

# NIPPON PAPER GROUP

Sustainability Report 2010



### **Editorial Policy**

The Nippon Paper Group regularly publishes a corporate social responsibility (CSR) report to communicate to a wide range of stakeholders efforts to meet its responsibilities as a corporate citizen. We present the information in two formats, one that attempts to provide complete and in-depth disclosure (Detailed Edition) and another that provides easy-to-read highlights covering the most important topics (Highlight Edition).

### **Period Covered**

April 1, 2009-March 31, 2010

\* Includes some information from before April 1, 2009, or after March 31, 2010.

#### Scope of Organizations

In this report, the holding company, Nippon Paper Group, Inc. reports on the activities of 11 companies including the Nippon Paper Group, Inc., and the 10 core companies listed below:

Nippon Paper Group, Inc.; Nippon Paper Industries Co., Ltd.; Nippon Daishowa Paperboard Co., Ltd.; Nippon Paper Crecia Co., Ltd.; Nippon Paper Papylia Co., Ltd.; SHIKOKU COCA-COLA BOTTLING CO., LTD.; NIPPON PAPER-PAK CO., LTD.; Nippon Paper Chemicals Co., Ltd.; Nippon Paper Lumber Co., Ltd.; NP Trading Co., Ltd.; Nippon Paper Development Co., Ltd.

(The contribution to total consolidated sales of these 11 companies was 88%.)

The scope of organizations covered with respect to basic policies and systems concerning the environment, environmental accounting and environmental performance data consists of the following 18 companies, which include all our major production bases. (Paper Australia Pty. Ltd., which joined the Group in June 2009, is not included in the scope of fiscal 2009 environmental performance data.) Nippon Paper Group, Inc.; Nippon Paper Industries Co., Ltd.; Nippon Daishowa Paperboard Co., Ltd.; Nippon Paper Crecia Co., Ltd.; Nippon Paper Papylia Co., Ltd.; SHIKOKU COCA-COLA BOTTLING CO., LTD.; NIPPON PAPER-PAK CO., LTD.; Nippon Paper Chemicals Co., Ltd.; Nippon Paper Lumber Co., Ltd.; NP Trading Co., Ltd.; Nippon Paper Co., Ltd.; Nippon Paper Co., Ltd.; Nippon Paper Industries USA Co., Ltd.; Nippon Seitai Corporation; Akita Jujo Chemicals Co., Ltd. (unconsolidated); PAL CO., LTD.; Diaishowa Uniboard Co., Ltd.

(The contribution to total consolidated sales of the 18 companies listed here was 92%.)

Nippon Paper Group, Inc., and the companies listed above are defined as "the Company" and "the Core Group Companies," respectively, in this report, clearly differentiated from the Nippon Paper Group (or "the Group"), which includes organizations outside the companies listed above. The organizational structure of the Nippon Paper Group is outlined in "Outline of the Nippon Paper Group" on pages 14, 15 and 32. However, the organizational scope covered by certain sections of this report may differ. In such cases, individual sections specify the scope covered.

#### **Referenced Guidelines**

- Environmental Reporting Guidelines of the Ministry of the Environment
- Sustainability Reporting Guidelines (3rd edition) by Global Reporting Initiative (GRI)
- United Nations Global Compact, etc.

### Disclaimer

This report includes statements of fact and historical data as well as plans, forecasts and estimates (forward-looking statements) based on the business plan and policies of Nippon Paper Group. These forward-looking statements are the result of assumptions or judgments based on currently available information as this report was prepared. Be advised that the estimates described in the forward-looking statements may differ significantly from actual results due to a number of important factors including future business activities and changing market conditions.

#### Nippon Paper Group's Sustainability Reporting



### Sustainability Report (Detailed Edition, Japanese only)

> Please visit the Nippon Paper Group's website.

### Items reported in the detailed edition

#### Business Outline

Message from the President

#### Feature 1

Toward Biodiversity Conservation

#### Feature 2 Overseas Business Expansion

and CSR Activities

#### **Management Responsibility**

Group Governance CSR Management Compliance Dialog with Stakeholders Information Disclosure and Investors Relations Profit Distribution to Shareholders

#### Environmental Responsibility

Material Balance Environmental Management Preventing Climate Change Recycling of Recovered Paper Reducing Waste Generation and Emissions Initiatives Targeting Environmental Pollution Targets and Results of Environmental Conservation Environmental Accounting

#### Material Procurement Responsibility

Raw Material Procurement Policy and Management Efforts in Supply Chain Management Stable Supply of Recovered Paper Overseas Afforestation Domestic Company-owned Forest Overview of Afforestation Areas

### For mail delivery, please go to : URL http://www.np-g.com/e/appliform/

### **NIPPON PAPER GROUP**

# Sustainability Report 2010

### Contents

- **Editorial Policy** 2
- Message from the President 4

#### Feature 1 6

# **Toward Biodiversity Conservation**

- **Forest management Activities** 7
- **Activities Utilizing Proprietary technology** 9
- 9 Activities that Use Company-owned forests

### Feature 2 10 **Overseas Business** Expansion and CSR **Activities**

- Sustainable Growth in Partnership with the 11 Global Community based on the United **Nations Global Compact**
- Paper Australia Pty. Ltd. Activities 12
- Nippon Paper Industries USA Co., Ltd. 13 Activities

### **Focus Theme Reports**

- The Nippon Paper Group's Involvement 14 in Society Across the Lifecycles of Its Products
- Sustainable Procurement of Raw Materials 16
- Initiatives Targeting Climate Change 20
- **Optimal Response to Customers** 24
- Promotion of Waste Paper Use 28
- 32 Data Packet
- **Third-Party Comments** 39
- 39 Action in Response to Third-Party Comments

Educational Activities **Environmental Activities** Activities that Benefit Communities and Society

Action in Response to Third-Party Comments

### Detailed Edition (PDF)

http://www.np-g.com/csr/

**Responsibility to Customers** Activities of the Nippon Paper Group Activities of Each Group Company

### **Responsibility to Employees**

Basic Policy on Human Rights, Employment and Labor Cultivating Human Resources Creating Workplaces that Support Employee Diversity

### Occupational Safety and Health **Responsibility to Local Communities**

Basic Philosophy and Framework for Promoting Social Contribution Activities

### Guidelines Reference



This report Sustainability Report 2010 (Highlight Edition)

> Reporting on the most important issues

> > z



Highlight Edition

# Looking beyond the next generation, we are working to realize a sustainable society



### Striving for sustainable development

Japan, North America and advanced nations in Europe continue to confront difficult economic conditions. The economies of China and Southeast Asian countries, on the other hand, are enjoying ongoing expansion coupled with population growth. Taking the aforementioned into consideration, the structure of the global economy is undergoing substantial change. With dwindling birthrates, greater longevity and the expansion of electronic media attributable to changes in the structure of demand, Japan's paper industry is also experiencing a harsh operating environment with limited prospect of a recovery in the short term. The global market, and particularly Asia, however, continues to witness steady growth.

Against this backdrop, the Nippon Paper Group aims to become "one of the top five pulp and paper companies worldwide" guided by its Group Vision 2015.

To this end, we are enhancing group flexibility and management efficiency. In our domestic paper business, we will secure stable profits by reviewing our business structure, taking into consideration harsh trends in demand. At the same time, we will expand business in overseas markets that offer the promise of future growth. Through these means, the Nippon Paper Group will consistently enhance its corporate value.

Running in tandem with these initiatives, we will contribute to society through our business activities as we aim to secure sustainable development. Our focus extends well beyond the goal of becoming one the world's top five companies in terms of sales. We are equally dedicated to playing a major role from each of the social and environmental perspectives encompassing CSR and corporate governance.

# Engaging in CSR-oriented domestic and overseas business development

The Nippon Paper Group fully supports and participates in the United Nations Global Compact and its 10 guiding principles relating to human rights, labor standards, the environment and the prevention of corruption. Building on our domestic endeavors, we are working diligently to practice each principle in the development of our overseas business. Looking ahead, we will continue our dialog with stakeholders as we push forward our global business activities.

Along with the launch of ISO 26000, an international standard for social responsibility, in November 2010, interest in corporate social responsibility (CSR) continues to peak. Appreciating this trend, we will redouble our efforts toward optimally responding to customer including consumers.

### Actively responding to environmental issues

Paper is essential for people's lives while contributing to cultural development. The Nippon Paper Group has positioned the supply of paper as its core business and forests as its primary source of raw materials. Each is inextricably linked to the global environment. As such, responding to environmental issues is an extremely important priority for the Group.

In recent years, the dangers posed by climate change and a drop in biodiversity have attracted increased global attention. As a part of the Group's voluntary measures to address these issues, Nippon Paper is working to reduce CO<sub>2</sub> emissions by saving energy in production and distribution processes, converting fuel by introducing biomass energy and managing forests properly to ensure CO<sub>2</sub> sequestration. To contribute to biodiversity conservation, we employ two major approaches. We try to enhance biodiversity in our mainstay business including forest management while trying to utilize our resources and technologies. Moreover, as one measure in our efforts to help develop a recycling-based society, we continue to recover and recycle wastepaper as a primary raw material.

Each of these activities represents an attempt by the Nippon Paper Group to carry out its Charter on the Environment, which states "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." As we move forward, we will continue to be guided by this philosophy.

The business environment in fiscal 2010 is expected to remain difficult. I believe that precisely because of these harsh operating conditions, we must muster our strengths to weather the current crisis. With a vision that extends well beyond the coming generation, we are adopting a proactive stance toward management going forward.

The Nippon Paper Group are continue to hold dialogs with stakeholders in its drive to contribute to the ongoing development of society. As we work toward achieving our goals, we sincerely request your continued support and guidance.

fostin Haga

**Yoshio Haga** President Nippon Paper Group, Inc.

# Toward Biodiversity Conservation

Forests play an important role in preventing global warming and protecting the environment.

While a primary raw material in the production of paper, many species of plants are used as essential ingredients in foods and medicines providing the very basics of our daily lives.

And yet each year, some 40,000 species are threatened with extinction resulting in the continued loss of biodiversity.

Over 190 countries and regions have either ratified or are signatories to the Convention on Biological Diversity. As a corporate group that uses forest resources, the Nippon Paper Group engages in wide-ranging activities aimed at achieving the Convention's objectives of "biological diversity conservation" and "the sustainable use of its components."

### The Philosophy of the Nippon Paper Group Charter on the Environment

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.

Initiatives Involving Our Main Business

### Forest management:

Proper management that takes into consideration biodiversity as a part of efforts to maintain sustainable forests



Supply chain:

Wood raw material supply chain management

### Leveraging the Group's Resources and Technologies



### **Proprietary technology:**

Harnessing the Group's propagation technologies to pass on plant species and genes



### Company-owned forests:

Working toward indigenous forestation utilizing Company-owned forests



# **Brazil-based AMCEL-Confronting the Challenge to Sustain Biodiversity in its Vast Preservation Areas and Forests**

**Forest management** 

### Approximately 173,000 hectares, or 57% of property held is protected – afforestation areas are certified by the FSC

Approximately 173,000 hectares, or 57%, of the 310,000 hectares of property held by Amapa Florestal e Celulose S.A. (AMCEL) is protected as a preservation area. The company is working diligently to maintain the ecosystem of plants and animals that inhabit the area.

AMCEL has received Forest Stewardship Council (FSC) accreditation for 210,000 hectares of its forests held, including all areas where the company is planting eucalyptus trees. In this manner, AMCEL has sought the evaluation and accreditation of its sustainable forest management from a respected third-party institution.



An AMCEL-owned forest

#### AMCEL

AMCEL is an afforestation company located in the state of Amapa that joined the Nippon Paper Group in December 2006. Within the Group, AMCEL boasts the largest landholdings at 310,000 hectares



### **Conducting Regular Biodiversity Research to Identify the Precious Animals** Inhabiting Our Proprietary Forests

AMCEL regularly conducts biodiversity research. In 2008, a large-scale survey of the São Bento Forest, designated a preservation area, and the Matapi afforestation area was conducted. A follow-up survey was then undertaken in 2009.

This survey focused mainly on fauna research within the area. Having confirmed a diverse and precious fauna population, we will manage the region as a preservation area.

At the Matapi afforestation area, which is a mix of eucalyptus plantations and protected savanna as well as protected native forests, a comparative survey was completed on the fauna population at each area of vegetation. This served to identify the impact of eucalyptus plantations on biodiversity. Drawing on the survey's findings, the types and numbers of animals inhabiting afforestation areas exceeded those of protected savanna preservation areas. In order not to isolate this fauna population we will work toward forests that take into consideration vegetation continuity. AMCEL commissioned an external professional institution to conduct each survey accompanied by company personnel.



A biodiversity survey

### Survey Results for the São Bento **Preservation Area**

	Mammals (excluding bats)	36 species				
Note: Included in the 36 families of mammals are such endangered species as the giant otter and the South American tapir and such semi-endangered species as tl giant anteater, the jaguar and the Amazon river dolphin.						
	Reptiles	18 species				
	Amphibia	25 species				

### Survey Results for the Matapi Afforestation Area

	Native forests (preservation area)	Savanna (preservation area)	Afforestation area
Mammals Species	19 species	5 species	11 species
Reptiles (lizards, snakes)	17 species	9 species	9 species
Amphibia (frogs)	20 species	3 species	8 species
Total	56 species	17 species	28 species



Brazil-based AMCEL-owned forests





Mammals identified by the survey Giant anteater (top) and armadillo (bottom)

# Through Activities that Take into Consideration Biodiversity such as the Monitoring of Illegal Acts, We are Implementing Sustainable Forest Management Practices

AMCEL is working to implement its sustainable forest management plan. While conducting regular biodiversity surveys and studies concerning water volumes and quality, the company strives to protect waterside forests and to ensure that harvesting does not impede animal movement.

As an owner of vast expanses of land, AMCEL

is exposed to such areas of risk as the unauthorized dumping of waste, illegal deforestation, hunting and the excavation of gravel. In demonstrating its stance toward land management through efforts to reinforce patrols and erect fences, AMCEL is promoting the early detection and prevention of illegal acts.



The preservation of waterside forests Savanna planting in an effort to protect a community of palm trees

#### Issues

- Unauthorized dumping of waste
- Illegal deforestation, grazing etc.



The unauthorized dumping of waste

### Countermeasures

- Prevent entry by trespassers by erecting railings and fences
- Demonstrate stance toward land management through more patrolling



Preventing trespassers from entering by erecting railings and fences



Demonstrating the company's stance toward land management through activities including an increase in the number of patrols

### Conducting Local Resident Awareness Surveys and Educational Activities to Help Prevent the Loss of Life and Woodlands due to Fire

In maintaining close communication with neighboring residents, AMCEL strives to deepen their understanding of its business activities. At the same time, the company works in partnership with local communities to protect the region's environment.

In fiscal 2009, AMCEL visited with residents living in close proximity to the São Bento preservation area. While conducting a survey on recent sightings of wildlife, the company called for comments from the local community as to how it



Door-to-door surveys with local residents

could best contribute to maintaining the environment, including preservation areas.

Recognizing that the vast majority of fires can be attributed to such human behavior as mismanagement or the spread of field burning, AMCEL took steps to explain about the dangers to life, property and forests through the distribution of pamphlets and presentation meetings.



A fire prevention presentation meeting and educational brochure



Requiring Suppliers to Fulfill their CSR

In procuring wood raw materials, surveys are undertaken to confirm that suppliers have taken into consideration the environment and society including biodiversity conservation concerns

Note: Please refer to pages 16 to 19 for details.



### Protecting and Nurturing Scarce Plant Species through Proprietary Techniques for Cultivating Cuttings in Containers

Nippon Paper Industries contributes to the protection of endangered plant species and rare plants of historical value through its proprietary technique for cultivating cuttings in containers.

In 2009, for example, the Company took up the challenge of propagating endangered plant species of the Ryukyu Islands conserved at the National Museum of Nature and Science's Tsukuba Botanical Garden. The Garden engages in research relating to the conservation of a diversity of plants that are on the verge of



Successfully rooting *Polyalthia liukiuensis* classified as Threatened IA Critically Endangered (CR)

extinction. Nippon Paper Industries has received from the Tsukuba Botanical Garden branches from 15 species of Ryukyu Island endangered plants and promoted their propagation by cultivating cuttings in specially developed containers. Through its efforts, the Company has successfully propagated and returned to the Garden 14 of the 15 species. Looking ahead, we will continue to engage in activities that help conserve biodiversity using proprietary techniques.



Successfully rooting *Phyllanthus leptoclados* classified as Threatened IB Endangered (EN)

The technique for cultivating cuttings in containers refers to a technology that encourages plants to take root using a cultivating room characterized by an environment that promotes photosynthesis. This method allows the propagating of plants that failed to take root by cutting.

 Place the container in a cultivating room with an elevated carbon dioxide concentration and light with suitable wavelengths to boost the plants' photosynthetic activities.



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





# "Nurturing Forests" for the Future at Company-owned Forests

Company-owned forests

As a part of efforts to pass on abundant forests to the future, the Nippon Paper Group launched a "Nurturing Forests" initiative under the guidance of Dr. Akira Miyawaki. This initiative calls on the general public and employees to participate in tree-planting activities.

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



More than 700 people participated in planting activities

Furthermore, we are planting trees for future use as an attempt to realize the concept of "forestation harmony with the economy" advocated by Dr. Miyawaki.

The first tree-planting was held in May 2010 at the Company-owned Sugenuma Forest in the Malnuma Kogen Resort, Katashina Village, Gunma Prefecture. 10,000 trees covering 25 species were planted.



Nippon Paper Group Inc.'s president taking part in planting activities



PROFILE

Akira Miyawaki was born in Okayama Prefecture in 1928. After graduating from Hiroshima University's Department of Biology, he served as Visiting Researcher at the Federal Institute for Vegetation Mapping in Germany, as a professor at Yokohama National University and as Chairman of the International Association for Ecology. Dr. Miyawaki is Professor Emeritus at the Yokohama National University and Director of the Japanese Center for International Studies in Ecology.

# Overseas Business Expansion and CSR Activities

As a part of its overall management policy, the Nippon Paper Group is expanding its business overseas in an effort to realize its Group Vision 2015 of becoming one of the top five pulp and paper companies worldwide. In addition to joining the United Nations Global Compact in 2004, we are promoting global CSR management that takes into consideration the concerns of various stakeholders while collaborating with a wide range of counterparties including international organizations, other companies, government, labor-related agencies and NGOs all over the world.

Customers

Business partners **Group Vision 2015** 

The Nippon Paper Group, through the development of the businesses of each of its companies, is aiming to achieve sustainable growth in corporate value. We aim to become one of the top-five pulp and paper companies worldwide, in both name and substance, by 2015. The environment

> Local communities

Shareholders

Employees

Further strengthen domestic core businesses

Fourth Medium-Term Business Plan Fiscal 2012 to Fiscal 2014

Third Medium-Term Business Plan Fiscal 2009 to Fiscal 2011

Second Medium-Term Business Plan Fiscal 2006 to Fiscal 2008

The Nippon Paper Group Achieve growth by expanding overseas business

# Sustainable Growth in Partnership with the Global Community Based on the United Nations Global Compact

The Nippon Paper Group has identified the overarching goal of becoming one of the top-five pulp and paper companies worldwide by 2015. This objective extends well beyond such benchmarks as sales to encompass every facet of a company's capabilities. Our aim is to be recognized as a major player in the global pulp and paper industry in CSR, corporate governance, profitability, financial standing and technology development.

In November 2004, the Group joined the Global Compact initiated by the United Nations. As a participant, we are actively involved in activities across the four fields of human rights, labor, the environment and anti-corruption on a voluntary basis. We also strive to practice the Compact's 10 principles in the development of our overseas business while engaging in product safety and customer satisfaction activities, disclosing equitable information and encouraging volunteer work.

Moving forward, the Nippon Paper Group will promote global CSR activities that take into consideration the concerns of a wide range of stakeholders including customers, business partners, shareholders, local communities and employees.

#### The U.N.-Led Global Compact

The Global Compact was proposed by the Secretary General of the United Nations Kofi A. Annan in 1999 and contains 10 principles in four different areas: human rights, labor, the environment and anti-corruption. Participating companies endeavor to promote and fulfill the 10 principles on a voluntary basis with a view toward attaining the sustainable development of society.



### • The Nippon Paper Group's Overseas Business Development

The Nippon Paper Group is actively pursuing overseas business development, focusing mainly on the Pacific Rim, in an effort to achieve its Group Vision. Working to bolster its business in the Oceania region, the Group acquired all of the shares of Paper Australia Pty. Ltd. in June 2009. Later in May of the following year, Nippon Paper Industries completed steps to purchase a 20.35% equity stake in the integrated containerboard business of Yuen Foong Yu Paper Mfg. Co., Ltd., Taiwan's largest paper manufacturer. In June 2010, an equity stake was taken in Lee & Man Paper Manufacturing Ltd., the second largest linerboard maker in China. Through these means, the Nippon Paper Group is working diligently to expand its business in China and Asia, which continue to experience marked growth.





### Paper Australia Pty. Ltd. (Australia)

### While promoting environmental activities we place the utmost priority on dialogue with our stakeholders



**Jim Henneberry** Chief Executive Officer Paper Australia Pty. Ltd.

Australian Paper manufactures approximately one million tons of pulp and paper each year, with a workforce of around 1,500 employees. The company works actively to address environmental concerns and is committed to realizing continuous improvement by reducing the use of such resources as energy, fibre and chemicals, minimizing the environmental impact on air, land and water as well as maximizing recycling. Turning to the issue of global warming, Australian Paper places considerable weight of the use of renewable energy. Currently, the company is one of Australia's largest industrial producers of renewable energy.

Australian Paper recognizes that customers, employees and communities are the cornerstone of its business. On this basis, the company places importance on dialog with its various stakeholders.



Maryvale Mill Paper Australia Pty. Ltd.

### Promoting CSR Management Systems

Australian Paper has introduced a broad spectrum of management systems as key components in its CSR management. In its efforts to practice CSR, the company takes steps to acquire global standard certification while undergoing external audits and assessments by third parties.

In the procurement of its raw materials, for example, Australian Paper has acquired Chain-of-Custody (CoC) certification from the FSC and the Programme for Endorsement of Forest Certification (PEFC), two of the world's leading forest certification schemes.

At the same time, the company has acquired ISO 14001 certification, to engage in environmentally conscious business activities, as well as ISO 9001, the international management standard for product quality. Through these and other efforts, the company is endeavoring to enhance customer satisfaction.

Moreover, Australian Paper has acquired the domestic Australian standard AS 4801 as a part of its employee occupational health and safety initiatives.



AS 4801 accreditation certificate

### Promoting the Use of Renewable Energy

Australian Paper is a strong advocate in the use of renewable energy to combat climate change. Backing this commitment, the company is currently one of Australia's largest industrial producers of renewable energy.

The Australian Government has set a target for 20% of Australia's electricity to be sourced from renewable energy by 2020. In this context, a national tradable renewable energy certificate (REC) system has been developed to encourage additional renewable energy in electricity supplies. In 2009, Australian Paper upgraded its power generation facilities in an effort to increase its supply of renewable energy. As a result, the company exceeded the base three-year (1996 to 1998) electricity supply average of 154,400 MWh by approximately 45,000 MWh resulting in the

issue of an equivalent REC.



Improvements conducted at the company's energy plant in 2009



### Nippon Paper Industries USA Co., Ltd. (North America)

# Developing Products that Meet Customers' Needs while Striving to Reduce Environmental Impact



Harold Norlund Manager, Port Angeles Mill

Nippon Paper Industries USA Co., Ltd. manufactures uncoated mechanical light weight paper including paper for telephone directories at its Port Angeles Mill located in Washington State. With a workforce of around 200 employees, the company sells products primarily along the west coast of the United States, Mexico, Australia and Asia.

Raw materials mainly are comprised of recovered paper primarily from Seattle, Washington State's largest city, and woodchips purchased from neighboring sawmills. The company engages in environmentally conscious raw material procurement and acquired both FSC and PEFC CoC certification in July 2009.

Nippon Paper Industries USA Co., Ltd. is committed to business development that considers the needs of all stakeholders including customers, business partners, local communities and employees.



Port Angeles Mill Nippon Paper Industries USA Co., Ltd.

### • Undertook to Reduce Heavy Fuel Oil Usage to Help Prevent Global Warming

Nippon Paper Industries USA Co., Ltd. strives to reduce the amount of heavy fuel oil used in an effort to further minimize its environmental impact. Following upgrades to equipment including the company's main boiler, heavy fuel oil usage in fiscal 2009 declined by 20% and 80% compared with fiscal 2008 and fiscal 2002, respectively. In addition to further steam reductions, the company is working to increase the usage ratio of wood waste and other non-fossil biomass fuels.

Working to Reduce Environmental Impact

Guided by the Nippon Paper Group's Charter on the Environment, Nippon Paper Industries USA Co., Ltd. is not only working to reduce the environmental impact of its business activities but also to develop and maintain relationships based on mutual trust with local communities. In recognition of the company's air purification initiatives, including measures to eliminate odors at its mill, Nippon Paper Industries USA Co., Ltd. received a certificate of commendation from the

Washington Office of the Olympic Region Clean Air Agency (ORCAA) in October 2009.

Up to 2007, depending on such climatic conditions as the direction of the wind, the company received complaints from local residents regarding odors emitting from the mill, particularly during the summer months when temperatures would rise. After newly introduced countermeasures, there were no complaints in 2008 and 2009.

### •Engaging in a Wide Range of Ongoing Social Contribution Activities

Nippon Paper Industries USA Co., Ltd. and its employees are united in their charitable activities striving through donations and volunteer work to play an important role in the continuous development of local communities. Taking the lead, employees serve as directors of charitable organizations, help educate and foster the young, participate in sporting events and volunteer for national park conservation duties. As good corporate citizens, employees actively engage in social contribution activities.





Certificate of Commendation received from ORCAA



Local community volunteer activities

# The Nippon Paper Group's Involvement in Society Across the Lifecycles of Its Products



- Biodiversity conservation
- Promotion of domestic timber use
- · Consideration of human rights, labor, etc. in dealings with local communities
- Promotion of fair trade

- Reduction of environmental impact (water, gas, etc.)
- Improvement of quality
- Enhancement of production site occupational health and safety

The Nippon Paper Group

• Promotion of risk communication with local communities

**Suppliers** 

### **Company Profile**

Corporate Name : Nippon Paper Group, Inc. Address: 1-2-2, Hitotsubashi, Chiyoda-ku, Tokyo, Japan Capital: ¥55.73 billion

Date of Incorporation : March 30, 2001

Consolidated subsidiaries : 45

Number of Employees on a Consolidated Basis :

14,210

Consolidated Net Sales (Millions of yen)



### **Group Profile**







Housing and Construction Materials Division

Nippon Paper Lumber Co., Ltd.

Nippon Paper Crecia Co., Ltd.

Lumbe



Nippon Paper Papylia Co., Ltd.



Note: Please refer to page 32 for further information on business segments and consolidated subsidiaries.







Nippon Paper Development Co., Ltd.



Raw material procurement 
Production and Sales Recycling

# **Sustainable Procurement of Raw Materials**

As a company that procures raw materials from forests deeply intertwined with the global environment

Woodchips, which are the main raw materials for pulp and paper, are supplied from forests deeply intertwined with the global environment and ecosystems. Trees are a reproducible resource, but environmental destruction can occur unless forests are managed appropriately. As forest sustainability is an important factor in procuring wood raw materials, we conform to relevant statutes throughout our supply chain management process. The Nippon Paper Group's Philosophy and Basic Policy Concerning Raw Material Procurement form the basis for reliable raw material procurement. We strive to develop a system that is conducive to the reliable procurement of raw materials through global supply chain management that takes into consideration society's needs and the environment.



Raw material procurement

# What is the Forest Certification System?

Forest certification is a system by which third-party institutions objectively evaluate and certify that companies are properly maintaining and managing forests with consideration to the sustainable use of timber resources. Typical forest certification systems are administered by international organizations such as the FSC and PEFC and the Sustainable Green Ecosystem Council (SGEC), which provides a certification unique to Japan.



FSC is a non-profit organization that employs 10 principles and 56 FSC criteria to certify responsible forest management.

SGEC SGEC is a unique responsible forest management certification system that takes into consideration Japan's natural environment as well as its social customs and culture.



\*2 AFS and CERTFORCHILE are forest certification programs in Australia and Chile with reciprocal approval by the Programme for the Endorsement of Forest Certification (PEFC).

\*3 AMCEL has obtained FSC certification for a total of 210,000 hectares including all areas currently undergoing eucalyptus afforestation. Plans are in place to commence certification application procedures for a further 100,000 hectares following completion of preliminary procedures with the state government.

# **Expanding Overseas Afforestation and Obtaining Certification for All Company-owned Forests**

Based on the "Tree Farm Initiative," the Group's overseas plantation project, launched in 1992, which entails raising, harvesting and making use of each year's growth, the Nippon Paper Group achieved its fiscal 2008 goal of developing 100,000 hectares of its overseas plantations in 2006. As of December 31, 2009, the Group had increased its overseas plantations to 166,000 hectares. We will continue working toward our new target, which is to have 200,000 hectares of plantation in place by 2015 (See Graph).

In addition, Nippon Paper Industries, responsible for procuring wood raw materials for the Group, employs forest certification programs to benchmark sustainable raw material procurement.

The Nippon Paper Group received FSC forest certification for AMCEL in Brazil in December 2008. This completed our objective of earning certification for all Company-owned forests both in Japan and overseas by 2008. We intend to maintain this certification status going forward.

#### Graph. Overseas Plantation Area by Country (Thousands of hectares)



### Certification of Company-owned Forests

Sustainable Procurement of Raw Materials

**Production and** Sales Recycling Raw material procurement transportation

# **Promoting Procurement from Plantations or Certified Forests while Strengthening Supply Chain Management**

The Nippon Paper Group has formulated an action plan as a part of efforts to promote raw material procurement that takes into consideration environmental and social concerns. Confirming shipping documents, supplier questionnaire results and information from local representatives help to ensure a reliable and sustainable procurement framework. In addition, the Group employs third-party forest certification programs to benchmark

raw material procurement.

Accounting for nearly 58%, the largest proportion of the Group's wood resources comes from the import of hardwood chips. The Nippon Paper Group strives to procure its raw materials from sustainable forests and achieved its goal of procuring all imported hardwood chips from plantations or certified forests in 2008.



# The Sound Development and Use of Japanese Forests

 Cultivating Company-owned Forests and Using Domestic Timber

A relatively high 67% of Japan is covered by forests, compared with around 30% for the Earth's total landmass. In spite of this, Japan's forest industry has experienced a steady decline due largely to the slump in lumber prices. Burdened by a distinct lack of essential care including forest thinning as well as the planting of trees following logging, Japan has witnessed an increase in dilapidated forests. In order to avoid this negative trend, it is important both to rejuvenate Japan's forest industry through the use of domestic timber and to create a virtuous afforestation, cultivation and logging cycle. In this context, Japan's government announced its "Forest and Forestry Revitalization Plan" in December 2009 and identified the goal of lifting the nation's wood self-sufficiency rate from its current level of 24% to more than 50% over the next decade.

As a corporate entity that is responsible for the use of timber, the Nippon Paper Group allocates approximately ¥600 million each year to the maintenance and management of around 90,000 hectares of Company-owned forests in Japan. Furthermore, the Group has set the goal of lifting its domestic timber utilization target rate to 30% by 2010 and surpassed this target in fiscal 2009.

 Utilizing Forest Thinning to Help Cultivate Domestic Forests
 Participating in the Morino Chonai-Kai

Forest thinning plays an important role in the cultivation of forests. Currently in Japan, even with the introduction of government subsidies and other support measures, costs exceed the sales prices of forest thinning materials.

Launched by the environmental NPO Office Chonai-Kai, the Morino Chonai-Kai (Forest Neighborhood Association) mechanism promotes the use of thinned timber. Under this mechanism, companies purchase forest-thinning-support paper with a thinning promotion fee included in the price as a company contribution to the environment. In this manner, steps are being taken to cover the shortfall in expenses, thereby promoting forest thinning.

The Nippon Paper Group participates in the Morino Chonai-Kai. Nippon Paper Industries mills utilize chipped thinning materials to manufacture forestthinning-support paper.

### Dilapidated forests lead to landslides and other disasters

If forests are left uncared for

trees become congested blocking sunlight to the ground

hindering vegetation and shrub growth

Fallen Trees

As trees become increasingly congested, the development of

deteriorates. Adverse weather

conditions including rain make it easier for trees to fall.

foliage, trunks and roots



#### Landslides With little or no underbrush growth, the earth soon becomes bare. This significantly increases the danger of landslides, particularly during periods of heavy rain.



An appropriately cared for forest plantation

### The Morino Chonai-Kai Forest Thinning Support Mechanism



### Forest Thinning Initiatives by Nippon Paper Industries

Initiative Details	Mill
Cooperation with the Shizuoka Prefecture Fujino Kuni Morino Chonai-kai and the Kanagawa Prefecture Kanagawa Morino Chonai-kai	Fuji Mill
Cooperation with the Kansai Morino Chonai-kai	lwakuni Mill
Manufacture of forest thinning material certified paper	Hokkaido Mill, Yatsushiro Mill
Use of forest thinning material fuels	Ishinomaki Mill, Nakoso Mill



Raw material procurement 
Production and Sales Recycling

# **Initiatives Targeting Climate Change**

As a company striving to help build a low-carbon society

In recent years, the growing incidence of large-scale typhoons as well as the onset of desertification have become more serious. As a result, countermeasures that focus on such initiatives as the reduction of atmospheric CO<sub>2</sub> have emerged as themes of growing importance. The Nippon Paper Group is working to reduce CO<sub>2</sub> emissions in three ways: converting fuel, conserving energy in each of the production and transportation processes and managing forests properly to ensure CO<sub>2</sub> absorption/sequestration.









# Working to Meet Our Objectives in Fiscal 2010

The Nippon Paper Group formulated the Green Action Plan 2010 for the prevention of global warming, and is working to reduce CO<sub>2</sub> emissions.

### Objectives of the Green Action Plan 2010

- Reduce per-unit CO<sub>2</sub> emissions from fossil energy consumption per product by 16% compared to fiscal 1990 levels by fiscal 2010
- Reduce units of fossil energy per product by 20% compared to fiscal 1990 levels by fiscal 2010

### CO2 Emissions and Energy Consumption

Just as in the previous fiscal year, the Nippon Paper Group witnessed a drop in its production volume due largely to the fluctuating economy. As one result, CO<sub>2</sub> emissions across all businesses fell approximately 21% compared to fiscal 1990 levels to 7.28 million tons (Graph 1). In addition, energy input across all businesses contracted 19% compared to fiscal 1990 levels (Graph 2).

#### Non-fossil Energy Usage

The Nippon Paper Group remains active in its ongoing efforts to reduce its fossil energy usage ratio. The Group willingly employs such biomass fuels as black liquor, a byproduct of making pulp from woodchips, and construction waste materials, as well as waste fuels including used tires as an alternative for fossil fuels. As a result, our ratio of non-fossil energy to total energy improved from 33% in fiscal 1990 to 40% in fiscal 2009 (Graph 2).

### Progress Report

As a part of its initial production plan, the Nippon Paper Group intended to further reduce both per-unit CO<sub>2</sub> emissions from fossil energy consumption and units of fossil energy. The Group was, however, impacted by fluctuations in its operating environment resulting in a drop in production efficiency. Accordingly, per unit CO<sub>2</sub> emissions from fossil energy consumption declined 8.4% compared to fiscal 1990 reflecting minimal progress toward its established goal (Graph 3). On the other hand, progress was made in reducing units of fossil energy, which declined by 15.2% (Graph 4).

# Graph 1. CO<sub>2</sub> Emissions from Fossil Energy (All Businesses)

(Millions of tons of CO<sub>2</sub>)



### Graph 2. Energy Input (All Businesses)



# Graph 3. Unit CO<sub>2</sub> Emissions from Fossil Energy (Pulp and Paper Businesses)

(Tons of CO2 per ton of products)





(Gigajoules per ton of products)



### **Initiatives Targeting Climate Change**

Raw material procurement 
Production and Sales Recycling

## **Converting to Non-fossil Energy by Employing Boilers that Use Biomass and Waste**

Installation of Boilers that Use Biomass and Waste In order to reduce its use of fossil fuels, the Nippon Paper Group installed a boiler in fiscal 2004. In the ensuing period boilers were systematically installed at 10 of its mills. These boilers use such non-fossil fuels as biomass and refuse including construction waste materials, used tires and RPF\*.

These efforts are expected to reduce CO<sub>2</sub> emissions from fossil fuels by 800,000 tons each year.

\* Refuse paper and plastic fuel: Fuel derived from paper that is unusable as recovered paper and waste plastic.

### Fuel from Biomass and Waste





RPF



Construction waste materials

Used tires

### Use of Black Liquor

Plants are a resource that through cultivation can be reproduced. In addition, biomass fuels derived from plants are characterized by their low environmental impact (please refer to the diagram below).

The paper manufacturing industry utilizes black liquor, a byproduct of making pulp from woodchips, as a biomass fuel. Black liquor typically provides one-third of the industry's total energy, alleviating the concentration of CO<sub>2</sub> in the air.

### The Concept of Carbon Neutral



Plants absorb CO<sub>2</sub> from the atmosphere through photosynthesis as they grow, so the CO<sub>2</sub> released when burning plant-based biomass for energy is gas that originated in the atmosphere. Therefore, biomass is considered carbon neutral, as it does not increase the amount of global CO<sub>2</sub>.

### **Boiler Installation**



# CO<sub>2</sub> Absorption by Company-owned Forests in Japan

The Nippon Paper Group owns 90,000 hectares of forests in Japan. In order to take full advantage of CO<sub>2</sub> absorption in these forests, we actively manage forests to ensure continued healthy growth.

Our forests newly absorbed 335,000 tons of CO<sub>2</sub> in fiscal 2009. This is equivalent to the CO<sub>2</sub> emitted by 63,000 average households\*

 \* One household emits approximately 5.35 tons of CO<sub>2</sub> per year. (Source: Greenhouse Gas Inventory Office of Japan Fiscal 2007 data)

### Yearly Amount of CO<sub>2</sub> Absorbed in Companyowned Forests in Japan

(Thousands of tons of CO2)



Nippon Paper Group, Inc. estimate
 The portion harvested is deducted from the sequestered

amount of CO2.

\* Sequestered from forest plantations, and natural forests with forest certification.

(Amount absorbed from natural forests in fiscal 2007)

# Promoting the Use of Fuels Derived from Sewage Sludge in **Cooperation with the Government and Local Communities**

After livestock scouring, sludge from the treatment of sewage and night soil is the biggest source of waste. In an effort to prevent global warming, sewage sludge in Miyagi Prefecture is converted into fuel using a dry-granulate method. Nippon Paper Industries' Iwanuma Mill purchases and uses this fuel as an alternative to fossil fuels.

### Conversion of Sewage Sludge into Fuel





has been used as a raw material for cement, compost and related products. Furthermore, there is increasing call for its use as a biomass fuel source.

sludge into fuels came online at the Kennan Purification Center in Iwanuma City, Miyagi prefecture in fiscal 2009. The Miyagi prefectural government is converting around 50 tons per day of the Prefecture's sewage sludge into fuels at this facility using a dry-granulate method. The approximately 13 tons of fuel produced is then used at

(Sewerage Division, Public Works Department, Miyagi Prefectural Government)

# **Cooperating with the Government in Its Efforts to Promote** the Creation of a Mechanism to Counter Global Warming

The Nippon Paper Group participates in Japan's trial integrated market for emission trading. Through the Japan Paper Association, we help create product category rules for METI's Carbon Footprint Pilot Program. Through these cooperative

### **Emission Trading Scheme**

In cap-and-trade scheme emission trading, an allowance (cap) is set on the level of emission in the form of emission permits. Companies that exceed this allowance can purchase these permits from companies that have held their emissions below the allocated allowance up to the excess amount. These companies are then deemed to have met their emission requirements.



endeavors and by providing data to evaluate the system and identify problems, we are supporting efforts to create an effective mechanism to counter global warming.

### Carbon Footprint (CFP)

A carbon footprint is the aggregate of greenhouse gases emitted at each stage of a product or service's lifecycle expressed in terms of CO2 equivalent. A set of common rules, referred to as product category rules, for each category of product or service with identical characteristics is necessary for the calculation of CFP.





Raw material procurement 
Production and Sales Recycling

# **Optimal Response to Customers**

A Company that Supplies Paper, a Commodity Essential to People's Daily Life

As a commodity indispensable to daily life, paper is widely used throughout society. Fundamental to its CSR endeavors, the Nippon Paper Group therefore strives to meet the expectations of customers by ensuring the stable supply of high-quality paper. Based on this understanding, we have identified "winning the trust of our customers" as one ideal within our Corporate Vision. Drawing on our philosophy and basic policy regarding product safety, we work diligently to provide products and services that address the needs of our customers. At every stage of the product lifecycle from design through manufacture to delivery and disposal, the Nippon Paper Group places the utmost emphasis on customer safety and satisfaction.





## Responding to Customer Comments in a Timely Manner (Nippon Paper Crecia Co., Ltd.)

Nippon Paper Crecia Co., Ltd. provides to individual endusers such family care products as facial and toilet tissues as well as disposable diapers. In order to strengthen its product safety risk management structure and systems, the company transferred the Customer Service Office to the Quality Assurance Department, which reports directly to the president, in July 2007. Retaining its direct reporting line to the president, the Customer Service Office was relocated as an independent entity adjacent to the President's Office in June 2010. By ensuring that customer claims and comments are conveyed directly to the president, the company has reinforced its crisis management framework ensuring that the appropriate response is implemented in a more timely and effective manner.

The Customer Service Office relays all inquiries to mills and the Quality Assurance Department on a daily basis. Through these, every effort is being made to ensure an appropriate response and to improve product and service quality.



The Customer Service Office

Third-Party Commen

Yukiko Furuya Board Member, Nippon Association of Consumer Specialists



# Looking Forward to Further Information Disclosure

The restructure of the Customer Service Office reporting directly to the president and its relocation are clear indications of the importance that the Company places on its customers' comments. This can also be seen in the level of customer satisfaction, the Group's focus on product safety risk management and the manufacture of user-friendly products.

The Customer Service Office collects information from external sources while making sure it protects and respects customers' rights. I expect this will help in incorporating consumer perspectives.

I recommend full disclosure on the processes employed to address customer inquiries as well as beneficial product data. In this manner, I anticipate the Nippon Paper Group will further boost customer confidence.

### Developing Products that Take into Consideration the Comments of Customers

Nippon Paper Crecia works tirelessly to develop products that incorporate the needs of customers drawing from information conveyed daily by the Customer Inquiry Office as well as sales and marketing personnel.

#### Kleenex<sup>®</sup> Hyper-Dry Paper Towels (Half-Cut size)

From the removal of moisture from vegetables to the absorption of oil from fried foods, paper towels boast a wide range of uses. While Nippon Paper Crecia had previously marketed a "half-cut" paper towel that positioned perforations at half the interval of existing products, the company suspended sales following comments by many customers that the product was both difficult to tear and use. After taking the product off the market, the company received numerous calls for its reinstatement due mainly to its overall convenience. Accordingly, Nippon Paper Crecia produced an easier-to-carry package and took steps to relaunch the Half-Cut size paper towel.

### scottie<sup>®</sup> Interfolded Toilet Paper

Nippon Paper Crecia received a large number of comments that rolled toilet paper was both difficult to carry and use particularly by people with disabilities or requiring nursing care.

In response, the company launched a carton-type toilet paper that addresses each of these issues while boasting the excellent absorption properties of sheets



Sales

### **Optimal Response to Customers**

Raw material procurement Production and Sales Recycling

# Service Engineers Regularly Call on Printing Companies and Customers as a Part of Their Quality Improvement and Product Development Activities (Nippon Paper Industries Co., Ltd.)

Nippon Paper Industries supplies newspaper, printing and business communication paper largely to corporate customers. Sales representatives call on customers to solicit their opinions and needs.

At the same time, the Company has introduced a service engineer system in an effort to close the gap between customers and the production frontline. Under this system, personnel engaged in the production of paper regularly call on customers. In witnessing firsthand the printing process through such initiatives as "Quality Patrols," service engineers are better positioned to accurately and promptly address the quality improvement needs of customers. Furthermore, face-to-face dialog instills a greater sense of awareness toward quality and customer satisfaction.

The information obtained through this system is fed back to and shared with other departments.

Framework for Addressing Customer Inquiries, Complaints and Claims





### Drawing from Customers' Frontline Comments through Quality Patrols Is Helping in Product Quality Design

Newspapers, which represent a principal source of information, are printed in large quantities at speed over a fixed period on a daily basis. We take the utmost care in quality design at mills to deliver the high paper quality required to ensure uninterrupted printing clarity.

With advances in printing presses and consumables, it has become increasingly important to monitor first-hand actual printing processes and to incorporate the needs of customers into quality design. In this context, we call on newspaper printing companies on a daily basis. We refer to these calls as "Quality Patrols" that allow us to monitor the status of printing and to pick up hints through discussions with frontline personnel. The information that is then fed back to our Mills helps provide the Company with a better understanding of the quality required and to detect at an early stage any issues of concern. In addition to our Mills, the information is shared with the Quality Assurance Department, Newsprint Sales Department, as well as staff engaged in newspaper-related sales across our nationwide network of branches. In this manner, all concerned parties are united in efforts to improve quality.

Looking ahead, we will strive to further enhance the satisfaction of our newsprint paper customers.

#### Takeshi Ganbe Newspaper Group, Quality Assurance Department, Nippon Paper Industries Co., Ltd.





#### Morning meetings

Information on the status of printing processes at the Company's corporate customers is shared. Issues identified by Quality Patrols and countermeasures are discussed in detail.

#### **Quality Patrol**

Quality Patrols undertaken at the newspaper printing frontline are a means to monitor the print clarity and smooth flow of paper as it passes through each press. At the same time, patrols provide the opportunity to garner important information from press operators. In the event of a problem, Company representatives monitor the evening printing of morning editions to ascertain the exact issue and cause.

# Sales

### Measures to Prevent Discrepancies in De-inked Pulp Content Ratios and Misrepresented Labels from Recurring

### Inspection and Ongoing Improvement of **Recurrence Prevention Procedures**

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

In order to promote continuous improvement, Nippon Paper Industries is currently undergoing thirdparty audits of its operating procedures from both the procedural performance (validity and compliance) perspective and the systems (management and review) perspective.

Performance audits were performed by SGS Japan Inc., an inspection, verification and certification organization, at the head office, Hokkaido Mill's Asahikawa Works and Yatsushiro Mill of Nippon Paper Industries and the Yoshinaga Mill of Nippon Daishowa Paperboard in fiscal 2010. These audits confirmed that application and compliance, including previously

identified improvement points, were being observed in accordance with procedures at each Mill. From a systems perspective, each Mill also underwent



An audit by SGS Japan Inc.

### Continuous Implementation of Compliance Education and Training

Nippon Paper Group, Inc. conducts compliance training on an ongoing basis to further enhance awareness and understanding among its employees.

In addition to continuous employee training on recurrence prevention procedures, education is provided on the fundamentals of compliance. As a theme in 2010, the Company selected the Antimonopoly Act. The content of training programs is expanding and

an environmental management systems ISO 14001 audit.

In addition, the Nippon Paper Group undergoes inspections by customers based on the verification system formulated by the Japan Paper Association. Customers check that the production processes and content ratios at Mills conform to regulations.

Moving forward, the Group will continue to implement prevention measures and to pursue their ongoing improvement while accurately grasping the needs of society.



### Implementing Inspections at Mills

omment from a Customer

is covering increasingly specialist fields. As well as examples of recent violations and prohibited matters, curricula include details of penalty, surcharge and exemption systems.



Compliance training

Disclosed in Previous Sustainability

Recurrence Prevention Measures 

Raw material procurement 
Production and Sales Recycling

# Promotion of Waste Paper Use

A Company Responsible for Promoting Waste Paper Recycling

The paper manufacturing industry has from an early stage promoted waste paper recycling in efforts to use resources efficiently. Japan's waste paper collection rate has reached 79.7%, with the RP utilization rate (the percentage of recovered paper in the raw materials used for making paper) more than 60%. In addition to procuring woodchips from sustainable forests that take into consideration the environment, including plantation timber and certified forests, the Nippon Paper Group contributes to the development of a recycling-based society by promoting the collection and use of waste paper. Striving to lift the RP utilization rate, the Group works with a great many people in expanding the use of waste paper. To this end, we enhanced our recovered paper processing capabilities while utilizing both unused and low-quality waste paper.



Sorting and collecting





# Promoting Increased Collection of Waste Paper in Cooperation with Customers and Industry Groups

### Initiatives Implemented with Customers

Nippon Paper Industries is pursuing activities aimed at recovering and utilizing waste paper in cooperation with its customers.

Blazing a trail, Nippon Paper Industries supported the application of a mechanism that used old telephone directories as the paper for newly printed directories in 2001. This initiative is being promoted in cooperation with NTT Directory Services Co., which has been active in the recycling of telephone directories issued by the company. NTT Directory Services has established a system under which it collects old directories at the time new directories are distributed. For its part, Nippon Paper Industries has advanced research into the removal of dusts and so forth as well as the maintenance of paper strength. In addition to increasing the telephone directory collection rate, these initiatives have helped to promote their recycle.

Currently, steps are being taken to pursue similar initiatives for brochures including catalogs and in-flight magazines.

 Initiatives Implemented with Citizens Groups and Industry Associations

In promoting higher RP utilization rate, the Nippon Paper Group coordinates with industry associations to expand the volume of waste paper collected. As a part of these endeavors, the Group is focusing on promoting the collection of beverage cartons which typically used for milk containers. These cartons yield quality recycled pulp.

NIPPON PAPER-PAK 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 beverage carton collection rate of at least 50% by 2010. In addition to the exchange of information and educational activities through milk carton recycling promotion in local conferences and recycling workshops, steps are taken to place a number of milk carton collection boxes by aproaching schools, local governments, public facilities and other organizations across Japan. In fiscal 2008, Japan achieved a paper beverage carton collection rate of 42.6%.

Furthermore, working with the Japan Milk Carton Recycling Association, a citizens' group, NIPPON PAPER-PAK holds onsite classes at elementary schools. As a part of the company's environmental activities, NIPPON PAPER-PAK strives to educate young children about paper carton recycling and to instill a greater sense of spiritual richness as well as an understanding of the importance of everyday items.

### The Flow of Telephone Directory Paper Recycling



Note: NTT Directory Services Co. issues telephone directories on a contract basis for NIPPON TELEGRAPH AND TELEPHONE EAST CORPORATION and NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION.



A milk carton collection box

### Trends in the Percentage of Beverage Cartons Collected



Recycling

**Production and** Sales Recycling Raw material procurement transportation

# Increasing Waste Paper Use through the Utilization of **Unused and Low-Quality Waste Paper**

Raising the Fiscal 2009 RP Utilization Rate to 54.6% The Nippon Paper Group has actively promoted the use of waste paper by enhancing its recovered paper processing capabilities, utilizing confidential documents and other as yet unrealized items as waste paper. At the same time, we have also taken steps to develop technologies aimed at raising the quality of pulp made from recovered paper and to expand the application of recycled pulp.

As a result, the Group successfully achieved its target to increase the RP utilization rate to 50% or higher by fiscal 2008, and recorded a rate as high as 54.6% in fiscal 2009.

In recent years, the procurement of waste paper in Japan has become increasingly difficult, reflecting the substantial upswing in demand for paper and paperboard in China. Despite adverse conditions, we will continue our efforts to expand waste paper usage.

### Trends in the Nippon Paper Group's RP Utilization Rate



Cooperating with Local Governments and Recovered Paper Wholesalers to Use Paper Scraps

Sapporo City introduced a system of waste fees from July 2009. At the same time, the City commenced the sorting and collection of paper scraps, generally discarded as combustible waste, in an effort to reduce the amount of household waste and promote the effective use of resources.

Around half of all paper scrap is unsuitable as a papermaking material. Considerable time and energy has generally been required to identify and sort what scrap paper can be used. For this reason, the partial use of paper scraps was limited to such paperboards as cardboard.

Nippon Paper Industries' Hokkaido Mill has built a sorting system for paper scraps that complies with the quality standards for paper in cooperation with the Sapporo City Paper Materials Business Cooperation Society. Through these means, the use of waste paper was expanded.

Together with all related wholesaler members of the

Association, who participated in paper scrap sorting activities, Nippon Paper Industries is promoting the development of quality standards through a



The sorting of paper scraps

process of trial and error. Looking ahead, the company will continue to use paper scraps as a stable source of papermaking raw materials as a part of efforts to expand waste paper utilization.



A Major Step in Expanding Future Waste Paper Utilization

We began collecting paper scraps from July 2009. With discrepancies between emission criteria imposed by Sapporo City and the quality standards of recovered paper centers, considerable effort is required in sorting activities. With the support and cooperation of paper manufacturing companies in Hokkaido, our success in lifting the quality of sorted paper scraps to a level suitable for use as a raw material for newsprint paper is a major step forward in expanding future waste paper utilization. Looking ahead, we remain dedicated to increasing the use of waste paper and will pursue wide-ranging activities from both the demand and supply perspectives.

### Utilizing Recovered Paper in a Variety of Products

### Products Compliant with the Law on Promoting Green Purchasing

Revisions to criteria outlined under the law on promoting green purchasing, which aims to encourage national government and other institutions to engage in green procurement, received Cabinet approval in February 2010. As a result, a new composite rating index system was introduced to assess copier and printing paper. Under this new system, the composite rating must be 80 or higher for copier and printing paper procured by government, incorporated administrative agencies and other organizations.

The Nippon Paper Group manufactures and markets products that comply with the new standards of the law on promoting green purchasing through the use of high recycled pulp content ratio guarantees and forest certification program credits.

			Detail	s (Index Item an	d Rating)		
Grade / Brand	Composite rating	Minimum Guarantee Recycled Pulp Content Ratio	Certified Forest Pulp Utilization Ratio*	Brightness	Other Sustainable Pulp Utilization Ratio	Coating Amount	
PPC Paper	85	70%	Credits	70%			
PPC Paper N70 PEFC	00	50	30	5	_	—	
PPC Paper	89	100%		66%			
PPC Paper N100	09	80	_	9	_	—	
Printing Paper	90	70%	Credits	75%			
npi WOODFREE GREEN 70 (PEFC)	90	60	30	0	_	—	
Printing Paper		70%	Credits	70%			
npi GREEN LAND 70 (PEFC) [Made-to-Order Product]	95	60	30	5	_	—	
Printing Paper		70%		66%	30%		
npi GREEN FL 70 [Made-to-Order Product]	84	60	-	9	15	-	
A2 Coated Paper (Gloss)	95	70%	Credits			30 g/m <sup>2</sup>	
npi COAT GREEN 70 (PEFC)	90	60	30	_	_	5	
A2 Coated Paper (Matt)	05	70%	Credits			30 g/m <sup>2</sup>	
npi MATT GREEN 70 (PEFC)	95	60	30	1 -	_	5	
Both sides coated duplex board	00	70%	Credits				
Rebirth 70 (PEFC)	90	60	30	- 1	-	—	

### List of Products Compliant with the Law on Promoting Green Purchasing

		Standard				
Grade / Brand	Recycled Pulp Content Ratio	Pulpwood legality	Brightness			
Business form paper	70% and above	Complied	Around 70%			
NPi Form Recycle [Made-to-Order Product]	1070 and above	Complied	and below			
Semi-bleached kraft paper	40% and above	Complied				
G Olympus	40% and above	Complied	_			

Note: Certified forest pulp utilization ratio is calculated based on the credit method of the Programme for the Endorsement of Forest Certification (PEFC) Chain-of-Custody (CoC) system with the portion other than the recycled pulp portion deemed as the total amount of Certified Forest Pulp.

### Election Campaign Poster Notice Boards

Nippon Daishowa Paperboard's mainstay products include container board and coated duplex board made almost entirely from recovered paper. The company's paperboards have a wide range of product applications. *SIKRA PAK*, for example, is a highly water-resistant paperboard. In addition to sheet palettes and the packaging of marine products, *SIKRA PAK* is used as an alternative to the mainstream wooden notice election campaign boards. Recovered container board is the

principal raw material for SIKRA PAK and as such it can be recycled. SIKRA PAK is attracting wide acclaim for its lightweight and recycling properties.

				-	+					EG.
2	•	ł	1	-		٠		Χ.		
			a.							12
-	1	•							-	12

An election campaign board made from *SIKRA PAK* 

### Milk Carton Recycled Pulp Products

High-quality pulp, coated on both sides with a thin polyethylene film, is used in the manufacture of milk, juice and other cartons. Nippon Paper Crecia Co., Ltd., which engages in the manufacture and sale of a variety

of household paper products, utilizes a proprietary multiscreening repulping method to remove this polyethylene film from drink cartons to reclaim the high-quality pulp. This milk carton recycled pulp is then used in the manufacture of other high-quality products.



scottie® toilet paper made from recycled milk cartons

### **Outline of the Nippon Paper Group**

### **Company Profile**

Corporate Name	Nippon Paper Group, Inc.
Address	1-2-2, Hitotsubashi, Chiyoda-ku, Tokyo, Japan
Capital	¥55.73 billion
Date of Incorporation	March 30, 2001
Securities Code	3893
Telephone	+81-(0)3-6665-1000

### Segment Data (As of March 31, 2010)

### **Pulp and Paper Division**

The Tulp and Paper Division, the core business of Nippon Paper Group, manufactures and sells paper, paperboard, household paper products, and pulp.

#### **Consolidated Subsidiaries**

Nippon Paper Industries Co., Ltd., Nippon Daishowa Paperboard Co., Ltd., Nippon Paper Crecia Co., Ltd., Nippon Paper Papylia Co., Ltd., Kitakami Paper Co., Ltd., KOYO PAPER MFG. Co., Ltd., Daishowa North America Corporation, Nippon Paper Industries USA Co., Ltd., NP Trading Co., Ltd., Kokuei Paper Co., Ltd., Paper Australia Pty. Ltd., and seven other companies\*

Note: Paper Australia Pty. Ltd. became a wholly owned subsidiary of Nippon Paper Industries Co., Ltd. following the acquisition of its shares on June 1, 2009.

#### **Paper-related Division**

The Paper-related Division manufactures and sells processed paper products, such as paper containers for liquids and heavy-duty sacks, as well as dissolved pulp and functional chemical products.

#### **Consolidated Subsidiaries**

NIPPON PAPER-PAK CO., LTD., Nippon Paper Chemicals Co., Ltd., Nippon Seitai Corporation, FLOWRIC CO., LTD., Sakurai Co., Ltd.

### Group Companies (As of March 31, 2010)

#### By Financial Statement Classification

1	Consolidated subsidiaries	45
	Non-consolidated subsidiaries	90
	Affiliates	49

#### By Region

	Japan	USA	Canada	Australia	Asia	Europe	Total
Consolidated subsidiaries	34	2	1	4	3	1	45
Affiliated companies accounted for by the equity method of accounting	6	1	1	1	0	0	9

### **Housing and Construction Materials Division**

The Housing and Construction Materials Division purchases and sells lumber and construction materials and conducts civil engineering-related work.

#### Consolidated Subsidiaries

Nippon Paper Lumber Co., Ltd., South East Fiber Exports Pty. Ltd., NIPPON PAPER UNITEC CO., LTD., Kokusaku Kiko Co., Ltd., PAL CO., LTD., N&E CO., LTD., Daishowa Uniboard Co., Ltd., Kunimoku House Co., Ltd., and Nippon Paper Ishinomaki Technology Co., Ltd.\*

Note: Nakamura Kogyo Co., Ltd. changed its name to Nippon Paper Ishinomaki Technology Co., Ltd. on July 1, 2009. (The company was earlier included in Nippon Paper Group, Inc.'s scope of consolidation as a subsidiary company due to its growing importance on April 1, 2009.)

### **Other Division**

The Other Division manufactures and sells soft drinks, develops and operates sports and leisure facilities, and is engaged in the warehouse and transportation business.

#### **Consolidated Subsidiaries**

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

Note: SHIKOKU COCA-COLA BOTTLING CO., LTD., became a wholly consolidated subsidiary of Nippon Paper Group, Inc., through a stock swap on October 1, 2009.

### Consolidated Net Sales



#### Consolidated Operating Income (Millions of yen)



### Division 873,890 Di

\* "Cross-Organizational" means employees responsible for multiple divisions.

### Number of Employees by Business



### **Economic Indexes**

### **Major Financial Indicators**

	Unit	FY2005	FY2006	FY2007	FY2008	FY2009
Consolidated Net Sales*1	Millions of yen	1,152,166	1,175,264	1,211,682	1,188,136	1,095,233
Pulp and Paper Division	Millions of yen	860,993	889,866	950,171	940,297	873,890
Paper-related Division	Millions of yen	110,350	101,459	102,125	92,647	88,567
Housing and Construction Materials Division	Millions of yen	94,041	100,489	82,099	70,064	53,588
Other Division	Millions of yen	86,781	83,449	77,286	85,126	79,186
Consolidated Operating Income	Millions of yen	48,391	44,655	32,834	19,951	43,149
Pulp and Paper Division	Millions of yen	33,197	30,650	20,374	12,673	34,047
Paper-Related Division	Millions of yen	6,181	4,898	4,321	2,165	4,211
Housing and Construction Materials Division	Millions of yen	2,607	2,993	2,337	1,078	590
Other Division	Millions of yen	6,404	6,112	5,801	4,034	4,298
Operating Income to Net Sales	%	4.2	3.8	2.7	1.7	3.9
Consolidated Ordinary Income	Millions of yen	49,403	47,088	32,800	17,944	37,547
Consolidated Net Income	Millions of yen	17,192	22,952	5,661	-23,330	30,050
Total Assets	Millions of yen	1,492,427	1,565,978	1,625,571	1,492,027	1,500,246
Interest-Bearing Debt	Millions of yen	692,078	738,230	785,322	784,333	762,899
Cash Dividends Paid	Millions of yen	8,649	8,517	8,676	8,952	8,949
Cash Dividends per Share	Yen	8,000	8,000	8,000	*2	80

\*1 Overseas operations account for less than 10% of consolidated sales.

\*2 This figure is not indicated because a stock split on January 4, 2009, caused the real meaning of one share to change during the period. Assuming the stock split to have been carried out at the start of the term, dividends per share would have been ¥80 (a ¥40 interim dividend and a ¥40 year-end dividend).

### Major Debt Ratings (As of the end of September 2010)

### Major SRI Indices Adopted (As of the end of September 2010)

Rating Agencies	gencies Ratings Overseas		Overseas	Domestic
Rating and Investment Information, Inc. (R&I)	Long-term Debt A		FTSF4Good Global Index	Morningstar Socially Responsible Investment Index
Japan Credit Rating Agency, Ltd. (JCR)	Long-term Debt A+		TIJE40000 Global Index	womingstal Socially nesponsible investment index

### Major Organizations in Which Nippon Paper Group, Inc., Is a Member (As of April 1, 2010)

Overseas	Domestic		
The United Nations Global Compact	Japan Paper Association*		
* Nippon Paper Industries Co., Ltd., Nippon Daishowa Paperboard Co., Ltd.,	Nippon Keidanren		
Nippon Paper Papylia Co., Ltd., and Kitakami Paper Co., Ltd., which are operating companies, are members.	Council for Better Corporate Citizenship (CBCC)		

### **Employment and Occupational Safety and Health\* Indicators**

\* Safety and health data are calculated by calendar year.

### Number of Employees by Business

	As of FY2005	As of FY2006	As of FY2007	As of FY2008	As of FY2009
Number of Employees on a Consolidated Basis	12,798	12,584	13,666	13,088	14,210
Pulp and Paper Division	8,148	8,040	8,383	7,865	8,589
Paper-Related Division	1,196	1,200	1,327	1,281	1,221
Housing and Construction Materials Division	1,256	1,254	1,258	1,276	1,798
Other Divisions	1,995	1,885	2,487	2,445	2,372
Cross-Organizational*	203	205	211	221	230

\* "Cross-Organizational" means employees responsible for multiple divisions.

### Percentage of Female Workers and the Rate of Employment of People with Disabilities (As of April 1, 2010) (%)

item	Percentage/Rate
Percentage of Female Workers in Management*	1.08
Rate of Employment of People with Disabilities*	1.75

\* Organizations from which data were collected: Nippon Paper Group, Inc., Nippon Paper Industries Co., Ltd., Nippon Daishowa Paperboard Co., Ltd., Nippon Paper Crecia Co., Ltd., Nippon Paper Papylia Co., Ltd., NIPPON PAPER-PAK CO., LTD., Nippon Paper Chemicals Co., Ltd., Nippon Paper Lumber Co., Ltd., NP Trading Co., Ltd., Nippon Paper Development Co., Ltd.

### **Status of Occupational Safety**

	Unit	2005	2006	2007	2008	2009
Frequency rate of occupational accidents*	Frequency Rate	0.63	0.57	0.55	0.46	0.96
Occupational accident severity rate*	Severity Rate	0.02	0.02	0.01	0.60	0.07

\* Organizations from which data were collected: Manufacturing sites of Nippon Paper Industries Co., Ltd., Nippon Daishowa Paperboard Co., Ltd., Nippon Paper Crecia Co., Ltd., Nippon Paper Papylia Co., Ltd., NIPPON PAPER-PAK CO., LTD. and Nippon Paper Chemicals Co., Ltd. (6 companies)

# Acquisition of ISO Certification

### Acquisition of ISO 9001 Certification (As of March 31, 2010)

Company Name	Mills/Manufacturing Company/Works
Nippon Paper Industries Co., Ltd.	Nakoso Mill
Nippon Daishowa Paperboard Co., Ltd.	Akita Mill, Ashikaga Mill, Soka Mill, Yoshinaga Mill, Otake Mill
Nippon Paper Crecia Co., Ltd.	Tokyo Mill
Nippon Paper Papylia Co., Ltd.	Harada Mill, Suita Mill, Kochi Mill
NIPPON PAPER-PAK CO., LTD.	SOKA PAPER-PAK CO., LTD., EGAWA PAPER-PAK CO., LTD., MIKI PAPER-PAK CO., LTD., ISHIOKA KAKO CO., LTD.
Nippon Paper Chemicals Co., Ltd.	Gotsu Works*, Yufutsu Works, Iwakuni Works, Higashimatsuyama Works
FLOWRIC CO., LTD.	Headquarters, Nagoya Mill, Concrete Research Center
Nippon Seitai Corporation	Saitama Mill, Asahikawa Mill, Maebashi Mill
Nippon Paper Development Co., Ltd.	Landscape Department
SHIKOKU COCA-COLA PRODUCTS CO., LTD.	Komatsu Mill
Kokusaku Kiko Co., Ltd.	Yufutsu Works, Asahikawa Works, Machinery and Equipment Business Site
NIPPON PAPER UNITEC CO., LTD.	Four business sites at headquarters
NANKO UNYU CO., LTD.	·
Graphic Arts Communication	

\* Nippon Paper Chemicals' Gotsu Works has gained certification for specific product types.

### Acquisition of ISO 14001 Certification (As of March 31, 2010)

Kushiro Mill, Asahikawa Mill, Yufutsu	Norks
Nippon Paper Industries Co., Ltd. Shiraoi Mill, Ishinomaki Mill, Iwanuma Nakoso Mill, Fuji Mill,Iwakuni Mill, Yats Mill, R&D Dept.	Mill,
Nippon Daishowa Paperboard Akita Mill, Soka Mill, Ashikaga Mill, Yo Co., Ltd. Mill, Otake Mill	oshinaga
Nippon Paper Crecia Co., Ltd. Tokyo Mill, Kaisei Mill, Kyoto Mill, Iwal	kuni Mill
Nippon Paper Papylia Co., Ltd. Harada Mill, Suita Mill, Kochi Mill	
KOYO PAPER MFG. CO., LTD. Headquarters – Mill	
Kitakami Paper Co., Ltd. Headquarters – Ichinoseki Mill	
NP Trading Co., Ltd. Company-wide	
NIPPON PAPER-PAK CO., LTD., NIPPON PAPER-PAK CO., LTD., EGAW PAPER-PAK CO., LTD., MIKI PAPER- LTD., ISHIOKA KAKO CO., LTD.	/A
Nippon Paper Chemicals Co., Ltd. Gotsu Works, Iwakuni Works, Higashimatsuyama Works	
Nippon Paper Industries USA Co., Ltd. Port Angeles Mill	
Nippon Seitai Corporation Works, Maebashi Mill, Saitama Mill, K Works, Kyusyu Works	
Daishowa Uniboard Co., Ltd. Company-wide	
SHIKOKU COCA-COLA BOTTLING CO., LTD. BOTTLING CO., LTD. BOTTLING CO., LTD. SERVICE CO., LTD.; Headquarters, DYNAFLOW CO., LTD.; Headquarters	WAYAKA SHIKOKU
Nippon Paper Lumber Co., Ltd. Insulator Sales Department	
Nippon Paper Development         Headquarters, Landscape Department           Co., Ltd.         Sports and Amusement Department	nt, Tokyo
Sakurai Co., Ltd. Headquarters	
South East Fibre Export Company-wide	
Nippon Paper Resources         Portland Treefarm Project, Bunbury T           Australia         Project, Victoria Treefarm Project	reefarm
WAPRES Company-wide	
WAPRES         Company-wide           Volterra         Company-wide	

(%)

### **Raw Material Procurement-Related Indicators**

### Countries of Production and Species of Woodchips the Group Procured from Overseas (FY 2009) Hardwood Softwood

Country	1,000 dry tons	Percentage	Species		Country	1,000 dry tons	Percentage	Species
Australia	1,411	53.9%	Eucalyptus		Australia	278	78.3%	Radiata pine
Chile	479	18.3%	Eucalyptus	-	United States	62	17.4%	Douglas fir
South Africa	463	17.7%	Eucalyptus, Acacia	-	Russia	15	4.3%	Russian pine
Brazil	264	10.1%	Eucalyptus, Acacia		Total	355	100.0%	
Total	2,616	100.0%		-				

### Breakdown of Imported Hardwood Chips by Source Type

	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010 (Forecast)
"Tree Farm Initiative" plantations	8	12	11	14	18	22
Other plantations	54	51	56	53	51	52
Certified native forests	17	15	25	29	31	26
Non-certified native forests	21	22	8	4	0	0

### **Overseas Afforestation Areas by Country**

Country	End of 2004	End of 2005	End of 2006	End of 2007	End of 2008	End of 2009
Australia	64.0	73.7	77.9	79.6	80.7	80.2
Chile	13.5	13.5	13.5	12.7	13.0	13.0
Brazil	-	-	62.0	62.0	62.0	62.0
South Africa	4.2	12.1	12.1	11.6	11.6	11.1
Total	81.7	99.3	165.5	165.9	167.3	166.3

### Status of Forest Certification for Overseas Afforestation Projects and Company-owned Forests in Japan

Overseas afforestation project (country)	Certification Program Name	Acquisition Date
WAPRES/RTA (Australia)	AFS	September 2004
VTP/VIZ/JAF MATE/KTA (Australia)	AFS	May 2005
PTP (Australia)	AFS	June 2006
BTP/AAP/ECOT (Australia)	AFS	April 2006
SEFE (Australia)	AFS	October 2006
Volterra (Chile)	CERTFORCHILE	December 2007
Forestco (South Africa)	FSC	April 2003
AMCEL (Brazil)	FSC	December 2008

Company-owned forests in Japan Certification Acquisition Date by area **Program Name** Hokkaido SGEC December 2005 Tohoku October 2007 SGEC Kanto and Chubu SGEC October 2007\* Kinki, Chugoku and Shikoku SGEC December 2006 SGEC Kyushu March 2005

(Thousands of hectares)

(Thousands of hectares)

\* The Company's Kitayama Forest in Shizuoka Prefecture was certified in December 2003.

### Biodiversity Data for Company-owned Forests in Japan (as of March 31, 2010)

Ratio of Commercial Environmental **IUCN** categories Total Percentage environmental **IUCN** definition forest area\* forest area\* forest area (%) Strict nature reserve/ Protected area that is managed mainly for scientific research and I 0 0 0 0% Wilderness area wilderness protection Protected area managed mainly for ecosystem protection and Ш National park 0.6 4.5 5.1 6% 88% recreation Protected area managed mainly for conservation of specific natural |||Natural monument 0 0 0 0% features Habitat/Species Protected area managed mainly for conservation through management IV 0 0 0 0% \_ Management Area intervention Protected Landscape/ Protected area managed mainly for landscape/seascape protection and V 2.5 0.7 3.2 4% 22% Seascape recreation Managed Resource Protected area managed mainly for the sustainable use of natural VI 0 0 0 0% \_ Protected Area ecosystems Not applicable 68.6 13.1 81.7 91% 16% Total 90.0 71.7 18.3 100% 20%

\* Commercial forest area: The portion of Company-owned forests utilized as resources under appropriate forest management.

Environmental forest area: The portion of forests for which environmental functions are conserved. The logging of trees for the purpose of lumber production is banned at this portion.

### **Environment-Related Indicators**

### **Balance of Materials for All Businesses (Principal Materials)**

			INPUT	OUTPU	T
Fossil energy input Electricity Oil Coal Gas Non-fossil energy input Black liquor Non-fossil fuels input*	1,971GWh 427,000kl 2,343,000t 117,000t <b>t</b> 4,047,000t 1,403,000t	Raw materials Woodchips Logs Pulp Recovered paper Inorganic filler Inorganic chemicals Organic chemicals Base paper	5,349,000t 43,000t 281,000t 3,342,000t 569,000t 637,000t 184,000t 127,000t	CO2 emissions from fossil ene SOx emissions NOx emissions Soot and dust Chemical sub PRTR Law	rgy stances subje
Chemical substances s Law (Amount handled)	<b>subject to PRTR</b> 17,294t	Resin Printing ink Baw material	17,000t 1,000t 15,000t	(amount rele (amount trar <b>Wastewater</b>	,
Water consumption River water Industrial water Well water Public water supply	963,000,000t 614,000,000t 311,000,000t 37,000,000t 1,000,000t	chemicals Beverage cartons Saccharide Wood-based construction material	9,000t 7,000t 28,000t	Public water Sewer COD/BOD SS AOX	s 931 6

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

CO <sub>2</sub> emissions			
from fossil energy	7,280,000t	Nitrogen	1.210t
SOx emissions	3.230t	Phosphorous	170t
NOx emissions	7.460t	Waste generation	649,000BDt
Soot and dust	1,120t	Landfill	24,000BDt
Chemical substances	subject to	Effective use	625,000BDt
PRTR Law	,	Products manufact	ıred
(amount released) (amount transferred)	224t 64t	Paper, household paper	4,900,000t
Wastewater	937,000,000t	Paperboard	1,310,000t
Public waters	931,000,000t	Pulp	155,000t
Sewer	6.000.000t	Paper container	100,000t
COD/BOD	-,	Chemical product	120,000t
SS	53,700t 21,000t	Building materials	52,000t
AOX	21,000t 810t	Beverage	107,000t

### **Environment-Related Indicators**

### **Major Environmental Performance Data**

		Unit	FY2005	FY2006	FY2007	FY2008	FY2009
	Fossil energy input	Million GJ	125	121	120	105	98
Energy	Non-fossil energy input	Million GJ	72	74	76	71	64
	CO2 emissions from fossil energy	Million Tons of CO2	9.03	8.67	8.71	7.73	7.28
Water consumption		Million Tons	1,069	1,067	1,069	997	963
	Amount discharged	Million Tons	1,043	1,038	1,023	955	937
Wastewater	COD/BOD	Thousand tons	67.2	66.5	66.0	60.4	53.7
Wastewater	SS	Thousand tons	27.6	27.9	24.3	21.2	21.0
	AOX	Thousand tons	1.02	0.87	0.88	0.78	0.81
	SOx	Thousand tons	4.19	3.96	4.01	3.56	3.23
Gas emissions	NOx	Thousand tons	10.5	10.2	9.80	8.11	7.46
	Soot and dust	Thousand tons	2.10	1.79	1.76	1.40	1.12
Wests	Amount generated	Thousand tons	569	623	701	688	649
Waste	Landfill	Thousand tons	21	28	26	24	24

\* Figures for Nippon Paper Papylia Co., Ltd. (formerly Mishima Paper Co., Ltd.), which joined the Nippon Paper Group in 2008, have been added to data for fiscal 2005 to fiscal 2007.

### Unit CO<sub>2</sub> Emissions from Fossil Energy and Units of Fossil Energy (Pulp and Paper Division)

	Unit	FY1990	FY2005	FY2006	FY2007	FY2008	FY2009
Unit CO2 emissions from fossil energy	t-CO <sub>2</sub> /product ton	1.185	1.120	1.081	1.070	1.073	1.086
Units of fossil energy	GJ/product ton	17.1	15.4	15.0	14.7	14.6	14.5

\* Figures for Nippon Paper Papylia Co., Ltd. (formerly Mishima Paper Co., Ltd.), which joined the Nippon Paper Group in 2008, have been added to data for fiscal 2005 to fiscal 2007.

(%)

(Units)

### **Group RP Utilization Rates\***

	FY2005	FY2006	FY2007	FY2008	FY2009
RP utilization rate (Paper + Paperboard)	49.5	50.3	50.9	52.3	54.6
RP utilization rate (Paper)	36.0	36.9	38.0	38.7	41.2
RP utilization rate (Paperboard)	87.0	87.8	87.8	89.2	89.1

\* RP utilization rate = Recovered paper/(Recovered paper + Other pulp)

\* Figures for Nippon Paper Papylia Co., Ltd. (formerly Mishima Paper Co., Ltd.), which joined the Nippon Paper Group in 2008, have been added to data for fiscal 2005 to fiscal 2007.

### Environment-Related Complaints (FY2009)

Item	Noise	Vibration	Offensive odor	Dust and mist dispersal	Smoke	Other	Total
No. of Complaints	33	3	24	8	3	6	77

### External Awards for Environmental Conservation Activities (FY2009)

Mill	Award	Award Organization
Headquarter and Ichinoseki Mill of Kitakami Paper Co., Ltd.	Environmental Conservation Outstanding Business Site Award	Iwate Prefecture Environmental Conservation Liaison Council
Port Angeles Mill of Nippon Paper Industries USA Co., Ltd.	Commendation for Practices Promoting Clean Air	Olympic Region Clean Air Agency of Washington State

### External Award for Environmental Reporting (FY2009)

Award Recipient	Award	Award Organization
Nippon Paper Group Sustainability Report 2009	13th Environmental and Sustainability Report Awards, Environmental Report Category, The Second Prize	Toyo Keizai, Inc. and the Green Reporting Forum

### Storage and Use of PCB-Containing Electrical Equipment (FY2009)

	Transformers	Capacitors	Reactors	Stabilizer
Stored	19	748	0	2,669
In operation	0	8	0	104

\* Figures denote confirmed units.

Cabinet order No.	CAS No.	Chemical substance	Unit	Amount handled (Amount generated)	Amount removed	Amount transferred
2	79-06-1	Acrylamide	t	1,194	0	0
3	79-10-7	Acrylic acid	t	697	0	0
7	107-13-1	Acrylonitrile	t	829	0	0
13	78-67-1	2,2-azobisisobutyronitrile	t	1	0	0
24		n-alkylbenzenesulfonic acid and its salts	t	48	0	0
29	80-05-7	4,4'-isopropylidenediphenol (bisphenol A)	t	143	0	0
30	25068-38-6	Bisphenol A type epoxy resin	t	19	0	0
40	100-41-4	Ethylbenzene	t	3	0	0
43	107-21-1	Ethylene glycol	t	10	0	3
44	110-80-5	Ethylene glycol monoethyl ether	t	23	15	3
47	60-00-4	Ethylenediaminetetraacetate	t	4	1	0
63	1330-20-7	Xylene	t	55	6	0
65	107-22-2	Glyoxal	t	9	0	0
66	111-30-8	Glutaraldehyde	t	2	0	0
80	79-11-8	Chloroacetic acid	t	1,380	0	0
95	67-66-3	Chloroform	t	287	161	25
109	100-37-8	2(-diethylamino)ethanol	t	1	0	0
112	56-23-5	Carbon tetrachloride	t	29	0	29
114	108-91-8	Cyclohexylamine	t	4	0	0
134	96-23-1	1,3-dichloro-2-propanol	t	5	2	0
177	100-42-5	Styrene	t	3,359	7	0
179		Dioxins*2	g-TEQ	5	0	5
227	108-88-3	Toluene	t	2,304	28	4
253	302-01-2	Hydrazine	t	2	0	0
268	106-99-0	1,3-butadiene	t	2,177	3	0
304		Boron and its compounds (as B)	t	16	0	0
307		Poly (oxyethylene) alkyl ether	t	12	0	0
309	9016-45-9	Poly (oxyethylene) nonylphenyl ether	t	5	0	0
310	50-00-0	Formaldehyde	t	4,104	0	0
313	108-31-6	Maleic anhydride	t	20	0	0
314	79-41-4	Methacrylic acid	t	359	0	0
318	2867-47-2	2-(dimethylamino) ethyl methacrylate	t	137	0	0
320	80-62-6	Methyl methacrylate	t	57	0	0
otal (ex	cludes substan	ces less than one kilogram)*3	t	17,294	224	64

### Amounts of Substances Subject to PRTR Law Handled, Released and Transferred\*1 (FY2009)

\*1 In-house data on totals for amounts handled by the Company (excluding dioxins) of one ton or more. There were no amounts of designated type 1 chemical substances (excluding dioxins) that are subject to reporting if the handling quantity is 0.5 tons or more.
 \*2 Dioxins and Chloroform are unintentionally generated.

\*3 Total does not include dioxins.

### **Environmental Accounting\***

### Cost for Environmental Conservation (Millions of yen)

Category	Investment	Cost
(1) Business area cost		
1. Pollution prevention cost	7,648	17,894
2. Global environmental conservation cost	2,657	1,315
3. Resources circulation cost	323	8,615
(2) Upstream/downstream cost	_	1,119
(3) Administration cost	_	646
(4) R&D cost	_	1,011
(5) Social activity cost	_	118
(6) Environmental remediation cost	_	716
Total	10,629	31,434

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

### **Economic Benefits of Environmental** Conservation

Conservation	(Millions of yen)
Effect	Amount
Income from our forests in Japan	561
Reduced expenses from energy saved	394
Reduced disposal expenses through effective use of waste	4,481
Gain on sales from effective recycling of waste	1,350
Reduced expenses through recycling of shipping materials	569
Total	7,355

Basic Policy in the Charter on the Environment	Green Action Plan 2010	Fiscal 2009 Efforts and Progress
	Reduce per-unit CO <sub>2</sub> emissions from fossil energy consumption per product by 16% compared to fiscal 1990 levels by fiscal 2010	Achieved 8.4% reductions from fiscal 1990 levels through promotion of energy savings at mills and operation of newly installed boilers.
	Reduce units of fossil energy per product by 20% compared to fiscal 1990 levels by fiscal 2010	Achieved 15.2% reductions from fiscal 1990 levels through promotion of energy savings at mills and operation of newly installed boilers.
1. Act to counter global warming	Reduce greenhouse gas emissions	Implemented measurement of nitrous oxide (N2O), which has a high global warming potential. Contribute to CO <sub>2</sub> absorption through overseas afforestation and appropriate forest management.
	Manage company-owned forests in Japan based on sound practice designed to ensure carbon dioxide absorption and sequestration	Acquired forest certification for all Company-owned forests in Japan*1; currently working to maintain certification.
	Proceed with the Tree Farm Initiative, an overseas afforestation project that fosters sustainable sources of hardwood chips, to achieve an overseas afforestation area of 200,000 hectares by 2015	Achieved an overseas afforestation area of 166,000 hectares as of the end of 2009. Currently implementing ongoing measures in pursuit of target afforestation area.
2. Protect and	Maintain existing forest certification for all company-owned forests in Japan or overseas	Currently working to maintain existing forest certification (SGEC, FSC, PEFC) for all Company-owned forests in Japan and overseas.
develop forest resources	Procure all imported hardwood chips from plantations or certified forests	Achieved an imported hardwood chip from plantations or certificated forests ratio of 100% <sup>42</sup> following acquisition of CoC certification by all imported hardwood chip suppliers dealing in native forests.
	Develop advanced technologies for boosting lumber cultivation	Planted 40,000 fast-growing, desiccation-tolerant select superior trees in a plantation in Western Australia. Next-generation screening of characteristics and pulpability testing spawned three potential elite tree systems. Improved root-generation capabilities of clone cuttings at AMCEL of Brazil. Commenced hybridization breeding of elite trees.
3. Increase use of recycled resources	Maintain the recovered paper usage rate at 50% or higher	Raised de-inked pulp (DIP) content while maintaining quality. Reached 54.6% in fiscal 2009. Target attained.
	Reduce final waste disposal to maximum 4% of fiscal 1990 levels by fiscal 2010	Final disposal amount for fiscal 2009 in Japan was 2.0% of fiscal 1990 levels. Target attained.
	Increase the ratio of products made from waste to 25% or more of total waste generated, by fiscal 2010	Promoted implementation of granulation facilities. Achieved 32.4% realization ratio of products made from waste in fiscal 2009.
	Maintain and strengthen our environmental management systems	Acquired ISO 14001 certification at the Niigata Works of Nippon Seitai Corporation in September 2009 and Eco-Action 21 certification at Akita Jujo Chemicals Co., Ltd. in February 2010.
4. Comply with environmental statutes	Define and manage voluntary control targets for preventing air, water, and soil pollution; noise; vibration; and foul odors	Set separate voluntary emissions management targets at works and mills fo gas and water, and instituted controls to observe emission standards and protocols. Carried out voluntary water quality inspections for onsite wells an groundwater, depending on the soil and the mill.
and work to minimize our environmental	Control chemical substances appropriately by identifying substances whose use is to be prohibited or emissions reduced	Encouraged the use of alternative substances.
impact	Accelerate the shift to transport modes, containers, and packing materials with low environmental impacts	Reducing distribution-related energy consumption by promoting direct delivery, consolidating Group company product storage and distribution centers and reducing regular shipments.
	Move ahead with green procurement of office equipment, supplies, and other needs	Recommended green purchasing at each Group company.
5. Develop environmentally friendly	Step up the research and development of environmentally safe, resource-saving products	Nippon Paper Chemicals Co., Ltd. joined in a joint feasibility study on the development of a practical process for the production of bioethanol with Cosmo Oil Co., Ltd. from July 2009. Nippon Paper Industries Co., Ltd. joined in research and development on the creation of trees with high biomass energy productivity through genetic engineering with Tokyo University of Agriculture and Technology and the University of Tsukuba from July 2009. Nippon Paper Industri's lowest density High-bulk book paper and High-bulk lightweight coated paper as well as a low basis weight High-bulk lightweight coated paper from December 2009.
technologies and products	Conduct research and development of technologies for reducing environmental impact at all stages of manufacturing	Investigated technologies for DIP manufacturing from low-grade used paper and promoted use of de-inked pulp. Developed technologies to shift to materials that have a lower environmental impact.
	Continue to install and improve resource-saving equipment	Promoted installation of boilers and introduction of energy-saving equipment. Installed high-efficiency boilers at the Otake Mill of Nippon Daishowa Paperboard Co., Ltd. on May 2009.
	Disclose environmental information to stakeholders in a timely manner through sustainability reports and on the website	Published sustainability reports and magazines communicating with the public on environment and social issues.
6. Engage in active environmental communication	Engage actively in local environmental communication through dialog with the public and the government	Continued risk communication and other environmental communication.
	Play an active role and support environmental conservation activities and initiatives	Participated in cleanups (roadways near facilities, seashores, ports and harbors), tree-planting and local afforestation activities.

### **Targets and Performance of Environmental Conservation Activities**

\*1 Refers to forests owned by Nippon Paper Industries Co., Ltd., which owns 95% of the Group's forests in Japan. \*2 Refers to Nippon Paper Industries Co., Ltd.

### **Third-Party Comments**

Yoshinao Kozuma Professor, Faculty of Economics, Sophia University



#### Profile

After leaving the Sophia University Graduate School of Economics upon completion of the latter period of his doctoral course, Yoshinao Kozuma became a research assistant at the Nagoya Institute of Technology and attended the Limperg Instituut, the Inter-University Institute for Accounting and Auditing, 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 and Transport; the Cabinet Office; and the Japanese Institute of Certified Public Accountants. He is also a director of the Japan Accounting Association.

.....

This year's report impressively provides an overview of the Nippon Paper Group's sustainability management including supply chain-related activities while taking into consideration the lifecycles of the Company's products.

Recent innovative environmental management has been extending its boundary and scope of coverage to encompass the entire supply chain and thus to optimize management activities throughout the overall lifecycle in order to improve performance through better resource efficiency. In doing so, it becomes easier to systematically monitor various challenging issues in business activities and to avoid critical trade-offs, which may arise in different stages of the supply chain.

In reviewing the structure and content of the report, it is clear that the Nippon Paper Group has successfully incorporated this way of thinking into their sustainability management. The Group is increasingly engaging in activities aimed at reducing the environmental impacts that arise from the raw material procurement and product disposal processes, the former entailing the shift to afforested or certified forests for raw materials to establish sustainable procurement practices and the latter encompassing efforts to promote the use of waste paper, collaborating with client firms and industry associations to collect more waste paper and upgrade recycling capabilities. While I can commend this as one of the Group's best practices, I hope that they will further enhance product design processes through which recycling at the disposal stage can be undertaken more easily. It is also an important CSR issue to address climate change risks in their supply chain and to enhance management capabilities with respect to water resources that are critical to business activities. A holistic approach toward resource management that includes these countermeasures needs to be introduced, taking into consideration the decline in afforestation areas this year.

Secondly, I commend the Nippon Paper Group for their ongoing efforts to keep discrepancies in recycled pulp content ratios and misrepresented labels from recurring. In recognizing that this problem requires more than just compliance training, the Group has established a mechanism to check operating processes from each of the performance and systems perspectives while ensuring the disclosure of comprehensive follow-up information.

There is, on the other hand, room for improvement in the disclosure of social information in the Data Packet. As a multinational enterprise, for example, workforce details by geographic segment are a vital piece of information. Moreover, readers are unable to assess trends without information on the percentage of female workers in management and the rate of employment of people with disabilities for consecutive years. Recently, companies have increasingly disclosed information on take up rates for child-, nursing-care and annual leave as well as overtime. I would ask that the Nippon Paper Group consider disclosing this information in future highlight editions.

### **Action in Response to Third-Party Comments**



Tsuyoshi Yamashita Executive Vice President, Representative Director and General Manager of CSR Division

The Nippon Paper Group supplies paper, a commodity indispensable to daily life, as the foundation of its business activities. For this reason, the Group maintains deeply rooted ties with the global environment through its proprietary and other forests. With this in mind, we place the utmost emphasis on protection and conservation of the environment. We channel our efforts toward reducing environmental impact across the entire supply chain beginning with the procurement of raw materials. The high regard in which this Report and our activities are held is a source of immense pleasure. Moving forward, we will continue to build on these initiatives by improving our recycling technologies and enhancing our capabilities from the product design stage. Through these means, we intend to further optimize our supply chain.

In overseas afforestation, we are working diligently to achieve our target of "200,000 hectares or more by 2015" established under our Environmental Action Plan. Currently, we are preparing for the development of new plantations. Looking ahead, the Nippon Paper Group will engage in both comprehensive and sound resource management, taking into consideration the multi-faceted functions inherent in forests including global warming prevention and water resource replenishment.

The Nippon Paper Group will take to heart each issue identified and work to improve in such areas as information disclosure. At the same time, we will engage in CSR activities that help build a sustainable society. As we work toward achieving these goals, we sincerely request your continued guidance, support and understanding.



# NIPPON PAPER GROUP, INC.

Head Office: 1-2-2 Hitotsubashi, Chiyoda-ku, Tokyo 100-0003, Japan				
Issued:	January 2011			
	Previous issue: February 2010			
	Next issue: January 2012			
Inquiries:	CSR Department			
Phone:	+81-(0)3-6665-1015 Fax: +81-(0)3-3217-3009			
Website:	http://www.np-g.com/e/csr/index.html			



### **Cover Photograph**



Sugenuma Forest owned by Nippon Paper Industries (Katashina Village, Tone District, Gunma Prefecture)

Photographer: Yuhji Itsumi



The cost of the paper used for this report includes a portion of the expense of using timber from forest thinning discarded in the forest. (See page 19)

### The Paper Used for This Report

Covers: npi matte green 70, Weight: 157 g/m<sup>2</sup> Text pages: npi matte green 70, Weight: 104.7 g/m<sup>2</sup> npi matte green 70 is forest certified paper consisting of at least 70% de-inked pulp. The de-inked pulp content was verified by a management system created by Nippon Paper Industries. Furthermore, third-party audits by SGS Japan Inc. confirm that the system is operating correctly.





Waterless printing with soy ink.