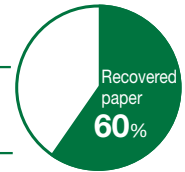




Resource- and Environment-related Business Initiatives (Recovered Paper)

Making maximum use of limited resources through paper recycling



Percentage of raw materials in papermaking

Overview of recovered paper usage

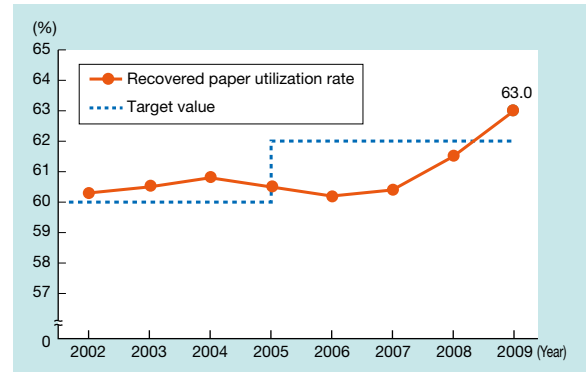
Japan's paper recovery rate is among the highest in the world, thanks to the efforts of everyone taking part in recovery. To make maximum use of recovered paper as a raw material in papermaking, in 2005 the Oji Paper Group set a goal of a 62% recovered paper utilization rate by 2010, and subsequently met that goal in fiscal 2009.

Against reduced production following a drop in demand for paper and paperboard products, the amount of domestic paper recovered and used has also fallen. On the other hand, exports of recovered paper to the fast-growing economy of China hit a record in fiscal 2009. While this may appear to represent a flow of renewable resources overseas, the reality is that the amount of recovered paper usable as a raw material is limited, even with utilization maximized. This is because quality requirements for paper products inevitably place a limit on the content ratio of recovered paper.

For example, the amount of containerboard that flows into Japan as packaging material for products from overseas exceeds the amount that flows out of Japan. Excessive exports are a hindrance to healthy domestic recovered paper recycling, but a certain level of export has the effect of reducing the amount of recovered paper that becomes garbage. For this reason, the Oji Paper Group believes that balanced exports together with domestic recovery and use are both vital.

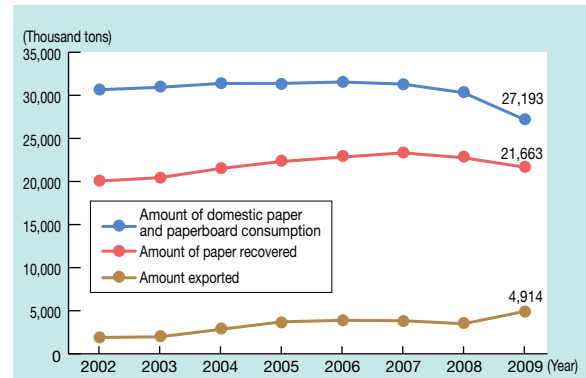
* **Recovered paper utilization rate:** Recovered paper consumption amount / total fiber raw material consumption amount (recovered paper + pulp + other fiber raw materials)

Changes in the Oji Paper Group's recovered paper utilization rate



Sources: Compiled from Paper Recycling Promotion Center statistics and Oji Paper statistics

Changes in amount of domestic paper and paperboard consumption, amount of paper recovered, and amount of paper exported



Source: Compiled from Paper Recycling Promotion Center statistics



Recycling of confidential documents

In 2006, Oji Paperboard's Edogawa Mill installed dedicated dissolution equipment for confidential documents. The amount of documents recycled through the system is increasing steadily, reaching 11,000 tons in fiscal 2009. The company plans to further expand use of this valuable recycled resource.



Comments from users

"We have been practicing recycling, but when we heard that the Edogawa Mill can do same-day processing of documents brought in, we jumped at the service." (Warehousing firm)

"We can confirm on the spot that processing is taking place without even opening the cartons, which is reassuring from the standpoint of preventing information leaks." (Financial institution)

"The Edogawa Mill is close to where our confidential documents are generated, meaning we can expect big improvements in transport efficiency." (Shipping firm)

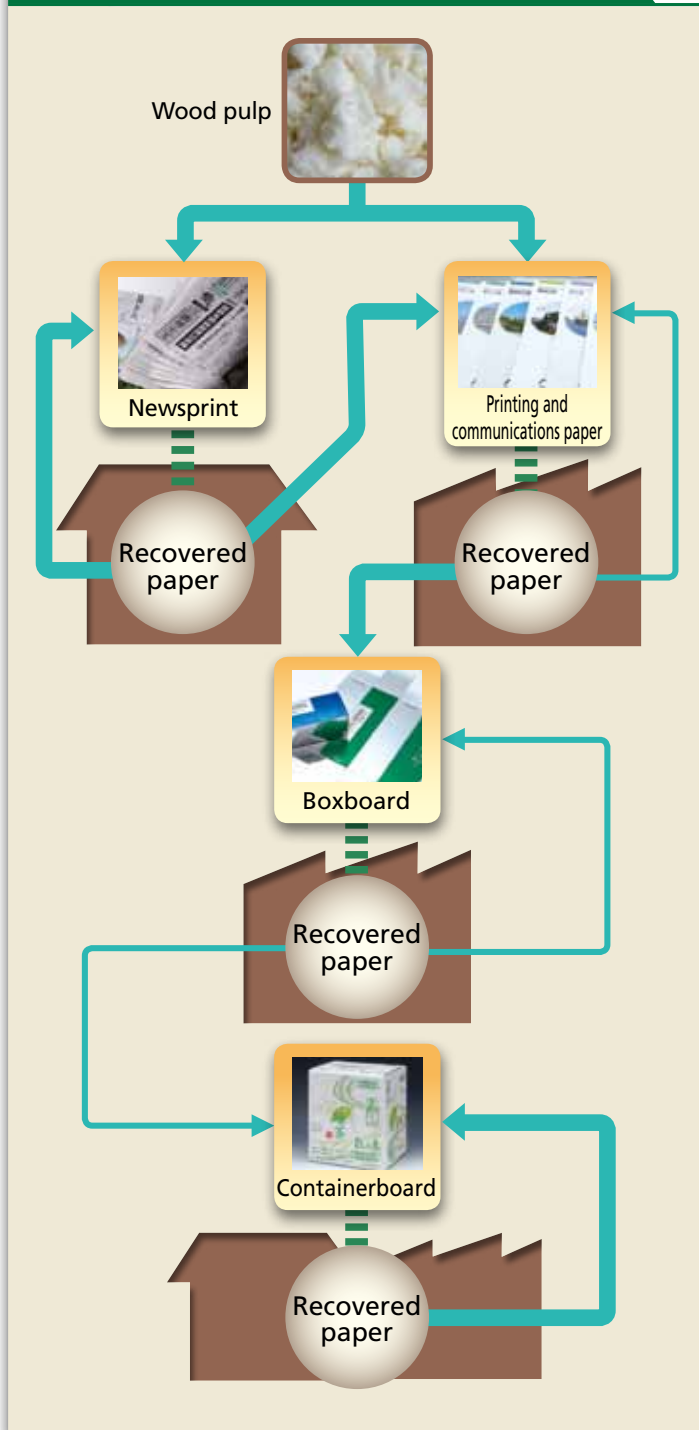
Preventing recurrence of recovered paper falsification

At all mills that manufacture paper products with recovered paper content (21 mills at papermaking companies in fiscal 2009), the Oji Paper Group is continuing its measures to prevent the recurrence of falsified reporting of recovered paper content.

Major measures in fiscal 2009 were as follows:

- 1) At each mill, we have introduced inspection systems to confirm the recovered paper pulp content ratio at each stage of production, under guidelines set by the Japan Paper Association.
- 2) At least once a year, a Recovered Paper Use Content Ratio Audit Committee, drawing together all group company head offices, conducts internal audits of raw material and product management and of the operational status of inspection systems.

Primary flow of recovered paper recycling



◆ Types and applications of recovered paper

The Oji Paper Group produces a wide range of paper and paperboard product types, incorporating various types of recovered paper matched to quality requirements. Frequently, recovered paper is recycled back into products not only in the same product category as the source paper, but in entirely separate product categories.

As production of newsprint falls amid changes in media, the amount of recovered newsprint is in gradual decline as well. To maintain our use of recovered paper, we are branching out from recovered newsprint and tackling the use of recovered magazine paper and printing and communications paper as raw materials. Compared with recovered newsprint, recovered magazine paper contains a high level of impurities that must be removed with equipment. Meanwhile, as raw material for paperboard, we are advancing the use of vinyl-coated paper and other recovered papers traditionally difficult to use.



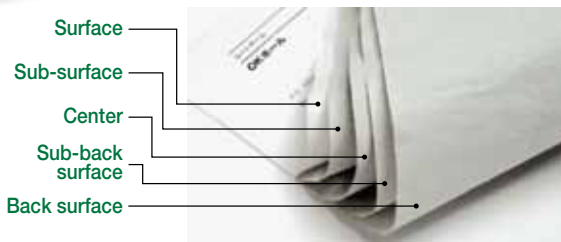
The history of recovered paper use

The recycling of recovered paper in Japan is said to go as far back as the reconstituting of unneeded paper in the Heian Era, with the current recycling system of collection, separation, and use appearing from the Edo Era.

Almost all paper currently in circulation is "Western-style" paper. The Oji Paper Fuji Mill was the first to use recovered paper in Western-style paper in 1953. Since then, the amount of recovered paper we employ has continued to rise along with demand for recycled paper, amid the urban waste problem and the heightening of environmental awareness.



A closer look at boxboard



Recovered paper is used according to its type. For example, the boxboard used in confectionary boxes is composed of four to five layers; the recovered paper used as raw material may differ by layer. Recovered papers are used to best advantage according to quality and amount.

Surface: Mainly white shavings, made from the trimmings from printing and bookbinding processes.

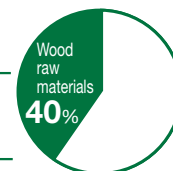
Sub-surface: Made from white shavings and recovered magazine paper.

Center, sub-back surface, and back surface: Mainly made from recovered magazine paper.



Resource- and Environment-related Business Initiatives (Forest Resources)

Exploring new possibilities based on sustainable forest resources

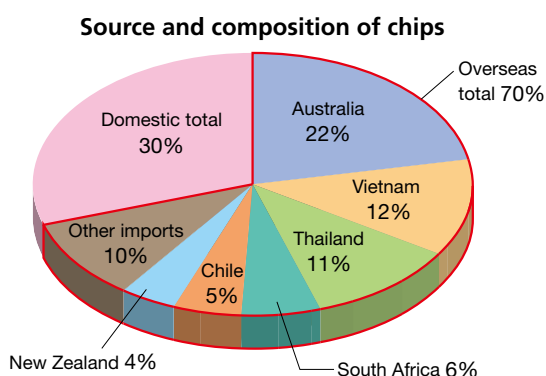


Percentage of raw materials in papermaking

◆ Source and composition of wood chips

The Oji Paper Group's domestic mills used 4,039,000 tons of wood chips in fiscal 2009, about 70% of which came from overseas.

Following our Partnership Procurement Policy and our Wood Raw Material Procurement Guidelines, we procure wood chips only from sustainable forests that are appropriately managed environmentally, socially, and economically.

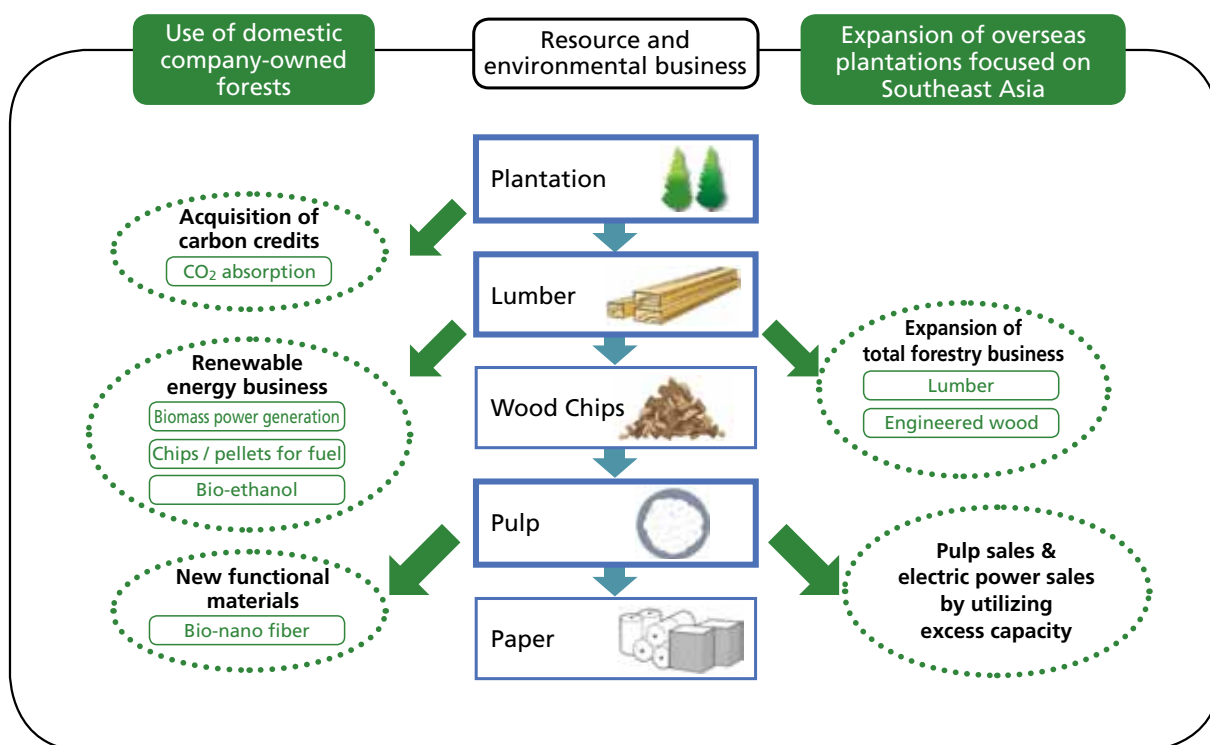


Chip traceability reporting

The Oji Paper Group requires the submission of traceability reports by all suppliers of chips. This report, consisting of self-assessment on the part of suppliers, is collected once per shipload of imported material and once per year from domestic suppliers. The collected reports are sent once per year to a third-party evaluation body to confirm 1) conformance with the Wood Raw Material Procurement Guidelines, and 2) proper recording of logging region. Results of the evaluation are reported on our website. We believe that confirmation of logging performed legally within sustainable forests is a part of environmental consideration.

◆ Promotion of resource and environmental business

We are actively advancing our resource and environmental business, taking a step beyond the securing of resources to make use of our accumulated forest resources and related technology.





Printing and Communications Media Company Initiatives

Constantly evolving paper indispensable to daily lifestyles, through products geared to paper and forest recycling

◆ New standards under Japan's Law on Promoting Green Purchasing: Our response and compliant products

Through aggressive initiatives toward recovered paper recycling, the Oji Paper Group has worked to enhance its lineup of 100% recovered paper products even in printing and communication paper. These products conform to the national standards revised in April of 2010 under Japan's Law on Promoting Green Purchasing (hereafter "Green Purchasing Law").



What is the Green Purchasing Law?

The Green Purchasing Law serves to promote environmental product purchasing by national and regional administrative bodies. Promoting the use of recovered paper is the Law's focus for paper products, for which procurement standards were revised in April of 2010. (Composite ratings* were introduced for printing paper and raised for copy paper, with 80 points now the minimum for compliant products.)

* **Composite rating:** A value based on recovered paper pulp content ratio, with whiteness and amount of coating taken into account.

Products compliant with the Green Purchasing Law

Copy paper	Printing paper		
★ Recycle PPC Paper 100	★ WHITE A G100	★ KOTE N GREEN100	★ CRYSTAL LIGHT G100
★ NEW Yamayuri 100	★ MATT KOTE GREEN100	★ KOTE L GREEN100	★ CRYSTAL LIGHT DULL G100
★ Recycle PPC Paper 100W			

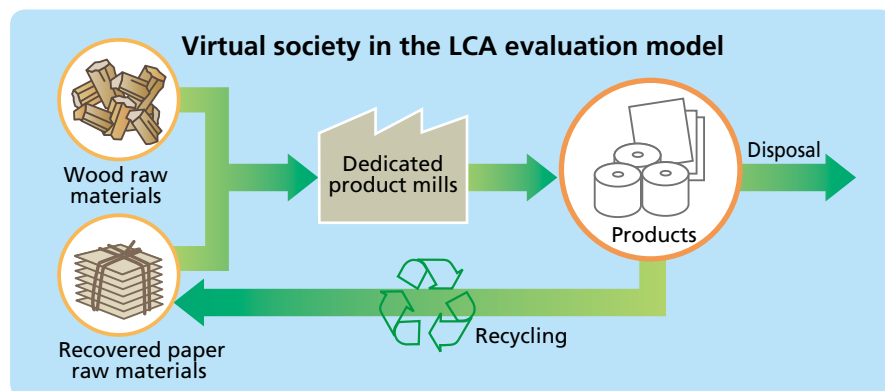
Our printing paper has achieved Eco Mark accreditation.

See website for details: <http://www.ojipaper.co.jp/envi/green/index.html>

Available in Japanese language only.

◆ Cooperation with LCA research on paper

Our customers often ask us what sort of paper is good for the environment. One evaluation method for determining "good" paper is LCA. Oji Paper is cooperating with LCA Research for Paper Recycling, a research project that creates models of virtual societies incorporating papermaking mills, and then modifies factors such as recovered paper utilization rate, recovery rate, and energy sources to compare overall social impacts on the environment. The research is expected to add to our knowledge about environmental impacts.



What is LCA?

Life Cycle Assessment, or LCA, is a method for comprehensively and quantitatively analyzing various environmental impacts through the entire life cycle of products and materials.

ZOOM



Cooperation with environmental NPO's tree-thinning promotion activities

Office Chonai-Kai, an environmental NPO, has launched the Morino Chonai-Kai (Forest Neighborhood Association) program to promote tree thinning through papermaking. Through this initiative, companies and organizations procure "Forest Thinning Support Paper" whose price includes a tree thinning promotion cost premium that goes toward tree thinning and the promotion of material gained from tree thinning. Through cooperation with the Morino Chonai-Kai program in Japan's Chubu region, Oji Paper's Kasugai Mill takes in chips originating from tree thinning, and makes use of them as papermaking raw material.





Household and Packaging Materials Company Initiatives

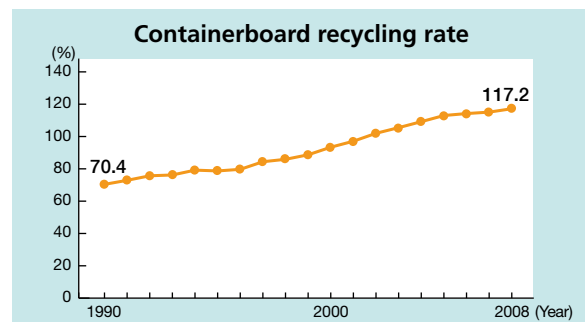
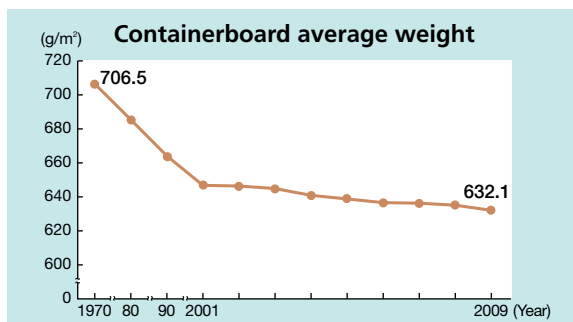
Together with customers, developing packaging materials exceeding conventional functions and maximizing the use of limited resources

Packaging materials business

Our everyday lifestyle scenarios abound with papers of all kinds. Examples close at hand include paper boxes for confectionary or detergents, packaging paper and paper bags for gifts, and containerboard boxes for shipping. To reduce impacts on the environment and effectively use limited resources, we are actively tackling the 3Rs of containers and packaging: Reduce weights and volumes, Reuse items used once, and Recycle used containers and packaging.

◆ The 3Rs of containerboard

Pursuing the merits of our status as a comprehensive paper manufacturer spanning base paper (Oji Paperboard Co., Ltd.) to processing (Oji Chiyoda Container Co., Ltd. and Mori Shigyo Group), the Oji Paper Group is advancing the selection and development of base paper matched to packaging specifications. While containerboard products enjoy a high recycling rate and thus already represent a packaging material with low environmental impact, we are further cutting such products' weight in response to customers' growing environmental considerations.



Containerboard recycling rate (%):
 $(\text{Domestic amount used} + \text{export amount}) / \text{domestic production amount} \times 100$

Lightweight paper lineup

★ Liner: Testliner 120g/m²

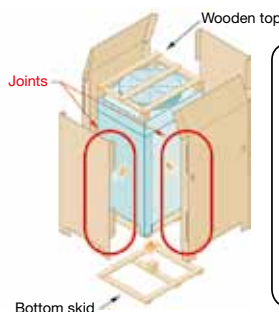
★ Medium: Medium 100g/m², Powermedium 120g/m²

Contact: Oji Paperboard Co., Ltd., Oji Chiyoda Container Co., Ltd., Mori Shigyo Group

Initiatives with customers

Daikin Industries, Ltd.

Simplified packaging



Results of improvements

Packaging cost	... 27% reduction
Packaging work steps	... 46% reduction
CO ₂ emissions volume	... 17% reduction
Containerboard parts	... 7 → 4 parts
Number of staples	... 62 → 0

Together with customer Daikin Industries, Oji Chiyoda Container is working on the development of simplified packaging. Through the development of joint technology for containerboard, the companies achieved environmentally-friendly packaging with a construction that minimizes component parts and aims to reduce the number of work steps while boosting shock absorption performance. The concept went on to win prizes at the Japan Packaging Contest 2009 and the Worldstar Packaging Awards 2009.

Lotte Co., Ltd.

Effective use of waste



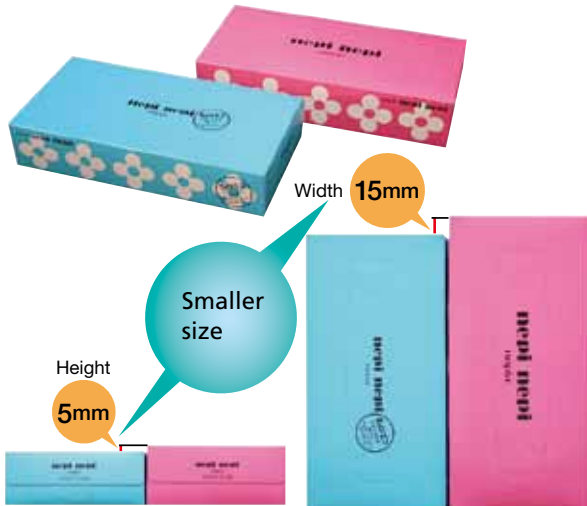
RPF fuel

Together with customer Lotte, Oji Chiyoda Container is addressing the effective use of waste. By turning waste into RPF fuel, the companies are striving for effective use of waste through thermal recycling and a reduction in the use of fossil fuels.

◆ The 3Rs of paper containers and paper bags

Reduce

We are reducing the weight and surface area of the boxboard we use in paper containers.



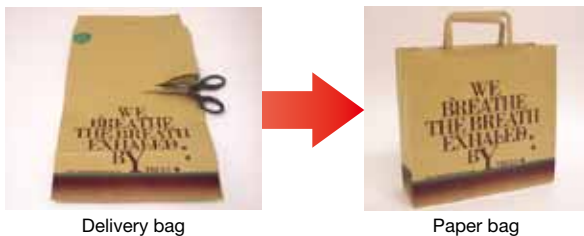
Recycle

Packaging that folds flat after use enables easier collection from households.



Reuse

We are proposing packaging that can easily be put to new uses through simple devices.



Other

The recovered paper utilization rate for the boxboard used in paper boxes is over 90%, contributing greatly to progress in the rate for paper and paperboard overall. At the same time, while Japan's paper recovery rate is among the world's highest at 79.7%¹, the recovery rate for paper container packaging alone is estimated at a low 14%². Improvement in the recovery rate is highly hoped for from the perspectives of both environmental consideration and the stable securing of recovered paper supplies.

- ¹ Source: Paper Recycling Promotion Center, 2009 materials
² Source: Paper Container and Packaging Recycling Promotion Conference, 2008 materials

Initiatives with customers

Yamamotoyama Co., Ltd. Proposing paper box designs



By switching from a conventional metal can design to paper for the packaging of *nori* seaweed, Oji Packaging has enabled improvement in shipping efficiency along with reduction in required storage space. The company retained a metal appearance for the box through metallic leaf while using shock-resistant Micro-flute in the larger boxes. The end result nearly equals the metal cans in beauty and safety.

zoom

Example of development and proposal of environmentally-conscious new materials

Oji Adba has developed a new translucent paper bag with the name "MI'L'BA". Earlier bags of the sort used transparent film placed over base paper with cut-out "windows", but MI'L'BA actually makes the window portions from transparent base paper itself, without using film. The result is a bag that does not sacrifice strength and uses environmentally friendly material. Meanwhile, letting products and packages in the bag show through the window offers a new type of advertising effect.



Translucent paper bag MI'L'BA

◆ Social contribution activities by Oji Nepia

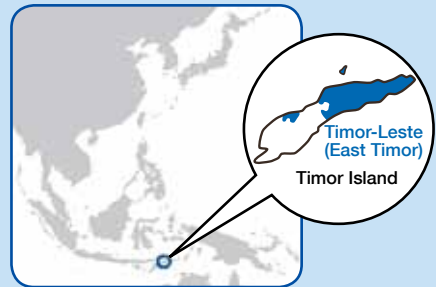
Under the banner of “participation in social contribution activities” set forth by the Oji Paper Group Corporate Code of Conduct, Oji Nepia Co., Ltd. asked what it could do as a company with regard to social issues. The company is not only contributing to customers’ lifestyles through products, but is also addressing social issues through a number of CSR activities.

“nepia 1,000 Toilets Project” initiative

The “nepia 1,000 Toilets Project” is a project launched in conjunction with UNICEF in 2008, the International Year of Sanitation, to improve toilet and water conditions in developing nations.

Each year the program sets a campaign period during which a portion of sales from specified Nepia products goes to support UNICEF’s water- and sanitation-related aid activities in Asia’s youngest nation, Timor-Leste (East Timor). Activities focus on supporting the creation of household toilets, maintaining toilet and water facilities in schools, and promoting sanitary habits, all with the aim of protecting the lives and health of children and their families.

The project managers at Oji Nepia visit Timor-Leste every year to observe and report on local sanitary conditions, and take action to make information on the region available in Japan. Oji Nepia newly established an in-house CSR support organization in 2010, and its members also traveled to Timor-Leste to observe conditions.



Comment from UNICEF, partner in nepia 1,000 Toilets Project

Jun Kukita

Representative, UNICEF office in Timor-Leste



I see firsthand how Timor-Leste, one of the youngest countries in the world, is making progress in areas such as sanitation, at the highest rate of speed in the world. I believe that is why aid is needed now. I am convinced that carrying on with this project will make even greater results possible.

Launching the “Poo Class”

“Excretion is a part of life and good health.” With that thought in mind, in 2007 we joined the Japan Toilet Labo in launching “Poo Class” to teach Japan’s elementary school children the importance of healthy bowel movements. The program has addressed about 1,600 students in 17 schools, and continues to this day. Comments from participating children include “Now I can go to the bathroom at school” and “I started eating vegetables for good bowel movements.” Such feedback lets us know that as a company we are doing something for society, and actually formed the impetus for starting the nepia 1,000 Toilets Project.



Start of “nepia GENKI ! supports Japan CliniClowns Association”

With a desire to send cheer to bedridden children, from 2010 we have begun supporting the Japan CliniClowns Association through a portion of the sales from our nepia GENKI! disposable baby diapers. The funds support the activities of the “CliniClowns” who use fun and humor to bring smiles to children who are staying in hospitals.





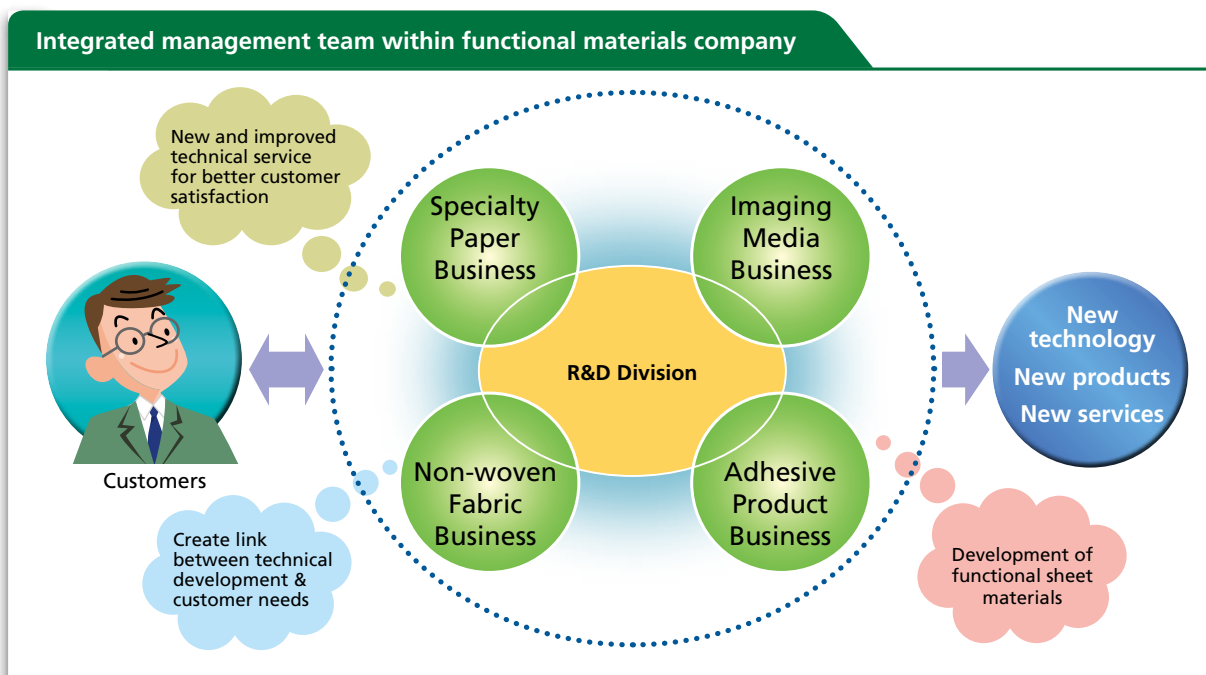
Functional Materials Company Initiatives

Developing new products using our long-standing technical and development competencies

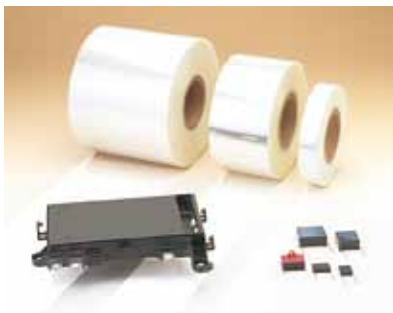
◆ R&D-based new product proposals

The Functional Materials Company advances new products, technologies, and services to meet customers' needs. In doing so it makes use of the Oji Paper Group's technological and development competencies in a wide range of fields.

Demands for environmentally-friendly products and materials continue to grow. All of the Oji Paper Group businesses work as one with our research and development division to develop products with low environmental impact.



Film material for capacitors



Oji Specialty Paper Co., Ltd. manufactures film material for the capacitors used in hybrid cars.

Hybrid cars employ a system that converts the engine's motive energy into electrical energy which is stored in batteries, and then converts the electrical energy into motive energy. Capacitors are essential in ensuring the stable flow of electricity into and out of batteries.



Elements for total heat exchangers



What is a total heat exchanger?

The total heat exchanger element embedded in ventilation equipment is essentially the heart of the system. It uses specialty paper as a medium to draw out and displace heat energy from the air, improving air conditioning efficiency.

Oji Specialty Paper Co., Ltd. manufactures the liner used in the heat exchange elements of total heat exchangers.

Liner from Oji Specialty Paper and flute from Oji Paper are processed by Oji Chiyoda Container Co., Ltd. in China, an example of the Oji Paper Group's integrated business model for material processing.



China Business Initiatives

Deepening exchanges environmentally and socially as well as economically, through business activities in China



Image of completed mill

◆ Overview of the new Jiangsu Oji Paper Nantong Mill

The new flagship Nantong Mill of the Oji Paper Group's China business is under construction along the Yangtze River in Nantong City, Jiangsu Province, about 100 km from Shanghai. Construction began in February 2008. Following the completion of berths, water and effluent treatment facilities, the power generation plant, and installation of papermaking and coating machines, commissioning began in May 2010. Current plans call for annual production of 400,000 tons of coated

paper and uncoated wood-free paper. The mill is also equipped with the latest in environmental equipment to meet China's environmental regulations.

More than simply the latest in technological equipment, though, we are also transferring to the mill the environmental management and product safety expertise built up through long experience in our Japan operations.



Berth during loading operations



First papermaking machine



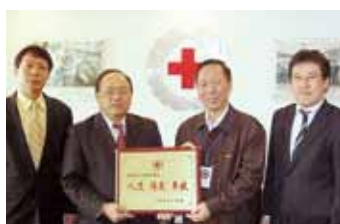
400 local workers actively listening to lecture

◆ Contributions to local communities by the Oji Paper Group

The Oji Paper Group currently has 15 local companies and 4 offices in China. As a group, we are pursuing various contribution activities on behalf of local communities.

Qinghai (Yushu) Earthquake Relief Fund

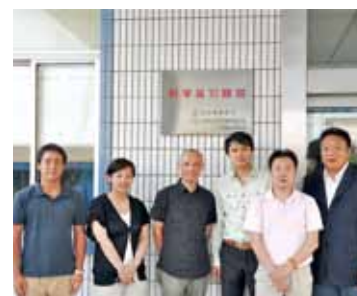
Following the earthquake that struck Yushu, Qinghai Province, on April 14, 2010, Oji Paper and employees of the Oji Paper Group in China made donations for reconstruction through the Jiangsu Province Red Cross. Similar donations were made after the 2008 Sichuan earthquake.



Commendation from the Jiangsu Province Red Cross

Promotion of academic exchanges

To help train print designers and to spread the concept of paper bags using recycled paper, in July 2009 Shanghai Eastern Oji Packaging Co., Ltd. cooperated with Shanghai Theatre Academy to set up learning and training sites within the company grounds. Here students from the Shanghai Theatre Academy gain hands-on experience and knowledge about the design and manufacture of 100% recycled paper bags.



Representatives from Shanghai Eastern Oji Packaging and Shanghai Theatre Academy

Message from the
Mayor of Nantong

Mayor Ding

Nantong Municipal People's Government

Despite the impact of the global financial crisis, Oji Paper is pressing ahead with construction of its largest overseas investment project ever, the new Jiangsu Oji Paper Nantong Mill. This project, an expression of the company's unwavering confidence in the Chinese market, continues to receive the welcome and support of the Nantong Municipal People's Government.

The mill will begin commercial production of high-quality paper in 2010 and will start running pulp production lines in 2013. We sincerely wish for Oji Paper's Nantong venture to continue recording new successes day by day. Toward the growth of the project the Nantong Municipal People's Government will provide close, quality service, and continue to create a favorable environment for further development.



Mayor Ding (right) and Oji Paper Co., Ltd. President Shinoda



Mayor Ding and President Shinoda presenting papers to commemorate commissioning



Mill tour

voice

Cultural contribution activities in China

Fang Liang

Winner of the art contest sponsored by Guangxi Oji Plantation Forest (CPFL), Xinxiu School in Jingkou Town, Bobai County

Our school has no art classes. Thanks to this opportunity provided by CPFL, for the first time I learned the joy of drawing. My school grades aren't so great, and there is nothing in particular that I'm good at—until now! By working hard at something I'm good at, I can get a better grade than others and win awards! Through this contest, I feel I have discovered hope for that sort of life.

- Every year, CPFL provides art supplies to elementary and middle school children and sponsors the art contest.



Fang Liang (center)