

NIPPON PAPER GROUP

# Sustainability Report 2015



Group Companies

	Japan	North America	Australia	Asia	Europe	South America	Africa	Total
Consolidated subsidiaries	30	3	5	3	3	0	0	44
Non-consolidated subsidiaries	74	0	1	6	1	2	0	84
Affiliates	34	1	0	5	1	1	1	43
Equity-method affiliates	7	2	0	1	1	0	0	11

Production Sites

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 Akita Mill
  - 6 Ishinomaki Mill
  - 7 Iwanuma Mill
  - 8 Nakoso Mill
  - 9 Ashikaga Mill
  - 10 Soka Mill
  - 11 Yoshinaga Mill
  - 12 Fuji Mill
  - 13 Otake Mill
  - 14 Iwakuni Mill
  - 15 Yatsushiro 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
- Jujo Thermal Oy
  - 27 Kauttua 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 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

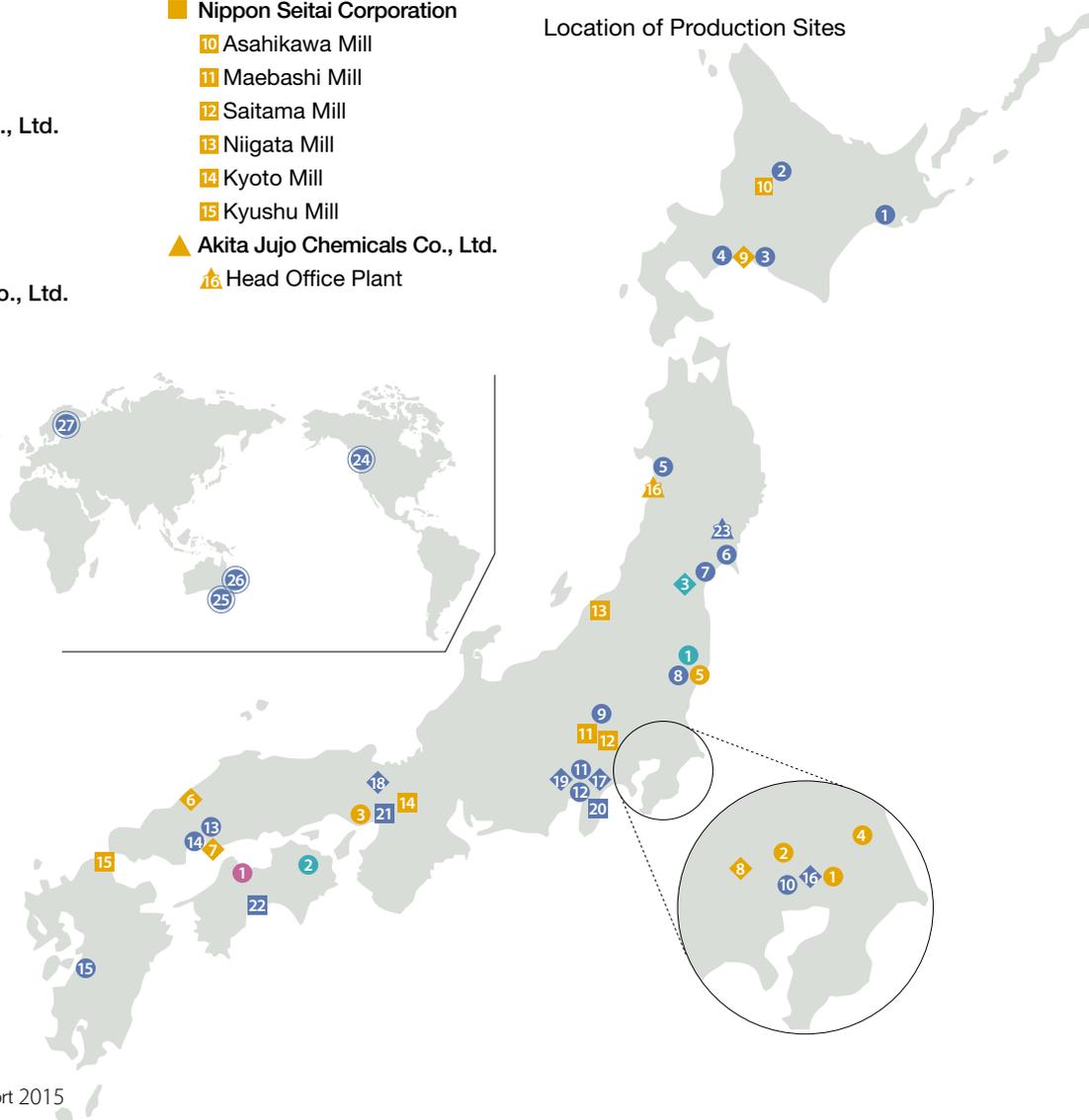
- Nippon Paper Lumber Co., Ltd.
  - 1 Iwaki Mill
  - 2 N&E Co., Ltd.
- ◆ Daishowa Uniboard Co., Ltd.
  - 3 Miyagi Mill

Other Businesses

- SHIKOKU COCA-COLA BOTTLING CO., LTD.\*
  - 1 Komatsu Plant

\* Transferred all issued common shares to Coca-Cola West Co., Ltd. in April 2015.

Location of Production Sites



## Editorial Policy

The Nippon Paper Group publishes its sustainability report to provide stakeholders with a broad overview of what we are doing to meet our corporate social responsibilities (CSR). The Group also publishes an annual report to provide information on its financial aspects and results of operations.

### Period Covered

April 1, 2014–March 31, 2015

Includes information from before April 1, 2014 and after March 31, 2015. 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, 2015 for Nippon Paper Industries Co., Ltd. and all 44 of its consolidated subsidiaries.

#### Environmental Coverage

The scope of the report covers the basic environmental policies, systems, environmental accounting and environment performance and other data for the 18 companies, including 4 non-consolidated subsidiaries with production facilities, named below. All major production locations are included.

Consolidated: Nippon Paper Industries Co., Ltd.; Nippon Paper Crecia Co., Ltd.; Nippon Paper Papylia Co., Ltd.; Paper Australia Pty Ltd.; Kitakami Paper Co., Ltd.; Nippon Paper Industries USA Co., Ltd.; Jujo Thermal Oy; Nippon Seitai Corporation; Nippon Paper Lumber Co., Ltd.; N&E Co., Ltd.; Daishowa Uniboard Co., Ltd.; South East Fibre Exports Pty Ltd.; Nippon Paper Development Co., Ltd.; GAC CO., LTD.

**(The contribution to total consolidated sales of the companies listed here was 91%.)**

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

Non-consolidated: SOKA PAPERPAK CO., LTD.; EGAWA PAPER-PAK CO., LTD.; MIKI PAPER-PAK CO., LTD.; Akita Jujo Chemicals Co., Ltd.

### Referenced Guidelines

- *Environmental Reporting Guidelines* (2012) of the Ministry of the Environment
- *Sustainability Reporting Guidelines* (Version 4) issued by the Global Reporting Initiative (GRI)
- United Nations Global Compact
- ISO 26000, etc.

### Disclaimer

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

## Contents

Major Operating Companies and Production Sites ...	2
Editorial Policy .....	3
Message from the President.....	4
<b>Special Features</b>	
<b>Business Strategy and CSR Activities</b>	
• The Sustainable Business Model of a Comprehensive Biomass Enterprise.....	6
• Nippon Paper Group Business Overview.....	8
• Fifth Medium-Term Business Plan .....	10
• Social Issues and the Nippon Paper Group's Value Creation Flow .....	12
• CSR Materiality at the Nippon Paper Group .....	14
■ Management Responsibility .....	15
■ Forest Management and Raw Material Procurement Responsibility .....	21
■ Environmental Responsibility.....	29
■ Responsibility to Customers .....	47
■ Human Rights, Employment and Labor Responsibility .....	53
■ Responsibility to Communities .....	61
Outline of the Nippon Paper Group .....	66
Guideline Comparison Table .....	68
Third-Party Comments .....	71
Action in Response to Third-Party Comments .....	71

# The Nippon Paper Group Aims to Contribute to Better Living and Cultural Progress Everywhere It Does Business.

## **As a comprehensive biomass enterprise shaping the future with trees, we are advancing in a sustainable business model.**

The identity of the Nippon Paper Group rests on trees. Over periods of many years, we nurture the trees that become the raw material for paper. And by providing myriad products and services applying forest resources, we help to improve lives and promote cultural progress. The practice of sound forest management and the pursuit of a wide array of businesses that apply every bit of the lumber produced from forests under our stewardship help to address serious social issues, such as climate change and resource depletion, and contribute to the development of a sustainable society.

Including both company-owned forests in Japan and overseas afforestation areas, the Nippon Paper Group manages forests totaling 204,000 hectares. As expansive as the entirety of Tokyo Prefecture, these are areas in which we are preserving ecosystems and biodiversity through sustainable forest management. Trees absorb and sequester CO<sub>2</sub>, which remains held even after the trees are processed into lumber. This is how using wood resources helps to fight climate change. In addition, the use of black liquor (a byproduct of the pulp manufacturing process), woody biomass, and construction waste as fuel; the recycling of paper products; and the use or recycling of all the other resources that result from forests we manage help to reduce resource depletion.

The Nippon Paper Group's business model, as that of a comprehensive biomass enterprise, is sustainable and contributes to the development of society while making effective use of sustainable assets and resources. Maximizing the value of renewable forest resources will remain a fundamental objective as we move forward.

## **We are applying the diversity of wood as a material to make the most of opportunities in new and growth fields.**

Wood, the raw material for paper, is characterized by a high degree of diversity in application. A key advantage enjoyed by the Nippon Paper Group is that it maintains a diverse, yet balanced, structure as a comprehensive biomass enterprise making use of renewable forest resources. It has been said that paper is the barometer of a culture, and contributing to cultural progress through the manufacture of paper is the very foundation of the Nippon

Paper Group. Underpinned by that foundation, we apply advanced technologies to turn wood materials into energy, healthcare products, biochemicals, packaging, and other goods that contribute to better living. We are now ramping up our efforts to develop applications for cellulose nanofiber and expect to launch the first product using this promising next-generation material – an incontinence product with odor-control properties – in the fall of 2015.

Incorporating the development of these applications, the Nippon Paper Group formulated its Fifth Medium-Term Business Plan, covering fiscal 2015 to 2017, as a roadmap for its ongoing growth and development as a comprehensive biomass enterprise. Working from a base of earning power enhancement in our domestic and overseas paper and paperboard divisions, we are committed to transforming our business structure to develop and successfully implement approaches for making the most of opportunities in new and growth areas.

## **Through ongoing dialogue with stakeholders, we will expand our perspective and serve to build a sustainable society.**

The Nippon Paper Group, through its management of vast tracts of forest and operation of large-scale production sites, has the potential to significantly impact local areas and their residents. Coexistence with local communities, therefore, is critical for our own continued existence. We, therefore, view stakeholder opinions as opportunities to take notice of matters important for coexistence with local communities, and for sustainable growth. We appreciate, for example, that environmental consciousness is indispensable toward those ends. Communicating with communities and customers, we reflect stakeholder expectations and demands in our daily operations, product development, and medium-term environmental action plan, and take highly effective environmental measures in procurement, production, distribution, product development, recycling, and other aspects of the value chain. This is none other than implementation of the Nippon Paper Group Environmental Charter, which lays out environmental management principles for Group companies, and we are committed to its steadfast implementation. Investors, of course, are also stakeholders and we treat their opinions as valuable inputs for increasing our shareholder value over the medium-to-long term.

There are various social challenges that have serious global implications and must be overcome through broad

## Group Mission

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### Mission

The Nippon Paper Group aims to contribute to better living and cultural progress everywhere it does business.

### Vision

1. Drive social sustainability through our business
2. Delight our customers
3. Instill pride in employees
4. Give back to society

### Value

**Challenge : Embrace new challenges**

**Fairness : Be fair**

**Teamwork : Champion teamwork**

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social cooperation based on expanded perspectives and close attention to their evolution. The participation of Nippon Paper Industries Co., Ltd. in the United Nations Global Compact, which sets out ten principles with respect to human rights, labor standards, the environment, and the prevention of corruption, is based on this understanding.

Regarding employees, the Nippon Paper Group wants every individual to fully exercise their capabilities, based on our Values - including the spirit of Challenge, Fairness, and Teamwork - and with strict attention paid to health, safety, and compliance. We are striving to create new value as we change our business structure. Fairness is the foundation of our organizational vigor and the trust we earn from customers and society. With shared objectives and a clear understanding of organizational and individual roles, teamwork on a daily basis to rise to large and small challenges will ultimately result in sustained growth.

This report focuses on describing how our business model, as that of a comprehensive biomass enterprise, is intimately connected to problem resolution and ongoing development for society, and how we will continue to pursue our business in coexistence with local communities. The Nippon Paper Group will keep working in ways that promote the building of a sustainable society, based on the needs of stakeholders. We would be very pleased to have this report read as widely as possible and to receive candid feedback on its contents.

**Fumio Manoshiro**  
President  
Nippon Paper Industries, Co., Ltd.



# The Sustainable Business Model of a Comprehensive Biomass Enterprise

In addition to preventing global warming and protecting watersheds, forests perform a wide variety of functions such as providing shelter for diverse living creatures. As a comprehensive biomass enterprise, the Nippon Paper Group practices sustainable forest management, while also making full use of and recycling the precious resources forests represent.

Helping to fight global warming, protect biodiversity, and prevent resource depletion

**Three** Cycles Contributing to Sustainable Development

## 1 Sustainable Forest Management

**204,000** hectares of company-owned forests worldwide —roughly equivalent to the entire area of Tokyo Prefecture

After harvesting, steps are taken to regenerate forests. Every effort is being made to ensure that forests under our stewardship thrive indefinitely.

### Preserving biodiversity

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.

Environmental forest areas:

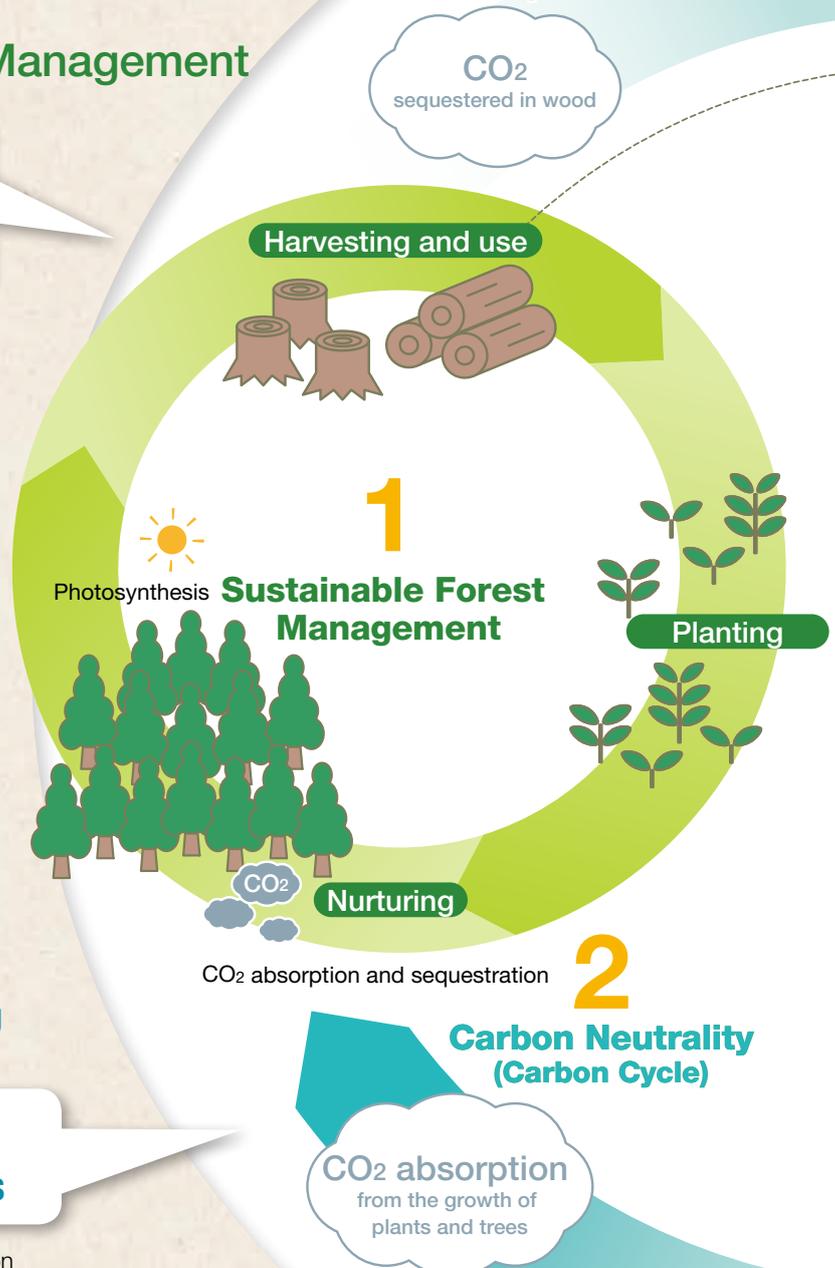
**18,000** hectares

About 20% of forests owned in Japan

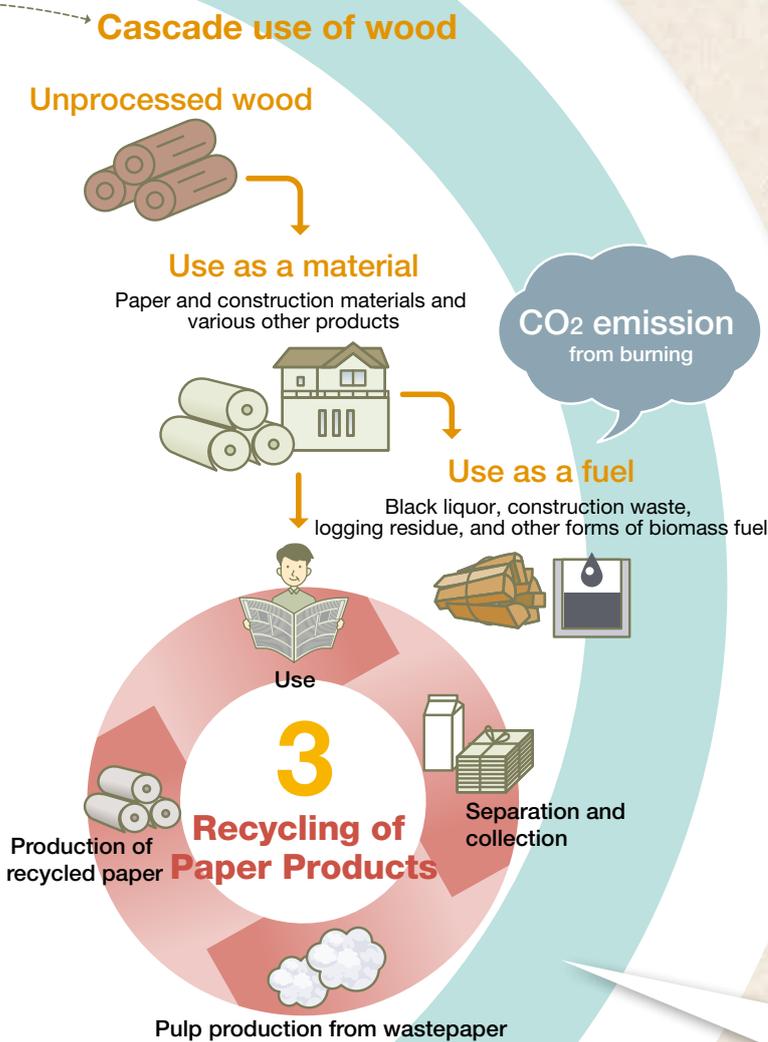
## 2 Carbon Neutrality (Preventing Global Warming through the Carbon Cycle)

CO<sub>2</sub> sequestered in company-owned forests worldwide: **34 million tons**

Trees, the principal raw material used by the Nippon Paper Group, absorb and hold CO<sub>2</sub> from the atmosphere as they grow. When wood resources are burned, this CO<sub>2</sub> is released, so there is no net increase in atmospheric CO<sub>2</sub>. The ongoing effective use of wood resources from properly managed, sustainable forests constitutes a carbon-neutral cycle that adds no carbon to the atmosphere.



## Making full use of and recycling trees as a biomass resource



### Cascade use of trees

The Nippon Paper Group uses trees in a cascade of applications that contributes to greater resource usage efficiency by employing every bit of every tree.

### Prevention of resource depletion

Of the energy used by the Nippon Paper Group, 47% is comprised of black liquor 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 Group is making advances in the development of biomass materials that can be used in place of petrochemical products.

### Non-fossil energy\* as a percent of total energy usage:

**47%**

\* Non-fossil energy = biomass energy+ waste energy

## 3 Recycling of Paper Products

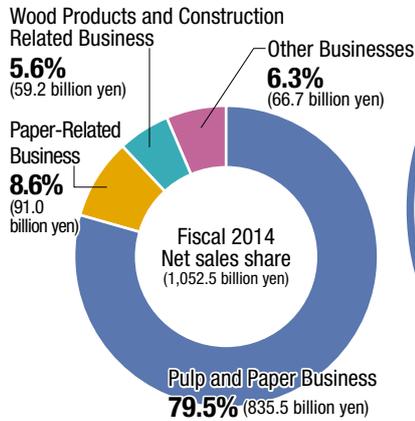
### Recycled paper utilization rate

Paper **38%** Paperboard **92%**

The Nippon Paper Group is working diligently to increase the waste paper collection 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.

# Nippon Paper Group Business Overview

The Nippon Paper Group uses renewable wood resources to pursue a diversity of businesses. From paper and paperboard, and household paper, to paper containers, chemicals, and housing construction materials, we provide a wide range of products indispensable for daily life.



### Paper Media

Product Examples

Newsprint      Printing paper

### Packaging

Product Examples

Linerboard and corrugated medium      Beverage containers

## Pulp and Paper Business

### Business Description

Various paper, paperboard and household paper products in this core segment lead the domestic industry in production, sales volumes and quality. We are working to reorganize our production structure. At the same time, we are proactively developing overseas markets for paper and paperboard, especially in Asia and the Pacific Rim. Significant attention is also being devoted to the application of in-house power generation know-how to produce and sell electricity.

### Principal Customers

Newspaper, publishing, printing, and stationery companies; public offices, paper manufacturers, electric utilities, and general consumers

### Healthcare

Product Example

Household paper products

### Special Function Papers

Product Example

Specialty paper (teabags and other products)

### Energy

Business Example

Power generation business



## Paper-Related Business

### Business Description

Comprising this business are three segments, including paper-processing operations, which add various forms of value to paper as a raw material; the chemical products segment, which applies all wood components fully in the manufacture and sale of various types of products; and the functional film segment, which makes the most of its clean coating technology.

### Principal Customers

Manufacturers of beverages, food, chemicals and other products, and various types of paper processing companies

### Chemicals

#### Product Examples



Coating materials



Food additives



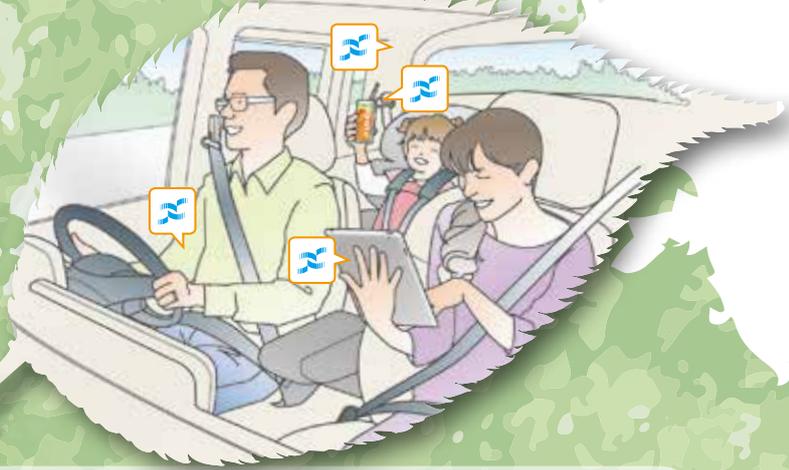
Material for LCDs



Raw material for rayon



Concrete dispersant



## Wood Products and Construction Related Business

### Business Description

The lumber segment of this business has the advantage of using Japanese timber obtained by the same expertise we use to procure wood resources for making paper. It also focuses on using construction materials made from Japanese wood resources. The civil-engineering-related segment makes use of the technologies we have amassed for maintaining facilities at our paper mills.

### Principal Customers

Construction materials, housing and construction companies, general consumers, and public offices

### Housing and Construction

#### Product Examples



Lumber



Interior decoration materials

## Other Businesses

### Business Description

Included here are segments that put biotechnology expertise developed in afforestation R&D to work in agricultural pursuits; apply real estate and other Group assets in sports and leisure operations; and handle product and material logistics for Group companies.

### Principal Customers

Businesses and general consumers

### Agriculture

#### Business Example



Agricultural businesses

### Sports & Leisure

#### Business Example



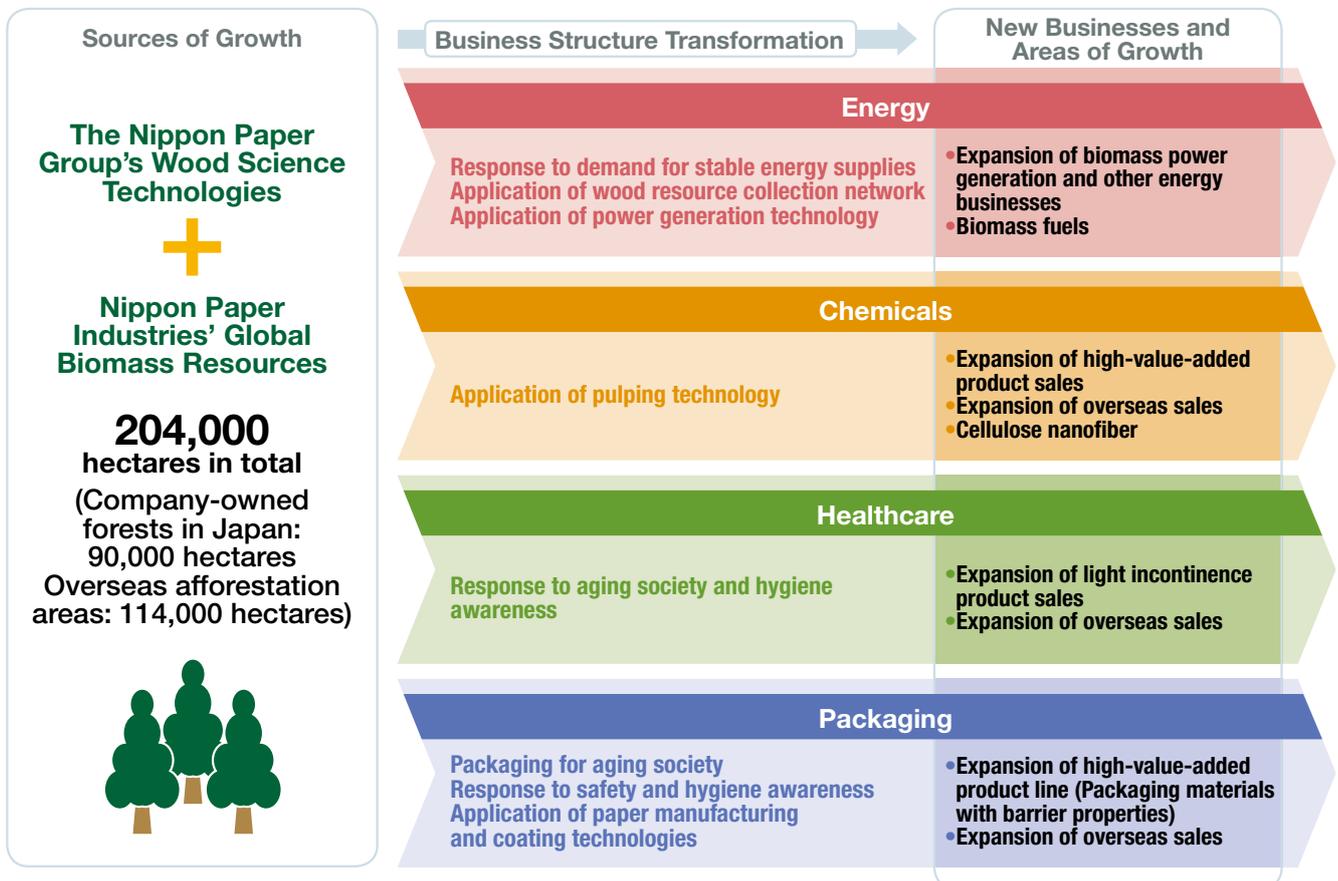
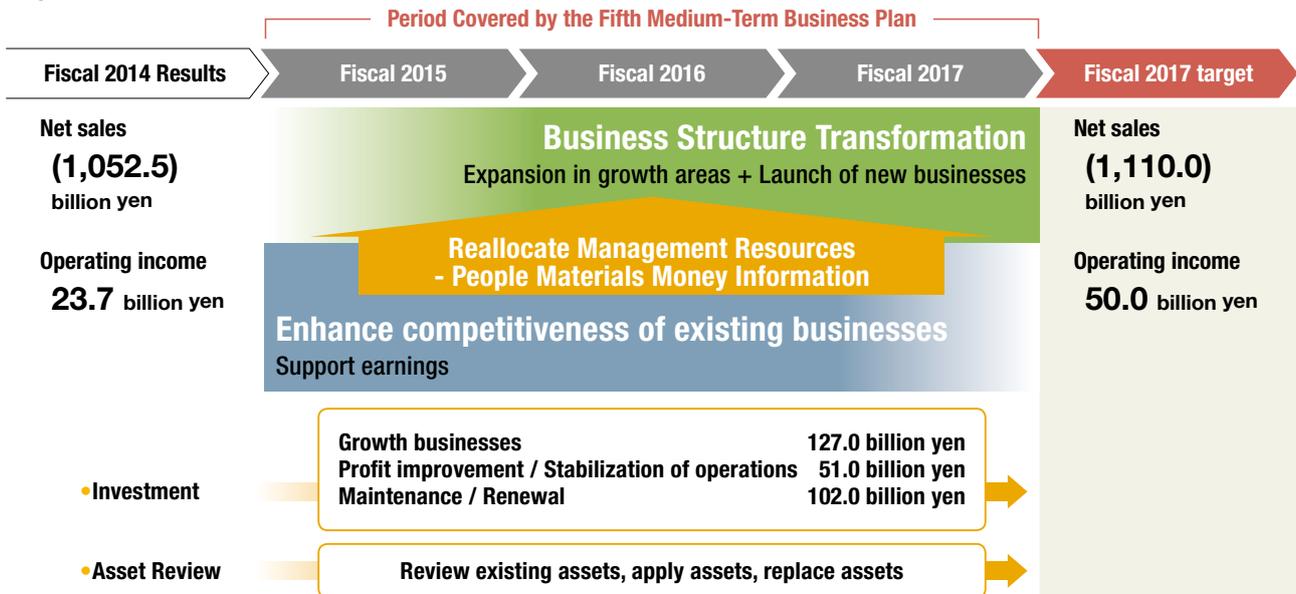
Leisure business

# Fifth Medium-Term Business Plan

The Nippon Paper Group has formulated its Fifth Medium-Term Business Plan, which covers the period April 1, 2015 to March 31, 2018.

Working from a base of enhancing profitability in the domestic and overseas paper and paperboard businesses, this plan sets the course for expanding growth businesses by transforming the business structure, and creating new value as a comprehensive biomass enterprise shaping the future with trees.

## Key Themes of the Fifth Medium-Term Business Plan



## Growth Areas

### 1 Energy

Nippon Paper Industries began operating a solar power plant in the city of Komatsushima in Tokushima Prefecture, in February 2015, and a biomass power plant at its Yatsushiro Mill in June 2015. It is also advancing a coal-biomass mixed fuel power generation project, a wind power project, and a new initiative for the commercialization of biomass fuel. Moving forward with the steady implementation of the Fifth Medium-Term Business Plan, work will focus on rapidly developing these energy projects into businesses with combined annual sales of around 50 billion yen.



Komatsushima Solar Power Plant (Module capacity of 21,000 KW)

### 2 Healthcare

The healthcare business is viewed as a promising growth area and is being treated as a high priority for management resources, which will be allocated with the goal of achieving a medium-term target of ¥20 billion in annual sales. Nippon Paper Crecia will complete capacity expansion work at its main Kyoto Mill and simultaneously strengthen its sales operations. In addition, through the release of products such as the Poise® and the Hada Care Acty® series of light incontinence products featuring outstanding odor control, Nippon Paper Crecia is offering new value that responds to the needs of an aging society.



Poise® Pad Regular  
20 pads

Hada Care Acty® Soft Fit  
All-night absorbent pads  
27 pads each with  
capacity for 6 urination  
episodes

### 3 Packaging

Having gotten into the business of paper containers for liquids 50 years ago, we are now at a turning point and it is now time to refocus our attention on the development of original products. We aim to enhance the added value of our products from various perspectives, including the 3Rs (Reduce, Reuse, Recycle) and portability. Over the medium term, we will move forward with attention focused on expanding into paper container applications beyond beverages and developing business on a global scale.



Various types of paper containers and packaging

## New Business

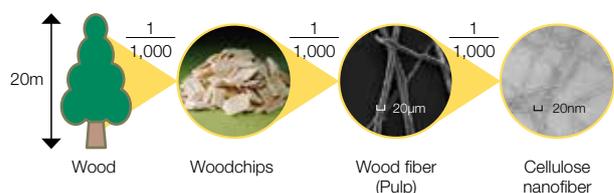
### Cellulose Nanofiber (CNF) - Using a Proprietary Technology to Create a New Market

Cellulose nanofiber is wood fiber (pulp) that has been refined down to a nano\*-order scale and is the world's most advanced biomass material.

In October 2013, Nippon Paper Industries established Japan's first production demonstration facilities (with minimum production capacity of 30 tons per year) for CNF at the Iwakuni Mill. At present, we are distributing sample products to potential customers in a range of industries to support application development, while we work to establish the mass-production technology and reduce production costs.

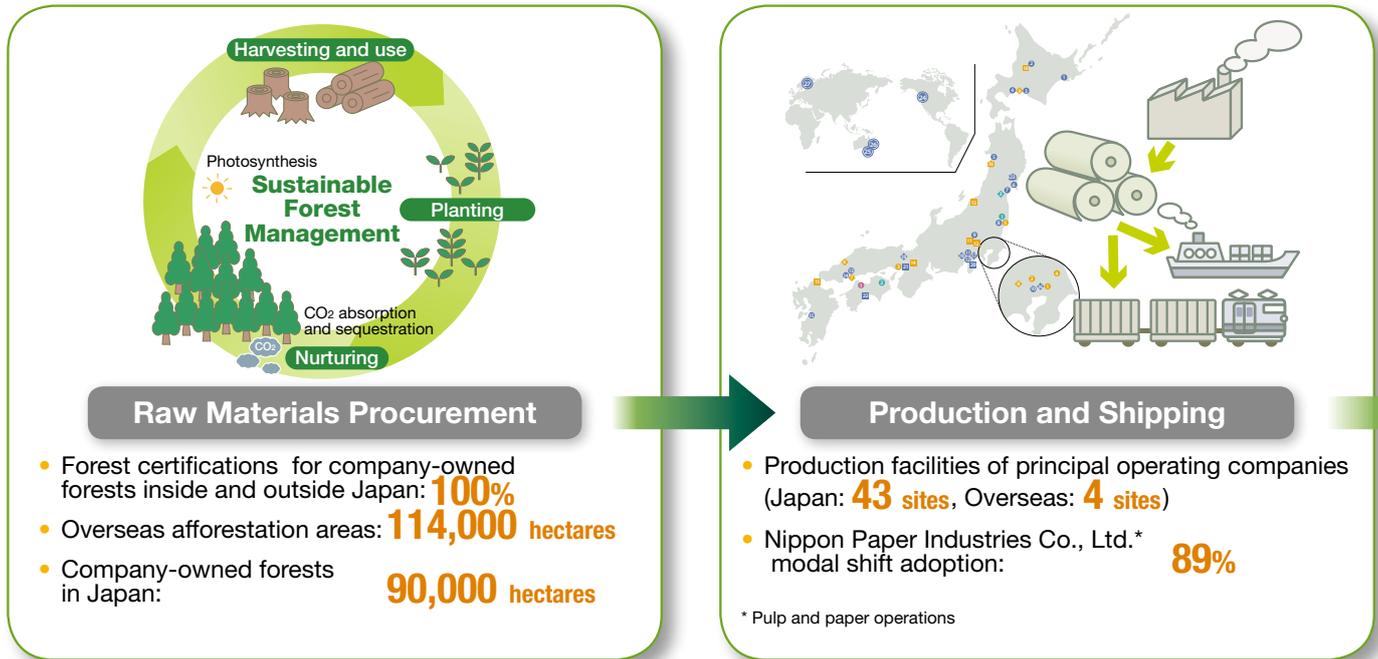
Having developed healthcare products, such as the Hada Care Acty® series, which incorporates CNF in a functional sheet with outstanding odor-control properties, we are also developing new markets for products applying CNF.

Japan's Ministry of Economy, Trade and Industry has established the goal of developing the CNF materials market into one with annual sales of a trillion yen by 2030. Given the potential to greatly reduce weight - for example, in automobile parts - CNF could give rise to a major new market in composite materials. Nippon Paper Industries, therefore, aims to allocate more human resources to the task of accelerating the commercialization of CNF.



\* "Nano" = one billionth.

# Social Issues and the Nippon Paper Group's Value Creation Flow



## Addressing Social Issues in Our Value Chain

Social Issues	ISO 26000 Core Subjects	Pages in Sustainability Report 2015	Raw Material Procurement
Management Responsibility	Organizational Governance, Fair Operating Practices	P15-20	←
Forest Management, Raw Material Procurement, and Environmental Responsibility	The Environment	P21-46	<ul style="list-style-type: none"> <li><b>Sustainable procurement of raw materials</b> (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 (<b>Preserving biodiversity</b> and other efforts to maintain the diversity of roles played by forests)</li> </ul>
Responsibility to Customers	Consumer Issues	P47-52	←←
Human Rights, Employment and Labor Responsibility	Human Rights, Labor Practices	P53-60	<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 (Respect for indigenous people, prohibitions against forced labor and child labor, etc.)</li> </ul>
Responsibility to Communities	Community Involvement and Development	P61-65	<ul style="list-style-type: none"> <li><b>Coexistence with communities</b> adjacent to overseas afforestation areas (Job creation, education support, cultural preservation <b>contributions to local environments</b>, <b>Preserving biodiversity</b>, 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

- Nippon Paper Group's Net Sales Breakdown
 

Pulp and Paper Business:	<b>79.5%</b>	Paper-Related Business:	<b>8.6%</b>
Wood Products and Construction Related Business:	<b>5.6%</b>	Other Businesses:	<b>6.3%</b>

### Separation, Collection, Recycling, and Disposal

- Recycled Paper Usage (Japan)
 

Paper:	<b>38%</b>
Paperboard:	<b>92%</b>

Materiality

Initiatives in Our Value Chain			
Production	Shipping	Sales and Usage	Separation, Collection, Recycling, and Disposal
Corporate governance, CSR management, thorough compliance, appropriate information disclosure, and <b>dialog with stakeholders</b>			
<ul style="list-style-type: none"> <li>Climate change initiatives</li> <li>Reduction of environmental impacts (Water and air pollutants, waste, noise, vibration, odor, chemical substances, etc.)</li> <li>Development and manufacturing of environmentally and socially conscious 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>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 wastepaper collection</li> </ul>
<ul style="list-style-type: none"> <li>The stable supply of products</li> <li>Ensuring quality and safety</li> </ul>		<ul style="list-style-type: none"> <li>Providing environmentally and socially conscious products</li> <li>Ensuring safety in use</li> <li>Pursuing customer satisfaction</li> <li>Appropriate disclosure of product information</li> <li>Addressing customer questions and opinions</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of wastepaper collection together with customers (Support for recycling organizations, establishment of waste paper collection facilities, etc.)</li> </ul>
Climate Change Initiatives			
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 prevention</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>Coexistence with areas surrounding mills (Job creation, education support, contributions to local environments, cultural preservation, promotion of safety and disaster prevention, 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 wastepaper collection</li> </ul>
Promotion of appropriate information disclosure and communication			

# CSR Materiality at the Nippon Paper Group

## CSR Materiality Items among Initiatives in Our Value Chain (Addressed on pages 12-13)

ISO 26000 Core Subjects	Materiality	Indicators
Organizational Governance, Fair Operating Practices (Management Responsibility)	<ul style="list-style-type: none"> <li>• <b>Dialog with stakeholders</b></li> </ul>	P20
The Environment (Forest Management, Raw Material Procurement, and Environmental Responsibility)	<ul style="list-style-type: none"> <li>• <b>Sustainable procurement of raw materials</b></li> <li>• <b>Climate change initiatives</b></li> <li>• <b>Reduction of environmental impacts</b></li> <li>• <b>Wastepaper collection and use</b></li> <li>• <b>Preserving biodiversity</b></li> </ul>	P24 P35 P38 P43 P44
Consumer Issues (Responsibility to Customers)	<ul style="list-style-type: none"> <li>• <b>Providing environmentally and socially conscious products</b></li> </ul>	P51
Human Rights, Labor Practices (Human Rights, Employment and Labor Responsibility)	<ul style="list-style-type: none"> <li>• <b>Occupational safety and health</b></li> </ul>	P55
Community Involvement and Development (Responsibility to Communities)	<ul style="list-style-type: none"> <li>• <b>Coexistence with local communities and society at large</b></li> </ul>	P63

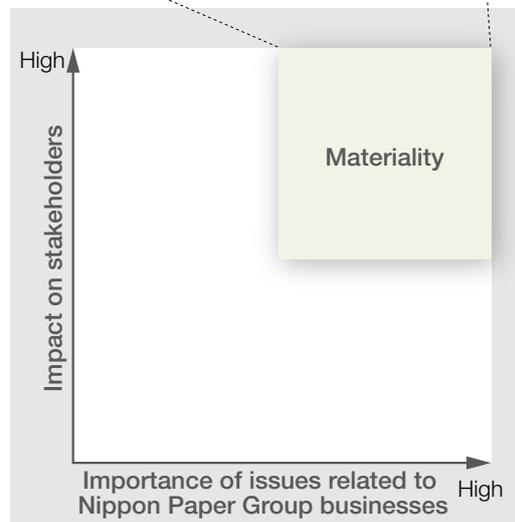
The Nippon Paper Group, working from a foundation of sustainable forest management, contributes to better living and cultural progress as a comprehensive biomass enterprise making full use of, and recycling, renewable wood resources.

We have a social responsibility to use renewable resources to contribute to the development of a sustainable society.

Proper management can make forests into sustainable resources and enable the preservation of forest ecosystems and biodiversity. Sequestering CO<sub>2</sub> in forests and using wood resources helps to fight global warming. And using, recycling, and regenerating wood resources prevent resource depletion.

Creating new products and expanding our activities as a comprehensive biomass enterprise, the Nippon Paper Group manages and operates expansive forests and large-scale production sites, and has a significant impact on the local areas and people who work there. Coexistence with these communities, as well as reducing environmental impacts and securing the safety and health of our local employees, therefore, are critical to our own continued existence.

Moreover, the opinions of our stakeholders serve as valuable opportunities to grasp issues that are important for coexisting and growing with society in a sustainable way.



Therefore, the materiality items given above are of particular importance among our initiatives addressing social issues in our value chain (see pages 12–13).

Materiality items, which were identified based on impact on stakeholders and importance to our businesses, also reflect Nippon Paper Group employee survey results, and concerns frequently expressed by customers and local communities in inquiries submitted to the Nippon Paper Group.

# Management Responsibility



- の要件を満たす、社会から持続的に必要とされる企業グループ
1. 事業活動を通して持続可能な社会の構築に寄与する
  2. お客様のニーズに的確に応える
  3. 社員が誇りを持って明るく仕事に取り組む
  4. 安定して利益を生み出し社会に還元する

Value 社員が重視する価値観  
Challenge, Fairness, Teamwork

木とともに未来を拓く総合バイオマス企業として新たな価値を創出

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

Investor Briefings

## Materiality

### • Dialog with Stakeholders

## Indicators

- Various types of shareholder briefings, individual meetings, etc. held: 252
- Whistleblower reports received: 26
- Risk communication meetings held: 38
- Supplier questionnaires conducted: 27

## Group Governance and Information Disclosure

Corporate Governance Structure	16
Internal Control System	16
Basic Position on Information Disclosure	17
Compensation Paid to Directors	17
IR Activities	17

## CSR Management

Management Structure	18
Collaborative Initiatives	18

## Compliance

Compliance Structure	19
Personal Information Protection	19
Respect for Intellectual Property	19
Group Internal Whistleblower System	19

## Dialog with Stakeholders

Basic Stance	20
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# Group Governance and Information Disclosure

Increasing transparency and practicing fair management

## Corporate Governance Structure

### Working to enhance management efficiency and credibility

The company's Board of Directors is comprised of seven internal directors and one outside director, for a total of eight directors, as of June 26, 2015. It is responsible for making decisions on the basic policies of the Group companies, on matters pertaining to laws or regulations, and Articles of Incorporation, and on other critical management issues, and also monitoring the executive aspects of Group companies.

The Management Execution Committee meets weekly to support the business execution activities of the president, 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.

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.

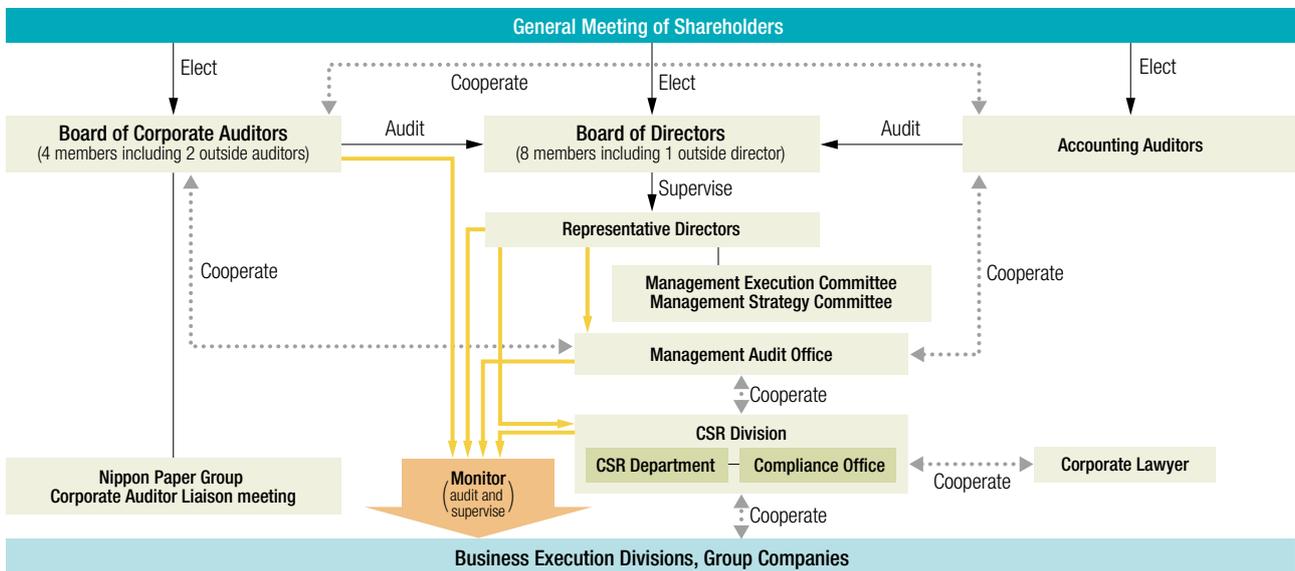
## Internal Control System

### Complying with statutory and regulatory requirements

In accordance with the Companies 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 Management Audit Office assesses the status and operation of financial reporting internal controls. Covered by these assessments are Nippon Paper Industries Co., Ltd., and 25 consolidated subsidiaries and equity-method affiliates—at an overall company level. Assessments for two key companies among this group of companies are performed at a more detailed level with attention focusing on net sales, accounts receivable and inventory administration processes, which are of special importance to business objectives. These assessments helped confirm the efficacy of the Group's internal control and financial reporting systems as of the end of fiscal 2014.

Corporate governance structure



### Comment

### Monitoring management from the perspectives of compliance, CSR, and the interests of stakeholders

Yoshimitsu Aoyama, Outside Director, Nippon Paper Industries Co., Ltd.

As an outside director, I monitor decision-making in the Board of Directors from the perspectives of compliance, CSR, and stakeholder interests.

The purpose of corporate governance, I believe, is to increase corporate value, provide resulting benefits to shareholders and other stakeholders, and promote the creation and maintenance of comfortable working environments. In the course of doing these things, corporate governance also serves to enhance the dignity of the company as a member of society. I view my own role as a board member with experience as a legal scholar as contributing to the entire board's observance of the Revised Companies Act and affirmative attitude toward the Corporate Governance Code.



## ● Basic Position on Information Disclosure

### Ensuring management transparency 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 18). 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 instrument 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.



#### Information Disclosure Policy

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

### 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

## ● Compensation Paid to Directors

### Determined on the basis of responsibilities and performance

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. Compensation paid to corporate auditors is limited to a fixed amount in view of their responsibilities. 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

## ● IR Activities

### Promoting dialogue with shareholders and investors

In striving to increase its share price over the medium-to-long term, Nippon Paper Industries expends great effort in explaining to its shareholders and investors. 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 2014

Operating results and management briefings	1 time
Operating results briefings (Teleconference)	3 times
Individual meetings	248 times

#### ● 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' Ishinomaki Mill and seminars on cellulose nanofiber in fiscal 2014 attracted considerable praise from participants.



Tours of Nippon Paper Industries' Ishinomaki Mill

#### Trends in dividends per share

(Yen)

Company name	Fiscal year end	Interim dividend	Period-end dividend
Nippon Paper Group, Inc.	March 2012	10	20
	March 2013	10	—
Nippon Paper Industries Co., Ltd.*	March 2013	—	30
	March 2014	10	30
	March 2015	20	30

\* Nippon Paper Industries Co. Ltd. and Nippon Paper Group, Inc. merged on April 1, 2013.

# CSR Management

The CSR Division executes corporate social responsibility initiatives

## 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 CSR activities based on the shared values embodied in the Action Charter and works closely with the various divisions and departments.

### Meeting social responsibilities through business activities

The Nippon Paper Group views its reason for existence as contributing to better living and cultural progress everywhere it does business. As a comprehensive biomass enterprise shaping the future with trees, we aim to contribute to the development of a sustainable society through our business activities. Toward that end, we are committed to grasping the expectations and demands of our stakeholders, and fulfilling our corporate social responsibilities from the perspectives of business management; forest management and the procurement of raw materials; the environment; customers; human rights, employment, and labor; and local communities.

Meeting social responsibilities through business activities



## The Nippon Paper Group's Action Charter

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

### Supporting CSR activities by Group companies

Nippon Paper Industries Co., Ltd.'s CSR Department hosts regular CSR liaison meetings with personnel in charge of CSR at principal Group companies. These meetings are held to communicate directions being taken with regard to CSR matters and to share information. They are also used as opportunities to hear discussions of CSR trends by invited consultants, and to hold "business and human rights" workshops moderated by a representative of Amnesty International Japan.

## Collaborative Initiatives

### Seeking to connect to and work with external parties

The Nippon Paper Group is striving to build relationships of genuine coexistence with its stakeholders. As part of that effort, we are working to share CSR-related information with other companies, international organizations, governmental institutions, labor organizations, and NGOs in countries around the world, and contribute to various activities together with these partners.



### The United Nations Global Compact

Nippon Paper Industries Co., Ltd. announced its decision to support the 10 principles covering the four fields of human rights, labor, environment and anti-corruption and joined the United Nations Global Compact as a signatory in November 2004.



United Nations Global Compact  
<https://www.unglobalcompact.org/>

# 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

## ● Compliance Structure

### Promoting compliance throughout the Group

The CSR Division of Nippon Paper Industries Co., Ltd., was established to serve as the core of the compliance system for the Nippon Paper Group. The division serves as a facilitator and driving force behind efforts to achieve and reinforce understanding of compliance throughout the Group.

Each Group company appoints a person to be in charge of compliance within its organization, and Nippon Paper Industries' Compliance Office actively hosts Group Compliance Liaison Meetings to provide all employees in charge of compliance with details of compliance policies and initiatives, opportunities to share 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.

### ● Implementing compliance training

The Nippon Paper Group conducts training on an ongoing basis to further enhance compliance awareness and understanding. We, together with a consultant from outside the Group, conduct training that involves group discussions and is tailored to the specific needs of production sites and sales offices.



Compliance training

Education on compliance is also provided through avenues such as e-learning, new-hire training, and training for newly appointed managers.

## ● Personal Information Protection

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

Nippon Paper Industries has taken steps to ensure clear understanding of the structure and rules applicable to the handling of personal information. The personal information of customers, business partners and employees is controlled by clearly stated rules and a manual, and is tracked and managed in control ledgers by individual related departments as required by the Private Information Protection Law. These ledgers contain details of the dates when personal information was obtained and the purposes for holding it, and are reviewed annually to eliminate data for which the holding period has expired and take other actions, as well, 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.

A total of 342 employees attended the 11 programs implemented in fiscal 2014.

## ● Group Internal Whistleblower System

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

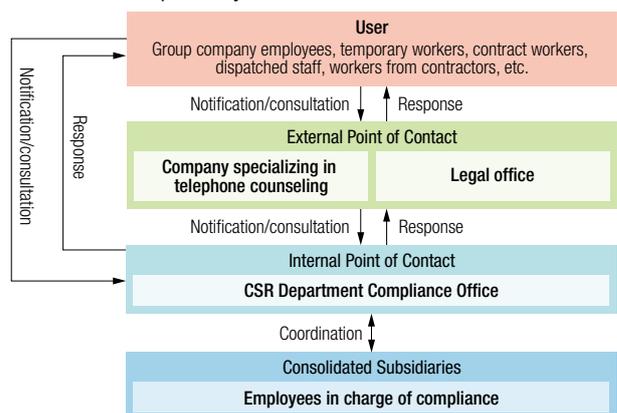
The Nippon Paper Group has established its help line system to allow any employee of the Group to provide direct notification of, or seek advice outside the chain-of-command on, any action in the workplace that could violate laws, social norms or corporate ethics. The Compliance Office located within the CSR Department serves as a point of contact within the Group. We have also established 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.

Trends in the number of notifications received by the help line

Fiscal 2011	Fiscal 2012	Fiscal 2013	Fiscal 2014
15	13	21	26

Flow of the help line system



# Dialog with Stakeholders

Actively creating opportunities for dialog to promote coexistence with society

**Basic Stance**

## Actively promoting dialog

The Nippon Paper Group manages broad areas of forest and operates large-scale production sites. Coexistence with the places where we pursue business activities, and with society at large, therefore, is in our own vital interest, and dialogue with stakeholders is critical for understanding what coexistence demands.

In this context, we actively establish contact points and opportunities for direct dialog with all stakeholders while regularly providing information on our operations and promoting the exchange of opinions. Each of our business locations actively creates opportunities for regular communication on risks and other matters. And stakeholder opinions are received through channels such as our website and *ShikiOriori*, the CSR communication magazine we publish to provide plain and simple explanations of our CSR initiatives.

Stakeholder opinions are carefully considered and reflected in management decision making aimed at enabling the mutually beneficial ongoing development of society and the Nippon Paper Group.



CSR communication magazine *ShikiOriori*

### 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 12,771 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 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 to corporate customers: wholesale trading companies, newspaper 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 Product safety sections Customer assistance channels	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>	Responsible sections within mills and branches	Environmental explanatory meeting, risk communication, environmental monitoring system, mill presentation meetings, etc.
	Responsible sections within each business segment	Interviews, etc.
	Social contribution sections	Social contribution activities, etc.
	Public relations sections	Press releases, interviews, etc.
<p><b>Business partners (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, supplier surveys, 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 43% and 20%, respectively, of the 116,250,000 shares issued by the company as of March 31, 2015. Nippon Paper Group, Inc. strives to disclose information promptly in a transparent, fair and continuous manner.</p>	General affairs sections IR sections	General shareholders' meetings, shareholder communications, explanatory meetings, annual reports, IR site, IR information mail, etc.

# Forest Management and Raw Material Procurement Responsibility



The Nippon Paper Group, as a comprehensive biomass enterprise pursuing business endeavors that are founded on sustainable forest management and promote sustainable growth by using, and later recycling, every bit of the renewable wood resources it harvests, contributes to better living and cultural progress.

As such, we have a social responsibility to contribute to the sustainable development of society by making effective use of wood resources, which are renewable.

With proper forest management, forests can be used as a sustainable resource, and forest ecosystems and biodiversity can be protected. Because forests act to sequester CO<sub>2</sub>, using wood resources actually helps to prevent global warming.

BTP (Australia) afforested area

## Materiality

- **Sustainable Procurement of Raw Materials**

## Indicators

- Forest certifications for company-owned forests inside and outside Japan: 100%
- Forest certifications for imported hardwood chips: 100%
- Overseas chip suppliers questionnaires: 100% (27 questionnaires)

## Policy and Management

Basic Stance .....	22
Philosophy and Basic Policy .....	22
Sustainable Forest Management ...	22
Framework for Promoting Raw Materials Procurement Management .....	22

## Current Status of Raw Materials Procurement

Current Status of Raw Materials Procurement .....	23
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## Sustainable Procurement of Raw Materials

Basic Stance .....	24
Action Plan for Wood-Based Raw Material Procurement .....	24

## Protecting and Nurturing Japan's Wood Resources

Sustainable Management of Company-Owned Forests in Japan	26
Invigorating Japan's Forest Industry	26

## Promoting Overseas Afforestation

Basic Stance .....	28
Tree Farm Initiative.....	28

# Policy and Management

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

## ● Basic Stance

### Pursuing sustainable and stable wood resources procurement

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

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

## ● Philosophy and Basic Policy

### Philosophy and basic policy reflecting 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.

## ● Sustainable Forest Management

### Practicing proper planning and management

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

- 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.

Proper planning and management are important factors in the sustainable management of forests. A considerable amount of time is required to cultivate trees to their maturity. In putting together a viable sustainable forest management plan, it is important to consider factors including the areas allocated to afforestation and harvesting, the rate of growth, the surrounding environment and the impact on society. Landscape concerns related to efforts to protect waterside forests and address other such needs must also be examined. Taking full advantage of its expertise in forest management, the Group is promoting proper planning and management.

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

## 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.

# Current Status of Raw Materials Procurement

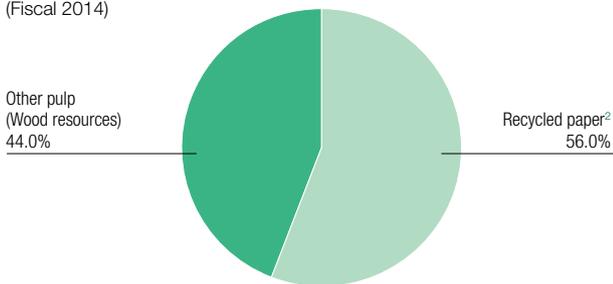
In addition to actively promoting the use of recycled paper, we procure wood resources from sustainably managed forests.

## Current Status of Paper Raw Materials Procurement

### Using waste paper and wood resources as raw materials

The Nippon Paper Group is engaged primarily in the manufacture of paper products. Fifty-six percent of the raw materials are composed of recycled paper and the remaining 44% consists of such wood resources as woodchips. Both types of raw materials are used to produce pulp.

Breakdown of main raw materials for paper manufacturing\*1 (Fiscal 2014)



1 Japanese subsidiaries  
2 Wastepaper / (Wastepaper + other types of pulp)

### Initiatives aimed at stable waste paper procurement

The collection of wastepaper 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 maintained a stable system for procuring waste paper. This system, the product of many years of collaboration with the waste paper industry, promotes the recycling of waste paper.

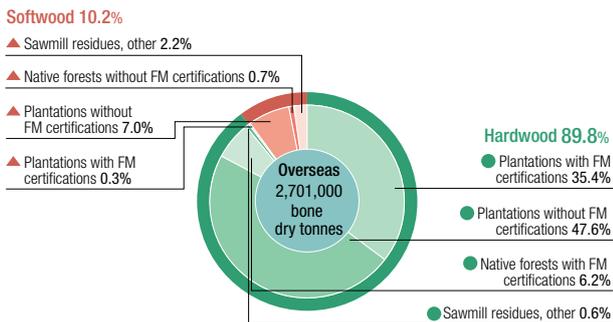
### Initiatives aimed at stable wood resource procurement

Nippon Paper Industries is responsible for procuring wood raw materials for the Group. Slightly more than 60% of the wood resources are procured from overseas and a little under 40% sourced from Japan. Australia is the main source for overseas hardwood and softwood, accounting for 35% and 71% of these materials, respectively.

Breakdown of wood raw materials procurement (Fiscal 2014) (Nippon Paper Industries Co., Ltd.) (tonnes=bone dry tonnes)

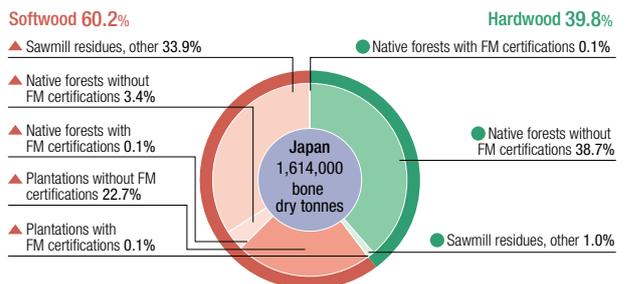


### Breakdown of wood raw materials procured from overseas



\* All forests without FM certifications have undergone CoC risk assessments (see page 24 for information on FM certifications)

### Breakdown of wood raw materials procured from Japan



\* All forests without FM certifications have undergone CoC risk assessments (see page 24 for information on FM certifications)

Tree species Nippon Paper Industries Co., Ltd. procured from overseas, and their countries of origin (Fiscal 2014) (tonnes=bone dry tonnes)

#### Hardwood

Country	1,000 tonnes	Percentage	Species
Australia	855	35.2%	Eucalyptus
South Africa	540	22.3%	Acacia
Brazil	510	21.0%	Eucalyptus, Acacia
Vietnam	280	11.5%	Acacia
Chile	241	9.9%	Eucalyptus
Total	2,426	100.0%	

#### Softwood

Country	1,000 tonnes	Percentage	Species
Australia	196	71.2%	Radiata pine
U.S.A.	65	23.7%	Douglas fir
Russia	14	5.0%	Yezo spruce
Total	276	100.0%	

# Sustainable Procurement of Raw Materials

Practicing sustainable forest management emphasizing legal compliance and using certifications as benchmarks

## 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 the environmental and social concerns. Our procurement of wood resources rests on the principles of legality and emphasize sustainability, clear identification of the origin of wood resources, and full accountability.

When purchasing from external suppliers, we make every effort to enhance our supply chain management capabilities, taking into consideration the environment and society's needs. 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 procurement 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.

#### Key points of sustainable wood resources procurement

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

## Action Plan for Wood-Based Raw Material Procurement

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

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, and consideration for human rights, labor, local communities, and the protection of biodiversity, 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.

Nippon Paper Industries, in connection with annual forest certification audits and monitoring performed by the Japan Paper Association's illegal logging monitoring project, has third parties perform objective assessments to determine whether it is conducting wood resource procurement in accordance with its basic policies. Suggestions from these assessments are then used to make improvements where necessary.



➔ Action Plan for Wood-Based Raw Material Procurement  
<http://www.nipponpapergroup.com/csr/forest/procurement/actionplan/index.html> (Japanese only)

## Overview of major forest certification programs

Certification program name	Details and features
<b>FSC®</b> —Forest Stewardship Council® 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 56 standards. FSC® has adopted the FM and CoC certification system.
<b>PEFC</b> —Programme for the Endorsement of Forest Certification 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 39 countries around the world. In similar fashion to FSC®, PEFC has adopted the CoC certification system.  Examples of certifications mutually recognized by PEFC (for forests owned by Nippon Paper Industries Co., Ltd.) Australian Forestry Standard (AFS): Australia / CERTFORCHILE: Chile / CERFLOR: Brazil
<b>SGEC</b> —Sustainable Green Ecosystem Council 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 while taking into consideration Japan's natural environment as well as its social customs and culture. SGEC has also adopted the CoC certification system. It joined the PEFC in November 2014 and submitted an application for mutual recognition in March 2015.

#### \* 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 processing and distribution of timber materials. In addition to tracking products (certified woodchips) from certified forests in each process including processing and distribution, CoC certification confirms that a risk assessment of all non-certified woodchips has been undertaken. Products display a certification mark in the event that all operators have acquired CoC certification across all processes.

Sustainable Wood Resource Procurement Scheme

Philosophy and Basic Policy Concerning Raw Materials Procurement (➡P.22)

Action Plan for Wood-based Raw Material Procurement

Action Plan for Wood-based Raw Material Procurement		
	Japanese Resources	Overseas Resources
<b>Basic Policy and Scheme</b>	Confirm legality based on verifications by organizations approved by forest, timber or lumber industry organizations specified in the Guideline for Verification of Legality and Sustainability of Wood and Wood Products established by Japan's Forest Agency in connection with government procurement initiatives to fight illegal logging in accordance with the Law on Promoting Green Purchasing.	<ul style="list-style-type: none"> <li>Paper industry meets requirements through verifications by individual companies using their own approaches, as provided in the Guideline for Verification of Legality and Sustainability of Wood and Wood Products.</li> <li>Policies and actions based on Japan Paper Association's guideline for measures against illegal logging.</li> </ul>
<b>Confirmation of Legality</b>	<ul style="list-style-type: none"> <li>Procurement through Nippon Paper Lumber Co., Ltd., which has an industry organization approval.</li> <li>In accordance with the guidelines, confirm legality based on the chain of verification from all timber suppliers to Nippon Paper Lumber Co., Ltd.</li> <li>Confirm certification by timber chipper industry organization.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>On-site checks by employees assigned to local offices</li> <li>Questionnaires and local interviews (Every effort is made to enhance traceability by confirming compliance with statutory requirements regarding forest management, tree species, and the acquisition of forest certifications.</li> </ul> <p>* In fiscal 2014, it was determined, based on questionnaire responses and shipping documents provided by each supplier, that no illegally harvested woodchips were procured from overseas suppliers.</p>
<b>Concern for human rights, labor and the protection of biodiversity</b>	<p>Based on information from sources such as questionnaires and local interviews, the following has been confirmed regarding initiatives by individual suppliers.</p> <ul style="list-style-type: none"> <li>Policies or systems have been established for addressing human rights and labor matters.</li> <li>Social contribution initiatives, such as contributions to schools and social welfare facilities, have been undertaken to improve relations with local communities.</li> <li>Biodiversity surveys have been conducted.</li> <li>Areas requiring special consideration to protect biodiversity have been identified and logging and forest management activities have been modified appropriately.</li> </ul>	
<b>Independent Audits</b>	<p>The following have been implemented for all procured wood resources.</p> <ul style="list-style-type: none"> <li>Annual audits by the Japan Paper Association's illegal logging monitoring project.</li> <li>Annual risk assessments based on the due diligence system of the Programme for the Endorsement of Forest Certification (PEFC), a Forest certification organization.</li> </ul>	



Third-Party Sustainable Forest Management Validations

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



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

Status of forest certification acquisition for overseas afforestation project

Overseas plantation project by operating company	Certification system name (License no.)	Date of acquisition
PTP (Australia)	AFS	June 2006
BTP (Australia)	AFS	April 2006
SEFE (Australia)	AFS	October 2006
Volterra (Chile)	FSC® (FSC®C120260), CERTFORCHILE	January 2014, December 2007
Forestco (South Africa)	FSC® (FSC®C012171)	April 2003
AMCEL (Brazil)	FSC® (FSC®C023383), CERFLOR	December 2008, September 2014

# Protecting and Nurturing Japan's Wood Resources

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

## Sustainable Management of Company-Owned Forests in Japan

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

Nippon Paper Industries owns approximately 90,000 hectares of forest in 375 locations in Japan, the second largest private-sector holdings of forest in the country. SGEN Forest Certifications have been obtained for all of the forest.

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 functions forests play within society.

#### Maintaining company-owned forests in Japan

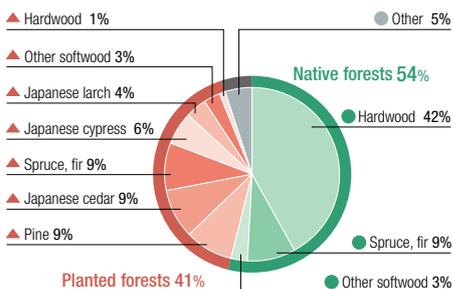
Nippon Paper Industries allocates approximately ¥0.7 billion each year to the maintenance and management of company-owned forests in Japan, which entails the clearing of undergrowth and thinning. As a company which has continued to benefit from and grow through forests and forest products, we are committed to balanced, sustainable forest management that allows forests to fulfill their multifaceted functions—including ones that benefit ecosystem protection and watershed conservation—despite the fact that forests within Japan are not currently economically viable because of the stagnant price of domestic timber.

#### Environmental forest designations, biodiversity-conscious forest management

Nippon Paper Industries 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.



Sugenuma company-owned forest designated an “environmental forest area” (Mt. Nikko-Shirane)



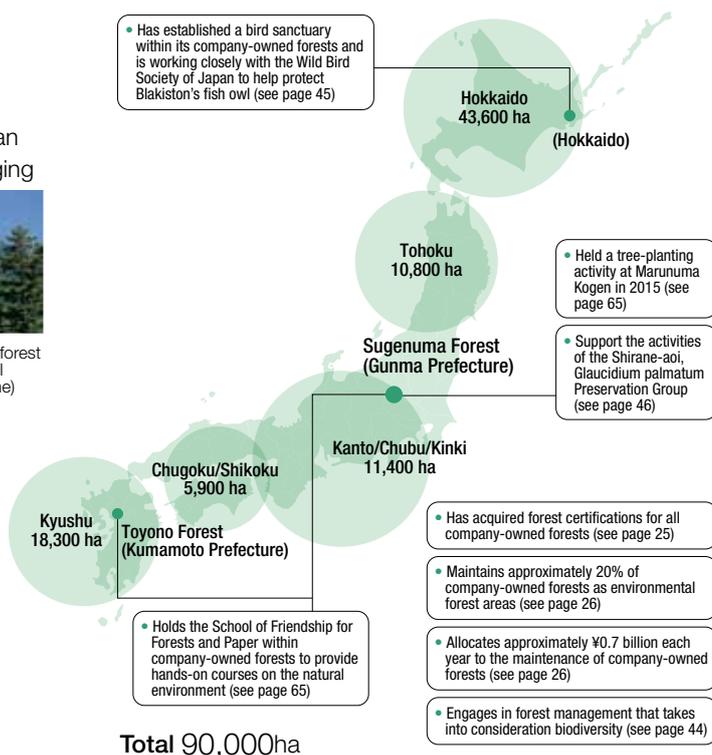
## Invigorating Japan's Forest Industry

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

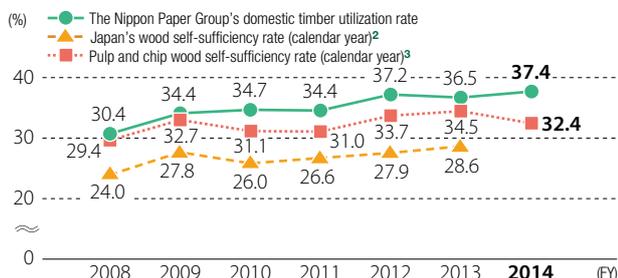
In recent years, deterioration of artificially planted Japanese cypress and Japanese cedar forests throughout Japan has become a concern. The reason for this deterioration is low lumber prices that have squeezed forest industry profitability and made it impossible to perform thinning and other necessary maintenance. To invigorate the 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 itself 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.

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, this figure rose by over 7 percentage points, to 37.4%, in fiscal 2014. 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.

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



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



1 The domestic (Japan) timber utilization rate includes sawmill residues.  
 2 Source: Supply and Demand of Lumber issued by the Forestry Agency of Japan  
 3 Source: Yearbook of Paper and Pulp Statistics issued by the Ministry of Economy, Trade and Industry of Japan

### ● Organizing private-sector forest owners in Kyushu

Increasing the competitiveness of Japan's forest industry requires that forest owners work together to maintain an efficient road network and systematic thinning operations. The signing of a memorandum of understanding on the advancement of forest management in Kyushu by Nippon Paper Industries Co. Ltd., the Kyushu Regional Forest Office; Oji Paper Co., Ltd.; Sumitomo Forestry Co., Ltd.; and others in 2009 set the stage for later developments.

In March 2015, for example, an area covered by an agreement concerning the promotion of forest maintenance in the Itsuki region of Kyushu was designated as the site for a consolidation test project with the participation of the Japan Project-Industry Council's Forestry Regeneration Committee.

In a separate development, a forest management and lumber production agreement was concluded for the Yatsushiro region in March 2014. This groundbreaking wide-area model agreement calls for private-sector forest owners to manage forests in Kyushu collaboratively. Participants in the agreement include Kumamoto Prefecture, Yatsushiro City, the Yatsushiro Shinrin Forest Cooperative, and Nippon Paper Co. Ltd.

### Case Actively promoting the use of domestic timber

With its network for domestic timber collection in Japan, and its ability to handle a comprehensive lineup of products, Nippon Paper Lumber is actively developing its domestic timber business. In fiscal 2014, the company handled approximately 740,000 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.)



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

Nippon Paper Industries sells "Kininaru Kami" copier paper made with wood from forest thinning operations in Kyushu.

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 distributors, 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



Packaging emphasizing that products were "made in Kyushu"

and a likeness of Kumamon, Kumamoto Prefecture's PR mascot, all to emphasize the product's "made in Kyushu" origins.

### Case 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 JAPIC Forestry Regeneration Committee created the Japan wood mark, and a committee dedicated to the promotion of its use, in August 2013.

Nippon Paper Industries 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 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 forest it owns in Japan.



Mark promoting the use of domestically produced wood

# Promoting Overseas Afforestation

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

## Basic Stance

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

Recognizing the importance of mutual 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.

## Tree Farm Initiative

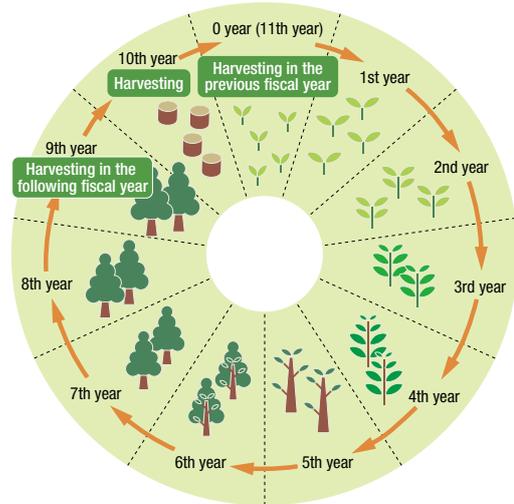
### Nurturing renewable wood resources

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

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.

#### 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 cycle-based forest management.



Example of a harvesting cycle

### Afforestation projects that help the local ecology

The Nippon Paper Group performs afforestation work on grasslands, former farms and pastures and on harvested plantation land. We select species, focusing mainly on fast-growing Eucalyptus, according to individual climatic conditions and materials available for making paper. In order to maintain a balance between areas planted with Eucalyptus and the biodiversity needs of each region, we implement appropriate measures and keep vegetation 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 local biodiversity.



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

## Coexisting with local communities in forested areas (P.63)

### Overview of Overseas Forests under Nippon Paper Group Management

Total forest area: 114,000 ha

Country	Afforested area
Australia	36,000ha
Brazil	54,000ha
South Africa	11,000ha
Chile	13,000ha

Country	Company Name	Background
Australia	Nippon Paper Resources Australia Pty. Ltd. (NPR)	Wholly owned subsidiary of Nippon Paper Industries Co., Ltd.
	South East Fibre Exports Pty. Ltd. (SEFE)	Joint-venture company established by Nippon Paper Industries Co., Ltd., and ITOCHU Corporation
Brazil	Amapá Florestal e Celulose S.A. (AMCEL)	Wholly owned subsidiary of Nippon Paper Industries Co., Ltd.
South Africa	Forest Resources Ltd. (Forestco)	Joint-venture company established by Nippon Paper Industries Co., Ltd., Sumitomo Corporation and BayFibre
Chile	Volterra S.A.	Joint-venture company established by Nippon Paper Industries Co., Ltd., Sumitomo Corporation and Mitsui O.S.K. Lines, Ltd.

# Environmental Responsibility

The Nippon Paper Group's social responsibility is to effectively use sustainable resources to contribute to the development of a sustainable society.

With proper management, forests become sustainable resources, and forest ecosystems and biodiversity can be protected. The CO<sub>2</sub> sequestering function of forests and the use of wood resources contribute to the prevention of global warming. And the use, recycling, and regeneration of wood resources contributes to the prevention of resource depletion.

As a comprehensive biomass enterprise pursuing the development of new products and expansion of business activities, the Nippon Paper Group owns large-scale production sites, and procures raw materials and ships finished products in massive volumes. Coexistence with local communities and society at large, therefore, demands that we work to reduce our environmental impact at every stage of the value chain.

Blakiston's fish owl living in a company-owned forest  
(Photo courtesy of the Wild Bird Society of Japan)

## Materiality

- **Climate Change Initiatives**
- **Reduction of Environmental Impacts**
- **Wastepaper Collection and Use**
- **Preserving Biodiversity**

## Indicators

- CO<sub>2</sub> emissions from fossil energy: Reduced by 28.7% vs. Fiscal 1990 (Fiscal 2015 objective/Reduced by 25% vs. fiscal 1990)
- Use of fossil energy: Reduced by 38.4% vs. fiscal 1990 (Fiscal 2015 objective/Reduced by 30% vs. fiscal 1990)
- Waste recycling rate: 98.2% (Fiscal 2015 objective/at least 97%)
- Onsite recycling rate for waste generated within mills: 27.9% (Fiscal 2015 objective/at least 40%)
- Ratio of recycled paper to paper: 38.2% (Fiscal 2015 objective/at least 40%)
- Ratio of recycled paper to paperboard: 92.3% (Fiscal 2015 objective/at least 88%)
- Forest certifications for company-owned forests: 100% (Objective/100%)

## Policy and Management .....30

Basic Stance / Environmental Charter / Environmental Action Plan (Green Action Plan 2015) / Environmental Management Promotion Structure / Strengthening Environmental Compliance / Environmental Communication / Environmental Education and Training / Environmental Accounting

## Climate Change Initiatives .....35

Basic Stance / Fuel Conversion Led by the Adoption of Biomass Boilers / Advancing Energy Efficiency in Logistics / Absorbing and Sequestering CO<sub>2</sub> through Proper Management of Company-Owned Forests

## Reduction of Environmental Impacts ..... 38

Material Balance / Preventing Air Pollution / Preventing Soil Pollution / Preventing Water Pollution / Reducing Industrial Waste / Preventing Noise, Vibration, and Odors / Controlling Chemical Substances

## Wastepaper Collection and Use ..... 43

Basic Stance / Progress under the Green Action Plan 2015 / Initiatives for Expanding the Use of Recycled Paper

## Preserving Biodiversity ..... 44

Basic Stance / Initiatives in Our Core Business Activities / Initiatives Leveraging Our Resources and Technologies

# 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

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 depletion, and air and water pollution.

## Environmental Charter

### Promoting corporate activities that take into consideration the environment

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 2015)

### Setting forth specific objectives and actions

The Nippon Paper Group has incorporated into its Environmental Action Plan actions and objectives with respect to each six basic policy in its Environmental Charter.

Group companies have each established their own specific environmental action plans based on these actions and objectives. Their efforts to fulfill these plans 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

## Environmental Management Promotion Structure

### Putting in place a Group-wide Structure

The Management Execution Committee bears management decision-making responsibility for environmental strategy and oversees environmental activities, for the entire Group. Chaired by the executive officer 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, 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 Execution Committee. Deliberating and determining new initiatives, the Management Execution Committee leads the environmental activities of the entire Group and promotes ongoing improvement.

The Nippon Paper Group’s environmental management promotion structure (as of March 31, 2015)



The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015) fiscal 2014 status

	Green Action Plan 2015	Progress	Page
1. Anti-global warming action	Reduce CO <sub>2</sub> emissions from fossil energy by 25% versus fiscal 1990.	•Notwithstanding the impact of decreased production volumes in the Paper and Paperboard departments, reduced CO <sub>2</sub> emissions from fossil energy by 28.7% as well as the use of fossil energy by 38.4% versus fiscal 1990 through energy-saving initiatives and successful efforts to promote the conversion of fuel.	35
	Reduce the use of fossil energy by 30% versus fiscal 1990.		
	Reduce logistics-generated CO <sub>2</sub> emissions.	•With persistent efforts, paper operations have continued to far surpass the domestic industry average with an 89% adoption rate for highly efficient modal shift transport. •The decision to use freight trains to transport wastepaper on return trips, thereby, reducing energy consumption and CO <sub>2</sub> emissions earned the Fiscal 2014 Green Logistics Partnership Conference Special Award and the Logistics Environment Special Award at the Japan Association for Logistics and Transport's 16th Environmental Awards.	36,37
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>	•As of the end of 2014, total afforested areas came to 114,000 ha. •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.	28
	Maintain forest certification in all proprietary forests, both domestically and internationally.	• Currently maintaining SGECC, FSC <sup>®</sup> , and PEFC certification at all company-owned forests in Japan and overseas. • AMCEL S.A., adding to its FSC <sup>®</sup> -FM certification, obtained the PEFC reciprocal CERFLOR FM certification in September 2014.	25
	Ensure that all imported hardwood chips are PEFC- or FSC <sup>®</sup> -certified. <sup>3</sup>	•Continuing from fiscal 2013, achieved PEFC- or FSC <sup>®</sup> -certification for 100% of imported hardwood chips.	25
	Enhance traceability and facilitate the procurement of sustainable forest resources.	•Cleared the requirements of PEFC rules in their entirety and FSC <sup>®</sup> rules to 82% with respect to the assessment of imported wood risk as of December 31, 2014.	-
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%.	•Achieved ratios of recycled paper to paper and recycled paper to paperboard of 38.2% and 92.3%, respectively, through proactive efforts to utilize recycled paper.	43
	Increase the waste recycling rate to at least 97%.	•As a result of progress in the effective use of granulated combustion ash and other waste, achieved a waste recycling rate of 98.2% (vs. total waste generated) and an on-site recycling rate 27.9 % for waste generated at mills.	41
	Recycle at least 40% of waste generated within mills.		
Reduce water use in the manufacturing process.	•Taking steps to conserve water consumption by assessing material balance of water.	40	
4. Observance of environment-related laws and reduction of environmental load	Use the environmental management system to strengthen environmental management.	•Together with strengthening and maintenance of the environmental management system, which is led by the Management Execution Committee, environmental management systems have been adopted at individual works. As of March 31, 2015, 51 business locations at 18 consolidated subsidiaries, and 4 business locations at 4 non-consolidated subsidiaries, had obtained ISO 14001 certification. Eco-Action 21 certification had been obtained by 1 business location at 1 non-consolidated subsidiary.	30
	Properly control and reduce the use of chemical substances.	•Based on the Nippon Paper Group Chemical Substance Management Guidelines, the types and volumes of chemical substances handled are being ascertained, and proper chemical substance management is being pursued.	42
	Facilitate the procurement of raw materials and equipment with a smaller environmental burden throughout the supply chain.	• Establishing and updating of facilities, based on energy management rules, energy efficiency is one selection benchmark for the procurement of raw materials.	-
5. Development of eco-friendly technologies and products	Enhance the more sophisticated use of wood materials.	• A test facility for cellulose nanofiber (CNF) production is being used to examine mass-production technologies, and provide samples to support application development. • Participated in a NEDO project for the development of a manufacturing process for non-edible plant-based chemical products, advancing the development of a process for manufacturing various types of chemical product raw materials from wood biomass through an industry-government-academia collaboration.	11
	Develop equipment technology for facilitating a departure from reliance on fossil energy.	•Work to develop a new biomass fuel for pulverized coal boilers continues. The ability to co-fire imported steam explosion pellets and high-temperature, high-speed torrefaction pellets was confirmed, opening the door to the use of both fuels.	36
	Reduce the environmental load through ecofriendly products and services.	•Participated as an observer on a committee considering possibilities for using wastepaper processing technology to create a paper diaper recycling system for the city of Fukuoka, and provided technical cooperation for constructing an optimal processing system. •The Aluminum-Free Fuji Pak, a brick-shaped aluminum free paper carton, received the Eco-Products Awards Steering Committee Chairperson's Award at the 11th Eco-Products Awards. •Commenced power generation at the Mega-Solar Plant in Komatsushima City, Tokushima Prefecture.	11,52
6. Proactive environmental communication	Disclose environment-related information to stakeholders whenever appropriate with the use of CSR reports, the website etc.	• Sustainability reports are being made available in both printed and online editions. Also, <i>Shiki/Ori</i> , communication magazine is being published to provide reader-friendly information on environmental and social issues.	20
	Proactively facilitate environmental communication on a regional basis through, for example, dialogue with local people and governments.	•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.	33
	Proactively participate in and support environment conservation activities.	• Actively participated in environmental endeavors including clean-up and greening initiatives organized by local communities, while promoting various activities including mill tours and internships.	64
7. Biodiversity commitments	Remain aware of the impact of business activities on biodiversity, and facilitate companywide biodiversity commitments.	• Positioning forest certification systems as one of several biodiversity conservation benchmarks in an effort to promote sustainable forest management in line with core business activities. • As an initiative that makes the most of proprietary resources and technologies, concluded a memorandum of understanding with the Wild Bird Society of Japan regarding preserving Blakiston's fish owl habitat while pursuing logging in company-owned forests in the Kushiro region of Hokkaido.	44-46

1 No deadline has been set at this point.  
 2 FSC<sup>®</sup> Logo License No.FSC<sup>®</sup>C120260, FSC<sup>®</sup>C022307, FSC<sup>®</sup>C023383  
 3 Aside from FM certification, CW certification is also included.



# Policy and Management

## ● 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



ISO 14001 renewal inspection

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, 2015)

Company Name	Mills / Operating Divisions/ Manufacturing Companies
Nippon Paper Industries Co., Ltd.	Kushiro Mill, Hokkaido Mill, Akita Mill, Ishinomaki Mill, Iwanuma Mill, Nakoso Mill, Ashikaga Mill, Soka Mill, Yoshinaga Mill, Fuji Mill, Otake Mill, Iwakuni Mill, Yatsushiro Mill, R&D Dept.
(Paper-Pak Division)	Paper-Pak Division (Ochanomizu and Oji regions), SOKA PAPER-PAK CO., LTD., EGAWA PAPER-PAK CO., LTD., MIKI PAPER-PAK CO., LTD., ISHIOKA KAKO CO., LTD.
(Chemical Division)	Gotsu Mill, Iwakuni Mill, Higashimatsuyama Mill, Yufutsu Mill
Nippon Paper Crecia Co., Ltd.	Tokyo Mill, Kaisei Mill, Koyo Mill, Kyoto Mill
Nippon Paper Papyrus Co., Ltd.	Harada Mill, Suita Mill, Kochi Mill
Kitakami Paper Co., Ltd.	Headquarters/Ichinoseki Mill
NP Trading Co., Ltd.	Headquarters/Sapporo Branch Office/Chubu Branch Office/Kansai Branch Office/Chugoku Branch Office/Kyushu Branch Office/Shizuoka Sales Office
Nippon Seitai Corporation	Headquarters, Hokkaido Office, Niigata Office, Maebashi Mill, Saitama Mill, Kansai Office, Kyusyu Office
Daishowa Uniboard Co., Ltd.	Headquarters, Miyagi Mill
SHIKOKU COCA-COLA BOTTLING CO., LTD.	Headquarters, Komatsu Plant
SHIKOKUCANTEENCO., 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.	Headquarters
Nippon Paper Industries USA Co., Ltd.	Port Angeles Mill
Australian Paper	Maryvale Mill, Shoalhaven Mill
South East Fiber Exports	Eden
Jujo Thermal Oy	Kauttua Mill

### The status of Eco-Action 21 acquisition (as of March 31, 2015)

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

## ● Strengthening Environmental Compliance

### Two-pronged approach for environmental compliance

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

#### To bolster environmental compliance

- Building systems to prevent problems**
  - Building a workplace that emphasizes the importance of 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. Having also adopted resources such as a system for searching legal and regulatory matters, we are able to identify the particular laws and legal provisions to which we are subject.

## ● 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 2014.

## ● Strengthening environmental management systems

At the Nippon Paper Group, efforts are being made to strengthen the environmental management systems overseen by the headquarters of individual Group companies.

Nippon Paper Industries, for example, has adopted a system for centrally managing emissions from the boilers of individual mills and other business locations. This effort illustrates how the company's headquarters and production facilities work together to ensure facilities are properly operated and managed.

● **Environmental audits that place particular emphasis on legal compliance and prevention**

Based on the environmental management guidelines on pollution prevention issued by the Japanese Ministry of the Environment and Ministry of Economy, Trade and Industry, the Nippon Paper Group's various business locations perform internal audits. Once these are completed, Nippon Paper Industry's head office Environment & Safety Department conducts an environmental audit as an additional check to ensure legal compliance. As a further measure to prevent environmental accidents, audits are performed at the local level to look for chemical leaks and other risky conditions that could develop into more serious problems.

The Nippon Paper Group has put in place a system of mutual audits, under which environmental audits of any particular Group member are performed with the participation of persons responsible for the environment at other Group companies.



Conducting a document audit



Conducting a field inspection

● **Status with regard to legal compliance**

We were not subject to any form of adverse disposition from regulatory authorities (revocation of licenses, orders to suspend operation or the use of facilities, or fines) with respect to compliance with environmental regulations in fiscal 2014.

● **Environmental Communication**

**Reflecting feedback into our 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 of the communities adjacent to each of its mills and other business locations. 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.

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 risks.

● **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.

In fiscal 2014, the Nippon Paper Group handled 14 environment-related complaints in Japan. 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, and 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 2014)

Complaints	No. of complaints	Complaints	No. of complaints
Noise	8	Vibration	0
Dust and mist dispersal	3	Smoke	0
Odor	2	Other	1
Total 14			

● **Environmental Education and Training**

**Supporting employees to learn**

The Nippon Paper Group provides environmental education in various forms. 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 participate in external training and take advantage of other opportunities to further their qualifications and skills.

● **Environmental e-learning**

June is Environment Month and this time around in June 2015 we offered an online program, under the theme of "Biodiversity," which many employees participated in.

● **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.



The 8th Eco Photo Award grand prize "Drying with the Winter Wind"

# Policy and Management

## Environmental Accounting

### Environmental conservation expenses amounted to ¥31.2 billion

To advance environmental protection initiatives more efficiently and effectively, the Nippon Paper Group

practices environmental accounting to track its environmental protection investments and expenses and quantify their impacts.

#### Environmental accounting at domestic consolidated subsidiaries\*

##### 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, etc.	512	13,517
2. Global environmental conservation costs	Preventing global warming as well as maintaining and managing company-owned forests, etc.	3,250	736
3. Resources circulation costs	Effectively utilizing recycled paper as well as treating, reducing and recycling industrial waste, etc.	374	8,635
(2) Upstream / downstream costs	Recovering pallets, etc.	–	2,102
(3) Administration costs	ISO 14001 inspection, operation and management; environmental information disclosure; employee environmental education; and workplace cleaning initiatives, etc.	–	386
(4) R&D costs	R&D relating to environmentally friendly products as well as the reduction of environmental load imposed by paper manufacturing processes, etc.	–	1,027
(5) Social activity costs	Local community natural conservation, tree planting, cleaning and landscaping activities, as well as donations and support for environmental organizations, etc.	–	55
(6) Environmental remediation costs	Levy for pollution-related health damage compensation system (SOx), etc.	–	576
<b>Subtotal</b>		<b>4,136</b>	<b>27,034</b>
<b>Total</b>		<b>31,170</b>	

#### Environmental conservation impacts in 2014

Categories	Environmental Impact Indicators		Results	YoY Change	
Effects related to resources introduced to business activities	Afforestation projects overseas	Overseas afforestation areas	114,000 hectares	Down 2,000 hectares	
	Energy-saving measures	Fuel use (Heavy oil equivalent)	–	Down 41,525 kl	
Effects related to environmental impact and waste from business activities	Greenhouse gas emissions	CO <sub>2</sub> emissions from fossil energy	6,490,000 tonnes	Down 2,000 tonnes	
		NO <sub>x</sub> emissions (NO equivalent)	7,185 tonnes	Down 340 tonnes	
		SO <sub>x</sub> emissions (SO <sub>2</sub> equivalent)	2,483 tonnes	Down 134 tonnes	
	Hazardous air pollutant emissions	Soot and dust emissions	1,541 tonnes	Up 315 tonnes	
		Water contaminant emissions	Effluent	899,000,000 tonnes	Up 31,000,000 tonnes
			COD/BOD emissions	54,083 tonnes	Down 1,764 tonnes
	SS emissions		21,503 tonnes	Down 257 tonnes	
Final waste disposal		13,600 tonnes	Down 16,000 tonnes		
Effects related to goods and services produced from business activities	Product recycling	Recycled paper utilization rate (paper)	38.2%	Down 0.9%	
		Recycled paper utilization rate (paperboard)	92.3%	Up 2.8%	
	Shipping material recycling	Pallet recovery rate	44.6%	Down 0.4%	

#### Economic benefits of environmental conservation

(Millions of yen)

Effect	Amount
Income from company-owned forests in Japan	621
Reduced expenses from energy saved	2,280
Reduced disposal expenses through the effective use of waste	5,274
Gain on sales from the recycled waste	444
Reduced expenses through the recycling of shipping materials	77
<b>Total</b>	<b>8,696</b>

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

# Climate Change Initiatives

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

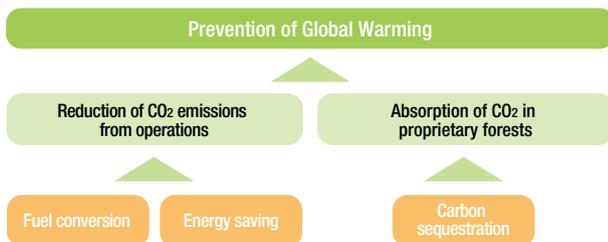
## Basic Stance

### Working to achieve goals 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, (2) conserving energy in each of our production and transportation processes, and (3) managing proprietary forests properly to ensure CO<sub>2</sub> absorption/sequestration (see pages 35–37).

Furthermore, in accordance with the first item in our Environmental Charter, which calls for the advancement of measures to fight global warming, we have established targets for fighting global warming in the Nippon Paper Group's Green Action Plan 2015 (see page 31).

### Nippon Paper Group Environmental Initiatives



### Targets for Preventing Global Warming (Green Action Plan 2015)

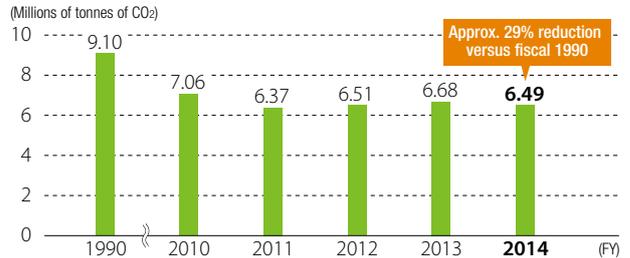
- Reduce CO<sub>2</sub> emissions from fossil energy by 25% versus fiscal 1990 levels
- Reduce the use of fossil energy by 30% versus fiscal 1990 levels
- Reduce logistics-generated CO<sub>2</sub> emissions (see pages 36–37)

### Progress under the Green Action Plan 2015

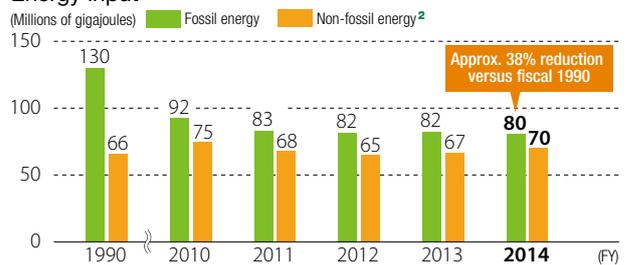
With the impacts of worsening global economic difficulties since 2008 and the Great East Japan Earthquake in 2011, production volumes in the Nippon Paper Group's core paper and pulp businesses have been on downward trends.

Though affected by slight declines in paper and paperboard production, compared to both fiscal 2013 and 2014, individual mills and other business locations undertook energy-saving construction and took steps for the continuation of activities for saving energy in operations. These efforts made it possible to not only meet but exceed Green Action Plan 2015 targets, with fiscal 2014 CO<sub>2</sub> emissions from fossil energy down about 29% and fossil energy usage down around 38%, compared to fiscal 1990 figures.

### CO<sub>2</sub> emissions from fossil energy<sup>1</sup>



### Energy input



<sup>1</sup> For consolidated and non-consolidated Japanese subsidiaries subject to the Act on Rational Use of Energy  
<sup>2</sup> Energy from biomass and waste.

## Fuel Conversion Led by the Adoption of Biomass Boilers

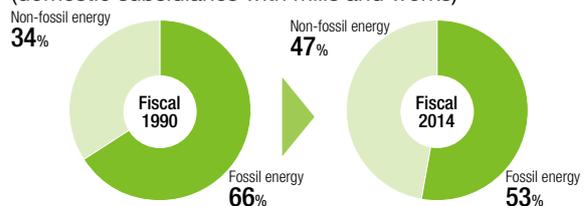
### Actively using biomass and waste fuels to reduce fossil energy usage

In fiscal 2004, the Nippon Paper Group began installing two types of boilers—high-efficiency boilers and boilers capable of burning construction waste and other biomass fuels; used tires, RPF\*; and other waste fuels. 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 fossil energy usage ratio in Japan fell to 53% in fiscal 2014, compared to 66% in fiscal 1990.

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

### Change in fossil energy usage ratio (calories) (domestic subsidiaries with mills and works)



Construction waste and other materials



RPF



Used tires

# Climate Change Initiatives

## ● Development of a New Biomass Solid Fuel Effective for Reducing CO<sub>2</sub> Emissions

The idling of nuclear power plants after the Great East Japan Earthquake has resulted in increased reliance on coal-fired power generation and concerns about ways to reduce global warming gas (CO<sub>2</sub>) emissions.

Electric utilities and others have been moving forward with the coal firing of woody biomass fuel in pulverized coal boilers, as a way to reduce CO<sub>2</sub> emissions. Woodchips and wood pellets, however, cannot be efficiently crushed and there are other issues, for example, with water repellency when stored outdoors.

To address these challenges, Nippon Paper Industries has applied torrefaction technology to carbonize woody biomass at a relatively low temperature to develop a new biomass solid fuel that has pulverization properties similar to those of coal and retains most of its energy value.



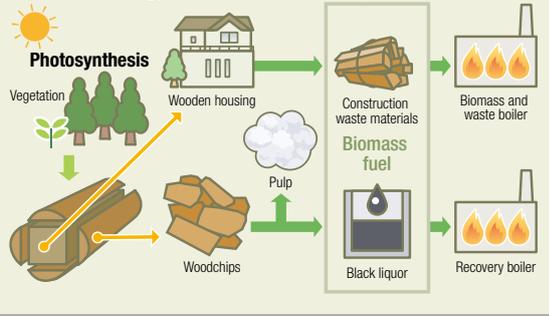
New woody biomass solid fuel made with torrefaction technology

## One of the largest corporate users of biomass energy in Japan

The Nippon Paper Group actively applies biomass energy from sources such as black liquor, a byproduct of the pulp manufacturing process, and construction waste. The amount consumed accounts for up to 7%\* of non-fossil energy (excluding nuclear and hydroelectric power) used in Japan. The Nippon Paper Group is one of the largest corporate users of biomass energy in Japan.

\* In-house data prepared using energy supply information (fiscal 2013 finalized information) published by the Natural Resources and Energy Agency.

### Biomass energy utilization at the Nippon Paper Group

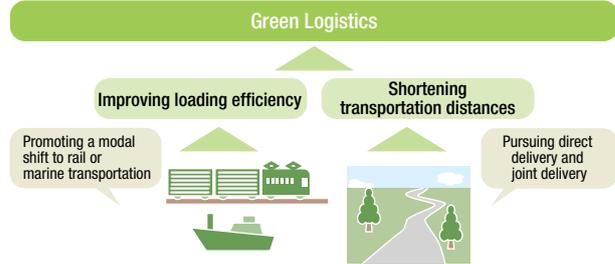


## ● Advancing Energy Efficiency in Logistics

### 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



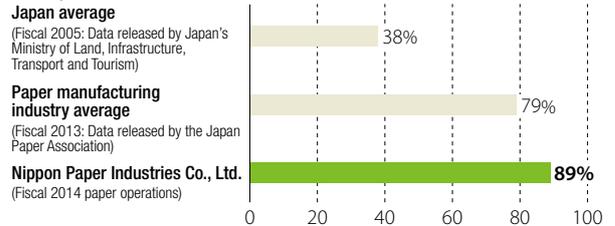
## ● Promoting a modal shift in transportation to secure high loading efficiency

Nippon Paper Industries achieved a modal shift rate\* of 89% in its paper operations in fiscal 2014. 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.

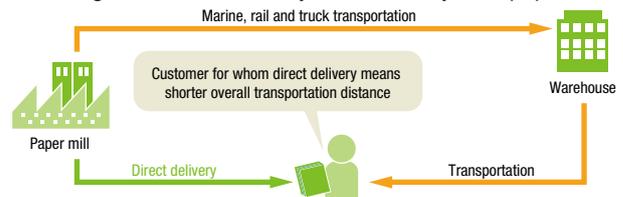
#### Comparison of modal shift rates



## ● 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 by direct delivery from paper mills



### ● 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, 17 business locations of 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—have received Green Management Certifications (as of July 1, 2015). The Nippon Paper Group is actively implementing ecological driving, vehicle inspection and maintenance, reduction of vehicle disposal and waste generation, proper waste handling and recycling, and other practices consistent with green management.



Green Management Certification logo

### Adoption of rail transport to move waste paper

Containers on trains operated by Japan Freight Railway Company (JR Freight) are used to ship products to the Tokyo metropolitan area from Nippon Paper Industries' Ishinomaki Mill. Until now, however, those containers were being sent back to northeastern Japan empty.

In restoring its Ishinomaki Mill, which suffered heavy damage from the Great East Japan Earthquake, Nippon Paper Industries changed the mill's layout and helped to prepare the adjacent JR Ishinomakiko Freight Terminal in ways that now allow wastepaper collected in Tokyo to be sent to the Ishinomaki Mill on freight trains. Now, roughly 2,000 tonnes of waste paper is collected in metropolitan Tokyo, loaded into containers and shipped by rail back to the Ishinomaki Mill every month. Switching from trucks to rail transport has reduced CO<sub>2</sub> emissions by approximately 1,750 tonnes per year.

That this joint undertaking by Nippon Paper Industries, Nanko Unyu, and JR Freight, has produced stable supplies of wastepaper and succeeded in reducing CO<sub>2</sub> emissions was recognized by Japan's Ministry of Land, Infrastructure, Transport and Tourism, and Ministry of Economy, Trade and Industry, which presented the trio with a Fiscal 2014 Green Logistics Partnership Conference Special Award.



Fiscal 2014 Green Logistics Partnership Conference Special Award presentation ceremony

### ● Absorbing and sequestering CO<sub>2</sub> through Proper Management of Company-Owned Forests

#### Sequestering atmospheric CO<sub>2</sub> in forests and wood products

##### ● Sequestering CO<sub>2</sub> with 204,000 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.

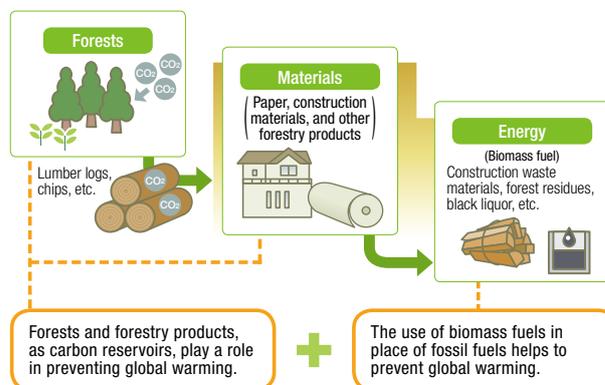
Together with its 90,000 hectares held across 30 prefectures in Japan, the Nippon Paper Group manages 114,000 hectares of forests across four countries abroad for a total of 204,000 hectares. Through proper forest management, the Group retains its CO<sub>2</sub> absorption and sequestration capabilities. These forests, both in and outside Japan, continuously sequester approximately 34 million tonnes of CO<sub>2</sub>, thereby helping to prevent global warming.

##### ● 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>.

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



\* "Cascade-use" refers to the full use of an individual tree for applications across the quality scale, from ones requiring very high quality to others for which quality is not a consideration, for maximum efficiency in resource usage.

# Reduction of Environmental Impacts

Coexisting with local communities by striving to lower environmental impacts

## Material Balance

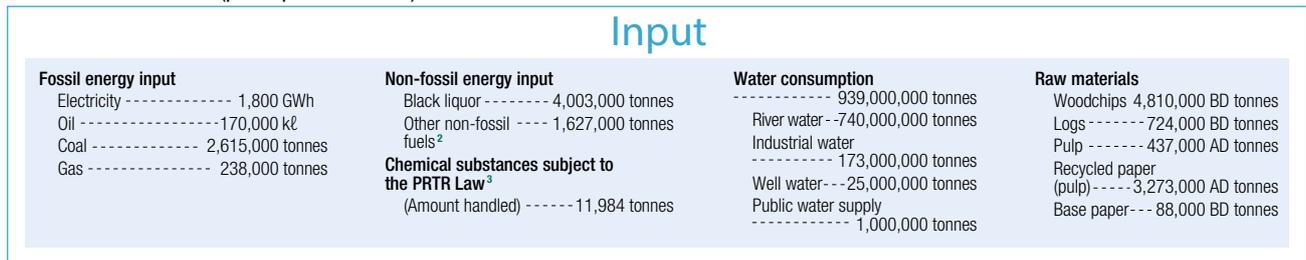
### Identifying and reducing the environmental impact of our business activities

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 79% of

total net sales. Constituting most of the Group's material balance in Japan, this division is responsible for approximately 92% of the Group's water consumption and 95% of its CO<sub>2</sub> emissions there.

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

Balance of materials (principal materials) <sup>1</sup>

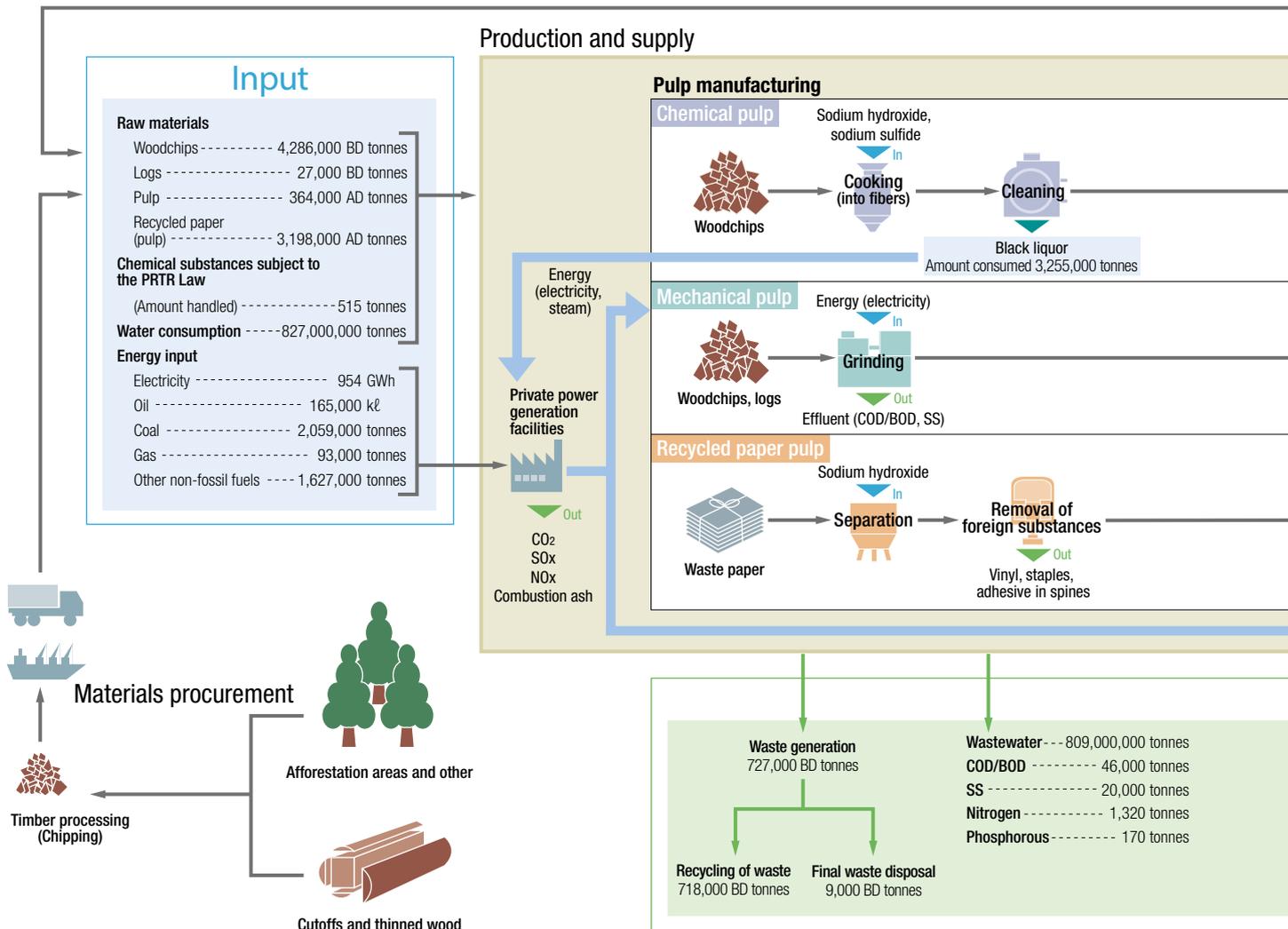


<sup>1</sup> Jujo Thermal Oy and South East Fibre Exports were added to the data collection scope in fiscal 2014.

<sup>2</sup> Biomass fuels except for black liquor and waste fuels

<sup>3</sup> Japan only

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

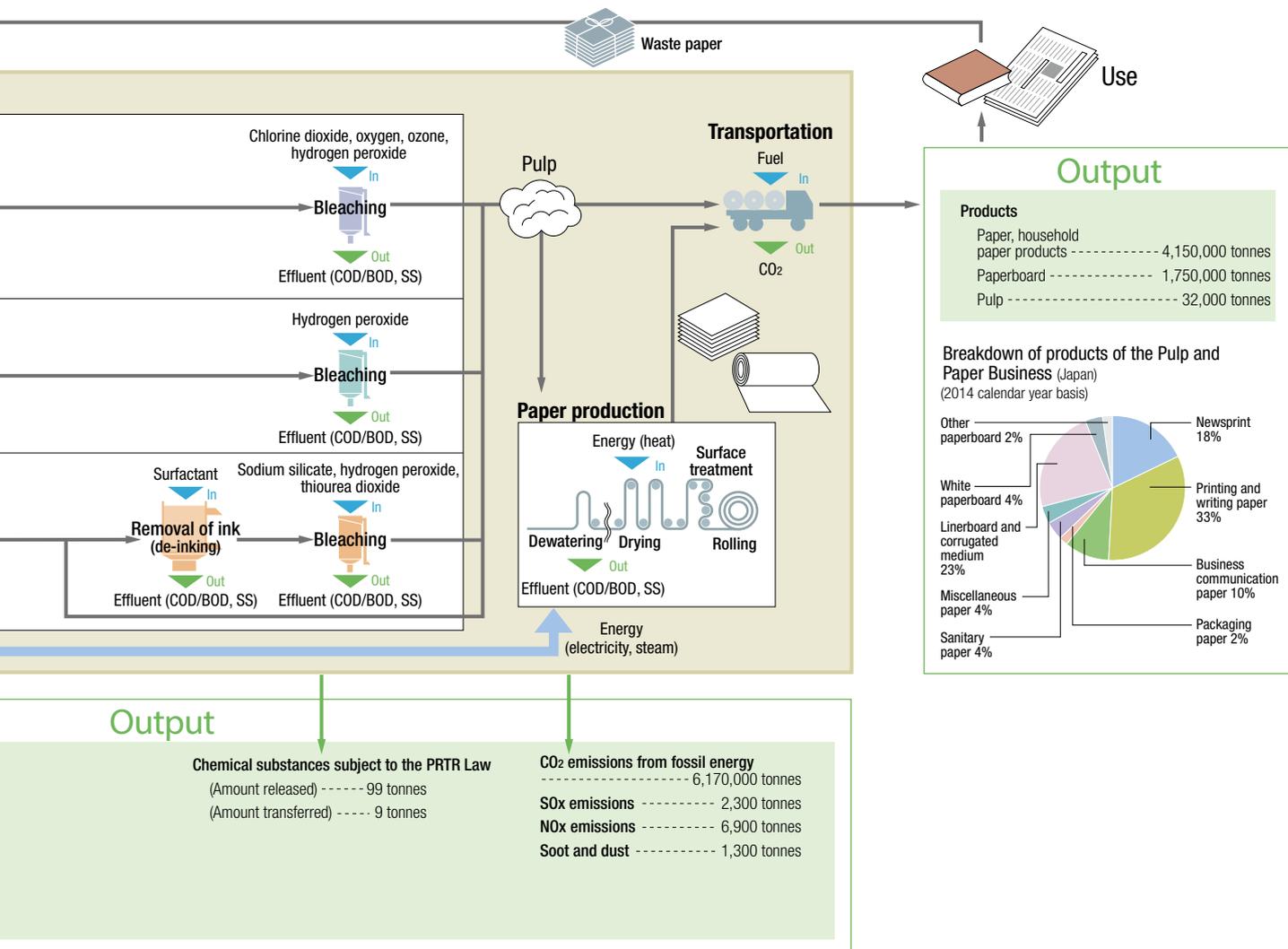


pulp slurry and then formed as wet thin sheets. The water is then removed by drying to make paper. In the pulp and papermaking processes, steam is used as a heat source and electricity as a power source. Pulp and paper mills are equipped with boilers that combust fuel to generate steam, and generators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

### Output

<b>CO<sub>2</sub> emissions from fossil energy</b> ----- 7,150,000 tonnes <b>SO<sub>x</sub> emissions</b> ----- 4,300 tonnes <b>NO<sub>x</sub> emissions</b> ----- 8,800 tonnes <b>Soot and dust</b> ----- 1,500 tonnes <b>Chemical substances subject to the PRTR Law</b> (Amount released) ----- 192 tonnes (Amount transferred) ----- 61 tonnes	<b>Wastewater</b> ----- 918,000,000 tonnes Public water ----- 908,000,000 tonnes Sewerage ----- 10,000,000 tonnes <b>COD/BOD</b> ----- 63,700 tonnes <b>SS</b> ----- 23,600 tonnes <b>Nitrogen</b> ----- 1,490 tonnes <b>Phosphorous</b> ----- 250 tonnes	<b>Waste generation</b> -- 850,000 BD tonnes <b>Final waste disposal</b> -- 54,000 BD tonnes <b>Recycling of waste</b> -- 796,000 BD tonnes	<b>Products manufactured</b> Paper, household paper ----- 4,360,000 tonnes Paperboard ----- 1,750,000 tonnes Pulp ----- 122,000 tonnes Paper container ----- 98,000 tonnes Chemical products ----- 108,000 tonnes Building materials ----- 63,000 tonnes
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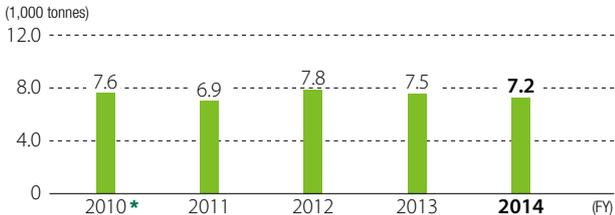
# Reduction of Environmental Impacts

## Preventing Air Pollution

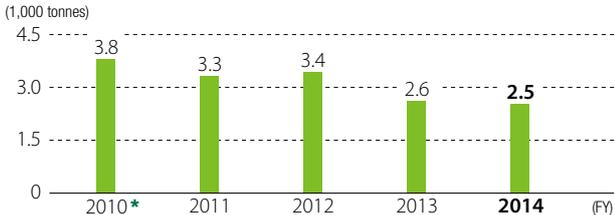
### Activities aimed at continuously reducing emissions of NOx, SOx, soot and dust

The Nippon Paper Group has installed boilers and turbines in an effort to generate power internally at its paper mills. Included in the steam 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.

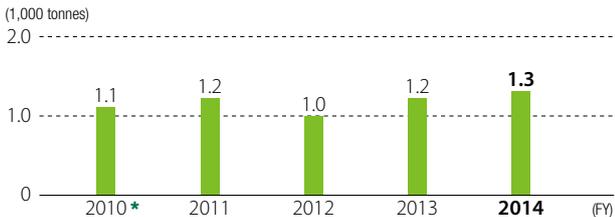
NOx emissions in domestic subsidiaries with mills and works (1,000 tonnes)



SOx emissions in domestic subsidiaries with mills and works (1,000 tonnes)



Soot and dust emissions in domestic subsidiaries with mills and works (1,000 tonnes)



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

## Preventing Soil Pollution

### No instances of soil contamination generated at Group companies in 2014

The raw materials and chemicals used by Nippon Paper Group mills contain almost no heavy metals, trichloroethylene or other soil contaminants. There were no instances of contaminated soil generated at Group companies during fiscal 2014.

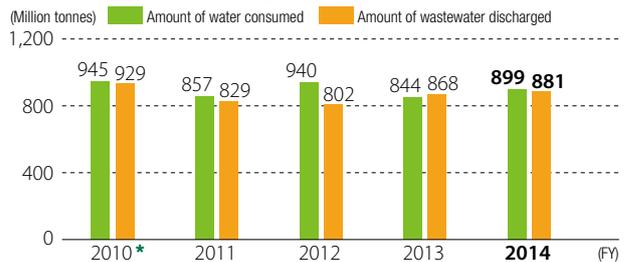
## Preventing Water Pollution

### Purifying wastewater through the use of microorganisms

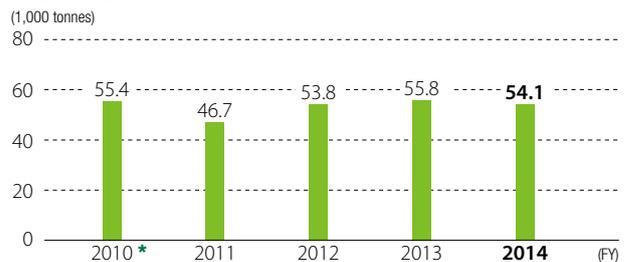
In papermaking, pulp is highly diluted with water to make a pulp suspension and then formed as a wet thin sheet. Water is removed from the sheet by drying to make paper. Water, therefore, is an extremely important element in the paper manufacturing process, and wastewater contains minute pulp fibers,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

Each of the Nippon Paper Group's mills consistently measures pollutants with such indices as COD, BOD, SS, and pH, and treats wastewater before it is discharged. Working to reduce water pollution even further, we also ensure that contaminants are held below levels prescribed under the law.

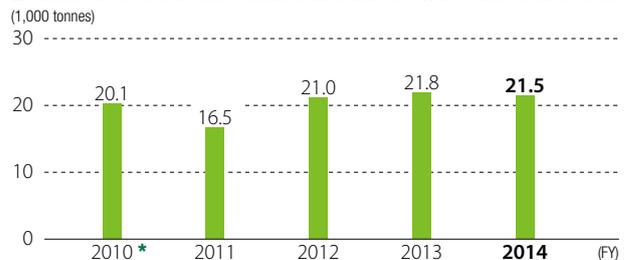
Amount of water consumed / wastewater discharged in domestic subsidiaries with mills and works (Million tonnes)



Emissions of COD / BOD in domestic subsidiaries with mills and works (1,000 tonnes)



Emissions of SS in domestic subsidiaries with mills and works (1,000 tonnes)



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

● Reducing Industrial Waste

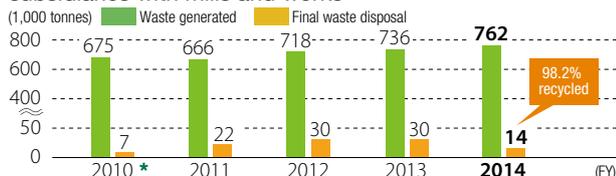
**Working to make effective use of waste, while reducing waste generation**

The Group is working diligently to expand the effective use of waste, while reducing the amount of waste generated, to reduce 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.

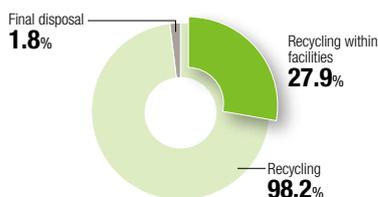
As a result of the introduction of granulation equipment to advance the effective use of ash produced from the burning of fuel, the waste recycling rate and the recycling rate of waste generated within facilities approximated 98.2% and 27.9%, respectively, in fiscal 2014.

**Waste generated and final waste disposal in domestic subsidiaries with mills and works**



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

**The ratio of recycling to the amount of waste generated (Fiscal 2014)**



● Preventing Noise, Vibration, and Odors

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

● Preventing noise and vibration

Pulp and paper mills produce large amounts of paper and use large machines to do so. As long as these machines have a lot of motors and pumps, they are a potential source of noise and vibration. In fiscal 2014, the Group received 8 complaints about noise and none regarding vibrations. Irrespective of the existence of complaints, each mill takes steps to minimize the level of noise generated, and installs sound insulation facilities or relocates machinery whenever an issue is determined to have arisen.



Before installation of sound insulation wall (left) and after (right) (Yoshinaga 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 two complaints relating to odors during fiscal 2014. 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.

**Case Project for making and selling the concrete admixture CfFA® (Carbon-free Fly Ash)**

It has long been known that fly ash, a product of coal combustion, is extremely effective in increasing density, and enhancing strength and useful life, when used as an ingredient in concrete. The use of fly ash as a concrete admixture, however, has not taken hold because it often contains unburned carbon, which, in even small percentage, can have negative impacts on the properties of ready-mixed concrete and quality of hardened concrete.

To promote the use of fly ash as a concrete admixture, Nippon Paper Industries has adopted technology developed under the leadership of Oita University. Sales of CfFA®, a high-quality fly ash concrete admixture we will manufacture at the Ishinomaki Mill, are now scheduled to begin in January 2016. This technology, the first of its kind in the world,

removes unburned carbon from fly ash through a firing process.

Reconstruction work is moving forward in the Ishinomaki area, which suffered severe damage in the Great East Japan Earthquake. CfFA®, as a product that makes effective use of ash from coal combustion – a waste product – to improve the quality of concrete, can make a valuable contribution to restoration of disaster area.



Fly ash from Nippon Paper Industries' Ishinomaki Mill. Electron microscope image of fly ash (prior to firing)

# Reduction of Environmental Impacts

## Controlling Chemical Substances

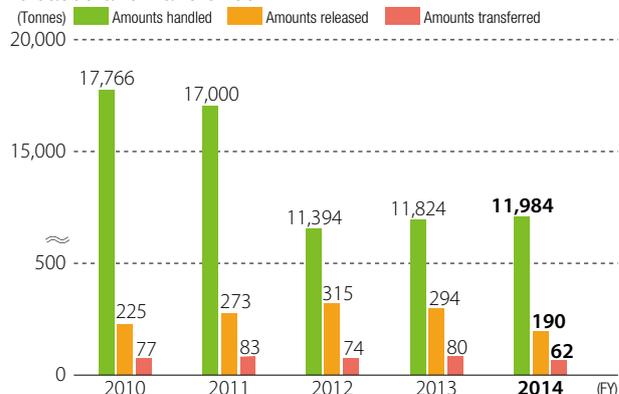
### Properly managing chemical substances while pursuing efforts to limit use

#### Responding to the PRTR Law

The Pollutant Release and Transfer Register (PRTR) is a mechanism for businesses to use in tallying and reporting the wide variety of hazardous chemical substances that are either emitted from their facilities or transferred from their facilities in waste.

The Nippon Paper Group holds risk communication meetings at its mills. Steps are taken at each meeting to explain to local residents how chemical substances subject to the PRTR Law are being managed and used.

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



Amounts of substances subject to the PRTR Law released and transferred<sup>1</sup> (Fiscal 2014)

Cabinet Order No.	CAS No.	Chemical Substance	Unit	Amount Released	Amount Transferred
1	—	Water-soluble zinc compounds	t	3	9
2	79-06-1	Acrylamide	t	0	0
4	—	Acrylic acid and water-soluble salt	t	0	0
6	818-61-1	Acrylic acid 2-hydroxyethyl ester	t	0	0
9	107-13-1	Acrylonitrile	t	0	0
16	78-67-1	2, 2'-azobisisobutyronitrile	t	0	0
37	80-05-7	4,4'-isopropylidenediphenol	t	0	0
48	2104-64-5	O-ethyl-O-(4-nitrophenyl)phenylphosphonothioate	t	2	0
53	100-41-4	Ethyl benzene	t	0	0
57	110-80-5	Ethylene glycol monoethyl ether	t	1	4
80	1330-20-7	Xylene	t	4	1
85	111-30-8	Glutaraldehyde	t	0	0
98	79-11-8	Chlorodifluoromethane	t	0	0
127	67-66-3	Chloroform <sup>2</sup>	t	72	11
134	108-05-4	Vinyl acetate	t	0	0
144	—	Inorganic cyanide compounds (except complex salts and cyanates)	t	2	0
149	56-23-5	Tetrachloromethane	t	0	33
154	108-91-8	Cyclohexylamine	t	1	0
213	127-19-5	N, N-dimethyl acetamide	t	0	0
232	68-12-2	N,N-dimethylmethanamide	t	0	0
243	—	Dioxins <sup>3</sup>	g-TEQ	0	7
272	—	Copper salts (water-soluble, except complex salts)	t	2	0
296	95-63-6	1,2,4-trimethylbenzene	t	5	0
300	108-88-3	Toluene	t	24	3
302	91-20-3	Naphthalene	t	0	0
318	75-15-0	Carbon disulfide	t	6	0
333	302-01-2	Hydrazine	t	0	0
374	—	Hydrogen fluoride and its water-soluble salts	t	16	0
392	110-54-3	N-hexane	t	0	0
395	—	Water-soluble salts of peroxodisulfuric acid	t	0	0
405	—	Boron compounds	t	26	0
407	—	Poly (oxyethylene) alkyl ether (alkyl C=12-15)	t	0	0
410	9016-45-9	Polyoxyethylene nonylphenyl ether	t	0	0
411	50-00-0	Formaldehyde	t	6	0
412	—	Manganese and its compounds	t	20	0
414	108-31-6	Maleic anhydride	t	0	0
415	79-41-4	Methacrylic acid	t	0	0
418	2867-47-2	2-(dimethylamino) ethyl methacrylate	t	0	0
419	97-88-1	N-butyl methacrylate	t	0	0
420	80-62-6	Methyl methacrylate	t	0	0
438	1321-94-4	Methylnaphthalene	t	2	0
448	101-68-8	Methylenebis (4,1-phenylene) diisocyanate	t	0	0
455	110-91-8	Morpholine	t	0	0
Total <sup>3</sup>			t	190	62

1 A summary of the amounts of substances, excluding dioxins, released or transferred in quantities of at least 1 tonne by each Group company. Dioxins and formaldehyde are designated type 1 chemical substances.

2 Includes unintentionally generated chloroform and dioxins.

3 Dioxins are not included in total data.

# Wastepaper Collection and Use

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

## Basic Stance

### Actively promoting paper recycling

To promote effective use of resources, the Nippon Paper Group, together with customers, has built systems for collecting and using wastepaper and is working with citizens' and industry groups to promote awareness and understanding of wastepaper collection. In addition to bolstering its wastepaper 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.

## Progress under the Green Action Plan 2015

### Striving to achieve challenging goals

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

In fiscal 2014 the Group reported recycled paper utilization rates for paper and paperboard of 38.2% and 92.3%, respectively. Despite difficulties in procuring recycled paper in Japan due to the rise in demand in China in recent years, we will continue to maintain and improve recycled paper utilization rates going forward.

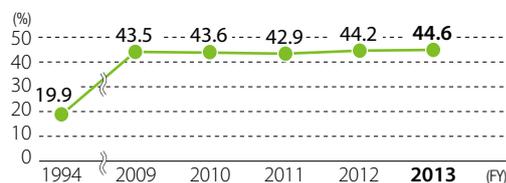
Recycled paper utilization rate in domestic subsidiaries with mills and works



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

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 and placement of milk carton collection boxes at schools and public facilities, we achieved a paper beverage carton collection rate of 44.6% in fiscal 2013.

Beverage carton collection rate



### 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. The ability to take wastepaper to the Yoshinaga Mill's off-site facilities at any time of day 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 wastepaper collection facility on the grounds of its mill. The residents and small and medium-sized enterprises of the city of Ichinoseki are allowed to freely



Wastepaper collection facility in Kitakami Paper Co., Ltd.

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 the city.

## Initiatives for Expanding the Use of Recycled Paper

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

At the Maryvale Mill of 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. Facilities capable of producing 50,000 tonnes of wastepaper pulp annually have been installed at the 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.

As a result of the startup of new wastepaper-pulp facilities in 2015, Australian Paper will vigorously expand its line of products with recycled paper content and ramp up production.



Australian Paper's Maryvale Mill

# Preserving Biodiversity

Pursuing activities that protect the ecosystems of company-owned forests and leverage proprietary resources and technologies

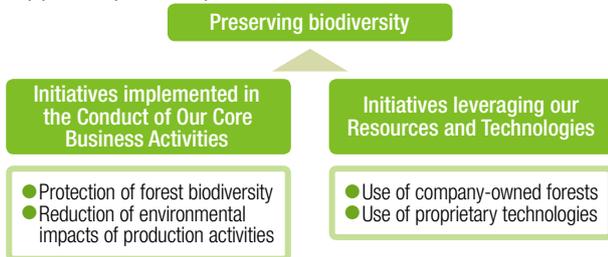
## Basic Stance

### Engaging in two core initiatives

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 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.

The Nippon Paper Group is preserving biodiversity and sustainably using its components (see page 22, Sustainable Forest Management). In our efforts to preserve biodiversity, we are advancing various activities in accordance with two core principles—one, to implement initiatives through our core business activities, and the other, to leverage the Group's resources and technologies.

### Nippon Paper Group Initiatives



## Initiatives in Our Core Business Activities

### Pass thriving forests on to future generations

#### ● Forest biodiversity protection scheme

The Nippon Paper Group, working from a foundation of sustainable forest management, cooperates with stakeholders to conduct biodiversity surveys and take collaborative action to protect forest biodiversity.

#### Breakdown of company-owned forests in Japan

(As of March 31, 2015)

(1,000 hectares)

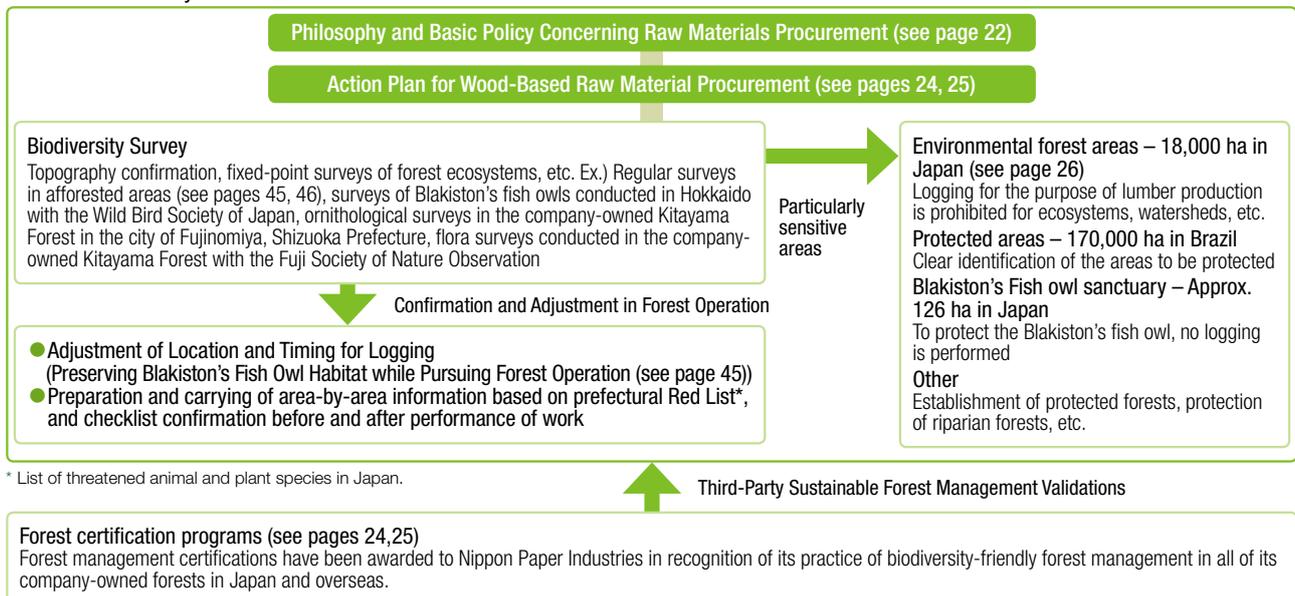
IUCN Categories*	Commercial Forest Area	Environmental Forest Area	Total	% Share	Environmental Forest Area %
I Strict nature reserve / wilderness area	0	0	0	0%	—
II National park	0.6	4.5	5.1	6%	88%
III Natural monument	0	0	0	0%	—
IV Habitat/species management area	0	0	0	0%	—
V Protected landscape/ seascape	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%
<b>Total</b>	<b>71.7</b>	<b>18.3</b>	<b>90.0</b>	<b>100%</b>	<b>20%</b>

\* Defined by the International Union for Conservation of Nature as areas set aside for the long-term protection of nature and ecosystem services, and cultural value.

#### ● Reducing the environmental impacts of production activities

For the benefit of biodiversity, the Nippon Paper Group strives to reduce the environmental impacts 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.

### Forest Biodiversity Protection Scheme



Case

## Preserving Blakiston's fish owl habitat while pursuing business activities – Collaborating with the Wild Bird Society of Japan

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

In May 2015, we signed a memorandum of understanding for the pursuit of business activities while preserving Blakiston's fish owl habitat in company-owned forests located in the Kushiro region of Hokkaido. Blakiston's fish owl reproduction was first confirmed in thinned areas of the same forests in 2011 and a survey to identify the areas where these birds are active during their breeding season was conducted with the Wild Bird Society of Japan in 2014. Collaboration with the same organization in the Nemuro region led to mutual understanding of the importance of protecting endangered species, and the positions of both parties in the relationship. It also produced a degree of trust that enabled agreement on timing standards and work approaches that protect Blakiston's fish owl habitat and breeding activity, allowing us to conduct normal logging and forest operation activities without establishing a wild bird sanctuary. As we enhance our efforts for the benefit of sustainable forest management, we will continue to rely on the knowledge of the Wild Bird Society of Japan.

Building a baseline of data on species is vital to protecting ecosystems with rare plants and animals. In fiscal 2013, therefore, we conducted a survey of mammals in the Nemuro region's wildlife sanctuary. The presence of seven species and

eight types of bats are confirmed. In general, large to small species, including brown bears, Ezo red foxes, and Hokkaido squirrels were confirmed to be living in the sanctuary.

### Surveys undertaken with the Wild Bird Society

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



(Photo courtesy of the Wild Bird Society of Japan)

#### Blakiston's fish owl

Standing 70 to 80cm high and weighing 3 to 4.5 kg, Blakiston's fish owl is the world's largest owl, with a wingspan of 180 cm. Formerly numbering over 1,000 and found throughout Hokkaido, Blakiston's fish owls are now found mainly in the eastern parts of Hokkaido, with confirmed numbers reduced by development and other factors to around 140, making up 50 braces. Blakiston's fish owl was identified as a national protected species in 1971, and placed on the Red List of critically endangered species by Japan's Ministry of the Environment.

Case

## Conducting biodiversity research (AMCEL S.A, Brazil)

AMCEL S.A., located in the Brazilian state of Amapa, owns approximately 310,000 hectares of land, and has set aside 55% of it, about 170,000 hectares, as a conservation area. To preserve the ecosystem, 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**
- **Collaboration with the Department of Biological Sciences at the Federal University of Para (2010 - )**  
Ongoing monitoring by AMCEL following a joint 2010 mammalian habitat survey in afforested and other areas. In 2013, began a survey of animals to serve as indicators for sanctuaries for scarce species.
- **Collaboration with the Universidade Federal Rural da Amazonia (2011-2012)**  
Conduct of a pre-afforestation tropical savanna survey to gather basic vegetation information. Plants from 25 orders and 14 families were catalogued.

- **Conduct of a survey of medium- and large-size mammals in the conservation area (2011-2013)**  
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. It was determined that jaguars, which are a "near-threatened" species, live within the conservation area.

In fiscal 2013, a habitat survey was initiated in AMCEL's sanctuary-designated land for the protection of the yellow-spotted river turtle, which has been designated a vulnerable species.

- **Collaboration with the local environmental research institution in Amapa state (2014- )**

A vegetation survey was initiated on company-owned sanctuary-designated land to determine the distribution and status of plant life.

Additionally, AMCEL maintains a database of wild animal sightings by employees in afforested sanctuary-designated areas to use as an index of biodiversity.



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



Adult giant anteater ("vulnerable" species on the IUCN Red List)



Conducting a vegetation survey



Conducting an animal survey

# Preserving Biodiversity

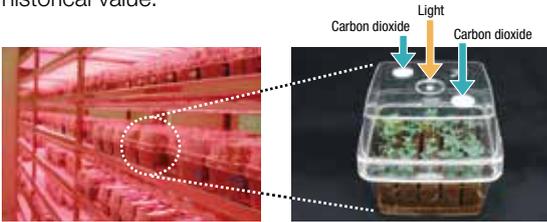
## Initiatives Leveraging Our Resources and Technologies

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

#### Protecting trees of historical value

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

The technology for cultivating cuttings in containers encourages plants to root and does so through the use of a cultivating room characterized by an environment that promotes photosynthesis. Because this technology enables the propagation of even trees that failed to root via traditional cutting technology or are too old to root, it is one option for preserving endangered species and trees of historical value.



Even plant species that normally fail to root by cutting are able to root



An example of the latter is the Tatekawa cherry tree at Reishozan Shinsho Gokuraku-ji (also known as Shinnyo-do), a temple located Kyoto. This tree is said to have been planted to mark the death of Kuranosuke Saito, the father of Kasuga-no-Tsubone, who was the wet nurse of Iemitsu Tokugawa, the third shogun of the Tokugawa dynasty. Planted over 300 years ago, it was already quite old when it was toppled by a typhoon in 1959. It was also quite large, with a trunk diameter of about one meter. Efforts to save it began several years later, when a shoot emerged from the broken trunk, and they succeeded in bringing the tree back to the point of being able to blossom again. With its advanced age, however, it inevitably weakened, and attention turned to the possibility of growing a new tree from a cutting.



Saplings grown from Tatekawa cherry tree cuttings and presented to Shinnyo-do

Confident in its technique for cultivating cuttings in containers, Nippon Paper Industries took up the challenge and, in November 2013, successfully presenting Shinnyo-do with one-meter saplings that began as cuttings from the Tatekawa cherry tree.

#### Restoring tidal flat environments

One of the byproducts of the papermaking process is paper sludge. Comprised of material such as tiny fibers that could not be used to make paper, paper sludge is used as a fuel. The use of this byproduct, however, does not have to end there; firing results in paper sludge ash and work is proceeding to develop effective uses for this material.

Nippon Paper Industries' Yatsushiro Mill has partnered with Kumamoto University and Fukuoka Construction K.K. to develop a new offshore engineering material for revitalizing coastal environments. Made from sediment dredged from seaways, paper sludge ash, and other waste, this new material is currently being used in a test aimed at restoring a portion of tidal flat at the Port of Yatsushiro. With the test started in February 2013, it became clear in six months that around 30 species, including crabs and clams, had taken hold in the newly created tidal flat.

### 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 "threatened II" 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. As recognition of its achievements to date, it received the Greenery Day Minister of the Environment's Prize for Meritorious Service Related to the Natural Environment in April 2014.

Since its inception, Nippon Paper Development, which manages Nippon Paper Industries' Sugenuma Forest, has supported the operation of the Shirane-aoi Preservation Group and Nippon Paper Industries has offered a portion of the Sugenuma Forest as a plantation site for Shirane-aoi. Since 2002, the Group has called for volunteers to participate in planting, seed collection, and other activities.



Collecting Shirane-aoi seeds

### Case Ecosystem research within company-owned natural forests (Volterra S.A., Chile)

Volterra S.A., which engages in afforestation activities in Chile, works with the University of Concepcion to regularly conduct biodiversity surveys of roughly 19,000 hectares of company-owned forests. Of these forests, approximately 5,000 hectares are protected, in a natural state, and home to a wealth of plant and animal life. Around 2,000 hectares of this area is said to be of particularly high conservation value because of the presence of rare or endangered species.

# Responsibility to Customers



Stakeholder opinions are critical for bringing to our attention issues that are important for coexisting with society and growing sustainably.

We now receive large numbers of customer questions regarding environmentally and socially conscious raw material procurement and product development. The Nippon Paper Group is committed to providing products that respond to customer concerns and desires.

Paper gallery at headquarter of Nippon Paper Industries

## Key Objective (Materiality)

- **Providing environmentally and socially conscious products**

## Indicators

- Forest certification coverage (For the provision of products with forest certifications)
  - Company-owned forests with forest certifications: 100%
  - Forest certifications for imported hardwood chip: 100%
- Wastepaper content
  - Paper: 38.2%
  - Paperboard: 92.3%

## Policy and Management

Basic Stance .....	48
Product Safety Management System .....	48
Approach toward Product Safety .....	48
Initiatives for Quality Stabilization...	49
The Stable Supply of Products ...	50
Identifying Customer Needs.....	50

## Providing Environmentally and Socially Conscious Products

Development of Environmentally Friendly Products .....	51
Providing Products that Help to Overcome Challenges for Society ...	52

# Policy and Management

In addition to the stable supply of various products that are indispensable to everyday life, we continue to pursue quality and safety which meet the expectations of customers

## Basic Stance

### Providing products that society trusts

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

Providing stable supplies of these products that are indispensable to everyday life is how we fulfill our basic responsibility to play a useful role for society. By also assuring quality and safety, we will continue to live up to the trust society places in our products and services.

### Philosophy and Basic Policy on Product Safety (established on October 1, 2004, revised on August 1, 2014)

#### Philosophy

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

#### Basic Policy

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

## Product Safety Management System

### Establishing a Group 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 each Group company, deliberates on and determines important matters concerning product safety policies and activities.

Reporting directly to the committee, the Product Safety Subcommittee monitors and manages activities at each Group company. Drawing on information and the exchange of opinions among Group companies, the subcommittee also deliberates on optimal responses 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 Papylia 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 May 31, 2015)

## Approach toward Product Safety

### Strictly complying with laws and regulations

Nippon Paper Industries' mills and research laboratory have assembled ISO 14001 systems that guide their control of chemical substances used. At the same time, steps are taken on all statutory and regulatory compliance including the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture and the PRTR Law.

To ensure food safety and confidence, regarding products used as food containers, Japan's Food Sanitation Act and all other laws, regulations, and standards applying to paper containers for food and beverages are followed. Nippon Paper Industries' Paper-Pak Division also incorporates HACCP<sup>1</sup> concepts in the hygiene management of its production processes, monitors products with devices for detecting defects, and has introduced special clothing to prevent product contamination by hair. The division is constantly working to equip and enhance its production facilities in ways that promote stable quality and even better health.

In our food and beverage related businesses, we are moving to obtain the international FSSC 22000<sup>2</sup> certification on food safety, which includes enhancing food defense.

<sup>1</sup> HACCP

An acronym for "Hazard Analysis and Critical Control Point"

<sup>2</sup> FSSC 22000

FSSC 22000 is a food safety management system certification scheme that integrates ISO 22000 and other standards.

### Acquisition of FSSC 22000 Certifications Obtained (as of March 31, 2015)

Company Name	Mills, Operating Division, Production Subsidiaries
Nippon Paper Industries Co., Ltd.	
(Paper-Pak Division)	SOKA PAPER-PAK CO., LTD., EGAWA PAPER-PAK CO., LTD.
(Chemical Division)	Gotsu Mill*

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

**Initiatives for Quality Stabilization**

**Working to stabilize quality, so customers can use our products with confidence**

Each Group company actively promotes efforts aimed at acquiring ISO 9001 certification and engages in quality management suited to the characteristics of its products.

**Acquisition of ISO 9001 certification (As of March 31, 2015)**

Company Name	Mills/Operating Division/Production Subsidiaries
Nippon Paper Industries Co., Ltd.	Akita Mill, Nakoso Mill, Ashikaga Mill, Soka Mill, Yoshinaga Mill, Otake Mill
(Paper-Pak Division)	MIKI PAPER-PAK CO., LTD., ISHIOKA KAKO CO., LTD.
(Chemical Division)	Gotsu Mill*, Iwakuni Mill, Higashimatsuyama Mill, Yufutsu Mill
Nippon Paper Crecia Co., Ltd.	Tokyo Mill
Nippon Paper Papyrus Co., Ltd.	Harada Mill, Suita Mill, Kochi Mill
SHIKOKU COCA-COLA BOTTLING CO., LTD.	Komatsu Plant
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/Ishinomaki Office/Shipping Management Center/Iwanuma Office/Nakoso Office/Akita Sales Office Service Department/Maintenance Shop/Tokyo Branch
Nippon Paper Ishinomaki Technology Co., Ltd.	Headquarters
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 Facility
Juho Thermal Oy	Kaattua Mill

\* Certifications obtained for CMC and cellulose powder production.

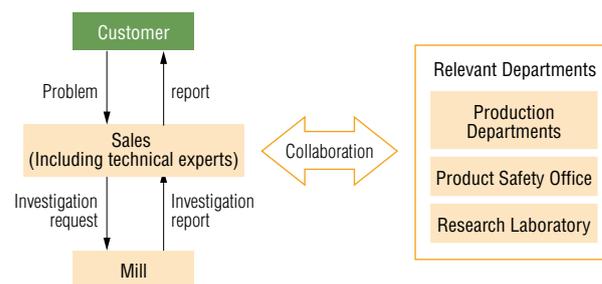
**Quality assurance systems in the paper and paperboard divisions**

Nippon Paper Industries has adopted a Service Engineer system to shorten the distance between customers and production facilities. Under this system, Service Engineers-technical staff members - listen directly to customers' voices. They do this, for instance, by visiting customers and conducting quality patrols in which they observe printing and processing lines where paper is used. Furthermore, to create even closer relationships with customers, Nippon Paper Industries revamped its quality assurance systems in 2013, assigning employees expert in technical matters to sales divisions. Having not only sales personnel but also technical experts and SEs meet with customers, we rapidly address customer needs across a wide range areas.

In addition, to handle contacts about product defects, we have established a system in which we record the

information received in an internal database, and then implement a collaborative response to the problem by swiftly communicating the information to the relevant division. Moreover, aggregating and analyzing the database content helps to prevent problems from recurring and improves quality.

**Quality Assurance Systems in the Paper and Paperboard Divisions**



**Quality audits at companies making containers for liquids**

The five production subsidiaries of Nippon Paper Industries' Paper-Pak Division 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 sanitation investigation focusing in particular on measures for dealing with critical microorganisms, foreign matters, and pest control.

\* The 5Ss are romanized abbreviation of five Japanese words— seiri, seiton, seiso, seiketsu, and shitsuke—which mean sorting, setting-in-order, shining, standardizing, and sustaining, respectively. The 5Ss are used to maintain or improve workplace environments.



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



Checking carton quality

**Verification and audit of waste paper pulp blending ratio**

Nippon Paper Industries has established a system for managing the percentage of waste paper pulp content in its products and guarantees these percentages to customers.

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. The proper operation of content management systems is confirmed in internal and external audits, and customers come to our mills to verify that products are being manufactured to content specifications.

## Policy and Management

### ● 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 (e.g. Customer Service Office) at the relevant Group companies 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 to be particularly significant or in need of urgent attention, each Group company takes the appropriate action in accordance with its Product Safety Crisis Management Manual.

At Nippon Paper Crecia Co., Ltd., which sells consumer products, contact information for the Customer Service Office is provided on all products and the Customer Service Office itself is placed directly under the president to ensure that the president is informed of all customer complaints.

Furthermore, the company's website is configured to accept customer queries and comments. Nippon Paper



The Customer Service Office

Creacia 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 Stable Supply of Products

#### Stable supply systems optimized by product

To provide customers with the amounts of products they need at the times they need them, we devote considerable effort to maintaining stable production by securing reliable procurement of raw materials, and systematically maintaining and upgrading our production facilities. The sales departments and production units coordinate their activities to provide customers with reliable supplies of products by developing flexible production plans that avoid waste, and managing inventories appropriately.

### ● Stable supply of newsprint

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.

### ● Addressing natural disaster risks

The Nippon Paper Group, having learned much in the wake of the Great East Japan Earthquake, has developed practical guidelines for addressing earthquake, tsunami, and other

natural disaster risks. Working from these guidelines, each mill and plant has examined the natural disaster response measures it has used to date and revised its disaster response manual.

For its part, Nippon Paper Industries, in preparation for a major disaster that could either disable its headquarters or damage infrastructure so severely that its headquarters is unable to function, has established a backup facility that could immediately take over headquarters functions. The company also conducts training in the transfer of functions from its headquarters to the backup facility.

### ● Business continuity management system

To help ensure that beverages and other products reach consumers regardless of external circumstances, Nippon Paper Industries' Paper-Pak Division has developed its own business continuity guidelines and established its own business continuity management system, so that it can maintain production even in times of emergency. In particular, the division is moving ahead with procurement of key raw materials from multiple manufacturers. It has also dispersed its paper container production facilities across four production companies to lower its disaster risk exposure.

### ● Identifying Customer Needs

#### Proactive communication

The Nippon Paper Group engages in proactive communication—in everything from routine sales activities to quality patrols by technical staff—to identify customer needs across a wide range of areas. We now receive numerous questions from customers wanting information on the species of trees, countries of origin, and legality of our raw materials. In response, we explain that we are meeting customer demands through our own initiatives and through third-party evaluations (see page 25).

Nippon Paper Industries' 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.

Nippon Paper Crecia and other Group members, meanwhile, use customer surveys to gather data on customer satisfaction and needs by product, and then use what they learn to create measures of their success in serving customers.

### ● Mill tours for customers

The Nippon Paper Group actively welcomes customers for inspections and tours of mills and plants to give them a first-hand view of production facilities and, thereby, gain their understanding of production activities.

# Providing Environmentally and Socially Conscious Products

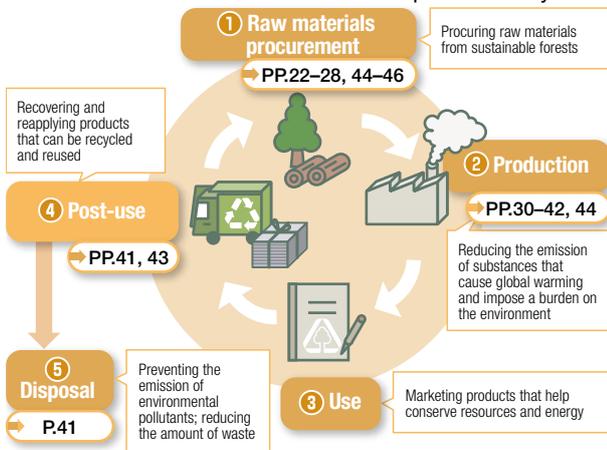
We provide products that meet customer demands including forest certified products

## Development of Environmentally Friendly Products

### Considering every stage of the product lifecycle

Nippon Paper Group products use wood raw materials—renewable biomass resources—and are recyclable. Drawing on these characteristics, we strive to develop products that are cognizant of the environment at every stage beginning with raw material procurement and proceeding through production, consumption, post-consumption, and disposal.

Points of environmental concern from a product lifecycle



### 1 Environmentally Friendly Raw Materials Procurement

#### Case Providing certified paper by starting with properly managed forests (Nippon Paper Group)

The forest certification system is composed of two components—the Forest Management (FM) component, which certifies that forests are responsibly managed from environmental, social, and economic perspectives, and the Chain-of-Custody (CoC) component, which certifies that products from certified forests have been properly processed and distributed. The Nippon Paper Group has obtained international CoC certifications at its principle mills, and provides certified paper products.

Status of CoC certification acquisition  
(as of March 31, 2015)  
PEFC

Company Name	Mill
Nippon Paper Industries Co., Ltd.	Hokkaido (Shiraoi), Akita, Ishinomaki, Yoshinaga, Fuji, Otake, Iwakuni, Yatsushiro
Nippon Paper Papyrus Co., Ltd.	Harada, Kochi

FSC®

Company Name	Mill (License no.)
Nippon Paper Industries Co., Ltd.	Hokkaido (Yufutsu, Shiraoi) (FSC®C00952) Nakoso, (FSC®C020977), Iwakuni (FSC®C115436)
Nippon Paper Papyrus Co., Ltd.	Harada, Kochi (FSC®C005984)
Nippon Paper Crecia Co., Ltd.	Koyo (FSC®C095114)

#### Case SGEN certified MDF using 100% domestic timber (Nippon Paper Lumber Co., Ltd.)

In 2011, N&E Co., Ltd., a Nippon Paper Lumber Co., Ltd. subsidiary, was the first company in the industry to manufacture and market SGEN-certified Medium-Density Fiberboard (MDF), made from 100% domestic timber. The use of timber produced in Tokushima Prefecture is helping to revitalize local forests.



SGEN certified MDF



An example of the product used in construction

### 2 Environmentally Friendly Production

#### Case Low-basis-weight coated cardboard (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries sells a lightweight coated cardboard product (Floche White Card) that is suitable for use in children's books and as packaging material. While using almost 10% less raw material than previous products, this new product, even with its lower density, maintains the same level of print gloss as earlier products. Made without the use of fluorescent dyes, it also offers greater safety.

Reducing the basis-weight of products will continue to be a focus as the company expands its offerings of environmentally conscious products.



Floche White Card

### 3 Environmentally Friendly Utilization

#### Case Offering the lightest printing paper in Japan (Nippon Paper Papyrus Co., Ltd.)

Nippon Paper Papyrus has developed, and now sells, the lightest (18 g/m<sup>2</sup>) printing paper available in Japan (based on company research). Even with less than a third the thickness of ordinary copy paper, this paper retains suitability for use as a printing paper.

Putting the same amount of information on paper that is lighter and less luminous results in smaller loads to ship and lower space requirements for storage.

# Providing Environmentally and Socially Conscious Products

## 4 Environmentally Friendly Handling after Use

### Case Non-aluminum paper containers (Nippon Paper Industries, Paper-Pak Division)

Non-Aluminum FUJIPAK, a product of Nippon Paper Industries' Paper-Pak Division, was adopted by ITO EN, LTD. for its Jujitsu Yasai (vegetables galore) series of vegetable juice products launched in March 2014. Non-Aluminum FUJIPAK containers include no aluminum foil, so they can be collected through the same channels used for milk cartons. These containers for liquid products leverage the characteristics of paper as a recyclable biomass material and were named a winner of the Chairperson's Award at the 11th Eco-Products Awards for their desire to lower environmental impact.

The Paper-Pak Division, in its effort to realize the full potential of the FUJIPAK system, offers a wide range of container choices to meet the needs of product manufacturers and society.



Jujitsu Yasai (vegetables galore) series products made by ITO EN, LTD. and employing Non-Aluminum FUJIPAK paper containers

## 5 Environmentally Friendly Disposal

### Case KC FLOCK® powdered cellulose made from wood pulp (Nippon Paper Industries, Chemical Division)

Nippon Paper Industries' Chemical Division 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®

## Providing Products that Help to Overcome Challenges for Society

### Responding to changing quality demands

### Case Super Jet Fiber 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



Super Jet Fiber (insulator)

average house uses 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.

### Case A product line for a wide range of needs (Nippon Paper Crecia Co., Ltd.)

Nippon Paper Crecia goes to great lengths to develop products that respond to customer needs. It pays meticulous attention to feedback received directly from customers through its Customer Service Office and sales channels, and works to develop products that meet newly emerging needs and performance demands.



Hada Care Acty® Soft-fit, comfortable thin underpants



Scottie® Fine Washable paper Towel box



Scottie® Sheet Wash For toilets

### Case Sunrose® and other nursing care foods (Nippon Paper Industries Co., Ltd. Chemical Division)

The Chemical Division of Nippon Paper Industries Co., Ltd. is devoting substantial attention to applications for foods for the elderly and people requiring nursing care. At



Nippon Paper Industries booth at the Medi-Care Foods Expo

the Medi-Care Foods Expo, for example, it featured Sunrose®, a water-soluble polymer (CMC); KC FLOCK®, dietary fiber in the form of cellulose powder; and SK SWEET®, a form of stevia, a natural high-intensity sweetener.

# Human Rights, Employment and Labor Responsibility



The Nippon Paper Group manages broad expanses of forest and owns large-scale production sites. Securing the safety and health of the people working at each of its business locations, therefore, is its top priority.

Small Group Activity Presentations

## Materiality

- Occupational Safety and Health

## Indicators

- Occupational accident frequency rate: 0.31
- Occupational accident severity rate: 0.03

## Policy and Management

Basic Stance .....	54
Philosophy and Basic Policy .....	54
Initiatives in Respect of Human Rights .....	54

## Occupational Safety and Health

Basic Stance .....	55
System to Promote Occupational Safety and Health .....	55
Status of Occupational Accidents .....	56
Efforts regarding Safety and Disaster Prevention .....	56
Efforts regarding Hygiene and Health .....	56

## Creating Workplaces that Support Diverse Human Resources

Basic Stance .....	57
Recruitment and Employment .....	57
Women in the Workplace .....	58
Promoting Work-Life Balance .....	58
Initiatives Aimed at Developing Human Resources .....	59
Fair Evaluation and Compensation .....	60
Industrial Relations .....	60

# 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

### Focusing on the optimal application of diverse human resources while ensuring 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. In utilizing a diverse workforce, a partner to secure mutual growth, the 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 Group's production sites use heavy machinery and engage in inherently dangerous operations, every effort is made to maintain and enhance safe working environments and to take all appropriate measures for safety and anti-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 fulfill its responsibilities, every employee must

#### 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.

act with a high moral sense and strong motivation. The Group, therefore, bears important responsibilities for 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 Group established its Philosophy and Basic Policy on Human Rights, Employment and Labor. And employees who believe a problem may exist in any of these areas can report it via the Group's Help Line System (see page 19).

## ● Initiatives in Respect of Human Rights

### Confirming, verifying, and educating with the help of a third-party perspective

#### ● Concern for human rights across the supply chain

Concern for human rights and labor across the entire supply chain is clearly defined in the Nippon Paper Group's Philosophy and Basic Policy Concerning Raw Materials Procurement (see page 22). At the same time, the Group conducts supplier surveys and interviews to confirm that these concerns are properly addressed (see page 25).

In addition, Group forest management considers the culture and traditions of residents in each region of its overseas afforestation operations (see page 28).

#### ● Exchanging opinions with Amnesty International Japan

In 2014, the Nippon Paper Group held a meeting with Amnesty International Japan to share opinions and enlist a third-party perspective in uncovering human rights issues.

Representatives of that organization were asked to meet separately with Nippon Paper Industries' Forestry and Personnel departments. The meetings helped us to deepen our understanding of global trends in human rights issues and gave us an opportunity to explain and discuss conditions at the Group. Furthermore, given the understanding that human rights issues can exist despite legal compliance, we considered items to be treated as the highest priorities in confirming current conditions. In fiscal 2015, we have begun to consider the future confirmation of the status of human rights at subcontractors in Japan.

#### ● Education and training

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 in training courses hosted by government agencies. The Group has also conducted human rights education for personnel in charge of CSR at each of the Group companies. Human rights education will also be conducted for new hires and newly appointed managers.

# Occupational Safety and Health

By working daily to uncover inherent risks, maintaining a workplace environment in which employees can go about their duties without undue anxiety

## ● Basic Stance

### Securing safety and health, and preventing disasters

In providing a safe work environment, the Nippon Paper Group advances initiatives emphasizing safety and health. Maintaining an unwavering daily commitment to uncovering and minimizing risks is key to that effort. Consistently engaging in sound management while responding to the trust of employees is also important for building a pleasant and comfortable workplace that helps to maintain and improve employees' health.

Having formulated the Philosophy and Basic Policy on Safety and Health Measures in 2004, the Group has created labor safety and health 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.

## ● Mill safety audit system

The Nippon Paper Group conducts mill safety audits to raise the level of safety management. In addition, mutual safety audits among the Group companies were introduced in 2010. Audits are being improved from the bottom up by promoting closer communications within the Group.

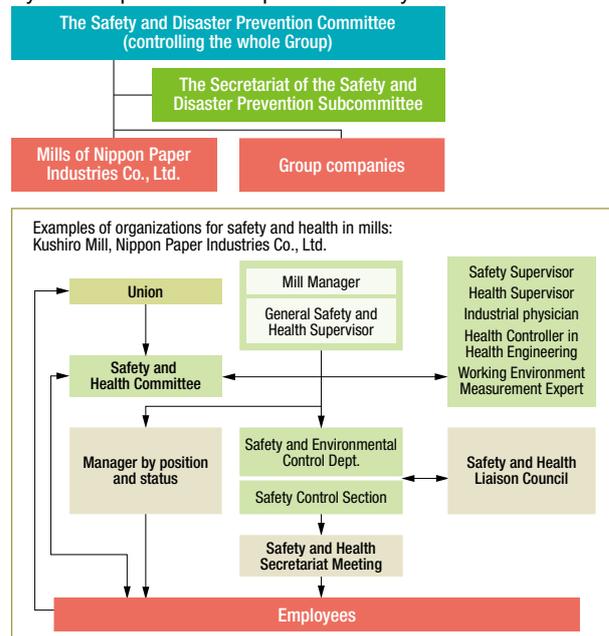
## ● System to Promote Occupational Safety and Health

### To build a safe workplace environment

The Nippon Paper Group has established the Safety and Disaster Prevention Committee, which coordinates Group-wide occupational safety and health, disaster prevention and security measures.

At Nippon Paper Industries, labor and management occupational safety and health meetings are held once each year. The persons 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.

#### System to promote occupational safety and health



## ● Occupational safety and health management system

In 2009, the Nippon Paper Group implemented its own system for continuously pursuing occupational safety and health management activities at the organization level. Under this system, a three-tiered approach is used for the performance of risk assessments by employees and at the management level, and information on risks and risk abatement measures is shared through measures such as the performance of mutual risk assessments among the organizational units of a business location. Events are held to promote the sharing of expertise on the performance of risk assessments to raise safety standards across the Group.

# Occupational Safety and Health

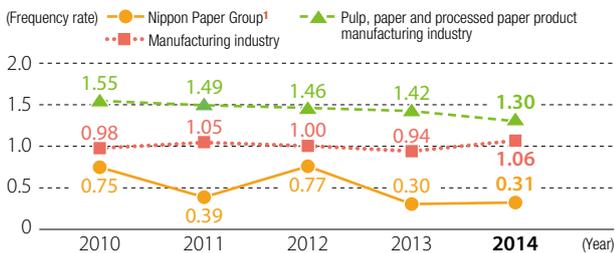
## ● Status of Occupational Accidents

### Eliminating occupational accidents

The Nippon Paper Group<sup>1</sup> had an occupational accident frequency rate of 0.31 and severity rate of 0.03 for 2014. The Group is working to eliminate occupational accidents by promoting the use of risk assessments, and conducting risk prediction, patrol, and education activities.

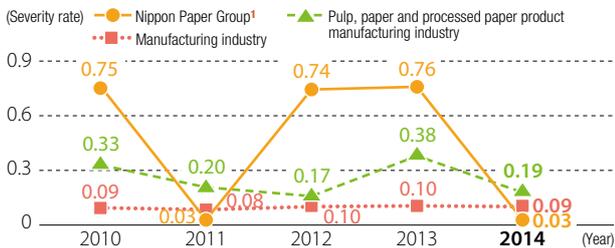
#### Occupational accident frequency rate

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



#### Occupational accident severity rate

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



<sup>1</sup> The manufacturing facilities of Nippon Paper Industries Co., Ltd., Nippon Paper Crecia Co., Ltd., and Nippon Paper Papyrus Co., Ltd.

## ● Efforts regarding Safety and Disaster Prevention

### Working from various angles

#### ● Safety Education

The Nippon Paper Group places considerable weight on employee safety education and training. These efforts are designed to achieve employee thorough awareness toward occupational safety and health.

Nippon Paper Industries puts in place an annual Occupational Safety and Health Management System plan at each of its mills and offices, which then implements various occupational safety and health education programs 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.

#### ● In-plant safety measures

Nippon Paper Industries has always endeavored to ensure workplace safety with the intention of eliminating 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

In preparation for earthquakes, tsunamis, floods, and other types of natural disasters, the various business locations of the Nippon Paper Group have created disaster preparedness manuals reflecting local hazard map information and the characteristics of their particular operations and geographic location. They also cooperate with local fire departments and other public safety



Emergency drill (Yatsushiro Mill, Nippon Paper Industries)

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

#### ● Traffic safety initiatives

Traffic safety education is offered to raise employee awareness of commuting safety. In addition, the Nippon Paper 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.

## ● Efforts regarding Hygiene and Health

### Taking into consideration the importance of mental and physical 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 Group companies that are members of the Nippon Paper Industries Health Insurance Union, examinations focusing on lifestyle diseases are performed together with regular physical examinations. In addition, industrial physicians regularly visit workplaces and the Group uses the results of these visits in efforts to improve working environments. The Group also provides medical examinations for the spouses of employees.

#### ● Tackling mental health

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

# 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, diversification of workforces is becoming increasingly vital to ensuring ongoing growth. Our aim is to be a vigorous organization emphasizing the spirit of Challenge, Fairness, and Teamwork - the values included in the Group Mission we definitively stated in 2015.

## Recruitment and Employment

### Advancing discrimination-free hiring

The Nippon Paper Group employs over 12,000 employees in and outside of Japan. In its efforts to fulfill its responsibilities to communities, the Group strives to ensure stable employment while continuously recruiting new employees.

Furthermore, based on its Philosophy and Basic Policy on Human Rights, Employment and Labor, the Group promotes discrimination-free recruitment and employment. 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 decisions.

### Hiring of People with Disabilities

The statutory employment rate for people with disabilities was 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

The Nippon Paper Group has implemented its 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 new rules that will allow employees of retirement age to continue working based on their desire and skills, at least until they begin to receive pensions.

## Employment Data

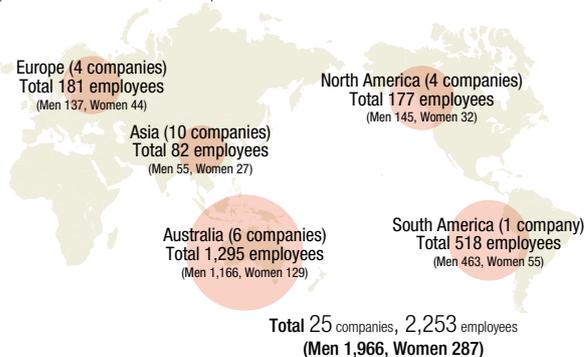
	Units	FY2014
Number of employees on a consolidated basis <sup>2</sup>	Persons	12,771
Men	Persons	11,389
Women	Persons	1,382
Overseas	Persons	1,745
Men	Persons	1,531
Women	Persons	214
Percent of upper management from the local community	%	83.2
New graduates hired <sup>3</sup>	Persons	160
Men	Persons	143
Women	Persons	17
Mid-career hired <sup>3</sup>	Persons	190
Men	Persons	169
Women	Persons	21
Average age of employees <sup>1,3</sup>	Years	42.7
Men	Years	42.7
Women	Years	42.0
Average years of employment <sup>1,3</sup>	Years	18.7
Men	Years	19.0
Women	Years	15.9
Turnover rate <sup>3</sup> (Includes employees leaving at the mandatory retirement age)	%	3.83
Dispatched workers <sup>1,3</sup>	Persons	87
Men	Persons	28
Women	Persons	59

<sup>1</sup> Fiscal year end

<sup>2</sup> Data scope: Consolidated subsidiaries

<sup>3</sup> Data scope: Consolidated subsidiaries in Japan

## Numbers\* of overseas subsidiaries and employees by region (as of December 31, 2014)



\* Overseas subsidiaries (including non-consolidated subsidiaries)

## Performance in reemploying workers who reach the mandatory retirement age<sup>1,2</sup>

(Regular employees of Nippon Paper Industries and consolidated subsidiaries in Japan)

(FY)	2009	2010	2011	2012	2013	2014
Nippon Paper Ind. Employees seeking reemployment	55	62	44	57	51	112
People reemployed	52	59	43	67	53	112
Consolidated subsidiaries in Japan People reemployed	—	—	—	—	—	309

<sup>1</sup> Beginning with fiscal 2014, figures cover consolidated subsidiaries in Japan and management employees. Until fiscal 2013, figures covered only non-management employees at Nippon Paper Industries.

<sup>2</sup> Depending on staffing conditions and other factors, 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 sometimes exceeds the number of retirees requesting to be reemployed.

# Creating Workplaces that Support Diverse Human Resources

## Case Using the Trial Employment system for recruitment (Yoshinaga Mill, Nippon Paper Industries)

The Ministry of Health, Labour and Welfare is promoting "Trial Employment" system under which people are hired in principle for three months with the presumption that they will be transitioned to full-time employment afterwards. This system is intended for the benefit of people who are uncertain about taking on a full-time job.

The Yoshinaga Mill used this system when it first began to hire people with disabilities, and used the three-month trial period for on-the-job training. Hands-on job experience over this period gave participants and the company a chance to develop clearer understandings of each other and resulted in participants joining the company as full-time employees.

### Women in the Workplace

## Creating greater opportunities for women

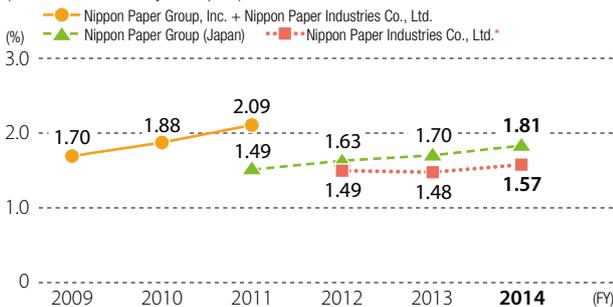
Organizational invigoration is an additional consideration in emphasizing the importance of applying and giving women opportunities to succeed in the workforce, and the Nippon Paper Group, with the establishment of a new Human Resources Planning Office, is creating conditions that promote their participation here.

Nippon Paper Industries, for example, has moved to help employees with children meet both work and home responsibilities through measures like extending its childcare support policies to allow the use of accumulated leave (expired annual paid leave) to care for children up through the time they begin to attend elementary school.

### Female management participation and recruiting

At Nippon Paper Industries a large proportion of jobs is in mill settings and so low recruitment of women in the past is a major reason for their low participation in our management ranks now. To remedy this situation, we are actively assigning women to mills with the goal of doubling their participation in management by fiscal 2020.

Percentage of female employees in management (consolidated entity in Japan)



Beginning with fiscal 2013 percentages have been adjusted retroactively to exclude associate directors, employees commissioned for specific purposes, employees on temporary assignment from other companies, and other non-full-time personnel to present percentages of only full-time employees.

Percentage of female employees in management (consolidated subsidiaries outside Japan) (as of December 31, 2014)

17.8% (Managerial personnel at the level of section manager or positions higher)

New graduates hired into career-track positions (Nippon Paper Industries Co., Ltd.) (Persons)

Fiscal years	2010	2011	2012	2013	2014	2015
New graduates	33	16	37	43	56	34
Women	6	3	3	6	8	7
Men	27	13	34	37	48	27
Percent women	18	19	8	14	14	21

### Promoting Work-Life Balance

## Realizing a balanced workplace environment

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 work hours for its head office, research facilities, branches, and the administrative sections of its mills.

### Complying with the 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 Japan's Act on Advancement of Measures to Support Raising Next Generation Children.

As one example, Nippon Paper Industries revised its systems at the timing of revisions to Japan's Child Care and Family Care Leave Act. Since fiscal 2010, the company has continued to implement systems that exceed the provisions stipulated under the 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.

**Data on Balancing Work and Personal Lives**

	Unit	2014
Employees taking child-care leave <sup>1</sup>	Persons	25
Men	Persons	4
Women	Persons	21
recently giving birth	%	91
who returned to work	%	100
Employees taking maternity/paternity leave <sup>1</sup>	Persons	164
Men	Persons	141
Women	Persons	23
Average number of days taken for maternity/paternity leave <sup>1</sup>		
Men	Days	3
Women	Days	86
Employees taking nursing-care leave <sup>1</sup>	Persons	2
Total number of working hours <sup>2</sup>	Hours	1,885
The rate of annual paid leave taken by employees <sup>2</sup>	%	69.2

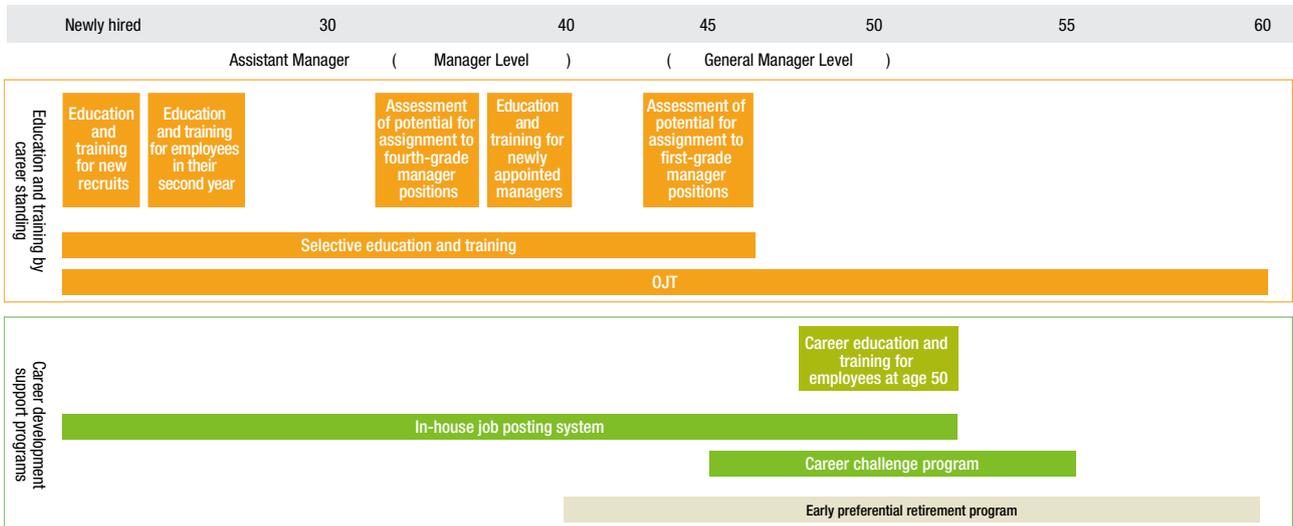
<sup>1</sup> Data scope: Consolidated subsidiaries in Japan  
<sup>2</sup> Data scope: Non-management employees of Nippon Paper Industries

**Initiatives Aimed at Developing Human Resources**

**Support for the improvement and exercise of professional skills**

In reinforcing its mechanism for human resource development, the Nippon Paper Group focuses its attention on the following five areas: (1) support for self-development and voluntary career planning; (2) assignment of the right people to the right positions; (3) development of human resources capable of acting on a global stage; (4) reinforcement of production frontline capabilities; and (5) support for the development of lifelong as well as career plans. Complementing these endeavors, the Group is also building a Global Human Resources Bank and conducting joint training among group companies.

**Outline of the education and career development support system for career-track employees**  
 (Information on Nippon Paper Industries for fiscal 2014)



**Support for self-development and voluntary skill acquisition**

The Nippon Paper Group supports employee self-development and voluntary skill acquisition through means such as group training and rewards for acquiring professional qualifications. In addition, traditional job-level-based training is conducted jointly by Group members to promote the development of employees throughout the Group. And training is pursued from a broad perspective; job-level-based training at mills, for example, is conducted not just for a single mill but together with neighboring mills.

Furthermore, Group employees can meet self-determined skill needs by taking any of approximately 150 correspondence courses and joint training. Every employee



Internal training session

is offered not only the ability to choose courses they personally want to take but also precious, mutually stimulating opportunities for joint training with colleagues from other Group companies.

**Assignment of the right people to the right positions**

Nippon Paper Industries periodically surveys employees to ascertain what kind of job assignments they wish to have. Based on the results of these surveys, every effort is made to match employee strengths with job types.

In addition, Nippon Paper Industries has implemented an internal recruitment system. Under this system, individual employees can consider their skills and how they want to develop their career, and then apply for a position posted by a Nippon Paper Group member.

# Creating Workplaces that Support Diverse Human Resources

## ● 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 efficiently build a corps of human resources capable of working in a global setting. Currently, 500 personnel are registered with the bank.

### Case

#### Implement small group activities globally

The Nippon Paper Group is implementing small group activities in and outside Japan. These activities are undertaken in groups comprised of several people and are aimed at achieving improvements in areas such as operations, quality, and costs.

At the 22nd (2014) Group-wide presentation meeting, attended by roughly 300 people, including the Group president and other members of top management, 11 select teams, representing nine domestic mills and two overseas mills, gave presentations explaining what they had accomplished. All of the presentations provided opportunities for attendees to better understand their own workplaces in greater detail and consider examples of good practices from other workplaces globally.



22nd Group-wide Presentation Conference

## ● Reinforcement of production frontline capabilities

Human resource capabilities at the production frontline represent the heart of the manufacturing process. The Nippon Paper Group passes on to each generation the technologies and skills nurtured over a lengthy period to maintain and improve the capabilities of its human resources.

Nippon Paper Industries organized the “Committee to Study the Strengthening of Mill-Level Production Frontline Capabilities” in fiscal 2006, and all mills began implementing its recommendations in fiscal 2008. Nippon Paper Industries has organized and is operating systems under which technologies and skills that should be carried forward at individual production sites are identified, and training is prioritized based on analyses of the strengths and weaknesses of, and skills needed by, individuals. In fiscal 2015, the company is introducing these education and training activities at the paperboard business absorbed in a 2012 merger.

## ● Support for the planning of life and career

Given the hike in the public pension eligibility age and increasing diversification of lifestyles, employees must

consider a number of factors when planning their careers and life after retirement. Therefore, core companies within the Nippon Paper Group offer Life Plan Seminars 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.

### ● Fair Evaluation and Compensation

#### 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 non-management employees. Review sessions are an opportunity to ensure that employees understand and accept evaluation results and for setting the skill development direction for individual employees. For decisions on promotions to management and other positions, the assistance of outside companies specializing in human resource assessment is called upon to enhance objectivity.

### ● Industrial Relations

#### 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 cover such fields as the operations of labor and management agreements, and staffing adjustments. Discussions with mutual respect and agreements between the two provide the basis for a variety of initiatives, as well as efforts to improve the workplace environment. On the top of these endeavors, regular central meetings of both sides' leaders provide a forum to discuss diverse issues including corporate management and 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. Nippon Paper Group companies do not unilaterally impose changes on employees.

Routine communication is critical for gaining employee understanding of company actions. The Group strives to engage in dialog with employees and labor union to provide such information as financial results.

# Responsibility to Communities



As a comprehensive biomass enterprise developing new products and growing its businesses, the Nippon Paper Group manages broad expanses of forests and owns large-scale production sites, so it has significant impacts on local communities and the people who live and work in them. Coexistence with these communities is critical to our own continued existence.

Planting Japanese wood poppies

## Materiality

- **Coexistence with Local Communities and Society at Large**

## Indicators

- Company-owned forests with forest certifications: 100% (Assessment criteria include factors such as biodiversity and protection of human rights)
- Mill tour participants: 21,446 (including 7,575 students and teachers)

## Policy and Management

Basic Stance ..... 62

## Coexistence with Local Communities and Society at Large

Employment Support.....	63
Preserving Local Community Cultures .....	63
Respect for Indigenous People .....	63
Advancing Science and Technology	63
Promoting Recycling Activities .....	64
Preserving Biodiversity .....	64
Providing Opportunities to Tour Group Companies and Their Mills...	64
Providing Educational Opportunities through Sports .....	64

## Corporate Identity Sharing

Utilizing Company-Owned Forests 65

# Policy and Management

The Nippon Paper Group engages in a variety of social contribution activities to garner the trust of and remain close to local residents

## Basic Stance

### Coexisting with Local Communities, Contributing to the Advancement of Society as a Whole

As one of its members, the Nippon Paper Group aims to contribute to society as a whole. While continuing to provide needed products, we would like to play a useful role in protection of the global environment and in the advancement of culture and local communities. We are confident that building a consistent track record along those lines will earn the trust of society and allow us to continue our business activities in coexistence with local communities.

The initiatives we engage in, both inside and outside Japan, include cleanups of the areas around our mills and plants, support for vocational training in afforestation areas, and other locally focused activities; and operation of the School of Friendship for Forests and Paper, mill tours, and other activities making use of forests and other Group resources.

#### Philosophy and Principles for Social Contribution Activities

(established on April 1, 2004)

##### Philosophy

As a member of society, we shall proudly promote activities that contribute to social development.

##### Principles

1. We shall pursue activities that contribute to cultural heritage and development.
2. We shall pursue activities that contribute to conservation and improvement of the environment.
3. We shall pursue activities that contribute to the development of communities.

#### Specific activity themes

- Increase the community involvement of Group company mills and overseas affiliates
- Promote activities that effectively utilize the resources and specialist expertise of each Group company
- Promote corporate citizenship activities in which our employees play an active role
- Effectively use the company-owned forests in Japan (about 90,000 hectares)
- Employ effective PR inside and outside the Group

### Structure for promoting social contribution activities

The CSR 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 develops a thorough understanding of social contribution activities undertaken to date, and works to upgrade and expand their content and details.

### The Nippon Paper Group's principal social contribution activities

Principal activities	Specific examples	Page
<b>Local community activities</b>		
Cleaning activities	Activities in areas surrounding the Group's sites	—
Local community safety and disaster prevention	Activities focusing on the safety of children	—
	Traffic safety initiatives	56
	Participation in fire brigades	—
Local development	Fostering of local specialty products	—
Preserving local community cultures	To preserve Japan's precious cherry blossoms	46
	Supporting Asukayama Takigi Noh plays	—
	Protecting cultural assets	63
Respect for indigenous people	Making wild herb habitat available to indigenous people	63
Holding and participating in local events	Participating in and sponsoring local events	—
	Opening of recreational facilities to the public	—
	Holding summer festivals and other events	—
Social welfare activities	Participating in and cosponsoring social welfare events	—
	Purchasing products made by social welfare groups	—
	Provision of a venue for a charity horse race	—
Community education	Holding of CSR lectures (public seminars)	—
Advancing science and technology	Supporting the Fujihara Foundation of Science	63
Disaster relief activities	Participating in volunteer activities	—
<b>Environmental activities</b>		
Tree planting activities	Marunuma Highland Tree-Planting	65
Preserving biodiversity	Utilizing the Group's cultivating cuttings in container tech	46
	Establishing a sanctuary for Blakiston's fish owl	45
	Supporting the activities of the Shirane-aoi Preservation Group	46
	Promoting Morino Chonai-kai activities	—
	Activities to protect Japanese crane	64
Promoting recycling activities	Operating the Recycle Plaza Shiyukan	—
	Supporting the recycling activities of organizations	43
	Recycling waste paper	43
	Recycling milk cartons	43
	Recycling wood waste	64
<b>Educational activities</b>		
Providing opportunities to tour group companies and their mills	Mill tours and paper making	64
Utilizing company-owned forests	Holding the School of Friendship for Forests and Paper	65
Employment support	Promoting internship programs	58
	Sponsoring workshops	63
Providing classes taught by employees	Cooperation in teaching school classes	64
Music appreciation	Inviting students to concerts	—
Providing educational opportunities through sports	Baseball clinics by the Ishinomaki Baseball Club	64
	Ice hockey classes and championships	—
	Cosponsoring soccer tournaments	—
Providing products to classrooms	Provision of paper products, printed materials and publications	—

# Coexistence with Local Communities and Society at Large

Continuing to pursue business activities in coexistence with local communities

## ● Employment Support

### Case Sponsoring workshops in line with local desires (Brazil, AMCEL S.A.)

AMCEL, which holds expansive land, strives to maintain harmonious relationships and further dialogue with local residents.

As part of that effort, it asked local communities what topics they would like to learn about, and in 2014 began to sponsor workshops based on the responses received.

In fiscal 2014, AMCEL organized four workshops for four different communities. Led by invited experts, these workshops addressed recycling, sewing, corporation, and fish farming. Each lasted five days, was attended by 20-40 participants, and earned positive reviews.



Recycling workshop



Sewing workshop

## ● Preserving Local Community Cultures

### Case Protecting cultural assets (Nippon Paper Industries USA Co., Ltd.)

Port Angeles, Washington, the home of Nippon Paper Industries USA, is also the home of the Lower Elwha Klallam Tribe (LEKT) of Native Americans. When it came time to install a new boiler at its Port Angeles Mill, Nippon Paper Industries USA, together with representatives of the US government and other parties, talked with the LEKT to determine what had to be paid attention to in performing the necessary civil engineering construction work. As a result of discussions, the company learned what it should do if buried objects were discovered and agreed to have an archaeologist with knowledge of LEKT cultural treasures, or, alternatively, an LEKT member, on hand to monitor excavation work.

Strictly abiding by the terms agreed upon with the LEKT, Nippon Paper Industries USA built a good relationship with the tribe and completed the construction work for its new boiler.

## ● Respect for Indigenous People

### Case Making wild herb habitat available to indigenous people (Chile, Volterra S.A.)

The Mapuche are indigenous people who have inhabited southern Chile since well before the arrival of Europeans and maintained their own distinct traditions and culture. One aspect of their cultural heritage is the use of certain wild herbs for medicinal purposes. Availability of these herbs, however, has declined with the development of land for agriculture, housing, and other purposes.

Volterra, as part of its preservation activities on company-owned land, is protecting habitat for the scarce herbs the Mapuche value and has made it available for their use.



Nanco, a wild herb used by the Mapuche

## ● Advancing Science and Technology

### Case Supporting the Fujihara Foundation of Science (Nippon Paper Industries Co., Ltd.)

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.

At the 56th Fujihara Awards presentation ceremony, held in June 2015, Dr. Masataka Nakazawa a professor at Tohoku University’s Research Institute of Electrical Communication and Dr. Shigeyuki Yokoyama a Distinguished Senior Scientist at RIKEN were each presented with a certificate and gold medal, together with ten million yen.



A commemorative photograph taken after the presentation ceremony

# Coexistence with Local Communities and Society at Large

## Promoting Recycling Activities

**Case Promoting the recycling of wood waste**  
(Nanei Co., Ltd., a Nippon Paper Lumber Co., Ltd. Subsidiary)

Nanei, a company that performs sylviculture and logging services in Nippon Paper Industries' and other forests, also makes woodchips used for manufacturing paper and generating electricity, and specializes in the intermediate processing of wood materials from waste. Operating in the Kumamoto Prefecture city of Yatsushiro, Nanei uses a tub grinder to turn tree waste from garden shrubs, wooden pallets and other wooden materials into fine particles that can be used as boiler fuel, or raw material for particle board. Some of this material is also mixed with sawdust and used as bedding for livestock. Recently, Nanei has begun to use tree waste that would otherwise have gone to the city waste incinerator, significantly reducing the city's waste processing burden.



Bringing tree waste in

## Preserving Biodiversity

**Case Activities to protect Japanese crane**  
(Nippon Paper Cranes ice hockey team)

The Nippon Paper Cranes help to protect the environment of the Kushiro-shitsugen (Kushiro marsh) and contribute to the local community by participating in an annual event the Wild Bird Society of Japan holds to create a feeding ground for Japanese cranes. Once threatened with extinction, Japanese cranes are now increasing their number year by year with the help of protection activities. Under present circumstances, however, they find it impossible to get through the winter without food provided by humans. To help them find food on their own, therefore, efforts are made to clear underbrush along riverbanks to allow the birds easier access to the rivers, where they feed. Monitors installed in places where underbrush has been cleared make it possible to see the cranes feeding in the rivers and give participants a real sense of what they have accomplished.



Clearing underbrush

Seeing the benefit of their efforts, the Nippon Paper Cranes intend to continue helping to protect the birds for whom they are named.

## Providing Opportunities to Tour Group Companies and Their Mills

In fiscal 2014, 21,446 people (including 7,575 students and teachers) toured Nippon Paper Group facilities worldwide.

**Case Mill tours and papermaking**  
(Hokkaido Mill (Yufutsu), Nippon Paper Industries)

The Yufutsu works of the Hokkaido Mill enthusiastically welcomes students from schools in and around Tomakomai City for tours of its facilities. In addition to these tours, the Yufutsu works also offers a program in which it teaches the making of paper postcards by hand. A similar program is conducted by employees at local schools.

Students who come to the Yufutsu works gain a deeper appreciation for the paper used in daily life. They do this by touring the facility - where they are typically surprised by the scale of the machinery - and then experiencing for themselves the craft of making paper by hand. The numerous letters and notes of thanks received from students afterward reassure employees that their efforts are worthwhile. As a company that takes a strong interest in local communities where it operates, Nippon Paper Industries is committed to continuing its contributions in support of local education and culture.



Explaining how to make paper by hand



Making postcards

## Providing Educational Opportunities through Sports

**Case Baseball clinics by the Ishinomaki Mill's baseball club**  
(Ishinomaki Mill, Nippon Paper Industries)

The baseball club at Nippon Paper Industries' Ishinomaki Mill holds baseball clinics mainly during the winter. Joint practice sessions are regularly held with local youth teams and high school teams, and trainers are sent to work with these teams and explain training methods to players and coaches. When it received a request for assistance by the High School Baseball Federation in Fukushima Prefecture, the club responded by holding two days of clinics for about 140 players on each day. The clinics welcomed four players from every high school team in the prefecture and were widely seen as a success.

The mill's baseball club actively contributes to local community outside of baseball, as well. For the Ishinomaki Kawabiraki Festival, for example, it lent a hand by making lanterns that were released onto the Kitakami River to mourn victims of the Great East Japan Earthquake.



Baseball clinic

# Corporate Identity Sharing

Conducting activities that enable employees and local residents to physically experience the essence of the Nippon Paper Group

## Utilizing Company-Owned Forests

Case

### Conducting the annual School of Friendship for Forests and Paper (Nippon Paper Industries Co. Ltd., Nippon Paper Development Co., Ltd.)



Walk in a forest owned by Nippon Paper Industries

#### Comments from elementary school children (June 2015)

I never thought paper could be made from twigs, so I was surprised to see that a pretty postcard could be made from them.

It was interesting to see that the material for making paper looks like miso.



A ceremonial photograph of all involved parties

The School of Friendship for Forests and Paper is a hands-on course on the natural environment utilizing forests (approximately 90,000 hectares) owned by Nippon Paper Industries in Japan. With the aim of introducing participants to the beauty and abundance of forests owned by the company, the school is also an opportunity to experience the connection between forests and paper, an essential item for everyday life. This initiative was first launched in the Sugenuma forest of Gunma Prefecture, 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. Since its inception at the Sugenuma company-owned forest, through June 2015, the school has been conducted 18 times, for a total of 606 participants, including parents and children, and students from local schools.

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.

Case

### Marunuma Highland Tree-Planting 2015 held (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries is advancing initiatives aimed at leaving a thriving forest to future generations. As part of that effort, tree-planting activities were begun in the company's Sugenuma Forest in Gunma Prefecture in May 2010. The fourth iteration of this activity—the Marunuma Highland Tree Planting 2015—took place in May. The number of participants—both Nippon Paper Group people and others, mainly from Tokyo—came to about 100 in all.

Under the guidance of staff, participants used transplanting trowels to efficiently plant 1,000 seedlings of

five types of trees, including Japanese beeches and Japanese Judas trees, in around 30 minutes. Going forward, Nippon Paper Industries plans to continue holding tree-plantings.



Planting seedling one at a time on a slope

Shaping the Future with Trees

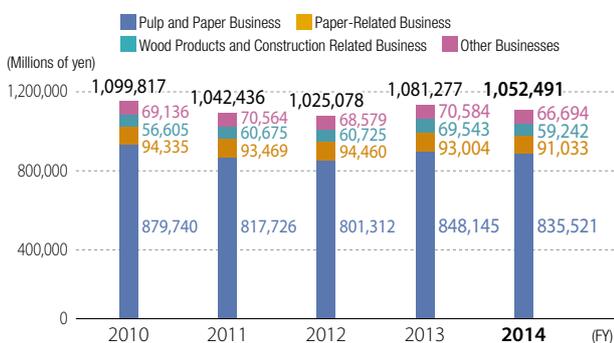
# Outline of the Nippon Paper Group

## Company Profile (As of March 31, 2015)

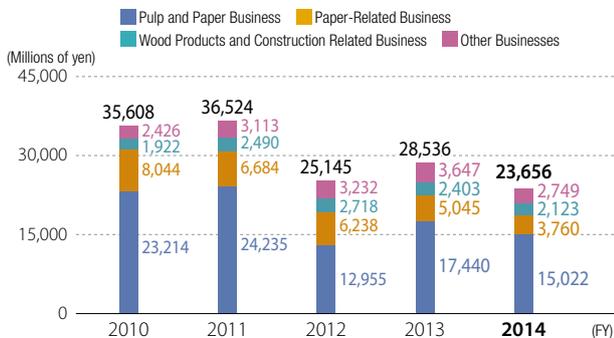
Trade Name Nippon Paper Industries Co., Ltd.  
 Address 4-6 Kandasurugadai, Chiyoda-ku, Tokyo, Japan  
 Capital ¥104.873 billion  
 Incorporation August 1, 1949  
 Listing Tokyo Stock Exchange (Securities code 3863)  
 Telephone +81-3-6665-1111

## Major Financial Indicators Trends

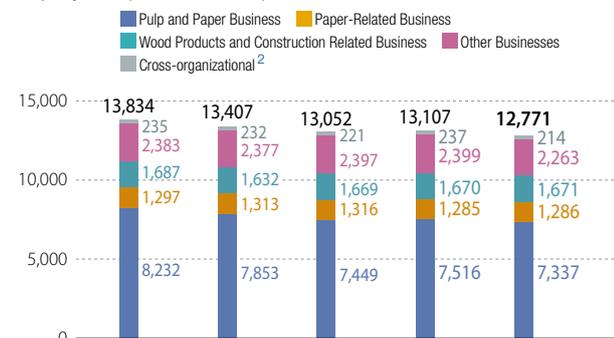
### Consolidated net sales



### Consolidated operating income

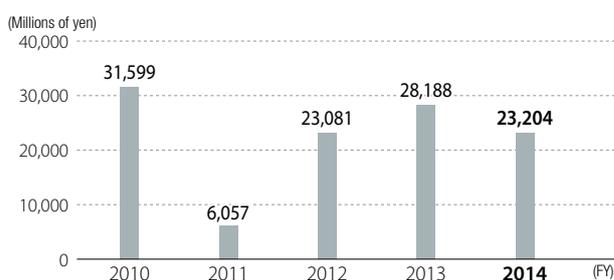


### Employees (consolidated)<sup>1</sup>



<sup>1</sup> Fiscal year-end data  
<sup>2</sup> Employees responsible for multiple divisions

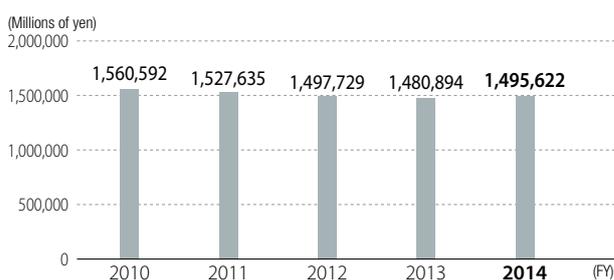
### Consolidated ordinary income



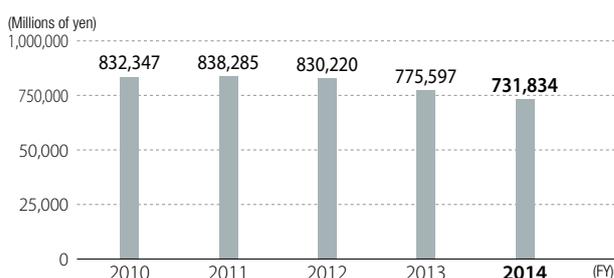
### Consolidated net income or loss



### Total assets (consolidated)



### Interest-bearing debt (consolidated)



## Consolidated Subsidiaries (as of March 31, 2015)

### Pulp and Paper Business

Nippon Paper Crecia Co., Ltd., Nippon Paper Papyrus Co., Ltd., Paper Australia Pty Ltd. (and its 7 subsidiaries), NP Trading Co., Ltd., Kokuei Paper Co., Ltd., SUN OAK CO., LTD., Kitakami Paper Co., Ltd., Daishowa North America Corporation, Nippon Paper Industries USA Co., Ltd., Dyna Wave Holding Asia, and Jujo Thermal Oy

### Paper-Related Business

Sakurai Co., Ltd., Nippon Seitai Corporation, and FLOWRIC CO. LTD.

### Wood Products and Construction Related Business

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

### Other Businesses

NANKO UNYU CO., LTD., Kyokushin Transport Co., Ltd., NIPPON PAPER LOGISTICS CO., LTD., Hotoku Co., Ltd., SHIKOKU COCA-COLA BOTTLING CO., LTD. (and its 3 subsidiaries), Nippon Paper Development Co., Ltd., and GAC CO., LTD.

## The Status of Debt Ratings (As of March 30, 2015)

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

## Major Socially Responsible Investment (SRI) Indices Incorporating the Nippon Paper Group

	<p>Selected once again for inclusion in Ethibel Investment Register* in June 2014</p> <p>A universe of companies selected by Forum Ethibel, a Belgian organization that promotes socially responsible investment, for their outstanding performance in terms of social responsibility. In making its selections, Forum Ethibel assesses companies on criteria including human rights, human resources, environment, business behavior, corporate governance, and community impact.</p>
	<p>Included in the Euronext Vigeo World 120 Index in December 2014</p> <p>The Euronext Vigeo World 120 is an equity index managed by NYSE Euronext, which operates securities exchanges in Europe and the U.S., and by Vigeo, an enterprise that assesses companies. The Euronext Vigeo World 120 is comprised of the 120 companies judged to be the most advanced in environmental, social, and governance matters in Europe, North America, and the Asia-Pacific region.</p>

## Major Environmental Performance Data<sup>1</sup>

		Unit	FY2010	FY2011	FY2012	FY2013	FY2014
Energy	Fossil energy input	Million GJ	97	88	91	97	95
	Non-fossil energy input <sup>2</sup>	Million GJ	76	69	66	77	80
	CO <sub>2</sub> emissions from fossil energy	Million tonnes of CO <sub>2</sub>	7.23	6.55	6.63	7.29	7.15
Water consumption		Million tonnes	958 <sup>3</sup>	870	953	883	939
Wastewater	Amount discharged	Million tonnes	942 <sup>3</sup>	843	905	907	918
	COD/BOD	Thousand tonnes	55.5 <sup>3</sup>	46.9	54.0	56.0	63.7
	SS	Thousand tonnes	20.3 <sup>3</sup>	16.8	21.3	22.0	23.6
Gas emissions	SO <sub>x</sub>	Thousand tonnes	3.96 <sup>3</sup>	3.37	3.50	3.34	4.32
	NO <sub>x</sub>	Thousand tonnes	7.73 <sup>3</sup>	7.05	7.95	9.03	8.78
	Soot and dust	Thousand tonnes	1.23 <sup>3</sup>	1.25	1.04	1.52	1.54
Waste	Amount generated	Thousand tonnes	699 <sup>3</sup>	688	737	769	850
	Final waste disposal	Thousand tonnes	31 <sup>3</sup>	44	49	79	54.2

<sup>1</sup> Australian Paper was added to the data collection scope in fiscal 2013. Jujo Thermal Oy and South East Fibre Exports Pty. Ltd. were added in fiscal 2014.

<sup>2</sup> Energy from biomass and waste

<sup>3</sup> 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.

## External Awards for Environmental Conservation Activities (FY2014)

Recipient	Award	Award Organization
Nippon Paper Industries Co., Ltd., Ishinomaki Mill; Nanko Unyu Co, Ltd.	Green Logistics Partnership Conference Special Award*	Ministry of Land, Infrastructure, Transport and Tourism and the Ministry of Economy, Trade and Industry
Nippon Paper Industries Co., Ltd., Head office	Excellent Waste Manager Award	Chiyoda City, Tokyo
Nippon Paper Crecia Co., Ltd., Kaisei Mill	Fiscal 2014 Environmental Conservation Award (Chairman's Award) Western Prefecture Region	Kanagawa Environmental Conservation Association
Kitakami Paper Co., Ltd.	Iwate Prefecture Southern Wide-Area Development Bureau Environmental Grand Prize	Iwate Prefecture Southern Wide-Area Development Bureau

\* Named a co-recipient, together with Japan Freight Railway Company

# Guideline Comparison Table

Guideline Comparison Table (GRI Sustainability Reporting Guidelines Ver. 4) \*Only items mentioned in the report are shown.

Item	Corresponding Page(s)	Contents
<b>General Standard Disclosures</b>		
Strategy and Analysis		
G4-1	4-5	Message from the President
G4-2	4-7, 10-11	Message from the President, The Sustainable Business Model of a Comprehensive Biomass Enterprise, Fifth Medium-Term Business Plan
Organizational Profile		
G4-3	66-67	Outline of the Nippon Paper Group
G4-4	8-9	Nippon Paper Group Business Overview
G4-5	66-67	Outline of the Nippon Paper Group
G4-6	2-3, 28, 57	Major Operating Companies and Production Sites, Promoting Overseas Afforestation, Recruitment and Employment
G4-7	20, 66	Dialog with Stakeholders, Outline of the Nippon Paper Group
G4-8	2, 8-9, 20	Major Operating Companies and Production Sites, Nippon Paper Group Business Overview, Dialog with Stakeholders
G4-9	2, 8-9, 66-67	Major Operating Companies and Production Sites, Nippon Paper Group Business Overview, Outline of the Nippon Paper Group
G4-10	57	Recruitment and Employment
G4-11	60	Industrial Relations
G4-12	12-13, 23-25, 28	Social Issues and the Nippon Paper Group's Value Creation Flow, Current Status of Raw Materials Procurement, Sustainable Procurement of Raw Materials, Promoting Overseas Afforestation
G4-13	2	Major Operating Companies and Production Sites
Commitments to External Initiatives		
G4-14	19, 22, 24-25, 30-33, 48-50, 54-56	Compliance, Sustainable Forest Management, Action Plan for Wood-Based Raw Material Procurement, (Environment, Customers, Human Rights and Labor) Policy and Management, Occupational Safety and Health
G4-15	18	The United Nations Global Compact
G4-16	18	Collaborative Initiatives
Identified Material Aspects and Boundaries		
G4-17	3, 67	Scope of Organizations Covered, Outline of the Nippon Paper Group
G4-18	3, 14, 20	Editorial Policy, CSR Materiality at the Nippon Paper Group, Dialog with Stakeholders
G4-19	14	CSR Materiality at the Nippon Paper Group
G4-20	2-3	Major Operating Companies and Production Sites, Scope of Organizations Covered
G4-21	3, 14	Scope of Organizations Covered, CSR Materiality at the Nippon Paper Group
G4-22	58	Female Management Participation and Recruiting
G4-23	3, 38-39, 57, 67	Scope of Organizations Covered, Material Balance, Performance in Reemploying Workers Who Reach the Mandatory Retirement Age, Major Environmental Performance Data
Stakeholder Engagement		
G4-24	20	Dialog with Stakeholders
G4-25	20	Dialog with Stakeholders
G4-26	17, 19, 20, 24-25, 33, 50, 55-65	IR Activities, Group Internal Whistleblower System, Dialog with Stakeholders, Action Plan for Wood-Based Raw Material Procurement, Environmental Education and Training, Environmental Communication, Identifying Customer Needs, Occupational Safety and Health, Creating Workplaces that Support Diverse Human Resources, Responsibility to Communities
G4-27	14, 19, 20, 24-25, 33, 51-52, 55-65	CSR Materiality at the Nippon Paper Group, Group Internal Whistleblower System, Dialog with Stakeholders, Action Plan for Wood-Based Raw Material Procurement, Environmental Communication, Providing Environmentally and Socially Conscious Products, Occupational Safety and Health, Creating Workplaces that Support Diverse Human Resources, Responsibility to Communities
Report Profile		
G4-28	3	Period Covered
G4-29	Back cover	Issued Year, Month
G4-30	Back cover	Issued Year, Month
G4-31	Back cover	Inquiries
GRI Content Index		
G4-32	68-70	Guideline Comparison Table
Assurance		
Governance		
Governance Structure and Composition		

Item	Corresponding Page(s)	Contents
G4-34	16, 22, 30, 48, 55	Group Governance, Framework for Promoting Raw Materials Procurement Management, Environmental Management Promotion Structure, Product Safety Management System, System to Promote Occupational Safety and Health
G4-35	18, 22, 30, 48, 55, 62	CSR Management, Framework for Promoting Raw Materials Procurement Management, Environmental Management Promotion Structure, Product Safety Management System, System to Promote Occupational Safety and Health, Structure for Promoting Social Contribution Activities
G4-36	22, 30, 48, 55	Raw Material Management Promotion Structure, Environmental Management Promotion Structure, Product Safety Management System, System to Promote Occupational Safety and Health
G4-37	17, 20, 24-25, 33, 48-50, 55, 60	IR activities, Dialog with Stakeholders, Sustainable Procurement of Raw Materials, Environmental Communication, (Customers) Policy and Management, Occupational Safety and Health, Industrial Relations
G4-38	16	Group Governance
Highest Governance Body's Role in Setting Purpose, Values, and Strategy		
G4-42	16, 30	Group Governance, Environmental Management Promotion Structure
Highest Governance Body's Competencies and Performance Evaluation		
G4-43	18, 24-25, 30	CSR Management, Sustainable Procurement of Raw Materials, Environmental Management Promotion Structure
G4-44	16	Group Governance
Highest Governance Body's Role in Risk Management		
G4-45	16, 18, 20, 24-25, 33, 48-50, 54, 55	Group Governance, CSR Management, Dialog with Stakeholders, Sustainable Procurement of Raw Materials, Environmental Communication, (Customers) Policy and Management, Initiatives in Respect of Human Rights, System to Promote Occupational Safety and Health
G4-46	16, 30	Group Governance, Environmental Management Promotion Structure
G4-47	16	Group Governance
Highest Governance Body's Role in Sustainability Reporting		
Highest Governance Body's Role in Evaluating Economic, Environmental and Social Performance		
G4-49	18, 30	CSR Management, Environmental Management Promotion Structure
Remuneration and Incentives		
G4-51	17	Compensation Paid to Directors
Ethics and Integrity		
G4-56	5, 18, 22, 30, 48, 54, 62	Group Mission, The Nippon Paper Group's Action Charter, Philosophy and Basic Policy Concerning Raw Materials Procurement, Environmental Charter, Philosophy and Basic Policy on Product Safety, Philosophy and Basic Policy on Human Rights, Employment and Labor, Philosophy and Principles for Social Contribution Activities
G4-57	19	Group Internal Whistleblower System
G4-58	19	Group Internal Whistleblower System
<b>Specific Standard Disclosures</b>		
Category: Economic		
G4-EC1	17, 34, 66	Trends in Dividends Per Share, Environmental Accounting, Outline of the Nippon Paper Group
G4-EC2	6-7, 10-11, 34-37	The Sustainable Business Model of a Comprehensive Biomass Enterprise, Fifth Medium-Term Business Plan, Environmental Accounting, Climate Change Initiatives
G4-EC6	57	Employment Data
G4-EC7	26-28, 34, 36-37, 44-46, 61-65	Protecting and Nurturing Japan's Wood Resources, Promoting Overseas Afforestation, Environmental Accounting, Advancing Energy Efficiency in Logistics, Preserving Biodiversity, Responsibility to Communities
G4-EC8	26-28, 61-65	Protecting and Nurturing Japan's Wood Resources, Promoting Overseas Afforestation, Responsibility to Communities
Category: Environment		
G4-EN1	23, 38-39	Current Status of Raw Materials Procurement, Material Balance
G4-EN2	23, 38-39, 43	Current Status of Raw Materials Procurement, Material Balance, Wastepaper Collection and Use
G4-EN3	35-39	Climate Change Initiatives, Material Balance
G4-EN6	31, 34, 35-37	Environmental Action Plan Fiscal 2014 Status, Environmental Conservation Impacts, Climate Change Initiatives
G4-EN8	38-39	Material Balance
G4-EN11	44	Breakdown of Company-Owned Forests in Japan
G4-EN12	26, 28, 44-46	Sustainable Management of Company-Owned Forests in Japan, Promoting Overseas Afforestation, Preserving Biodiversity

Item	Corresponding Page(s)	Contents
G4-EN13	26, 28, 44-46, 64	Sustainable Management of Company-Owned Forests in Japan, Promoting Overseas Afforestation, Preserving Biodiversity, (Local Communities) Preserving Biodiversity
G4-EN19	34, 35	Environmental Conservation Impacts, Progress under the Green Action Plan 2015
G4-EN20	42	Controlling Chemical Substances
G4-EN21	34, 38-39, 40	Environmental Conservation Impacts, Material Balance, Preventing Air Pollution
G4-EN22	34, 38-39, 40	Environmental Conservation Impacts, Material Balance, Preventing Water Pollution
G4-EN23	34, 38-39, 40	Environmental Conservation Impacts, Material Balance, Reducing Industrial Waste
G4-EN24	33	Status with Regard to Legal Compliance
G4-EN28	34, 43	Environmental Conservation Impacts, Wastepaper Collection and Use
G4-EN29	33	Status with Regard to Legal Compliance
G4-EN30	36-37, 51	Advancing Energy Efficiency in Logistics, Environmentally Friendly Utilization
G4-EN31	34	Environmental Accounting
G4-EN32	21, 24-25	(Raw Materials) Indicators, Sustainable Procurement of Raw Materials
G4-EN34	33, 41	Responses to Opinions and Complaints, Preventing Noise, Vibration, and Odors
Category: Social		
Sub-Category: Labor Practices and Decent Work		
G4-LA1	57, 58	Recruitment and Employment, Women in the Workplace
G4-LA3	59	Data on Balancing Work and Personal Lives
G4-LA5	55, 60	System to Promote Occupational Safety and Health, Industrial Relations
G4-LA6	56	Status of Occupational Accidents
G4-LA8	20, 55, 60	Dialog with Stakeholders, System to Promote Occupational Safety and Health, Industrial Relations
G4-LA10	57-60	Creating Workplaces that Support Diverse Human Resources
G4-LA11	60	Fair Evaluation and Compensation
G4-LA14	21, 24-25	(Raw Materials) Indicators, Sustainable Procurement of Raw Materials
G4-LA15	21, 24-25	(Raw Materials) Indicators, Sustainable Procurement of Raw Materials
G4-LA16	19	Group Internal Whistleblower System
Sub-Category: Human Rights		
G4-HR4	22, 24-25	(Raw Materials) Philosophy and Basic Policy, Action Plan for Wood-Based Raw Material Procurement
G4-HR5	22, 24-25	(Raw Materials) Philosophy and Basic Policy, Action Plan for Wood-Based Raw Material Procurement
G4-HR6	22, 24-25	(Raw Materials) Philosophy and Basic Policy, Action Plan for Wood-Based Raw Material Procurement
G4-HR9	21, 24-25	(Raw Materials) Indicators, Sustainable Procurement of Raw Materials
G4-HR10	21, 24-25	(Raw Materials) Indicators, Sustainable Procurement of Raw Materials
G4-HR11	21, 24-25	(Raw Materials) Indicators, Sustainable Procurement of Raw Materials
G4-HR12	19	Group Internal Whistleblower System
Sub-Category: Society		
G4-SO1	15, 20, 33	(Management) Indicators, Dialog with Stakeholders, Environmental Communication
G4-SO2	38-39	Material Balance
G4-SO4	19	Implementing Compliance Training
G4-SO9	21, 24-25	(Raw Materials) Indicators, Sustainable Procurement of Raw Materials
G4-SO10	21, 24-25	(Raw Materials) Indicators, Sustainable Procurement of Raw Materials
Sub-Category: Product Responsibility		
G4-PR1	48-50	Approach toward Product Safety, Initiatives for Quality Stabilization
G4-PR3	26-27, 49, 51	Invigorating Japan's Forest Industry, Verification and Audit of Waste Paper Pulp Blending Ratio, Providing Certified Paper by Starting with Properly Managed Forests, SGEC Certified MDF Using 100% Domestic Timber
G4-PR5	51-52	Providing Environmentally and Socially Conscious Products

## ISO 26000 Comparison Table

Core Subjects and Issues	Corresponding Page(s)	Contents
6.2 Organizational Governance	4-5, 6-7, 15-20, 22, 24-25, 30-33, 48-50, 53-60, 62	Message from the President, The Sustainable Business Model of a Comprehensive Biomass Enterprise, Management Responsibility, (Raw Materials) Policy and Management, Sustainable Procurement of Raw Materials, (Environment, Customers) Policy and Management, Human Rights, Employment and Labor Responsibility, (Community) Policy and Management
6.3 Human Rights		
6.3.3	18, 24-25, 54	CSR Management, Sustainable Procurement of Raw Materials, Initiatives in Respect of Human Rights
6.3.4	18, 22	The Nippon Paper Group's Action Charter, (Raw Materials) Policy and Management
6.3.5	22, 54	(Raw Materials, Human Rights and Labor) Policy and Management
6.3.6	19, 33, 49-50	Group Internal Whistleblower System, Environmental Communication, Initiatives for Quality Stabilization
6.3.7	54, 57-60	(Human Rights and Labor) Policy and Management, Creating Workplaces that Support Diverse Human Resources
6.3.8	54	(Human Rights and Labor) Policy and Management
6.3.9	55-56, 63	Occupational Safety and Health, Preserving Local Community Cultures, Respect for Indigenous People
6.3.10	54, 60	(Human Rights and Labor) Policy and Management, Industrial Relations
6.4 Labor Practices		
6.4.3	53-60	Human Rights, Employment and Labor Responsibility
6.4.4	53-60	Human Rights, Employment and Labor Responsibility
6.4.5	60	Industrial Relations
6.4.6	55-56	Occupational Safety and Health
6.4.7	59-60	Initiatives Aimed at Developing Human Resources
6.5 The Environment		
6.5.3	35-42	Climate Change Initiatives, Reduction of Environmental Impacts
6.5.4	6-7, 24-28, 43	The Sustainable Business Model of a Comprehensive Biomass Enterprise, Sustainable Procurement of Raw Materials, Protecting and Nurturing Japan's Wood Resources, Promoting Overseas Afforestation, Wastepaper Collection and Use
6.5.5	35-37	Climate Change Initiatives
6.5.6	44-46	Preserving Biodiversity
6.6 Fair Operating Practices		
6.6.3	18, 22	The Nippon Paper Group's Action Charter, (Raw Materials) Policy and Management
6.6.4	18, 22	The Nippon Paper Group's Action Charter, (Raw Materials) Policy and Management
6.6.5	18, 22	The Nippon Paper Group's Action Charter, (Raw Materials) Policy and Management
6.6.6	12-13, 22, 24-25	Social Issues and the Nippon Paper Group's Value Creation Flow, (Raw Materials) Policy and Management, Sustainable Procurement of Raw Materials
6.6.7	19	Respect for Intellectual Property
6.7 Consumer Issues		
6.7.3	17, 48	Basic Position on Information Disclosure, (Customers) Basic Stance
6.7.4	47-52	Responsibility to Customers
6.7.5	47-52	Responsibility to Customers
6.7.6	48-50	(Customers) Policy and Management
6.7.7	19	Personal Information Protection
6.7.8	18	The Nippon Paper Group's Action Charter
6.7.9	50, 64, 65	Mill Tours for Customers, Providing Opportunities to Tour Group Companies and Their Mills, Corporate Identity Sharing
6.8 Community Involvement and Development		
6.8.3	20, 28, 61-65	Dialog with Stakeholders, Promoting Overseas Afforestation, Responsibility to Communities
6.8.4	61-65	Responsibility to Communities
6.8.5	61-65	Responsibility to Communities
6.8.6	61-65	Responsibility to Communities
6.8.7	61-65	Responsibility to Communities
6.8.8	35-42, 51-52, 55-56	Climate Change Initiatives, Reduction of Environmental Impacts, Providing Environmentally and Socially Conscious Products, Occupational Safety and Health
6.8.9	26-27, 61-65	Invigorating Japan's Forest Industry, Responsibility to Communities

# Guideline Comparison Table

Guideline Comparison Table (*Environmental Reporting Guidelines, Ministry of the Environment*)

Item	Corresponding Page(s)	Contents
<b>Basic Issues of Environment Reporting</b>		
1. (1)	3	Editorial Policy
1. (2)	3	Editorial Policy
1. (3)	3	Editorial Policy
1. (4)	3, Back Cover	Editorial Policy
2	4-5	Message from the President
3. (1)	4-5, 6-7	Message from the President, The Sustainable Business Model of a Comprehensive Biomass Enterprise
3. (2)	31	The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015) Fiscal 2014 Status
3. (3)	31	The Nippon Paper Group Environmental Action Plan (Green Action Plan 2015) Fiscal 2014 Status
4	38-39	Material Balance
<b>Status of Environmental Management (MPI)</b>		
1. (1)	30-34	(Environment) Policy and Management
1. (2)	6-11	The Sustainable Business Model of a Comprehensive Biomass Enterprise, Nippon Paper Group Business Overview, Fifth Medium-Term Business Plan
2. (1)	30	Environmental Management Promotion Structure
2. (2)	30-34	(Environment) Policy and Management
2. (3)	32-33, 38-42	Strengthening Environmental Compliance, Reduction of Environmental Impacts
3. (1)	20, 33	Dialog with Stakeholders, Environmental Communication
3. (2)	44-46, 61-65	Preserving Biodiversity, Responsibility to Communities
4. (1)	12-13, 22, 30-31	Social Issues and the Nippon Paper Group's Value Creation Flow (Forest Management and Raw Material Procurement) Policy and Management, Environmental Action Plan
4. (2)	22-23	(Forest Management and Raw Material Procurement) Policy and Management, Current Status of Raw Materials Procurement
4. (3)	51-52	Providing Environmentally and Socially Conscious Products
4. (4)	10-11, 41, 46, 51-52	Fifth Medium-Term Business Plan, Reducing Industrial Waste, Initiatives that Harness Company-Owned Resources and Technologies, Providing Environmentally and Socially Conscious Products

Item	Corresponding Page(s)	Contents
4. (5)	36-37	Advancing Energy Efficiency in Logistics
4. (6)	26-28, 35-36	Protecting and Nurturing Japan's Wood Resources, Promoting Overseas Afforestation, Fuel Conversion Led by the Adoption of Biomass Boilers
4. (7)	41, 43	Reducing Industrial Waste, Wastepaper Collection and Use
<b>Information and Indicators that Describe the Status of Activities for Environmental Impacts and Its Reduction Measures</b>		
1. (1)	35-39	Climate Change Initiatives, Material Balance
1. (2)	38-39, 43	Material Balance, Wastepaper Collection and Use
1. (3)	38-39	Material Balance
2	6-7, 35-36, 41	The Sustainable Business Model of a Comprehensive Biomass Enterprise, Fuel Conversion Led by the Adoption of Biomass Boilers, Reducing Industrial Waste
3. (1)	38-39	Material Balance
3. (2)	35-39	Climate Change Initiatives, Material Balance
3. (3)	38-39	Material Balance
3. (4)	38-42	Reduction of Environmental Impacts
3. (5)	38-42	Reduction of Environmental Impacts
3. (6)	38-39, 41	Material Balance, Reducing Industrial Waste
3. (7)	38-42	Reduction of Environmental Impacts
4	44-46	Preserving Biodiversity
<b>The Status of Environmental Management from Economic and Social Perspectives</b>		
1. (1)	34	Environmental Accounting
1. (2)	—	—
2	21-28, 32-33, 44-46, 51-52, 61-65	Forest Management and Raw Material Procurement Responsibility, Strengthening Environmental Compliance, Environmental Communication, Preserving Biodiversity, Providing Environmentally and Socially Conscious Products, Responsibility to Communities
<b>Other Issues</b>		
1	3	Period Covered
2	71	Third-Party Comments

Comparison Table (the United Nations Global Compact)

Principles	Corresponding Page(s)	Contents
Signatory to and Participation in the United Nations Global Compact	4-5, 18	Message from the President, Collaborative Initiatives
<b>Human Rights</b>		
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights.	22, 24-25, 53-60 (Forest Management and Raw Material Procurement), Policy and Management, Sustainable Procurement of Raw Materials, Human Rights, Employment and Labor Responsibility
Principle 2	Businesses should make sure that they are not complicit in human rights abuses.	22, 24-25, 54 (Forest Management and Raw Material Procurement) Policy and Management, Sustainable Procurement of Raw Materials, (Human Rights, Employment and Labor) Policy and Management
<b>Labor</b>		
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	54, 60 (Human Rights, Employment and Labor) Policy and Management, Industrial Relations
Principle 4	Businesses should uphold the elimination of all forms of forced and compulsory labor.	22, 24-25, 54 (Forest Management and Raw Material Procurement) Policy and Management, Sustainable Procurement of Raw Materials, (Human Rights, Employment and Labor) Policy and Management
Principle 5	Businesses should uphold the effective abolition of child labor.	22, 24-25, 54 (Forest Management and Raw Material Procurement) Policy and Management, Sustainable Procurement of Raw Materials, (Human Rights, Employment and Labor) Policy and Management
Principle 6	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	54, 57-60 (Human Rights, Employment and Labor) Policy and Management, Creating Workplaces that Support Diverse Human Resources
<b>Environment</b>		
Principle 7	Businesses should support a precautionary approach to environmental challenges.	22, 24-25, 29-46 (Forest Management and Raw Material Procurement) Policy and Management, Sustainable Procurement of Raw Materials, Environmental Responsibility
Principle 8	Businesses should undertake initiatives to promote greater environmental responsibility.	4-5, 6-7, 10-11, 21-28, 29-46 Message from the President, The Sustainable Business Model of a Comprehensive Biomass Enterprise, Fifth Medium-Term Business Plan, Forest Management and Raw Material Procurement Responsibility, Environmental Responsibility
Principle 9	Businesses should encourage the development and diffusion of environmentally friendly technologies.	10-11, 41, 46, 51-52 Fifth Medium-Term Business Plan, Reducing Industrial Waste, Initiatives that Harness Company-Owned Resources and Technologies, Providing Environmentally and Socially Conscious Products
<b>Anti-Corruption</b>		
Principle 10	Businesses should work against corruption in all its forms including extortion and bribery.	18-19, 22 CSR Management, Compliance, (Forest Management and Raw Material Procurement) Policy and Management



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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 worked at the Limperg Instituut, 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

The Nippon Paper Group has been pursuing a strategy for accelerating the transformation of its business structure and achieving growth as a comprehensive biomass enterprise. This was a key point of the Fourth Medium-Term Business Plan and is addressed in more concrete terms in the Fifth Medium-Term Business Plan. The basic concept of this strategy is to apply the Group's trove of knowledge in wood science and technologies, and its own biomass resources inside and outside Japan, to capitalize on opportunities in growth fields and develop new businesses into key contributors to the Group's success. Accelerating the transformation of the Group's business structure is to be achieved by concentrating on expanding investments in growth fields and reallocating management resources based on a reassessment of Group assets, while enhancing the competitiveness of existing businesses to provide earnings to underpin these initiatives.

Something I believe the Group deserves special credit for is the development of a clear statement of its corporate mission in conjunction with its Fifth Medium-Term Business Plan. That plan stresses the Group's corporate mission – "... to contribute to better living and cultural progress everywhere it does business" – which is to be achieved through a corporate vision, one element of which is to "Drive social sustainability through our business." This is a clear statement of commitment to achieving business results that support a transition to a sustainable society. Pursuing a renewable energy business to help lower CO<sub>2</sub> emissions, and elevating the 3R - Reduce, Reuse, Recycle - performance of products in its packaging business, are two ways in which the Group proposes to achieve its objectives, and much is expected of their endeavors. The ability to clearly express the stance described above serves as a reminder of why Nippon Paper Industries has been selected for inclusion in the Ethibel Investment Register and Euronext Vigeo World 120 index.

Turning to environmental performance, attention focuses on progress in achieving the Group's Green Action Plan 2015. Included therein are quantitative targets to be achieved on various fronts by fiscal 2015. Most of these have been achieved or are very close to being achieved. Two areas where performance is falling behind and stronger measures are called for going forward are total hectares of afforested land outside of Japan and the percent of waste recycled in-house.

In terms of social performance, the Group has gradually increased its female management participation percentage over the years. Still, however, one would like to see greater efforts here and in the hiring of people with disabilities, an area in which the Group has nearly but not quite achieved the legally mandated workforce participation rate.

As for the sustainability report itself, it is clear that several improvements in disclosure have been made. Materiality standards, for example, have been partially revised and the related indicators disclosed. Showing relevant indicators at the beginning of each report section covering a key issue greatly facilitates understanding of the results of particular endeavors. The Group has also included a table providing nearly comprehensive coverage of employment data at the consolidated level. This information was previously available only online, and I see its addition to the printed report as a significant improvement. As well, credit should be given for the addition of data on dispatched workers as this change in the Group's disclosure standard for workforce data brings it very close to the workforce reporting requirement in the GRI G4 Sustainability Reporting Guidelines.

### Action in Response to Third-Party Comments

In fiscal 2015, the Nippon Paper Group – in order to have all employees work toward a common purpose and objectives - set forth in clear terms a social mission, a vision for achieving that mission, and values that must be upheld for mission achievement. Based on the mission we defined, we then formulated our Fifth Medium-Term Business Plan, for creating new value as a comprehensive biomass enterprise shaping the future with trees. In our Sustainability Report 2015, we have done our best to explain how our mission and Fifth Medium-Term Business Plan are tied to CSR activities and will contribute to the building of a sustainable society. As Dr. Kozuma recognizes, we have also taken steps – such as using text that is more clearly written and including indicators or illustrations for particularly important matters – to facilitate understanding of report contents. Furthermore, we have adopted a uniform reporting boundary wherever possible as a direct response to Dr. Kozuma's comment regarding multiple reporting boundaries depending on data type in our Sustainability Report 2014. As for Dr. Kozuma's input regarding our CSR activities, we will carry on with efforts to step up our performance. Looking to the future, we aim to continue pursuing business activities that emphasize coexistence with society and welcome candid opinions and critiques regarding our performance.



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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.

## Cover Photograph



### The Four Seasons in Nippon Paper Industries' Company-owned Forests

1. Sugenuma Forest
  2. Akan Forest \*
  3. Sugenuma Forest \*
  4. Sugenuma Forest \*
  5. Blakiston's fish owl in a Nippon Paper Industries company-owned forest  
(Photo courtesy of the Wild Bird Society of Japan)
  6. Houou Forest \*
  7. Sugenuma Forest \*
  8. Akan Forest \*
  9. Sugenuma Forest \*
- \* Photographer: Yuhji Itsumi

### The Paper Used in This Report

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