten principles (in the categories of human rights, labor, environment, and anti-corruption) of the UN Global Compact and engage in voluntary actions toward that end.
	International Council of Forest and Paper Association (ICFPA) <sup>1</sup>	ICFPA is made up of 43 forest and paper industry associations from 40 countries and regions. The council serves as a forum that promotes dialog, interaction, and cooperation.
	Amnesty International Japan	Amnesty International is a global movement whose vision is for every person to enjoy all the rights enshrined in the Universal Declaration of Human Rights and other international human rights laws and standards.
	WWF Japan	The World Wide Fund for Nature Japan is a member of the World Wide Fund for Nature, the world's largest nature conservation NGO. It engages in a wide range of activities aimed at protecting the natural environment worldwide.
Japan	Japan Paper Association <sup>2</sup>	The Japan Paper Association is a paper and pulp manufacturing industry organization composed of major paper and pulp companies whose goal is to promote sound industry growth.
	Keidanren (Japan Business Federation)	An all-encompassing business Incorporated Association whose mission is to transform Japan's economy into one that is sustainable and driven by the private sector.
	Council for Better Corporate Citizenship (CBCC)	With the full backing of Keidanren, CBCC supports the activities Japanese companies undertake overseas as good corporate citizens.
	Japan Hygiene Products Industry Association (JHPIA) <sup>3</sup>	An Incorporated Association, JHPIA is comprised of the following five industry organizations: the Japan Hygiene Materials Industry Association, the Japan Hygiene Paper Industry Association, the Japan First Aid Bandage Industry Association, the Japan Cleansing Wipes Industry Association, and the Japan Face Mask Industry Association. The Association strives to resolve issues common throughout the industry in an effort to enhance the quality of civil life, health and hygiene.
	Japan Project-Industry Council (JAPIC)	Multiple major corporations are participating in an industry-government-academia research committee organized within JAPIC to revitalize Japan's forests through business initiatives.
	Committee for Milk Container Environmental Issues	The committee is composed of related associations in the dairy, container manufacturing, and other sectors. It engages in the collection and recycling of milk and other beverage containers as well as educational activities designed to promote environmental awareness.
	Milk Packaging and Machinery	The Japan Association of Milk Packaging and Machinery is a General Incorporated Association established under the Civil Code by Japan's Ministry of Health, Labour and Welfare. Comprised of packaging container and machinery manufacturers, the association is active in the advancement of milk and other beverage container, packaging, and manufacturing equipment with a particular focus on improving safety and hygiene.
Wild Bird Society of Japan	The Wild Bird Society of Japan is a public interest corporation. Its purpose is to protect wild animals and their habitats with a particular emphasis on birdlife.	
Overseas	Australian Forest Products Association (AFPA) <sup>4</sup>	An Australian organization representing, and working for the sustainable development of the paper pulp, forest, and lumber industries.
	Victorian Association of Forest Industries (VAFI) <sup>4</sup>	An industry association that is domiciled in the Australian state of Victoria and promoting the use of sustainable, natural forest resources.

<sup>1</sup> The company's participation is through the Japan Paper Association, representing Japan as a member of ICFPA.

<sup>2</sup> Nippon Paper Industries, Nippon Paper Papyrus, and Kitakami Paper are members.

<sup>3</sup> Nippon Paper Creca is a member.

<sup>4</sup> Australian Paper is a member.

# Compliance

As a committed partner ensuring that employees are fully informed about compliance, the Nippon Paper Group engages in corporate activities in accordance with laws and social norms.

## Basic Stance

### Promoting thorough understanding of compliance in accordance with the Group's Action Charter

In its Action Charter (see page 21) formulated in 2004, the Nippon Paper Group declared its commitment to abiding by the letter and the spirit of laws and regulations and complying with the highest ethical standards and social codes of conduct both in Japan and abroad. To meet this commitment, the Group diligently upgrades and expands its compliance structure while implementing measures to enhance thoroughgoing compliance awareness, such as through continuous training programs.

## Compliance Structure

### Positioning the CSR Division at the heart of Group-wide compliance efforts

The Nippon Paper Group established the CSR Division in June 2008 to play a pivotal role in compliance, and created the Compliance Office within the division.

The CSR Division, aiming to promote strict compliance, serves as a facilitator and driving force behind efforts to achieve the two major compliance-related goals of imbuing the Group with zero tolerance of misconduct and transforming the corporate structure and culture.

#### ● Promoting Group-wide compliance

A person is appointed to be in charge of compliance within each Group company, and the Compliance Office acts as a central contact point for promoting and coordinating compliance activities among the Group companies.

The Compliance Office holds Group Compliance Liaison Meetings to provide all employees in charge of compliance with details of compliance policies, initiatives, and other information, as well as advice on education and training activities. Through these and other means, we are making every effort to promote Group-wide compliance.

## Compliance Training

### Educating the workforce to raise the awareness of compliance

In addition to being constituent members of the Group, our employees are members of society. In this regard, each and every employee must ensure that his or her mindset is consistent with societal norms. By adjusting the company's actions to align with this premise, we are taking the first steps toward reforming our corporate culture.

Education and training implemented by the CSR Division conveys the importance of compliance while enhancing employee awareness throughout the Group.

### Implementing compliance training

Nippon Paper Industries Co., Ltd. conducts compliance training on an ongoing basis to further enhance awareness and understanding among employees of the Group (consolidated and production subsidiaries in Japan).

We invite a consultant from outside the Group to augment our compliance programs. And we conduct training that involves group discussions and is tailored to work environments. Practical compliance risk management training is conducted at manufacturing sites, and case-based compliance training at sales offices and other works. Looking ahead, we will continue to implement compliance training to ensure a heightened sense of awareness and strict adherence throughout the Group.



Compliance training

### Group Internal Whistleblower System

#### Encouraging reporting via a help-line on activity in conflict with compliance

The Nippon Paper Group has established its Help Line System to allow any employee of the Group to provide direct notification of, or seek advice outside the chain-of-command on, any action in the workplace that could violate laws, social norms or corporate ethics. The Compliance Office located within the CSR Department serves as a point of contact within the Group. We have also taken steps to establish points of contact outside the Group for use by employees as appropriate.

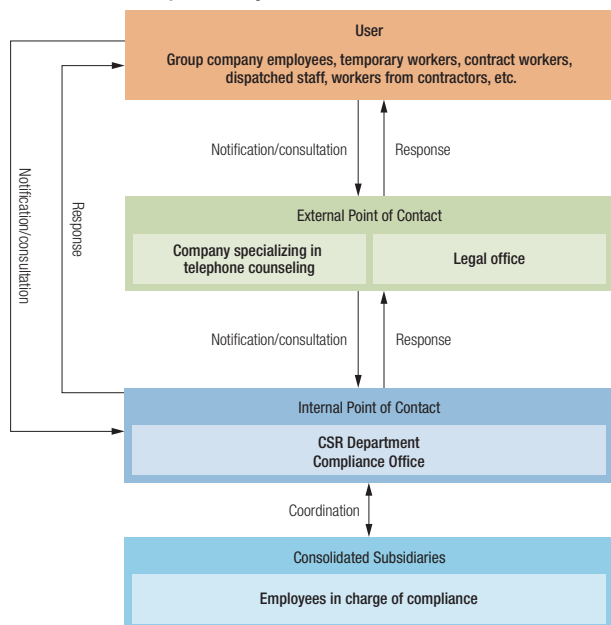
The Help Line System guarantees the privacy of whistleblowers and protects them from any disadvantageous treatment after notification or consultation. The system also ensures that quick and appropriate action is taken to address all issues. A detailed explanation of the Help Line System is an integral component of the Group's compliance training and helps to ensure that the system is used to maximum effectiveness.

#### Trends in the number of notifications received by the Help Line\*

Fiscal 2009	Fiscal 2010	Fiscal 2011	Fiscal 2012
24	11	15	13

\* The Help Line is open to members of the Nippon Paper Group (consolidated and production subsidiaries in Japan)

#### Flow of the Help Line System



### Personal Information Protection

#### Ensuring protection and appropriate handling of personal information through a systematic structure and rules

The Nippon Paper Group has taken steps to ensure clear understanding of the structure and rules applicable to the handling of personal information. A manual in each operating company forms the basis for appropriately handling the personal information of customers, business partners and employees.

Nippon Paper Industries drew up the Rules on the Handling of Personal Information on April 1, 2006. Copies of these rules and the aforementioned manual are distributed to all directors and employees, and are also posted on the Group's intranet to further ensure strict adherence. In the lead up to the establishment of the Rules and manual, Nippon Paper Industries, conducted a review of the personal information held by individual departments since fiscal 2005. Details of the date when personal information was obtained and the purposes for holding it are recorded and managed in a control ledger in accordance with Private Information Protection Law. This ledger is reviewed annually to eliminate unnecessary data and to ensure that information is handled properly.

### Respect for Intellectual Property

#### Heightening respect for intellectual property and ensuring compliance with all applicable laws through education programs

The Nippon Paper Group's emphasis on intellectual property is evident not only in research and development, but also in all of its business activities. In order to instill an appreciation of the value of intellectual property and to promote strict adherence to all applicable laws and regulations, members of the Intellectual Property Department of Nippon Paper Industries conduct intellectual property education programs for the benefit of Group company employees.

Since intellectual property education was first initiated in fiscal 2002, the content of programs has improved each year. Today, Nippon Paper Group engineers and administrative employees are exposed to a wide variety of material commensurate with their years of service and duties. Programs encompass details of all relevant laws including the Patent Law, the Utility Model Law, the Design Law, the Trademark Law, the Unfair Competition Prevention Law and the Copyright Law. In addition to providing pertinent information on the relationship between the company



Class on matters related to intellectual property

and the aforementioned laws, these programs identify areas requiring particular care from a compliance perspective. A total of 305 employees attended the 11 programs implemented in fiscal 2012.

# Information Disclosure and Investor Relations; Profit Distribution to Shareholders

The Nippon Paper Group is dedicated to promoting mutual understanding with its shareholders and investors, mainly through presentations, events, and other forms of dialog.

## Basic Position on Information Disclosure

### Addressing the interests of stakeholders and ensuring transparent management through active information disclosure

The Nippon Paper Group recognizes that open and fair disclosure to a broad stakeholder base is a key responsibility of management. In this regard, we work diligently to engage in sound and highly transparent management by disclosing company information in accordance with our Action Charter (see page 21). To guide us in our endeavors, we formulated the Nippon Paper Group Disclosure Policy in October 2005.

Following the guidelines of this basic policy, we comply with the provisions of the Financial Instruments and Exchange Act of Japan and other relevant laws and regulations. We also adhere to the prompt disclosure rules stipulated by financial exchanges, and disclose information in a timely manner, standing on the principles of transparency, fairness and continuity. Furthermore, we disclose information that may not be required under applicable laws, regulations, or timely disclosure rules, when deemed to be of interest to our stakeholders and other members of society.

**WEB** Information Disclosure Policy  
<http://www.nipponpapergroup.com/e/ir/policy.html>

### The Nippon Paper Information Disclosure Policy (Excerpt)

#### 1. Basic Disclosure Stance

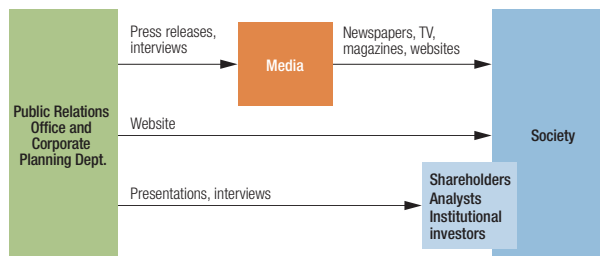
The Nippon Paper Group (the Group) pursues a fundamental policy of disclosing corporate information proactively and fairly to all Group stakeholders, and raising the level of management transparency in accordance with its Action Charter and Codes of Conduct.

#### 2. Criteria for Disclosure

- (1) The Group conducts expeditious disclosure based on the principles of transparency, fairness and consistency, in line with the Japanese Corporate Law, Securities and Exchange Law<sup>1</sup> and other relevant laws, as well as the Rules on Timely Disclosure of Corporate Information by Issuer of Listed Security (the Rules on Timely Disclosure) stipulated by securities exchanges.<sup>2</sup>
- (2) Even for information that does not fall under the categories stipulated in the relevant laws and the Rules on Timely Disclosure, the Group carries out rapid and accurate disclosure of information useful to stakeholders and the broader society, to the fullest extent possible, regardless of any advantages or disadvantages that may accrue to the Group as a result of such information disclosure.

<sup>1</sup> Currently the Financial Instruments and Exchange Law  
<sup>2</sup> Currently the financial instruments exchange

## Information disclosure structure and framework



## IR Activities

### Promoting dialogue with shareholders and investors

Nippon Paper Industries expends great effort in providing to its shareholders and investors a direct explanation of the status of the Group's management and business through stakeholders' meetings and other presentation opportunities. At the same time, we actively listen to the comments and concerns of shareholders and investors, and incorporate what we learn into ongoing management.

### Results of activities in fiscal 2012

Operating results and management briefings	Two times
Operating Results Briefings (Teleconference)	Two times
Individual meetings	298 times

#### ● Shareholders' meeting

In an effort to ensure attendance by as many shareholders as possible, Nippon Paper Industries Co., Ltd. holds its annual general meeting of shareholders at easily accessible venues in central Tokyo.

For the benefit of overseas investors, the company prepares an English-language convocation notice. Furthermore, it has established a service that allows shareholders to exercise their rights either in writing or online. Through these and other measures, we are endeavoring to promote the exercise of voting rights by shareholders both in Japan and overseas.

#### ● Operating results and management briefings

Regular operating results and management briefings are held for the benefit of institutional investors and analysts. Each briefing is attended by close to 200 people, who are provided with management thoughts on the immediate and future business environments, and information on medium- to long-term management strategies.



Operating results briefing



### ● Meetings with management

In addition to the aforementioned briefings, Nippon Paper Industries Co., Ltd. convenes meetings attended by the company's management.

These direct dialogs help institutional investors deepen their understanding of the company's strategies and management stance while providing management with the opportunity to listen directly to the comments and concerns of the market.

### ● Individual interviews

With the exception of quiet or closed periods, the company responds positively to requests for interviews from institutional investors and analysts throughout the year. Cognizant of the importance of maintaining fairness in the provision of information, the company provides details of its operating results, performance forecasts and management initiatives in a candid and precise manner.

### ● Tours and other events

Every opportunity is taken to promote a deeper understanding of the Nippon Paper Group and its activities. Annual plant tours are one example. The tours of Nippon Paper Industries' R&D



Tour of Nippon Paper Crecia's Tokyo Mill

Division and Ishinomaki, Soka, and Yatsushiro mills; and Nippon Paper Crecia's Tokyo Mill in fiscal 2012 attracted considerable praise from participants.

### ● IR tools and websites

The Nippon Paper Group uses various websites to disclose IR information. In addition to copies of news releases, the Group's IR websites provide an array of information, including presentations and briefings, as well as summaries of consolidated financial results. Moving forward, the Group will continue to bolster and expand the content of IR information.

**WEB** Annual Reports  
Application form:  
<http://www.nipponpapergroup.com/e/appliform/index.html>  
PDF version:  
<http://www.nipponpapergroup.com/e/ir/annual.html>

## Profit Distribution to Shareholders

**The continuous distribution of profits to shareholders through the steady payment of cash dividends is among the Nippon Paper Group's highest priorities.**

Nippon Paper Industries Co., Ltd. strives to reinforce its management base, improve profitability and secure the sustainable growth of its corporate value, thus fulfilling the expectations of shareholders.

Fundamentally, our dividend distribution policy is based on a comprehensive assessment of the Group's performance as well

as efforts to boost retained earnings. With this as a guide, we endeavor to consistently pay a steady level of dividends to the extent possible.

### Trends in dividends per share

(Yen)

Holding company name	Fiscal year end	Interim dividend	Period-end dividend
Nippon Paper Group, Inc.	March 2009	4,000	40 <sup>1</sup>
	March 2010	40	40
	March 2011	40	20
	March 2012	10	20
	March 2013	10	—
Nippon Paper Industries Co., Ltd.	March 2013	—	30 <sup>2</sup>

<sup>1</sup> A 100-to-1 stock split was conducted on January 4, 2009, with trading lots introduced with one lot consisting of 100 shares.

<sup>2</sup> Because of the April 1, 2013 merger of Nippon Paper Industries Co. Ltd. and Nippon Paper Group, Inc., dividends beginning with the year-end dividend for the fiscal year ended March 2013 are being paid as dividends from Nippon Paper Industries Co., Ltd.

## Evaluations by External Research and Ratings Agencies

The company has received evaluations from the following external agencies.

### ● Debt ratings

Listed below are the major debt ratings of Nippon Paper Industries Co., Ltd.

### The status of major debt ratings (As of September 30, 2013)

Ratings agency	Rating
Rating and Investment Information, Inc. (R&I)	Long-term bonds: A <sup>-</sup>
Japan Credit Rating Agency, Ltd. (JCR)	Long-term bonds: A

### ● Evaluation from SRI research/rating agencies

Nippon Paper Industries has been selected for inclusion in socially responsible investment (SRI) indices. In Japan, it was once again chosen for inclusion in the Morningstar Socially Responsible Investment Index (MS-SRI) in April 2013. The MS-SRI is an index of the share prices of 150 companies Morningstar Japan selects, from among all listed companies in Japan, for their excellence in social responsibility.

Overseas, Nippon Paper Industries was selected by Forum Ethibel, a Belgian organization promoting SRI, for inclusion in its Ethibel Excellence. This selection, in February 2013, was made from among the companies listed in the Ethibel Investment



Register, and reflects Forum Ethibel's judgment that Nippon Paper Industries ranks better than average in its industry in terms of human rights, human capital, the environment, market ethics, good governance, and social impact.

# Dialog with Stakeholders

In addition to daily communication, we are actively promoting opportunities for dialog.

## Basic Stance

### Actively promoting dialog

The Nippon Paper Group maintains relationships with a broad spectrum of stakeholders including employees, customers, society and local residents, business partners, and shareholders in the conduct of its business. The Group places importance on communication with stakeholders, incorporating their comments

and requests into its business and CSR management.

In this context, we actively establish contact points and opportunities for direct dialog with all stakeholders while providing daily information and promoting the exchange of opinions. By disclosing relevant information and listening carefully to the concerns of stakeholders, we will work diligently to secure sustainable growth and development both for the Group and society as a whole.

### Contact points for dialog with stakeholders

Stakeholder	Major point of contact	Means of communication
<p><b>Employees (executives, permanent employees, part-time employees, employee families)</b>                      The approximate 13,100 employees (consolidated basis) of the Nippon Paper Group are responsible for business and CSR activities. Working closely with the labor union, the principal mouthpiece for the Group's employees, we make every effort to ensure that our employee evaluation and compensation systems are fair and equitable, and to provide a rewarding and comfortable workplace. In addition, we provide a variety of benefits, including medical examinations covering employees and their dependents in an effort to foster peace of mind and garner the trust of employee families.</p>	Human resource sections	Labor-management councils, labor-management committees, etc.
<p><b>Customers (business enterprises, consumers, etc.)</b>                      Paper, the Nippon Paper Group's principal product, is widely used by both companies and individuals. Paper products are for the most part delivered directly to the corporate customers: wholesale trading companies, printing companies and publishers in Japan. In addition, household paper and leisure services are provided for individual customers (consumers). We are putting in place the necessary structures and systems by product and service that best address the needs of customers.</p>	Sales sections Quality control sections Customer relations	Individual interviews, inquiries to customer relations sections, etc.
<p><b>Society and local residents (local communities, NPOs/NGOs, municipalities, the media, students, etc.)</b>                      The business activities of the Nippon Paper Group's production bases have a major impact on surrounding communities. We, therefore, place significant weight on promoting harmonious co-existence with local residents, protecting the natural environment and garnering the trust of society. We are also acutely aware that the activities of NPOs and NGOs, both in and outside Japan, reflect the interests and concerns of society. Through dialog and support, we are working to foster deeper mutual understanding. Moreover, we acknowledge the importance of the media in ensuring accountability to the broader society. In this regard, we are actively engaged in information disclosure.</p>	Mills and branches	Environmental explanatory meeting, risk communication, environmental monitoring system, factory and other presentation meetings, etc.
	Responsible sections within each business segment	Interviews, etc.
	Social contribution sections	Social contribution activities, etc.
<p><b>Business partners (agents, suppliers, subcontractors, etc.)</b>                      While the majority of business partners are companies domiciled in Japan, items such as woodchips and fuel are mainly procured from overseas suppliers. Moving forward, relationships with business partners are expected to increasingly take on a global nature. The Nippon Paper Group engages in open and fair trading transactions while promoting positive relations with its business partners. In addition, responding to the confidence customers place in us, we work closely with business partners to pursue CSR activities throughout the supply chain.</p>	Procurement sections Human resource sections	Individual interviews, etc.
	<p><b>Shareholders (shareholders, investors, etc.)</b>                      Shares of Nippon Paper Industries Co., Ltd. are listed on the Tokyo Stock Exchange. Financial institutions and foreign investors held 45% and 19%, respectively of the 16,250,000 shares issued by the company as of April 1, 2013. Nippon Paper Group, Inc. strives to disclose information in a timely, transparent, fair and continuous manner.</p>	General affairs sections IR sections

## The Use of Communication Tools

### Actively and continuously disclosing information

Striving to inform stakeholders about its wide-ranging activities, the Nippon Paper Group uses a variety of communication tools to disseminate corporate information. Through this feedback, we are actively working to stimulate dialog.

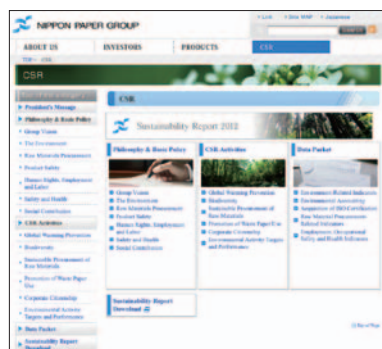


Sustainability Report

Corporate Profile

Group communication magazine *Dynawave*

Annual Report



Website

<http://www.nipponpapergroup.com/e/csr/>

### CSR Seminar held (March 6, 2013)

Nippon Paper Industries has held seminars on its environmental and social initiatives annually since 2007. In fiscal 2012, we invited, as the guest speaker, Professor Yoshinao Kozuma of Sophia University, a specialist in environmental and international accounting and the foremost expert in CSR research, and held a seminar on strategically addressing social issues and the importance of information disclosure. Professor Kozuma gave a talk on global trends in social issues and the importance of CSR initiatives at the event, which attracted an audience of around 200, consisting of members of the general public and Nippon Paper Group employees. Attendees reflecting on Professor Kozuma's lucid presentation commented that it had given them a clear understanding of why CSR is important for companies.



CSR seminar

### Major communication tools

Tool	Published by	Description	Main targeted readers
Sustainability report	Nippon Paper Industries Co., Ltd.	Detailed explanation of the Group's CSR activities	All stakeholders
Environmental and social communication magazine <i>ShikiOriori</i>	Nippon Paper Industries Co., Ltd.	Explanation of the Group's CSR activities	All stakeholders
Corporate profile	Group companies	Overview of each company	All stakeholders
Group communication magazine <i>Dynawave</i>	Nippon Paper Industries Co., Ltd.	Introduction of the Group's activities	Employees and their families, business partners
Group company in-house newsletters and mill public relations magazines	Group companies and mills	Introduction of the activities of each company and mill	Employees and their families
Corporate profile for job applicants	Group companies	Company description	Job applicants
Annual report	Nippon Paper Industries Co., Ltd.	Detailed explanation of the Group's operating results and financial standing	Shareholders, investors, securities analysts
Shareholder communications	Nippon Paper Industries Co., Ltd.	Explanation of the Group's operating results and financial standing	Shareholders
Website	Group companies	Comprehensive presentation of information relating to individual companies	All stakeholders
IR information mailings	Nippon Paper Industries Co., Ltd.	IR information	Shareholders, investors, securities analysts

Principal News Items on the Nippon Paper Group

Distributing a wide range of corporate information through such media as the Internet

Major press releases in Japan and the related pages in the 2013 sustainability report (April 2012–October 2013)

Year	Month	The environment and society	Management, investment, new products, etc.
2012	May		<ul style="list-style-type: none"> <li>● Nippon Paper Group develops Fourth Medium-Term Business Plan (FY2012–FY2014)</li> </ul>
	Jun.	<ul style="list-style-type: none"> <li>● Marunuma Kogen School of Friendship for Forests and Paper sessions held (Annually in June and September) (see page 99)</li> <li>● Participation in Shirane-aoi Preservation Group activities (annually in June and September) (see page 100)</li> </ul>	<ul style="list-style-type: none"> <li>● Nippon Paper Group announces joint venture with SCG Paper in Thailand for multipurpose light industrial paper</li> </ul>
	Aug.		<ul style="list-style-type: none"> <li>● Nippon Paper Industries Ishinomaki Mill once again fully operational following the Great East Japan Earthquake</li> </ul>
	Oct.	<ul style="list-style-type: none"> <li>● Publication of PR publication <i>ShikiOriori</i> Vol. 15 “Wood in Daily Life”  <b>WEB</b> <a href="http://www.nipponpapergroup.com/contents/200195048.pdf">http://www.nipponpapergroup.com/contents/200195048.pdf</a></li> </ul>	<ul style="list-style-type: none"> <li>● Nippon Daishowa Paperboard, Nippon Paper-Pak, and Nippon Paper Chemicals merge with Nippon Paper Industries (see page 18)</li> <li>● Dissolving pulp production system installed at Kushiro Mill</li> </ul>
	Nov.		<ul style="list-style-type: none"> <li>● Cultivation technology developed for plants used in Chinese and western medicine (see page 11)</li> </ul>
	Dec.	<ul style="list-style-type: none"> <li>● CSR Seminar session held for Group employees                      Theme: 2012 CSR Report</li> <li>● Participated in Eco-Products 2012 Exhibition with a booth themed, “Making the Future from Wood—Nippon Paper becoming a Woody Biomass Company”</li> <li>● Stakeholder Dialog held with students of the Musashino University Faculty of Environmental Science</li> </ul>	
2013	Feb.	<ul style="list-style-type: none"> <li>● Selected by the Ethibel Investment Register for inclusion in Ethibel EXCELLENCE (see page 25)</li> <li>● Exhibit on Blakiston’s fish owl protection activities at the Nemuro Birdland Festival</li> <li>● Award received in the Environmental Education Category of the Chiyoda-ku Global Warming Action Plan Program</li> </ul>	<ul style="list-style-type: none"> <li>● Decision to make cellulose nanofiber pilot production facility (see page 11)</li> </ul>
	Mar.	<ul style="list-style-type: none"> <li>● CSR Seminar held on strategically addressing social issues and the importance of information disclosure (Speaker: Sophia University Professor Yoshinao Kozuma) (see page 27)</li> <li>● Once again selected for inclusion in the Morningstar Socially Responsible Investment Index (see page 25)</li> <li>● Publication of PR publication <i>ShikiOriori</i> Vol. 16 “Paper Mills Functioning as Power Plants”  <b>WEB</b> <a href="http://www.nipponpapergroup.com/contents/200195057.pdf">http://www.nipponpapergroup.com/contents/200195057.pdf</a></li> <li>● Toyono School of Friendship for Forest and Paper Session held (annually in March)</li> </ul>	<ul style="list-style-type: none"> <li>● Cellulose Nanofiber Business Promotion Office established (see page 11)</li> <li>● Head office relocated to Ochanomizu Sola City in Kanda Surugadai, Chiyoda-ku, Tokyo</li> <li>● Brazilian afforestation and woodchip maker AMCEL becomes wholly owned subsidiary</li> </ul>
	Apr.		<ul style="list-style-type: none"> <li>● After merger with Nippon Paper Group, Inc., Nippon Paper Industries Co., Ltd. lists on TSE 1st Section as an operating holding company (see page 18)</li> </ul>
	May		<ul style="list-style-type: none"> <li>● Energy Business Division established (see page 10)</li> </ul>
	Jun.	<ul style="list-style-type: none"> <li>● Nippon Paper Group Tree Planting 2013 Held (see page 100)</li> </ul>	<ul style="list-style-type: none"> <li>● New research results on effects of Sun Cellobio®-K oligosaccharide product announced</li> </ul>
	Jul.	<ul style="list-style-type: none"> <li>● Publication of the environmental and social communication magazine <i>ShikiOriori</i> Vol. 17 “Making Wood Fiber Smaller for Greater Possibilities (Cellulose Nanofiber)”  <b>WEB</b> <a href="http://www.nipponpapergroup.com/contents/200201679.pdf">http://www.nipponpapergroup.com/contents/200201679.pdf</a></li> <li>● CSR Study Session held for Group Employees                      Theme: Characteristics of and Possibilities for Cellulose Nanofiber</li> </ul>	<ul style="list-style-type: none"> <li>● Sales Started for “Kininaru Kami Copy Paper” made with wood from forest thinning operations in Kyushu at the Yatsushiro Mill in Kumamoto Prefecture (see page 82)</li> <li>● Provision of technical cooperation to a committee made up of Fukuoka Prefecture and 17 Fukuoka metropolitan area municipalities, and considering possibilities for a Fukuoka metropolitan area disposable diaper recycling system (see page 46)</li> </ul>
	Sep.	<ul style="list-style-type: none"> <li>● Ochanomizu Sola City (Nippon Paper Group’s New HQ Building) awarded Platinum 2013 Certification—The highest DBJ Green Building Certification awarded by the Development Bank of Japan  <b>WEB</b> <a href="http://business.nikkeibp.co.jp/article/emf/20130909/253160/">http://business.nikkeibp.co.jp/article/emf/20130909/253160/</a></li> </ul>	<ul style="list-style-type: none"> <li>● International Sales Management &amp; Planning Department established</li> </ul>
	Oct.		<ul style="list-style-type: none"> <li>● Paperboard Business Division reorganized into the Containerboard Sales Division and the Duplex Board and Industrial Paper Sales Division</li> </ul>

# Environmental Responsibility



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# 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

**Endeavoring to reduce the environmental impact of our activities taking into consideration the unique characteristics of our business and wide-ranging social issues**

Through the effective use of wood, a renewable resource, the Nippon Paper Group delivers a wide spectrum of products to society. Considering the substantial amounts of energy and water used in its manufacturing processes, the Nippon Paper Group has made reducing the environmental impact of its business activities a key corporate social responsibility.

The Nippon Paper Group is committed to increasing the efficiency of equipment and operations at every stage of the value chain. At the same time, we are promoting effective measures to address wider environmental issues including global warming, resource recycling, and environmental pollution.

## Environmental Charter

**Promoting corporate activities that take into consideration the environment based on the philosophy and basic policies of our Environmental Charter**

The Nippon Paper Group has established its Environmental Charter to provide a framework for pursuing eco-friendly business activities. Based on the philosophy and basic policies of this charter, the Group strives to reduce the environmental impact of its activities. Looking ahead, we will pursue corporate activities that respond to the heightened environmental awareness of stakeholders.

**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

\* Biodiversity typically falls into three different classes: genetic diversity, which refers to the genetic variability within a species; species diversity, which covers the variety of species within a community; and ecosystem diversity, which entails the organization of species in an area of distinctive plant and animal communities.

## Environmental Action Plan (Green Action Plan)

**In identifying specific objectives and concrete actions, we are working to raise the effectiveness of our environmental endeavors.**

The Nippon Paper Group has incorporated into its Environmental Action Plan actions and objectives covering the six basic policies in its Environmental Charter. The Group has incorporated the value chain, traceability, and other new perspectives into the Green Action Plan, which sets forth objectives and actions for fiscal 2011 to fiscal 2015.

Group companies have each established their own specific environmental action plans based on this. Bringing together each Group company's efforts is enhancing our ability to accomplish the Green Action Plan 2015.

### The essence of the Green Action Plan 2015

- **Promote anti-global warming action**  
Achieve substantive reductions by adopting "total quantity" indices
- **Protect and develop forest resources**  
Clearly state the importance of full traceability
- **Promote the use of recycled resources**  
Promote the use of recycled resources by adopting "recycling rates" as indices
- **Observe environment-related laws and reduce environmental load**  
Strengthen environmental management from the perspective of a preventive approach in conjunction with efforts to observe environment-related laws

### The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015)

This plan establishes concrete Group-wide specific objectives and actions based on the Group's overarching environmental philosophy and basic policies.

### Environmental action plans of each Group company

Each Group company, including Nippon Paper Industries and Nippon Paper Creca, establishes its own set of objectives and actions based on the Green Action Plan 2015.

## The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015) fiscal 2012 results

	Green Action Plan 2015	Progress	Page No.
1. Anti-global warming action	Reduce CO <sub>2</sub> emissions from fossil energy by 25% versus fiscal 1990.	<ul style="list-style-type: none"> <li>Notwithstanding the impact of decreased production volumes in the Paper and Paperboard departments, reduced CO<sub>2</sub> emissions from fossil energy by 28.5% as well as the use of fossil energy by 36.7% versus fiscal 1990 through energy-saving initiatives and successful efforts to promote the conversion of fuel.</li> </ul>	38
	Reduce the use of fossil energy by 30% versus fiscal 1990.		
	Reduce logistics-generated CO <sub>2</sub> emissions.	<ul style="list-style-type: none"> <li>Achieved a modal shift rate of 92%, far surpassing the industry average in Japan, owing to successful efforts to apply highly efficient transportation methods.</li> <li>At Nippon Paper Industries' Ishinomaki Mill, which was damaged by the Great East Japan Earthquake, rebuilt the logistics system, creating a stable low-environmental-impact system based mainly on railway transport. Did this by restoring railway facilities at the mill site and providing locomotives and other equipment.</li> </ul>	40
2. Protection and development of forest resources	Facilitate the Tree Farm Initiative, an overseas afforestation project for procuring sustainable resources, with the aim of increasing overseas afforested area up to 200,000 hectares <sup>1</sup> .	<ul style="list-style-type: none"> <li>As of the end of 2012, had afforested 159,000 ha in overseas afforestation operations.</li> <li>On March 29, 2013, afforested area declined to 124,000 ha with the sale of shares in WAPRES. Shares were sold in connection with AMCEL becoming a wholly owned subsidiary. Going forward, plans to take full advantage of AMCEL's 130,000 ha (70,000 ha remaining) of afforestable areas will be drawn up for purposes including afforestation for the energy business.</li> </ul>	57
	Maintain forest certification in all proprietary forests, both domestically and internationally.	<ul style="list-style-type: none"> <li>Currently working to maintain SGEC, FSC<sup>2</sup>, and PEFC certification at all company-owned forests in Japan and overseas.</li> </ul>	57, 59
	Ensure that all imported hardwood chips are PEFC- or FSC <sup>2</sup> -certified <sup>3</sup> .	<ul style="list-style-type: none"> <li>The volume of PEFC- or FSC<sup>2</sup>-certified materials handled in fiscal 2012 stood at 97% as of December 31, 2012.</li> </ul>	55
	Enhance traceability and facilitate the procurement of sustainable forest resources.	<ul style="list-style-type: none"> <li>Cleared the requirements of PEFC rules in their entirety and FSC<sup>2</sup> rules to 67% with respect to the assessment of imported wood risk as of December 31, 2012.</li> <li>Currently working with FSC<sup>2</sup> Japan on a national risk assessment for sourcing FSC<sup>2</sup>-controlled wood from within Japan.</li> </ul>	—
3. Recycling of resources	Increase the ratio of recycled paper to paper to at least 40%. Increase the ratio of recycled paper to paperboard to at least 88%.	<ul style="list-style-type: none"> <li>Achieved ratios of recycled paper to paper and recycled paper to paperboard of 41.3% and 89.4%, respectively, through proactive efforts to utilize recycled paper.</li> </ul>	50
	Increase the waste recycling rate to at least 97%.	<ul style="list-style-type: none"> <li>Achieved a resource recycling rate to the total amount of waste generated of 95.8% and a recycled resource use rate of 22.7% at the mills through the introduction of granulation facilities and successful efforts to effectively use ash.</li> </ul>	46
	Recycle at least 40% of waste generated within mills.		
	Reduce water use in the manufacturing process.	<ul style="list-style-type: none"> <li>Taking steps to conserve water consumption by assessing material balance of water.</li> </ul>	47
4. Observance of environment-related laws and reduction of environmental load	Use the environmental management system to strengthen environmental management.	<ul style="list-style-type: none"> <li>Strengthening of the environmental management by top management is underway and adoption of environmental management systems at individual works is being promoted. As of March 31, 2013, 51 bases at 19 consolidated subsidiaries, and 4 bases at 4 non-consolidated subsidiaries, had obtained ISO14001 certification. 1 base at 1 non-consolidated subsidiary had obtained the Eco-Action 21 certification.</li> </ul>	32
	Properly control and reduce the use of chemical substances.	<ul style="list-style-type: none"> <li>Took steps to ascertain the types and volumes of chemical substances handled while endeavoring to promote proper chemical substance management.</li> </ul>	48, 49
	Facilitate the procurement of raw materials and equipment with a smaller environmental burden throughout the supply chain.	<ul style="list-style-type: none"> <li>Clearly identified, in energy management rules, energy efficiency as one selection benchmark in the establishment and renewal of equipment.</li> </ul>	—
5. Development of eco-friendly technologies and products	Enhance the more sophisticated use of wood materials.	<ul style="list-style-type: none"> <li>Constructed a test facility for cellulose nanofiber production at Nippon Paper Industries' Iwakuni Mill (in October 2013). Efforts to establish manufacturing technology for production facilities and develop applications are being accelerated.</li> </ul>	9, 11
	Develop equipment technology for facilitating a departure from reliance on fossil energy.	<ul style="list-style-type: none"> <li>Currently promoting the practical application of torrefaction technology to use biomass fuels more efficiently. In a large-scale combustion test at Nippon Paper Industries Yatsushiro Mill, the mixed fuel burning ratio was successfully increased to 25% by weight, confirming fuel performance. Operational simulation envisioning commercialization is now underway.</li> </ul>	—
	Reduce the environmental load through eco-friendly products and services.	<ul style="list-style-type: none"> <li>Considering use of waste-paper processing technology to commercialize recycling of used paper diapers. Participating as an observer on a committee (created in July 2013) considering possibilities for a paper diaper recycling system for the city of Fukuoka. Also providing technical cooperation together with Totalcare System Co.</li> </ul>	46
6. Proactive environmental communication	Disclose environment-related information to stakeholders whenever appropriate with the use of CSR reports, the website etc.	<ul style="list-style-type: none"> <li>Sustainability reports are being made available in both highlight and detailed editions on the website. Environmental site reports disclosing environmental activities at individual works are also being issued. And <i>ShikiOri</i>, an environmental and social communication magazine is being published to provide reader-friendly information on social issues.</li> </ul>	27
	Proactively facilitate environmental communication on a regional basis through, for example, dialogue with local people and governments.	<ul style="list-style-type: none"> <li>Placed particular emphasis on risk communication as a part of efforts to share risk information with local communities and to foster relationships of mutual trust. In fiscal 2012, implemented risk communication at all mills of Nippon Paper Industries Co., Ltd. Steps currently being taken to implement risk communication at Group companies.</li> </ul>	34
	Proactively participate in and support environment conservation activities.	<ul style="list-style-type: none"> <li>Actively participated in environmental endeavors including clean-up and beautification initiatives organized by local communities. At the same time, promoted various activities including mill tours and internships.</li> </ul>	97,100
7. Biodiversity commitments	Remain aware of the impact of business activities on biodiversity, and facilitate companywide biodiversity commitments.	<ul style="list-style-type: none"> <li>Currently promoting initiatives in line with core business activities together with activities that make the most of proprietary resources and technologies. Positioned forest certification systems as one of several biodiversity conservation benchmarks in an effort to promote sustainable forest management in line with core business activities. In addition, undertook such activities as the establishment of bird sanctuaries within company-owned forests.</li> </ul>	42-45

<sup>1</sup> No deadline has been set at this point.

<sup>2</sup> FSC Logo License No. FSC-C001751, FSC-C005984, FSC-C095114

<sup>3</sup> Aside from FM certification, CW certification is also included.

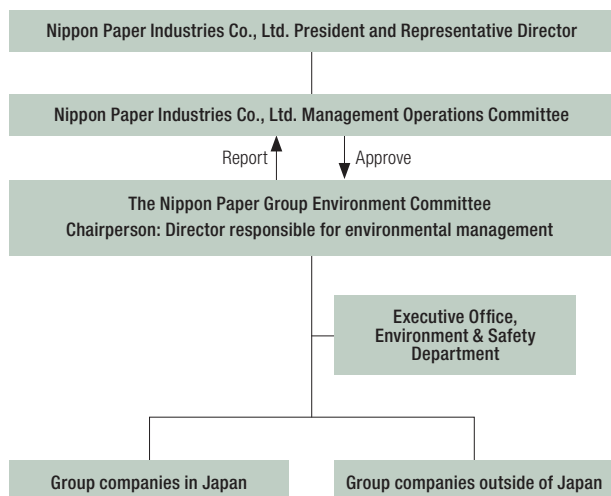
# Policy and Management

## Environmental Management Promotion Structure

### Putting in place a Group-wide environmental management structure in an effort to promote environment management

The Management Operations Committee bears management decision-making responsibility for the Nippon Paper Group's environmental strategy and oversees environmental activities for the entire Group. Chaired by the director responsible for environmental management, the Nippon Paper Group Environmental Committee draws up the Environmental Action Plan. This Action Plan serves as the basis for practicing the philosophy and basic policies of the Environmental Charter (see page 30), which outlines the environmental management principles of Group companies. In addition to monitoring the status of progress under the Plan, the Environmental Committee reports to the Management Operations Committee. Drawing on these reports, the Management Operations Committee in turn deliberates on and determines new initiatives as a part of efforts to oversee the environmental activities of the entire Group and to promote ongoing improvement.

### The Nippon Paper Group's environment promotion structure (as of April 2013)



### ● Introducing environmental management systems

As one measure aimed at promoting environmental management, the Nippon Paper Group is introducing various environmental management systems including ISO 14001, the international standard for environmental management, and Eco-Action 21.

The Nippon Paper Group's consolidated subsidiaries and principal production bases have a 98% ISO 14001 certification acquisition rate.

### Acquisition of ISO 14001 certification (as of March 31, 2013)

Company Name	Mills / Facilities/ Offices
Nippon Paper Industries Co., Ltd.	Kushiro Mill, Hokkaido Mill (Asahikawa, Yufutsu, Shiraoi), Ishinomaki Mill, Iwanuma Mill, Nakoso Mill, Fuji Mill, Iwakuni Mill, Yatsushiro Mill, R&D Dept.
(Paperboard Division)	Akita Mill, Ashikaga Mill, Soka Mill, Yoshinaga Mill, Otake Mill
(Chemical Division)	Gotsu Mill, Iwakuni Mill, Higashimatsuyama Mill, Yufutsu Mill
(Paper-Pak Division)*	Paper-Pak Division (Ochanomizu and Oji regions)
Nippon Paper Crecia Co., Ltd.	Tokyo Mill, Kaisei Mill, Koyo Mill, Kyoto Mill
Nippon Paper Papylia Co., Ltd.	Harada Mill, Suita Mill, Kochi Mill
Kitakami Paper Co., Ltd.	Ichinoseki Mill
NP Trading Co., Ltd.	Headquarters and offices in Japan
Nippon Seitai Corporation	Headquarters, Hokkaido Office, Niigata Office, Maebashi Mill, Saitama Mill, Kansai Office, Kyusyu Office
Daishowa Uniboard Co., Ltd.	Miyagi Mill
SHIKOKU COCACOLA BOTTLING CO., LTD.	Headquarters
SHIKOKU COCA-COLA PRODUCTS CO., LTD.	
SHIKOKU SAWAYAKA SERVICES CO., LTD.	Headquarters
SHIKOKUCANTEEN CO., LTD.	Headquarters
DYNAFLOW CO., LTD.	Headquarters
N&E Co., LTD.	
Nippon Paper Development Co., Ltd.	Headquarters, Landscape Department, Tokyo Department
Sakurai Co., Ltd.	Headquarters
Nippon Paper Ishinomaki Technology Co., Ltd.	All departments (Electric Device Department, Machinery Department, Construction Department)
Nippon Paper Industries USA Co., Ltd.	Port Angeles Mill
Australian Paper	Maryvale Mill, Shoalhaven Mill
South East Fibre Exports	Eden

\* The production subsidiary of Nippon Paper Industries' Paper-Pak Division, SOKA PAPER-PAK CO., LTD., EGAWA PAPER-PAK CO., LTD., MIKI PAPER-PAK CO., LTD., and ISHIOKA KAKO CO., LTD. have also acquired ISO 14001 certification.

### The status of Eco-Action 21 acquisition (as of March 31, 2013)

Company Name	Mill / Works
Akita Jujo Chemicals Co., Ltd.	Head Office Plant

## Strengthening Environmental Compliance

### Engaging in activities designed to bolster environmental compliance, including environmental audits

In order to better manage and reduce the environmental impact of its business activities, the Nippon Paper Group is strengthening environmental compliance by preventing problems and establishing a framework that ensures all problems come to light.



## Bolstering environmental compliance

### Building systems to prevent problems

- Building a workplace that places the utmost importance on the environment (environmental compliance training)
- Reinforcing systems to identify laws and regulations
- Implementing measures from both the facility and technology perspectives



### Establishing a framework that ensures all problems come to light

- Bolstering environmental audits
- Strengthening the environmental management structure
- Engaging in environmental communication and active information disclosure

## ● Strengthening the framework for reliably identifying laws to be observed

To accurately respond to wide-ranging and relatively frequent changes in environmental legislation, Nippon Paper Industries has signed advisory agreements with knowledgeable legal experts.

A legal search system, as well as advice on new and complex laws, has bolstered the framework for reliably identifying laws to be observed and their content.

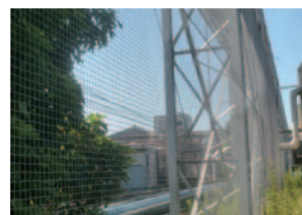
## ● Introducing equipment and facilities to prevent environmental accidents

While moving to strengthen its legal compliance systems, the Nippon Paper Group is also working to introduce equipment and facilities to prevent environmental accidents.

Nippon Paper Industries identifies risks of environmental accidents in terms of both probability and potential impact, and introduces the equipment and facilities needed for prevention. Acting on the top priority of preventing chemical spills, the company took steps like installing liquid containment walls in fiscal 2012.



Liquid containment wall



Wastepaper containment unit

## ● Environmental audits that place particular emphasis on legal compliance

Based on the environmental management guidelines on pollution prevention issued by the Japanese Ministry of the Environment and Ministry of Economy, Trade and Industry in March 2007, Nippon Paper Industries conducts environmental audits focusing on legal compliance.

The conduct of these audits, which follow an environmental compliance checklist, begins within the mills. On completion, the officer in charge of the company's head office Environment & Safety Department conducts an additional environmental audit. This system of complementary checks and balances helps enhance efforts aimed at ensuring legal compliance. Moreover, the Nippon Paper Group has put in place a system of mutual audits. Under this system, officers responsible for the environment at other Group companies participate in the audits of each company.



Conducting a document audit



Conducting a field inspection

## Environmental audit priorities by year

- 2007 Air Pollution Control Act, Water Pollution Control Act
- 2008 Air Pollution Control Act, Water Pollution Control Act, Law Concerning Special Measures Against PCB Waste
- 2009 Air Pollution Control Act, Water Pollution Control Act
- 2010 Air Pollution Control Act, Pollutant Release and Transfer Register (PRTR) Law, Law Concerning the Recovery and Destruction of Fluorocarbons
- 2011 Water Pollution Control Act, Poisonous and Deleterious Substances Control Act
- 2012 Waste Management and Public Cleansing Act, Poisonous and Deleterious Substances Control Act
- 2013 Waste Management and Public Cleansing Act, management and response to emergency situations

## Status with regard to Legal Compliance

### No instances of adverse disposition imposed by regulatory authorities

We were not subject to any form of adverse disposition from regulatory authorities (suspension of licenses, orders to suspend operation or the use of facilities, or fines) with respect to compliance in fiscal 2012.

## Policy and Management

### Environmental Communication

#### Actively promoting environmental communication and reflecting feedback into our environmental activities

##### ● Risk communication

The Nippon Paper Group places particular emphasis on sharing risk information in an effort to nurture strong ties of trust with local communities. To this end, the Group engages in risk communication with local residents at each of its mills. We recognize that in creating opportunities to exchange information about the risks associated with chemical substances and disasters, we are better placed to raise mutual awareness toward risk measures and to foster a greater sense of cooperation. When installing large-scale equipment, the Nippon Paper Group also conducts explanatory meetings to provide a better understanding of any impact on the environment.



Risk communication meeting

We established the Nippon Paper Group Risk Communication Guidelines in fiscal 2011, and, going beyond simply disclosing information, hold dialogues with stakeholders in annual communications on risk.

##### ● 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 that are effectively driven by local residents to ensure that their comments are appropriately conveyed.

The Nippon Paper Group handled 28 environment-related complaints in fiscal 2012. With each complaint, the relevant mill took steps to determine the cause, and took swift countermeasures. In those instances where a permanent solution required an extended amount of time, all appropriate provisional measures were taken as quickly as possible. Later, consideration was given to each complaint to ensure a permanent solution. With each complaint, the Group takes steps to explain the details of remedial action to be taken and to obtain the necessary acknowledgement.

#### Environment-related complaints (fiscal 2012)

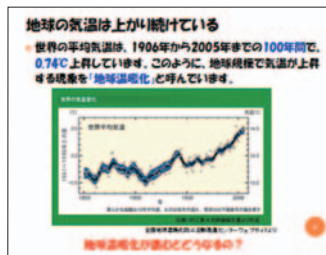
Item	No. of complaints	Item	No. of complaints
Noise	8	Vibration	2
Dust and mist dispersal	5	Smoke	2
Odor	6	Other	5
Total 28			

### Environmental Education and Training

#### Supporting employees increase their knowledge and skills

The Nippon Paper Group provides environmental education. This education is aligned to the career status of each employee from basic knowledge to specialist education including wastewater treatment plant operation. In addition, the Group encourages employees to attend externally organized training seminars to further their qualifications and skills.

##### ● Environmental e-learning



Environmental e-learning in fiscal 2013  
“Energy and Global Warming”

The Nippon Paper Group has introduced an online educational program to allow employees to learn about the environment at a time, place, and pace of their own convenience.

The program theme for fiscal 2013 was “Energy and Global Warming.”

##### ● Ministry of the Environment’s “Uchi Eco Shindan” Program

The Nippon Paper Group supports efforts that allow employees to take part in energy-efficiency and other activities that contribute to the environment, even in their own homes. In fiscal 2013, 30 employees of Nippon Paper Industries’ Research Laboratory underwent eco checkups at their homes. These checkups were conducted by inspectors certified under the Ministry of



Employee undergoing an eco checkup

the Environment’s “Uchi Eco Shindan” program for evaluating the eco-friendliness of households. Assessment results were then used to provide each employee with suggestions on ways to save electricity at home.

##### ● The Nippon Paper Group Eco Photo Award

The Nippon Paper Group has held the Eco Photo Awards in June as a part of its Environment Month activities. Through the medium of photos, this initiative is another opportunity for employees and their families to focus on the environment.



Fiscal 2013 Eco Photo Award winning entry  
“Little ringed plover living on land used as a mill parking lot”

## Environmental Accounting

### Environmental conservation expenses amounted to around ¥35.8 billion

The total cost for environmental conservation amounted to approximately ¥35.8 billion in fiscal 2012. This was largely

comprised of investments totaling ¥6.0 billion and expenses of ¥29.8 billion, up ¥0.1 billion from the previous fiscal year.

Turning to environmental liabilities, the Nippon Paper Group recorded a provision for environmental measures totaling ¥0.5 billion on its consolidated balance sheet to cover costs for PCB treatment.

#### Environmental accounting\*

##### Environmental conservation costs

(Millions of yen)

Categories	Principal Activities	Investment	Cost
(1) Business area costs			
1. Pollution prevention costs	Maintaining, managing and improving air and water pollution prevention facilities	631	15,705
2. Global environmental conservation costs	Preventing global warming as well as maintaining and managing company-owned forests	4,281	594
3. Resources circulation costs	Effectively utilizing recycled paper as well as treating, reducing and recycling industrial waste	1,032	9,065
(2) Upstream / downstream cost	Recovering pallets, etc.	–	2,252
(3) Administration costs	ISO 14001 inspection, operation and management; environmental information disclosure; employee environmental education; and workplace cleaning initiatives	–	363
(4) R&D cost	R&D relating to environmentally friendly products as well as the reduction of environmental load imposed by paper manufacturing processes	–	1,197
(5) Social activity costs	Local community natural conservation, tree planting, cleaning and landscaping activities, as well as donations and support for environmental organizations	–	96
(6) Environmental remediation costs	Levy for pollution-related health damage compensation system (SOx)	–	535
<b>Total</b>		<b>5,944</b>	<b>29,807</b>

#### Results of environmental impact in 2012

Categories	Environmental Impact Indicators		Results	YoY Change	
Effects related to resources introduced to business activities	Afforestation projects overseas	Overseas afforestation areas	124,000 hectares	–	
	Energy-saving measures	Fuel use (Heavy oil equivalent)	–	Down 32,661 kl	
Effects related to environmental impact and waste from business activities	Greenhouse gas emission control	CO <sub>2</sub> emissions from fossil energy	6,630,000 tonnes	Up 80,000 tonnes	
		NO <sub>x</sub> emissions (NO equivalent)	7,949 tonnes	Up 897 tonnes	
		SO <sub>x</sub> emissions (SO <sub>2</sub> equivalent)	3,504 tonnes	Up 129 tonnes	
	Emissions of hazardous air pollutants	Soot and dust emissions	1,044 tonnes	Down 209 tonnes	
		Emissions of water contaminants	Effluent	905,000,000 tonnes	Up 62,000,000 tonnes
			COD/BOD emissions	53,956 tonnes	Up 7,026 tonnes
	SS emissions		21,255 tonnes	Up 4,473 tonnes	
Final waste disposal		48,600 tonnes	Up 5,000 tonnes		
Effects related to goods and services produced from business activities	Product recycling	Recycled paper utilization rate (paper)	41.3%	Up 1.4%	
		Recycled paper utilization rate (paperboard)	89.4%	Up 0.5%	
	Shipping material recycling	Pallet recovery rate	45.4%	Up 4.6%	

#### Economic benefits of environmental conservation

(Millions of yen)

Effect	Amount
Income from company-owned forests in Japan	542
Reduced expenses from energy saved	2,216
Reduced disposal expenses through the effective use of waste	4,372
Gain on sales from the effective recycling of waste	448
Reduced expenses through the recycling of shipping materials	163
<b>Total</b>	<b>7,741</b>

\* Accounting standards are based on Environmental Accounting Guidelines 2005.

# Material Balance

Reducing the environmental impact of our activities, mainly among the manufacturing processes of our mainstay pulp and paper business

## Material Balance

### Identifying and reducing the environmental impact of our business activities

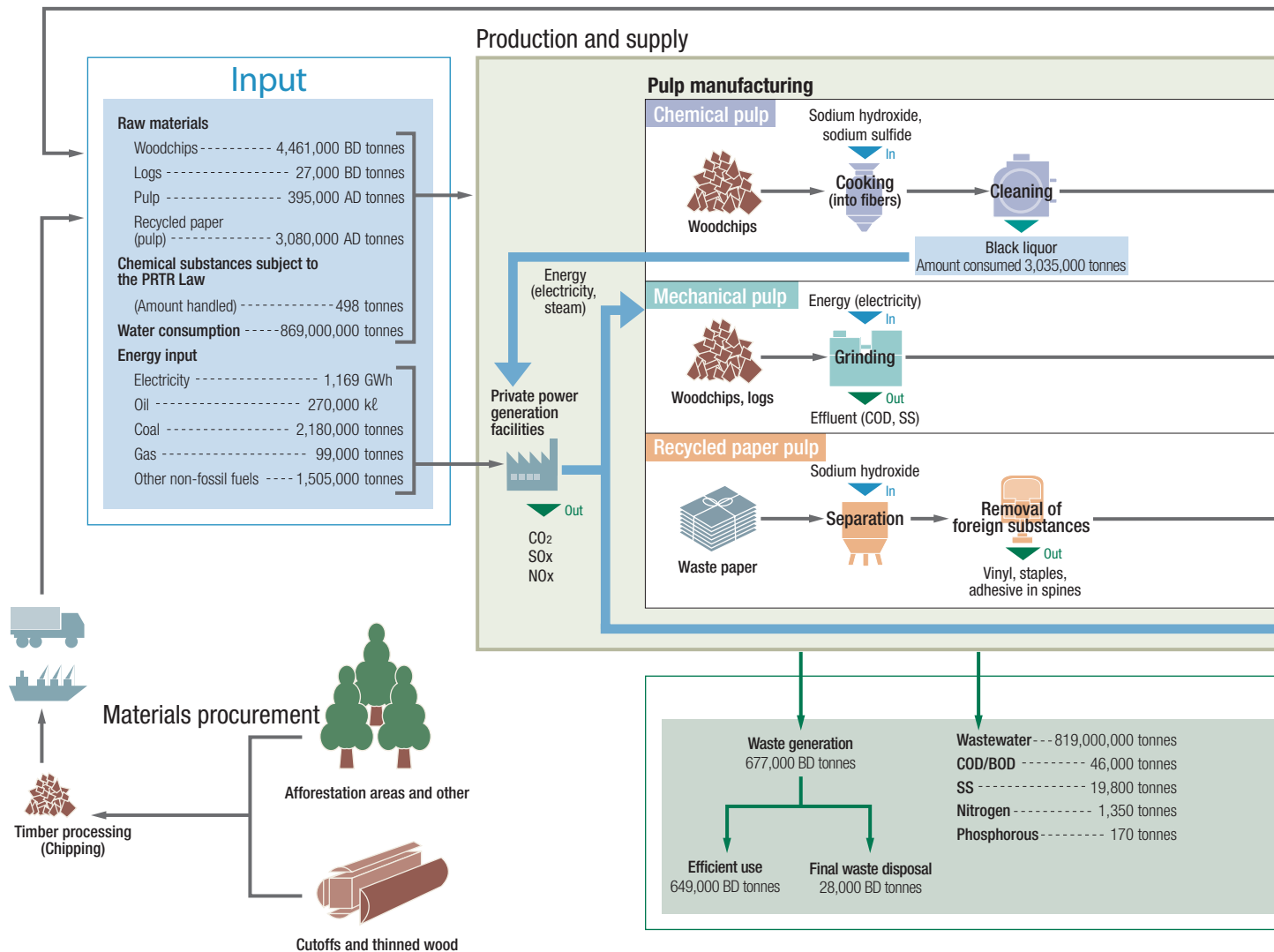
The Nippon Paper Group engages in a broad range of paper-related and other business activities driven primarily by the Pulp and Paper Division, which accounts for 78% of total net sales. Constituting most of the Group's material balance in Japan, this division is responsible for approximately 90% of the Group's water consumption and 94% of its CO<sub>2</sub> emissions.

Woodchips and recycled paper make up the bulk of raw materials used to make paper. After converting these raw materials into pulp, the pulp is diluted with water to produce pulp

slurry and then formed as wet thin sheets. The water is then removed by drying to make paper. In the pulp and papermaking processes, steam is used as a heat source and electricity as a power source. Pulp and paper mills are equipped with boilers that combust fuel to generate steam, and generators that create electricity with turbines driven by steam.

Unfortunate byproducts of the pulp and paper manufacturing process are effluents containing water contaminants as well as gases containing air pollutants and CO<sub>2</sub>. Moreover, the fuels combusted by boilers produce ash waste. With this in mind, the Nippon Paper Group strives to reduce the environmental impact of these pollutants.

Material balance in the Pulp and Paper Business in Japan (principal materials)

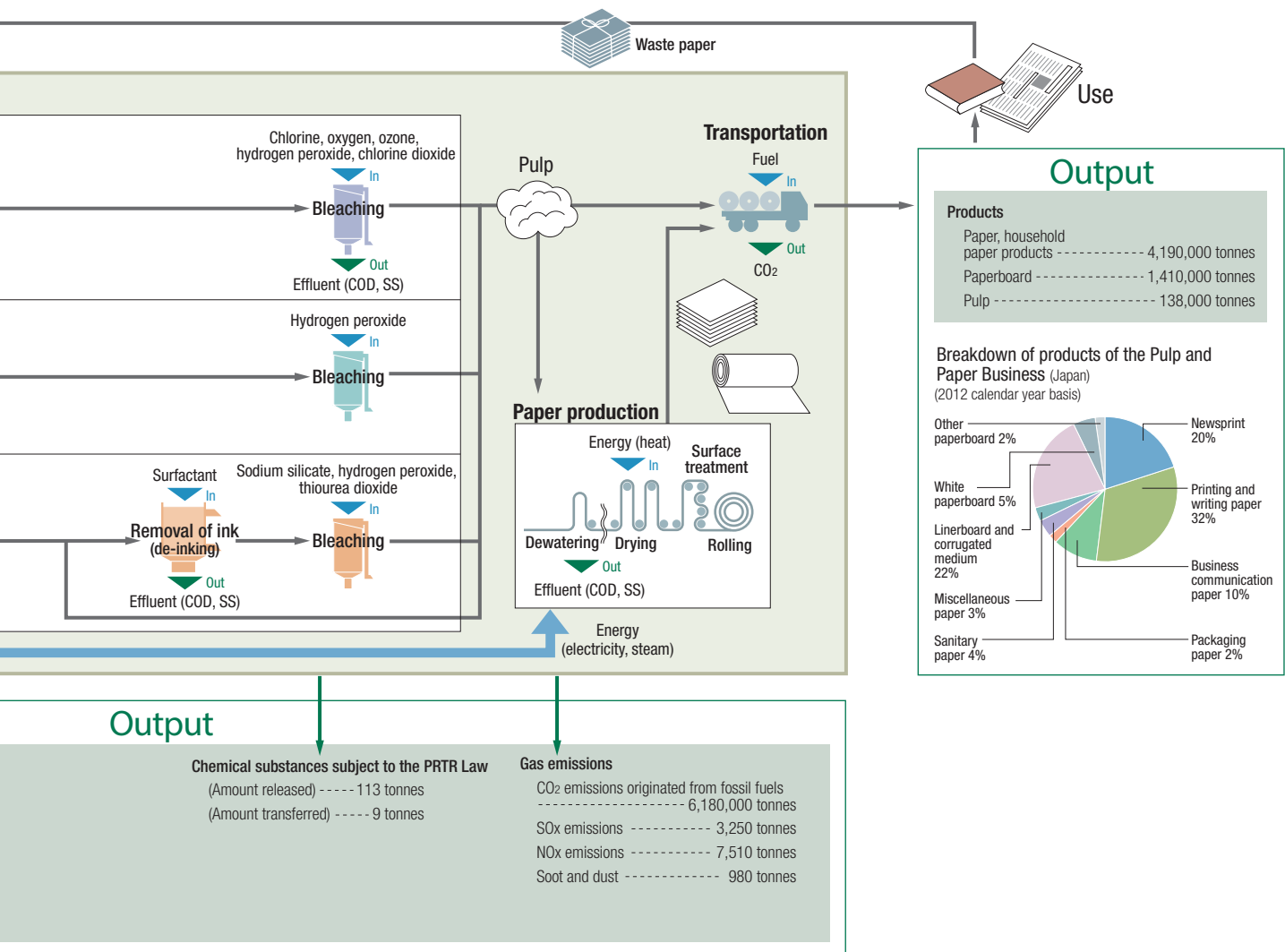


Balance of materials for all business (principal materials)

Input	
<b>Fossil energy input</b>	
Electricity	1,744 GWh
Oil	273,000 kℓ
Coal	2,264,000 tonnes
Gas	111,000 tonnes
<b>Non-fossil energy input</b>	
Black liquor	3,101,000 tonnes
Other non-fossil fuels*	1,577,000 tonnes
<b>Chemical substances subject to the PRTR Law</b>	
(Amount handled)	11,394 tonnes
<b>Water consumption</b>	
River water	717,000,000 tonnes
Industrial water	206,000,000 tonnes
Well water	29,000,000 tonnes
Public water supply	1,000,000 tonnes
<b>Raw materials</b>	
Woodchips	4,847,000 tonnes
Logs	27,000 tonnes
Pulp	399,000 tonnes
Recycled paper (pulp)	3,122,000 tonnes
Base paper	127,000 tonnes

Output	
<b>CO2 emissions from fossil energy</b>	6,630,000 tonnes
<b>SOx emissions</b>	3,500 tonnes
<b>NOx emissions</b>	7,950 tonnes
<b>Soot and dust</b>	1,040 tonnes
<b>Chemical substances subject to the PRTR Law</b>	
(Amount released)	315 tonnes
(Amount transferred)	74 tonnes
<b>Wastewater</b>	905,000,000 tonnes
Public water	903,000,000 tonnes
Sewerage	2,000,000 tonnes
<b>COD/BOD</b>	54,000 tonnes
<b>SS</b>	21,000 tonnes
<b>Nitrogen</b>	1,560 tonnes
<b>Phosphorous</b>	240 tonnes
<b>Waste generation</b>	737,000 BD tonnes
<b>Final waste disposal</b>	49,000 BD tonnes
<b>Effective waste use</b>	688,000 BD tonnes
<b>Products manufactured</b>	
Paper, household paper	4,340,000 tonnes
Paperboard	1,410,000 tonnes
Pulp	138,000 tonnes
Paper container	103,000 tonnes
Chemical products	108,000 tonnes
Building materials	97,000 tonnes
Beverages	130,000 tonnes

\* Biomass fuels, except for black liquor, and waste fuels



# Mitigation of Climate Change

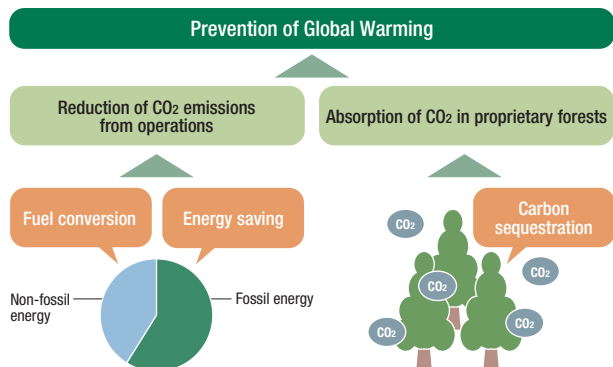
Reducing CO<sub>2</sub> emissions at every stage of our business activities

## Basic Stance

### Working to prevent global warming through three core initiatives

As a part of our efforts to prevent global warming across every stage of our business activities, we are (1) converting to non-fossil energy by employing boilers that use biomass and waste fuels (see page 39), (2) conserving energy in each of the production and transportation processes (see page 40), and (3) managing proprietary forests properly to ensure CO<sub>2</sub> absorption/sequestration (see page 41).

### Global warming initiatives



## Environmental Action Plan: The Green Action Plan

### Preventing global warming is the overriding objective of the Green Action Plan

#### ● Green Action Plan objective

In accordance with the first basic policy of its Environmental Charter, the Nippon Paper Group formulated an environmental action plan, the Green Action Plan (see page 31), as a part of its efforts to prevent global warming.

### The objectives of the Green Action Plan 2015 aimed at preventing global warming

- Reduce CO<sub>2</sub> emissions from fossil energy consumption by 25% compared to fiscal 1990 levels
- Reduce the use of fossil energy by 30% compared to fiscal 1990 levels
- Reduce logistics-generated CO<sub>2</sub> emissions

## Progress under the Green Action Plan 2015

### Identifying goals through to fiscal 2015 and working to reduce CO<sub>2</sub> emissions

With the impacts of worsening global economic conditions since 2008 and the Great East Japan Earthquake, in 2011, production volumes in the Nippon Paper Group's core paper and pulp businesses had been on downward trends.

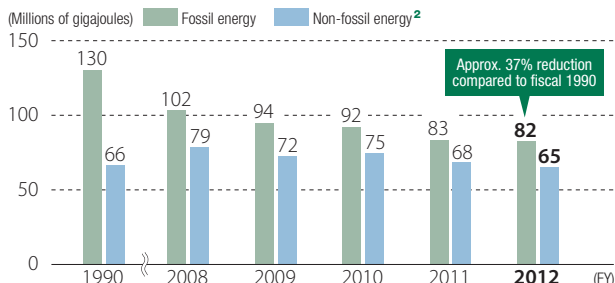
In fiscal 2012, however, production volumes improved as recovery from the 2011 disaster proceeded, and use of fossil fuels and emissions of CO<sub>2</sub> from fossil fuels rose, compared to the prior year. Even with these increases, though, performance in both cases was still better than the levels recorded for fiscal 1990, with use of fossil fuels down 37% and CO<sub>2</sub> emissions down about 29%. Moreover, in both cases the goals set forth in the Green Action Plan 2015 were exceeded (see Graph 1, 2).

In the paper and pulp industries, the black liquor that is a byproduct of the pulp-making process is used as a carbon-neutral (see page 41) non-fossil fuel. A decline in pulp production volume means a lower volume of black liquor, and higher use of fossil fuels. That translates into a significant impact on CO<sub>2</sub> emissions. Under present circumstances, large increases in paper and pulp production are highly unlikely, but we will continue with our efforts to prevent global warming by proactively pursuing energy-efficiency activities and fuel conversion.

**Graph 1. CO<sub>2</sub> emissions from fossil energy<sup>1</sup>**



**Graph 2. Energy input<sup>1</sup>**



<sup>1</sup> For consolidated and non-consolidated subsidiaries subject to the Act on Rational Use of Energy

<sup>2</sup> Non-fossil fuel energy includes energy from biomass and waste.

## Reducing the Use of Fossil Fuels through Fuel Conversion

### Actively using biomass and waste fuels

The Nippon Paper Group is working to reduce its use of fossil fuels as one initiative for preventing global warming. In fiscal 2004, the Group began installing two types of boilers—high-efficiency boilers and boilers capable of burning construction waste and other biomass fuels; used tires, refuse paper and plastic fuel (RPF\*); and other waste fuels. By fiscal 2009, 10 of these boilers were in operation in Japan.

As a result of energy saving activities, and the fuel conversion accomplished through the introduction of these boilers, the Nippon Paper Group lowered fossil fuels as a percent of its total energy usage in Japan from 66% in fiscal 1990 to 56% in fiscal 2012 (See Graph 3).

\* **Refuse paper and plastic fuel (RPF):** Fuel derived from paper that is unusable as recycled paper and waste plastic.

### Examples of biomass and waste fuels

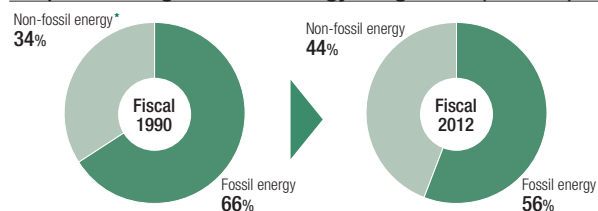


Construction waste and other materials

RPF

Used tires

**Graph 3. Change in fossil energy usage ratio (calories)**



\* **Non-fossil energy:** Includes biomass and waste energy

**Status of boiler installation** (Fiscal 2004 to fiscal 2009)

Year and Month Operation Commenced	Company Name	Mill Name	Location	Evaporation (tonnes/h)
September 2004	Nippon Paper Industries	Nakoso Mill	Fukushima Prefecture	105
October 2006		Ishinomaki Mill	Miyagi Prefecture	180
October 2007		Fuji Mill	Shizuoka Prefecture	230
December 2007		Iwanuma Mill	Miyagi Prefecture	230
February 2008		Iwakuni Mill	Yamaguchi Prefecture	180
May 2008	Nippon Daishowa Paperboard*	Akita Mill	Akita Prefecture	180
June 2008		Yoshinaga Mill	Shizuoka Prefecture	180
August 2008	Nippon Paper Industries	Hokkaido Mill (Shiraoi)	Hokkaido	300
October 2008		Hokkaido Mill (Asahikawa)	Hokkaido	180
April 2009	Nippon Daishowa Paperboard*	Otake Mill	Hiroshima Prefecture	280

\* Nippon Daishowa Paperboard merged with Nippon Paper Industries in October 2012.

### Making energy usage visible

Paper and pulp manufacturing processes require large amounts of energy. The Nippon Paper Group strives to save energy by not only installing energy-efficient facilities but also actively working on a daily basis to manage its operations as efficiently as possible.

In fiscal 2012, Nippon Paper Industries, Nippon Paper Crecia, and Nippon Paper Papylia, undertook an effort to create visual representations of the amounts of energy they use.

The amounts of energy these companies use in processes for producing pulp from wood chips and forming and processing paper products are now displayed on large monitors in control rooms and manufacturing facilities. Having a real-time grasp of energy-intensive processes is useful for improving and achieving efficiency gains in daily operations management, and cutting CO<sub>2</sub> emissions.



Nippon Paper Crecia's Kyoto Mill

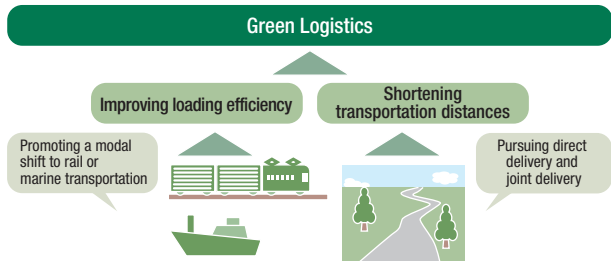
# Mitigation of Climate Change

## Advancing Energy Efficiency in Logistics

### Working to promote green logistics

The Nippon Paper Group focuses mainly on the two core initiatives of improving its loading efficiency and shortening transportation distances to reduce CO<sub>2</sub> emissions.

### Logistics-related initiatives



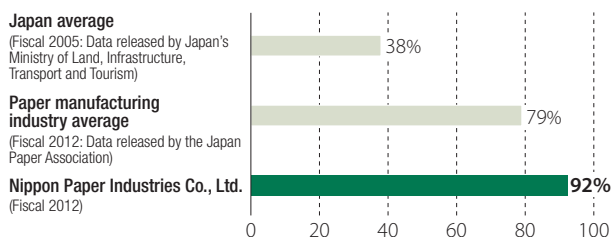
#### ● Promoting a modal shift in transportation to secure high loading efficiency

The Nippon Paper Group is promoting a modal shift in transportation. Nippon Paper Industries achieved a modal shift rate\* of 92% in fiscal 2012. This far surpassed the domestic and industry averages.

**\* Modal shift rate:**

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

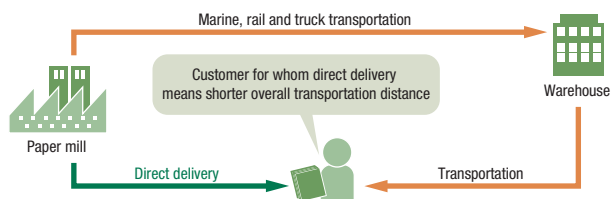
### Comparison of modal shift rates



#### ● Working with logistics service providers to shorten transportation distances

The Nippon Paper Group is working with logistics service providers to bypass warehouses and deliver products directly to customers. This effort is intended to reduce CO<sub>2</sub> emissions by shortening overall transportation distances.

### Reducing the total distance products are transported by promoting delivery direct from paper mills



## Restoration of logistics following the Great East Japan Earthquake

The Great East Japan Earthquake caused devastating damage to the logistics systems as well as the production facilities at Nippon Paper Industries' Ishinomaki Mill. Before the disaster, the Ishinomaki Mill had been leading an effort to reduce the environmental impact of Nippon Paper Industries' logistics by building a shipping and logistics system that would use the containers owned by Japan Freight Railway Company to effect a modal shift. The disaster, however, inflicted major damage on the logistics system—everything from railway tracks, to containers, container cars, locomotives, and product warehouses—at the mill. Rebuilding a stable, eco-friendly logistics system as part of the overall recovery effort, therefore, became a matter of great urgency.

Recovery work focusing on restoring logistics operations to get them back up as other facilities came back on line began in September 2011 when mill operations were restarted. Since all of the railway tracks within the Ishinomaki Mill site were washed away by the tsunami, logistics following the disaster consisted of loading products into containers and moving these by truck to the train station at the Port of Ishinomaki. When that station, owned by Japan Freight Railway and located adjacent to the mill, restarted rail operations in October 2012, attention focused on restoring road beds and tracks within the Ishinomaki Mill site, and on needs like providing locomotives and restoring rail sidings. Stable logistics capabilities and environmental-



Container train departing Nippon Paper Industries' Ishinomaki Mill

impact-lowering railway transportation were restored with the reestablishment of direct container railway service from the mill in February 2013.

#### ● Obtaining Green Management Certifications

Green Management 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 Nippon Paper Group, 9 Group companies—Nippon Paper Logistics, Kyokushin Transport, Nanko Logistics Support, Hotoku, NP Unyu Kanto, NP Unyu Fuji, NP Unyu Kansai, NP Unyu Iwakuni, and New Transport—and 17 works have received Green Management Certifications.



## Sequestering CO<sub>2</sub> through Absorption by Forests and the Use of Wood

### Sequestering atmospheric CO<sub>2</sub> through various methods

#### ● Sequestering CO<sub>2</sub> with 214,000 hectares of forests in and outside Japan

As trees grow, they absorb and sequester CO<sub>2</sub> from the atmosphere. As they are a major repository of carbon, it is widely recognized that the proper protection of forests helps prevent global warming. Together with its 90,000 hectares held across 30 prefectures in Japan, the Nippon Paper Group manages 124,000 hectares of forests overseas for an aggregate total of 214,000 hectares.

Through proper forest management, the Group retains its CO<sub>2</sub> absorption and sequestration capabilities. These forests, both in and outside Japan, continuously sequester approximately 35 million tonnes of CO<sub>2</sub>, thereby helping to prevent global warming.

### Forest absorption credits (J-VER)

In June 2013, credits were received under the Ministry of the Environment's J-VER offset credit system\* for increases in CO<sub>2</sub> absorption at Nippon Paper Industries' Kitayama Forest (Shizuoka Prefecture) and Nippon Paper Lumber's Sudagai Forest (Gunma Prefecture). Projects for promoting forest thinning have been underway at both of these forests.

**\* J-VER offset credit system:**

This system aims to promote the reduction and absorption of greenhouse gases in Japan. Using J-VER credits for carbon offsets helps to support Japan's emissions reduction and absorption projects.

Forest Name	Location	Area	Credits Received
Kitayama Forest	Fujinomiya City, Shizuoka Prefecture	158.73 ha	1,706 t-CO <sub>2</sub>
Sudagai Forest	Minakami Town, Gunma Prefecture	71.84 ha	1,084 t-CO <sub>2</sub>



Conducting a monitoring survey

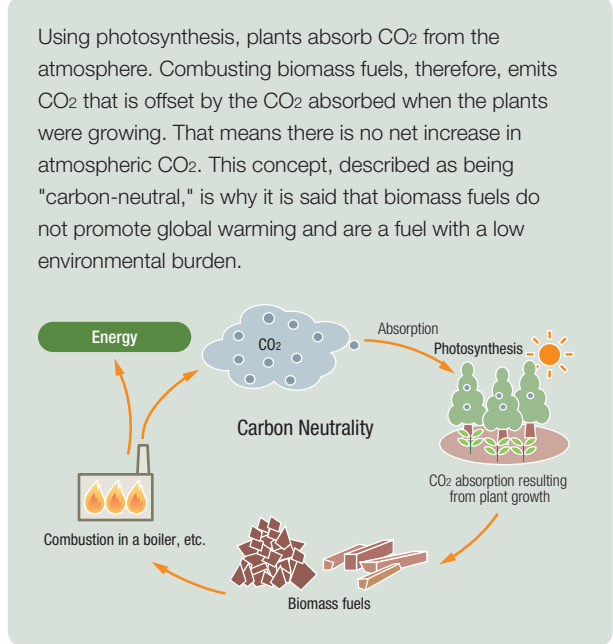


Forest where sunlight now reaches the ground after thinning

#### ● Sequestering CO<sub>2</sub> in various wood products

CO<sub>2</sub> sequestered in trees as carbon remains sequestered even after trees have been processed into products like construction materials and paper. Products made from wood, therefore, work to prevent increases in atmospheric CO<sub>2</sub> concentrations. Using wood products and actively recycling waste paper, in other words, by fixing CO<sub>2</sub> for extended periods of time in products, helps to hold down increases in atmospheric CO<sub>2</sub> concentrations. Moreover, when wood products like construction materials reach the end of their useful lives they can be used as carbon-neutral biomass fuel, the burning of which does not increase atmospheric CO<sub>2</sub>.

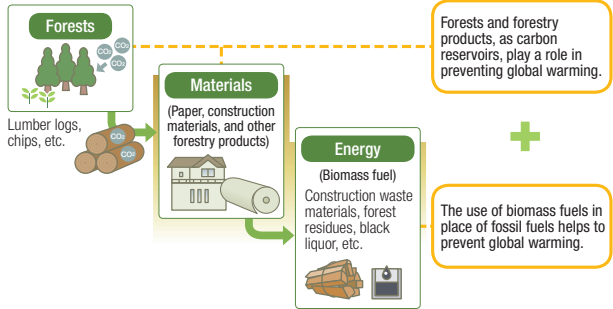
### Idea behind carbon neutrality



#### ● Helping to prevent global warming by using every bit of every tree

The Nippon Paper Group uses trees in a cascade that starts from applications with demanding quality requirements and ends with applications where quality is less of a concern. Using every bit of every tree, we achieve high usage efficiency for woody resources. Through our efforts, we are fixing CO<sub>2</sub> in products derived from wood and helping to prevent global warming.

### Helping to prevent global warming through the cascade use of trees



# Biodiversity Conservation

The Nippon Paper Group promotes biodiversity conservation in its business activities, as well as in a variety of pursuits that harness its proprietary resources and technologies.

## Basic Stance

**The Nippon Paper Group is pursuing activities that promote biological diversity conservation and the sustainable use of its components.**

The business activities of the Nippon Paper Group, which directly entail the cultivation and utilization of forests, therefore have an inherently significant and wide-ranging impact on biodiversity. With this in mind, we recognize that the sustainable use of forests and our ability to ensure abundant forest areas for the future are fundamental to our existence and development as a going concern.

The Nippon Paper Group therefore maintains a deep respect for and appreciation of biodiversity. At the same time, we are committed to the objectives of the Convention on Biological Diversity, namely biological diversity conservation and the sustainable use of its components.

## Overview of Biodiversity Conservation Activities

### Engaging in activities on the basis of two core initiatives

The basic philosophy of the Nippon Paper Group Environmental Charter (see page 30) states that 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. In addition, we have endorsed the Declaration of Biodiversity by Nippon Keidanren and participate as a declaration promotion partner.

In practicing the philosophy of our Environmental Charter, we engage in activities defined by two core principles—one, to uphold the philosophy expressed in the Charter in our main business activities, and the other, to leverage the Group's resources and technologies.

### Overview of biodiversity conservation activities

#### Initiatives involving our main businesses

- Forest management that takes into consideration biodiversity
- Sustainable wood raw material procurement (supply chain activities)
- Reducing the environmental impact of manufacturing activities



#### Activities that leverage the Group's resources and technologies

- Conservation work that harnesses proprietary technologies
- Activities that utilize company-owned forests

## Initiatives Implemented in the Conduct of Our Core Business Activities

### Receiving the bounty of abundant forests and passing it on to future generations

#### • Forest management that takes into consideration biodiversity

Nippon Paper Industries owns around 90,000 hectares of forest land in Japan. Together with its approximate 124,000 hectares of overseas plantation area, the company manages a total of about 214,000 hectares of forests. Managing this forest land in a sustainable manner while taking into consideration biodiversity conservation is one of several core corporate social responsibilities.

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 therefore important to consider a wide range of factors including the areas allocated to afforestation and harvesting, the rate of growth, the surrounding environment and the impact on society. Another factor critical to any plan is landscape concerns encompassing efforts to protect waterside forests (see page 57). Taking full advantage of its expertise in forest management, the Nippon Paper Group is promoting proper planning and management.

### Forest certification and biodiversity

Forest certification is an evaluation system under which independent third-party institutions certify that companies are properly managing forests for the purpose of sustainably using forest resources. Measuring biodiversity conservation is a key component of the evaluation process.

Nippon Paper Industries employs forest certification systems to benchmark its sustainable forest management. As confirmation that the company engages in forest management that takes into consideration biodiversity, all of its forests both in and outside Japan have acquired certification.

Moving forward, Nippon Paper Industries will work to practice forest management that incorporates biodiversity concerns, while gaining third-party approval through the maintenance of forest certifications.

### ● Prohibiting harvesting for the purpose of lumber production in environmental forest areas

Nippon Paper Industries has designated approximately 20%, or 18,000 hectares, of forest areas owned in Japan as “environmental forest areas.” In these areas, the logging of trees for the purpose of lumber production is prohibited and the environmental functions of forests (forest ecosystems, watershed conservation, etc.) are conserved. Outside of Japan, approximately 56%, or 175,000 hectares, of property held by Amapa Florestal e Celulose S.A. (AMCEL) is protected as a preservation area. Every effort is being made to incorporate biodiversity concerns by clearly identifying preservation areas.



The company-owned Sugenuma Forest (Mount Nikko Shirane), which is designated as an environmental forest area

### ● Raw materials procurement that takes into consideration biodiversity

While taking into consideration biodiversity in the conduct of core business activities, the Nippon Paper Group also incorporates biodiversity conservation concerns into its supply chain management focusing mainly on the procurements of raw materials.

Procuring raw materials from sustainably managed forests was identified under the Group’s Philosophy and Basic Policy Concerning Raw Materials Procurement formulated in October 2005. In August 2006, the Group put in place an action plan for implementing this philosophy and basic policy.

**Note:** Sustainable raw materials procurement activities in the context of the entire supply chain are explained in more detail on pages 54–57.

### ● Reducing the environmental impact of production activities

Nature, which plays host to and nurtures ecosystems, is closely linked to a company’s business activities. In this regard, efforts to reduce the environmental impact of production activities by, for example, returning to nature the water discharged from mills in as clean a state as possible and preventing global warming by curtailing greenhouse gas emissions are vital to securing biological diversity.

While recognizing its impact on the environment, the Nippon Paper Group will continue to engage in environmentally friendly production activities and reduce its environmental load.

### Biodiversity survey at AMCEL

AMCEL is an afforestation company and manages approximately 310,000 hectares of forests in the Brazilian state of Amapa. Fifty-six percent of this land (about 175,000 hectares) is protected as a conservation area, and AMCEL, in an effort to maintain its biodiversity, regularly conducts biodiversity surveys to examine the status of the animal and plant life in this area.

In fiscal 2012, a survey covering eight communities located within the conservation area adjacent to AMCEL’s afforested land was conducted. Focusing on medium- and large-size mammals, it employed a questionnaire to gather sighting and other information from residents, and incorporated observations of evidence such as animal trails, fecal matter, and footprints. As one of the findings, it was determined that jaguars, which are a “near-threatened” species, live within the conservation area.

Meanwhile, another survey, also conducted in fiscal 2012, examined the tropical savanna prior to AMCEL’s afforestation efforts to gather basic data on its vegetation. Of the 25 orders and 14 families of vegetation observed, 60% consisted of Cyperaceae, Poaceae, Fabaceae, Asteraceae, Malpighiaceae, and Rubiaceae.

In addition to such regular surveys, AMCEL maintains an internal database of wildlife sightings by its employees within its afforestation and conservation areas, as an index for biodiversity preservation.

### Biodiversity survey in AMCEL’s conservation area



Footprints of a jaguar (a “near-threatened” species on the IUCN Red List)



Adult giant anteater (“vulnerable” species on the IUCN Red List) and its offspring



Conducting a vegetation survey

## Biodiversity Conservation

### Initiatives that Harness Company-Owned Resources and Technologies

#### Contributing to the protection of a variety of plant species

##### ● Utilizing proprietary technologies (1) — protecting and nurturing endangered species

Nippon Paper Industries contributes to the protection of endangered plant species through its proprietary technology for cultivating cuttings in containers.

Using this technology, the company has successfully propagated endangered plant species native to the Ogasawara Islands. In 2009, it also succeeded in propagating 24 of 26 endangered plant species native to the Ryukyu Islands. These latter samples were provided by the Tsukuba Botanical Gardens, part of Japan's National Museum of Nature and Science, and the successfully propagated seedlings were returned to the botanical gardens.

##### ● Utilizing proprietary technologies (2) — protecting cherry tree species

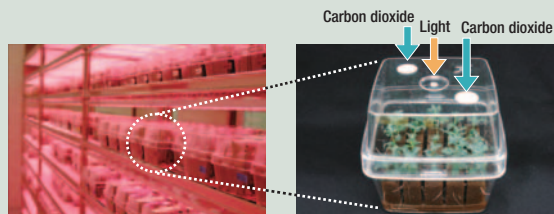
A precious genetic repository of over 260 species of cherry tree originally collected from all over Japan by the late Dr. Yo Takenaka, who traced the origins of the Somei Yoshino cherry tree species, has been left to Japan's National Institute of Genetics\*, in Mishima, Shizuoka Prefecture. Nippon Paper Industries began in 2006 to cultivate seedlings from the species in the collection to preserve them. By 2011, it had achieved success for 78 species and returned them to the National Institute for Genetics.

\* The Research Organization of Information and Systems National Institute of Genetics

#### The technique for cultivating cuttings in containers refers to:

A technology that encourages plants to root using a cultivating room characterized by an environment that promotes photosynthesis. This method allows the rooting of plants that failed to take root via the use of cuttings.

(1) Cultivation maximizing the plants' photosynthetic activities with an appropriate carbon dioxide concentration and light with suitable wavelengths.



(2) Even plant species that normally fail to root by cutting are able to root.



##### ● Utilizing proprietary technologies (3) — restoring tidal flat environments

Paper mills import raw materials and fuel by sea and have impacted coastal environments by constructing ports and establishing seaways. To help reverse some of this impact, Nippon Paper Industries' Yatsushiro Mill has partnered with Kumamoto University and Fukuoka Construction K.K. to develop a new material for revitalizing coastal environments. Made from sediment dredged from seaways, paper sludge ash\*, and other materials traditionally treated as waste, this new material is currently being used in a test aimed at restoring a portion of tidal flat at the Port of Yatsushiro. This test is being conducted with the cooperation of the Japan's Ministry of Land, Infrastructure, Transport and Tourism and Kumamoto Prefecture.

In February 2013, it was determined that around 30 species, including crabs and clams, had taken hold in the newly created tidal flat. With such positive results, Nippon Paper Industries is



Tidal flat restoration

committed to working with the local community to conduct follow-up surveys and other work.

\* Ash remaining from the burning of paper sludge as fuel. Paper sludge is composed of fine wood fibers and other materials left over from the paper production process.

##### ● Utilizing company-owned forests (1) — Mori-to-Kami-no-Nakayoshi-Gakko (School of Friendship for Forest and Paper)

Nippon Paper Industries launched Mori-to-Kami-no-Nakayoshi Gakko (School of Friendship for Forest and Paper), an environmental education program, at the company's own forests with a total area of nearly 90,000 hectares in 2006 (see page 99).

##### ● Utilizing company-owned forests (2) — Replicating original forests

As part of its efforts to leave bountiful forests to future generations, the Nippon Paper Group, under the guidance of Dr. Akira Miyawaki, a Professor Emeritus at Yokohama National University, undertook in 2010 the "Nurturing Forests" initiative at Marunuma Kogen (location of the company's Suganuma Forest) in the Gunma Prefecture village of Katashina.

In addition to contributing to biodiversity conservation through the regeneration of indigenous forests, this initiative also aims to help prevent global warming and landslides.



Planting trees

In June 2013, around 200 people gathered to take part in the "Nippon Paper Group Tree Planting 2013" event and planted 2,000 trees of five species, including beech and water oak (see page 100), that are native to the area.

### Blakiston's fish owl protection activities (Nippon Paper Industries Co., Ltd.)

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

Since entering into the agreement, the company has worked with the Wild Bird Society of Japan to conduct various monitoring surveys aimed at accumulating data for forest environment preservation. As it continues to perform these joint surveys, the company will acquire



Monitoring birdlife habitats

knowledge from the Wild Bird Society of Japan and then apply this knowledge to engage in forest management that balances economic and environmental concerns in its other forests, as well.



Blakiston's fish owl (Photo provided by: The Kushiro Nature Conservation Office of Japan's Ministry of the Environment)

#### 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 180cm. From a population of over 1,000 across Hokkaido, their numbers in the wild have dwindled due to river-related development. Today, Blakiston's fish owls are found mainly in the eastern parts of Hokkaido. Confirmed numbers have diminished to around 140, making up 50 braces.

Blakiston's fish owl was identified as a protected species in 1971, and placed on the red list of critically endangered species by Japan's Ministry of the Environment.

#### Joint monitoring surveys conducted with the Wild Bird Society of Japan

Fiscal Year	Purpose	Survey Description
2010	Vegetation survey	<ul style="list-style-type: none"> <li>Survey of large trees suitable as Blakiston's fish owl habitat                             <ul style="list-style-type: none"> <li>Confirmed the existence of around 30 trees (Erman's birch, water oak, etc.) with trunk diameters of 1m or greater</li> </ul> </li> </ul>
2011	Bird species habitat survey	<ul style="list-style-type: none"> <li>Survey of the local bird population, which is considered to be a reflection of the forest environment                             <ul style="list-style-type: none"> <li>Confirmed that 47 bird species are present, possibly because of the thriving forest environment. This survey is slated to be repeated every five years.</li> </ul> </li> </ul>
2012	Eagle species nesting survey	<ul style="list-style-type: none"> <li>Nesting survey focusing on white-tailed eagles and vulnerable (according to Japan's Ministry of the Environment) Stellar's sea eagles                             <ul style="list-style-type: none"> <li>The existence of multiple white-tailed eagle nests was confirmed, affirming the area to be an important habitat for eagle species.</li> </ul> </li> </ul>

### Source water protection activities (SHIKOKU COCA-COLA BOTTLING CO., LTD.)

#### ● Implementing Source Water Protection Project

The Coca-Cola system, which is comprised of Coca-Cola (Japan) Co., Ltd. as well as its bottling and related companies, is pushing ahead with the "Source Water Protection" Project, under which water sources are identified for plants and protection plans are developed after assessing source vulnerability. SHIKOKU COCA-COLA BOTTLING began identifying water sources and to conduct vulnerability assessments at its Komatsu No. 2 Plant from 2010. These efforts have proven useful for the protection of the local water resources.



SHIKOKU COCA-COLA PRODUCTS CO., LTD. Komatsu No. 2 Plant

#### ● Protecting watershed areas Yokomine Temple mountain climbing clean-up activities in conjunction with the green friend's federation of Iwane elementary school

SHIKOKU COCA-COLA PRODUCTS' Komatsu No. 2 Plant has continued to promote Yokomine Temple mountain climbing clean-up activities in conjunction with the Iwane junior green friend's federation since 2009. This is part of the Coca-Cola group's "Learn from the Forest" Project to provide students with an insight into the function forests play in water circulation. Yokomine Temple is regularly visited by pilgrims



Clean-up activities with the Green Friend's Federation of Iwane Elementary School

and is located in an area that is a water source for the plant. In addition to clean-up activities, students are given lectures on the relationship between forests and water in order to highlight forest protection and introduce key issues, including those of abandoned forests.

# Reducing Waste Generation and Final Disposal

Minimizing final waste disposal through recycling and related measures

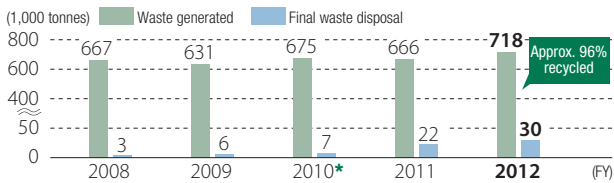
## Reducing Final Waste Disposal

### Reducing final waste disposal

The amount of waste generated by the Nippon Paper Group in Japan totaled 718,000 tonnes in fiscal 2012. Of this total, approximately 80% is ash from the incineration of paper sludge and coal. The residual amount is comprised of sludge, wood waste and waste plastic. While the Group is working diligently to expand the effective use of waste as a part of efforts to reduce final waste disposal, it recorded another year-on-year increase in the amounts of waste generated and final waste disposal in fiscal 2012, mainly because of the processing of debris left by the Great East Japan Earthquake.

As it works to reduce waste, the Nippon Paper Group also practices proper waste management. The company complies with Japan's Act for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes which is based on the Basel Convention.

### Waste generated and final waste disposal in Japan



\* The Group was unable to compile information for the Ishinomaki and Iwanuma mills, due to the impact of the Great East Japan Earthquake. Accordingly, fiscal 2009 data for each mill was used and modified to enable a year-on-year comparison.

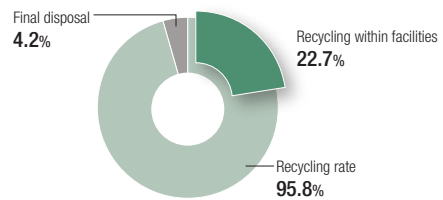
## Effectively Utilizing Waste

### Promoting the effective use of waste through the development of applications

The Nippon Paper Group is endeavoring to effectively use waste as a part of efforts to reduce the amount of final waste disposal. Under its Green Action Plan 2015, the Group has the twin objectives of increasing the waste recycling rate to at least 97% and recycling at least 40% of waste generated within its facilities to promote the effective use of resources.

As a result of the introduction of granulation equipment to advance the effective use of ash produced from the burning of fuel, the waste recycling rate and the recycling rate of waste generated within facilities approximated 96% and 23 %, respectively, in fiscal 2012.

### The ratio of recycling to the amount of waste generated



## Development of recycling technology for disposable diapers

In Japan, the production of disposable diapers for adults, as of 2012, had grown to 2.6 times<sup>1</sup> what it had been a decade earlier. This rise in output resulted from the increasing population of seniors, and forecasts see production rising further. Total waste generation, on the other hand, is expected to decline, as the overall population falls and progress is achieved in implementing the 3Rs (reduce/reuse/recycle), so incineration capacity reductions are being considered. Many local governments, therefore, have been wrestling with the problem of what to do about an increasing volume of moisture-laden disposable diapers in collected refuse.

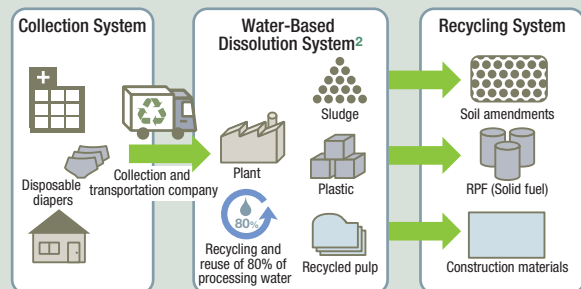
Nippon Paper Industries is responding to this social issue by applying paper recycling technologies developed in its paper and pulp businesses to devise technologies for recycling disposable diapers.

In fiscal 2013, the company began participating on a committee formed by Fukuoka Prefecture and 17 municipalities in the Fukuoka metropolitan area to consider possibilities for

a disposable diaper recycling system. In that connection, the company is also providing technical cooperation, together with Totalcare System Co., for the development of a new recycling system. Other municipalities are wrestling with similar issues and the company is open to working with them as well.

<sup>1</sup> Based on research by the Japan Hygiene Products Industry Association.  
<sup>2</sup> Material recycling system that uses water and chemicals to separate disposable diapers into pulp, non-woven fabric, and polymer absorbent.

### Disposable Diaper Recycling System



# Initiatives to Prevent Environmental Pollution

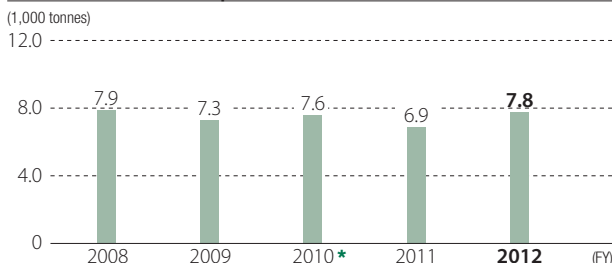
## Reducing environmental load

### Preventing Air Pollution

#### Activities aimed at continuously reducing emissions of NOx, SOx, soot and dust

The Nippon Paper Group has installed boilers and turbines in an effort to generate power internally at its paper mills. Included in the combustion gases emitted by boilers are nitrogen oxide (NOx) and sulfur oxide (SOx), as well as soot and dust. The Group has introduced desulfurization, denitrification, dust collection, and other equipment and is working to reduce these contaminants to levels substantially lower than legal requirements.

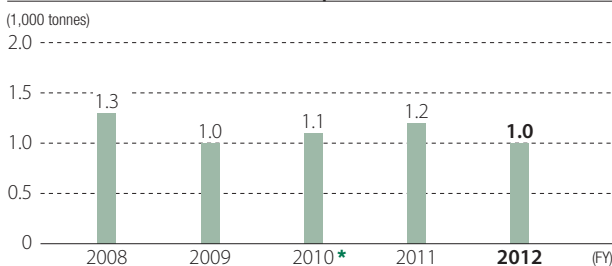
#### NOx emissions in Japan



#### SOx emissions in Japan



#### Soot and dust emissions in Japan



\* The Group was unable to compile information for the Ishinomaki and Iwanuma mills, due to the impact of the Great East Japan Earthquake. Accordingly, fiscal 2009 data for each mill was used and modified to enable a year-on-year comparison.

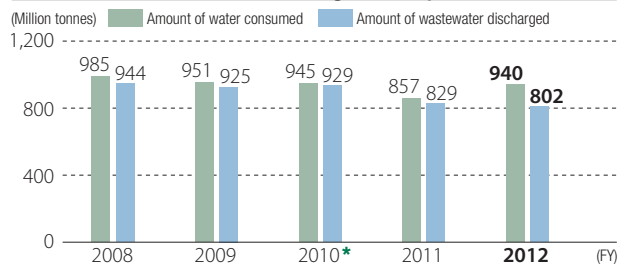
### Preventing Water Pollution

#### Purifying wastewater through the use of microorganisms

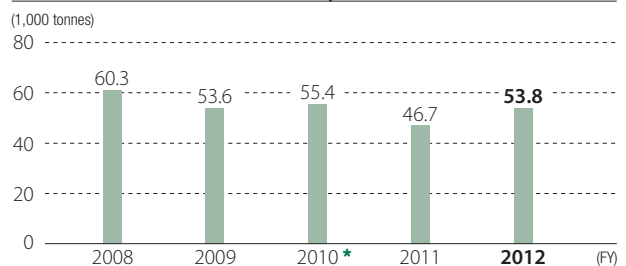
In papermaking, pulp is highly diluted with water to make a pulp suspension and then formed as a wet thin sheet. Water is removed from the sheet by drying to make paper. Water, therefore, is an extremely important element in the paper manufacturing process, and wastewater contains minute pulp fibers, filler, and other materials that are derived from wood, but are not used to make paper.

Each of the Nippon Paper Group's mill consistently measures pollutants with such indices as COD, BOD and SS, and treats wastewater before it is discharged. In addition to ensuring that contaminated substances are held below levels prescribed under the law, we are also implementing wide-ranging measures to reduce water pollution even further.

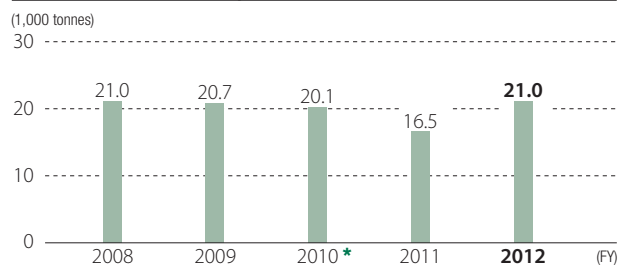
#### Amount of water consumed / Amount of wastewater discharged in Japan



#### Emissions of COD / BOD in Japan



#### Emissions of SS in Japan



\* The Group was unable to compile information for the Ishinomaki and Iwanuma mills, due to the impact of the Great East Japan Earthquake. Accordingly, fiscal 2009 data for each mill was used and modified to enable a year-on-year comparison.

## Initiatives to Prevent Environmental Pollution

### Preventing Noise, Vibration, and Odors

Putting in place measures to reduce the impact on areas in proximity to mills

#### ● Preventing noise and vibration

Since pulp and paper mills produce large amounts of paper, production equipment is substantial. As long as these machines have motors and pumps, they are a potential source of noise and vibration. In fiscal 2012, the Group received eight complaints about noise and two regarding vibrations. Irrespective of the existence of complaints, each mill takes steps to minimize the level of noise generated and to install sound insulation facilities whenever an issue is determined to have arisen.



Before (left) and after (right) sound insulation measures have been implemented (Fuji Mill, Nippon Paper Industries)

#### ● Preventing odors

When making kraft pulp, foul odors from substances such as hydrogen sulfide, methyl mercaptan, methyl sulfide, and methyl disulfide can be generated. The Nippon Paper Group received six complaints relating to odors during fiscal 2012. In addition to installing equipment that contains odors, we regularly measure odor levels and conduct patrols to ensure that issues do not arise. Through these means, we are endeavoring to minimize the impact of odors on surrounding areas.

### Preventing Soil Pollution

There are no instances of soil contamination at Group companies.

Since the raw materials and chemicals used by Nippon Paper Group mills contain little or no heavy metals, trichloroethylene or other soil contaminants. We witness very few incidents of serious soil contamination. There were no instances of soil contamination at Group companies during fiscal 2012.

### Controlling Chemical Substances

Properly managing chemical substances while pursuing efforts to limit use

#### ● PCB management

Given their excellent insulating properties, PCBs have been used for such electric devices as transformers. The Nippon Paper Group owns devices that contain PCBs at its facilities. Those devices that are not in use are stored in accordance with statutory requirements. PCB waste is disposed of under contract in accordance with the detoxification plan put forward by the Japan Environmental Safety Corporation.

The status of PCB-containing devices held\* (Units)

	Transformers / capacitors	Reactors	Stabilizers
Number of units held	495	1	3,382

\* Figures for units confirmed as held as of March 31, 2013

#### ● Reducing emissions of volatile organic compounds (VOCs)

The Nippon Paper Group is working diligently to reduce emissions of VOCs, widely regarded as a cause of airborne particulate matter and photochemical oxidants.

By implementing such measures as the replacement of chemicals used, the actual amount of VOCs released into the atmosphere by Nippon Paper Industries, in fiscal 2012 was 22.5 tonnes.

#### Emission of volatile organic compounds\*

(Nippon Paper Industries Co., Ltd.)



\* Amounts of less than one tonne handled have also been recorded.



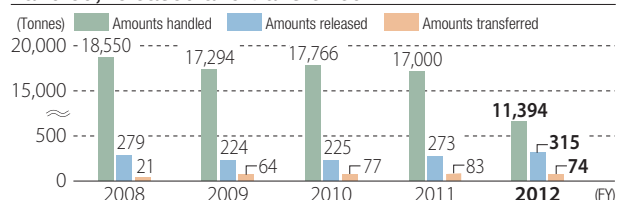
### ● Responding to the PRTR Law

The Pollutant Release and Transfer Register (PRTR) is an open and public mechanism that makes clear how the wide variety of hazardous chemical substances are handled, released and transferred at facilities. The Nippon Paper Group's chemical substance releases and transfers came to 315 tonnes and 74 tonnes, respectively, in fiscal 2012. The Group is moving forward with ongoing efforts to further reduce releases and transfers of these substances by limiting their use through replacement and other measures.

The Nippon Paper Group holds risk communication meetings at its mills. Steps are taken at each meeting to explain to local

residents the management and use of chemical substances subject to the PRTR Law.

### Amounts of substances subject to the PRTR Law handled, released and transferred



### Amounts of substances subject to the PRTR Law handled, released and transferred<sup>1</sup> (Fiscal 2012)

Cabinet Order No.	CAS No.	Chemical Substance	Unit	Amount Handled (Amount Generated)	Amount Released	Amount Transferred
1	—	Water-soluble zinc compounds	t	6	2	5
2	79-06-1	Acrylamide	t	923	0	0
4	—	Acrylic acid and water-soluble salt	t	711	0	0
6	818-61-1	Acrylic acid 2-hydroxyethyl ester	t	1	0	0
9	107-13-1	Acrylonitrile	t	2	0	0
16	78-67-1	2, 2'-azobisisobutyronitrile	t	2	0	0
30	—	n-alkylbenzenesulfonic acid and its salts (alkyl C=10-14)	t	3	1	0
37	80-05-7	4,4'-isopropylidenediphenol	t	8	0	0
48	2104-64-5	O-ethyl-O-(4-nitrophenyl)phenylphosphonothioate	t	2	2	0
53	100-41-4	Ethylbenzene	t	2	0	0
57	110-80-5	Ethylene glycol monoethyl ether	t	40	11	4
60	60-00-4	Ethylenediaminetetraacetate	t	2	1	0
80	1330-20-7	Xylene	t	36	2	0
84	107-22-2	Glyoxal	t	2	0	0
98	79-11-8	chlorodifluoromethane	t	1,654	0	0
127	67-66-3	Chloroform <sup>2</sup>	t	264	145	15
144	—	Inorganic cyanide compounds (except complex salts and cyanates)	t	2	2	0
149	56-23-5	tetrachloromethane	t	31	0	31
154	108-91-8	Cyclohexylamine	t	4	1	0
213	127-19-5	N, N-dimethyl acetamide	t	47	0	0
232	68-12-2	N,N-dimethylmethanamide	t	4	3	0
243	—	Dioxins <sup>2</sup>	g-TEQ	6	1	8
272	—	Copper salts (water-soluble, except complex salts)	t	2	2	0
296	95-63-6	1,2,4-trimethylbenzene	t	35	3	0
297	108-67-8	1,3,5-trimethylbenzene	t	13	0	0
300	108-88-3	Toluene	t	2,265	54	14
302	91-20-3	Naphthalene	t	195	0	0
309	—	Nickel compounds	t	4	0	4
318	75-15-0	Carbon disulfide	t	6	5	0
333	302-01-2	Hydrazine	t	1	0	0
354	84-74-2	Dibutyl phthalate	t	12	12	0
374	—	Hydrogen fluoride and its water-soluble salts	t	31	31	0
395	—	Water-soluble salts of peroxodisulfuric acid	t	78	0	0
405	—	Boron compounds	t	29	29	0
407	—	Poly (oxyethylene) alkyl ether (alkyl C=12-15)	t	11	0	0
410	9016-45-9	Poly (oxyethylene) nonylphenyl ether	t	3	0	0
411	50-00-0	Formaldehyde	t	4,231	5	0
414	108-31-6	Maleic anhydride	t	29	0	0
415	79-41-4	Methacrylic acid	t	289	0	0
418	2867-47-2	2-(dimethylamino) ethyl methacrylate	t	141	0	0
420	80-62-6	Methyl methacrylate	t	2	0	0
438	1321-94-4	Methylnaphthalene	t	265	6	0
455	110-91-8	Morpholine	t	6	0	0
<b>Total<sup>3</sup></b>			t	<b>11,394</b>	<b>315</b>	<b>74</b>

<sup>1</sup> A summary of the amounts of substances handled by each Group company of one tonne or more excluding dioxins. Dioxins, nickel compounds, 1,3-butadiene and formaldehyde are designated type 1 chemical substances.

<sup>2</sup> Chloroform and dioxins are unintentionally generated.

<sup>3</sup> Dioxins are not included in total data.

# Promotion of Waste Paper Recycling

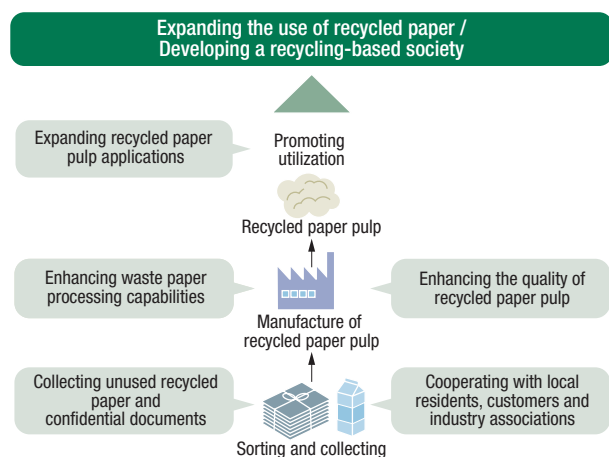
Contributing to the development of a recycling-based society by promoting increased use of recycled paper

## Basic Stance

### Actively promoting the recycling of waste paper

To promote the effective use of resources, the Nippon Paper Group, with the support of customers and the general public, is working diligently to increase the amount of waste paper collected. In addition to bolstering its waste-paper processing capabilities, the Group is striving to improve the quality of pulp made from waste paper and to increase the number of applications of pulp.

### Activities aimed at promoting the recycling of waste paper



## Initiatives for Expanding the Use of Recycled Paper Overseas

### Expanding the production of products made with recycled paper in Australia

The Nippon Paper Group is working to promote recycling in its overseas business activities as well. At Australian Paper, in the Australian state of Victoria, we are planning to increase our production of eco-friendly products that respond to the country's heightened environmental awareness. Presently, facilities capable of producing 50,000 tonnes of waste-paper pulp annually are being installed at that company's Maryvale Mill with technical support from Nippon Paper Industries and assistance from the Australian government.

To date, Australian Paper has been the only company in Australia to produce recycled copier paper—an eco-friendly product. After the facilities scheduled for start-up in 2014 come on line, the company will begin to offer a wide line of products made with recycled paper and increase its production volume.



Maryvale Mill

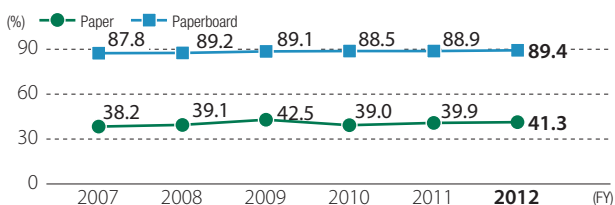
## Progress in Achieving Green Action Plan 2015

### Increasing rates for both paper and paperboard on a year-on-year basis

Under its Green Action Plan 2015 environmental action plan (see page 31), the Nippon Paper Group raised the objectives of increasing the ratio of recycled paper to paper to at least 40% and the ratio of recycled paper to paperboard to at least 88%.

In fiscal 2012, the Nippon Paper Group reported recycled paper utilization rates for paper and paperboard of 41.3% and 89.4%, respectively. Despite difficulties in procuring recycled paper in Japan due to the rise in demand for paper and paperboard in China in recent years, we will continue to maintain and improve recycled paper utilizations rates going forward.

### The Nippon Paper Group's recycled paper utilization rate\* in Japan



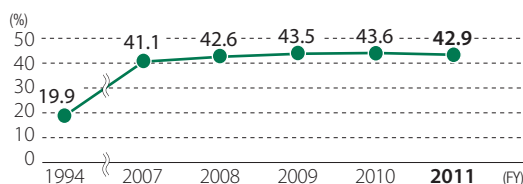
\* Recycled paper utilization rate = recycled paper / (recycled paper + other pulp)

### Initiatives aimed at recovering milk cartons (The Nippon Paper Industries)

The Nippon Paper Group is putting in place various mechanisms with the aim of collecting and utilizing recycled paper in cooperation with customers. At the same time, the Group is promoting the collection of waste paper through educational activities in collaboration with citizens' groups and industry associations.

Nippon Paper Industries Co., Ltd., a member of the Committee for Milk Container Environmental Issues, for example, is promoting activities consistent with the committee's goal of achieving a beverage carton collection rate of at least 50% by 2015. Through a variety of educational initiatives as well as the exchange of information through such forums as the Regional Conference for the Promotion of Milk Carton Recycling and recycling workshops together with the placement of milk carton collection boxes at nationwide schools and public facilities, we achieved a paper beverage carton collection rate of 42.9% in fiscal 2011.

### Beverage carton collection rate



# Raw Material Procurement and Forest Management Responsibility



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# Policy and Management

Practicing raw materials procurement that takes into consideration environmental and social concerns based on our philosophy and basic policy

## Basic Stance

### Pursuing stable procurement based on sustainable wood resources

Woodchips, which are the main raw materials for pulp and paper, are derived from forests that are deeply intertwined with the global environment and ecosystems. Procurement 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 the impact on 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.

Accordingly, we are endeavoring to build a structure and framework that will allow us to sustainably procure renewable wood resources.

## Philosophy and Basic Policy

### Putting in place a philosophy and basic policy that reflects the opinions of stakeholders

The Nippon Paper Group established its Philosophy and Basic Policy Concerning Raw Materials Procurement in fiscal 2005. In formulating this philosophy and basic policies, a draft proposal was released to the public so as to solicit the opinions of stakeholders in Japan and overseas. The Group considered all of the close to 2,000 comments received, and incorporated several suggestions into revisions made to the draft.

## Framework for Promoting Raw Materials Procurement Management

### Overseeing raw material procurement for the entire Group

The Nippon Paper Group established the Raw Materials Committee, chaired by the director in charge of raw materials 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.

## 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.

#### \* Sustainable forest management:

Forestry management that not only considers economic rationality, but also environmental and social sustainability.

The Nippon Paper Group defines sustainable forest management as follows:

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

# Current Status of Raw Materials Procurement

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

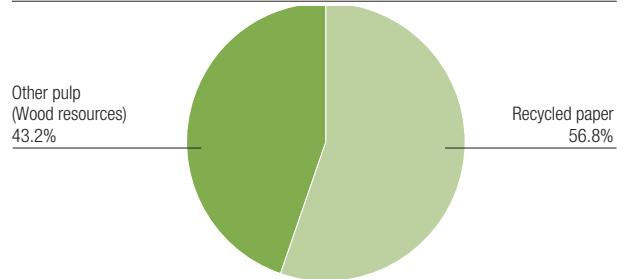
## Current Status of Paper Raw Materials Procurement

### Manufacturing and supplying pulp and paper products made mainly from recycled paper and wood resources

The Nippon Paper Group is primarily engaged in the manufacture of paper products. Fifty-seven percent of the raw materials are composed of recycled paper and the remaining 43% consists of such wood resources as woodchips. Both types of raw materials are used to produce pulp.

Nippon Paper Industries is responsible for procuring wood raw materials for the Group. Around two-thirds of the wood resources are procured from overseas and one-third sourced from Japan. The Oceania region including Australia is a main source for overseas hardwood and softwood, and accounts for 48% and 76% of procurements, respectively.

### Recycled paper utilization rate with respect to paper products<sup>1</sup> (Fiscal 2012)<sup>2</sup>

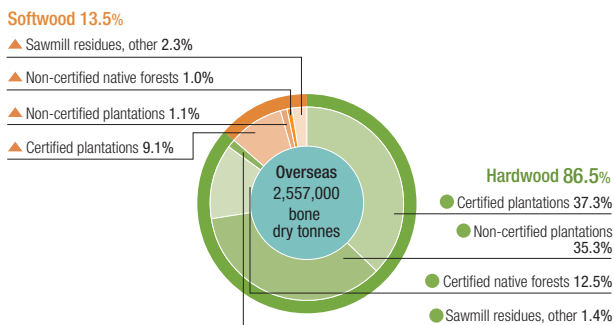


<sup>1</sup> Recycled paper utilization rate = recycled paper / (recycled paper + other pulp)  
<sup>2</sup> The Group in Japan

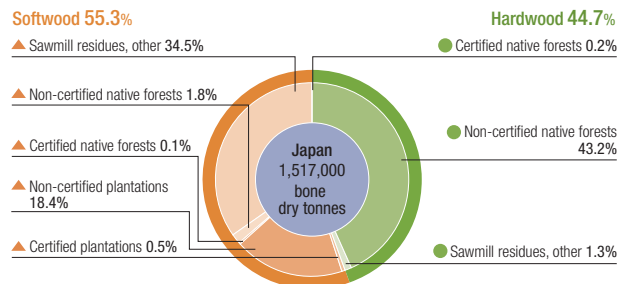
### Breakdown of wood raw materials procurement (Fiscal 2012) (Nippon Paper Industries Co., Ltd.) (tonnes=bone dry tonnes)

Overseas 62.8% (2,557,000 tonnes)		Japan 37.2% (1,517,000 tonnes)	
Hardwood 54.3% (2,211,000 tonnes)	Softwood 8.5% (346,000 tonnes)	Hardwood 16.6% (678,000 tonnes)	Softwood 20.6% (840,000 tonnes)

#### Breakdown of wood raw materials procured from overseas



#### Breakdown of wood raw materials procured from Japan



### Tree species Nippon Paper Industries Co., Ltd. procured from overseas, and their countries of origin (Fiscal 2012)

Hardwood			
Country	1,000 dry tonnes	Percentage	Species
Australia	1,051	47.5%	Eucalyptus
Chile	389	17.6%	Eucalyptus
South Africa	530	24.0%	Eucalyptus, Acacia
Brazil	241	10.9%	Eucalyptus
<b>Total</b>	<b>2,211</b>	<b>100.0%</b>	

### Softwood (tonnes=bone dry tonnes)

Country	1,000 dry tonnes	Percentage	Species
Australia/ New Zealand	262	75.8%	Radiata pine
U.S.A.	84	24.2%	Douglas fir
<b>Total</b>	<b>346</b>	<b>100.0%</b>	

# Sustainable Procurement of Raw Materials

Strengthening supply chain management based on the Action Plan for Wood-based Raw Material Procurement

## Basic Stance

### Focusing on legal compliance and transparency in the procurement of raw materials

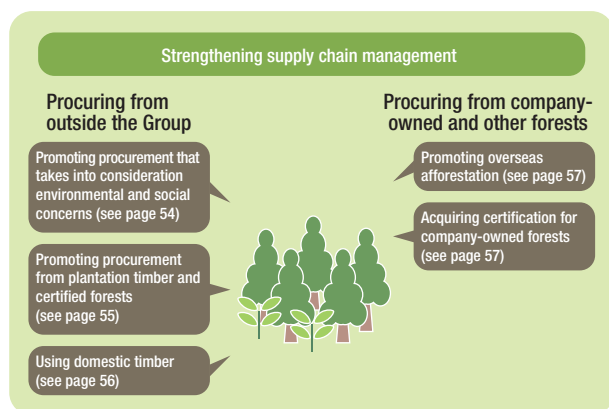
The Nippon Paper Group is a strong advocate of sustainable raw materials procurement that takes into consideration environmental and social concerns. Our procurement of wood resources rests on the principles of legality and sustainability, and it is on that basis that we emphasize clear identification of the origin of wood resources and the maintenance of full accountability.

When purchasing from external suppliers, we make every effort to enhance our supply chain management capabilities, taking into consideration society's needs and the environment. At the same time, we strive to develop a system that is conducive to reliable procurement and employ third-party forest certification programs to benchmark the adequacy of raw materials procurement.

In the context of our efforts to procure wood resources from company-owned forests, we pursue overseas afforestation projects to increase our plantation timber procurement. Moreover, we practice sustainable forest management by acquiring forest certifications for company-owned forests both in Japan and overseas.

### Sustainable wood resources procurement

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



## Promoting Procurement that Takes into Consideration Environmental and Social Concerns

### Strictly prohibiting purchases from illegal logging while promoting procurement that takes into consideration society's needs and the environment

The Nippon Paper Group has put in place its Action Plan for Wood-based Raw Material Procurement based on 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, allowing the Group to practice CSR procurement. This action plan also helps enhance traceability with respect to woodchips procured from overseas while placing considerable emphasis on trade association certification of the legality of woodchips produced in Japan.

**WEB** Action Plan for Wood-Based Raw Material Procurement  
<http://www.nipponpapergroup.com/e/csr/ActionPlan.html>

### ● Confirming the legality of imported woodchips

In procuring wood from overseas suppliers, 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. For 2012, it was determined, based on shipping documents and questionnaire responses provided by each supplier, that no illegally harvested woodchips were procured from overseas suppliers.

### ● Confirming the legality of domestically produced woodchips

In 2006, guidelines for confirming the legality of woodchips, were specified, as stipulated in the Law on Promoting Green Purchasing. Set forth as methods for confirming legality were the submission of individual harvesting and other documents, and the acquisition of a trade association certification approving the system of procurement management.

Nippon Paper Lumber has acquired this trade association certification. By taking in shipments of domestically produced timber and woodchips through this company, Nippon Paper Industries is receiving supplies of legally confirmed materials.

### ● Enhancement of traceability

Overseas suppliers are surveyed and requested to attend hearings. Every effort is made to enhance traceability while confirming compliance with statutory requirements regarding forest management, the species of woodchips and existence or otherwise of forest certification. Through these means, the Nippon Paper Group strives to confirm woodchip legality and sustainability. For woodchips procured from Japanese suppliers, traceability has been secured in accordance with the Guideline for Verification of Legality and Sustainability of Wood and Wood Products issued by the Forest Agency.

### ● Concern for human rights, labor and the local community

Utilizing a process of surveys and hearings, Nippon Paper Industries works to confirm its suppliers' policies and systems toward human rights and labor. This process has allowed the company to confirm that no human rights or labor relations issues have arisen.

At the same time, a large number of suppliers is working closely with local communities through social contribution activities including donations to schools and welfare facilities.

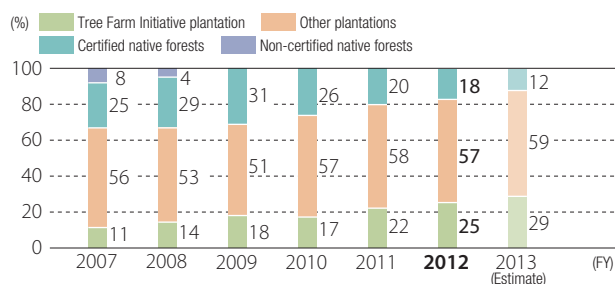
## Promoting Procurement from Plantations and Certified Forests

### Procuring all imported hardwood chips from plantations or certified forests

The Nippon Paper Group utilizes the forest certification system as a tool to confirm the proper procurement of raw materials. By procuring wood resources from certified forests as raw materials, the Group is positioning itself to objectively verify not only the legality, but also the sustainability of its raw materials.

Against this backdrop, the Nippon Paper Group previously identified the objective of procuring all of the imported hardwood chips used in its pulp and paper mills in Japan from plantations or certified forests by 2008. We met this goal during fiscal 2008 according to plan, and have continued to do so in every subsequent fiscal year.

### Imported hardwood chips by type (Nippon Paper Industries Co., Ltd.)



### Overview of major forest certification programs

Forest certification programs entail third-party confirmation that forests are being managed in a sustainable manner in order to support sound and continuous forest management. They include the use of labels indicating that forest products are from certified forests, so as to promote ethical purchasing.

Certification Program Name	Details and Features
Forest Stewardship Council (FSC®) A global forest certification program	FSC® is a non-profit international member-based organization that certifies that forests are being managed in compliance with its 10 principles and standards. FSC® has adopted the CoC certification system.
Programme for the Endorsement of Forest Certification (PEFC) A program that promotes mutual recognition of the forest certification programs of individual countries	PEFC bases its sustainability benchmark on a broad 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. Launched across countries in Europe, the program encompasses the forest certification programs of 34 countries around the world. In similar fashion to FSC®, PEFC has adopted the CoC certification system.  Examples of certifications mutually recognized by PEFC: Sustainable Forest Initiative (SFI): North America (U.S.A./Canada) Canadian Standard Association (CSA): Canada Finnish Forest Certification System (FFCS): Finland Australian Forestry Standard (AFS): Australia CERTFORCHILE: Chile
Sustainable Green Ecosystem Council (SGEC) A forest certification program established in Japan	SGEC certifies forest management combining an abundant natural environment with continuous lumber production. SGEC engages in an evaluation based on seven criteria and 35 benchmarks while taking into consideration Japan's natural environment as well as its social customs and culture. SGEC has adopted the CoC certification system.

### Promoting procurement of imported hardwood chips from certified forests

After achieving the above-mentioned objective, the Nippon Paper Group established the new objective of ensuring that all imported hardwood chips procured are certified under the Programme for the Endorsement of Forest Certification (PEFC) or Forest Stewardship Council (FSC®) schemes under its Green Action Plan 2015. As a result, the Group is now working to promote the procurement of imported hardwood chips from forests that have acquired Forest Management (FM)\* certification or Chain-of-Custody (CoC)\* certification, which confirms that a risk assessment has been undertaken.

Currently, a large number of the Group's suppliers have acquired CoC certification. As of December 31, 2012, 97% of the total volume of imported hardwood chips received comprised either PEFC or FSC® certified materials.

#### \* 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 conservation of forest ecosystems and biodiversity, (3) respect for native and local resident rights, and (4) maintenance and improvement of forest productivity.

CoC certification is a system covering all operators engaged in the production, processing and distribution of timber materials. In addition to certifying that products (certified woodchips) are managed based on the forest certification standard in each process including production, 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.

## Sustainable Procurement of Raw Materials

### Using Domestic Timber

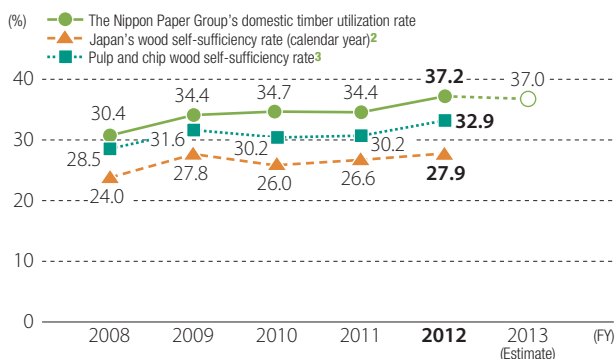
#### Actively utilizing domestically produced timber while contributing to the prevention of forest deterioration

In recent years, deterioration of artificially planted Japanese cypress and Japanese cedar forests throughout Japan has become a concern. The reason for this deterioration is low lumber prices that have squeezed industry profitability and made it impossible to perform thinning and other necessary maintenance. To invigorate the forest industry and prevent further forest deterioration, the Japanese government announced its Forest and Forestry Revitalization Plan in 2009. Under this plan the government has committed the nation's resources to promoting the use of domestically produced wood, and lifting the nation's wood self-sufficiency rate from 24%, as of 2008, to 50% by 2020.

For its part, the Nippon Paper Group is working to increase the percentage of domestically produced wood it uses to make paper. Having reached 30% in fiscal 2008, it increased further, to 37.2%, in fiscal 2012. Moving forward, the Nippon Paper Group

will continue to actively use domestically produced wood, and thereby contribute to the revitalization of Japan's forest industry.

#### Domestic timber utilization rate<sup>1</sup> (Nippon Paper Group)



<sup>1</sup> The domestic (Japan) timber utilization rate includes sawmill residues.  
<sup>2</sup> Source: Supply and Demand of Lumber issued by the Forestry Agency of Japan  
<sup>3</sup> Source: Year book of paper and pulp statistics issued by the Ministry of Economy, Trade and Industry of Japan

#### Case

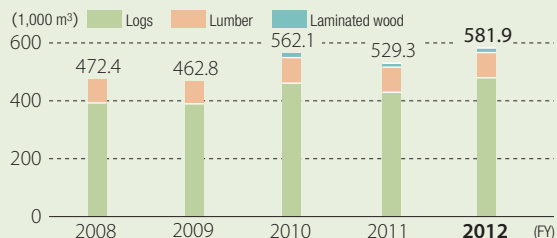
#### Actively promoting the use of domestic timber

(Nippon Paper Lumber Co., Ltd., Nippon Paper Industries Co., Ltd., PAL CO., LTD., PALTEC Co., Ltd.)

#### ● Business development based on a network of domestic timber collections

Nippon Paper Lumber is responsible for collecting of domestic timber for Nippon Paper Industries. The company also procures and sells a wide range of products including timber for residential use and building materials. With its network of domestic timber collections in Japan, and its ability to handle a comprehensive lineup of products, Nippon Paper Lumber is actively developing its domestic timber business. In fiscal 2012, the company handled approximately 580,000 m<sup>3</sup> of domestically produced materials, and ranked second in its field in Japan. The company aims to lift this figure to 1,000,000 m<sup>3</sup>, and, to this end, is continuing to develop new applications while working to further boost exports.

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



#### ● Selling copier paper made with thinned wood from Kyushu

Nippon Paper Industries has begun to sell "Kininaru Kami" copier paper made with wood from forest thinning operations in Kyushu (see page 82).

#### ● Development of housing construction material made from 100% domestically produced wood

With national government backing, efforts to promote the use of domestically produced wood and reinvigorate Japan's forest industry have been afoot in recent years.

In an effort to increase its use of domestically produced wood, PAL CO., LTD. has developed flush doors, folding doors, and compound flooring made with wood components consisting of 100% domestically produced wood—housing construction materials economically priced yet made with wood sourced entirely from forests in Japan. PAL is also actively using wood from forest thinning as a raw material for its Japanese cedar and cypress MDF. Strict material procurement, storage, and operation rules have been established for all of these products, which bear labels indicating they are made with 100% domestically produced wood.

In addition to developing and manufacturing interior residential construction materials, PAL works with Nippon Paper Lumber, which has a network of timber collections



Left) "Space Palette Japan Wood 100" flush door to closet space



Right) "Realfit Eco Japan Wood 100" compound flooring

throughout Japan, and N&E Co. Ltd.\*, a maker of MDF composed mainly of wood from Japanese conifers, in manufacturing activities that begin with raw materials and turn out finished products.

\* Nippon Paper Lumber subsidiary



**Promoting Overseas Afforestation**

**Nurturing renewable wood resources under the guidance of the Tree Farm Initiative**

Guided by its Environmental Charter (see page 30), the Nippon Paper Group is protecting and nurturing forests in and outside Japan while taking into consideration biodiversity concerns. We are also pushing through this policy even within the Tree Farm Initiative for overseas afforestation.

In similar fashion to the cultivation of crops in the field, the Tree Farm Initiative achieves sustainable raw materials procurement by growing as many trees as are harvested and used each year.

Afforestation areas came to 124,000 hectares as of the end of 2012. Under its Environmental Action Plan (Green Action Plan 2015) (see page 31), the Nippon Paper Group has identified the target of increasing overseas afforestation areas to 200,000 hectares.

**Afforestation projects that help the local ecology**

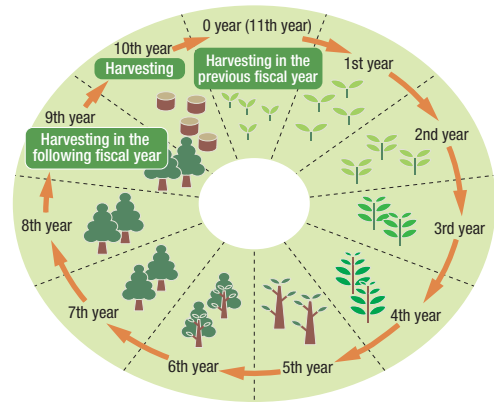
The Nippon Paper Group conducts afforestation projects on grasslands, reclaimed farms and pastures and on harvested plantation land. We select species, focusing mainly on *Eucalyptus globulus*, according to individual climactic conditions and materials available for making paper. Eucalyptus trees are known for their quick growth. In order to maintain a balance between the planting of fast-growing, highly profitable trees and the biodiversity needs of each region, we implement appropriate measures and ensure that our trees are not planted along rivers and water courses where the potential effects on the ecology are large. For example, over half of the property held by Brazil-based AMCEL is protected as a conservation area. In addition to soil erosion countermeasures and the monitoring of water quality, every effort is being made through joint surveys with universities and research institutes to protect the natural vegetation and wildlife.



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

**The afforestation cycle**

Trees are systematically planted in accordance with annual plans and harvested for use after significant growth. After harvesting, steps are taken to regenerate forests through replanting as well as coppicing, (the growth of new trees from the shoots that sprout from stumps). In repeatedly implementing this cycle, we gain the benefit of access to a permanent source of forests. Moving forward, we are also cultivating hardwood chip resources through recycling-based forest management.



10-year harvesting cycle

**Acquiring Certification for Company-Owned Forests Inside and Outside Japan**

**Acquired certification of all company-owned forests in and outside of Japan**

The Nippon Paper Group employs third-party forest certification programs as a benchmark for proper raw material procurement, and has continued to promote the acquisition of forest certifications for all company-owned forests.

All company-owned forests in Japan were certified in fiscal 2007 (see page 59). Nippon Paper Industries has completed its objective of obtaining certification of all company-owned forests overseas. Looking ahead, we intend to maintain this certification status while continuing to engage in forest management that takes into consideration society's needs and the environment.

**Status of forest certification acquisition for overseas afforestation project**

Overseas plantation project (by operating company)	Certification system name (License no.)	Date of acquisition
VTP (Australia)	AFS	May 2005
PTP (Australia)	AFS	June 2006
BTP (Australia)	AFS	April 2006
SEFE (Australia)	AFS	October 2006
Volterra (Chile)	CERTFORCHILE	December 2007
Forestco (South Africa)	FSC® (FSC-C022307)	April 2003
AMCEL(Brazil)	FSC® (FSC-C001931)	December 2008

# Protection and Cultivation of Domestic Company-Owned Forests

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

## Initiatives concerning Domestic Company-Owned Forests

### Practicing appropriate forest management at company-owned forests over an area extending to 90,000 hectares

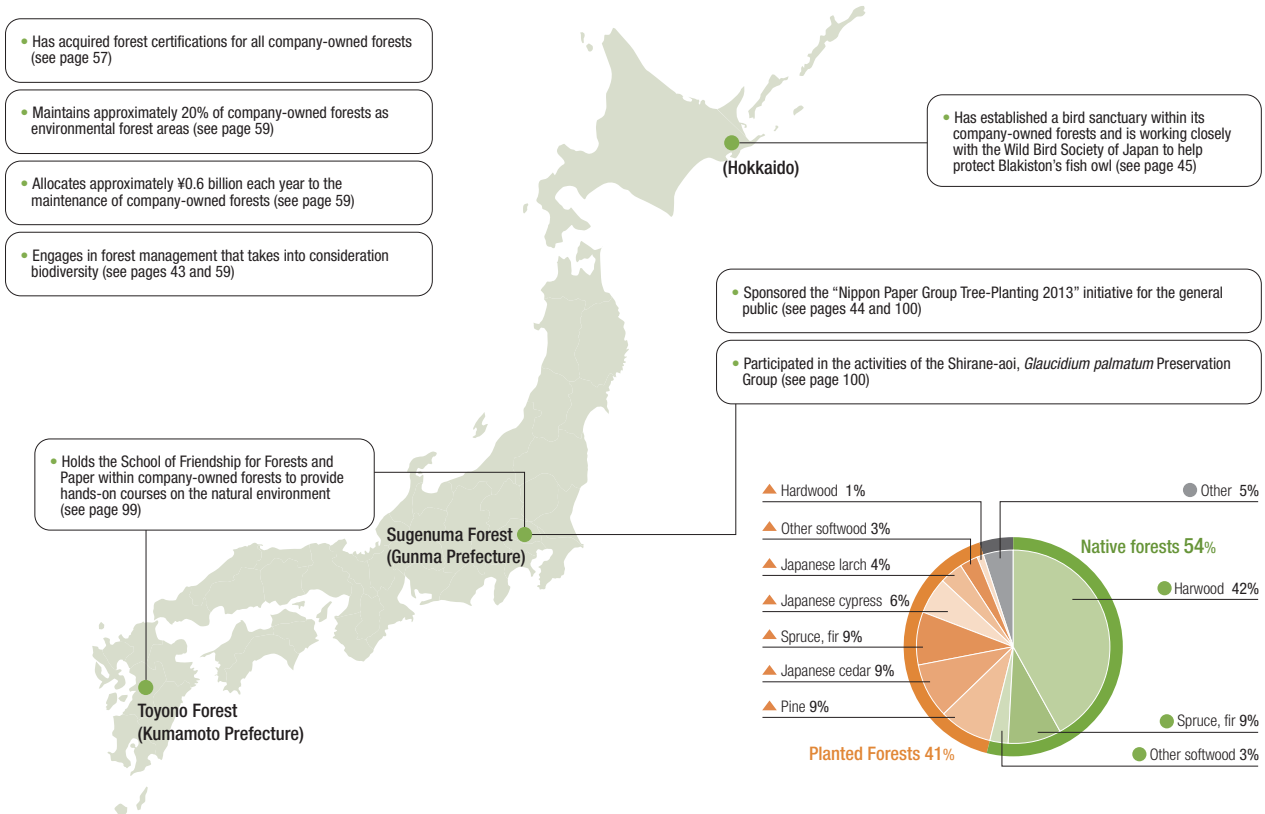
Nippon Paper Industries owns approximately 90,000 hectares of company forest in Japan. Accordingly, the company is the second largest owner of forests in the private sector.

For the Nippon Paper Group, forests are not only an important

business resource—as a corporate group whose existence is closely tied to the health and conservation of forests, we recognize and work to manage the integrity of the multifaceted role forests play within society.

With company-owned forests spread across 400 nationwide locations from Hokkaido in the north to Kyushu in the south, we are practicing sustainable forest management that takes into consideration the characteristics of each region.

### Distribution of company-owned forests in Japan and composition by species (Nippon Paper Industries Co., Ltd.)



### Distribution of company-owned forests by prefecture (As of March 31, 2013)

Prefecture	Number of company-owned forests	Area (hectares)	Prefecture	Number of company-owned forests	Area (hectares)	Prefecture	Number of company-owned forests	Area (hectares)
Hokkaido	53	43,580	Shizuoka	54	2,677	Shimane	17	2,851
Aomori	7	294	Gifu	2	233	Yamaguchi	26	1,457
Akita	12	693	Kyoto	16	279	Tokushima	2	244
Iwate	29	6,541	Mie	1	3	Ehime	1	319
Miyagi	16	1,675	Nara	2	795	Kochi	1	146
Yamagata	10	498	Hyogo	4	286	Fukuoka	2	53
Niigata	1	350	Wakayama	2	230	Oita	10	702
Fukushima	14	1,074	Okayama	1	58	Kumamoto	58	5,737
Gunma	1	4,915	Hiroshima	9	721	Miyazaki	25	9,235
Yamanashi	8	1,615	Tottori	1	168	Kagoshima	15	2,563
Total							400	89,991

### ● Certification acquired for all company-owned forests in Japan

Nippon Paper Industries has acquired forest certification from the Sustainable Green Ecosystem Council (SGEC) for all company-owned forests in Japan.

SGEC is a forest certification system unique to Japan (see page 55). It evaluates the sustainable management of forests, including preservation of the wide-ranging functions of forests such as watershed protection and biodiversity conservation while taking into account the Japanese climate and conditions. The forests owned by Nippon Paper Industries have received SGEC certification acknowledging the company's efforts to engage in forest management that takes into consideration biodiversity and the natural environment of each region. Moving forward, the company will maintain this certification.

### ● Establishing environmental forest areas

Nippon Paper Industries makes a clear distinction between commercial forest and environmental forest areas, and engages in forest management appropriate to the specific characteristics of each area. Approximately 80% of all company-owned forests are designated as commercial forest areas. In addition to the production of lumber, these areas are managed in a manner that fully recognizes the surrounding environment and the attributes of each area. Harvesting for the purpose of lumber production is not undertaken within environmental forest areas. Every effort is made within environmental forest areas to maintain those functions inherent in forests including the protection of ecosystems and conservation of watersheds. Environmental forest areas account for approximately 20% (18,000 hectares) of company-owned forests in Japan and include Akan and Nikko, which have been



Environmental forest area (Hokkaido)

designated national parks. In addition to the functions mentioned above, environmental forest areas act as sanctuaries for large numbers of plants and animals.

### ● Maintaining company-owned forests in Japan

Nippon Paper Industries allocates approximately ¥0.6 billion each year to the maintenance and management of company-owned forests in Japan. This entails such wide-ranging activities as weeding, pruning and thinning. As a company which has continued to benefit and grow through the appropriate application of forests and forest products, we are committed to balanced, sustainable forest management that allows forests to fulfill their multifaceted functions, despite the fact that forests within Japan are not currently economically viable because of the stagnant price of domestic timber.

### ● Forest management that takes into consideration biodiversity

Nippon Paper Industries places considerable emphasis on the conservation of biodiversity. In this context, the company undertakes various activities including the acquisition of forest certification and the establishment of environmental forest areas. Consideration is also given to matters such as protecting riparian forests, which are critical to their local ecosystems.

Moreover, onsite personnel carry their own red data books listing scarce wildlife in each region. Through this and other means, every effort is made to help preserve biodiversity.

### Biodiversity data for company-owned forests in Japan

(As of March 31, 2013)

(1,000 hectares)

IUCN Categories	Commercial Forest Area	Environmental Forest Area	Total	Percentage Share	Ratio of Environmental Forest Area to Total Area
I Strict nature reserve / wilderness area	0	0	0	0%	—
II National park	0.6	4.5	5.1	6%	88%
III Natural monument	0	0	0	0%	—
IV Habitat / species management area	0	0	0	0%	—
V Protected landscape / seascape	2.5	0.7	3.2	4%	22%
VI Protected area with sustainable use of natural resources	0	0	0	0%	—
Not applicable	68.6	13.1	81.7	91%	16%
Total	71.7	18.3	90.0	100%	20%

WEB For IUCN website  
<http://www.iucn.com>

### Creation of the "Japan wood mark" and participation in promotion activities

Based on the concept that greater use of domestically produced wood by Japan's people and industries will rejuvenate the country's forests, the Forestry regeneration committee of the Japan Project-Industry Council (JAPIC) created the Japan wood mark, and a committee dedicated to the promotion of its use, in August 2013.

Nippon Paper Industries, which has been a member of the Forestry regeneration committee since that organization was founded in 2009, contributed to the creation of the Japan wood mark and is one of the original participants on the Japan wood mark committee. As it engages in



Mark promoting the use of domestically produced wood

activities that help to advance use of the Japan wood mark, Nippon Paper Industries intends to apply it as a sales promotion tool for wood from the 90,000 hectares of forest it owns in Japan.

\* More information on initiatives promoting the use of wood produced in Japan can be found on page 56.

# Contributing to Local Communities in Overseas Afforestation Areas

Fostering positive ties with local communities built on harmonious coexistence and mutual prosperity

## Basic Stance

### Developing an afforestation business that contributes to the local community

Recognizing the importance of mutual growth and development the Nippon Paper Group strives to build positive ties with the local communities in and around its forests. 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. Considerable effort is also placed on promoting educational activities, and creating employment opportunities, within local economies.

## Overview of Afforestation Areas

### Managing 124,000 hectares of forest land in four countries

The Nippon Paper Group manages 124,000 hectares of forest land in the four countries of Australia, South Africa, Chile and Brazil.

#### ● Australia

Australia is a country rich in forest resources. With a highly developed lumber industry, it is the world's premier exporter of woodchips used in the manufacture of paper.

The Nippon Paper Group began importing natural hardwood chips from Australia at the start of the 1970s. Today, approximately 50% of its woodchips are imported from Australia (see page 53). At the same time, the Group actively participates in discussions regarding the protection and use of native forests. We

are committed to promoting afforestation activities that expand afforestation resources in Australia.

#### ● South Africa

The history of afforestation in South Africa, one of the world's leading countries in this field, began in the late 17th century with the planting of conifers (pines). Since 1975, the Nippon Paper Group has imported woodchips from South Africa.

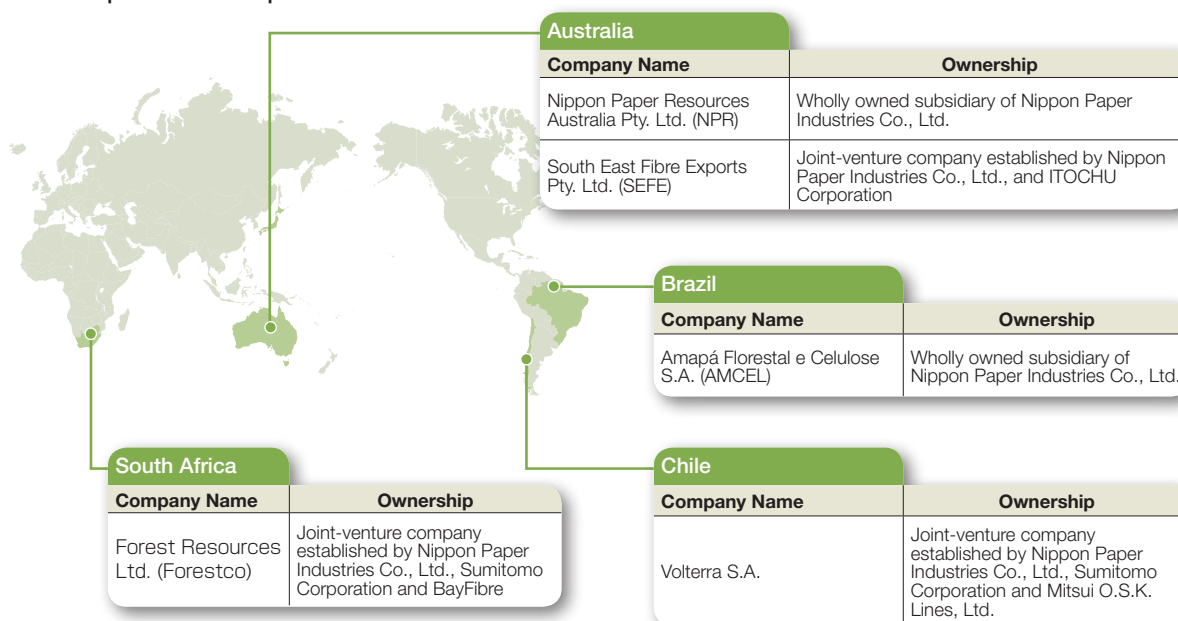
#### ● Chile

The afforestation of radiata pines and eucalyptus has been actively undertaken in Chile since the mid-20th century. At 2,320,000 hectares, afforestation areas account for 3% of the nation's total land area (at the end of 2009). The forest products from the area are exported to countries around the world and play a vital role in supporting Chile's economy. Afforestation in Chile comprised the Nippon Paper Group's first project under the Tree Farm Initiative (see page 57).

#### ● Brazil

With its vast land area, Brazil is recognized worldwide for its rich forest resources and highly developed lumber industry. As a nation that continues to enjoy firm economic growth, significant progress is being made in the development of infrastructure essential to afforestation management. The Nippon Paper Group purchased AMCEL, a company engaged in such wide-ranging activities as the production and export of woodchips, and is managing substantial forest land.

## Overview of plantation companies



**Taking into Consideration the Needs of Local Residents and Regional Cultures**

**Placing priority on communication while coexisting with society**

The Nippon Paper Group respects regional cultures and traditions as a part of efforts to promote harmonious coexistence.

**Case Fostering locally produced products in partnership with local communities (Volterra S.A., Chile)**

Volterra S.A. appoints a designated officer to serve as a point of contact for the local community. In addition to fielding requests from neighboring residents, particular care is taken to balance afforestation business promotion and regional development needs.

As part of that effort, Volterra began in 2011 to support the efforts of a neighboring village to cultivate raspberries as a new specialty crop. Working closely with another neighboring village, the company also assisted in efforts to manufacture folk handicrafts made from locally produced wicker cane.



With neighboring residents following the initial harvest of raspberries



Folk crafts made with wicker cane

**Case Participating in a program that donates seedlings to farmers (Volterra S.A., Chile)**

Volterra S.A. is an active participant in a program initiated by an alliance between Corporación Chilena de la Madera (CORMA) and the corporate sector. Under this program, five million seedlings of pine and eucalyptus are being donated to farmers over a five-year period. In addition to the licensing of technology, the goal of the program is to provide rural areas with a source of income and to restore land exhausted by soil erosion. The company has donated eucalyptus seedlings each year since 2005 and provided 16,000 seedlings in 2013.

**Case Respect for indigenous people (Volterra S.A., Chile)**

Residing in the southern region of Chile, the indigenous Mapuche people have long upheld and treasured their traditions and culture. As a part of its afforestation management activities, Volterra S.A. has endeavored to ascertain the presence of sacred sites, and important legacies and to allow the indigenous Mapuche people to visit and utilize sites of historic significance within forests held by the company.

**Case Helping local residents obtain qualification for chainsaw work (Volterra S.A., Chile)**

Volterra S.A., in order to provide local residents with logging work in a company-owned forest known as the Tranaquepe block, held a training event aimed at helping local residents obtain licenses to do chainsaw work. This training was conducted in the Tranaquepe block, with sponsorship by a



Training to perform chainsaw work

Chilean forest industry association. Volterra began providing employment opportunities for local residents to perform logging work in 2013.

**Case Supporting plans to increase the number of available nursing home buses (AMCEL, Brazil)**

Amapa Florestal e Celulose S.A. (AMCEL) is located in Santana City, State of Amapá. The city continues to confront a dearth of public buses suitable for people with disabilities. As a result, a great many people continue to face difficulties in traveling. In addition to the prohibitive costs of using taxis, safety and security issues continue to plague transportation. In an effort to address these issues, Japan's Ministry of Foreign Affairs is promoting plans, as part of its development assistance program, to provide buses for use by Casa da Hospitalidade (nursing home



Interested persons in front of the bus donated by AMCEL

facilities). As a joint private- and public-sector endeavor, AMCEL is providing its full cooperation and has donated a bus configured specifically for disabled persons use.

## Contributing to Local Communities in Overseas Afforestation Areas

**Case** **Engaging in employment support activities for people throughout the region**  
(AMCEL, Brazil)

AMCEL is conducting employment as well as job training in conjunction with local engineering and commercial training schools at the request of the State of Amapá, other local governmental bodies at various levels, and regional communities. Each year, the company is a major sponsor of such education programs as the Escola da Madiera (lumber school)<sup>1</sup> and Youth Project<sup>2</sup>, open to young people and the



Practical training in lumber processing at the Escola da Madiera (lumber school)

economically disadvantaged. These programs have been held annually since 1998 in Santana (where AMCEL's head office is located), Porto Grande (where AMCEL has an operational office) and Tartarugalzinho (where AMCEL has a seedling nursery). Over 2,000 people have participated in the programs.

**1 Escola da Madiera (lumber school)**

A school designed to teach techniques in processing wood materials including furniture making

**2 Youth Project**

This project is designed to teach participants skills that will allow them to take up positions as mechanics or hairdressers, as examples.

**Case** **Putting in place fire protection teams at afforestation companies**  
(BTP\*, Western Australia)

Afforestation companies in southwest Western Australia have formed their own fire brigades to address the vital issue of bushfires. As a member of this group, the Bunbury Treefarm Project (BTP) has acquired firefighting equipment including fire trucks. Each year, regular coordination meetings and joint training events are held between afforestation companies, to constantly improve communication networks and understanding of each others' roles. Systems have been established for cooperating with the Department of Parks and Wildlife



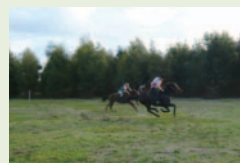
Supporting fire-fighting activities

(DPAW), Department of Fire and Emergency Services (DFES), and other Western Australian government agencies specializing in fighting bushfires.

\* BTP is an affiliate of Nippon Paper Resources.

**Case** **Providing a venue for charity picnic races**  
(BTP, Western Australia)

BTP, which has been contracted to manage the afforestation of Eco Tree Farm Pty. Ltd., a joint-venture company owned 70% by Osaka Gas Co., Ltd. and 30% by Mitsui & Co., Ltd., provides a portion of the company's plantation area free of charge as a venue for charity picnic races for three days each year. These horse races, which are hosted by charitable organizations, were held for the



Charity picnic races held in an afforestation area

40th time in 2013. They attract large numbers of people every year and proceeds are donated to children with disabilities caused by accidents or disease, to local fire brigades, and others.

**Case** **Communicating with regional societies**  
(Volterra S.A., Chile)

Volterra S.A. delivers gifts to local elementary school



Local elementary school students receiving gifts

students at Christmas each year as a part of efforts to interact with local communities. The children in particular look forward to this annual event.

### Taking into Consideration the Natural Environment and Ecosystem Conservation

#### Helping to conserve ecosystems through biodiversity and water quality research

The Nippon Paper Group works to conserve ecosystems by conducting biodiversity, water quality, and various other types of research in its afforested areas.

In addition, we engage in environmental and related education activities for the benefit of young children and students in an effort to promote harmonious coexistence with the region.

**Case** **Undertaking ecosystem research within company-owned natural forests**  
(Volterra S.A., Chile)

In 2011, Volterra S.A. and the University of Concepcion commenced research on the ecosystems of flora and fauna in the natural forests within Volterra's properties. The approximate 5,000 hectares of natural forests are a home to a wealth of wildlife including rare or endangered species. In addition to its monitoring activities, Volterra S.A. is actively promoting the integrity of ecosystems within the forests.

### Case Plan for regenerating a natural forest (Volterra S.A., Chile)

Volterra S.A. has developed a plan for a project aimed at regenerating a natural forest in part of an afforested area. To carry out the project, the company, in 2013, collected 13,000 tree seedlings growing naturally in the area. The next step will be to plant these seedlings in the target area.



Natural tree seedlings



Local residents who helped to collect the seedlings

### Case Conducting biodiversity research (AMCEL, Brazil)

AMCEL owns 314,000 hectares of land, and 56% of it, about 175,000 hectares, has been set aside as a conservation area. To preserve the ecosystem of plants and animals living there, the company is pursuing the following initiatives.

- Installation of equipment for monitoring the quality and level of water in the afforestation area, and performance of regular water inspections
- Annual provision of the conservation area for use in a wildlife release program being conducted by the Brazilian Institute for the Environment and Renewable Natural Resources
- Maintenance of a database of wildlife sightings on AMCEL's property
- With the assistance of the Department of Biological Sciences at the Federal University of Para, conduct of a mammalian habitat survey in afforested and other areas, in 2010
- With the assistance of the Universidade Federal Rural da Amazonia, conduct of a savanna vegetation survey from 2011 to 2012
- Conduct of a survey of large- and medium-size mammals in the conservation area from 2011 through 2013 (see page 43)



Undertaking surveys

### Case Canberra high school students tour logging site and woodchip mill (South East Fibre Exports Pty. Ltd. (SEFE), Australia)

In March 2013, students from Orana High School in Canberra visited a logging site and woodchip mill owned by SEFE. This vocational tour of lumber and woodchip production operations was a fascinating experience for the students, who are enrolled in the engineering course at their school.



Students on a tour of a SEFE plant

### Case Adopting agroforestry techniques (BTP, Western Australia)

BTP has adopted agroforestry techniques allowing the cultivation of trees and other agricultural products together with livestock on the same land.

BTP began to raise sheep in its afforestation areas at the end of 2005 (approximately 300 head of sheep as of June 31, 2013) and embarked on sales of wool and sheep (for consumption) in 2006. Sheep grazing can help to reduce the need for herbicides and the risk of forest fires. And sheep manure is an excellent fertilizer that can lower the need for chemical fertilizers. Sheep grazing, therefore, is contributing from multiple angles to NPR's efforts to engage in sustainable afforestation activities.



Sheep grazing on forest land

# Stable Procurement of Recycled Paper

Balancing Group-wide supply and demand through uniform management at the Group's head office

## Initiatives Aimed at Stable Recycled Paper Procurement

### Promoting stable procurement and increased use of recycled paper by accurately grasping supply and demand trends

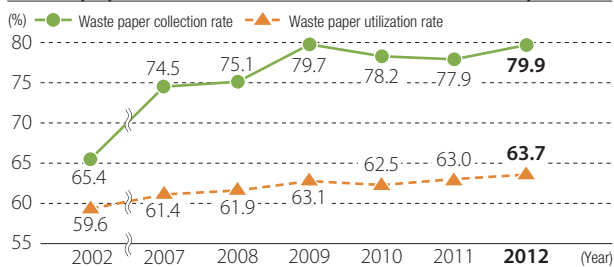
The collection of waste paper has taken on greater importance with each passing year. This is attributable not only to government initiatives aimed at reducing the volume of waste, but also to measures designed to promote the recycling of resources. Waste paper is an essential resource accounting for more than 60% of the raw materials used by Japan's paper industry.

Against this backdrop, the Nippon Paper Group has continued to adopt a stable procurement stance nurtured over many years in conjunction with the waste paper industry. In this manner, the Group has promoted stable procurement, recognizing it as the starting point for waste paper recycling.

### ● The current status of waste paper

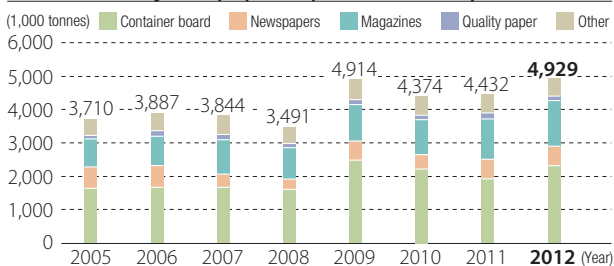
Japan's waste paper collection and utilization rates came to 79.9% and 63.7%, respectively, in 2012. In recent years, demand for waste paper and particularly waste paper for use in paperboard has grown in China. This has in turn impacted the price of waste paper in Japan.

### Waste paper collection and utilization rates in Japan



Source: Paper Recycling Promotion Center

### Volume of recycled paper exported from Japan



\* January to December annual totals

### ● Balancing supply to each mill through centralized head office management

The Nippon Paper Group's consumption of recycled paper reached 2,960,000 tonnes in 2012, approximately 18% of the total consumed by Japan's paper industry as a whole. Taking this into consideration, securing sufficient volumes of waste paper is vital to ensuring the Group's ability to stably supply pulp and paper products. Waste paper is a material that occurs in a variety of forms including used newspapers, magazines and container board boxes, and is not a material specifically designed for production. Therefore, its supply cannot be easily managed. Accordingly, the abilities to balance supply and demand of recycled paper with a high degree of accuracy, and to efficiently collect required volumes, are critical to maintaining stable recycled paper utilization.

The Nippon Paper Group determines, at five nationwide locations, the status of supply and demand focusing on the amount of waste paper required for production at each of its mills. Trends are then managed on a uniform basis by the head office of Nippon Paper Industries. In this manner, steps are taken to ensure a stable and balanced supply to each mill, taking into consideration the Group as a whole.

### ● Maintaining high stock capacity to support stable supply

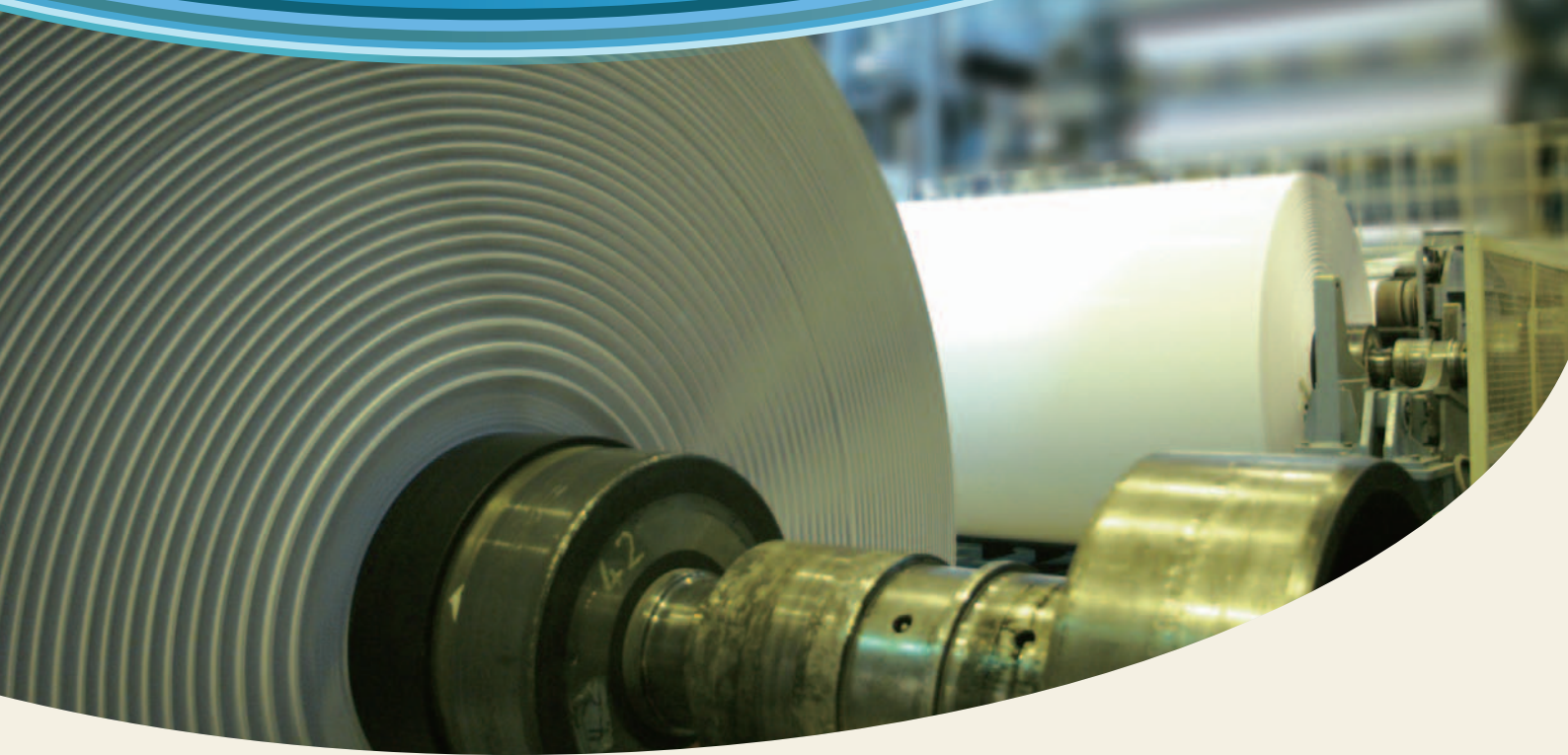
Maintaining sufficient storage space to accommodate fluctuations in the amount of waste paper available is essential to the stable procurement of large volumes of waste paper. The Nippon Paper Group maintains storage space equivalent to around 80% of its monthly consumption to ensure a stable supply of waste paper against changes in availability.



Waste paper storage yard (Yatsushiro Mill, Nippon Paper Industries)



# Responsibility to Our Customers



<b>Policy and Management</b> .....	<b>66</b>	<b>Activities of Nippon Paper Crecia Co., Ltd.</b> .....	<b>76</b>
Basic Stance / Philosophy and Basic Policy / Product Safety Management System / Verification and Audit of Recycled Paper		Business and Product Features and Basic Stance / Product Safety Management System / Providing Relevant Product Information / Responding to Customers / The Stable Supply of Products / Product Development that Addresses the Needs of Customers	
<b>Activities of Nippon Paper Industries Co., Ltd.</b> .....	<b>68</b>	<b>Activities of Nippon Paper Papylia Co., Ltd.</b> .....	<b>78</b>
Business and Product Features and Basic Stance / Product Safety Management System / Approach toward Product Safety / The Stable Supply of Products / Responding to Customers / Product Development that Address the Needs of Customers		Business and Product Features and Basic Stance / Product Safety Management System / Product Safety Initiatives / The Stable Supply of Products / Responding to Customers / Product Development that Address the Needs of Customers	
<b>Activities of Nippon Paper Industries' Paperboard Division</b> <sup>Note</sup> .....	<b>70</b>	<b>Activities of SHIKOKU COCA-COLA BOTTLING CO., LTD.</b> .....	<b>80</b>
Business and Product Features and Basic Stance / Product Safety Management System / Product Safety Initiatives / The Stable Supply of Products / Responding to Customers / Product Development that Addresses the Needs of Customers		Business and Product Features and Basic Stance / The KORE Management System / Initiatives Aimed at Enhancing Consumer Satisfaction / Environmentally Friendly Products and Packages	
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Note: As of October 1, 2013, the Paperboard Division was reorganized into the Containerboard Sales Division and the Duplex Board and Industrial Paper Sales Division. The information contained in this report is on the operations of the Paperboard Division through the end of September 2013.

# Policy and Management

In addition to the stable supply of various products, including paper, that are indispensable to society, we continue to pursue quality and safety which meet the expectations of customers.

## Basic Stance

### Providing products and services that benefit society

The Nippon Paper Group's business activities are grounded in the supply of paper. In this manner, we have continued to develop and grow in tune with society. Extending our horizons beyond paper and paper products, we also engage in a broad spectrum of activities including the manufacture and sale of chemical products, timber and construction materials. Our customer base is equally wide ranging encompassing both the corporate sector and individuals.

The Nippon Paper Group recognizes that the stable supply of paper and related products is a source not only for winning the trust of customers, but also for fulfilling its responsibility to society, securing a steady stream of earnings and returning profits to its many stakeholders.

With this in mind, we will work to secure the highest product and service quality as well as reliability while endeavoring to take into consideration such critical concerns as environmental conservation across the entire product life cycle.

## Philosophy and Basic Policy

### Winning the trust of our customers

The Nippon Paper Group has positioned "winning the trust of its customers" at the heart of its Corporate Vision (see page 20). As a part of efforts to achieve this goal, we formulated the

### Philosophy and Basic Policy on Product Safety

(established on October 1, 2004)

#### 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.
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 group employees have a thorough awareness of the importance of product safety.

Philosophy and Basic Policy on Product Safety in October 2004 and are endeavoring to win the trust of customers through the development and provision of socially useful and safe products and services, a key component of our underlying Action Charter (see page 21).

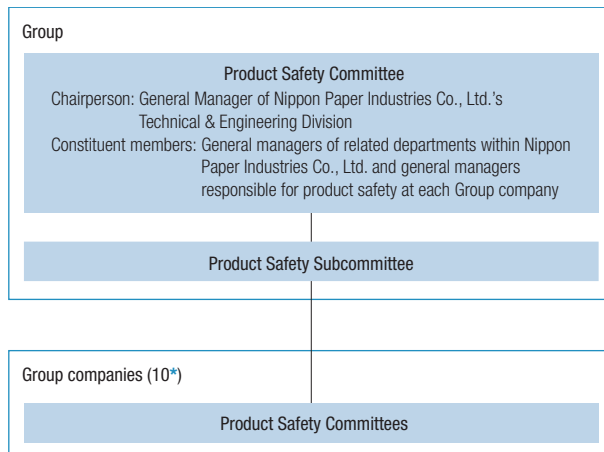
## Product Safety Management System

### Putting in place a Group product safety management system

The Nippon Paper Group Product Safety Committee, chaired by the General Manager of Nippon Paper Industries Co., Ltd.'s Technical & Engineering Division oversees all activities concerning product safety. The committee, which is made up of the general managers of related departments within Nippon Paper Industries Co., Ltd. and the general managers responsible for product safety at each Group company, deliberates on and determines important matters concerning product safety policies and activities.

Reporting directly to the Product Safety Committee, the Product Safety Subcommittee monitors and manages the status of activities at each Group company. Drawing on information and the exchange of opinions among Group companies, the subcommittee also deliberates on the optimal response to matters of concern. The results of these deliberations are then submitted to the Product Safety Committee. Each Group company establishes its own product safety committee and engages in appropriate product safety activities.

### Product safety management system



\* Nippon Paper Industries Co., Ltd., Nippon Paper Crecia Co., Ltd., Nippon Paper Papyrus Co., Ltd., SHIKOKU COCA-COLA BOTTLING CO., LTD., Nippon Paper Lumber Co., Ltd., Kitakami Paper Co., Ltd., Nippon Seitai Corporation, NP Trading Co., Ltd., Nippon Paper Development Co., Ltd., Akita Jujo Chemicals Co., Ltd. (As of April 2013)

### ● Acquiring quality management system certification

Each Group company actively promotes efforts aimed at acquiring ISO 9001 certification, the international standard for quality management. Group companies that had acquired certification as of March 31, 2013 are presented as follows.

#### Acquisition of ISO 9001 certification (As of March 31, 2013)

Company Name	Mill/ Manufacturing Companies/Woks
Nippon Paper Industries Co., Ltd.	Nakoso Mill
(Paperboard Division)	Akita Mill, Ashikaga Mill, Soka Mill, Yoshinaga Mill, Otake Mill
(Paper-Pak Division) <sup>1</sup>	
(Chemical Division)	Gotsu Mill <sup>2</sup> , Iwakuni Mill, Higashimatsuyama Mill, Yufutsu Mill
Nippon Paper Crecia Co., Ltd.	Tokyo Mill
Nippon Paper Papylia Co., Ltd.	Harada Mill, Suita Mill, Kochi Mill
SHIKOKU COCA-COLA PRODUCTS CO., LTD.	
SHIKOKU CUSTOMER SERVICE CO., LTD.	Headquarters
Nippon Seitai Corporation	Hokkaido Office, Maebashi Mill, Saitama Mill
NIPPON PAPER UNITEC CO., LTD.	Four business sites at headquarters (construction, electricity, control systems, plant engineering)
Kokusaku Kiko Co., Ltd.	Headquarters, Equipment & Facilities Department, Yufutsu Department, Shiraoi Department, Asahikawa Department
NANKO UNYU CO., LTD.	Headquarters (Port Operations, Land Operations), Service Department and Maintenance Works, Ishinomaki Office, Iwanuma Office, Nakoso Office, Akita Sales Office, Tokyo Branch
Nippon Paper Ishinomaki Technology Co., Ltd.	All departments (Electricity & Instrumentation, Machinery, Construction)
GAC Co., Ltd.	Headquarters, Mill, Marketing Division
FLOWRIC CO., LTD.	Headquarters, Concrete Research Center, Nagoya Mill
N&E Co., Ltd.	
Australian Paper	Maryvale Mill, Shoalhaven Mill, Preston Mill

<sup>1</sup> SOKA PAPER-PAK CO., LTD., EGAWA PAPER-PAK CO., LTD., MIKI PAPER-PAK CO., LTD., and ISHIOKA KAKO CO., LTD., which are the production subsidiaries overseen by the Paper Pak Division of Nippon Paper Industries, have obtained ISO 9001 certification.

<sup>2</sup> Nippon Paper Chemicals' Gotsu Mill has gained certification for specific products.

### ● Responding to instances of defective products

In instances where a problem with one of the Group's products has come to light, the department in charge of quality assurance at the relevant Group company will take the lead in coordinating with the appropriate mill and related head office departments to promptly and accurately address each issue. In the event that a problem is perceived or determined as urgent and serious attention, each Group company takes the appropriate action in accordance with its Product Safety Crisis Management Manual.

### Verification and Audit of Recycled Paper

#### Implementing appropriate operating processes while undergoing inspections by third-party institutions

In January 2008, the Nippon Paper Group notified the public that it had been manufacturing certain recycled paper products with lower-than-standard recycled pulp content while at the same time misrepresenting that content. In the ensuing period, the Group took ongoing steps to thoroughly investigate the causes of these issues and to formulate and implement recurrence prevention measures. Moreover, during dialog with stakeholders in 2009, we were encouraged to continue our endeavors regarding accountability including full disclosure.

In order to promote continuous improvement, Nippon Paper Industries conducts internal audits and undergoes third-party audits of its operating procedures from both the procedural performance (validity and compliance) perspective and the systems (management and review) perspective.

SGS Japan Inc., a third-party inspection and certification organization, conducted performance audits of the Group's operating processes from the receipt of orders through production to shipment between 2008 and 2012. For the period in question, SGS Japan confirmed that the Group's content ratio management system continued to operate without problem. Plans are in place for this organization to conduct similar audits in 2013.

The standards and criteria of the ISO 14001 environmental management system have been incorporated into production procedures at each of the Group's mills. Within the confines of this system, steps are being taken to manage and review production procedures.

In addition, the Nippon Paper Group undergoes inspections by customers based on the verification system formulated by the Japan Paper Association. Customers check that the production processes and recycled pulp contents at mills conform to regulations. Moving forward, the Group will continue to implement prevention measures and to pursue their ongoing improvement while accurately grasping the needs of society.



An audit by SGS Japan

# Activities of Nippon Paper Industries Co., Ltd.

Strengthening its quality management system in an effort to deliver products and services that fully satisfy customers

## Business and Product Features and Basic Stance

### Placing particular emphasis on the stable supply and environmental friendliness of products

Nippon Paper Industries manufactures paper, which is sold mainly to corporate customers, including newspaper, publishing and printing companies. The company's products cover a wide spectrum of uses such as newsprint, printing and publication paper, and business communication paper.

The Great East Japan Earthquake, which struck in 2011, caused major damage at the company's Ishinomaki, Iwanuma, and Nakoso mills. The Iwanuma and Nakoso mills were back in operation in May 2011 and the Ishinomaki Mill achieved fully operational status in August 2012. The company is working diligently to earn the trust of customers by placing the utmost emphasis on ensuring the stable supply of safe and reliable products.

At the same time, Nippon Paper Industries is focusing increasingly on producing environmentally friendly paper products as interest in products that reflect environmental concerns continues to grow.

## Product Safety Management System

### Promoting efforts to strengthen companywide quality systems focusing on quality, speed and service

#### ● Quality management system

Nippon Paper Industries maintains a nationwide manufacturing network of eight mills (as of April 2013, and excluding the Paperboard, Paper-Pak, and Chemical divisions). Each mill has put in place its own quality management system. The Quality Assurance Department oversees the quality of all products. Due to the wide range of products, companywide quality meetings are held regularly by item. The company's head office, mills and laboratories work in unison to promote quality enhancement measures.

#### ● Responding to instances of defective products

The Quality Assurance Department takes the lead in responding to customer inquiries and instances of defective products. In the event that a major incident occurs as a result of one of the company's products, the Quality Assurance Department acts swiftly to resolve any and all issues in collaboration with relevant departments. Nippon Paper Industries has put in place a system to ensure that information relating to accidents and the appropriate company response is relayed immediately to the responsible director and the president. This information is also channeled by the Quality Assurance Department to each mill and relevant in-house department.

## Approach toward Product Safety

### Promoting product safety initiatives in strict compliance with statutory requirements and industry standards

Guided by the Product Safety Committee, Nippon Paper Industries' mills and research laboratory ensure that chemical substances are used and managed in accordance with ISO 14001. At the same time, steps are taken to comply with all statutory and regulatory requirements including the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture and the PRTR Law. Turning to base materials used in the production of food containers, the company conforms to the Food Sanitation Act as well as industry standards.

## The Stable Supply of Products

### Putting in place an industry-wide paper supply system to ensure the uninterrupted issue of newsprint in emergency situations

Demand is particularly high for the stable supply of paper used in such highly public information media as newspapers. As a result, the paper industry prepares emergency manuals by region for use when an extraordinary incident occurs. In the event of a disruption to communication and transportation systems as a result of a major disaster, paper companies follow this manual to ensure the smooth supply of newsprint.



Shipping products from a warehouse

## Responding to Customers

### Calling for and responding to the opinions and requirements of customers through sales and marketing activities as well as regular customer visits

Nippon Paper Industries supplies newsprint, printing and publication paper and business communication paper largely to corporate customers. Sales representatives call on customers to solicit their opinions and needs. At the same time, the company has introduced a service engineer system in an effort to close the gap between customers and the production frontline. Under this system, technical staff engaged in the production of paper and acting as service engineers regularly call on customers. In witnessing firsthand the printing process through such initiatives

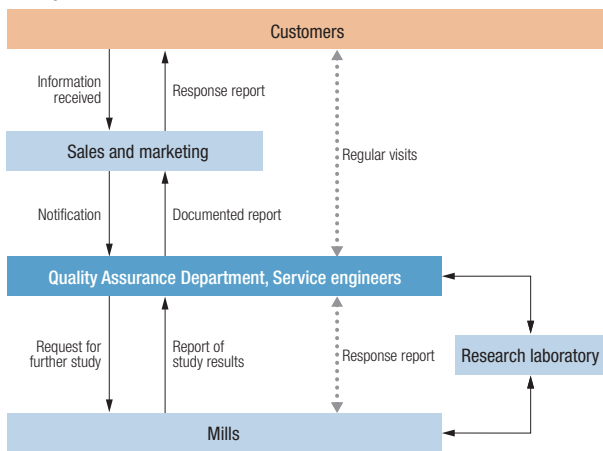
Note: Described herein are activities of Nippon Paper Industries Co., Ltd. as of September 30, 2013. Activities of the Paperboard, Paper-Pak, and Chemical divisions are discussed on pages 70–75.

as “Quality Patrols,” service engineers directly solicit feedback from customers conveying this information to all related in-house departments including the production frontline. This is in turn leading to accurate and timely improvements in product quality.



Regular visit at a printing factory by a service engineer

### Framework for addressing customer inquiries, complaints and claims



### Product Development that Address the Needs of Customers

#### Providing products leveraging inherent strengths

##### ● PEFC and FSC® certified paper

Nippon Paper Industries acquired Chain-of-Custody (CoC) certification (see page 55) under the Programme for the Endorsement of Forest Certification Schemes (PEFC), an internationally recognized forest certification system (see page 55). At the same time, Nippon Paper Industries was the first Japanese company to establish a comprehensive PEFC-certified paper production system from chip procurement through manufacture to sale in 2007. The company’s Raw Material & Purchasing Division first obtained PEFC-CoC certification for the import of woodchips in December 2004. At the end of March 2007, Nippon Paper Industries acquired certification at its headquarters as well as its Ishinomaki and Iwakuni mills. The Hokkaido Mill (Shiraoi) and the Fuji Mill were certified in October 2007 with the Yatsushiro Mill certified in March 2010.

The Headquarters, the Yatsushiro Mill, the Nakoso Mill, the Hokkaido Mill (Yufutsu), the Hokkaido Mill, the Iwakuni Mill, and the Shiraoi Facility of the Hokkaido Mill acquired CoC certification from the Forest Stewardship Council (FSC®), an international organization engaged in the certification of forests similar to PEFC, in January 2003, April 2007, December 2007, October 2009, March 2013, and September 2013, respectively.

### Status of CoC certification acquisition

(as of September 2013)

PEFC		FSC® <sup>1</sup>	
Office/Mill	Acquisition Date	Office/Mill	Acquisition Date
Headquarters	December 2004	Headquarters	January 2003
Ishinomaki	March 2007	Yatsushiro <sup>2</sup>	April 2007
Iwakuni	March 2007	Nakoso	December 2007
Hokkaido (Shiraoi)	October 2007	Hokkaido (Yufutsu)	October 2009
Fuji	October 2007	Iwakuni	March 2013
Yatsushiro	March 2010	Hokkaido (Shiraoi)	September 2013

<sup>1</sup> FSC Logo License No. FSC-C001751  
<sup>2</sup> FSC CoC certification currently suspended

#### ● New products that utilize high-bulk technologies

In recent years, demand for light and bulky paper has grown sharply for use in books, magazines, and other publications. Nippon Paper Industries applies its unique bulking technology to develop products that meet customer needs. The popular b7 series is a well-textured coated paper that achieves a low basis weight\*, yet high thickness. One product in particular, b7 BULKY, is a simple white matt paper with excellent shelf-life. b7 BULKY is made in a wide range of base weights to accommodate applications in a variety of publication applications.

\* Basis weight: Weight of one square meter of paper.

#### Ochanomizu Paper Gallery, where visitors can handle various types of paper

The Ochanomizu Paper Gallery is located on the ninth floor of the Nippon Paper Industries head office building (Chiyoda-ku, Tokyo). The gallery offers a permanent exhibit of 300 types of paper made by Nippon Paper Industries. It is open to the public and visited by both the general public and people who are engaged in work related to paper.

The Paper Gallery features samples of various kinds of paper including coated and non-coated papers, and papers used for books. It also offers leaflets providing basic data on each product, and displays actual books and magazines using Nippon Paper Industries products. The



Ochanomizu Paper Gallery

Paper Gallery has won high accolades for affording visitors opportunities to take paper samples into their own hands, and examine them and feel their texture for themselves.

**WEB** Website  
<http://www.nipponpapergroup.com/opg/>  
 (Japanese only)

# Activities of Nippon Paper Industries' Paperboard Division

Providing reliable transportation and packaging materials for food products, beverages, electrical and electronic devices, pharmaceuticals and a wide range of other products

## Business and Product Features and Basic Stance

**In addition to its mainstay linerboard and corrugated medium, the Paperboard Division provides a vast array of safe and high-quality paper products**

The Paperboard Division has production facilities throughout Japan, and makes every effort to engage in efficient and fast-paced management while bolstering the division's competitive prowess on the world stage. The division's core products are linerboard and corrugated medium, and coated duplex board, both of which save resources by using recycled paper as their primary raw material. The division pursues business opportunities across a variety of other fields including packaging paper, base paper for food containers, and pulp. In calendar year 2012, the division held a 13.3% share of the linerboard and corrugated medium market in Japan.

The Paperboard Division strives to provide high-quality safe and environmentally friendly products and services to meet the needs of customers and to earn their trust. In addition, the division works diligently to provide accurate and open information, including quality labeling.

## Product Safety Management System

**Providing safe products and services that comply with all relevant statutory requirements and industry standards**

The Paperboard Division participates in the Nippon Paper Group Product Safety Committee. It supplies products and services that comply with all relevant statutory and regulatory requirements, as well as industry standards.

The division places particular emphasis on strengthening mechanisms that guarantee and certify recycled paper fiber content, and compliance with the Law on Promoting Green Purchasing as well as the purchase of lumber from tree thinning. Another priority is the promotion of safety surveys regarding the paper and paperboard used in food packaging. The division follows a predetermined recycled paper fiber and non-wood fiber pulp content verification process based on the system established by the Japan Paper Association. It has also put in place guidelines for onsite customer inspections to verify recycled paper fiber content.

Calls for increasingly stringent, international safety and hygiene standards for paper and paperboard products used in food containers and packaging are becoming more pronounced in recent years. The paper industry formulated its own voluntary standards for paper and paperboard intended to come into

### Major products

Product Category	Details
Linerboard and corrugated medium	Linerboard and corrugated medium, which includes linerboard and corrugating medium, is a product that entails the active use of recycled paper. Through the application of cutting-edge technologies, products are manufactured in a manner that reduces environmental impact. In the context of recent efforts to reduce greenhouse gas emissions, demand for lightweight, high-strength base paper has steadily grown. The Paperboard Division is working to address this demand by delivering products that excel in meeting safety, workability, water resistance, water repellency, and a wide range of other needs as well.
Coated duplex board	Coated duplex board is a paper product comprising several laminated layers. Products vary according to combination of raw materials used for each layer. Taking full advantage of the latest technologies, the Paperboard Division offers an abundant product lineup that is used in the publishing, food, confectionary, pharmaceutical, daily necessity and other wide-ranging fields. In 2010, the division commenced sales of coated duplex board rebirth 70 (PEFC), a product that uses both recycled pulp and certified forest pulp and is compliant with the Law on Promoting Green Purchasing.
Color board, chipboard	Color board is commonly used for general-purpose packaging and writing materials. Chipboard is used as a general-purpose packaging, mat board, interlining and other material and has a wide variety of product packaging uses including pharmaceutical and confectionary boxes.
Base paper for food containers	Base paper used for paper cups, paper plates, small liquid containers, and other food containers is produced in compliance with the Food Sanitation Act and the industry's own standards.

Product Category	Details
Specialty paperboard	SIKRA PAK, a highly water-resistant paperboard, was developed as a flagship product in the Paperboard Division's specialty paperboard product range. Recycled linerboard and corrugated medium is the principal raw material for SIKRA PAK, and as such it can be recycled as a paper product after use. SIKRA PAK has a variety of applications and can be used in sheet pallets, returnable containers, marine product packaging, election campaign boards and concrete panels. SIKRA PAK is also attracting wide acclaim for its environmentally friendly, lightweight and recycling properties.
Gypsum board base paper	The gypsum board base paper manufactured by the Paperboard Division offers outstanding adhesive, water absorbability, dimensional stability and other properties. Due to its consistent high quality, this product is attracting wide acclaim from customers. Boasting a broad spectrum of material and texture features, the division's gypsum board base paper lineup offers considerable flexibility according to each application and design.
Packaging paper	The Paperboard Division offers products for a wide array of needs. Examples include unbleached kraft paper used in heavy-duty sacks (for holding cement, rice, and other grains), square-bottom bags, and general packaging; and bleached kraft paper for shopping bags and envelopes.
Core paperboard	Core paperboard is used in a variety of rolled containers for storing and transporting paper, cloth, film, drawings, certificates of merit and related items. Harnessing technologies developed over a lengthy period, the Paperboard Division's core paperboard products are manufactured with an emphasis on strength and precision for long-term, reliable use.
Paper	The Paperboard Division manufactures a variety of products for printing, book, office, drawing and packaging use. Brands include the high-quality paper Nichirin A, high-quality lightweight-coated paper COSMO AIR LIGHT, book paper Kohaku, rough cream Kohaku and new chiffon cream, machine-glazed paper SHIROGANE and machine glazed bleached Capital Wrap.

contact with food in 2007. The Paperboard Division closely follows these voluntary standards and the policies outlined regarding production and details of prohibited chemical substances, identifying chemical ingredients in production processes and conducting safety inspections.

### Product Safety Initiatives

#### Attending to each issue through a variety of measures including close-knit technological cooperation, while providing pertinent information

The intended application is an essential factor in selecting the base paper for use in paper processed products. Amid the implementation of increasingly stringent safety and hygiene requirements, customers are also placing greater emphasis on the reduction of both costs and greenhouse gas emissions. At the same time, calls for more robust linerboard and corrugated medium with a lower base weight have become especially strong for use in container board boxes that serve a multitude of purposes, including transportation. In an effort to address these needs, the Paperboard Division is both evaluating and manufacturing new base papers. In addition to providing information regarding processing and utilization methods to customers, the division is also offering cooperation and support from a technological perspective, which includes invitations to view first-hand processing procedures.

Statutory requirements relating to the use of chemical substances in products differ depending on the application. At the same time, there is a growing number of companies implementing voluntary standards with respect to acceptable chemical substances in each field. The need to assess and confirm compliance is becoming increasingly vital. The Paperboard Division has appointed a designated officer to oversee its efforts in accurately and promptly addressing these needs.

### The Stable Supply of Products

#### Promoting stable supply and precise information based on systematic production

The paperboard products in the Paperboard Division are essential to a broad spectrum of fields including the packaging and distribution sectors.

In addition to a procurement structure that ensures high-quality, safe and reliable raw materials and fuels, the Paperboard Division has put in place facility maintenance systems to secure continuous and systematic production. Through these systems, it is endeavoring to fully address the needs of its customers by providing high-quality, safe and environmentally friendly products

on a stable basis. Every effort is also made to offer accurate and open product information including product labeling.

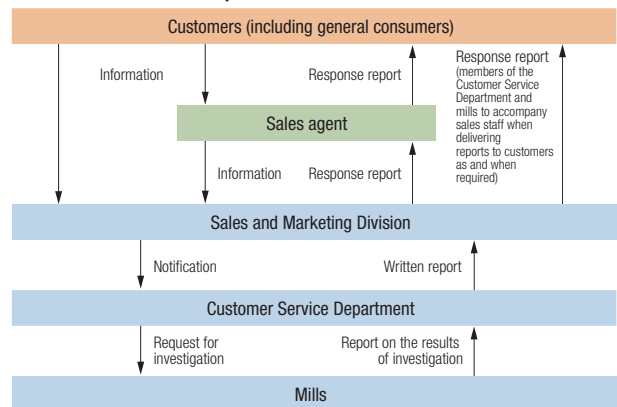
In the event of an earthquake or similar disaster, the division has established a backup system that entails coordination between mills. This serves to minimize any impact on the division's operations.

### Responding to Customers

#### Maintaining a system to address instances of product defects and customer inquiries appropriately

Details of product claims are channeled through sales representatives to the Customer Service Department. The Department then contacts the appropriate officer within each mill to ascertain the cause of the claim and to discuss appropriate countermeasures. A written report is prepared for the customer.

#### System for responding to defects, claims, requests for consultation and inquiries



### Product Development that Addresses the Needs of Customers

#### The Paperboard Division engages in the development of products that meet wide-ranging needs

In order to address the needs of such end users as soft drink manufacturers, who continued to call for lighter weight linerboard and corrugated medium made from recycled materials, the Paperboard Division developed a base weight reduction method. Employing this method, the division has been successful in reducing the volume of resources used as well as its environmental impact. Looking ahead, the division will continue to promote methods that reduce the base weight of container board in an effort to upgrade and expand its lineup of environmentally friendly products.

Note: As of October 1, 2013, the Paperboard Division was reorganized into the Containerboard Sales Division and the Duplex Board and Industrial Paper Sales Division. The information contained in this report is on the operations of the Paperboard Division through the end of September 2013.

# Activities of Nippon Paper Industries' Paper-Pak Division

With growing interest in food safety, the Paper-Pak Division is working to enhance safety and hygiene management and to ensure appropriate information disclosure.

## Business and Product Features and Basic Stance

### As a leading company in paper packaging for beverages

Nippon Paper Industries' Paper-Pak Division sells gable-top and brick-shaped paper containers for milk, juice, and other beverages, and sells and performs maintenance services for filling machines. It also manufactures and sells various other paper products such as outer boxes for tissue paper, baking paper and food wrapping films.

Furthermore, as a leading company with a large share of the market for paper packaging for beverages, Nippon Paper Industries supports the activities of industry organizations, such as The Japan Association of Milk Packaging and Machinery, and The Printers Association of Japan (Liquid Carton Subcommittee). The company ensures the quality and safety of its manufacturing processes in order to provide customers with safe products.

## Product Safety Management System

### Management audits production sites, ascertains current conditions of operations, and makes continuous improvements

In the Paper-Pak Division, a monthly Quality Assurance Committee meeting, chaired by the head of the division, checks the status of product quality, and sets and promotes quality-related policies. In addition, internal information is rapidly and widely shared through the Nippon Paper Group's "Product Safety Committee" and various departments, so as to build quality assurance systems that customers can trust.

The division discusses and implements quality improvement measures designed for greater effectiveness through monthly meetings between the division and the managers of the quality management sections of production companies, and in semi-annual quality assurance meetings attended by division representatives and production company executives.

The four production companies which make containers for liquids, have all obtained ISO 9001 certification and operate quality management systems based on this standard. All of the production companies undergo annual quality audits by a team which includes the division head, and pursue continuous quality improvement based on identified actual conditions (including the "5Ss"\*) in their production facilities. In addition to the quality audits, production companies also undergo food safety audits focusing in particular on measures for dealing with critical microorganisms, contaminants, and pest control.

\* The 5Ss are romanized abbreviation of five Japanese words—seiri, seiton, seiso, seiketsu, and shitsuke—which mean organization, tidiness, cleanliness, hygiene, and discipline, respectively. The 5Ss are used to maintain or improve workplace environments.



Quality audit at SOKA PAPER-PAK CO., LTD.



Using a filling machine to check carton quality at the Liquid Packaging Center

## Product management system





## Responding to Instances of Defective Products

### Preparing for unexpected situations

The Paper-Pak Division has created its Product Crisis Management Manual to address emergencies caused by the company's products. For emergencies arising from quality or other problems, this manual calls for: 1) Employees to directly inform the manager of the relevant sales department or the manager of the Paper-Pak Quality Assurance Department; 2) The Paper-Pak Quality Assurance Department to consult with relevant departments; 3) The subsequent convening of an emergency response meeting; and 4) The swift implementation of appropriate actions.

## Product Safety Initiatives

### Thorough implementation of HACCP-based\* health and safety management

To ensure food safety and confidence, the Paper-Pak Division complies with Japan's Food Sanitation Act and all other laws, regulations, and standards applying to paper containers for food and beverages.

The Division also incorporates HACCP concepts in the hygiene management of its production processes, monitors products with devices for detecting defects, and has introduced special clothing to prevent contamination of products. The Paper-Pak Division is constantly working to equip and enhance its production facilities in ways that promote stable quality, and health and safety.

#### \* HACCP

An acronym for Hazard Analysis and Critical Control Point, a health and safety management approach developed by the US National Aeronautics and Space Administration (NASA). The HACCP approach is used to identify and analyze all possible hazards at every stage of a food production process; specify management standards after identifying critical control points for preventing hazards; and constantly monitor, measure, and record compliance with standards in order to ensure product safety.

## The Stable Supply of Products

### Rapid disaster recovery based on a Business Continuity Plan (BCP)

The Paper-Pak Division has created its own business continuity guidelines and implemented a business continuity management (BCM) system to put in place a production system that will function in times of emergency and allow the division to continue the stable supply of products to customers, regardless of external circumstances. In particular, the division is moving ahead with plans for procurement from multiple manufacturers, especially for base paper, printing inks, and other key raw materials. It has also dispersed its paper container production facilities across

four production companies—two in Ibaraki Prefecture, and one each in Saitama and Hyogo prefectures—to lower its disaster risk exposure.

## Responding to Customers

### Proactive communication to gain customer confidence

For complaints, and investigation and other requests from customers, the relevant sales department acts as the main contact point, while the Paper-Pak Quality Assurance Department and production company quality management offices take the lead in carefully determining the nature of the situation at hand and responding as needed.

Customers are actively welcomed for inspections and tours of production companies to give them a first-hand view of production facilities and, thereby, gain their understanding of production activities.

The Paper-Pak Division conducts technical lectures 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.

## Product Development that Meets Customers' Needs

### Identifying customers' needs and recommending new packaging systems

The Paper-Pak Division strives day in and day out to gather information and perform R&D to provide new products that respond to diverse, ever-changing customer needs.

Of particular importance in recent years have been needs for eco-friendly products and products with universal design considerations. In responding to these needs, highly experienced personnel work with customers to create and test prototypes in repeated rounds of trial and error to develop new packaging systems.



New heat-resistant "OneWrap" food wrapping film made from the combination of polyethylene and polypropylene for improved heat-resistance and adhesion.



(Right) NP-PAK+R with a new shape  
(Left) Traditional NP-PAK

# Activities of Nippon Paper Industries' Chemical Division

Placing our highest priority on enabling customers to use our products with confidence, we strive to provide stable supplies of products used in a wide range of applications.

## Business and Product Features and Basic Stance

**Listen to our customers' feedback,  
Take into account the customers' perspective,  
And strive to make products that satisfy customers' needs**

The Chemical Division of Nippon Paper Industries, the only sulfite pulp manufacturer in Japan, produces many original functional products. Its business approach is to develop as wide a range of applications for wood biomass as possible.

These products are used for various purposes in many fields. Carboxymethyl cellulose made from dissolving pulp, for example, is used as a binding agent. Black liquor, which is a byproduct of pulp manufacturing, is used in concrete admixtures and other lignin products, nucleic acid and yeast products. Functional coating resins are used as an anchoring agent in the painting of automobile bumpers. And functional films, which create coating layers with high degrees of hardness, are used as surface films for LCD panels. All of these examples demonstrate the Chemical Division's philosophy at work. We listen to our customers' feedback, take into account their perspectives, and strive to make products that satisfy customers' needs.

### Product overview

Product	Description
Dissolving pulp	Dissolving pulp contains a high concentration of cellulose and is used for manufacturing rayon, cellophane and cellulose derivatives.
Lignin products	Lignin products are used as an admixture for mortar and concrete, binder, dispersant and other purposes as well.
Carboxymethyl cellulose (CMC)	CMC is used in food, cosmetics, construction materials and batteries.
Cellulose powder (CP)	Approved as a food additive, CP is used in food and supplements.
Stevia and licorice	Stevia and licorice products are natural sweeteners extracted and refined from native plants, and are used in beverages, pickles and other food products.
Nucleic acid, yeast, and yeast extracts	The results of cultivation skills we have developed over our long history, these products are used in seasonings, food and animal feed.
Functional coating resins	Functional coating resin is an additive for paints, inks, and adhesives. It is used in vehicles, buildings and packaging films.
Functional films	Optical functional films processed with the latest clean coating technology and under strict quality controls are used on televisions, personal computers, smartphones and other types of mobile devices.

## Product Safety Management System

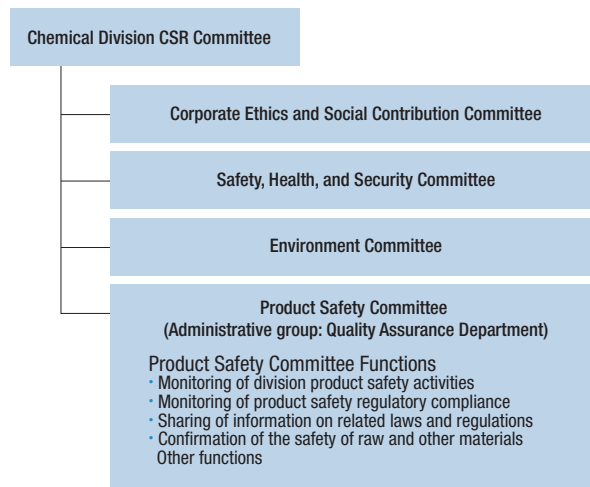
**Advancing safety activities applying the Quality Management System (QMS)**

In July 2011, the Quality Assurance Department was created in the Chemical Division in order to strengthen quality assurance and product safety management systems.

Each mill has acquired ISO 9001 certification and has created a quality assurance structure that applies a quality management system. While working to deliver stable quality in line with customer demands, they also pay strict attention to the details necessary for preventing product accidents.

Internal controls for ensuring product safety include the holding of the Product Safety Committee, as a subcommittee function of the Chemical Division CSR Committee; confirmation of the details of regulatory revisions, and consideration of improvements based on identified product safety risks; and internal dissemination of information on matters including accidents at other companies and measures for prevention.

### Product safety management organization



## Product Safety Initiatives

**Relevant units work together to provide customers with swift responses and accurate information**

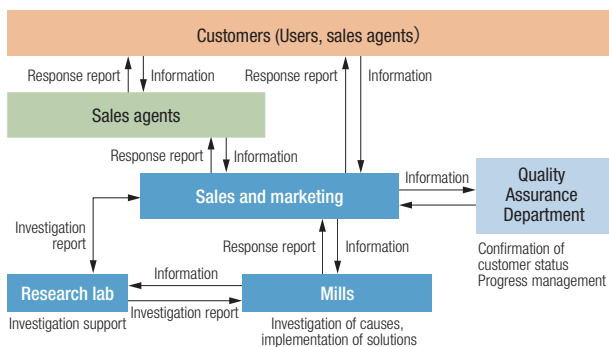
For customer complaints, sales departments act as the primary points of contact. When a sales department receives a complaint, it informs the relevant production facility, which then takes the lead in rapidly responding to the complaint. Steps to prevent recurrences of problems resulting in customer complaints are taken by applying ISO9001-compliant systems to consider, implement, and confirm the effectiveness of corrective actions.

All necessary steps are taken to ensure the safety of customers and their property, and prevent environmental damage. In cases where a product safety problem arises despite these steps, the

Chemical Division is prepared to act by convening an emergency meeting of the Product Safety Committee to solve the problem.

Regarding responses to product inquiries, relevant departments (i.e. sales, production, research, and quality assurance) work together to ensure that customers are provided with accurate information.

### Framework for handling customer inquiries, complaints and claims



### The Stable Supply of Products

#### Striving to provide the required amount of our products to customers at the required time

The Chemical Division works with other divisions to provide customers with the amounts of products they need, when they need them.

It focuses on securing stable procurement of raw materials, and systematically maintains and upgrades production facilities to ensure stable production. The sales department and production unit coordinate their activities to provide customers with reliable supplies of products by developing flexible production plans that avoid waste, and managing inventories appropriately.

In addition to delivery dates and amounts, consideration is given to providing satisfactory quality. We conduct two types of quality audits in order to ensure consistent and high-quality production. One audit is internal and the other is cross-organizational.

### Responding to Needs

#### Systems for responding to customer needs

In responding to quality needs that change on a daily basis, the Chemical Division considers improvements that encompass even existing products.

Information on customer needs is gathered not only through normal sales activities but also through Technical Service Activities

in which production, quality assurance, and research personnel visit customers. We have systems for organizing experience and other information accumulated over the years, and act swiftly for the customers' satisfaction.

All points and concerns raised by users are taken into consideration to maintain stable quality. For functional film products, we collect customer satisfaction data through customer surveys. These are used as an indicator of our performance in serving customer needs.

### Product Development that Reflects Customers' Needs

#### Ongoing development and improvement of products to meet changing quality demands

Responding to customer demands, the Chemical Division has further enhanced its refining capabilities and commenced manufacturing high-concentration cellulose products.

Carboxymethyl cellulose, a water-soluble polymer commonly used as a construction material in civil engineering and other construction projects, is now being used in food products and lithium-ion batteries as well. The products in which carboxymethyl cellulose is used are very intolerant of impurities, and require uniform solubility and special physical properties, so we are working to achieve further quality improvements while meeting customers' needs.

Functional coating resins are primarily made of chlorinated polyolefin resin. They are used in automobile paint, printing ink, adhesives, and a wide range of other applications due to their high adhesiveness to polypropylene. One point that has been raised regarding their use is their impact on the environment. In response, we have been developing non-chlorinated materials and water-dispersible products, which are more environmentally friendly.

Functional film products are used in LCD panels and, with smartphones as a prime example, LCDs are being made with ever-greater resolution. Customers, therefore, require not only that the hardcoat layer be free of scratches and other defects but also that it be improved with subtle optical properties. And the Chemical Division continues to make the required improvements.



Example application for functional coating material



Example application of a functional film product

# Activities of Nippon Paper Crecia Co., Ltd.

Concentrating on customers' perspectives in the development of easy-to-use products while strengthening the product safety management system

## Business and Product Features and Basic Stance

### Leveraging our position as a manufacturer to support clean and comfortable lifestyles

Nippon Paper Crecia provides individual consumers with family care products such as facial and toilet tissues as well as health, nursing and toilet care products. The company also offers professional products which are mostly for business use. Through such brands as Kleenex®, Scottie®, Poise®, and Acty®. Nippon Paper Crecia has attracted a popular following in personal care and hygiene products.

Providing safe and high-quality products is part and parcel of the company's efforts to deliver a clean and comfortable lifestyle to our customers. In order to supply products of an even higher quality, Nippon Paper Crecia listens to its customers and engages in research and development that focuses on addressing customer needs.

## Product Safety Management System

### Striving to address customer concerns in a proper and timely manner while further enhancing quality

The company has established the Product Safety Committee in order to engage in product safety risk management. Complementing this initiative, the Customer Service Office was relocated adjacent to the President's Office. By ensuring that customer claims are conveyed directly to the president, Nippon Paper Crecia is reinforcing its crisis management framework.

In March 2012, the Quality Assurance Department was placed within the Marketing Division and positioned as the Quality Assurance Group of the Product Development Department. With this initiative, the company has put in place a system that is not only deeply involved from the product design stage, but is also capable of promoting product safety risk management throughout each stage of the product life cycle from development through production to shipment in a timely and effective manner. In addition, the Quality Assurance Group takes the lead in implementing quality audits at each mill while also conducting inspections to confirm quality at OEM companies. Through these and other means, Nippon Paper Crecia is working to ensure increased product quality and stability.

### Product safety management system



### • Responding to instances of defective products

The Quality Assurance Group serves as the point of contact for all instances of defective products. While coordinating with relevant mills, the sales and marketing, distribution and all other appropriate departments, the Quality Assurance Group addresses each incident in a proper and timely manner. In addition to collating all appropriate information, the Quality Assurance Group formulates countermeasures after determining the degree of urgency and severity. An emergency countermeasures task force, made up of executive management and the general managers of all relevant departments, is established for incidents that are considered extremely urgent and severe.

### • Acquiring quality management system certification

In addition to acquiring ISO 9001 certification at its Tokyo Mill in February 2009, Nippon Paper Crecia has incorporated ISO 9001 procedures into its quality management system.

## Providing Relevant Product Information

### Ensuring proper labeling, advertising and information disclosure in accordance with statutory requirements

Nippon Paper Crecia adheres strictly to all relevant statutory and regulatory requirements including Japan's Household Goods Quality Labeling Act and the Law for Preventing Unjustifiable Extra or Unexpected Benefit and Misleading Representation, as well as industry standards. In this manner, the company takes steps to prevent erroneous labeling and advertising that may lead to misrepresentation. The Sales and Marketing Division's Intellectual Property Department and the Quality Assurance Group play a central role in both monitoring and verifying the accuracy of product labeling and advertising, while the Customer Service Office deals directly with inquiries relating to the features of each product and how products are used. In addition, the company has established a page on its website to explain its products and field inquiries.



Explanations and details of products posted on the company's website

## Responding to Customers

### Responding sincerely to ensure that customers are fully satisfied

Contact details for the Customer Service Office are displayed on all products. This helps customers to more easily direct their concerns to the company and to address any instances of defective products. The company's website is also configured to accept customer queries and comments. Nippon Paper Crecia consistently acts in good faith whenever its products are a cause for customer inconvenience. Every effort is made to ensure that customers are fully satisfied.



The Customer Service Office

### Basic philosophy and policies toward addressing customer claims (formulated on July 15, 2002)

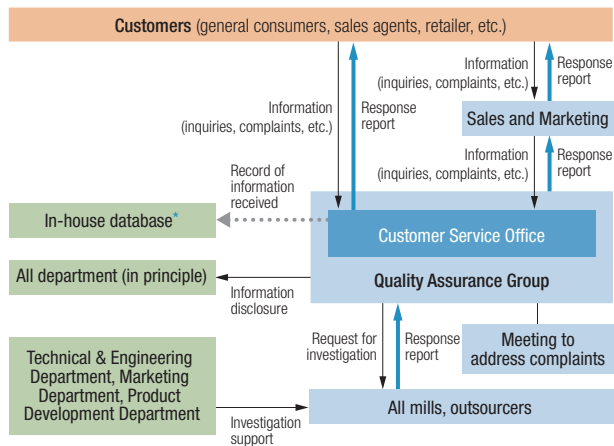
#### Basic Philosophy toward Addressing Customer Claims

Nippon Paper Crecia gives the highest priority to addressing customer claims in a sincere and timely manner. The company takes seriously the comments of its customers which are consistently reflected in efforts to improve products and services.

#### Basic Policies

1. The company positions efforts to address customer claims as one of its highest priorities.
2. The company maintains a deep respect for the interests of customers when addressing each claim.
3. Drawing on the collective strength of the organization as a whole, the company takes full responsibility until each customer claim is resolved.
4. Each claim is addressed without prejudice and in an open and fair manner irrespective of the details offered by the customer.
5. Every emphasis is placed on statutory compliance with unreasonable requests handled in a resolute manner.
6. Recognizing that customer comments are an invaluable source for improving the quality of its products and services, the company listens intently to the voice of its customers.
7. Every effort is made to stringently protect the personal information of customers.

### Framework for handling customer inquiries, complaints and claims



\* The recording of information received in the company's in-house database is strictly handled in accordance with the company's rules on the management of personal information.

## The Stable Supply of Products

### Supplying safe products through a nationwide network of four mills

Both facial and toilet tissues are items that are essential to daily life. Nippon Paper Crecia maintains a nationwide product supply network of four mills located in Saitama, Kanagawa, Shizuoka and Kyoto. Each mill takes great pride in delivering products that engender peace of mind. The company also maintains an emergency network in the event of an earthquake or other natural disaster.

## Product Development that Addresses the Needs of Customers

### Developing high-quality, easy-to-use products

In response to customer needs, Nippon Paper Crecia engages in product development activities that focus on enhancing both quality and added value. At the same time, the company pays equal attention to ease-of-use and environmental concerns.

For those products that are difficult to carry home or bulky, Nippon Paper Crecia has established an online shopping site. The company is taking steps to upgrade and expand its lineup of online products.

### Product development in response to customer needs



Poise® Pads Super Slim, 20 Pads



Kleenex® Lotion Tissue X



Scottie® Wet Guard Sanitizing Wet Towel, 80 sheets

# Activities of Nippon Paper Papyrus Co., Ltd.

Addressing diverse needs and winning the trust of customers by establishing a system that can accommodate high-mix, small-lot production, delivering highly functional, quality products and ensuring stable supply

## Business and Product Features and Basic Stance

### Responding to diverse customer needs through a flexible production system

Building on its craftsmanship nurtured over many years, Nippon Paper Papyrus handles a variety of specialty paper products in the thin paper field. The company's product lineup includes cigarette-related paper, thin printing paper, back carbon copying paper and processing base paper. In addition to its paper making technologies, which use a mix of wood pulp, non-wood pulp and synthetic fibers, Nippon Paper Papyrus is proud to also offer such diverse processing techniques as impregnation, coating, and thermal and crepe processing. Drawing on these technologies and techniques, the company continues to develop and market a vast array of unique, highly functional and specialty papers.

Nippon Paper Papyrus places customers' needs at the heart of its operating activities. To this end, production lines are designed, focusing on operating reliability, the flexibility to accommodate high-variety, low-volume production, safety and workability. Through advanced automation, the company is well positioned to efficiently produce stable quality products. At the same time,



Specialty paper

Nippon Paper Papyrus places considerable weight on efforts to improve its delivery capabilities.

### Major products of Nippon Paper Papyrus Co., Ltd.

Category	Details
Cigarette-related paper	Cigarette paper, filter plug wrapping paper, filter tipping paper
Thin printing paper	India paper, paper for lists of stipulations, paper for statement of virtues, ultra-lightweight coated printing paper, bulky paper
Copying paper	Back carbonizing base paper
Processing base paper	Releasing base paper, waxed base paper
Functional and specialty paper	Water-soluble paper, water absorbent paper, oilproof paper, waterproof paper, powder paper, various filter papers, heat sealable paper, tape base paper, specialty printing paper, wiper paper

## Product Safety Management System

### Standing at the forefront of the paper industry, Nippon Paper Papyrus has acquired ISO 9001 certification and is strengthening its quality assurance system

Taking the industry lead in quality, Nippon Paper Papyrus acquired ISO 9001 certification at its Suita Mill in 1992. The company then took steps to acquire certification at its Harada and Kochi mills, putting in place a robust companywide quality assurance system.

Companywide technology and quality meetings are held each month to deliberate on issues relating to production technology and quality assurance. With a shared understanding, Nippon Paper Papyrus continues to operate its quality assurance system.

### ● Ensuring product safety management in accordance with statutory requirements and industry standards

Nippon Paper Papyrus has formulated a Product Safety Charter. Guided by this charter, the company maintains and promotes comprehensive product safety, taking into consideration product features and disposal with a view to protecting the global environment as well as operating safety. Included in the charter are the company's product safety policies. These policies provide specific guidelines for the direction and implementation of product safety activities.

The Product Safety Committee, which has been established to help promote product safety activities in general, makes policies while managing activity progress. The committee also oversees the proper use and management of chemical substances and raw materials at mills and research laboratories. In this manner, every effort is made to ensure that the company complies with all relevant statutory requirements including the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., and the PRTR Law. With respect to such food wrapping products as oilproof and tea filter paper, Nippon Paper Papyrus engages in production that conforms to the Food Sanitation Act and industry voluntary standards.

As a member of the Nippon Paper Group, Nippon Paper Papyrus is conscious of its role in society, and shies away from any activity that would betray society's trust. Therefore, through training, Nippon Paper Papyrus is endeavoring to raise compliance awareness among directors and employees.

### Product Safety Policies

(Formulated on June 30, 1995, and revised on April 1, 2004)

1. The company positions the pursuit of safety at the heart of its basic business philosophy. To this end, the company has established and continues to observe specific product safety standards that help prevent the distribution of defective products.
2. With the underlying goal of maintaining and pursuing product safety, the company draws on the collective strength of its technological capabilities and strives diligently to prevent any injury or inconvenience to its customers as a result of a defective product.
3. To achieve this goal, the company strictly manages product safety. Stringent measures are taken to confirm product safety as a part of efforts to improve new product development, quality and processes. The company also closely monitors product safety to ensure that appropriate standards are maintained.
4. The company supplies its customers with safe products while steadfastly providing information to ensure that standards are maintained.

## Product Safety Initiatives

### Sharing information on problem issues and countermeasures in a timely manner

- **Responding to instances of defective products**

Instances of defective products are addressed in accordance with product complaint handling rules and regulations. Incidents of a severe nature that can be attributed to the company's products are resolved in a timely manner through collaboration between the responsible sales and marketing department, the Quality Assurance Department and all other related departments. The utmost priority is placed on addressing and satisfying the requirements of customers. Information relating to problem issues and countermeasures is forwarded from the company's head office Technology & Quality Assurance Departments and shared with the president, mills and relevant in-house departments.

- **Providing pertinent product information**

Nippon Paper Papyrus strives to consistently respond to customer inquiries. To this end, all relevant product departments coordinate with the appropriate departments within the company. The company has also established a page on its website to provide readers with individual products details and to field customer inquiries.

#### Customer service response center by inquiry

Nature of inquiry	Customer service response center
Cigarette-related paper inquiries	Tobacco & Industrial Paper Sales Department
Thin printing paper inquiries	Paper Sales Department
Functional paper inquiries	Special Products Marketing Department
Specialty paper inquiries	Specialty Paper Sales Department
General quality inquiries	Technology & Quality Assurance Department

## The Stable Supply of Products

### Promoting the decentralization of production bases while ensuring stable raw materials procurement

From a risk management perspective, Nippon Paper Papyrus strives to secure stable access to wood pulp, non-wood pulp and other primary raw materials from multiple suppliers to ensure the stable supply of its products. In addition, the company is moving forward with plans to produce some of its functional, specialty, and cigarette-related papers at two different mills—the Harada Mill, in Shizuoka Prefecture, and the Kochi Mill, in Kochi Prefecture—to ensure stable supplies of these products.

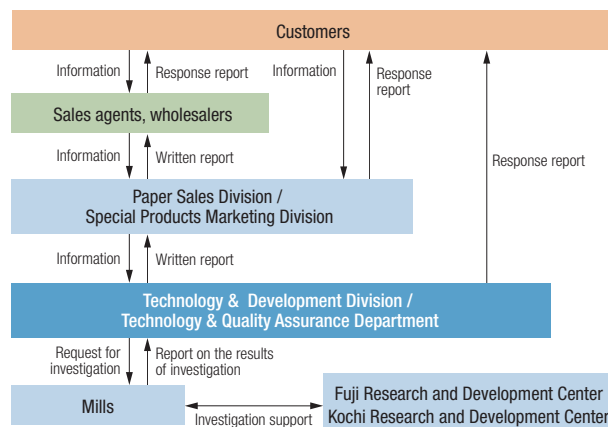
## Responding to Customers

### Facilitating prompt response to customer inquiries through collaboration between departments

At Nippon Paper Papyrus, officers responsible for sales and marketing take the lead in addressing customer complaints, requests for investigation and inquiries. Through a process of collaboration between sales and marketing, technical and engineering and development and research departments as well as mills, every effort is made to reply in a timely manner.

Moreover, officers responsible for sales and marketing as well as quality assurance call on printing and other companies. Information obtained through this process of onsite inspection on the status of consumption is used to further improve quality and to boost new product development.

#### Framework for handling customer inquiries, complaints and claims



## Product Development that Address the Needs of Customers

### Responding to changing needs by upgrading and expanding technical services

Nippon Paper Papyrus acquired CoC certification under the FSC®\* and PEFC programs in May 2007. CoC certification is a worldwide system that certifies that the products from certified forests have been properly processed and distributed.

Adhering to the requirements for certification, the company's Harada and Kochi mills engage in the procurement of resources from certified forests. These resources are then used in the development of products, which are sold to the market. Harnessing its inherent strengths, Nippon Paper Papyrus promotes wood resource conservation by steadily reducing the weight of products. In this context, the company is actively addressing the need for environmentally friendly products.

\* FSC® Logo License No. FSC-C005984

# Activities of SHIKOKU COCA-COLA BOTTLING CO., LTD.

Everything to please customers

## Business and Product Features and Basic Stance

**We deliver moments of refreshment for anyone, anytime, and anywhere, and grow along with communities we serve**

SHIKOKU COCA-COLA BOTTLING manufactures a variety of Coca-Cola beverages for people in four prefectures of Shikoku, Japan.

As a member of the communities it serves, SHIKOKU COCA-COLA BOTTLING encourages active and healthy living among the people of Shikoku through its beverage business. In addition to its social contribution activities, which focus on environmental protection and the promotion of sporting and cultural pursuits, SHIKOKU COCA-COLA BOTTLING works diligently to fulfill the expectations of a wide variety of stakeholders. In this context, the company actively promotes information disclosure and strives to create a workplace that is both comfortable and rewarding for its employees. Endeavoring to become a trusted and integral member of society, SHIKOKU COCA-COLA BOTTLING engages in activities that help us continue to pursue growth along with the community and fulfill its corporate social responsibility as part of the Nippon Paper Group.

## Basic Policies on Customer Satisfaction

(Entirety of the Coca-Cola system)

We are the Coca-Cola system.  
We strive to be an organization that delivers refreshment and satisfaction to everyone who comes into contact with the Coca-Cola brand, and, through all of our business activities, to be an organization that is trusted and chosen by customers.

### Code of Conduct

1. We sincerely listen to what customers have to say, strive to respond with fairness, equity, and transparency, and take swift, appropriate action.
2. We value dialogue with our customers, engage in the active provision of information, and reflect customer feedback in our business activities.
3. We are conscious of our responsibilities to society, and comply with relevant legal and ethical demands, and voluntary standards.
4. We are constantly focused on customer satisfaction and do everything we can to improve it.

## The KORE Management System

**Practicing more stringent management than international standards**

The Coca-Cola system practices operational management based on the Coca-Cola Operating Requirements (KORE), a proprietary management system used throughout its global operations. KORE encompasses all of the standards for quality, product safety, the environment, and occupational health and safety for every operational process, starting with ingredient procurement, continuing through production, distribution, transportation, and sales, and ending when our products reach consumers. The KORE system satisfies the requirements of ISO standards and applicable laws and regulations, and even includes more stringent voluntary standards.

Certification bodies assess our performance against the various standard requirements at least once a year. This objective evaluation from a third-party organization ensures that the Coca-Cola system's KORE management system operates in a fair and equitable way.

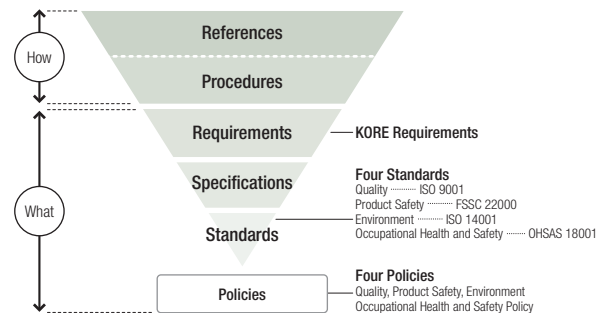
## Coca-Cola (KO\*) OPERATING REQUIREMENTS

"Coca-Cola Operating Requirements" are commonly referred to by the acronym "KORE."

\* "KO" is an abbreviation for the Coca-Cola Company, whose shares are publicly listed on the New York Stock Exchange.



### Architecture of the KORE Management System





**The first company in Shikoku to acquire FSSC 22000 certification in December 2010**

The Komatsu No.2 Plant, owned and operated by SHIKOKU COCA-COLA PRODUCTS CO., LTD., was the first production facility of any company in Shikoku to acquire FSSC 22000 certification, the recognized standard for product safety.

The FSSC 22000 product safety benchmark incorporates PAS 220, the underlying precondition of ISO 22000, and is also one component of the GFSI certification scheme\*. The company has taken steps to acquire ISO 22000 certification since 2008. Recognizing that this particular standard was not acknowledged under the GFSI certification scheme, the company accordingly shifted its efforts toward acquiring FSSC 22000 certification. As a result, SHIKOKU COCA-COLA PRODUCTS CO., LTD. was the first company in Japan to acquire FSSC 22000 certification in 2010. Moving forward, all 28 bottling plants managed under the Coca-Cola system had completed steps to acquire FSSC 22000 certification by March 2011.

**\* The GFSI certification scheme**

The Global Food Safety Initiative (GFSI) is a worldwide food safety framework established to promote and continuously improve uniform international standards with respect to the conduct of food plant and farm inspections and surveys while at the same time strengthening the confidence of consumers. The food service, restaurant, retail, and related manufacturing sectors are increasingly working to acquire international certification under schemes acknowledged by the GFSI benchmark. The Consumer Goods Forum, a leading organizational structure for the GFSI, and comprised of approximately 650 international companies of which around 80 are domiciled in Japan, interact to uncover ways in which to increase efficiency across the entire supply chain as well as consumer needs.

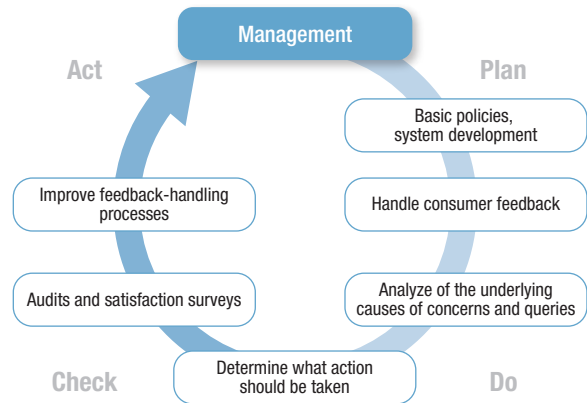
**Initiatives Aimed at Enhancing Consumer Satisfaction**

**The ISO 10002 (JIS Q 10002) standard**

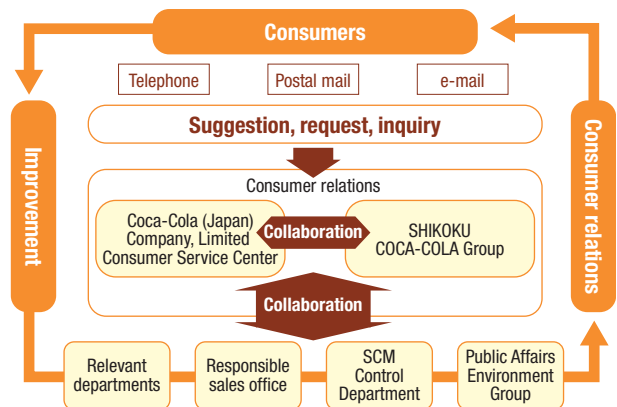
ISO 10002 is an international standard for continuously improving product and service quality, and complaint-response processes, in the interest of increasing consumer satisfaction. Its provisions call for the use of management systems based on the PDCA (Plan→Do→Check→Action) cycle.

Because there is no certification system in which third-parties perform inspections, companies themselves can determine whether they have met the requirements of the standard and announce their self-determined compliance. The Coca-Cola system, however, voluntarily undergoes compliance evaluations by third parties and announces its compliance status only after receiving third-party opinions.

**ISO 10002: 2004 management system PDCA cycle**



**Framework for handling consumer inquiries, complaints and suggestions**



**Environmentally Friendly Products and Packages**

**● ecoru Bottle Shiboru light-weight bottle for water products released**

The lightest PET bottle in Japan was adopted for use on May 18, 2009, and is now being used for the / LOHAS water brand.

**Features of the lightest bottle**

**Japan's lightest bottle at 12 g, employing semi-transparent cap**

- The first-of-its-kind semi-transparent cap for a Coca-Cola system product
- The lightest cap in Japan for bottles in this size

**Weight around the neck section is 20% lighter than previous bottles**

**Easy-to-remove wrap-around label**

- Wrap-around label as opposed to the conventional shrink label
- Easy removal without the need for tearing along a perforated line
- Substantial reduction in the amount of resin used due to smaller size and lighter weight

**Upsized 555 ml bottle\***

- Reflecting consumer calls for a little more than the standard 500 ml size

\* Responding to diverse consumer demands, we have also introduced smaller, 280 ml and 340 ml, product sizes in lightweight PET bottles.



# Development of Environmentally Friendly Products

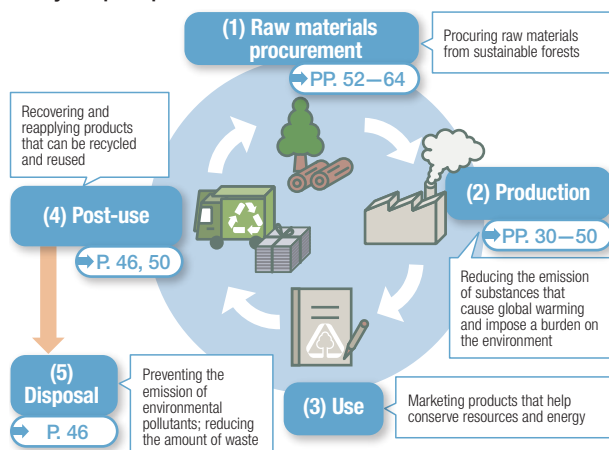
Actively developing products that help reduce environmental impact

## Basic Stance

### Engaging in development that incorporates environmental concerns throughout the entire product lifecycle

The Nippon Paper Group is engaged in a wide variety of business activities that utilize wood as a raw material. Wood is a resource that can be renewed through a process of photosynthesis. Wood-based products are environmentally friendly and contribute to the creation of a sustainable society. In addition, the Nippon Paper Group takes into consideration environmental concerns across every stage of the product lifecycle from the procurement of raw materials through production to use and product disposal. The Group's efforts at each stage of the product lifecycle from (1) to (5) are depicted in the following diagram. Moving forward, the Nippon Paper Group is committed to developing environmentally friendly products and at the same time contributing to an affluent society.

### Points of environmental concern from a product lifecycle perspective



## Environmentally Friendly Raw Materials Procurement

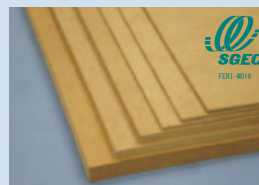
### Procuring raw materials from sustainable forests

The Nippon Paper Group procures woodchips and other raw materials for paper from sustainable forests that are managed taking into consideration environmental and social concerns (see pages 54–57). In addition, the Group is endeavoring to revitalize Japan's forests by actively utilizing domestic timber wherever possible.

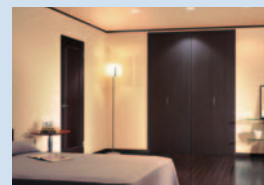
### Case SGEN certified MDF using 100% domestic timber (Nippon Paper Lumber Co., Ltd.)

In March 2011, N&E Co., Ltd., a Nippon Paper Lumber Co., Ltd. subsidiary, was the first company in the industry to manufacture and market SGEN (see page 55) certified Medium-Density Fiberboard (MDF), made from 100% domestic timber.

The use of timber produced in Tokushima Prefecture is helping to revitalize local forests. Furthermore, the application of raw materials accredited under the SGEN system, a certification system initiated in Japan, encourages environmentally friendly procurement.



SGEN certified MDF



An example of the product used in construction

### Case “Kininaru Kami copy paper” made with wood from forest thinning operations in Kyushu (Nippon Paper Industries Co., Ltd.)

Since 2009, the “Kininaru Kami” product series has been promoted by the Kyushu Regional Forest Office, eight prefectural governments (seven in Kyushu, plus Okinawa), paper companies, paper retailers, and others participating on a committee for the advancement of a movement aimed at generating popular support for the invigoration of Japan's forest industry. This movement seeks to return a portion of the revenue from sales of products using wood from forest thinning operations to forest owners to promote forest management, invigorate the forest industry and mountain villages, and help stop global warming.

Nippon Paper Industries' “Kininaru Kami copy paper,” which was introduced in July 2013, is made by the company's Yatsushiro Mill, in Kyushu, with wood from forest thinning operations in Kyushu. The product package carries the “Kininaru Kami” series name in prominent characters, together with a map of Kyushu and a likeness of



Kumamon, Kumamoto Prefecture's PR mascot, all to emphasize the product's “made in Kyushu” origins.

Packaging emphasizing that products were “made in Kyushu”

## Environmentally Friendly Production

### Promoting the reduction of emissions that impose a burden on the environment and minimizing the use of raw materials

The Nippon Paper Group strives to reduce the emission of greenhouse gases and other substances that impose a burden on the environment as a key endeavor at the production stage (see pages 38 to 41 and pages 46 to 49).

At the same time, the Group works diligently to develop technologies that minimize the use of raw materials while achieving the same quality.

#### Case Developing lower base weight linerboard and corrugated medium (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries has developed technology for reducing the base weight of linerboard and corrugated medium that goes into the container board boxes used by major beverage manufacturers for canned coffee and other products. This new technology reduces the amount of raw material needed for linerboard by 25%. Looking ahead, the company aims to expand its line of eco-friendly products by working to reduce the base weight of cardboard corrugating medium, as well.

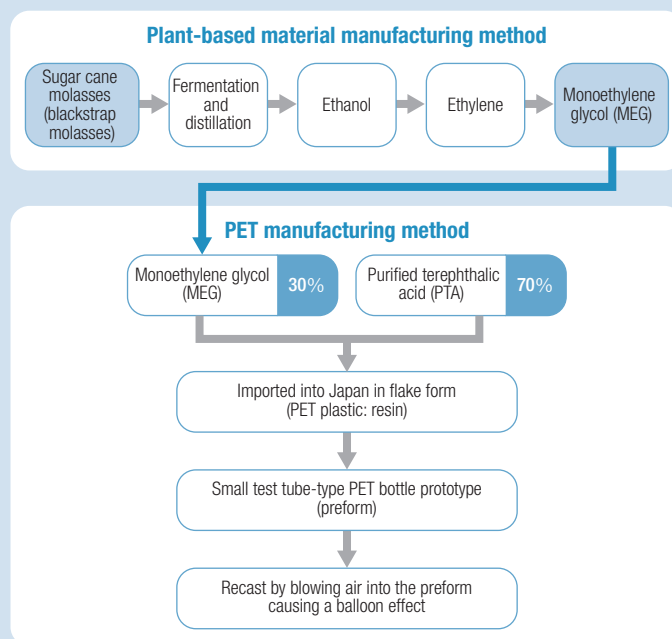
#### Case Continued improvements in environmentally friendly PET bottles (SHIKOKU COCA-COLA BOTTLING CO., LTD.)

*PlantBottle*, a next-generation PET bottle that uses between 5 and 30% renewable plant-based materials, was introduced to Japan in 2009 and used for the entire product range (280 ml, 340 ml, 555 ml, and 1,020 ml) of *LOHAS* water brand beverages. *PlantBottle* packaging is made through a purifying process and the effective use of such materials as sugar cane and molasses, a sugar byproduct. This use of plant-based materials helps reduce the reliance on petroleum, an exhaustible resource. Moreover, *PlantBottle* is identical to conventional PET bottles in terms of shape, weight, and strength. In addition to ensuring product safety, *PlantBottle* can also be fully recycled at existing PET bottle recycling plants.



*PlantBottle*

### PlantBottle manufacturing method



## Environmentally Friendly Utilization

### Developing products that help conserve resources

Conserving energy and resources are important considerations during the use of products. The Nippon Paper Group strives to develop products that reduce amount used while at the same time endeavoring to satisfy the needs of users.

#### Case “Scottie® Fine” reusable paper towels, 61 sheets in each roll (Nippon Paper Crecia Co., Ltd.)



Nippon Paper Crecia offers a washable, reusable paper towel combining the durability of cloth and absorbency of paper. A single sheet, therefore, could be used to clean dishes, cutting boards, tables, and other surfaces in the kitchen. The ability to wash and reuse these paper towels saves resources and reduces waste.

Scottie® Fine  
61 reusable paper towels in each roll

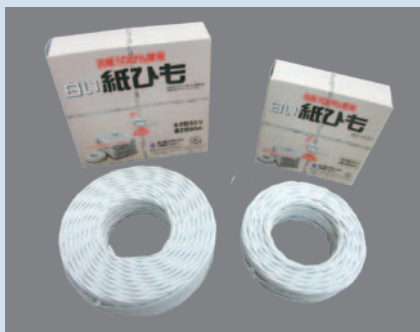
## Environmentally Friendly Handling after Use

### Promoting the use of recycled paper

The Nippon Paper Group markets a wide variety of products made from recycled paper.

#### Case White paper string made from recycled paper (Kitakami Paper Co., Ltd.)

Utilizing white paper string, made from recycled paper, as an alternative to polyester string, which cannot be recycled, helps reduce the amount of waste. This initiative is driven by the growing number of municipalities that prohibit the use of polyester string to tie together used paper including newspapers in an effort to curtail waste disposal expenses.



White paper string

#### Case Election campaign poster notice boards from recycled paper (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries has developed and currently markets, *SIKRA PAK*, a highly water-resistant paperboard made primarily from recycled paper. In addition to sheet pallets and the packaging of marine products, *SIKRA PAK* is used as an alternative to the mainstream wooden election campaign notice boards.



An election campaign notice board made from *SIKRA PAK*

#### Case Insulation made mainly from recycled newspaper Super Jet Fiber, a heat insulation material (Nippon Paper Lumber Co., Ltd.)

Nippon Paper Lumber manufactures Super Jet Fiber, a heat insulation material for home use, that is primarily made of recycled newspapers. In general terms, the manufacture of this product requires only one-seventh of the energy necessary for the production of more commonly used glass fiber insulation materials. The average house uses



Super Jet Fiber (insulator)

approximately 1.5 tonnes of heat insulation materials. On a morning paper subscription basis, this equates to about 20 years of recycled newspapers for one household.

## Environmentally Friendly Disposal

### Providing products that impose less burden on the environment at the time of disposal

Reducing the amount of waste, enhancing recyclability and promoting easy waste disposal are all important considerations at the disposal stage of each product. While the wood material-based products supplied by the Nippon Paper Group are believed to impose a relatively small burden on the environment at the disposal stage, every effort is being made for further environmentally friendly disposal.

#### Case KC FLOCK powdered cellulose made from wood pulp (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries markets KC FLOCK, the brand name for the company's powdered cellulose made from wood. Cellulose is a food fiber that is not harmful to humans. Biodegradable and easily incinerated, cellulose is used extensively in food, cosmetics, filter aids and other fields. As a filter aid, KC FLOCK is much easier to incinerate compared with the more conventional diatomaceous earth. This helps to significantly reduce waste. In addition, when processing liquids that contain rare metals, the KC FLOCK is able to catch the rare metals which can then be easily recovered to reuse after incineration of the KC FLOCK.



KC FLOCK

# Human Rights, Employment and Labor Responsibility



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# Policy and Management

Building a healthy and safe workplace environment in which employees, who serve as the driving force behind the Group's corporate activities, can take full advantage of their individual capabilities while conforming to the highest ethical standards

## Basic Stance

### Placing the utmost emphasis on the optimal application of a diverse pool of human resources while adhering strictly to a policy of safety and disaster prevention

The Nippon Paper Group respects human rights in every aspect of its business activities and aims to develop a working environment that makes the most of a diverse range of human resources. Recognizing the important standing and role played by human resources, a company should work in partnership with its employees to secure mutual growth. In utilizing a diverse workforce, the Nippon Paper Group therefore places considerable weight on building a fair evaluation and compensation system as well as education and training programs that help employees reach their full potential.

While the Nippon Paper Group's production sites use heavy machinery and engage in operations that are inherently dangerous, every effort is made to maintain and enhance safe working environments and to take all appropriate measures to ensure safety and to prevent disasters.

## Philosophy and Basic Policy

### Respecting fundamental human rights and working to be a company where employees can look to a better future

In order for the Nippon Paper Group to gain the trust of society and to adequately fulfill its responsibilities, each and every Group employee must act with a high sense of moral standards and strong motivation. The Group, therefore, bears important responsibilities in terms of promoting employee awareness and behavior consistent with that principle, helping individual employees improve their

capabilities, and rewarding them for their performance.

Taking all this into consideration, the Nippon Paper Group established its Philosophy and Basic Policy on Human Rights, Employment and Labor.

In addition, the Group joined the United Nations Global Compact in November 2004 and supports its 10 principles (see page 21), which fall under the categories of human rights, labor, environment, and anti-corruption.

## Education and Training with Respect to Human Rights

### Implementing appropriate personnel policies

The Nippon Paper Group, in its efforts to exercise appropriate personnel management cognizant of human rights, pursues initiatives such as having the employees responsible for personnel matters participate (on a company, mill, or works basis) in training courses and seminars hosted by government agencies.

## Concern for Human Rights across the Supply Chain

### Promoting initiatives across the entire supply chain

Concern for human rights and labor across the entire supply chain is a clearly defined component of the Nippon Paper Group's Philosophy and Basic Policy Concerning Raw Materials Procurement (see page 52). At the same time, the Group conducts supplier surveys and hearings to confirm that these concerns are indeed being practiced (see page 54).

In addition, Nippon Paper Group forest management takes into consideration the culture and traditions of residents in each region of its overseas afforestation operations (see pages 60–63).

## 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.

# The Status of Employment and Industrial Relations

Building a better company based on sound industrial relations

## The Status of Employment

### Employing a workforce of over 13,000 employees in and outside of Japan

The Nippon Paper Group maintains a workforce of over 13,000 employees in and outside of Japan. In its efforts to fulfill its responsibility toward society, the Group strives to ensure stable employment while continuously recruiting new employees. The Group diligently works to build a pleasant and comfortable workplace environment and maintain a high percentage of employees taking child-care leave as well as a high retention rate for newly hired employees.

## Industrial Relations

### Improving the workplace environment through labor and management consensus

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 promote smooth industrial relations at all Group companies.

For example, under the common objective of building a better company, Nippon Paper Industries has established a variety of committees that examine specific issues relating to

both management and labor. These committees cover such fields as the operations of labor and management agreements, and staffing adjustments. Management and labor also engage in ongoing discussions that reflect genuine and deep-seated mutual respect. Deliberations and agreements between management and labor provide the basis for a variety of initiatives, as well as efforts to improve the workplace environment. Complementing these endeavors, regular central labor-management meetings provide a forum to discuss diverse issues ranging from corporate management to working conditions.

#### ● Discussions of working conditions

Major changes to working conditions, such as alterations to personnel systems and personnel downsizing, are in principle implemented on the basis of prior discussions between labor and management. As a result, companies within the Group do not unilaterally impose changes on employees.



A central labor-management council meeting

## The status of employment

### 1. Number of employees on a consolidated basis (as of March 31, 2013)

Number of employees on a consolidated basis: 13,052  
(male 11,516; female 1,536)  
(overseas: 1,621)

### 2. Percentage of female employees in management (as of March 31, 2013)

Nippon Paper Industries Co., Ltd.<sup>1</sup>: 1.43%  
Consolidated subsidiaries in Japan: 1.63%  
Consolidated subsidiaries outside Japan: 12.3%<sup>2</sup>

### 3. Number of newly recruited employees at consolidated subsidiaries in Japan (FY2012)

	New graduates	Mid-career recruits
Male	97	169
Female	9	20
Total	106	189

### 4. Number of employees taking child-care leave (FY2012)

	Nippon Paper Industries Co., Ltd. <sup>3</sup>	Consolidated subsidiaries in Japan
Number of employees taking child-care leave	11	25
Male	0	0
Female	11 (take-up rate 91.7%)	25 (take-up rate 96%)

### 5. Rate of employment of disabled persons

Nippon Paper Industries Co., Ltd.: 1.85%  
(as of June 1, 2013)

### 6. Average years of employment

(Nippon Paper Industries Co., Ltd.<sup>1</sup>: as of March 31, 2013)

	Average age	Average years of employment
Male	41.8	20.9
Female	41.5	20.0
Total	41.8	20.9

### 7. Three-year retention rate for new graduate recruits

Nippon Paper Industries Co., Ltd.: 90.9%  
(main career-track position)

<sup>1</sup> Total for Nippon Paper Industries Co. Ltd. and Nippon Paper Group, Inc.

<sup>2</sup> Managerial personnel at the level of section manager or above (section manager, department manager, etc.)

<sup>3</sup> Total for Nippon Paper Industries Co. Ltd.; Nippon Paper Group, Inc.; Nippon Daishowa Paperboard Co. Ltd.; NIPPON PAPER-PAK CO., LTD.; and Nippon Paper Chemicals Co. Ltd.

# Creating Workplaces that Support Diverse Human Resources

With a deep respect for fundamental human rights and the unique characteristics of each individual, the Nippon Paper Group consistently recruits new graduates and actively employs women and people with disabilities.

## Basic Stance

### Developing a dynamic organization where diverse employees can demonstrate their capabilities

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 (because of the declining birthrate), efforts by companies to expand the breadth of their organizations by diversifying their workforces are becoming increasingly vital to ensuring sustainable business development. Based on this understanding, the Nippon Paper Group strives to secure a diverse employee pool.

## Employment and Recruitment Based on a Respect for Human Rights

### Promoting discrimination-free recruitment and employment

Based on its Philosophy and Basic Policy on Human Rights, Employment and Labor, the Nippon Paper Group promotes discrimination-free recruitment and employment. As a part of its recruiting activities, the Group employs a selection process that bases decisions on test and interview results. Factors including nationality, place of birth, gender and level of school completed have no place in selection.

## New Graduate Recruitment

### Ensuring that Group companies engage in new graduate recruitment on an ongoing basis

The Nippon Paper Group hires new graduates on a continuous basis to ensure a balanced age composition of its workforce and to provide the younger generation with employment opportunities. Group companies in Japan hired a total of 106 new graduates (97 males and 9 females) in fiscal 2012. Certain Group companies also engage in mid-career hiring. At total of 189 employees were hired during fiscal 2012.

With a deep respect for fundamental human rights and the unique characteristics of each individual, the Nippon Paper Group consistently recruits new graduates. It also actively employs women, people with disabilities, and elderly people.

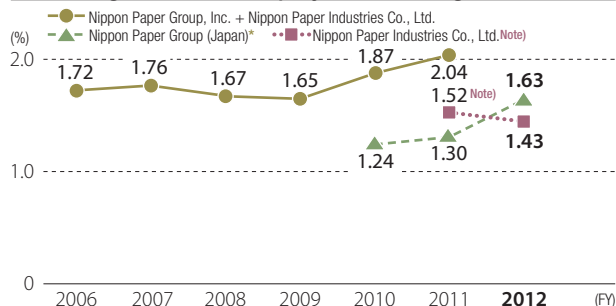
## Women in the Workplace

### Promoting the active participation of women in the workplace

While women account for 10.5% of the total number of Nippon Paper Group employees in Japan, they represent only around 1.63% of total management.

The Nippon Paper Group is making efforts to aggressively hire women and to create better working environments for them.

## Percentage of female employees in management



\* Data for the Nippon Paper Group (Japan) is the total for consolidated subsidiaries in Japan

### Promoting the hiring of women

In relative terms, Nippon Paper Industries does not engage in large volume hiring for career-track positions. While the ratio of male and female hires differs from year to year, every effort is made to meet the established target of ensuring that the proportion of newly hired female employees is kept above a certain level.

## Number of new graduates hired

(Nippon Paper Industries Co., Ltd., main career-track position)

Fiscal years	2007	2008	2009	2010	2011	2012	2013
New graduates	53	51	38	33	16 (31 Note)	17 (37)	43
Women	7	9	8	6	3 (5)	2 (3)	6
Men	46	42	30	27	13 (26)	15 (34)	37
Percent women	13	18	21	18	19 (16)	12 (8)	14

\* As of April 1 of each fiscal year

### Comeback entry system

Certain employees, particularly women, tend to leave employment for personal reasons including child care, nursing care and the transfer of a spouse. Nippon Paper Industries launched a reemployment system for these employees in October 2007. Nine individuals have applied for reentry to the workforce since this system was established. Two have been reemployed.

## Promoting Work-Life Balance

### Realizing an ideal workplace environment that balances work and family concerns

The Nippon Paper Group strives to establish an ideal workplace environment that allows employees to reach their full potential while balancing work and family needs.

Nippon Paper Industries, for example, has introduced flextime and summer-time work hours for its head office, research facilities, and branches; and flextime for the administrative sections of its mills.



The total number of hours worked at Nippon Paper Industries in fiscal 2012 increased from the prior year, but this was because fiscal 2011 total work hours per employee were relatively low as a result of mills being out of operation due to damage from the Great East Japan Earthquake.

### Working hours and paid leave taken

(Avg. for regular employees of Nippon Paper Industries Co., Ltd.)

Fiscal years	2007	2008	2009	2010	2011	2012
Total number of working hours	1,946	1,841	1,776	1,792	1,744 (1,759 <sup>Note</sup> )	1,836 (1,821)
The rate of annual paid leave taken by employees	71.4	73.5	67.7	73.0	68.0 (65.2)	74.4 (69.3)

### Complying with Japan's Act on Advancement of Measures to Support Raising Next Generation Children

The Nippon Paper Group has put in place an action plan and strives to support its employees in maintaining work and child-care balance in accordance with the Act on Advancement of Measures to Support Raising Next Generation Children.

As one example, Nippon Paper Industries revised its systems in line with revisions to Japan's Child Care and Family Care Leave Act. The company has continued to implement systems that exceed the provisions stipulated under revised legislation. This includes extensions to the exemption period for overtime working hours, the application period for child care and paid leave for child rearing.

### Action Plan in Response to the Act on Advancement of Measures to Support Raising Next Generation Children (Nippon Paper Industries: revised in April 2013)

#### 1. Improve the actual taking of child care leave

One or more male employees taking child care leave during the period of the plan (April 2013–March 2015), 80% or more of female employees taking child care leave

#### 2. Reduce total hours worked and promote the taking of annual paid leave

3. Strengthen support for the development of the young people who will lead the future. Do this by providing workplace tours, hands-on vocational education opportunities, etc.

### Increased Hiring of People with Disabilities

#### Improving the rate of employment of people with disabilities across the entire Group

For safety reasons, a number of restrictions exist on the employment of disabled workers at paper manufacturing production sites. The Japanese government set a rate for the employment of people with disabilities of 1.8% of a company's workforce, to be achieved by the end of March 2013. Nippon

Paper Industries aimed to achieve this rate by 2009. As a result, the company achieved its target in June 2009 when the rate reached 1.84% up from 1.51% in June 2007.

With the statutory rate having been increased to 2.0% in April 2013, the Nippon Paper Group as a whole is continuing with efforts to lift its rate for the employment of people with disabilities.

### The rate of employment of people with disabilities



### Promoting the Employment of Elderly Persons

#### Upgrading and expanding systems with the aim of promoting employment of elderly persons

The Nippon Paper Group long ago established the Reemployment after Retirement System to respond to the needs of an aging 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. Now, it is preparing reemployment rules that will comply with the revised Elderly Employment Stability Law, which took effect in April 2013. These rules will allow employees who have reached the age of retirement to continue working based on their desire and skills, at least until they begin to receive pensions.

#### Reemployment performance

(Regular employees of Nippon Paper Industries)

Fiscal years	2007	2008	2009	2010	2011	2012
Number of employees seeking reemployment	35	50	55	62	44 (72 <sup>Note</sup> )	21 (57)
Number of employees reemployed*	34	44	52	59	43 (69)	33 (67)

\* People who have reached retirement age are reemployed basically in response to their desire to continue working. Depending on staffing conditions and other factors, however, the company may request employees to continue working beyond the retirement age, and some employees have agreed to do this. This is why the number of people reemployed in fiscal 2012 exceeded the number of retirees requesting to be reemployed.

**Note:** Nippon Paper Industries Co., Ltd. merged with Nippon Daishowa Paperboard Co., Ltd., NIPPON PAPER-PAK CO., LTD., and Nippon Paper Chemicals Co., Ltd. in October 2012. Changes over the fiscal 2011–2012 period (shown in graphs with ● and in tables with ( )) reflect the sum of data for these three companies.

# Cultivating Human Resources

Supporting efforts to enhance the capabilities of each employee, while implementing proper evaluation systems based on skills and performance

## Basic Stance

**Recognizing that employees are important partners, the Nippon Paper Group strives to build sound relationships and cultivate human resources.**

The Nippon Paper Group places considerable emphasis on building positive ties with employees and developing human resources. At the same time, the Nippon Paper Group continues to build a mechanism whereby motivated and capable individuals can improve their skills by equitably offering opportunities to learn. Furthermore, every effort is made to assign the right persons to the right positions, and to provide fair evaluation and compensation.

## Initiatives Aimed at Developing Human Resources

### Taking measures to address key issues

In reinforcing its mechanism for human resource development, the Nippon Paper Group focuses its attention on the following six areas: (1) support for self-development and voluntary career planning; (2) early identification and development of potential leaders; (3) development of human resources capable of acting on a global stage; (4) reinforcement of production frontline capabilities; (5) support for the development of lifelong as well as career plans; and (6) assignment of the right people to the right positions. Complementing these endeavors, the Group is also building a Global Human Resources Bank and conducting joint training among group companies.

### ● Support for self-development and voluntary career planning

The Nippon Paper Group supports employee self-development and voluntary career planning through means such as correspondence courses, group training, and rewards for acquiring professional qualifications. In addition to existing training programs for various stages throughout each employee's career, Nippon Paper Industries is expanding learning opportunities to provide employees with a wide-ranging curriculum from which to select skill training they themselves consider necessary. In fiscal 2012, for example, we increased to 156 the number of correspondence courses full-time employees can take to study management, accounting, and languages, and to acquire professional qualifications.

Moreover, steps were taken to introduce various age-based career training programs for employees at 30, 40, and 50 in fiscal 2007. These programs help identify the strengths and weaknesses of individual employees through comprehensive job

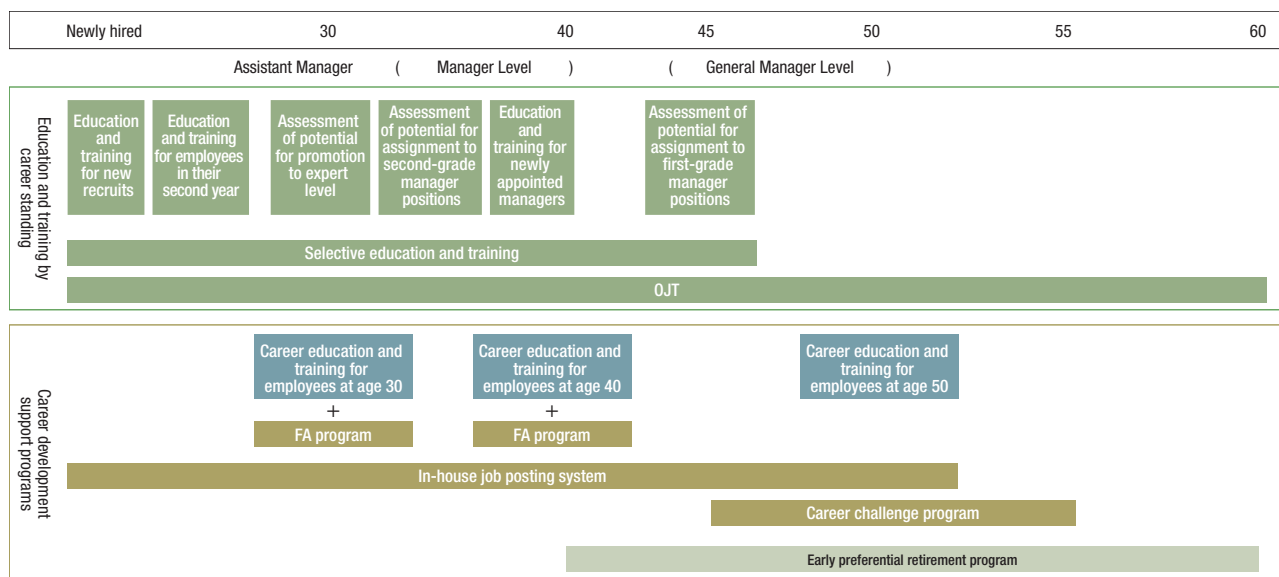


Career development training (Nippon Paper Industries)

analysis and 360-degree feedback. Together with the in-house FA system adopted from fiscal 2008, every effort is being made to invigorate human resources.

## Outline of the education and career development support system for career-track employees

(Information on Nippon Paper Industries for fiscal 2012)



### ● Early identification and development of potential leaders

In fiscal 2002, Nippon Paper Group adopted a program for identifying young employees with senior management potential and systematically developing these employees for such positions. That program, however, has been suspended and is being restructured.

### ● Development of employees capable of acting on a global stage

Recognizing the need to foster personnel who possess a global perspective in future overseas business development endeavors, Nippon Paper Industries and other Group companies have put in place an open-application overseas study program. This program is supported by the dispatch of personnel to overseas education institutions and by overseas assignments to the various offices of Nippon Paper Group.

Nippon Paper Industries is building the Global Human Resources Bank, a list of personnel with experience either working or studying overseas, or with advanced language skills in an effort to better address global expansion, which continues to progress



Nippon Paper Industries employees studying overseas

at an accelerated pace.

At the same time, special education and training programs will be introduced to efficiently foster personnel who can excel on the world stage. Currently, 460 personnel are registered with the bank.

### ● Reinforcement of production frontline capabilities

Human resource capabilities at the production frontline represent the heart of the manufacturing process and are vital to the Group's existence as a going concern amid increasingly harsh competition both in and outside Japan. The Nippon Paper Group passes on to each generation the technologies and skills nurtured over a lengthy period. Every emphasis must be placed on maintaining and strengthening the capabilities of its human resources.

Nippon Paper Industries organized the "Committee to Study the Strengthening of Mill-Level Production Frontline Capabilities" in fiscal 2006. The company also conducted education activities aimed at introducing this initiative across all mills in fiscal 2007. Based on these endeavors, activities aimed at strengthening the frontline have been undertaken at all mills since fiscal 2008. Through these means, Nippon Paper Industries has put in place a framework that covers the technologies and skills to be carried forward at each production site. In addition to analyzing areas of

individual strength as well as specific points that require bolstering, steps are being taken to implement education and training on a priority basis.

### ● Support for the development of lifelong as well as career plans

In recent years, there has been a rise in the age at which public pension payments begin, and increasing diversification of lifestyles. Employees must therefore consider a number of factors when planning their careers and life after retirement. Against this backdrop, and in an effort to allay the concerns and anxieties of employees, core companies within the Nippon Paper Group offer Life Plan 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.

### ● Assignment of the right people to the right positions

The core operating companies of the Nippon Paper Group periodically survey 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, Nippon Paper Industries launched the in-house job posting system in fiscal 2005. The 45 programs initiated to date have attracted 72 applications. After completing the necessary screening process, 29 employees were subsequently transferred.

## Fair Evaluation and Compensation

### Engaging in fair employee evaluation based on skills and performance

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 regular employees. Having employees meet with managers individually promotes greater understanding and acceptance of evaluation results, and is an opportunity to provide individual employees with guidance for skill development.

In addition, the company commissions assessments from specialist external parties in an effort to boost the objectivity of its evaluation process with respect to the appointment screening of management and other positions.

In ensuring that employees are fully informed of the detailed results of their evaluation based on clearly defined criteria, Nippon Paper Industries encourages employees to recognize their strengths and areas where they need more work. This helps to further motivate employees toward skills development.

# Occupational Safety and Health

Maintaining a workplace environment in which employees can go about their duties without undue anxiety by working daily to uncover inherent risks

## Basic Stance

### Taking into consideration the characteristics of each business to secure occupational safety and to prevent disaster

Maintaining a safe work environment for employees is one of the basic responsibilities of any corporation. The Nippon Paper Group strives for "safety first" operations. Irrespective of the amount of care taken, it is virtually impossible to totally eliminate all risks inherent in the workplace. It is nevertheless important to maintain an unwavering daily commitment to uncovering and minimizing these risks.

As a part of efforts to consistently engage in sound management while responding to the trust of employees, it is also important to build a pleasant and comfortable workplace that helps maintain and improve employees' health.

Therefore, the Nippon Paper Group formulated the Philosophy and Basic Policy on Safety and Health Measures in 2004. Under this philosophy and basic policy, the Group has created labor safety systems and continuously strives 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.

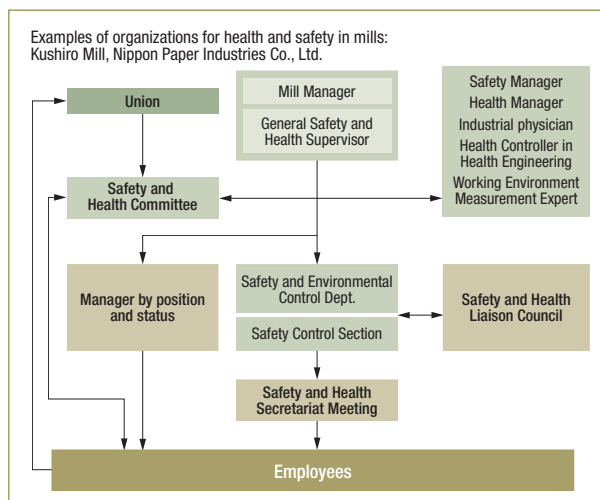
## System to Promote Occupational Safety and Health

### Labor and management working together to build a safe workplace environment

The Nippon Paper Group has established the Safety and Disaster Prevention Committee. This committee is coordinating Group-wide employee measures aimed at securing occupational safety and health, preventing disasters and preserving security.

At Nippon Paper Industries, labor and management occupational safety and health meetings are held once each year. The officers responsible for occupational safety and health from the head office, mills, and labor union come together to discuss a variety of issues, including the annual occupational safety and health management plan. Safety and health committees are also established at each mill and office. These committees deliberate on and determine important management matters relating to occupational safety and health as well as activity policies. Employees are notified of the details of decisions through department meetings and internal mill newsletters and then execute the determined activities.

### The Nippon Paper Group's structure to promote occupational safety and health



#### ● Mill safety audit system

The Nippon Paper Group engages in occupational safety and health activities on both an organizational and continuous basis. As a part of these endeavors, the Group conducts mill safety audits to raise the level of safety management.

In addition, mutual audits together with the auditors of other Group companies were introduced from 2010 in an effort to

further promote safety activities. By deepening exchange between companies, the Group is endeavoring to raise the quality of its audits.

### Occupational safety and health management system

Nippon Paper Group has adopted its own occupational safety and health management system to achieve further reductions in occupational accidents, and systematically and continuously advance safety and health activities.

### The status of occupational safety and health management system introduction

Company Name	Status of Introduction
Nippon Paper Industries Co., Ltd.*	Introduced in January 2010
Nippon Daishowa Paperboard Co., Ltd.*	Introduced in January 2011
Nippon Paper Crecia Co., Ltd.	Introduced in January 2011
Nippon Paper Papylia Co., Ltd.	Introduced in January 2011
SHIKOKU COCA-COLA PRODUCTS CO., LTD.	Acquired OHSAS certification in 2009
NIPPON PAPER-PAK CO., LTD.*	Introduced in January 2011
Nippon Paper Chemicals Co., Ltd.*	Introduced in January 2012
Kitakami Paper Co., Ltd.	Introduced in January 2013
NIPPON PAPER UNITEC CO., LTD.	Introduced in January 2011

\* Nippon Paper Industries Co., Ltd. merged with Nippon Daishowa Paperboard Co., Ltd., NIPPON PAPER-PAK CO., LTD., and Nippon Paper Chemicals Co., Ltd. in October 2012.

### Reinforcing risk assessment procedures

The Nippon Paper Group adopted risk assessment procedures in 2009 as a preliminary step toward building an occupational safety and health management system. The Group has also developed its own methods, such as a three-tiered (along the reporting



Meeting to share the risk assessment skills at the Hokkaido Mill (Shiraoi), Nippon Paper Industries

line) assessment system and the inclusion of third-party assessments in safety audits. To support the functioning of this system and improve safety levels within the Group, gatherings for the sharing of risk assessment information and skills are also held.

### Status of Occupational Accidents

#### Preventing occupational accidents

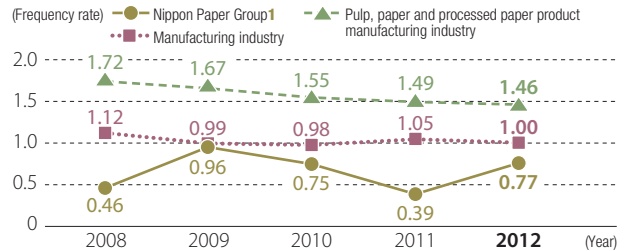
The Nippon Paper Group places the utmost importance on safety in the workplace. It is, however, by no means satisfied with its performance to date. The Nippon Paper Group's<sup>1</sup> 2012 occupational accident frequency rate<sup>2</sup> of 0.77 and severity rate<sup>3</sup> of 0.74 both exceeded levels for the previous year. The Group is working to eliminate occupational accidents by promoting the use of risk assessments, and conducting risk prediction, patrol, and education activities.

<sup>1</sup> The Nippon Paper Group: The manufacturing facilities of the following three Group companies: Nippon Paper Industries Co., Ltd., Nippon Paper Crecia Co., Ltd., and Nippon Paper Papylia Co., Ltd.

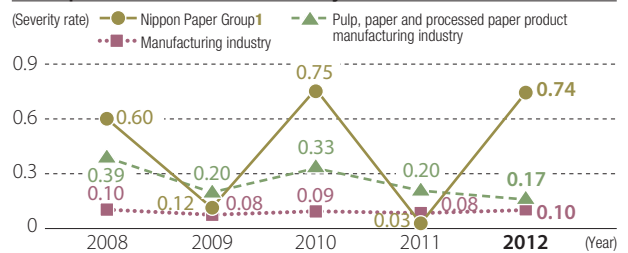
<sup>2</sup> Frequency rate: Indicates how often occupational accidents occur, in terms of the number of accidents causing injuries or deaths per million work hours.

<sup>3</sup> Severity rate: Indicates the seriousness of occupational accidents, in terms of the number of workdays lost per 1,000 work hours.

### Occupational accident frequency rate



### Occupational accident severity rate



### Report Incidents that led to occupational fatalities

At Nippon Paper Industries, there were two occupational accidents resulting in fatalities in 2012.\*

One accident occurred at Nippon Paper Industries' Iwakuni Mill on December 9, 2012.

Overview of the incident

Location: The Iwakuni Mill owned and operated by Nippon Paper Industries Co., Ltd.

Victim: A 37 year old employee with 10 years and two months working experience

Type of work: Cleaning of rollers on a papermaking machine

Accident: While the rollers on a paper making machine were being cleaned, vibration caused by the act of cleaning resulted in a roller falling and pinning a worker between it and the lower roller.

Factors: The stopper for preventing the upper roller from falling was not fully engaged and, therefore, was not able to bear the weight of the roller mechanism.

Countermeasures:

- (1) For roller inspection and cleaning work, guidelines were introduced for worker positioning to prevent pinning between rollers and for the performance of work procedures.
- (2) The stopper configuration for securing rollers was changed to use pins that must be inserted, instead of hooks.
- (3) A risk assessment and safety audit were performed for all work procedures, and findings were reflected in operational standards.

\* See page 91 of the 2012 Sustainability Report for information on the other accident.

## Occupational Safety and Health

### Safety Education

#### Raising employee awareness toward safety through systematic education and training

The Nippon Paper Group places considerable weight on employee safety education and training. These efforts are designed to raise employee awareness toward occupational safety and health.

Nippon Paper Industries puts in place an annual Occupational Safety and Health Management System (see page 93) plan at each of its mills and offices. Each mill and office then implements various occupational safety and health education programs in accordance with these plans, covering every stage of an employee's career from initial hiring through to supervisor training. Constantly renewing safety awareness, the company is endeavoring to achieve incident-and accident-free workplaces.

### Efforts regarding Safety and Disaster Prevention

#### Steadfastly promoting a wide range of measures

##### ● In-house safety measures

Nippon Paper Industries has always endeavored to ensure workplace safety with the intention of preventing personal injury to any and all people working within its mill premises. The company has accordingly implemented safety patrols and education in collaboration with the labor union and subcontractors. Safety patrols involve designated personnel patrolling work premises to identify areas of potential safety concern as well as risky employee behavior. Since 2006, we have enhanced mill safety with measures that cover even secondary subcontractors by clarifying the responsibilities of primary subcontractors.

##### ● Natural disaster and fire countermeasures

Individual mills and other offices within the Nippon Paper Group adopt their own disaster prevention measures that reflect the nature of their operations and regional characteristics. These mills and works create manuals on disaster prevention including steps to prepare for a natural disaster. They also conduct emergency drills.



Emergency drill  
(Yosinaga Mill, Nippon Paper Industries)

##### ● Traffic safety initiatives

Traffic safety education is offered to raise employee awareness of commuting safety. In addition, the Group actively participates in various traffic safety campaigns organized by local police authorities. Every effort is made to ensure that all employees remain conscious of the need to drive safely.



Traffic safety seminar  
(EGAWA PAPER-PAK CO., LTD.)

### Efforts regarding Hygiene and Health

#### Taking into consideration the importance of mental and physical health

##### ● Maintaining and improving employees' health

The objective of the Nippon Paper Group in terms of the health of its employees is the prevention and early detection of disease. For example, at the Group companies that are members of the Nippon Paper Industries Health Insurance Union (majority of the Group's companies), examinations focusing on lifestyle diseases are performed together with regular physical examinations. In addition, industrial physicians regularly visit workplaces. Based on the results of these visits, the Group strives to improve working environments. Moreover, the Nippon Paper Group takes great care in supporting the health of not only employees but also their families. An opportunity for a medical examination is offered to the spouses of employees.

##### ● Tackling mental health

Nippon Paper Industries has historically held lectures and seminars about mental health at individual mills and offices. In 2003, the company introduced a web-based mental health care system that functions as a mechanism for providing mental health checkups and counseling to all employees. Among a number of initiatives, all company employees have been requested to complete an annual survey-based mental health examination since 2008. Nippon Paper Industries is putting in place a structure that is designed to maintain the mental health of its employees while taking into consideration individual privacy protection and confidentiality.

# Community Responsibility



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# 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 as a good corporate citizen.

## Basic Stance

**Each Group company and mill engages in social contribution activities guided by a Group-wide philosophy and principles.**

The Nippon Paper Group is helping to build a sustainable society by effectively and appropriately utilizing trees, a renewable resource, to produce a variety of products including paper. It is also placing considerable emphasis on CSR management. In this context, the Group is aggressively engaging in social contribution activities as a good corporate citizen.

The Group conducts a broad spectrum of activities that make the most of its specialist expertise and resources in locations spread across the length and breadth of Japan. Examples of these community-based activities include clean-up events around mills, participation in local festivals, and mill tours for local residents. In order to stimulate increased thought toward the environment and related issues, the Group conducts lectures on such topics as paper recycling. These efforts are complemented by the activities of the School of Friendship for Forests and Paper, which utilizes company-owned forests.

Looking ahead, the Group will continue to upgrade and expand its activities, and support the development of society through Group-wide social contribution activities. In June 2008, the Group established the CSR Division.

## 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.

## Structure for Promoting Social Contribution Activities

**With the CSR Division playing a central role, the Nippon Paper Group positions persons responsible for social contribution activities in each Group company, and engages in ongoing activities.**

This division takes the lead in promoting Group-wide social contribution activities.

Each Group company appoints a person responsible for overseeing social contribution activities. Each responsible person tries to ensure that existing social contribution activities are undertaken on a continuous basis while upgrading and expanding their content and details. In recent years, particular emphasis has been placed on contributing to regional development. In addition to mill tours for school-age students the Group has proactively targeted community events including, clean-up activities.

## Specific activity themes

- Promote activities that effectively utilize the resources and specialist expertise of each Group company
- Increase the community involvement of Group company mills and overseas affiliates
- 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

## List of Social Contribution Activities

**Engaging in diverse activities that reflect the basic policy**

The Nippon Paper Group engages in a diverse range of activities based on its Philosophy and Principles for Social Contribution Activities. The nature and content of these activities encompass a wide range of areas including education, the environment, and coexistence with the community and society. Summaries of major themes are presented in the table to the right. For more detailed information on the Group's major social contribution activities, please refer to the following website.



Social Contribution Activities

<http://www.nipponpapergroup.com/e/csr/social.html>



The Nippon Paper Group's principal social contribution activities\*

Category	Principal activities	Specific examples	Page No.
Educational Activities	Providing opportunities for field trips	Organizing tours of the Group's mills	98
	Providing opportunities for work experience	Promoting internship programs	98
	Learning opportunities conducted by employees	Organizing school visits and classroom lessons	—
	Utilizing company-owned forests	Holding the School of Friendship for Forests and Paper programs	99
	Providing educational opportunities through music	Inviting young children and students to Sapporo Symphony Orchestra pop concerts	99
	Providing educational opportunities through sport	Holding Little League baseball clinics and tournaments	—
		Holding ice hockey classes and ice hockey championships	99
Donating unicycles; holding unicycle classes		—	
Providing products to classrooms	Supplying educational institutions with paper products, printed materials and publications	98	
Environmental Activities	Preserving biodiversity	Utilizing the Group's proprietary in-container rooting technology	44
		Promoting Morino Chonai-kai activities	—
		Establishing a sanctuary for Blakiston's fish owl	45
		Supporting the activities of the Shirane-aoi Preservation Group	100
	Promoting recycling activities	Operating the Recycle Plaza Shiyukan	100
		Collecting and recycling wooden chopsticks	—
		Supporting the activities of organizations dedicated to promoting recycling	50
		Establishing a waste paper collection facility	100
		Recovering and recycling milk cartons	50
	Adding greenery to local communities	Promoting and participating in tree planting activities	100
Providing opportunities for environmental education	Participating in a variety of environmental events	42	
Activities Aimed at Promoting Coexistence with Local Communities	Regional cleaning activities	Engaging in clean-up activities of areas surrounding the Group's mills and offices	101
	Local community safety and disaster prevention	Engaging in activities that focus on the safety of children	—
		Engaging in road safety activities	—
		Executing disaster relief and support agreements	—
	Preserving local community cultures	Participating in campaigns to preserve Japan's cherry blossoms for their cultural value	—
		Supporting Asukayama Takigi Noh plays	101
	Coexistence with local communities	Maintaining the multiple functions of forests through the proper management of company-owned forests	—
		Participating in and sponsoring festivals and other local events	—
		Opening the Group's recreational facilities including gymnasiums to the general public	—
		Leasing free-of-charge company-owned land	—
Sponsoring sporting events including the Naha marathon		—	
Holding events including summer festivals and Happy!! Shikoku	101		
Activities Aimed at Promoting Coexistence with Society	Social welfare activities	Participating in and sponsoring events run by social welfare organizations	—
		Purchasing products (bread and other items) from social welfare organizations	—
		Donating used stamps and postcards as well as blood	—
	Supporting sporting opportunities for disabled persons	Supporting ice sledge hockey	—
	Providing opportunities for community education	Holding of CSR lectures (Public seminars)	—
	Supporting the Fujihara Foundation of Science	Providing financial support to the Fujihara Foundation of Science	101
Supporting victims of natural disasters	Providing donations as well as relief supplies	—	

\* Please refer to pages 60 to 63 for information on activities at overseas afforestation areas.

# Educational Activities

The Nippon Paper Group plays an important role in providing young children with a variety of learning opportunities. In an effort to support sound and healthy growth, the Group organizes tours of its domestic production facilities, puts in place a wide range of work experience programs and provides chances to participate in sporting and artistic events.

## Providing Opportunities to Tour Group Companies and Their Mills

### Organizing tours of the Group's mills to showcase the importance of a recycling-based society through paper

In fiscal 2012, 8,894 elementary, junior and senior high school students toured the Group's production facilities.

#### Case Cooperation with a JICA youth training program (Nippon Paper Crecia Co., Ltd.)

Nippon Paper Crecia Co., Ltd.'s Kyoto Mill welcomed participants in a JICA (Japan International Cooperation Agency) youth training program for a tour of its facilities. The purpose of the JICA program is to promote the development of small and medium enterprises in the Central Asian Caucasus region.

Fifteen young people involved in the development of local economies in Armenia, Kazakhstan, and Kyrgyzstan visited the mill. After receiving an overall description of the facilities, they were escorted on a tour, and all seemed impressed with the large scale of the mill's facilities.



Observing products just off the production line

## Providing Opportunities for Work Experience

### Providing the young people who will lead the next generation with practical work experience

#### Case Accepting an intern (Nippon Paper Industries Co., Ltd.)

The Liquid Packaging Center (LPC)—the R&D unit of Nippon Paper Industries Co. Ltd.'s Paper-Pak Division—accepted a fourth-year student from the Tomakomai National College of Technology as an intern. The first day of this five-day internship was spent on a tour of the LPC manufacturing process at Egawa Paper-Pak Co., Ltd., a Nippon Paper Industries subsidiary. The second and following days were spent at the LPC, where the intern engaged in hands-on training in using a CAD system to design and analyze the quality of prototypes, operation of a filling machine, and other activities. On the final day, the intern gave a presentation reporting on the five-day experience.



Touring a production facility

#### Case Making products by hand at the Kids Job 2012 Exhibition (Nippon Paper Industries Co., Ltd.)

The Kids Job 2012 Exhibition was held at Fujisanmesse in Fuji City, Shizuoka Prefecture, and 13 employees of Nippon Paper Industries' Fuji Mill participated by setting up and staffing a booth where visitors could experience making postcards by hand. The Kids Job exhibition, jointly sponsored by Fuji City and Fujisanmesse, is intended to provide kids with hands-on opportunities to experience simulated work environments and help them develop an understanding of what it is like to perform a job. Local companies and other organizations participate in this event. The 2012 exhibition attracted a large number of both children and adults, who made their way through the exhibition's four areas. Of these, one was for making things and another for experiencing different kinds of jobs.

The Fuji Mill's booth was in the area for making things and helped around 100 visitors make their own postcards by choosing colors and adding their own artwork. Participants became completely absorbed in this activity and were very satisfied with the results.

They and their family members were very pleased with the activity.



Visitors enjoyed making their own postcards

## Providing Products for Use in the Classroom

### Helping young children with their studies by donating free-of-charge paper and printed materials to local community educational institutions

#### Case Providing student newspapers to local schools (NIPPON PAPER LOGISTICS CO., LTD.)

NIPPON PAPER LOGISTICS has continued to provide schools in close proximity of its head office with the Mainichi Student Newspaper since 2007 free of charge. The company commenced free deliveries to the Higashijuujuu Elementary School and the Asuka Senior High School from 2009. These newspapers, which summarize current events and include English-language content, are used as learning materials for students.

In addition, Nippon Paper Industries' R&D Division provides a local elementary school with an Asahi Photo News bulletin board.

## Utilizing Company-Owned Forests in Japan

Promoting a better understanding of the many benefits that forests provide while utilizing company-owned forests in Japan

**Case** **Conducting the annual School of Friendship for Forest and Paper**  
(Nippon Paper Industries Co. Ltd., Nippon Paper Development Co., Ltd.)

The School of Friendship for Forest and Paper is a hands-on course on the natural environment conducted within 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, one of the company's typical metropolitan-based forests 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, for example, participants enjoy walking through the forest and making paper from twigs they pick up. Participants are gathered from general public with the cooperation of the Japan Philanthropic Association. Despite its cancellation in the spring of 2011 due to impact of the Great East Japan Earthquake, the Sugenuma forest school has been held on an annual basis since its inception. September 2013 marked the 15th time the school was held. Over this period a total of 551 children, parents and local high school students have attended the school.

Since 2007, the Toyono School of Friendship for Forests and Paper has been held in Nippon Paper Industries' Toyono forest in Kumamoto Prefecture. Organized mainly by the company's Yatsushiro Mill, particular emphasis is placed on activities deeply rooted in the local community. One program of this school incorporates such activities as a mill tour and is one example of how activities are modified to accommodate the needs of each region.



Walk in a forest owned by Nippon Paper Industries



A ceremonial photograph of all involved parties

## Providing Educational Opportunities through Sport

Helping to revitalize society through sporting classes and tournaments

**Case** **Nippon Paper Industries Cup Ice Hockey Championship**  
(Nippon Paper Industries Co., Ltd.)

The Nippon Paper Industries Cup Ice Hockey Championship (38th competition at the elementary school level and 35th at the junior high school level) was held in January 2013 at the Jujo Skate Center in the City of Kushiro, Hokkaido. Words of encouragement were given in the opening ceremony by the General Manager of the Kushiro Mill, who urged players to be safe but also show off the results of their long days of practice. At the end of heated competitions, Tottori Nishi Elementary School emerged victorious at the elementary school level, and a joint team representing the western section of Kushiro, with only seven members on the bench, took top honors at the junior high level.



Heated competition on the ice

## Providing Educational Opportunities through Music

Providing opportunities to enjoy the pleasures of music by helping to put on concerts

**Case** **Invitations to the Sapporo Symphony Orchestra Concert**  
(Nippon Paper Industries Co., Ltd.)

The "Nippon Paper Industries Co., Ltd. Presents Sakkyo Pops Concert Vol. 11" was held and, with Nippon Paper Industries as the lead sponsor, the Yufutsu, Asahikawa and Shiraoi works of Nippon Paper Industries' Hokkaido Mill invited local elementary and junior high school students to attend. The intent in sponsoring this event was to have the audience experience the pleasures and appeal of an orchestra playing familiar and beloved selections, including movie themes, and Japanese and western popular music. Nippon Paper Industries has agreed to be the lead sponsor for this event as a way of supporting culture and the arts in Hokkaido. Audience members seemed to be captivated by the energetic, brilliant performance and to thoroughly enjoy the experience from beginning to end.



Invited students

# Environmental Activities

Placing particular emphasis on environmental conservation activities such as ecosystem protection, recycling, and greening, that consider the characteristics of individual regions and mills

## Preserving Biodiversity

Protecting and cultivating rare species while utilizing the Group's management resources

**Case** Supporting the activities of the Shirane-aoi wo Mamoru Kai (Shirane-aoi Preservation Group) (Nippon Paper Industries Co., Ltd., Nippon Paper Development Co., Ltd.)

Shirane-aoi (*Glaucidium palmatum*: Japanese wood poppy) is designated as a near-threatened species in the Red Data Book of Gunma Prefecture. To protect and breed 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 the village of Katashina in Tone-gun, Gunma Prefecture.

Nippon Paper Development, which runs the Marunuma Highland recreational facility in Gunma, has supported the Shirane-aoi Preservation Group since its inception. Nippon Paper Industries has offered a portion of its company-owned Sugenuma Forest as a plantation site for Shirane-aoi. Since 2002, the Group has called for volunteers to participate in planting and other activities.



Carefully planting seedlings

**Case** Nippon Paper Group Tree-Planting 2013 (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries held the Nippon Paper Group Tree-Planting 2013 at Marunuma Highland, in the village of Katashina in Tone-gun, Gunma Prefecture. This event, the purpose of which is to leave a thriving forest to future generations, attracted about 200 people—both Nippon Paper Group people and others, mainly from Tokyo.

Under the guidance of staff, participants used transplanting trowels to efficiently plant 2,000 seedlings of five types of trees in around 40 minutes. Going forward, Nippon Paper Industries plans to continue holding tree-plantings as one effort to leave a thriving forest to future generations.



Planting seedling one at a time on a slope

## Promoting Recycling Activities

Consistently engaging in recycling and related educational activities

**Case** Running the Recycle Plaza Shiyukan (Nippon Paper Industries Co., Ltd.)

The Recycle Plaza Shiyukan, located next to the Nippon Paper Industries Hokkaido Mill (Asahikawa), was opened on October 20, 1999 in a former infirmary repurposed toward that end. Its objective is to promote awareness of the current status of, and need for, paper recycling.

As an experiential learning facility, always ready to help visitors learn to make paper by hand, Recycle Plaza Shiyukan is visited by families and various types of groups including elementary, junior high, and high school students from not only Asahikawa City but also other parts of Hokkaido and Japan, and even other countries. Recycle Plaza Shiyukan also makes a portion of its facilities available at no charge for photo and calligraphy exhibits, and other local events.



The Recycle Plaza Shiyukan

**Case** Promoting wastepaper recycling activities (Nippon Paper Industries Co., Ltd., Kitakami Paper Co., Ltd.)

Aiming to be an urban resource recycling facility, Nippon Paper Industries' Yoshinaga Mill has established large-scale wastepaper recycling stations at two off-site locations to promote the saving of resources. Though wastepaper is already being collected as a city service, residents must take it to a designated location on a designated day of the week for collection at a designated time. The ability to take wastepaper to the Yoshinaga Mill's off-site facilities at any time of day, therefore, has won praise from residents who like that they no longer have to deal with the trouble of having to keep wastepaper at their homes until collection day. Looking to the future, the mill plans to encourage greater use of its facilities by local residents as part of a 24-hour wastepaper collection project.

Kitakami Paper Co., Ltd., meanwhile, has established its "Shigen no Kago" wastepaper collection facility on the grounds of its mill. The residents and small and medium enterprises of Ichinoseki City are allowed to freely bring their wastepaper to this facility, which accepts paper items including container board and used magazines. Money from the sale of this wastepaper is contributed to a fund benefitting Ichinoseki City.



Kitakami Paper Co., Ltd.'s "Shigen no Kago"

# Activities Aimed at Promoting Coexistence with Local Communities and Society

Working in partnership with municipalities and residents to help build clean and safe living environments while invigorating regional economies

## Regional Cleaning Activities

Maintaining clean city and town environments

**Case** Beautification and cleanup activities around mills (Nippon Paper Industries Co., Ltd.)

The Higashimatsuyama Mill of Nippon Paper Industries' Chemical Division, as part of its environmental conservation and local contribution activities, conducted beautification and cleanup activities in the area surrounding its site on June 5, Environment Day.

With help from subcontractors, a total of 80 people participated, beautifying and cleaning the area surrounding the mill. The area had become littered with illegally dumped used tires and large-size household waste, and the volunteers managed to fill a light-duty truck with the garbage they picked up. Now, partly because beautification and cleanup activities are conducted twice a year, illegal dumping seldom occurs.

Employees of the mill are united in continuing to participate in local environmental conservation activities, so they can keep the area in good condition.



Cleaning an area near the facility

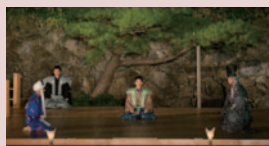
## Preserving Local Community Cultures

Supporting opportunities to experience traditional cultures

**Case** Supporting the Asukayama Takigi Noh Play (Nippon Paper Development Co., Ltd.)

The Asukayama Takigi Noh Play (torchlight Noh Performance) was conceived by the late Shigeya Kimura, a noh actor born and raised in Tokyo's Kita Ward. Mr. Kimura wanted to give something back to his hometown through his expertise. The play is held each year in autumn at an outdoor stage in Asukayama Park, Kita Ward. As a member of the local community, Nippon Paper Development has undertaken a variety of duties including reception tasks in its efforts to support the running of the event over the past six years.

The 10th Asukayama Takigi Noh Play was held in October 2012 featuring performances of the Kyogen (comic drama) Suminuri by living national treasure Mansaku Nomura, and Shakkyou by the Kanze style Noh actor Yaemon Yamashina and Yoshinobu Kanze.



An outdoor performance of a Noh play

## Coexistence with Local Communities

Strengthening ties with local communities through such initiatives as the introduction of interactive CSR activities

**Case** The Happy Shikoku Project (SHIKOKU COCA-COLA BOTTLING CO., LTD.)

Shikoku Coca-Cola Bottling Co., Ltd. has launched the Happy Shikoku Project in its effort to promote interactive CSR activities. The purpose of this project is to gather ideas for bringing joyful events to Shikoku. Ideas, received through a website and other channels, are implemented with a portion of the company's sales.

In March 2013, the company provided support for the Happy Dance Contest held in the Ehime Prefecture city of Matsuyama. The purpose of this event was to energize Ehime through dance, and participating children did their best in splendid performances. In May 2013, the company, in a joint undertaking with a project celebrating the 50th anniversary of the Takamatsu Junior Sports Clubs in Kagawa Prefecture, held the opening ceremony for the "En no Shita no Chikara Mochi Taikai," a sports tournament for parents, guardians, and others whom children rely on for guidance. Junior sports club members prepared the venue for mini-tennis and other competitions, and the competitors were awarded training gear and first-aid kits depending on order of finish.



Dancers in a splendid performance

## Supporting the Fujihara Foundation of Science

Supporting efforts to further advance science and technology

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. Nippon Paper Industries lends financial support to the Foundation to promote science and technology.

In June 2013, the 54th Fujihara Award was bestowed on Dr. Hidetoshi Katori of the Graduate School of Engineering at the University of Tokyo and Dr. Atsushi Miyawaki, Associate Director of Riken, a research institution. Each received a gold medal, certificate, and ¥10 million, as a supplementary prize.



A commemorative photograph taken after the presentation ceremony

Guideline Comparison Table (GRI Sustainability Reporting Guidelines Ver 3.1)<sup>1</sup>

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2.1		14	Outline of the Nippon Paper Group
2.2		14-15	Outline of the Nippon Paper Group
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2.3	6.2	14-15	Outline of the Nippon Paper Group
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3.3		Back cover	Issued
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3.5		2	Editorial Policy
		26	Dialog with Stakeholders
3.6		2	Scope of Organizations Covered
3.7		2	Scope of Organizations Covered
3.8		2	Scope of Organizations Covered
3.9		35	Environmental Accounting
3.10		Not applicable	—
3.11		2	Scope of Organizations Covered
3.12		102-104	Guideline Comparison Table
3.13	7.5.3	—	—
<b>4 Governance, Commitments, and Engagement</b>			
4.1	6.2	18-19	Group Governance
4.2		18-19	Group Governance
4.3		18-19	Group Governance
4.4		18-19	Group Governance
4.5		87	Industrial Relations
		19	Compensation Paid to Directors
4.6		18-19	Group Governance
4.7		—	—
4.8		4-5	Message from the President
		20-21	The Nippon Paper Group's Action Charter
4.9		18-19	Group Governance
		20-21	CSR Management
		21	Signatory to the United Nations Global Compact
4.10		30	Environmental Management
		—	—
4.11	38-41	Mitigation of Climate Change	
	42-45	Biodiversity Conservation	
4.12	93	Safety (Risk Assessment)	
	21	Signatory to the United Nations Global Compact	
4.13	21	Collaborative Initiatives	
4.14	26	Contact Points for Dialog with Stakeholders	
	97	The Nippon Paper Group's Principal Social Contribution Activities	
4.15	26	Contact Points for Dialog with Stakeholders	

Item	ISO 26000 clauses	Corresponding Page(s)	Contents
4.16	6.2	24-25	IR Activities
		26	Contact Points for Dialog with Stakeholders
		34	Environmental Communication
		60-63	Contributing to Local Communities at Overseas Afforestation Areas
		68, 71, 73, 75, 77, 79	Responding to Customers
		87, 91	Industrial Relations, Fair Evaluation and Compensation
		96-101	Community Responsibility
4.17		2	Editorial Policy
		34	Environmental Communication
		45	Blakiston's Fish Owl Protection Activities
<b>5 Management Approach and Performance Indicators</b>			
<b>Economic Performance Indicator</b>			
DMA <sup>2</sup>	6.2 / 6.8	4-5 20-21	Message from the President CSR Management
EC1. Core	6.8 / 6.8.3 / 6.8.7 / 6.8.9	14	Outline of the Nippon Paper Group
		25	Profit Distribution to Shareholders
EC2. Core	6.5.5	35	Environmental Accounting
		35	Environmental Accounting
EC3. Core		—	—
EC4. Core		Not applicable	—
EC5. Add		—	—
EC6. Core	6.6.6 / 6.8 / 6.8.5 / 6.8.7	52	Philosophy and Basic Policies Concerning Raw Materials Procurement
EC7. Core	6.8 / 6.8.5 / 6.8.7	—	—
EC8. Core	6.3.9 / 6.8 / 6.8.3 / 6.8.4 / 6.8.5 / 6.8.6 / 6.8.7 / 6.8.9	6-11	Special Feature: Toward More Sophisticated Use of Wood
		42-45	Biodiversity Conservation
		58-59	Protection and Cultivation of Domestic Company-Owned Forests
EC9. Add	6.3.9 / 6.6.6 / 6.6.7 / 6.7.8 / 6.8 / 6.8.5 / 6.8.6 / 6.8.7 / 6.8.9	60-63	Contributing to Local Communities in Overseas Afforestation Areas
		96-101	Community Responsibility
EC9. Add	6.3.9 / 6.6.6 / 6.6.7 / 6.7.8 / 6.8 / 6.8.5 / 6.8.6 / 6.8.7 / 6.8.9	35	Environmental Accounting
		60-63	Contributing to Local Communities at Overseas Afforestation Areas
<b>Environment Performance Indicator</b>			
DMA <sup>2</sup>	6.2 / 6.5	30-37	Environment (Policy and Management, Material Balance, Environmental Accounting)
EN1. Core	6.5 / 6.5.4	52-53	Raw Materials Procurement (Policy and Management, Current Status of Raw Materials Procurement)
		36-37	Material Balance
EN2. Core		53	Current Status of Raw Materials Procurement
EN3. Core		50	Promotion of Waste Paper Recycling
EN4. Core	6.5 / 6.5.4	36-37	Material Balance
		38-41	Mitigation of Climate Change
EN5. Add	6.5 / 6.5.4	36-37	Material Balance
		38-41	Mitigation of Climate Change
EN6. Add	6.5 / 6.5.4	40	Advancing energy efficiency in logistics
		38-41	Mitigation of Climate Change
EN7. Add		39	Reducing the Use of Fossil Fuels through Fuel Conversion
EN8. Core		—	—
EN9. Add		36-37	Material Balance
EN10. Add		45	Source Water Protection Project
EN11. Core	6.5 / 6.5.6	—	—
		59	Biodiversity Data for Company-Owned Forests in Japan (IUCN Categories)
		42-45	Biodiversity Conservation
EN12. Core	6.5 / 6.5.6	54-57	Sustainable Procurement of Raw Materials

<sup>1</sup> There is no official cross reference for GRI 3.1 guidelines and the ISO 26000 clauses. This table, therefore, was prepared based on information on how the GRI 3.0 guidelines relate to ISO 26000 clauses.

<sup>2</sup> DMA: Disclosure(s) on Management Approach

Item	ISO 26000 clauses	Corresponding Page(s)	Contents
EN12. Core	6.5 / 6.5.6	58–59	Protection and Cultivation of Domestic Company–Owned Forests
EN13. Add		42–45, 62–63	Forest Management that Takes into Consideration Biodiversity
EN14. Add		58–59	Protection and Cultivation of Domestic Company–Owned Forests
EN15. Add	6.5 / 6.5.5	42–45	Biodiversity Conservation
EN16. Core		—	—
EN17. Core		36–37	Material Balance
EN18. Add		38–41	Mitigation of Climate Change
EN19. Core	6.5 / 6.5.3	38–41	Mitigation of Climate Change
EN20. Core		49	Substances Subject to the PRTR Law
EN21. Core		36–37	Material Balance
EN22. Core		47–49	Initiatives to Prevent Environmental Pollution
EN23. Core		36–37	Material Balance
EN24. Add		47	Initiatives to Prevent Environmental Pollution
EN25. Add		36–37	Material Balance
EN26. Core		46	Reducing Waste Generation and Final Disposal
EN27. Core		33	Status with Regard to Legal Compliance
EN28. Core		46	Reducing Final Waste Disposal
EN29. Add	6.5 / 6.5.4 / 6.5.6	—	—
EN30. Add	6.5 / 6.5.4 / 6.6.6 / 6.7.5	82–84	Development of Environmentally Friendly Products
EN31. Add	6.5 / 6.5.4 / 6.7.5	50	Promotion of Waste Paper Recycling
EN32. Core	6.5	33	Status with Regard to Legal Compliance
EN33. Add	6.5 / 6.5.4 / 6.6.6	40	Advancing energy efficiency in logistics
EN34. Add	6.5	35	Environmental Accounting
<b>Product Responsibility Performance Indicator</b>			
DMA <sup>2</sup>	6.2 / 6.6 / 6.7	66–67	Customers (Policy and Management)
		68–81	Customers (Group Company Activities)
PR1. Core	6.3.9 / 6.6.6 / 6.7 / 6.7.4 / 6.7.5	66–67	Customers (Product Safety Management System)
PR2. Add		68–81	Customers (Group Company Activities)
PR3. Core	6.7 / 6.7.3 / 6.7.4 / 6.7.5 / 6.7.6 / 6.7.9	66–81	Customer Responsibility
PR4. Add	6.7 / 6.7.4 / 6.7.5 / 6.7.6 / 6.7.8 / 6.7.9	67	Verification and Audit of Recycled Paper
PR5. Add	6.7 / 6.7.3 / 6.7.6 / 6.7.9	76–77	Activities of Nippon Paper Crecia Co., Ltd.
PR6. Core	6.7 / 6.7.3 / 6.7.6 / 6.7.9	—	—
PR7. Add	6.7 / 6.7.7	—	—
PR8. Add	6.7 / 6.7.6	—	—
PR9. Core	6.2 / 6.4 / 6.3.10	86–87	Human Rights, Employment and Labor (Policy and Management, the Status of Employment, Industrial Relations)
LA1. Core	6.4 / 6.4.3	92	Occupational Safety and Health (Basic Policy, Promotion System)
LA2. Core		87	The Status of Employment
LA3. Add	6.4 / 6.4.3 / 6.4.4	87	The Status of Employment
LA4. Core	6.4 / 6.4.3 / 6.4.4 / 6.4.5	88–89	Creating Workplaces that Support Diverse Human Resources
LA5. Core	6.3 / 6.4 / 6.4.3 / 6.4.4 / 6.4.5	—	—
LA6. Add	6.3.10 / 6.4 / 6.4.3 / 6.4.4 / 6.4.5	87	The Status of Employment and Industrial Relations
LA7. Core	6.4 / 6.4.3 / 6.4.4 / 6.4.5	87	Industrial Relations
LA8. Core	6.4 / 6.4.6 / 6.8 / 6.8.3 / 6.8.4 / 6.8.8	—	—
LA9. Add	6.4 / 6.4.6	93	Occupational Safety and Health (Status of Occupational Accidents)
LA10. Core	6.4 / 6.4.6 / 6.8 / 6.8.3 / 6.8.4 / 6.8.8	94	Occupational Safety and Health (Efforts regarding Hygiene and Health)

Item	ISO 26000 clauses	Corresponding Page(s)	Contents
LA9. Add	6.4 / 6.4.6	—	—
LA10. Core	6.4 / 6.4.7	22	Compliance Training
		23	Respect for Intellectual Property
		34	Environmental Education and Training
LA11. Add	6.4 / 6.4.7 / 6.8.5	90–91	Cultivating Human Resources (Development of Lifelong as well as Career Plans)
LA12. Add	6.4 / 6.4.7	91	Cultivating Human Resources (Fair Evaluation and Compensation)
LA13. Core	6.3.7 / 6.3.10 / 6.4 / 6.4.3	14	Outline of the Nippon Paper Group
		87	The Status of Employment
LA14. Core	6.3.7 / 6.3.10 / 6.4 / 6.4.3 / 6.4.4	—	—
<b>Human Rights Performance Indicator</b>			
DMA <sup>2</sup>	6.2 / 6.3	86	Human Rights, Employment and Labor (Policy and Management)
		52	Philosophy and Basic Policy Concerning Raw Materials Procurement
HR1. Core	6.3 / 6.3.3 / 6.3.5 / 6.6.6	—	—
HR2. Core	6.3 / 6.3.3 / 6.3.5 / 6.4.3 / 6.6.6	54	Promoting Procurement that Takes into Consideration Environmental and Social Concerns
HR3. Core	6.3 / 6.3.5	—	—
HR4. Core	6.3 / 6.3.6 / 6.3.7 / 6.3.10 / 6.4.3	—	—
HR5. Core	6.3 / 6.3.3 / 6.3.4 / 6.3.5 / 6.3.8 / 6.3.10 / 6.4.3 / 6.4.5	—	—
HR6. Core	6.3 / 6.3.3 / 6.3.4 / 6.3.5 / 6.3.7 / 6.3.10	86	Philosophy and Basic Policy on Human Rights, Employment and Labor
		54	Promoting Procurement that Takes into Consideration Environmental and Social Concerns
HR7. Core	6.3 / 6.3.3 / 6.3.4 / 6.3.5 / 6.3.7 / 6.3.10	86	Philosophy and Basic Policy on Human Rights, Employment and Labor
		54	Promoting Procurement that Takes into Consideration Environmental and Social Concerns
HR8. Add	6.3 / 6.3.5 / 6.4.3 / 6.6.6	—	—
HR9. Add	6.3 / 6.3.6 / 6.3.7 / 6.3.8 / 6.6.7	—	—
HR10. Add	—	—	—
HR11. Add	—	—	—
<b>Society Performance Indicator</b>			
DMA <sup>2</sup>	6.2 / 6.6 / 6.8	18–19	Group Governance
		22–23	Compliance
		52	Raw Materials Procurement (Policy and Management)
	96	Community (Policy and Management)	
SO1. Core	6.3.9 / 6.6.7 / 6.8 / 6.8.5 / 6.8.7	—	—
SO9. Core	—	47–49	Initiatives to Prevent Environmental Pollution
SO10. Core	—	47–49	Initiatives to Prevent Environmental Pollution
SO2. Core	6.6 / 6.6.3	—	—
SO3. Core		22	Compliance Training
SO4. Core	—	—	—
SO5. Core	6.6 / 6.6.4 / 6.8.3	21	Collaborative Initiatives
SO6. Add	—	—	—
SO7. Add	6.6 / 6.6.5 / 6.6.7	Not applicable	—
SO8. Core	6.6 / 6.6.7 / 6.8.7	Not applicable	—

## Guideline Comparison Table (Environmental Reporting Guidelines [2012])

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<b>Basic Issues of Environment Reporting</b>		
1. (1)	2, Back Cover	Editorial Policy, Next Issue
1. (2)	2-3	Editorial Policy
1. (3)	2-3	Editorial Policy
1. (4)	2-3	Editorial Policy
2	4-5	Message from the President
3. (1)	6-11, 14-15	Special Feature: Toward More Sophisticated Use of Wood Outline of the Nippon Paper Group
3. (2)	31	Environmental Action Plan 2015 Fiscal 2012 Results
3. (3)	31	Environmental Action Plan 2015 Fiscal 2012 Results
4	36-37	Material Balance
<b>Status of Environmental Management (MPI)</b>		
1. (1)	30-31	Policy and Management
1. (2)	6-11	Special Feature: Toward More Sophisticated Use of Wood
2. (1)	32	Environmental Management Promotion Structure
2. (2)	30-35	Policy and Management
2. (3)	32-34	Breaches of Statutory Requirements and the Status of Accidents, Environment-related Complaints
3. (1)	26-27, 34	Dialog with Stakeholders, Environmental Communication
3. (2)	96-101	Community Responsibility
4. (1)	30-31, 52	Policy and Management (Environment), Policy and Management (Raw Materials Procurement)
4. (2)	54-57	Materials Procurement and Forest Management Responsibility
4. (3)	82-84	Development of Environmentally Friendly Products
4. (4)	6-11	Special Feature: Toward More Sophisticated Use of Wood
4. (5)	40	Advancing Energy Efficiency in Logistics
4. (6)	57	Promoting Overseas Afforestation
4. (7)	46, 50	Reducing Waste Generation and Final Disposal, Promotion of Waste Paper Recycling

Item	Corresponding Page(s)	Contents
<b>Information and Indicators that Describe the Status of Activities for Environmental Impacts and Its Reduction Measures</b>		
1. (1)	36-37, 38-41	Material Balance, Mitigation of Climate Change
1. (2)	36-37, 50, 54-57	Material Balance, Promotion of Waste Paper Recycling, Sustainable Procurement of Raw Materials
1. (3)	36-37, 47	Material Balance, Preventing Water Pollution
2	38, 46	Mitigation of Climate Change, Reducing Waste Generation and Final Disposal
3. (1)	36-37	Material Balance
3. (2)	36-37, 38-41	Material Balance, Mitigation of Climate Change
3. (3)	36-37, 47	Material Balance, Preventing Water Pollution
3. (4)	36-37, 47	Material Balance, Preventing Air Pollution
3. (5)	36-37, 48-49	Material Balance, Controlling Chemical Substances
3. (6)	36-37, 46	Material Balance, Reducing Waste Generation and Final Disposal
3. (7)	36-37, 48-49	Material Balance, Controlling Chemical Substances
4	42-45	Biodiversity Conservation
<b>The Status of Environmental Management from Economic and Social Perspectives</b>		
1.(1)	35	Environmental Accounting
1.(2)	25	Management (Dividends)
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<b>Other Issues</b>		
1	2	Scope of Organizations Covered (Information regarding the April 2013 merger)
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## Comparison Table (the United Nations Global Compact)

Principles	Corresponding Page(s)	Contents
<b>Human Rights</b>		
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Principle 2	52, 54-55, 86-94	Raw Materials Procurement (Promoting Procurement that Takes into Consideration Environmental and Social Concerns), Human Rights, Employment and Labor Responsibility
<b>Labor Standards</b>		
Principle 3	87	Human Rights, Employment and Labor Responsibility (Industrial Relations)
Principle 4	52, 54-55, 86	Raw Materials Procurement (Promoting Procurement that Takes into Consideration Environmental and Social Concerns), Human Rights, Employment and Labor Responsibility
Principle 5	52, 54-55, 86	Raw Materials Procurement (Promoting Procurement that Takes into Consideration Environmental and Social Concerns), Human Rights, Employment and Labor Responsibility
Principle 6	86, 88-89	Human Rights, Employment and Labor Responsibility (Policy and Management, Creating Workplaces that Support Diverse Human Resources)
<b>Environment</b>		
Principle 7	30-37, 38-41, 42-45, 52, 54-57	Environment (Policy and Management, Mitigation of Climate Change, Biodiversity Conservation), Raw Materials Procurement (Policy and Management, Sustainable Procurement of Raw Materials)
Principle 8	4-5, 6-11, 30-50, 52-64	Message from the President, Building a Sustainable Society, Environmental Responsibility, Raw Material Procurement and Forest Management Responsibility
Principle 9	42, 44, 46, 82-84	Environment (Biodiversity Conservation, Utilizing Proprietary Technologies), Customers (Development of Environmentally Friendly Products)
<b>Anti-Corruption</b>		
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# Third-Party Comments / Action in Response to Third-Party Comments



**Yoshinao Kozuma**  
Professor, Faculty of  
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## [ Profile ]

After leaving the doctoral program at the Sophia University Graduate School of Economics, Professor Kozuma became a research assistant at the Nagoya Institute of Technology and attended the Limperg Instituut, the Inter-University Institute for Accounting and Auditing in the Netherlands, as a guest researcher funded by the Dutch government. He became an associate professor at the University of Shizuoka School of Administration and Informatics, and then took up his current position as professor in the Faculty of Economics at Sophia University. He has held successive positions as the chair or member of various CSR- or environment-related advisory panels, study groups, and research conferences for the Ministry of the Environment; the Ministry of Economy, Trade and Industry; the Ministry of Land, Infrastructure, Transport and Tourism; the Cabinet Office; and the Japanese Institute of Certified Public Accountants.

## Third-Party Comments

This report provides more detailed coverage of the Nippon Paper Group's medium-to-long-term strategy of achieving sustainable growth as a comprehensive player in biomass businesses. The Group's Fourth Medium-Term Business Plan lays out the principal strategies of strengthening the earning power of its core paper business and achieving sustainable growth by transforming the business structure to make the Group a comprehensive player in biomass businesses. The latter, with its potential for future growth, is receiving a higher degree of attention, and I believe that as the details of that strategy become clear stakeholders will have even greater expectations for the possibility of its success.

Regarding the Group's organization, the merger of Nippon Paper Industries with Nippon Daishowa Paperboard, NIPPON PAPER-PAK, and Nippon Paper Chemicals in October 2012 was followed by the April 2013 merger making Nippon Paper Industries into an operating holding company. This phased reorganizing over such a short period clearly communicates the Nippon Paper Group's firm resolve to transform its business structure. As for the business model of being a comprehensive player in biomass business, the Group's fundamental tactics, which consist of making sophisticated use of the Group's forest resources and efficiently applying wood science technologies developed over many years, are clearly explained. This has made it much easier to understand how the cutting-edge products and technologies that have been introduced in bits and pieces in the past relate to the business transformation strategy.

In addition, the placement of feature coverage of business-model-related information immediately after the message from the president clearly shows, in terms of the report organization, the strategic position of sustainability factors. Considering also the concise summarization of important information and the inclusion of a content-rich data section, I give high marks to this report for the excellence of its view format and information quality, even in a highlight edition.

Looking forward, this report could be improved with better information disclosure. Beginning with the current report, information on overseas employment figures by geographic area is being provided. The Group, however, has put forth the active involvement of women and hiring of people from other countries as approaches for achieving diversity, so it would be ideal to have data on achievements in these areas. I also believe explanations that are a little more detailed are necessary to further enhance the information imparted by the abundant environmental data in the highlight edition.

For example, even though initiatives targeting environmental problems are producing results, the volume of non-fossil fuel energy used is not rising despite progress in fuel switching. Also, the percentage of waste that is being recycled is declining. Situations like these require the consideration of disclosure approaches that would fill the gap between textual explanations and quantitative data.

## Action in Response to Third-Party Comments

The Nippon Paper Group has developed technologies and products for the multi-dimensional use of wood, based on sustainable forest management. The business activities we have pursued over many years, while applying the unique characteristics of trees and forests in areas such as CO<sub>2</sub> absorption and sequestration, biodiversity preservation, and recyclability, are directly related to the building of a sustainable society. We aim to achieve further sustainable growth of the Nippon Paper Group together with society by building on existing technologies to develop new areas of business. For the present report, we have tried very hard to communicate to our stakeholders, in clear understandable terms, both the concept of becoming a comprehensive player in biomass businesses (one that can grow sustainably), and our progress in transforming our business structure toward achieving that. We are extremely pleased that Professor Kozuma recognized and highly rated our efforts in this regard.

As to the Professor's points concerning the range of our data disclosure and occasional lack of explanations addressing disclosed data, we take them seriously and will work to produce reports with descriptions and data that relate to one another in ways that are clearly understandable. These efforts will also extend to the highlight edition, which can easily become overly concise.

We will maintain our dialogue with our stakeholders and continue to pursue business activities that respond to society's expectations and demands. We will also continue to encourage stakeholders to let us know their candid opinions and impressions of our performance.



**Masaru Motomura**  
Executive Vice President,  
Representative Director  
and General Manager of  
the CSR Division  
Nippon Paper Industries  
Co., Ltd.



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### Cover Photograph



Shari Forest owned by  
Nippon Paper Industries

Photographer:  
Yuhji Itsumi



The cost of the paper used in this report includes a portion of expenses for the use of timber discarded in forests following tree thinning.

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