

Oji Group
Environmental and
Sustainability Report
2012



Editorial Policy

The Oji Group publishes this Environmental and Sustainability Report to broaden stakeholder understanding of its business activities. Feedback provided by readers about this report is used to continually improve our corporate behavior and activities.

The features of the 2012 version of this report are as follows.

- (1) In conjunction with the shift to a pure holding company system, we have taken further steps to emphasize the relationship between our business activities and social responsibilities.
- (2) We organized this report in relation to the core subjects of ISO26000 given the heightened awareness of this international standard on social responsibilities.
- (3) We have included specific initiatives in line with our Environmental Charter and Environmental Action Program 2015 to further address the critical task of environmental management.

The information in this report is also available on our corporate website.

Coverage of This Report

This report covers Oji Holdings Corporation and its Group companies both in Japan and overseas.

* Company and department names used in this report are those current as of October 1, 2012.

Period of Coverage

April 1, 2011 – March 31, 2012

Except for numerical data, some sections may contain activities from April 2012 and later

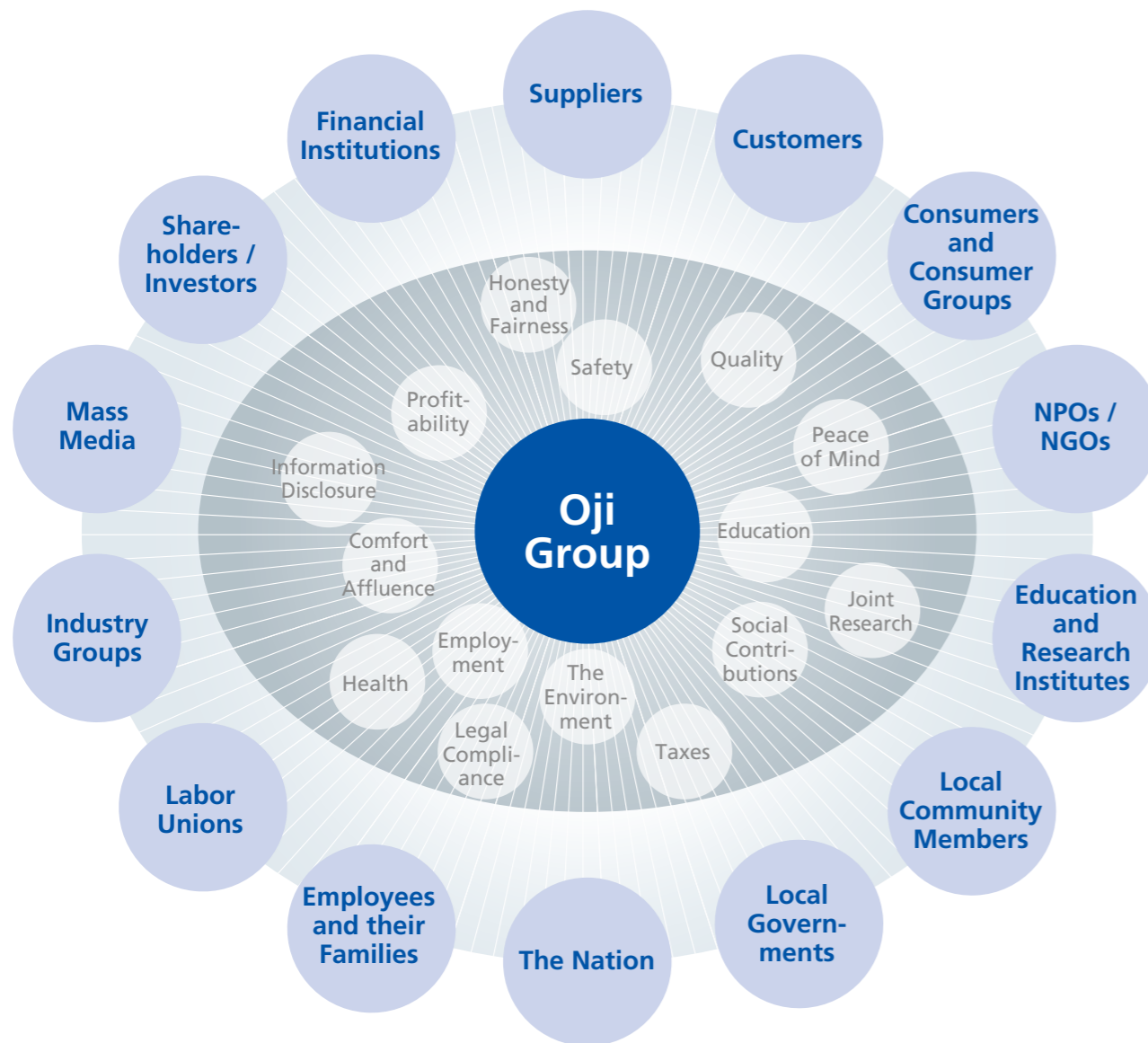
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◆ Relationship of Trust with Stakeholders



Utilizing Feedback from Employees

After publishing the 2011 edition of its Environmental and Sustainability Report, the Oji Group held briefings at each of its worksites to encourage more environmental initiatives at the Group. A questionnaire was also circulated at these briefings to help us improve future reports. A total of 21,242 responses were received, representing a response rate of 99%. This report was prepared based on the valuable feedback provided by our employees, which represent an important stakeholder in the Oji Group.

◆ Requests and Improvements (Excerpts from write-in responses)

Requests for Published Content	Improvements in This Report
Make the location, business description and products of each Group company and worksite more apparent.	This information is provided in the <i>Overview of the Oji Group and Business Portfolio Restructuring</i> sections. See p8-p26
Provide more details on our forest recycling as well as global warming and energy measures and policies.	More in-depth information is provided in the <i>Promotion of Forest Recycling and Promotion of Global Warming Countermeasures</i> sections. See p32-p43
Present a management policy on the expansion of the company both in Japan and overseas.	This is presented in the <i>Overview of the Oji Group and Business Portfolio Restructuring</i> sections. See p8-p26
Offer more in-depth information on new products, new technologies and environmentally-friendly products.	This is provided in the <i>Customer Relations</i> section. See p58-p61
Provide more details on the company's environmental initiatives, including results from Environmental Action Program 2015 and efforts to reduce environmental impacts.	This is provided in the <i>Our Commitment to the Environment</i> section. See p27-p51
Provide more details on the social contributions of worksites, such as assistance being provided to the earthquake and tsunami recovery effort.	This is provided in the <i>Community Relations</i> section. See p67-p70

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* Core Subjects of ISO26000

Fully Aware that Safety, the Environment and Compliance are Top Priorities, the Oji Group will Actively Seek Out Sustainable Growth Opportunities Following its Business Portfolio Restructuring

Preserving Our Original and Unique Corporate Philosophy

In the nearly 140 years since it was founded, the Oji Group has introduced the latest in cutting edge technologies and improved productivity in order to promptly and accurately respond to the changing needs of the industry as one of Japan's foremost paper manufacturing companies. Our commitment to always provide a stable supply of high quality products has helped us contribute to industrial development and improvements in people's lives.

Over the years, we have constantly striven to attain the ideals of ethical corporate management based on the union of morals and economics as well as the balance of ethics and profits found in the corporate philosophy of *the Analects of Confucius and the Abacus* expounded by our founder Eiichi Shibusawa.

However, our starch company and corrugated container company were subjected to on-site inspections by Japan's Fair Trade Commission in January and May 2012 as well as in June and September 2012, respectively, after it suspected that certain business dealings were in violation of Japan's Anti-Monopoly Act. We fully recognize the seriousness of these inspections and will take any steps, if necessary.

The Oji Group will return to its roots where management fully recognizes that safety, the environment and compliance take precedence over profits. We will instill this important belief in all of our employees as well as our executive management team so that Group companies can properly fulfill their responsibilities to society.

Business Portfolio Restructuring

The recent economic climate shows fiscal instability in the Eurozone, a stagnant United States economy, a slowdown in China's economic growth, while Japan is faced with the serious issues of yen appreciation, persistent deflation, downtrodden consumption, a decreasing birth-rate and aging population and the hollowing out of industry.

Given this environment, the Oji Group has positioned the following six basic measures as its fundamental management strategy. In implementing these measures, we will actively seek to promote structural changes in our business portfolio as well as focus more on our core competencies.

- | | |
|--|--|
| (1) Enhance global competitiveness through aggressive cost reduction | (4) Promote resources and environmental business |
| (2) Expand overseas business | (5) Establish material and process integrated business model |
| (3) Growth through incubating R&D oriented business | (6) Enhance trading business |

Transitioning to a Pure Holding Company Structure and Our Branding Slogan "Beyond the Boundaries"

As of October 1, 2012, Oji Paper transitioned to a pure holding company system, and started anew under the trade name Oji Holdings Corporation. The goal of this change is to maximize Group-wide management efficiencies. In other words, rather than employ a system where the head office centrally controls everything, we will be better positioned to realize an efficient corporate management system only after each of our Group companies formulates a management strategy and runs their own operations independently. This will clarify management's accountability and strengthen each company's business and management competencies. As a result, we decided to transition to a pure holding company structure.

In conjunction with this transition, we have also created the branding slogan "Beyond the Boundaries." This embodies the strong commitment of all Oji Group employees to reform their mindsets and move toward the future without being caught up in the conventional status quo.

Through this new organizational structure, the Oji Group will renew its commitment to prioritizing safety, the environment and compliance over all else as well as maximizing its corporate value and sustainable growth opportunities by moving forward into the future beyond the boundaries under various initiatives to restructure its business portfolio.

Kiyotaka Shindo
President and Chief Executive Officer
Oji Group



Corporate Philosophy

The Oji Group has inherited the philosophy expounded by its founder Eiichi Shibusawa in his vision *the Analects of Confucius and the Abacus*, which defines a union between morals and economics as well as a balance of ethics and profits. This belief forms the fundamental driving force behind our business as it is incorporated into our corporate philosophy. Our corporate code of conduct represents a crystallized version of this philosophy that defines a set of behavior standards that we abide by at all times.



- Relationship with Society**
 - 1. Compliance with Relevant Business Laws
 - 2. Environmental Conservation
 - 3. Ensuring Safety
 - 4. Sensible Action
 - 5. Wholesome Relationship with Politics and Government
 - 6. Severance of Relationships with Antisocial Groups and Organizations
 - 7. Coexistence with the International Community
- Relationship with Customers, Business Partners, and Competitors**
 - 8. Seeking a Relationship of Trust with Customers
 - 9. Maintenance of an Honest, Wholesome Relationship with Business Partners
 - 10. Compliance with Laws and Regulations Related to the Anti-monopoly Act and the Act Against Delay in Payment of Subcontract Proceeds Etc., to Subcontractors
 - 11. Prohibition of Unfair Competition
 - 12. Compliance with Laws and Regulations Related to Importing and Exporting
- Relationship with Shareholders and Investors**
 - 13. Disclosure of Management Information
 - 14. Prohibition of Insider Trading
- Relationship with Employees**
 - 15. Respect of Human Rights
 - 16. Ensuring Safety and Health in the Workplace
 - 17. Fulfillment of Duties and Self-development
- Relationship with the Company**
 - 18. Compliance with Company Rules
 - 19. Management of Company Secrets
 - 20. Appropriate Records and Accounting
 - 21. Appropriate Use of Computer Systems
 - 22. Maintenance of Company Assets
 - 23. Prohibition of Conflicts of Interest
 - 24. Prohibition of Political and Religious Activities in the Workplace
- Proactive Communication**
 - 25. Open Working Environment

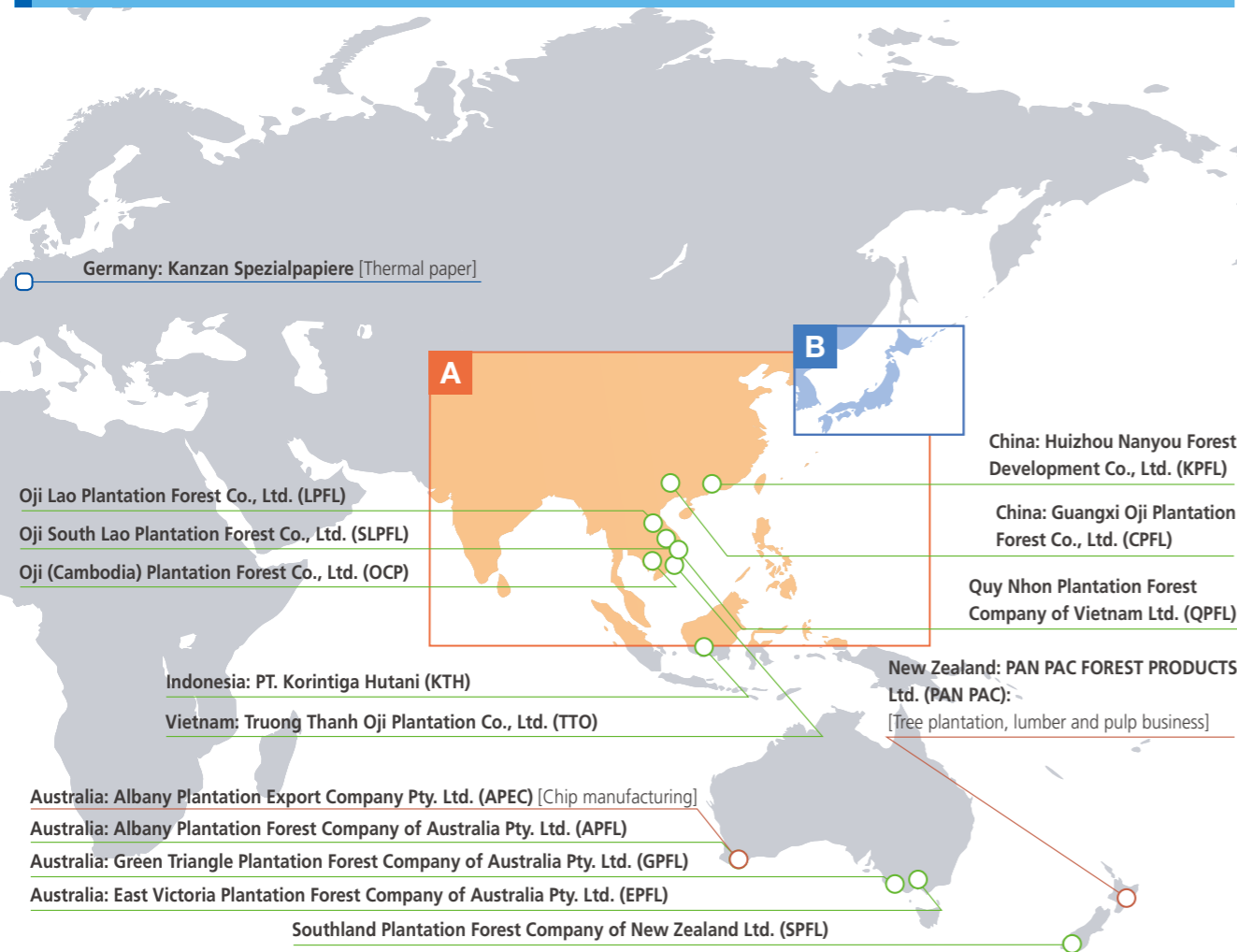
- 1. Compliance with the Law**
We will comply with the letter and spirit of the law in Japan and other countries, respect corporate ethics and all social standards, including common sense, and ensure that our business activities are fair and honorable.
- 2. Harmony with the Environment**
We will promote forest recycling and paper recycling and maintain and develop business activities that are in harmony with the environment from a global perspective.
- 3. Supply of Safe, Useful Products and Services**
We will contribute to society and culture by developing and supplying products that will allow us to gain the satisfaction and trust of customers, with proper consideration for usefulness and safety.

- 4. Communication with Society**
We will establish relationships of trust with all stakeholders, including customers, shareholders and local residents, through an active commitment to good communication with society.
- 5. Participation in Social Contribution Activities**
We will contribute to the development and improvement of society through active participation in social contribution activities.
- 6. Coexistence with the International Community**
We will respect the culture and customs of other countries and contribute to local communities.

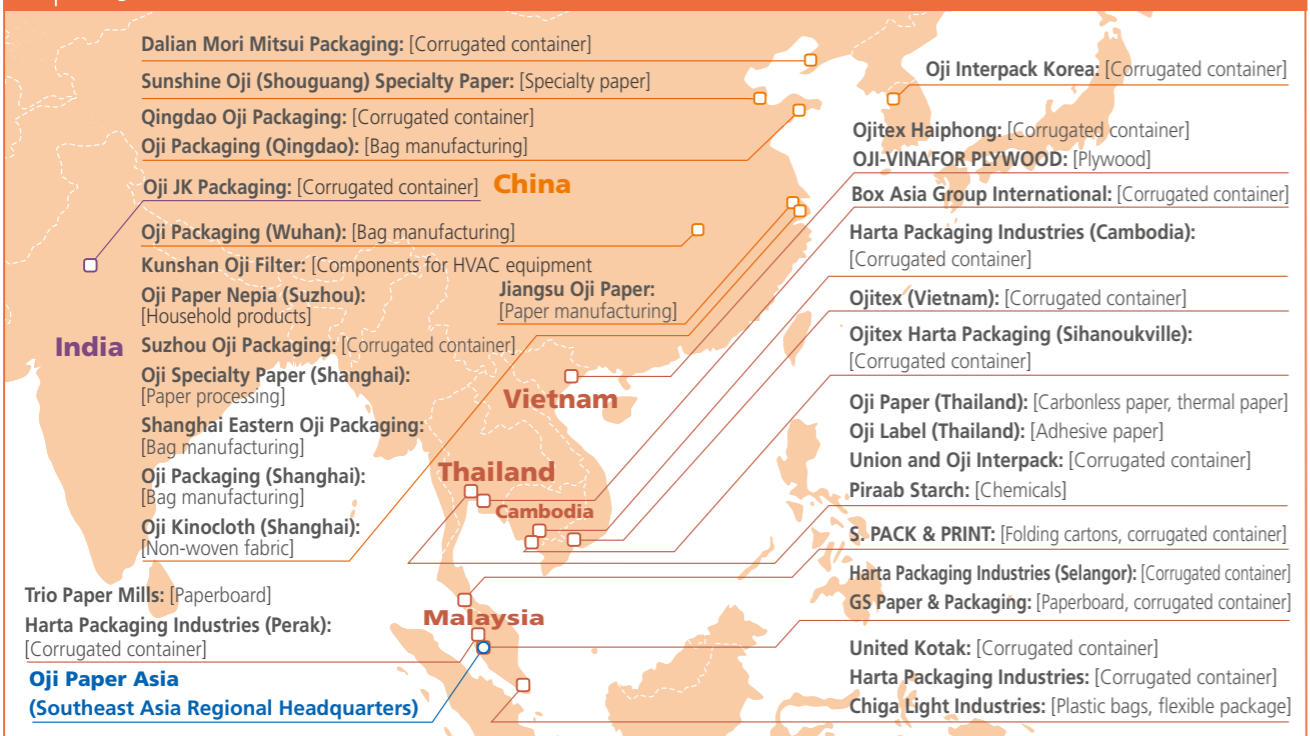
- 7. Contribution through Manufacturing**
We will express our pride in our role as a manufacturer by contributing to local communities through production activities guided by a commitment to safety and protecting the environment, and by contributing to the advancement of industry through technology development and innovation.
- 8. Achievement of Employee Satisfaction**
We will take all possible steps to ensure employee health and safety, and we will strive to give employees opportunities to achieve happiness and prosperity and realize their potential as individuals.

Overview of the Oji Group

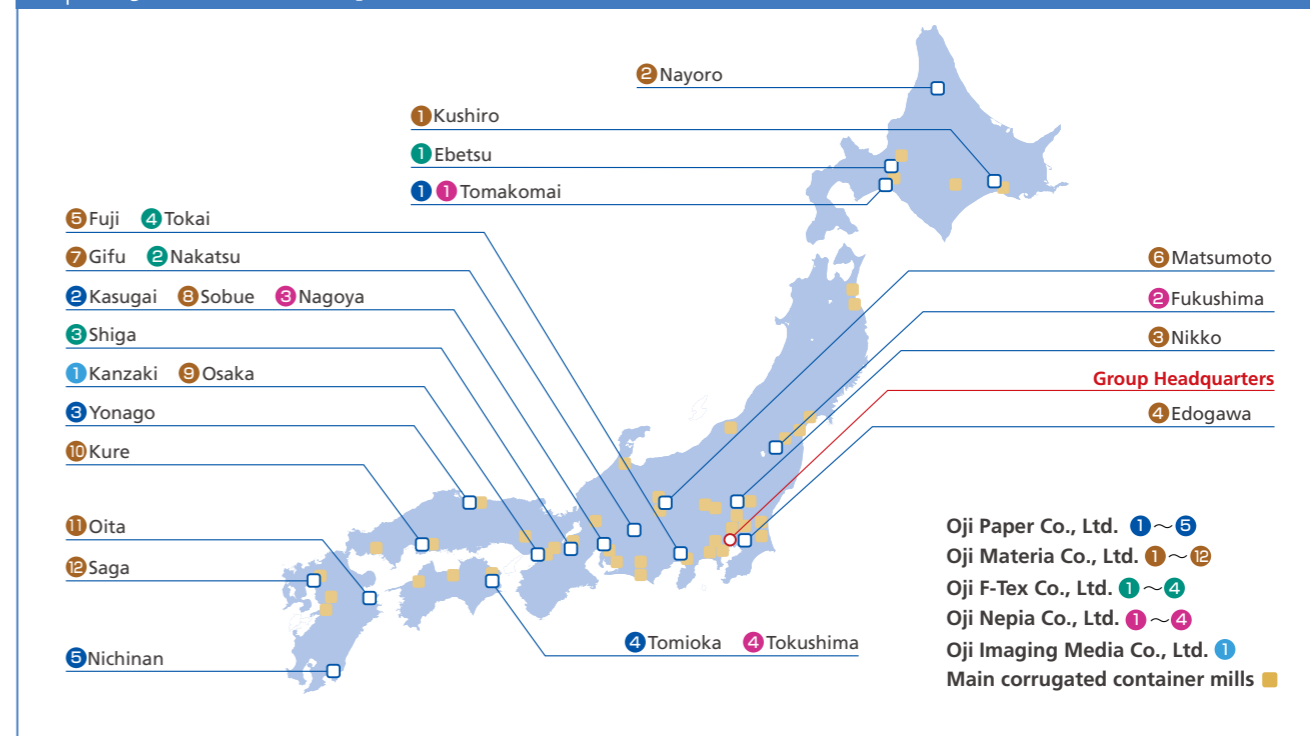
Operations in Japan, Asia, North America, Europe, Oceania and Latin America



A Major Mills in Asia



B Major Mills in Japan



Overview of the Oji Group

Name: Oji Holdings Corporation

Paid-in Capital: ¥103,880 million (as of March 31, 2012)

Headquarters: 4-7-5 Ginza, Chuo-ku, Tokyo 104-0061, Japan

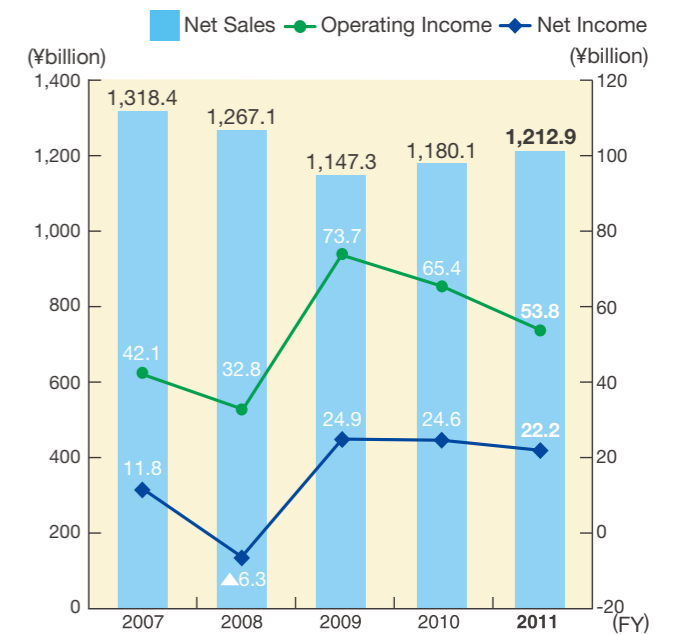
Established: August 1, 1949

Representative Director: Kiyotaka Shindo, President and Chief Executive Officer

No. of Consolidated Subsidiaries: 128 (as of March 31, 2012) (80 in Japan, 48 overseas)

No. of Employees: 24,683 on a consolidated basis (as of March 31, 2012) (17,613 in Japan, 7,070 overseas)

Net Sales, Operating Income and Net Income



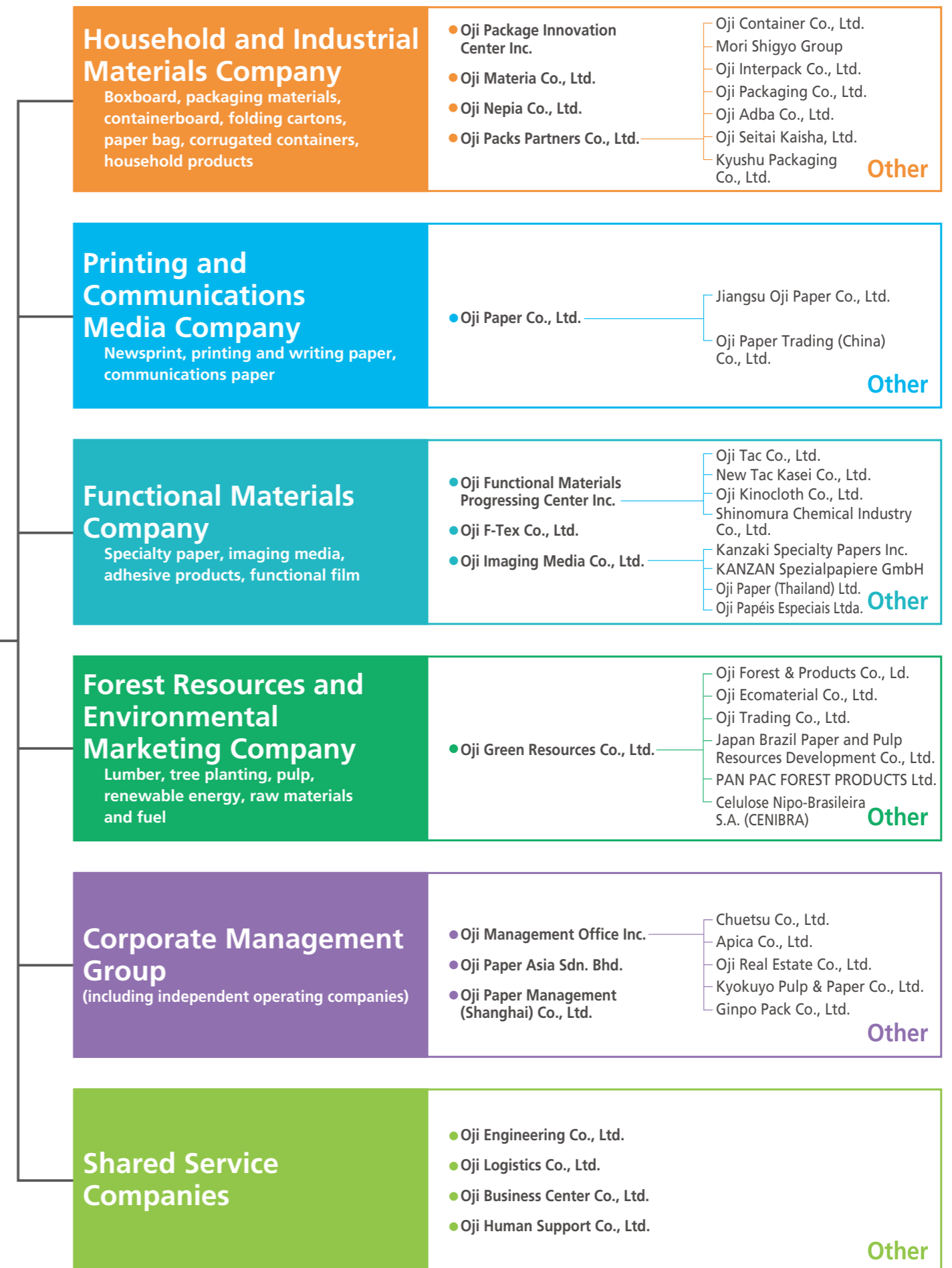
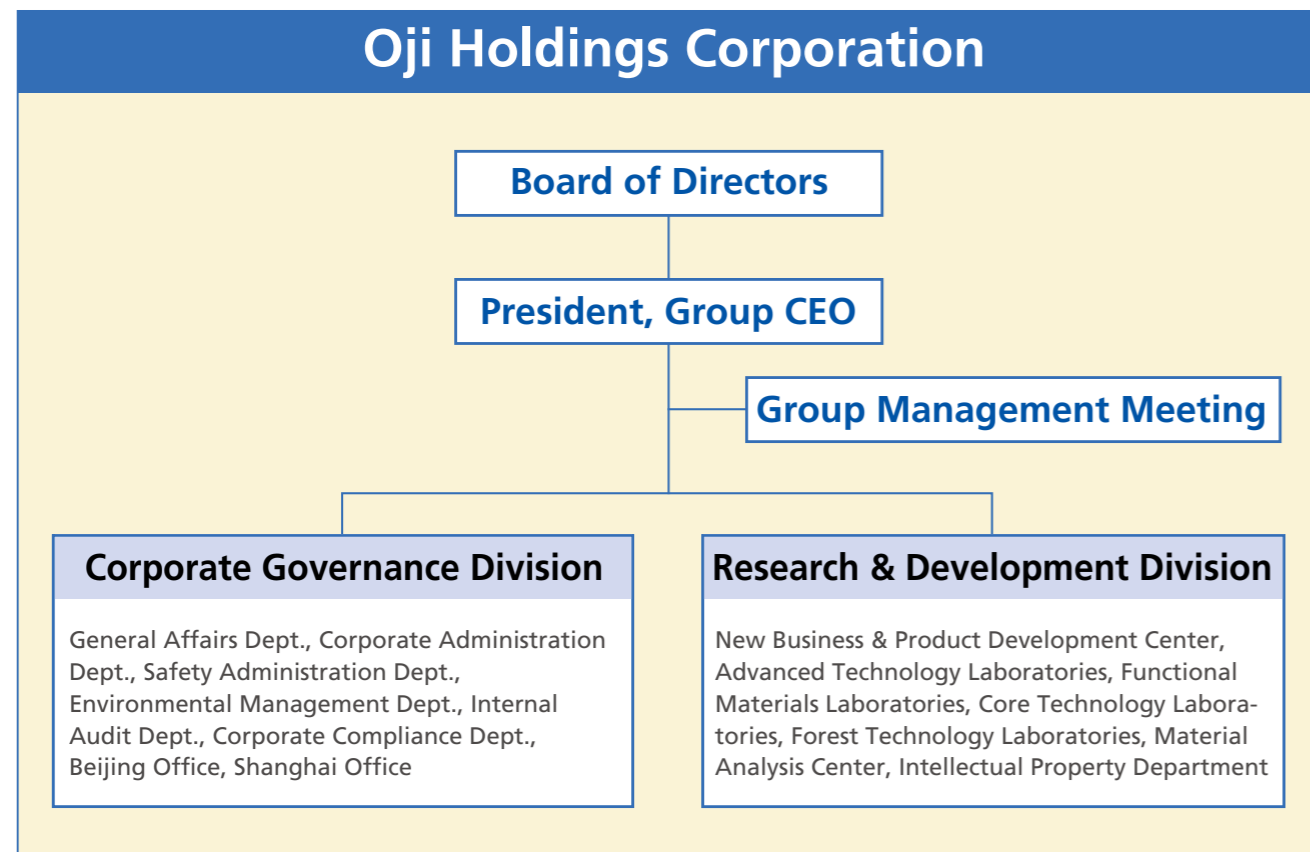
**[Overview of the Oji Group]
Transitioning to a Pure Holding Company Structure**

The Oji Group made the transition to a pure holding company structure on October 1, 2012. This structure better clarifies the management accountability of each of our Group companies, which will enable us to seek out sustainable growth opportunities as well as maximize corporate value.



Beyond the Boundaries

Boundaries here include business sectors, international borders, and the competencies of each and every employee. This branding slogan embodies our unwavering commitment to proactively transcend the conventional status quo as we make progress toward the future.

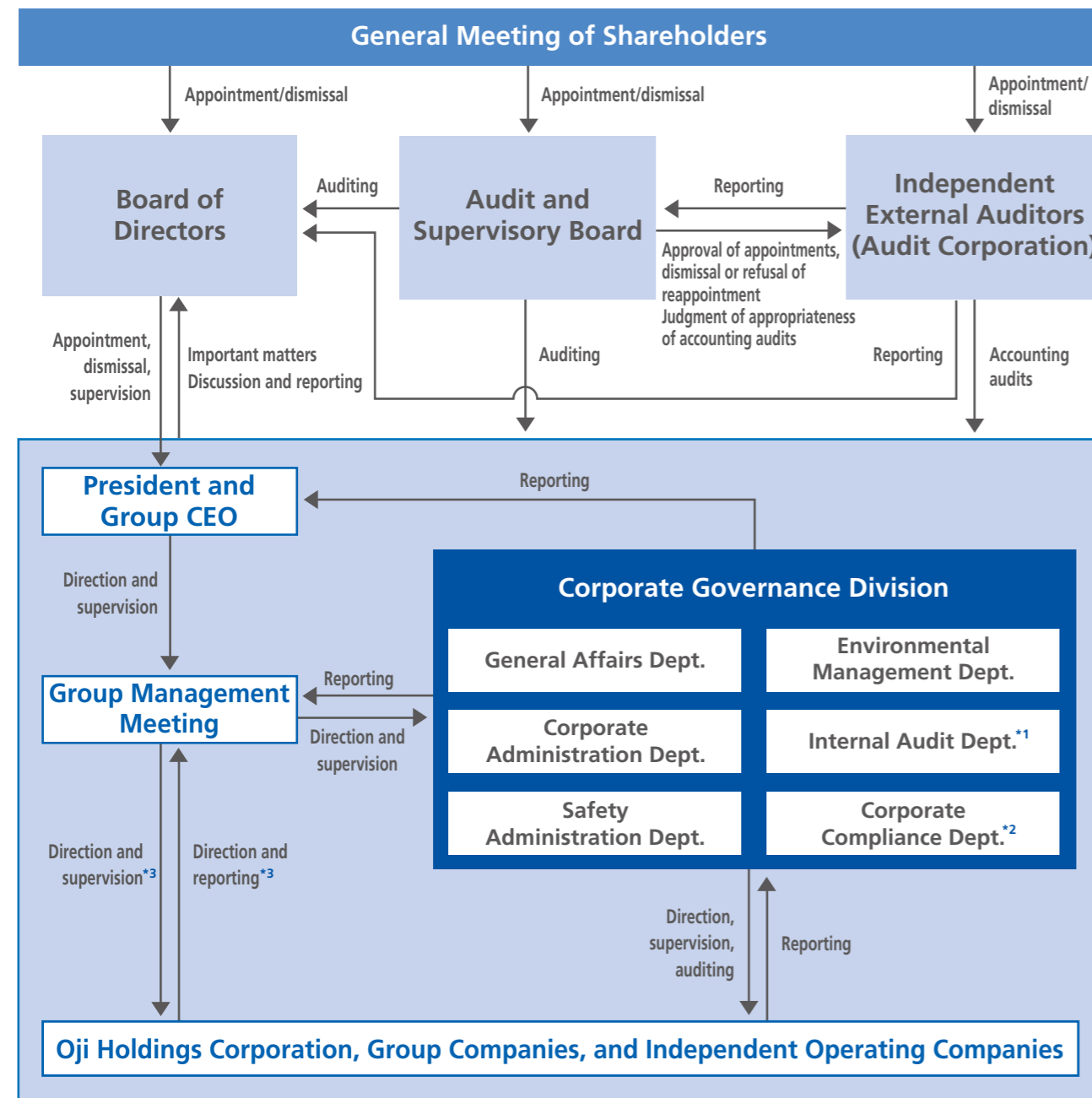


Corporate Governance System

Oji Holdings Corporation has established a Corporate Governance Division in order to guarantee the highest level of ethics, legal compliance, and proper risk management is practiced in all of its business activities by having all management executives and employees abide by our corporate code of conduct. [see p6](#) This division is also responsible for strengthening the governance of the entire Oji Group.

Under this new system, we will strive to become a company trusted by its stakeholders and that continually maximizes its corporate value by enhancing management efficiencies, soundness and transparency.

Corporate Governance Organization



*1 Also performs audits on each of Oji Holdings' business divisions

*2 Also holds compliance training for each of Oji Holdings' business divisions

*3 Deliberations and reporting held by Group Management Meeting members. Also receives direction and supervision.

Compliance Promotion System

Under the recognition that compliance-centered management is essential to business continuity and stable growth, the Corporate Compliance Department runs the compliance promotion program for the entire Oji Group, while the Internal Audit Department performs audits on the status of legal compliance. [See p52 for details](#)

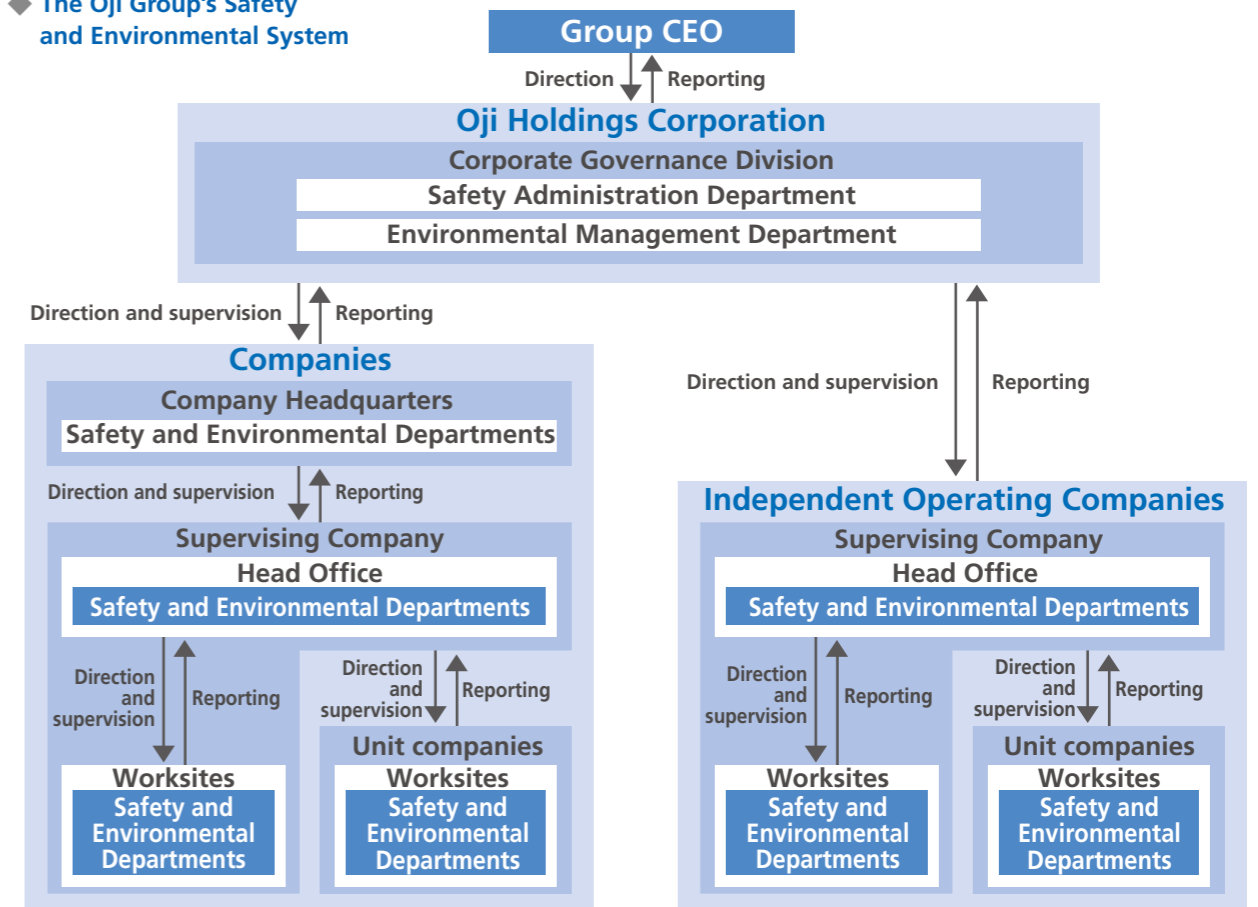
Safety Management System

The Safety Administration Department is in charge of overall safety management for the Oji Group. Under the fundamental philosophy of "safety is always first," the department conveys instructions and messages on safety to all worksites as part of its broader effort to ensure employee safety. [See p66 for details](#)

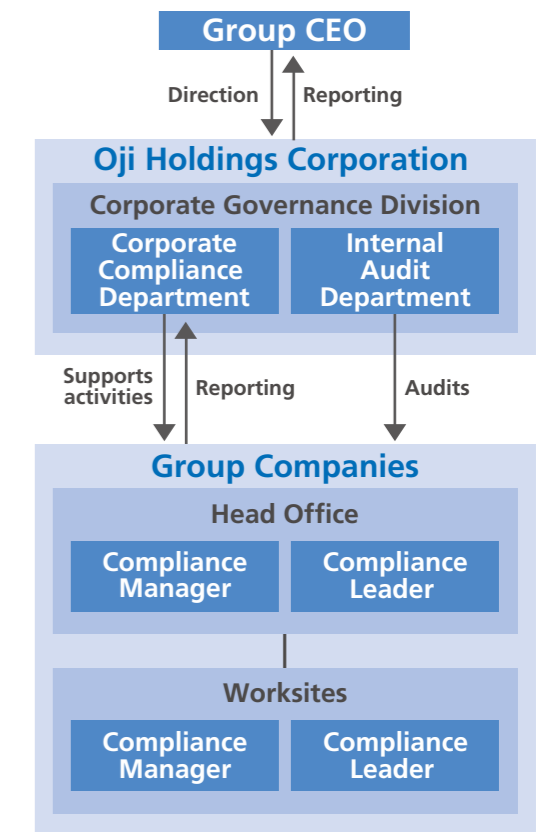
Environmental Management System

The Environmental Management Department is in charge of the environmental management of the Oji Group. This department collects information on environmental conservation and product safety from the Oji Group's companies and independent operating companies as well as provides appropriate and prompt guidance as part of its efforts to prevent environmental and product safety accidents. [See p27-51 and p56-57 for details](#)

The Oji Group's Safety and Environmental System



The Oji Group's Compliance Promotion System



Supporting the Group's Overseas Expansion

Safety, the environment and compliance are critical issues not only to the Oji Group in Japan, but also for all of its subsidiaries outside Japan. The Corporate Governance Division is committed to strengthening governance in conjunction with the acceleration of the Oji Group's overseas expansion.

Safety Management

The Safety Administration Department shares information on workplace accidents with all Group companies and ensures safety measures are rolled out accordingly. The department has also implemented on-site investigations and provided guidance on safety management and relevant countermeasures at sites in China and Malaysia since 2010.

Environmental and Product Safety Management

The Environmental Management Department implements environmental audits on worksites that impact the environment and product safety audits on worksites that manufacture products. In 2012, the department performed on-site audits at sites in China and Malaysia.



Equipment safety check (Harta Packaging Industries, Malaysia)

Compliance Promotion

The Corporate Compliance Department holds compliance training sessions and workplace compliance meetings to foster greater awareness among employees about the importance of legal compliance and corporate ethics.

Internal Audits

Audits on legal compliance are performed by corporate auditors and the Internal Audit Department. In addition to document audits, on-site audits were also implemented at a total of 11 companies in China and Malaysia during fiscal 2011.



Product safety audit (Harta Fleksipak, Malaysia)



Environmental audit (Harta Packaging Industries, Malaysia)



Workplace compliance meeting (Oji Paper Trading (China))

The Research and Development Division is responsible for making inroads into new businesses and strengthening the earnings base of existing businesses. It consists of the New Business and Product Development Center, four laboratories, the Material Analysis Center and the Intellectual Property Department. Each laboratory works closely with the research engineering departments of factories to develop new products and new technologies as well as help enhance productivity.



Joining Market Needs with R&D Seeds for Commercialization

New Business and Product Development Center

The New Business and Product Development Center was established to strengthen the Oji Group's development system for new businesses and products, which forms a critical measure under the Group's management strategy. The Center supports Group-wide development projects and encourages commercialization initiatives.



**[Overview of the Oji Group]
Research and Development Division**

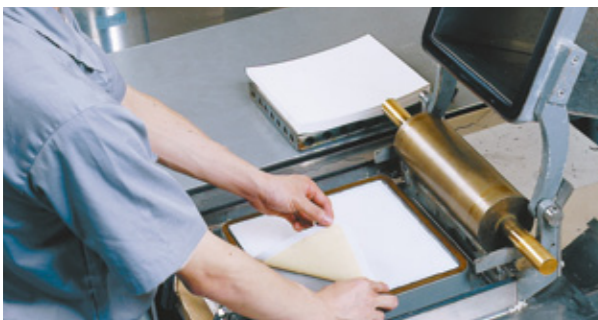
Advanced Technology Laboratories

The Advanced Technology Laboratories (ATL) researches and develops bioethanol, nanofiber cellulose,*1 and microscopic optical elements, with a focus on the use of nano-structures and creating new added value through the physical or chemical modification of wood materials. [see p25](#)



Core Technology Laboratories

The Core Technology Laboratories leverages Oji Group's long-standing pulp, paper manufacturing and coating technologies to enhance the competitiveness of existing products. It also creates fundamental technologies for resource conservation, new materials and environmental countermeasures.



Material Analysis Center

The Material Analysis Center develops new proprietary analysis and assessment technologies using cutting edge analysis equipment and paper quality assessment devices. As the sole materials analysis center of the Oji Group, it works closely with other divisions to help provide support and solutions.

- *1 **Nanofiber cellulose** Pulp raveled into microscopic fibers with a diameter of 30nm (one nanometer equals one millionth of a millimeter)
- *2 **Superior clones** Using cuttings to increase the number of fast-maturing trees
- *3 **Biomarker technologies** Technology that identifies useful biological information for determining growth qualities from the genetic information of tree species and uses it to quickly diagnose the heritable nature of plantation trees.

Functional Materials Laboratories

Leveraging the Oji Group's core sheeting and coating technologies, the Functional Materials Laboratories develops a wide range of functional sheets as well as works to reduce the cost of existing products and guarantee both quality and stable operations.



Forest Technology Laboratories

The Forest Technology Laboratories develops and evaluates new superior clones*2 that can be used in lumber, timber and pulp for promoting the total forestry business in Southeast Asia. It also develops biomarker technologies*3 and frontline applications to quickly secure superior clones and promptly perform assessments on the right tree species for each plantation.



Intellectual Property Department

The Intellectual Property Department safeguards the intellectual property rights of novel technologies, new products and new services developed by each company of the Oji Group using patents, utility model patents, design patents and trademarks. This work enables the profitable expansion of the Oji Group.

**[Overview of the Oji Group]
Household and Industrial Materials Company**



We will strengthen our earnings power further by focusing on creating value sought after by our customers and standing by our customer-first motto.

Takashi Ishida
Company President

Business Strategy

In Japan, we offer comprehensive solutions to our customers and are in the process of expanding and reorganizing our paper processing departments in the industrial materials business. In our household materials business, we are working to strengthen our paper diaper business and to rebuild our brand. Outside of Japan, we are proactively expanding our packaging business through M&A and site expansions. Moving forward, we are aiming to accelerate our expansion in East Asia, including India.

Business Overview



Boxboard, Packaging Materials and Containerboard

The Oji Group retains a leading share of the Japan market for three paper types. This market includes boxboard (over 40%), which is used for food and confectionery packaging and coversheets of publications, packaging paper (over 30%), which is used in shopping bags, envelopes, wheat, barley and cement bags, and containerboard (over 25%). This demonstrates that over the years we have earned the trust of the market.



Folding Cartons, Paper Bags and Corrugated Containers

Product packaging has evolved with the times and now demands such value added features as design, functionality and environmental performance. As a total packaging company that engages in every step of the value chain, from materials manufacturing to design and assembly, we take a customer-centric approach to continually provide better products to customers across Japan through our extensive network.



Household Products

We deliver household paper products to consumers, such as tissue, toilet paper and paper diapers, under the well-known Nepia brand. Under the slogan of "Kind Heart Nepia," we provide products that are beloved by all ages alike so that we can help consumers lead a comfortable lifestyle.

[Overview of the Oji Group]
Printing and Communications Media Company



We will modify our business portfolio to respond to the maturation of the Japan market and the integration of East Asia markets.

Tadashi Watanabe
 Company President

Business Strategy

Increased paper imports from China, Indonesia, and Europe have helped to globalize the Japan market, but also expose it to intense competition from paper manufacturers both in Japan and abroad. The Printing and Communications Media Company is currently moving forward with comprehensive cost reductions and taking steps to boost sales in order to beat out its competition.

Business Overview



Newsprint

Newsprint has the strength to undergo the rigors of high speed rotary printing and provides beautiful finishes to color printing. The Oji Group retains a 30% share of the Japan market and it continually strives to improve quality in order to meet the demands of newspaper companies from throughout Japan.



Printing and Writing Paper

Publication paper used for books and magazines and printing paper for catalogues and manuals require varying types of quality depending on the publication, contents, and specifications of the printer. The Oji Group strives to develop products that meet the needs of today and is expanding its lineup to fulfill the expectations of its customers.



Communications Paper

We have developed numerous new products, including conventional form paper, carbonless paper, optical character recognition (OCR) paper, plain paper copier (PPC) paper as well as high performance printing paper for printing on demand (POD). Our paper is widely used by countless industries and sectors as printing media for information processing systems.

[Overview of the Oji Group]
Functional Materials Company



We will focus our management resources on business portfolio restructuring, create a development-focused business model where we develop new customer-centric products and technologies, and cultivate new businesses leveraging our core technologies.

Takeshi Azuma
 Company President

Business Strategy

In Japan, we will create an R&D-focused business by establishing a fast-paced development framework for new products and technologies using a three-pronged approach involving the Functional Materials Company, Research and Development Division and New Business and Product Development Center. Internationally, we are among the world leaders in the imaging media field which includes thermosensitive materials, and going forward, we plan to step up our expansion primarily in key growth and resource countries.

Business Overview



Specialty Paper

The Functional Materials Company carries a wide range of advanced specialty papers. These include printing tissue paper for dictionaries, highly expressive fancy paper, electronic material papers such as insulation for high capacity inverters, carrier tape used for the shipment and storage of semiconductors and microchips, dried pulp non-woven fabric that is bulky and highly water retentivity, and glass paper used in construction materials and fiber-reinforced plastic (FRP) that is combined with resin to provide highly stable dimensions and heat resistance.



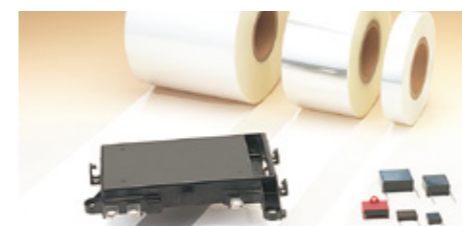
Imaging Media

The Oji Group's thermal paper retains a leading market share internationally. Using our diverse coating technologies for thermal and ink jet applications, we are developing a wide range of communications paper and films that fulfill the varying needs of households, industry, logistics and medicine.



Adhesive Products

Using our long-standing proprietary adhesive control technologies, we have developed an extensive lineup of products that spans from food and beverage labels, home delivery service labels, adhesive tape for packaging and adhesive plaster to aluminum tape for construction applications and tamper-resistant tape.



Functional Film

Our capacitor film is an important material used on the power-supply unit of hybrid and electric vehicles, and our lineup starts from the world's thinnest at 2.5µm. Our non-carrier film^{*1} and hard coat film^{*2} used in smartphones have seen rapid growth as of late.

*1 Non-carrier film

A transparent adhesive film applied to various touch panel screen components.

*2 Hard coat film

A scratch resistant hard film used to also prevent glass from shattering when broken.

**[Overview of the Oji Group]
Forest Resources and Environmental Marketing Company**



The Oji Group will make full use of the forest resources it owns both in Japan and overseas as well as its long-standing proprietary paper manufacturing related technologies to aggressively expand existing businesses and enter into new segments.

Gemmei Shimamura
Company President

Business Strategy

In Japan, we will move forward with the renewable energy business and biorefinery business as well as continue to encourage the acquisition and sale of offset credits (J-VER; [see p32](#)). Internationally, we will continue to build on our total forestry business by developing resources and environmental businesses derived from various processes, from tree sourcing to paper manufacturing.

Business Overview



Lumber and Tree Planting

In the lumber business, we will proactively expand our timber processing and commodities business through Oji Forest & Products, PAN PAC and KTH. In the tree planting business (company-owned domestic forests and overseas plantations), we will enhance the value of our plantation trees by increasing sales for high value-added applications outside of pulp, such as lumber.



Pulp

We maintain global pulp operations through PAN PAC and CENIBRA, which we made a consolidated subsidiary in fiscal 2012, and we are looking to expand our operations going forward. In addition to conventional pulp production, we are also looking to commercialize new pulp applications, such as dissolving pulp.



New Businesses (Renewable Energy and Agribusiness)

Japan's energy sector is undergoing great change, as evidenced by calls to end the country's dependence on nuclear power and the advent of the renewable energy feed-in tariff system. We aim to enter new energy ventures, such as photovoltaic and biomass boiler power generation and make these businesses profitable quickly.



Purchasing Raw Materials and Fuel

Prices of various materials have gone up with the economic growth seen in emerging countries. With this in mind, we will centralize Group-wide purchases to pursue a more cost efficient procurement program.

**[Overview of the Oji Group]
Independent Operating Companies**

Apica Co., Ltd.

Apica is an integrated paper stationery manufacturer engaged in a wide range of businesses, from school supplies such as notebooks and workbooks to office supplies, daily commodities, and hobby supplies. The company's "Premium C.D. NOTEBOOK" won an award under the Function Category at the 21st Stationery of the Year Awards 2012.



Chuetsu Co., Ltd.

—Fulfilling the "Wants" of Customers—
Chuetsu plans and manufactures a broad mix of printing solutions, including high-value added proprietary products made with high quality block-less digital printing. The company's long-standing technologies, expertise and ICT knowledge ensure that it is aptly positioned to achieve future growth.



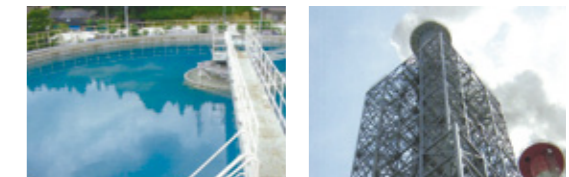
Oji Scientific Instruments Co., Ltd.

Oji Scientific Instruments is a manufacturer of analytical instruments that are developed with technologies derived from the research of paper. The optical birefringence analyzer can rapidly determine the orientation angle and birefringence of transparent films, and biosensors can also quickly measure key biological components such as sugars and amino acids, among others. These instruments are used widely in the production of flat-panel displays, pharmaceuticals research and quality control, and microbial fermentation.



Oji Engineering Co., Ltd.

Oji Engineering is responsible for the Oji Group's engineering needs, which span from basic facility design to materials procurement, construction and trial operations. It also provides solutions to other companies as an integrated engineering firm thanks to its technical skills and expertise in the construction and operation of paper and pulp mills as well as power and environmental facilities.



Oji Logistics Co., Ltd.

Oji Logistics ships Oji Group products nationwide in Japan using a wide range of modes and warehouse facilities. It also uses its wide ranging capabilities to provide safe, low-cost, reliable and speedy logistics solutions to other customers outside the Oji Group.



Oji Real Estate Co., Ltd.

Oji Real Estate manages and maximizes the use of land owned by the Oji Group. It also has a nationwide presence as an integrated developer engaged in condominiums, detached homes, subdivisions, office building and condominiums leasing, as well as condominiums and retail facility management.



Business Portfolio Restructuring

We will aim to complete our business portfolio restructuring program under the branding slogan "Beyond the Boundaries."

Demand for paper and paperboard in Japan is waning, while paper imports have risen, resulting in a challenging operating environment for Japan's paper industry. The Oji Group is working to complete its business portfolio restructuring program by focusing its management resources on international and domestic operations in key growth markets and areas. We are also working to establish a sound base for our existing businesses, develop new products and businesses as well as strengthen our competitiveness.

For additional details, please visit: <http://www.ojiholdings.co.jp/english/ir/strategy/index.html>

Management Targets	Operating Income: Over ¥100,000 million
	Net Profits: Over ¥50,000 million

	2011 Results	2012 Projections	2015 Forecast	2017 Targets
Net Sales	¥1,212,900 million	¥1,260,000 million	¥1,400,000 million	¥1,500,000 million
Operating Income	¥53,700 million	¥58,000 million	¥90,000 million	¥100,000 million

Six Measures Aimed at Business Portfolio Restructuring

1 Enhance global competitiveness through aggressive cost reduction

- Restructure production system in Japan
Facility shutdowns since 2008: 15 paper, 1 paperboard, 2 specialty papers (including plans)
- Implement further fundamental earning improvement measures
Terminate production of low-margin products and shift to high margin products as well as merge and reorganize Oji Group businesses
▶ Mill closures (bold production system restructuring)

2 Expand overseas business

- Accelerate expansion in both growth and resource countries, and take aggressive approach to expansion using M&A
Accelerate overseas expansion of packaging, functional materials and resource businesses
Focus areas: India, Southeast Asia and Latin America (Brazil)

See p23

3 Growth through incubating R&D oriented business

- Develop and expand line-up of functional material products
Example: Functional sheeting and films (for touch panels and capacitor films)

See p24 and p61

4 Promote resources and environmental business

- Expand operations, from upstream to downstream, in resource segments
Example: Total forestry business, biorefineries, renewable energy

See p25, p32 and p43

5 Establish material and process integrated business model

- Strengthen earnings base of existing growth businesses
Strengthen and promote care support and packaging businesses

See p25 and p58

6 Enhance trading business

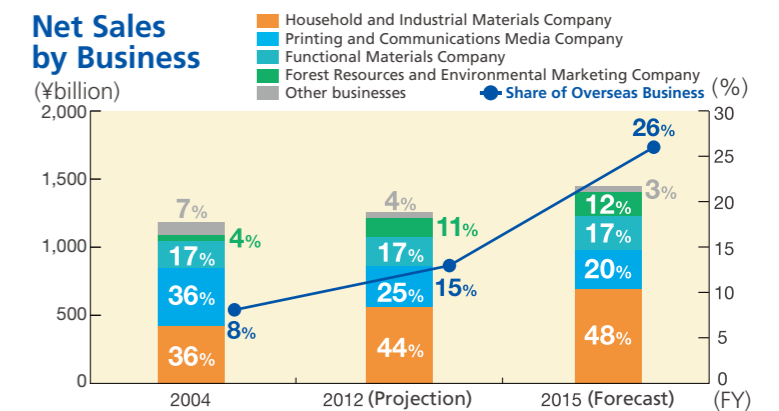
- Make Kyokuyo Pulp & Paper Co., Ltd. a subsidiary
Shift paper and pulp sales functions of Oji Trading to Kyokuyo Pulp & Paper

See p26

Expand Overseas Business

We will accelerate our expansion in both growth and resource countries.

We are expanding our overseas business in the new focus areas of India and Latin America (Brazil), in addition to our existing concentration on Southeast Asia.



Overseas Business Expansion

2010	<ul style="list-style-type: none"> Began management participation in PT. Korintiga Hutani (KTH) Acquired GS Paper & Packaging Acquired United Kotak 	Indonesia Malaysia Malaysia
2011	<ul style="list-style-type: none"> Acquired S. PACK & PRINT Acquired Harta Packaging Group <ul style="list-style-type: none"> *Harta Packaging Industries Trio Paper Mills Chiga Light Industries Established Truong Thanh Oji Plantation Co., Ltd. (TTO) Acquired Oji Papéis Especiais Added adhesive laminator at Oji Label (Thailand) 	Thailand Malaysia, Cambodia Malaysia Malaysia Vietnam Brazil Thailand
2012	<ul style="list-style-type: none"> Constructed new mill at Oji Packaging (Qingdao) Constructed new mill at Oji Packaging (Wuhan) Made CENIBRA a consolidated subsidiary Established OJI-VINAFOR PLYWOOD Established Oji JK Packaging Launched BCTMP* production at PAN PAC Acquired Box Asia Group International Launched new tree plantation in Cambodia 	China China Brazil Vietnam India New Zealand Thailand Cambodia
2013	<ul style="list-style-type: none"> Start operations at new paperboard mill in Vietnam Start operations at new paperboard mill in Cambodia 	Vietnam Cambodia

Household and industrial materials business Functional materials business
Forest resources and environmental marketing business

Expand Business in Latin America with Focus on Brazil

Oji Papéis Especiais (OPE)

OPE manufactures thermal paper and carbonless paper. The acquisition of OPE has provided our imaging media business with a fifth production and sales network, following our existing presence in Japan, Asia, North America and Europe. The Oji Group retains a second leading share of the global thermal paper market. Moving forward, we will move to strengthen our global network and agilely respond to growth in demand.



CENIBRA

We acquired additional shares of Japan Brazil Paper and Pulp Resources Development Co., Ltd. and made its pulp manufacturing subsidiary CENIBRA a consolidated subsidiary of the Oji Group. CENIBRA produces some 1.2 million tons of hardwood craft pulp each year, which it sells not only to customers in Japan, but also around the world including in Europe and North America. Going forward, we plan to aggressively expand its footprint as a key hub for the forest resource business in Latin America.



*BCTMP

An acronym used for bleached chemithermomechanical pulp made from crushed chips that are chemically treated and warmed. It is used as a raw material in boxboard and printing paper.

Growth through Incubating R&D Oriented Business

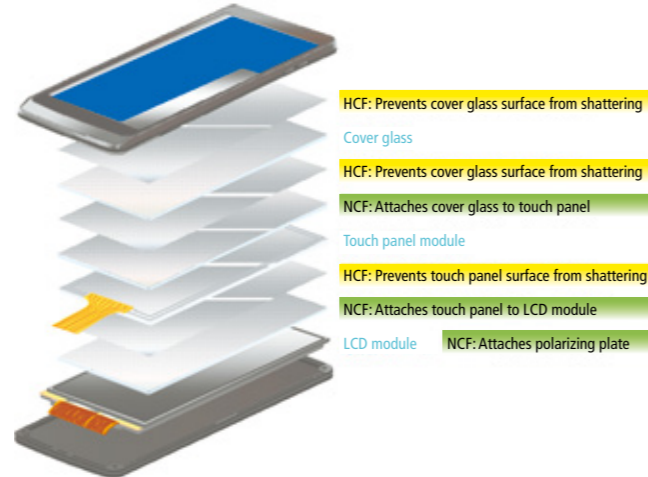
We are working closely together with the Functional Materials Company and Research and Development Division to develop and expand our line-up of products.

Optical Film

Films for smartphones

Our hard coat films (HCF) used to prevent cover glass from shattering and our double-sided adhesive sheeting (or non-carrier films; NCF) for optical applications have been adopted by smartphone manufacturers.

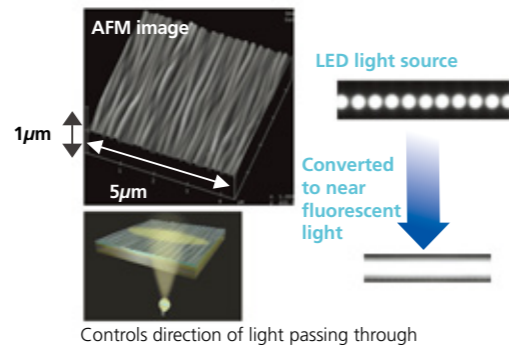
Examples of Oji Group materials used in smartphones



Nano-buckling

We have commercialized a film with wave-like micro topographic structures on the surface. This film controls the direction of light passing through and can transform LED and other point light sources into near fluorescent light.

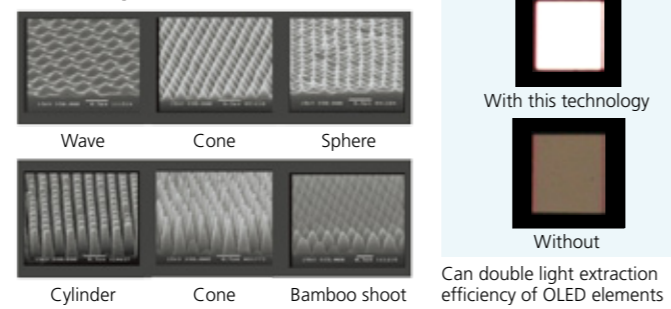
Nano-buckling structure (Structural period: 200nm; height: 100nm)



Nano-dot array

We have used our specialty coating technologies to develop a novel technology to create fine dot structures on the surface of materials. This technology can be used to double the light extraction efficiency of OLED elements.

Examples of fine dot structures

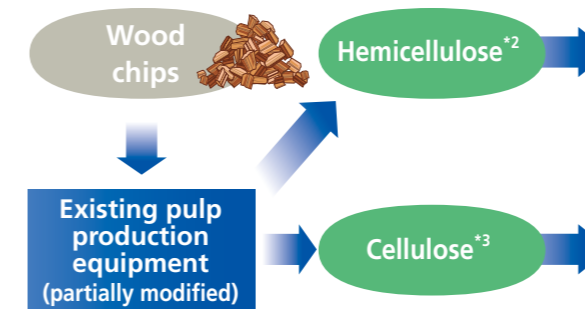


Promote Resources and Environmental Business

Verification, assessment and sale of biorefinery^{*1} products

(Approved project under the Ministry of Economy, Trade and Industry's Advanced Technology Verification and Assessment Facility Development Subsidy Innovation Site Support Project)

We have partially modified some of Oji Paper Yonago Mill's existing pulp manufacturing equipment to be used to expand the forest resource business as part of a biorefinery project.



Biorefinery Products

Furfural

Used as a solvent in oil refining, going forward furfural is expected to be used as a raw material for next generation bioplastics and as a chemical feedstock from biomass.



Xylo-oligosaccharide^{*4}
Xylose^{*5}
Ethanol

Dissolving pulp (scheduled to start production of 90,000 tons / year in January 2014)

We are aiming to enter high value-added product markets with a focus on specialty applications (chemicals and medicine). We will quickly commercialize general rayon applications and begin sales.

Research into bioethanol production systems

(NEDO^{*6} sponsored joint research with Nippon Steel & Sumikin Engineering Co., Ltd. and the National Institute of Advanced Industrial Science and Technology)

Under this project, a facility for trial and demonstration testing with a capacity of 250 to 300 liters per day was constructed at the Kure Mill of Oji Materia in November 2011. This facility will develop technologies for producing alcohol from fast-growing trees using low-cost and high-efficiency methods.



Ethanol production from woody biomass

We are researching technologies that can produce ethanol from unused branches, timber offcuts that cannot be used as a raw material for paper manufacturing, and fast-growing trees harvested in short cycles.

- Next generation renewable fuel that does not compete with food production
- Able to achieve high-efficiency, low-cost production

Establish material and process integrated business model

Strengthening the care support business

We are constructing a factory in Fukushima Prefecture to manufacture adult diapers in order to strengthen our care support business in advance of expected future market growth. [See p68](#)



Adult diapers set to be manufactured at the Fukushima Plant (Nepia Tender)



Fukushima Plant (scheduled to begin operations in April 2013)

^{*1} Biorefinery	Technologies and manufacturing facilities that use renewable biomass as a raw material.
^{*2} Hemicellulose	Part of the insoluble dietary fiber found in cellular wall of plants. It has the same movements as cellulose.
^{*3} Cellulose	The main component of dietary fiber found in the cellular wall of plants. It is used as a primary raw material in paper.

^{*4} Xylo-oligosaccharide	A sugar that acts as a nutrient for bifidobacteria and lactic acid bacterium. It is said to pass through the stomach and small intestine without being digested by enzymes on its way to the large intestine.
^{*5} Xylose	A raw material for xylitol widely present in plant life.
^{*6} NEDO	New Energy and Industrial Technology Development Organization

Business Portfolio Restructuring

Enhance Trading Business

We will strengthen our trading functions and maximize the profitability of the entire Oji Group.

Kyokuyo Pulp & Paper Co., Ltd.

Kyokuyo Pulp & Paper forms a core part of our initiatives to strengthen the functional materials business because it stands to capitalize on synergies from the expanded product line-up and sales network gained through merger and consolidation with Oji Trading. The company will combine chemicals with its existing paper products to create materials and it will work to provide comprehensive packaging solutions by working closely with the Oji Package Innovation Center.



Oji Forest & Products Co., Ltd.

The company's main international markets can be found in Asia's high-growth emerging countries such as China. It will work together with Oji Paper International Trading (Shanghai) as well as Oji Forest & Products' offices in Vietnam and Indonesia to develop new products and find new international trading partners. Moving forward, the company will aspire to become a total forestry business, from tree plantations to processing and sales, using the Oji Group's plantation resources in Asia. [See p32](#)



Oji Paper International Trading (Shanghai) Co., Ltd.

The company sells pulp manufactured by Oji Group companies both in Japan and overseas. It also serves as a hub for the forest resource business in China, as it engages in the import and export of wood products, procurement of chemicals and raw materials for paper manufacturing, and collection of market information.



Oji Trading Co., Ltd.

Under its parent company Oji Green Resources, which oversees the Oji Group's procurement, Oji Trading supplies Group companies both in Japan and overseas with raw materials, searches for new low-cost supplies, as well as imports, exports and sells pulp and recovered paper. It is implementing a sound procurement system that benefits the entire Oji Group.



Our Commitment to the Environment

The Oji Group promotes environmental management across all of its companies under the Oji Group Environmental Charter.

Oji Group Environmental Charter

Basic Policy

The Oji Group Environmental Charter requires the Oji Group to help create a truly enriched and sustainable society by developing business activities that harmonize with the environment from a global perspective. The Charter calls for the Oji Group to make autonomous efforts to achieve further environmental improvement, and aggressively drive its forest recycling, paper recycling, and global warming countermeasures forward.

Action Guidelines

1. Promotion of forest recycling
2. Promotion of paper recycling
3. Promotion of global warming countermeasures
4. Reinforcement of environmental improvement measures and environmental management systems
5. Development of production technologies and products that minimize environmental impact
6. Reduction and effective utilization of waste
7. Transfer of environmental protection technology to other countries
8. Building relationships of trust with stakeholders

Formulated in January 1997, revised in June 2006.

The Oji Group has established Environmental Action Program 2015 to ensure that it follows through on the action guidelines laid out in its Environmental Charter. [See p28](#)

FOCUS



Recognized with an Award for Environmental Management under Our Environmental Charter

Oji Holdings has received the highest environmental rating assigned by the Development Bank of Japan Inc. (DBJ). We also became the first in the pulp and paper sector to receive a special award from the DBJ in recognition of our progressive environmental initiatives.

Initiatives that Received Strong Praise

- (1) Relationship building with stakeholders
 - Environmental monitor meetings [See p67](#)
 - Oji Forest Nature School
- (2) Environmentally-friendly products developed with customers [See p58 to p61](#)
- (3) Forest resources and environmental marketing business
 - Acquisition and sale of offset credits (J-VER) [See p32](#)
 - Research into bioethanol mass production technologies [See p25](#)



Having received an environmental rating loan from the DBJ, we were recognized with a special award as a model company with excellent advanced environmental initiatives that are considerate of the environment.



Oji Forest Nature School

Environmental Action Program 2015 (Fiscal 2015 Targets)		Fiscal 2011 Achievements and Activities	See page(s)
Promotion of Forest Recycling	Increase the land area of overseas forest plantations to 300,000 hectares and move toward acquiring forest certification for all company-owned forests and forest plantations.	<ul style="list-style-type: none"> ● Overseas forest plantations: 250,000 ha We established TTO, a tree plantation company in Vietnam, and are steadily expanding our overseas forest plantations with a focus on Southeast Asia. ● Percentage of our overseas plantations that have received forest certification: about 60% GPFL (Australia) newly acquired FSC™ forest management certification (license code: FSC-C104712). Other non-certified companies are also working to obtain forest management certification for their plantations. 	34-35
	Manage company-owned forests in Japan through tree thinning and other activities.	Forest certification (SGEC certification) has been obtained for all company-owned forests in Japan, excluding profit-sharing forests. We manage our forests in a responsible and sustainable manner according to the seven standards of the SGEC certification program.	36-37
	Effectively utilize forests owned in Japan and overseas in promoting the total forestry business approach.	We increased lumber and pulp production capacity at PAN PAC (New Zealand) and are proactively expanding into the lumber and plywood processing business using our own plantation trees.	32
Promotion of Paper Recycling	Encourage the use of recovered paper as a resource. (Target to achieve a 64% recovered paper utilization rate)	<ul style="list-style-type: none"> ● Recovered paper utilization rate: 61.6% We continue to promote initiatives for expanding the use of recovered paper, including improving processing technologies for difficult-to-process recovered paper and establishing a system to collect confidential documents as recovered paper. 	44-47
Promotion of Global Warming Countermeasures	Reduce greenhouse gas emissions by 15% and carbon dioxide emissions from energy sources by 35% relative to 1990.	<ul style="list-style-type: none"> ● Greenhouse gas (GHG) emissions: 21.1% reduction (total emissions of 6.174 million tons) ● CO₂ emissions from energy sources: 39.6% reduction (total emissions of 4.531 million tons) We continue working to reduce our fossil fuel usage and implement energy conservation measures. We are also looking into the greater use of renewable energy, including implementing a study on the commercial viability of geothermal power generation. 	40-43
	Increase the amount of CO ₂ absorbed (offset credits, etc.) through forest management.	We acquired an additional 15,800 tons of offset credits (J-VER) for company-owned forests in Hokkaido, Wakayama, Okayama and Shimane prefectures. As at the end of fiscal 2011, we have obtained a total of 21,300 tons of these offset credits.	32
Development of Production Technologies and Products that Minimize Environmental Impact	Properly manage compliance with voluntary standards as well as laws and regulations in product safety.	We check conformity with various self-imposed standards and compliance with laws through safety checks involving raw materials and finished products. We also monitor operations through product safety audits. In fiscal 2011, we expanded these audits to include manufacturing partners and Group companies outside Japan as part of our efforts to strengthen our product safety management system.	14 56-57
	Develop a larger supply structure for forest certified products.	We are working to expand sales volume and types of forest certified products, while also seeking to raise awareness of forest certification schemes. In fiscal 2011, we sold 234,000 tons of FSC-certified paper products.	33
	Encourage the development of new products that help conserve resources and reduce CO ₂ emissions.	We are reducing CO ₂ emissions from transport operations by developing lighter weight packaging materials, and we are also developing a variety of resource-conserving packaging materials as part of our commitment to reduce both direct and indirect CO ₂ emissions.	58-61
Reinforcement of Environmental Improvement Measures and Environmental Management Systems	Develop a voluntary environmental management structure through the acquisition of certification for our environmental management system as well as regular upkeep and operations. (Target to acquire EMS certification for 150 mills)	<ul style="list-style-type: none"> ● EMS certified mills: 133 We are encouraging all of our mills to obtain either ISO14001 certification, Eco Action 21 certification for small worksites in Japan, or the Oji Group's proprietary O-EMS certification. In fiscal 2011, an additional 9 mills obtained one type of certification. 	30-31
Reduction and Effective Utilization of Waste	Reduce the total amount of waste for final disposal to under 50,000 tons (AD) per year. (Oji Paper, Oji Materia, Oji F-Tex, Oji Nepia, Oji Imaging Media)	<ul style="list-style-type: none"> ● Final disposal amount: 61,000 tons (AD) / year We actively utilize boiler ash as a raw material for cement or pavement, and we are also working to develop technologies for reusing this ash as a soil conditioner as part of our broader efforts to reduce our final disposal amount. 	48
Transfer of Environmental Protection Technology to Other Countries	Comply with relevant environmental standards in each country and share environmental management technologies developed in Japan.	As is the case in Japan, we implement document surveys on environmental management and also perform on-site audits on companies new to the Oji Group. We performed on-site audits at a total of 10 mills in 2012, including United Kotak.	14 56-57
Building Relationships of Trust with Stakeholders	Encourage greater communication with our stakeholders through exhibitions and publications.	We hosted booths at various exhibitions including Eco-Products 2011 and Tokyo Pack 2012 and communicated with our stakeholders through Environmental and Sustainability Report 2011 and other publications.	54-55
	Promote social contribution activities rooted in the local community.	We took part in a wide range of social contribution activities both in Japan and overseas, including various projects implemented by Oji Nepia.	67-70

Strengthening Our Environmental Management System

Each of the Oji Group companies has initiated a wide range of measures in order to minimize impacts on the natural environment.

Environmental Management at the Oji Group

Environmental Audits

Environmental audits are performed to help improve the environment, enhance our awareness of the environment, and strengthen our environmental management system. Any deficiencies found in audits implemented by staff at our worksites or audits performed by auditors are remedied promptly.

In fiscal 2011, on-site audits were held at 101 worksites, while document audits were conducted on 104 worksites.



Physical site inspection as part of an environmental audit

Adoption Status of Environmental Management System

	No. of worksite	Worksite (selected)
ISO14001 (Third-party certification)	107	All paper manufacturing mills of Oji Paper, Oji Materia, Oji F-Text, Oji Imaging Media, Oji Nepia, Oi Paper, mills of Oji Cornstarch, Oji Container, Oji Packaging, Gunma Mori Shigyo, Hokkaido Mori Shigyo, Oji Interpack, Shin Nippon Feather Core, other
Certifications in Japan (KES, Eco-Action 21, etc.)	8	Nihon Seika Hoso, Chuetsu (Shiga), Mori Kamihanbai (Kyoto, Nagoya), Tottori Mori Shigyo, Niigata Mori Shigyo, Shizuoka Mori Shigyo, Honshu Oita Danboru
O-EMS (Oji Group certification)	18	Fuchigami Danbo-ru, Matsuda Aoi Danboru, Shiota Danbo-ru, Yamachu Sangyo, Daiichi Paper Factory, Mori Kamihanbai (Tokyo), Yamanashi Mori Shigyo, Apica, Hokuyo Shiko (Fukushima, Sapporo), Oji Seitai Kaisha (Sendai, Iwamizawa, Akita), Nagasaki Danboru, Hyogo Oji Danboru, Oji Tac (Higashi Nihon Logistics Center), Oji Forest & Products (Niigata, Hokkaido)

As of March 31, 2012

Environmental Management Workshops

We hold environmental management workshops to educate our frontline managers about the management of noise, effluent and waste, which are most often cited in environmental audits.

We organized 25 of these workshops in fiscal 2011 and saw attendance total 535 employees thanks to participation from not only worksites subject to environmental audits, but others not subject to these audits as well.

(Non-compliance Case Study 2) Labeling not in compliance with legally defined categories

✗

Industrial Waste Storage	
Type	Waste ink
Manager Name	○○○○
Contact Info	XXX-XXX-

Industrial Waste Storage	
Type	Waste fluorescent tubes
Manager Name	○○○○
Contact Info	XXX-XXX-

Label using one of the 20 industrial waste categories

○

Industrial Waste Storage	
Type	Sludge (Waste ink)
Manager Name	○○○○
Contact Info	XXX-XXX-

Industrial Waste Storage	
Type	Glass and metal waste (Fluorescent tubes)
Manager Name	○○○○
Contact Info	XXX-XXX-

Learning material used in environmental management workshops

Initiatives for Preventing Environmental Problems and Eliminating Complaints

Preventing Environmental Problems

Each of our worksites has continuously implemented a wide range of measures against noise and odors, among other issues, aimed at preventing environmental problems and eliminating complaints. Worksites identify potential locations where environmental problems or complaints may occur and then strengthen patrols and undertake repair work where needed.

Sound absorbers installed on exhaust ducts to mitigate noise



Drills for counteracting environmental problems



Drill to stop leaking effluent with sandbags

Rolling Out Measures to Eliminate Environmental Problems

If an environmental problem or complaint occurs, the worksite immediately contacts the Environmental Management Department of Oji Holdings, investigates the cause and initiates countermeasures. The Environmental Management Department then presents a case study to other sites to raise awareness, prevent similar problems from occurring and ensure corrective measures are taken in advance. By rolling out such measures, we have been able to effectively reduce the number of environmental problems and move toward our goal of completely eliminating such problems.



Measures were rolled out after a heavy oil leak was detected from a pipe

Supervision Program on Environmental Management

This highly effective program requires worksites found to have a serious environmental problem or to be lacking environmental awareness to make improvements and take corrective actions.



Lecture aimed at enhancing environmental awareness

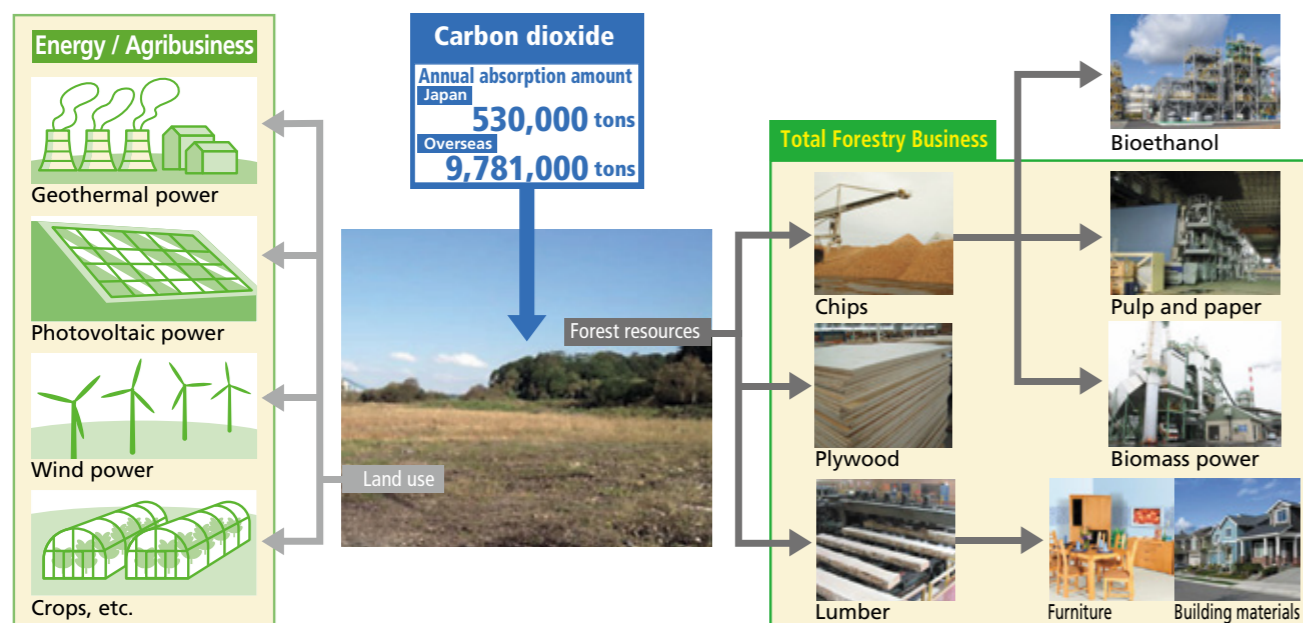
Promotion of Forest Recycling

We sustainably manage as well as comprehensively utilize our company-owned forest plantations in Japan and overseas.

Comprehensively Utilizing Forest Resources and Lands Both in Japan and Abroad

The Oji Group owns and manages 440,000 hectares of forest resources and lands, consisting of 190,000 hectares in Japan and an additional 250,000 hectares outside Japan.

The Forest Resources and Environmental Marketing Company forms the heart of our commitment to be a total forestry business that is able to fully utilize forest resources in a sustainable manner and to explore the energy business and agribusiness using these vast forest lands.



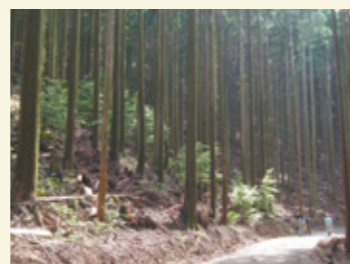
FOCUS The Oji Group's J-VER Project

The Oji Group is implementing the J-VER* Project to encourage thinning at its company-owned forests in Japan. This project aims to make forests more productive through thinning, which in turn will help increase the amount of CO₂ they absorb. Additionally, responsibly managed forests also help prevent landslides, ensure growth of the local forestry industry and maintain the diversity of ecosystems.

At the end of fiscal 2011, we had generated some 21,300 tons of carbon credits at our company-owned forests in Hokkaido, Kanagawa, Okayama and Shimane prefectures. We also sell paper products with carbon credits. As of August 2012, our customers had purchased some 103 tons of carbon credits.



Yezo Ural owl spotted at our company-owned forest in Hokkaido



Our responsibly managed forest in Wakayama

*J-VER

Japan Verified Emission Reduction: The amount of CO₂ emissions reduced through voluntary efforts or CO₂ emissions absorbed by forests that have been thinned are converted to carbon credits that can be purchased by a company or organization to offset its CO₂ emissions.

[Promotion of Forest Recycling] Use of Forest Certification Schemes

In recent years, companies have found it increasingly more important to adapt to the green economy that demands a balance between environmental preservation and economic growth. As a result, it is more important than ever to utilize benefits gained from natural resources and ecosystems in a sustainable manner.

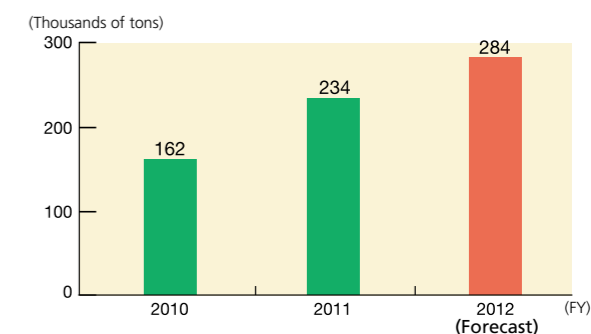
The Oji Group consumes a large amount of timber as a raw material and so strives to manage its forest lands in a sustainable manner as well as ensure that the timber resources it purchases from outside the Oji Group are from responsibly managed forests. [see p53](#)

The Oji Group utilizes forest certification schemes where a third party assesses and verifies that a forest is being managed in a sustainable way. Paper and wood products made from timber produced in certified forests are able to use the forest certified logo. Consumers that purchase products with the forest certified logo help to support responsibly managed forests and in a broader sense the preservation of the world's forest lands.

FSC™ Certified Products

The Oji Group sells pulp and paper products made from wood produced in certified forests with the FSC^{*1} trademark. In order to do so, we have acquired CoC certification,^{*2} in which a third party assesses our system for responsibly managing certified wood materials, for each phase of processing, from our chip and lumber mills to our paper processing facilities. In fiscal 2011, we sold a total of 234,000 tons worth of these products. Going forward, we are aiming to expand sales of FSC certified products as part of our commitment to raise awareness about forest certification schemes.

Sales of FSC Certified Products



* Data covers products sold by Oji Paper, Oji Nepia, Oji F-Tex, Oji Materia, Oji Imaging Media, and Oji Timely



The mark of responsible forestry



Tissue boxes and toilet rolls made by Oji Nepia (License Code: FSC-C 018118)



Wet wipe made by Oji Timely (License Code: FSC-C109587)



PPC paper made by Oji Paper (License Code: FSC-C 014119)

*1 FSC

Forest Stewardship Council

*2 CoC certification

Chain of Custody refers to a program where a third party certifies the management of processing and distribution processes.

[Promotion of Forest Recycling] FSC™ Certification Program and Initiatives at our Overseas Tree Plantations

The FSC certification program is widely known around the world. In order for a forest to be recognized as being responsibly managed it must pass a screening that consists of 10 principles and 56 standards from the perspective of environmental preservation, social interests and economic continuity. Some 60% of the Oji Group's overseas tree plantations have already obtained FSC certification and by the end of 2013 we plan to expand this figure to 87%. How do the Oji Group's sustainable forest management practices ensure compliance with the 10 principles of the FSC? To answer this question, we will take a closer look at the initiatives of QPFL (License Code: FSC-C 016623), which was the first tree plantation operator in Vietnam to obtain FSC certification.

Principle 1 Compliance with laws and FSC Principles — to comply with all laws, regulations, treaties, conventions and agreements, together with all FSC Principles and Criteria

QPFL engages in its business operations in full compliance with all related laws, including Vietnam's corporate laws, labor laws as well as forest preservation and development laws.

Principle 2 Tenure and use rights and responsibilities — to define, document and legally establish long-term tenure and use rights

Under its land management laws, Vietnam allows land to be leased for up to 50 years. In the case of QPFL, it has concluded a lease agreement with the Binh Dinh Province to retain the land use rights to its plantation for a period of 35 years starting in 1995.

Principle 3 Indigenous peoples' rights — to identify and uphold indigenous peoples' rights of ownership and use of land and resources

Although there are no ethnic minorities living in the communities surrounding QPFL, the company does maintain a sound relationship with the local communities in which it operates through a variety of corporate citizenship activities. [See p69](#)

Principle 4 Community relations and workers' rights — to maintain or enhance forest workers' and local communities' social and economic well-being

Nearly all of QPFL's harvesting and planting work is done with manual labor and the company employs a large number of people from the surrounding communities. Additionally, QPFL sells timber to local furniture manufacturing companies, which helps to support the economic activities of these communities.



Planting seedlings in a forest nursery area

Principle 5 Benefits from the forest — to maintain or enhance long term economic, social and environmental benefits from the forest

After harvesting work is completed local people are allowed to take leftover branches and bark for firewood



Leftover branches from harvested forest

Principle 6 Environmental impact — to maintain or restore the ecosystem, its biodiversity, resources and landscapes

QPFL has designated streams around its tree plantation as a protected area, where it plants native tree species to maintain biodiversity and protect the soil.



Planting native tree species

Principle 7 Management plan — to have a management plan, implemented, monitored and documented

QPFL creates a forest management plan that it revises each year. It also prepares a five-year harvesting and planting plan as part of its medium- to long-term operational planning.

QPFL's forest management plan is shared with Binh Dinh Province, the vendor contracted for the harvesting and planting work, and the FSC Secretariat, with any feedback promptly reflected.

Principle 8 Monitoring and assessment — to demonstrate progress towards management objectives

QPFL has set aside about 50 locations as permanent sample plots (400m² / plot) for observations where it monitors accumulation and growth each year using tree height and diameter at breast height data.



Measuring diameter at breast height

Principle 10 Plantations — to plan and manage plantations in accordance with FSC Principles and Criteria

QPFL only utilizes land that never had forest for its tree plantation, and not natural second-growth forest.

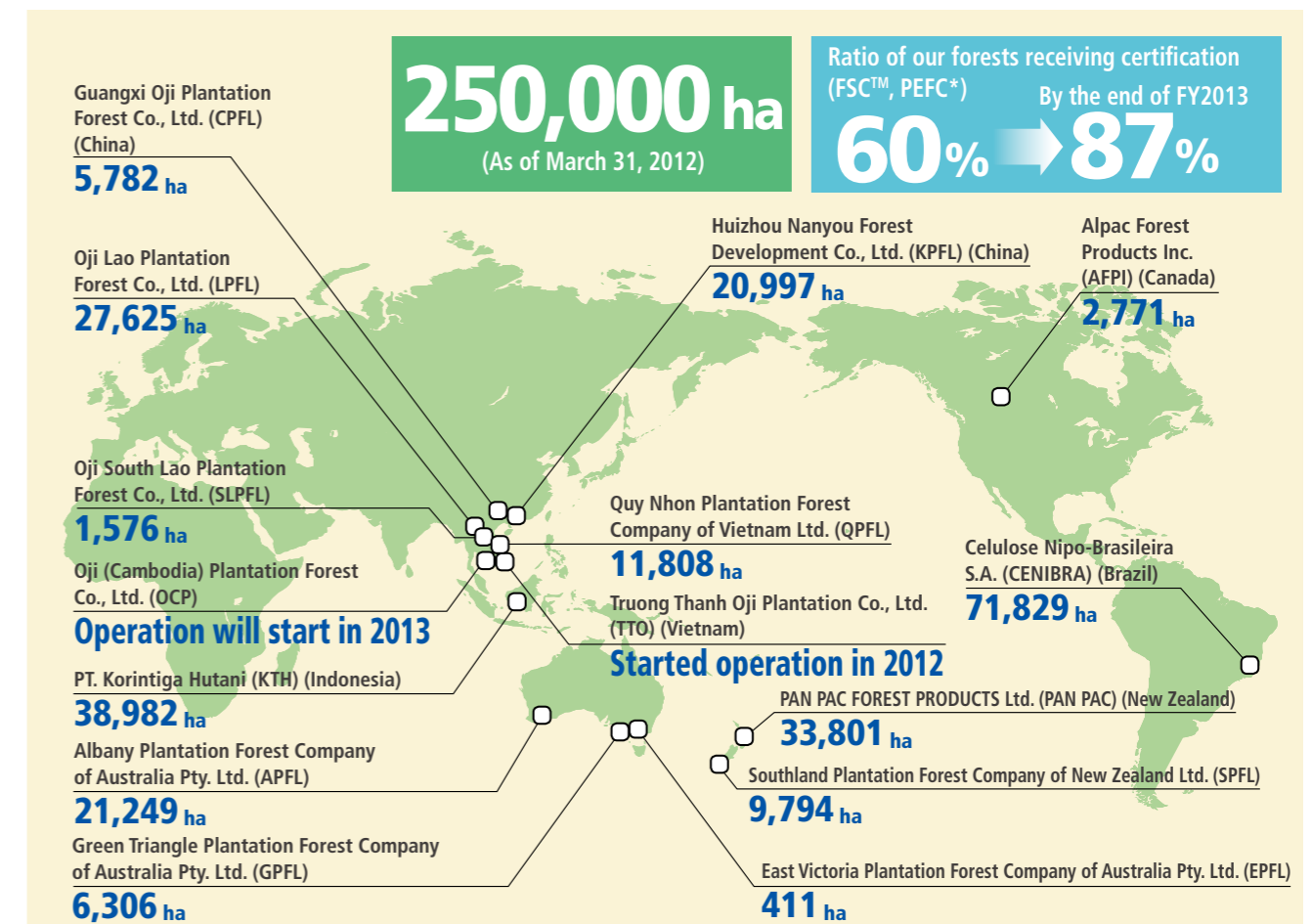


The natural second-growth forest is left untouched

Principle 9 Maintenance of high conservation value forests — to maintain or enhance the attributes which define such forests

In accordance with Binh Dinh Province's land use categories, QPFL avoids the use of highly diverse forest lands, such as high conservation value forests, and instead uses only commercial forest land for its plantations.

Distribution of the Oji Group Overseas Forest Plantations



Tree plantations operated by consolidated subsidiaries count as 100%, while tree plantations operated by all other companies are accounted for based on the Oji Group's investment ratio in the said company.

*PEFC

Programme for the Endorsement of Forest Certification Schemes

[Promotion of Forest Recycling] SGEC Certification Scheme and Initiatives at Our Forests in Japan

Forests play many roles, including watershed protection,^{*1} prevention of landslides, conservation of biodiversity, and absorption of carbon dioxide. Yet, planted forests cannot fully function in this manner unless they are properly managed. Planted forests account for about 40% of Japan's total forest lands, indicating just how important it is to use forest resources that are maintained responsibly.

The SGEC^{*2} certification scheme assesses and certifies sustainably managed forests using seven standards and 36 indicators that are both compliant with Japan's forest culture and schemes as well as based on the Montreal Process, an international forestry standard for temperate forests located in the Pacific Rim.

The Oji Group has obtained SGEC certification for all of its forests in Japan, with the exception of profit-sharing forests.^{*3} Below, we will introduce part of the Oji Group's initiatives to comply with the seven standards under the SGEC certification scheme.

Standard 1 Identification of forests and their management policies

- Prepare and manage a detailed forest register that includes the location, area, category (planted or natural), species, age and volume of each forest.
 - ▶ We prepare our own forest register that covers all of our forests in Japan.

Standard 2 Conservation of biological diversity

- Protect endangered species.
 - ▶ We work with NPOs and local governments to protect the endangered Itou (Sakhalin taimen), revitalize alpine flora and conserve lily-of-the-valley and other species. [See p39](#)
 - ▶ Our workers always carry the Red Data Book^{*4} with them when patrolling the forest.
- Strive to conserve natural vegetation and wildlife, including understory vegetation.
 - ▶ We protect understory vegetation and underbrush in planted forests.



The Red Data Book



We conserve natural trees in our planted cedar forests

Standard 3 Conservation and maintenance of soil and water resources

- Establish tree belts to guard against impacts from high winds and on the water system when logging or transporting lumber. For erosion control and water conservation, pay careful attention when opening forest roads. Use biological materials for structures.
 - ▶ We proactively thin planted forests under a coordinated plan.
 - ▶ We log matured and planted forests in zones or small areas and plant trees after work has been completed.
 - ▶ We use logged lumber to safeguard the side slope of work roads.



We use logs to shore up work roads

Standard 4 Maintenance of productivity and health of forest ecosystems

- Harvest forestry resources in a sustainable manner.
 - ▶ We also sustainably harvest non-wood biological resources.
- Strive to prevent forest fires and other disasters.
 - ▶ We use signage and other means to warn of forest fire dangers.



We gather less than 40% of mountain vegetation for research purposes.

*1 Watershed protection	Forests store water and stabilize river flow rates as well as help purify water quality.
*2 SGEC	Sustainable Green Ecosystem Council
*3 Profit-sharing forest	A forest where the operator is different from the landowner.
*4 Red Data Book	A proprietary field guide we use to identify certain species found in the Ministry of the Environment's Red Data Book.

Standard 5 Legal and institutional framework for sustainable forest management

- Respect local communities' usage rights of land and resources both legal and customary.
 - ▶ We provide water-intake facilities and land for hiking trails for use under agreements.
- Educate employees and contractors on biodiversity.
 - ▶ We provide training on-site.



We hold workshops on-site

Standard 6 Maintenance and promotion of societal and economic benefits

- Effectively utilize certified forestry products as a green resource.
 - ▶ Certified materials made by the Oji Group are used to build homes.
- Strive to provide people with access to forests, environmental education and safety instructions.
 - ▶ We have installed signs in our forests open to the public to promote education and safety.



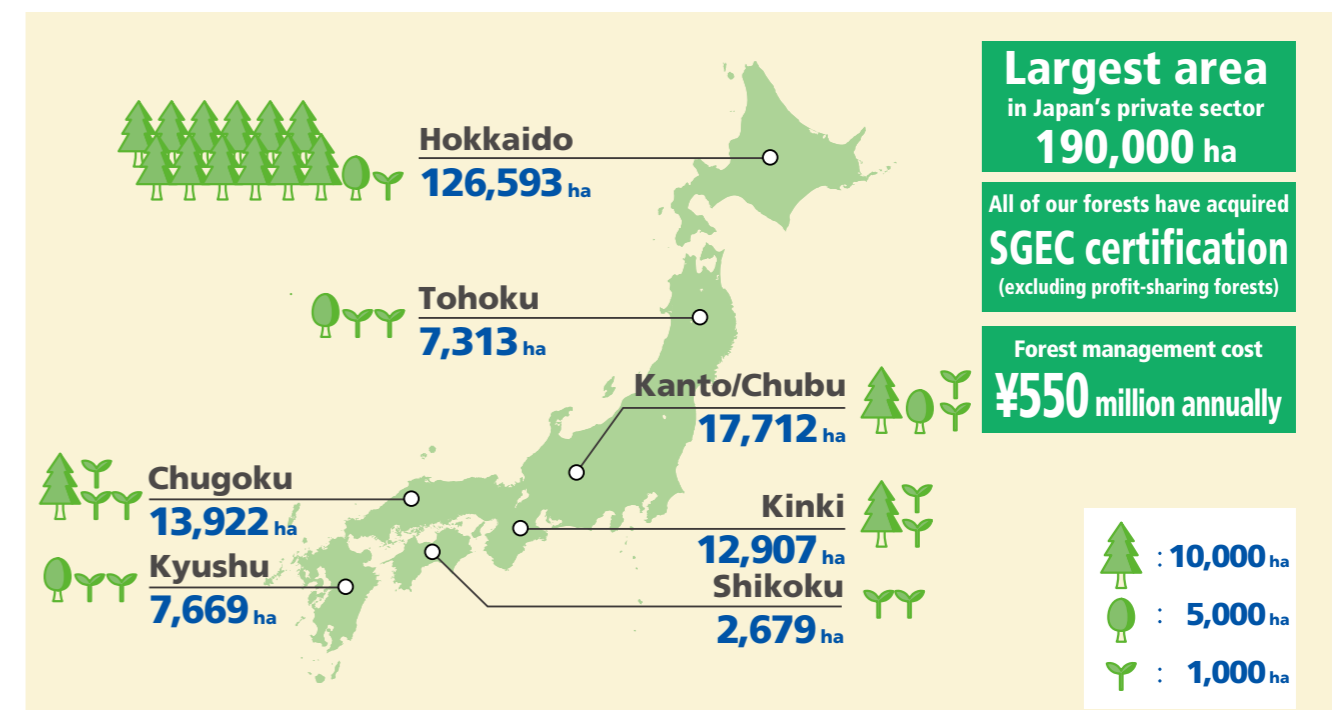
A home made from SGEC certified materials sold by the Oji Group

Sign intended to educate and promote safety

Standard 7 Monitoring and disclosure of information

- Record forest management work for each type of work, year and location.
 - ▶ Work records are kept in the form of electronic data, illustrations and photographs that will be used in future planning.
- Assess planning and execution through monitoring and make the results of monitoring public.
 - ▶ We are currently examining how best to release our monitoring results to the public. We have released the results of our certification screening through the screening body.

Distribution of the Oji Group Domestic Company-owned Forests



[Promotion of Forest Recycling] Initiatives for Conserving Biodiversity

The Oji Group owns vast forest lands both in Japan and overseas that it manages in a sustainable manner. Our overseas tree plantations use pasture lands, land clearing and slash-and-burn cultivation, as well as unutilized lands left after harvesting work. We protect and never log natural forests located on these lands. The sustainable management of forest lands produces not only employment opportunities, but also supplies lumber from planted forests, which helps alleviate logging pressure on natural forests.

Of our 190,000 hectares of company-owned forests in Japan, some 100,000 hectares are natural forests rich in biodiversity. Additionally, we have designated about 10,000 hectares as environmental conservation forest and manage this forest responsibly, from the standpoint of conserving national lands, protecting watersheds, and protecting threatened forests. Thinning of planted forests helps to bring sunlight to the forest floor, creating multiple layers of vegetation and in turn forming a diverse ecosystem. For this reason, threatened bird species have also been observed in our planted forests.

We are also working closely with local governments and communities both in and outside Japan to help conserve biodiversity.

Overseas Forest Conservation in Brazil

CENIBRA, which operates a eucalyptus plantation and has pulp operations in Brazil, owns and manages 100,000 hectares of natural forest and 150,000 hectares of tree plantations. In accordance with Brazil's forestry laws, the company has set aside some 50,000 hectares of tree plantations to help conserve biodiversity. As a result, its tree plantations include natural forest as well as forest on steep slopes and around water sources that remain untouched and never logged. If erosion, destruction or wildfires are detected within one of these protected areas, the company plants native species to help restore the environment.

Of the rare wildfowl species mutum, tinamou, spot-winged wood quail, and white-winged guan, CENIBRA is supporting activities that help raise, feed and return mutum to the natural environment.

Additionally, the company regularly monitors the number of wildlife and plant species residing in its tree plantations. The study performed in 2011 showed that wildfowl species increased by 20% and mammals by 10% compared to 2007.

Planting native species in sections of CENIBRA's tree plantations

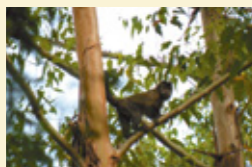
Prior to planting (2001)



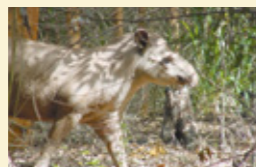
10 years later (2011)



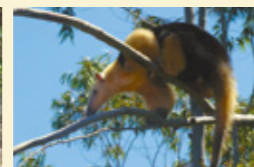
Wildlife observed in CENIBRA's tree plantations



Black-horned capuchin



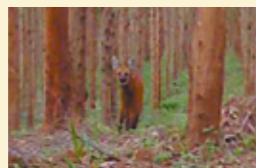
New world tapir



Southern tamandua



Broad-snouted caiman



Maned wolf



Southern crested caracara



The rare mutum

Overseas Protecting the Kiwi Bird in New Zealand

The kiwi, a bird native to New Zealand that cannot fly, faces the threat of extinction from mammal predators brought to the island country by people. Located in Napier, New Zealand, PAN PAC, which operates a plantation of radiata pine, a lumber business and a pulp business, is supporting conservation activities led by New Zealand's Ministry for the Environment and citizen volunteers.

There is a 40-hectare preserve that has been established for the kiwi bird using donations from PAN PAC and other local companies. A fence has been erected around the perimeter to prevent predators from entering, while any predators found within the preserve are quickly removed. Every year in October volunteers help to protect and collect chicks and eggs in the surrounding forests. PAN PAC employees are also helping out with these efforts. Eggs are sent to the preserve after being incubated, while chicks are reintroduced to the wild after they have reached a weight of more than 800 grams and can defend themselves from their natural predators.



PAN PAC employee volunteer



The rare kiwi bird

Japan Sarufutsu Itou Conservation Council

The forests of Sarufutsu (Hokkaido) are home to large numbers of Itou (also known as the Sakhalin taimen), which is Japan's largest freshwater fish and designated as a critically endangered species by the International Union for Conservation of Nature (IUCN) and in the Ministry of the Environment's Red List.

The Oji Group established the Sarufutsu Itou Conservation Council in concert with the Sarufutsu Itou Society, Sarufutsu Village and researchers. Through this organization we are working to protect this species and raise awareness among local communities.

To ensure coexistence between the forestry industry and the Itou, we have set aside 2,660 hectares of our 17,290-hectare mountainous forest in Sarufutsu as an ecological preserve where trees that line both sides of the river bank out to a distance of 30-meters are protected. Preserving the diversity of forests surrounding water areas helps to ensure insects and small fish eaten by the Itou mature, while fallen trees from these lands are used by the Itou as a hiding place.

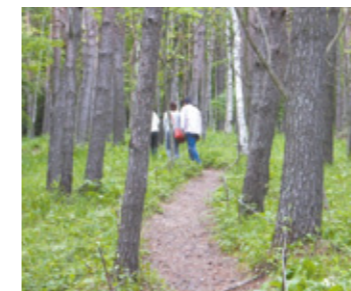


Itou being released after an ecological study

Japan Lily-of-the-Valley Habitat Conservation

The Kamiashigawa Forest in Fuefuki City, Yamanashi Prefecture is a habitat for lily-of-the-valley, which is a woodland flowering plant that has been designated as a natural monument by the prefecture. This is the largest such habitat outside of Hokkaido Prefecture and over the years it has been protected by local conservationists. In order to maintain this conservation, the Oji Group has leased land to Fuefuki City for free. In 2012, we also contracted locals to patrol the habitat as part of the conservation efforts.

The Lily-of-the-Valley Festival organized by Fuefuki City every year in May and June has helped the city to attract tourists that come for the many flowers that bloom during this time.



Walking through a lily-of-the-valley habitat



Lily-of-the-valley

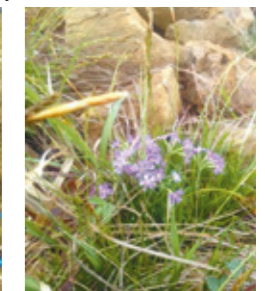
Japan Protecting Endangered Alpine Flora on Mt. Apoi

The Oji Group is working with the Mt. Apoi Restoration Committee to help revitalize alpine flora in the Samani Forest in Samani Town, Hokkaido. In order to protect this alpine flora, the upper reaches of Mt. Apoi past station five have been designated as a special natural monument, while our neighboring company-owned forest is being used as a testing ground for revitalization efforts.

These activities have been cited as a case study for collaboration involving citizens, specialists, local governments and the private sector in the Ministry of the Environment's Manual for Creating Regional Cooperation and Conservation Activity Plans under the Act on the Promotion of Regional Cooperation Activities for Biodiversity.



Conservation activities on Mt. Apoi



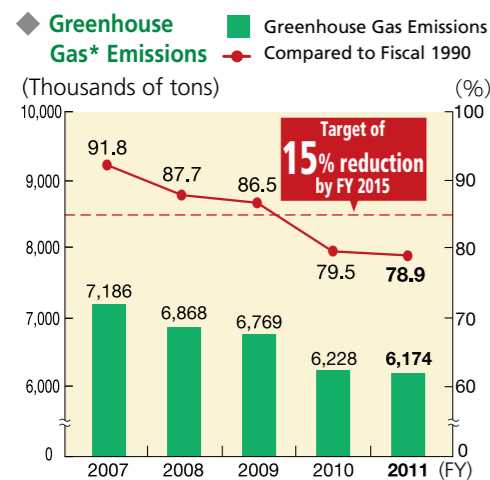
The samani yukiwari wildflower

Promotion of Global Warming Countermeasures

We are working to generate and use efficient energy sources, such as in-house power generation facilities and renewable energy.

Initiatives to Reduce Our Greenhouse Gas Emissions

The Oji Group continually strives to reduce its use of fossil fuels and implement energy conservation measures. In fiscal 2011, our greenhouse gas emissions totaled 6,174,000 tons in CO₂ equivalent, which represents a 21.1% reduction compared to fiscal 1990.

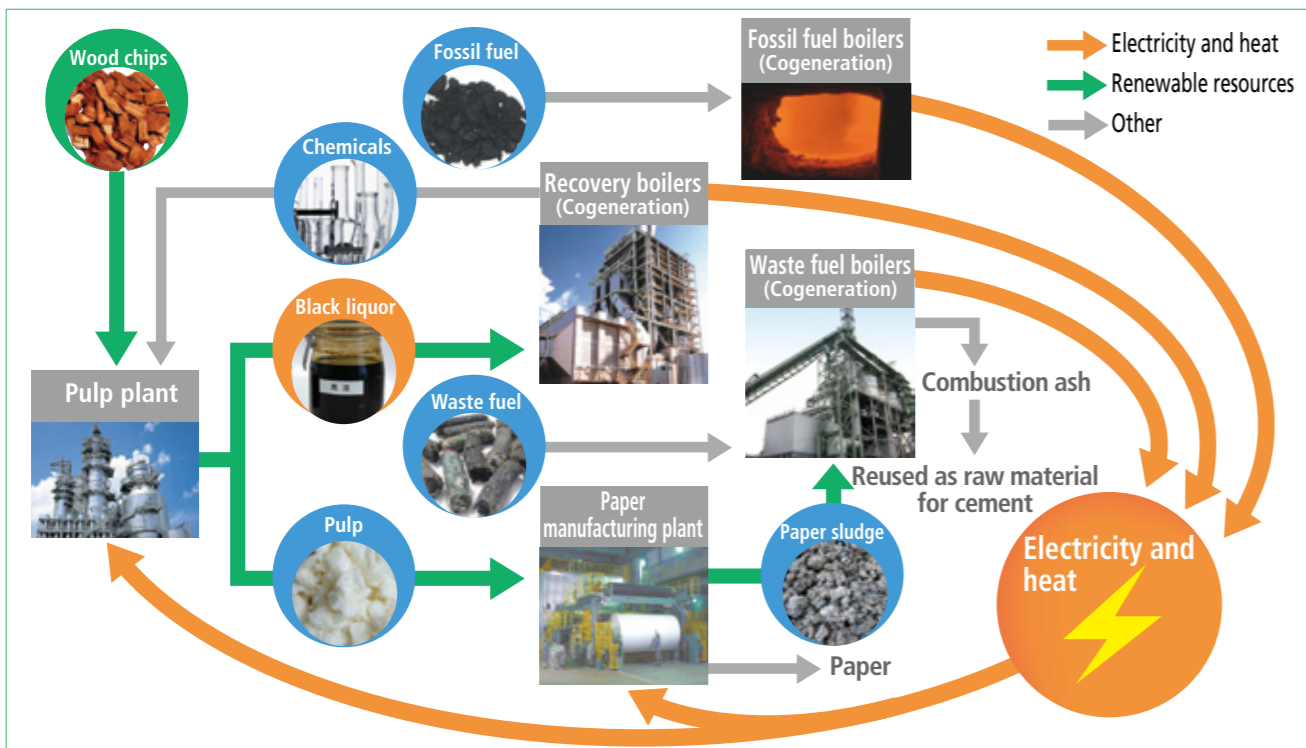


In-house Power Generation Facilities

Paper manufacturing mills consume a large amount of electricity and heat during the production process. As such, we have installed boilers and create electricity and heat used to power our mills. We have also been using combined heat and power (cogeneration) systems for quite some time. These systems reutilize waste heat (steam) emitted after power generation within our mills, providing an efficient use of energy. Power generation alone means that only about 40% of the actual energy from fuel can be used. This figure can be increased to around 70% when waste heat is recycled. We are also in the process of switching our boiler fuel away from fossil fuel (coal and heavy oil, etc.) to renewable fuel (black liquor and wood waste) and waste fuel as part of our broader efforts to reduce our greenhouse gas emissions.

* Greenhouse gas (GHG) Energy-derived CO₂, non-energy derived CO₂, CH₄ and N₂O emitted from production processes and landfills.

Overview of Our Greenhouse Gas Reduction Efforts



Black Liquor

Waste liquid emitted with the removal of necessary fibers from pulp during pulp production is called black liquor, which is used as a fuel source to power specially designed boilers, or recovery boilers. These boilers emit steam for power generation and also recover chemicals, which after processing are reused in the pulp manufacturing process. Black liquor is considered a biomass fuel that is carbon neutral.^{*1}

Waste Fuel

We are using scrap tires, waste plastics and refuse paper and plastic fuel (RPF) as waste fuel to power our boilers. Paper sludge (fine fibers unusable for paper) emitted from the paper manufacturing process is also used as boiler fuel. This helps us to reduce and effectively recycle waste, while at the same time curb the amount of fossil fuels we consume.



Energy Conservation Initiatives

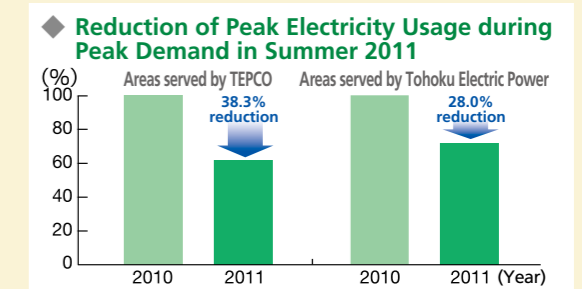
Our ISO14001-certified mills regularly organize energy conservation meetings involving the site's energy management departments and production departments. At these meetings, staff discuss a wide range of ideas, such as facility upgrades and changes to operation methods, in order to maximize the mill's energy conservation efforts. General meetings and workshops held once annually for relevant persons in charge at each of our companies and mills serve as a platform for sharing information on localized energy conservation efforts. Our goal is to reduce our total use of energy by at least 1.5% each year through energy conservation initiatives. In fiscal 2011, we implemented more than 1,000 such initiatives, both large and small. The recent decline in utilization rate due to a slowdown in paper demand has caused our specific energy consumption^{*2} to deteriorate, but we are striving to conserve energy through efforts that include suspending access capacity, working to reduce electricity usage, and conserving steam.

FOCUS Response to Electricity Shortages

On March 11, 2011 the Great East Japan Earthquake struck the Tohoku and Kanto regions of Japan, damaging power plants operated by power companies and leading to electricity supply shortages. The Oji Group strove to reduce its usage of electricity during times of peak demand by utilizing in-house power generation facilities and optimizing its production system. It was also able to supply power back to power companies. The Oji Group's offices also changed room temperature settings and their use of lighting as part of effort to reduce overall electricity consumption during times of peak demand. As a result of these efforts, we were able to reduce our use of electricity in times of peak demand by 38.3% in areas served by Tokyo Electric Power (TEPCO) and 28.0% in areas served by Tohoku Electric Power during the period from July 1 to September 9, 2011, compared to the government mandated 15% reduction. In the summer of 2012, when fears persisted about a nationwide electricity shortage, we initiated

electricity reduction efforts at more than 300 of our worksites across Japan. During the period from July 2 to September 14, 2012 for which the national government issued quantitative targets, we were able to reduce our total nationwide use of electricity in times of peak demand by 22.9% compared to 2010. To fulfill requests made by power companies, we also supplied an additional 120 million kWh of electricity (enough to power 130,000 households for three months*) between July and September using our in-house power generation facilities.

* This was calculated using 300 kWh as the amount of electricity consumed per household in one month (Source: Documents prepared by METI Advisory Committee for Natural Resources and Energy)



2010 summer results set at 100%

*1 Carbon neutral

Trees absorb CO₂ and mature using photosynthesis, and as such, CO₂ emitted from the burning of mature trees is considered to be equivalent to the CO₂ absorbed during the maturation process.

*2 Specific energy consumption

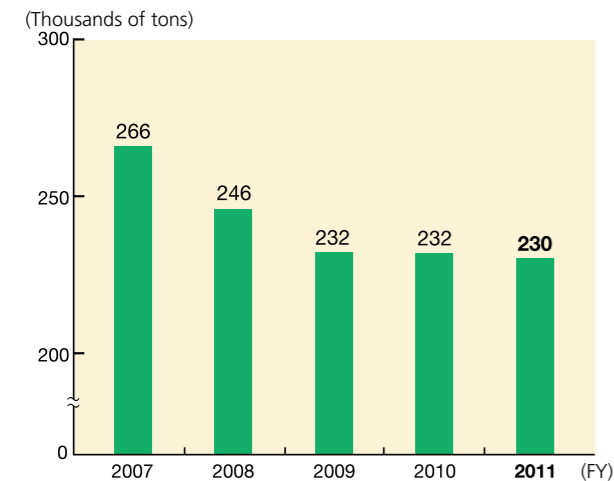
The amount of energy used per unit of production.

[Promotion of Global Warming Countermeasures] Initiatives in Logistics

Products manufactured in our mills are transported to customers using trucks, railways and ship. As such, we are also actively working to reduce our impact on the environment by curbing CO₂ emissions that occur during the logistics phase of the value chain. Oji Rikuun has obtained Green Management Certification for all 15 of its worksites across Japan from the Foundation for Promoting Personal Mobility and Ecological Transportation.

In fiscal 2011, the Oji Group's CO₂ emissions* from the transport of its products totaled 230,000 tons. We will continue to improve the efficiency of our logistics operations going forward and in the process reduce our emissions of CO₂.

◆ CO₂ Emitted During Product Transport



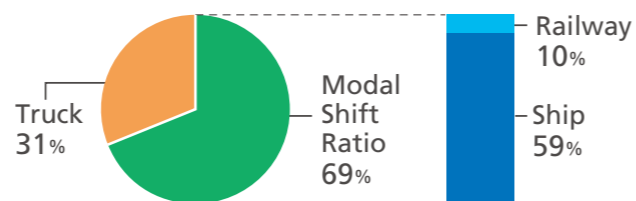
* Total emissions for Oji Paper, Oji Materia, Oji F-Tex, Oji Nepia, Oji Imaging Media, Oji Container, Oji Cornstarch and Oji Tac, which are required to report their use of energy as a Specified Consigner under Japan's Energy Conservation Act

Modal Shift

Railway and seaborne shipping modes can carry much larger loads than trucks and hence have a smaller impact on the environment. As a result, we have been initiating a modal shift, whereby we are switching from truck transport to railway or ship on major trunk routes.

Oji Paper's Tomakomai, Kasugai and Yonago mills have industrial spurs on-site from which they ship products in containers via rail.

◆ Fiscal 2011 Modal Shift Ratio

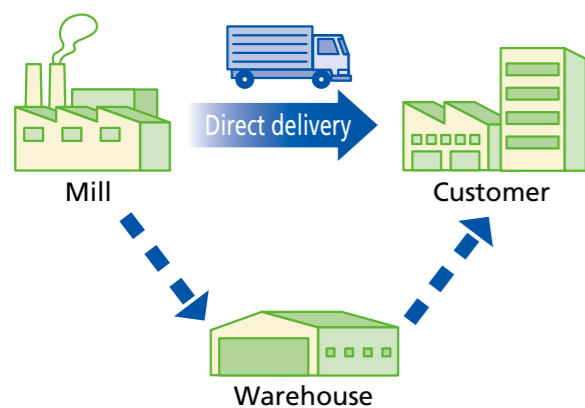


Note: The percentage of transport volume (distance x weight) for each mode

Switching Over to a Direct Delivery System

Products shipped from our mills are either delivered to our customers via a warehouse or directly from the mill. In recent years, we have made efforts to switch over to a direct delivery system as part of our commitment to optimize production management and product inventory.

A direct delivery system helps to reduce potential damage that may occur during transport and handling as well as total inventory, which in turn shortens delivery times, cuts costs and curbs our impact on the environment.



Reducing the Environmental Impact of Trucks

Trucks play an important role in high-frequency, short-distance transport. As such, we have been actively working to reduce their impact on the environment. When purchasing trucks we make sure the model offers excellent fuel economy and emits less particulate matter and NO_x. We also use fuel efficient tires on all of our vehicles as part of our efforts to improve fuel economy further. Additionally, we encourage the use of recycled tires to ensure the effective use of resources.

Encouraging Eco-friendly Driving

Oji Rikuun has installed digital tachographs on all of its company-owned vehicles to record and carefully analyze driving habits, such as acceleration. The company uses this data to instruct drivers on safe and environmentally-friendly driving habits as well as to prohibit idling. Oji Rikuun also uses these driving habits as evaluation criteria in its driver awards program.

[Promotion of Global Warming Countermeasures] Expanding Our Use of Renewable Energy

As part of the Oji Group's plans to expand its resources and environmental business it is working to step up its power generation using renewable energy such as photovoltaic, biomass, geothermal and hydroelectric power.

Construction of Photovoltaic Power Plant

The Oji Group's first photovoltaic power plant will be constructed on company-owned land in Shiranuka Town, Hokkaido. The 1.3 MW facility is slated to come on line in August 2013. We are also examining photovoltaic power plant projects on company-owned lands in other parts of Japan.



The construction site in Shiranuka Town

New Biomass Boilers

The Oji Group has installed biomass boilers that use biomass such as wood waste as fuel since 2004. Oji Materia's Fuji No. 1 Mill in Fuji City, Shizuoka Prefecture plans to install a new biomass boiler that is powered with unused wood materials such as unused thinned wood and other types. This boiler, which is slated to come on line in March 2015, will significantly reduce the Fuji No. 1 Mill's use of heavy oil and also make it possible to sell surplus electricity. We are also examining the installation of biomass boilers in other areas to promote the utilization of unused wood materials.



Fuji No. 1 Mill

Investigation of Geothermal Power

The Oji Group together with Obayashi Corporation is investigating the viability of geothermal power in the Biei Forest in Biei Town, Hokkaido.

Japan is home to many active volcanoes, under which there is magma with huge amounts of thermal energy. Geothermal power harnesses part of this energy using steam that occurs underground. Studies performed by the national government have already found a geothermal reservoir with a large amount of energy under the Biei Forest. If our study confirms the geothermal promise of this area, we will then investigate whether commercialization is viable or not.



Investigation in Biei Forest

Renewal of Hydroelectric Power Plants

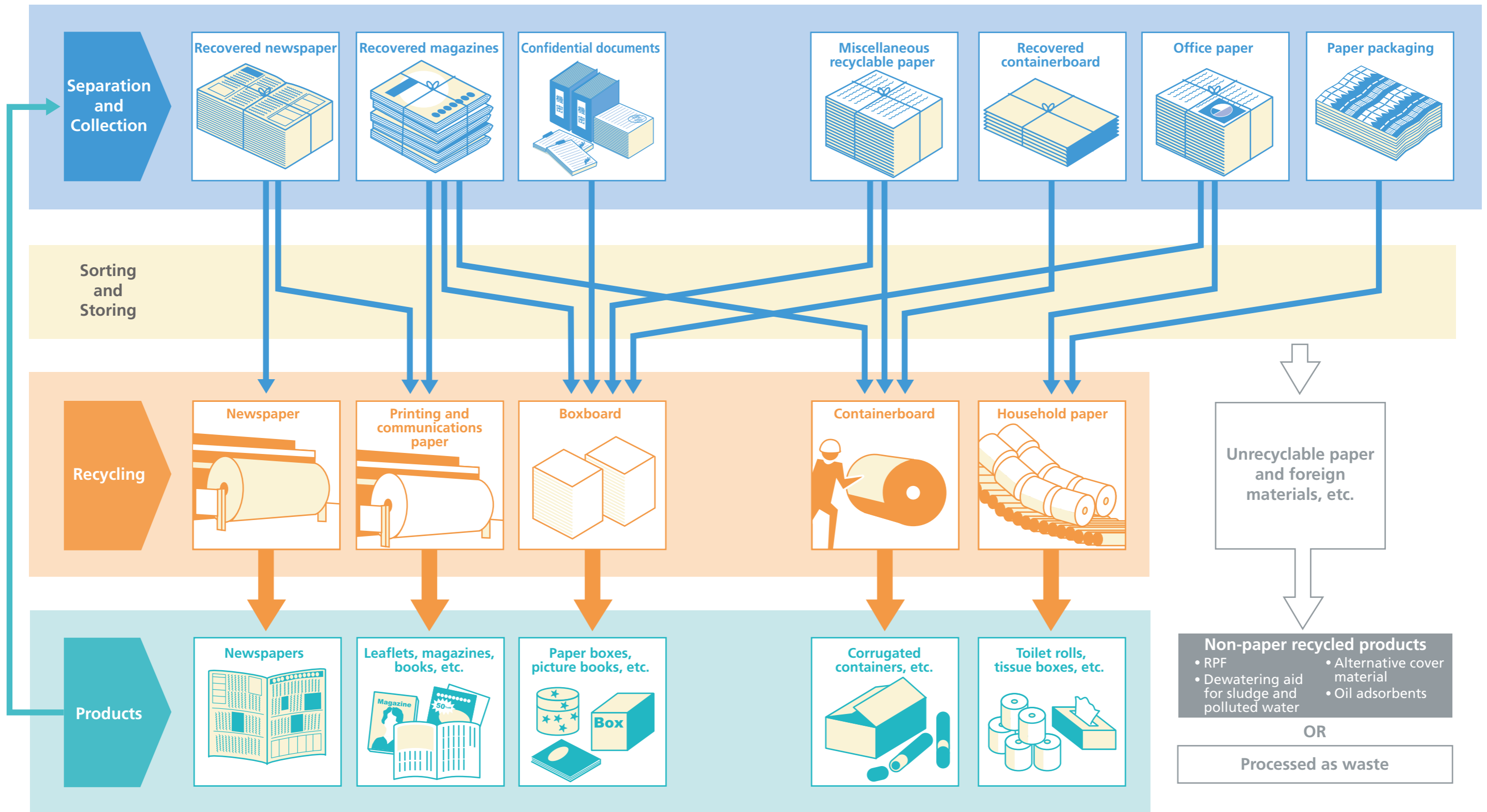
The Oji Group owns and operates 19 hydroelectric power plants located across Japan with a total generating capacity of 70,000 kW. Generated electricity is supplied to Oji Paper's Tomakomai Mill as well as Oji F-Tex's Tokai and Nakatsu mills. Also, part of this electricity is sent to the service area of TEPCO via power company transmission lines where it is being utilized as clean energy by users that are required to reduce their CO₂ emissions under Tokyo Metropolitan Government's emissions trading scheme. We plan to renew some of our older hydroelectric power plants in order to strengthen our power generation business and ensure a stable supply of electricity.

Promotion of Paper Recycling

We reuse recovered paper appropriately according to its quality.

We use recovered paper in a certain applications depending on the quality required. Paper products with stringent quality standards, such as printing and communications paper, require recovered paper used as a raw material be of superior quality and contain few foreign materials. Proper separation and removal of foreign materials are keys to using recovered paper effectively.

Paper recycling is made possible only with the cooperation of many individuals and organizations, from households and business offices that use paper to the neighborhood associations, local governments and recovery operators that collect and separate it, the wholesalers that sort and store it, as well as the paper makers that reuse it. Recovered paper can be more effectively utilized if households closely follow the separation rules for their local area and help prevent foreign materials from being mixed in with it.



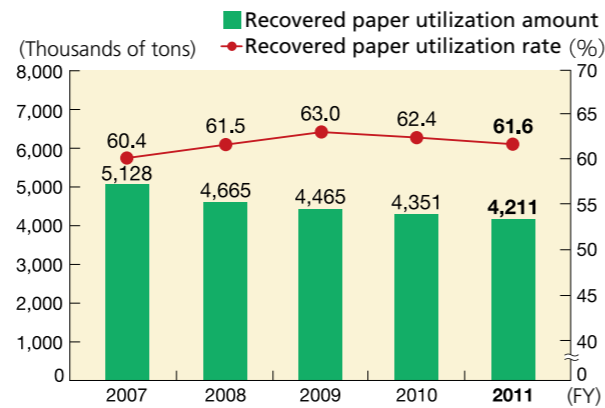
Promotion of Paper Recycling

The Japan Paper Association (JPA) has established its own set of voluntary standards to encourage companies to increase their use of recovered paper. The Oji Group has established its own target within Environmental Action Program 2015 to achieve a recovered paper utilization rate of 64%. * As part of this effort, we are actively promoting the use of recovered paper.

Our recovered paper utilization rate stood at 61.6% in fiscal 2011. We are committed to increasing this percentage going forward in order to achieve the target set for 2015.

Recovered paper utilization rate
 * Recovered paper consumption amount divided by total fiber raw material consumption amount
 (Total fiber raw material consumption amount=Total consumption amount of recovered paper, wood pulp and other fiber raw materials)

Oji Group Recovered Paper Utilization Amount and Utilization Rate



Processing Confidential Documents

Oji Materia's Edogawa Mill began processing confidential documents with a special solution in November 2006. Leveraging its advantageous location in Tokyo, the largest producing area of confidential documents in Japan, the mill is now actively working to expand this relatively new business segment. In January 2012, Oji Materia performed work to augment its processing capacity and tighten its security in order to provide its customers with an even more reliable processing service that fulfills their confidentiality requirements.



The dedicated gate for confidential documents

Features of This Confidential Documents Processing System

- 1 Dedicated and secure indoor processing equipment for confidential documents.
- 2 Each customer's documents are processed separately from one another using advanced reservations.
- 3 Confidential documents are dissolved without being taken out of their containers, making information leakages impossible.
- 4 The processing facilities are enclosed by a gate and entrance is restricted only to staff and the customer requesting the processing. The interior and exterior is monitored 24 hours using a security system, while a vein authentication device prevents entry from unauthorized third parties.



The confidential documents processing area

Managing the Content Ratio of Recovered Paper

In fiscal 2008 the Oji Group created the Recovered Paper and Pulp Content Ratio Management Procedure Manual based on the system for verifying the content ratio of recovered paper and pulp stipulated by the JPA.

This manual defines how we manage and keep records of the content ratio of recovered paper in each of our production processes, helping prevent any disparities between the actual content ratio of recovered paper and the product label. We also conduct audits to check the implementation status of these practices through our Recovered Paper Use Audit Committee. Additionally, we perform on-site verification as well as submit documents on recovered paper content at the request of our customers.

Prohibitive Materials

Paper that is not suitable for paper manufacturing raw material is referred to as prohibitive material. The Paper Recycling Promotion Center has defined types of prohibitive materials, and among these the following represent those that present the greatest trouble during the paper manufacturing process.

Textile Printing Paper (Dye-sublimation paper for iron printing, etc.)

Paper printed with sublimation dye is most commonly used to transfer images or written characters onto polyester fibers. Such paper is sold as a supplement to magazines or for handicrafts because it can be transferred using an iron, meaning it can also be used in the home. Textile printing paper often is dispensed in rolls and features written characters in reverse.

Recently, this paper is being used in handbags and shoes imported to Japan as a shock absorber. As the photograph below shows, textile printing paper is typically covered in white paper and then stuffed into the product.

Sublimation dye cannot be completely removed with today's recovered paper processing technologies, using both washing and bleach. As a result, the dye will gradually come off at room temperature when mixed in with recovered paper, appearing as a speckle or blotch on the surface of finished paper.



Textile printing paper



Textile printing paper used as a shock absorber in handbag

Paper with Odors

Paper with particularly strong odors, such as boxes used to package fragrances, soap or detergents, is difficult to process because these odors cannot be fully removed during recovered paper processing. As a result, the odor will remain on the final product.



Detergent packaging

Wax Paper

Wax paper is mainly used as a packaging paper that is covered in or soaked with paraffin-based coating agents. Occasionally, the containerboard used to transport lemons, broccoli, shrimp and other products imported to Japan are lined with wax. If wax paper is mixed in with recovered paper, it will create blemishes in the finished product.



Wax lined corrugated container

Note: Thermal foaming coated paper, which can be used to depict three-dimensional maps because its surface expands when heat is applied, is another prohibitive material.

Effective Utilization of Waste

We are promoting the effective reuse of waste and working to reduce our final disposal amount.

Initiatives Aimed at Utilizing Waste Effectively

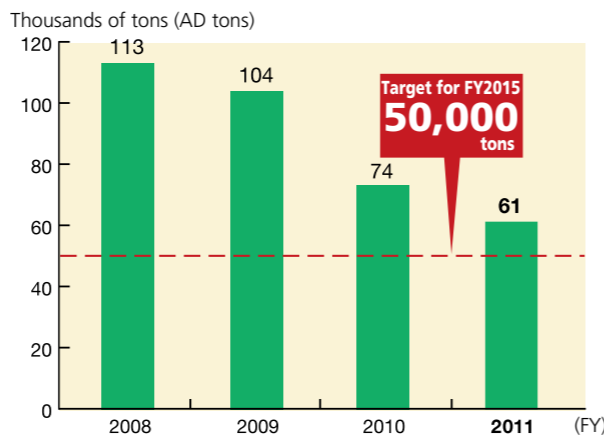
The Oji Group's final disposal amount*1 for fiscal 2011 was 61,000 tons. In order to reduce this amount further, our mills and research laboratories are working closely to develop ways to more effectively reuse waste.

The incinerated ash of paper sludge that was once sent to landfills as industrial waste is now being reused as a raw material for cement, in reconditioned sand, roadbed, and as a soil conditioner.*2

In a joint development project with Koya Eco Chemical, a manufacturer of soil conditioners, we experimented with our proprietary technologies to perform repeated testing on a new product fully compliant with Japan's Soil Contamination Countermeasures Act. The results showed that together we had developed a new soil conditioner today known as JAS COAT, which is more chemically and physically sound than competing products.

- *1 **Final disposal amount** The amount of waste that cannot be reused and in turn sent to a landfill as waste.
- *2 **Soil conditioner** Used to condition and modify polluted soil or soft soil for parks, playgrounds and road construction.

Final Disposal Amount

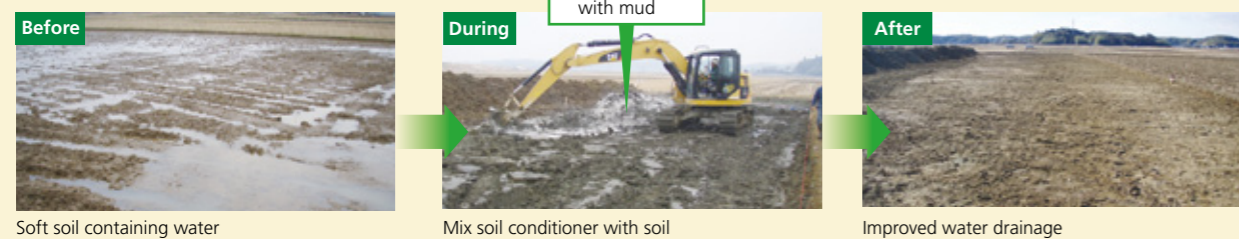


*Data covers Oji Paper, Oji Materia, Oji F-Text, Oji Nepia, and Oji Imaging Media.

How JAS COAT Differs from Conventional Soil Conditioners

- Conditioned soil is neutral, enabling plant growth
- Highly water permeable, conditioned soil enables water drainage
- Conditioned soil does not become hard like concrete

Soil Conditioning Project Example

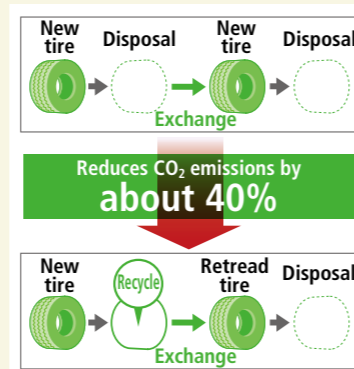


FOCUS

Using Recycled Tires

Oji Rikuun uses recycled tires on its vehicles. A tire that is reused after its worn out tread is replaced is called a retread tire. Such tires help to reduce the number of scrap tires and enable resource conservation.

Kyokuyo Pulp & Paper sells retread tires and fuel efficient tires that are used by other companies both from within and outside the Oji Group.



Environmental Data

INPUT

- Fossil fuel-derived energy**
1,472 thousand kl*1
- Renewable energy**
1,241 thousand kl*1
- Waste-derived energy**
505 thousand kl*1
- Water used**
616 million m³
- Main raw materials**
Wood chips: 4,035 thousand tons
Recovered paper: 4,211 thousand tons

Oji Group's four paper manufacturing companies*2

OUTPUT

- Discharge to atmosphere**
CO₂ from energy sources*4: 4,108 thousand tons
Greenhouse gas: 5,749 thousand tons
SOx*5: 6 thousand tons
NOx*6: 10 thousand tons
Soot*7: 0.5 thousand tons
- Discharge to water**
Wastewater: 589 million m³
BOD*8: 5 thousand tons
COD*9: 25 thousand tons
SS*10: 14 thousand tons
- Amount of waste generated**
1,271 thousand tons
- Final disposal amount**
61 thousand tons
- Production volume of paper and paperboard**
7,012 thousand tons

CO₂ absorption amount of Oji Group forests

- Company-owned forests in Japan: 530 thousand tons/year
- Overseas forest plantations: 9,781 thousand tons/year

CO₂ emissions from the transport of Oji Group products
230 thousand tons/year*3

*1 Energy is shown in crude oil equivalent.
*2 The four paper manufacturing companies are Oji Paper, Oji Materia, Oji F-Text, and Oji Nepia.
*3 Total emissions for Oji Paper, Oji Materia, Oji F-Text, Oji Nepia, Oji Imaging Media, Oji Container, Oji Corn Starch and Oji Tac, which are required to report their use of energy as a Specified Consigner under Japan's Energy Conservation Act.

*4 CO₂ from energy sources	CO ₂ originating from fossil fuels and purchased electricity that are consumed in the manufacturing process.
*5 SOx (sulfur oxides)	Oxides of sulfur included in the exhaust gas from boilers, incinerators, and other combustion equipment, with sulfur dioxide as the principal component.
*6 NOx (nitrogen oxides)	Oxides of nitrogen included in the exhaust gas from boilers, incinerators, and other combustion equipment.
*7 Soot	Particulate matter included in exhaust gas from boilers, incinerators, and other combustion equipment.

*8 BOD (biochemical oxygen demand)	The amount of oxygen consumed when microorganisms decompose organic compounds in water.
*9 COD (chemical oxygen demand)	The amount of oxygen consumed to decompose organic compounds in water through oxidation. Both COD and BOD are used as an indicator of the amount of organic pollutants in wastewater.
*10 SS (suspended solids)	Insoluble matter in wastewater.

Relationship with Business Partners

Ensuring fair and sound relationships with our business partners through compliance promotion and CSR-oriented procurement

Compliance

Compliance Promotion Initiatives

The Oji Group actively promotes compliance awareness among all of its employees through workplace compliance meetings (held semi-annually for all employees including part time workers) and a variety of rank-based training programs offered to everyone, from new employees up to senior management. We also distribute Compliance News (brochure) and loan out learning materials (books and DVDs, etc.).

After receiving an on-site inspection from Japan's Fair Trade Commission, the Oji Group's starch company and corrugated container company invited a speaker from the Fair Trade Institute to give a lecture in August 2012 in order to further strengthen compliance awareness among employees of these companies.



Training session led by a speaker from the Fair Trade Institute



Compliance News and learning materials

Business Ethics Helpline

All Oji Group employees, including executives as well as full-time and part-time employees, are able to report legal violations or improprieties, such as work-related or sexual and power harassment issues, in order to prevent incidents from occurring and to ensure that the Group quickly detect an incident and take remedial action. Two contact points have been set up within the Oji Group: internally, including the Corporate Compliance Department at Oji Holdings, and externally an attorney at law. In fiscal 2011, 39 incidents were reported and appropriate measures were taken in for each case.

Procurement Initiatives for Raw Materials

The Oji Group formulated the Oji Group Partnership Procurement Policy in April 2007 based upon the principles outlined in the United Nations Global Compact, the Oji Group Corporate Code of Conduct and the Oji Group Environmental Charter. This policy enables us to promote CSR-oriented procurement with the cooperation of our business partners.

Our Requests to Business Partners

- Ensure stable supply
- Comply with laws and social standards, and engage in fair trade
- Consider the environment
- Demonstrate social concern
- Communicate with society

Wood Raw Material Procurement Guidelines

The Oji Group created Wood Raw Material Procurement Guidelines based on the Oji Group Partnership Procurement Policy to help strengthen its initiatives for assuring that its wood raw materials are obtained from sustainably managed forests. Our initiatives under this policy are audited by a third party, with the results made available to the public.

Procurement Guidelines

① Expand procurement of wood from certified forests See p33-p37

② Increase use of plantation trees

③ Utilize unused wood effectively

④ Verify that procurement is in compliance with laws and is environmentally friendly and socially responsible

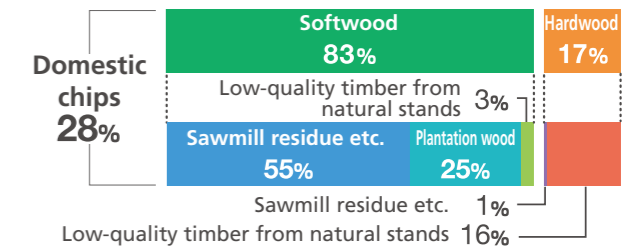
⑤ Disclose information (available online*)

* http://www.ojiholdings.co.jp/sustainability/forest_recycling/view.html (Japanese only)

Procured Wood Chips of Oji Group (Fiscal 2011)



Imported chips are primarily sourced from plantation wood. (Procurement Guideline ②)



Domestic chips are sourced from sawmill residue and low-quality timber as well as plantation wood to ensure the effective use of materials that would otherwise be disposed of. (Procurement Guideline ③)

Implementation of On-site Inspections (Procurement Guideline ④)

Our staff regularly visit forests as well as logging and processing sites to check the traceability of wood raw materials. We also check with local governments from time to time to make sure no illegal logging is taking place at these sites.



Inspection at logging site



Third-party audit report on the traceability of wood materials (Procurement Guideline ④)

Raw Materials (Chemicals and Other Materials) Safety Checks See p56-p57

Whenever sourcing a new material, the Oji Group uses its own inspection sheet to check that its business partners conform to all related laws, hazardous chemical regulations, and green procurement standards set by the industry.

Customer Relations

We always place the utmost emphasis on product safety and supporting our customer's business with our broad product line-up

The Oji Group is devoted to its customers and fosters a bond of trust by taking a fair and equitable approach. We manage customer information, including confidential and personal information, in an appropriate manner, while our utmost priority in all of our business activities always focuses on safety. This is why we constantly strive to ensure the safety of our products and services as well as guarantee the highest degree of safety at our workplaces.

Some of our other goals are to communicate effectively with our customers through our presence at exhibitions and other events and to work with our corporate customers to jointly develop new and innovative packaging solutions.

Product Safety Charter

The Oji Group delivers safe products, fully recognizing that its corporate social responsibility entails providing quality and services that enable customers to use its products with peace of mind. Going forward, we will continue to fulfill the trust of our customers by ensuring that all of our employees reliably implement the following commitments.

- (1) Complying with all safety-related laws and regulations, we will also implement appropriate management to follow voluntary standards.
- (2) We will continually improve our Group-wide quality control system, striving to ensure safety.
- (3) We will provide timely and appropriate information on product safety and proper usage.
- (4) We will proactively gather information on products involved in incidents and make reports to relevant authorities in compliance with the law. We will also faithfully take necessary action to find the root causes of incidents and strive to prevent their recurrence.
- (5) We will continuously review our management system through regular internal audits, always striving for improvement.

Oji Paper Library

The Oji Paper Library, located on the first floor of the Oji Holdings head office building in Tokyo, was opened in order to provide a platform for us to directly interact with consumers. The library houses a display of some 300 types of paper samples that can be viewed, touched, and checked. Visitors are also able to take these samples with them for further review. The theme of the library is changed on a regular basis to provide a variety of information on paper.

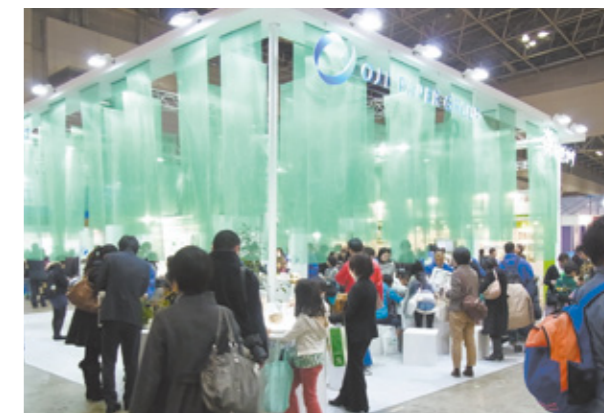


Hours:	9:00am to 5:00pm Monday thru Friday
Admission:	Free
Address:	Oji Holdings Head Office 1F, 4-7-5 Ginza, Chuo-ku, Tokyo

Hosting Booths at Exhibitions

Eco-Products 2011

The Oji Group hosted a booth at Eco-Products 2011, Japan's largest environmental exhibition, under the theme of utilizing its forests. The Oji Group's booth showcased its forest certified products made of wood sourced from responsibly managed forests as well as the potential offered by forestry resources. The booth also worked to foster greater understanding about the Oji Group's recycling-based business that seeks harmony with the environment.



Automotive Engineering Exposition 2012

We took part in the Automotive Engineering Exposition for the first time in 2012 in order to introduce our broad range of materials borne from our proprietary paper manufacturing technologies. Our booth also strove to foster greater understanding in the unique and superior performance offered by each.

Our booth showcased materials from the four key fields of paper, film, non-woven fabrics, adhesives as well as novel technologies such as nano buckling, nano dot arrays, nano fiber cellulose, and bioethanol.



Cosme Tech 2012

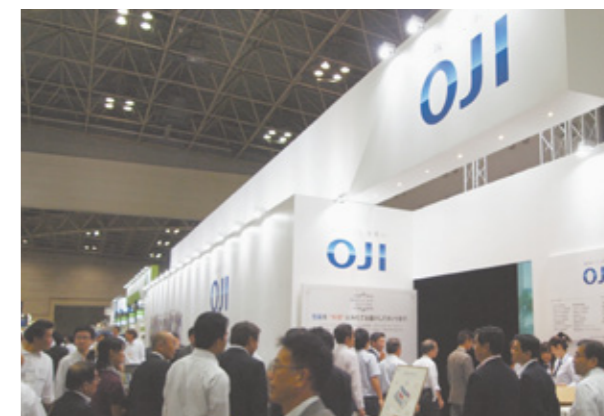
Oji Kinocloth and New Tac Kasei jointly hosted a booth at Cosme Tech 2012. Oji Kinocloth highlighted its cosmetic puffs and face mask materials, from among its non-woven fabric sheets that require a wide variety of qualities based on the application. New Tac Kasei introduced its gel sheet manufacturing line that processes a wide range of shapes and sizes by coating non-woven fabrics and films with gel infused with beauty ingredients.



Tokyo International Packaging Exhibition 2012 (Tokyo Pack 2012)

The Oji Group booth at Tokyo Pack 2012 introduced products from 15 of its subsidiaries in Japan and 13 of its overseas subsidiaries. Under our Group branding slogan "Beyond the Boundaries," we focused on the theme of visualization as an integrated materials manufacturer when introducing new solutions for our products to exhibition visitors.

At the exhibition, we left a strong impression of our globally-integrated operations thanks to the presence of both domestic and overseas employees at the booth.



Product Safety Management

We strive to continually enhance the quality of our products by performing safety checks that start with the selection of chemicals. We also provide product information to our customers.

Informing Customers

Information Provision

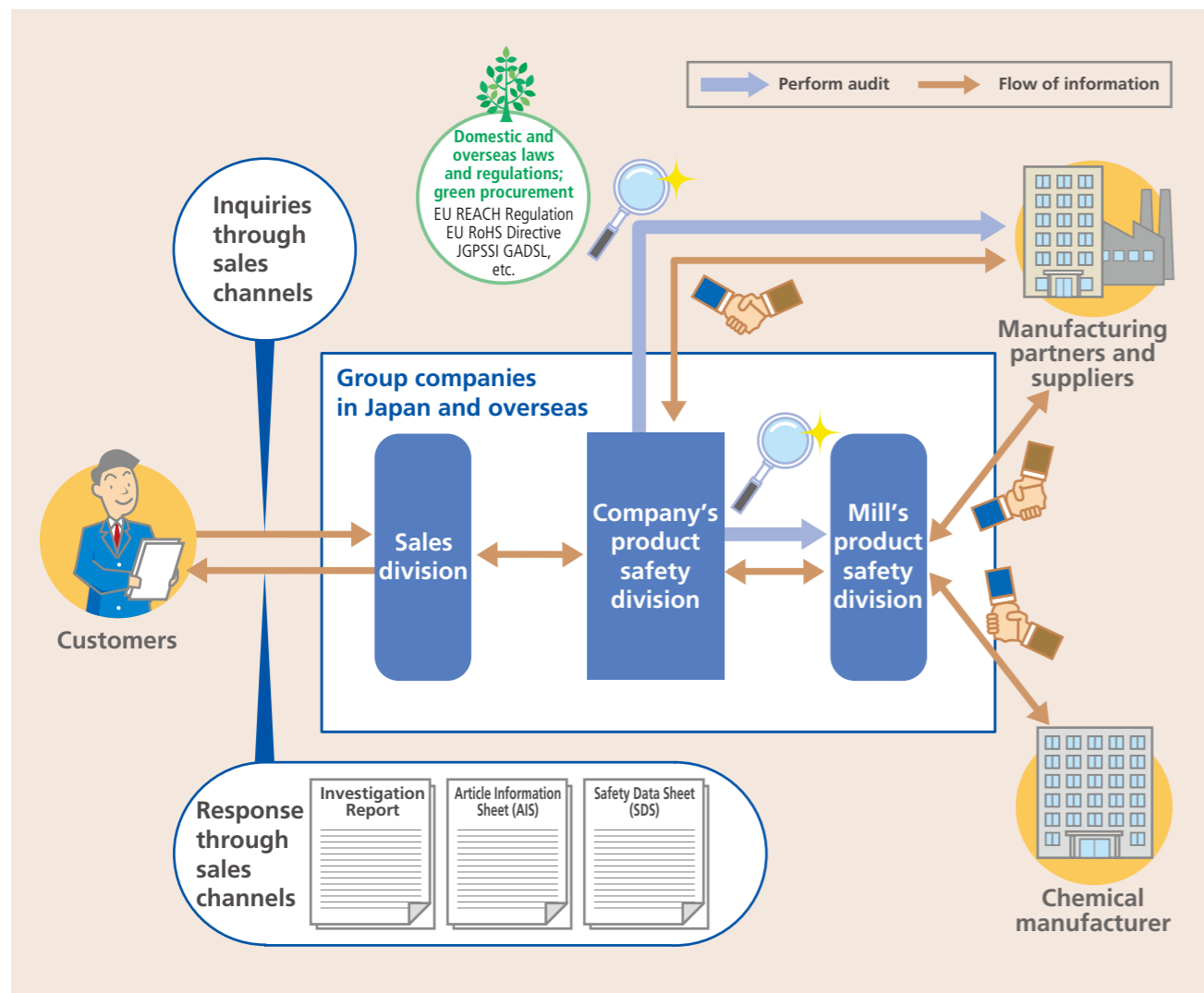
We respond to customer inquiries based on a variety of chemical safety information (including materials, hereinafter "chemicals") verified through our pre-use evaluation system and information updating system.

Responding to Customers

Oji Paper, Oji Materia, Oji F-Tex, Oji Imaging Media and Oji Nepia respond to customer inquiries using Investigation Reports,*1 Article Information Sheets (AIS)*2 and Safety Data Sheets (SDS).*3

In fiscal 2011, these five companies responded to some 6,500 customer inquiries. Other Group companies also respond to customer inquiries individually.

*1	Investigation Report	A report that investigates chemicals used over a prescribed period in response to inquiries for more detailed information.
*2	Article Information Sheet (AIS)	Document overviewing laws, regulations, and handling cautions related to the product.
*3	Safety Data Sheet (SDS)	Legally-required document issued for special products containing substances specified by law, in amounts above a specified threshold.



Verification of Chemical Safety

Pre-use Evaluation System

When examining the use of a new chemical, the Oji Group uses its proprietary pre-use evaluation system to check if the particular product complies with laws, internal chemical toxicity regulations and the green procurement standards of industry groups.

This system was launched by Oji Paper in 1994, or the year prior to the enactment of Japan's Product Liability Act. Later, it was extended to other Oji Group companies.

Information Updating System

Chemical substance management regimes have been strengthened both in Japan and overseas, with more chemical substances now subject to regulations and green procurement standards. As a complement to the pre-use evaluation system, we employ the Oji Group's proprietary survey sheets to periodically update information covering chemicals in use.

Product Safety Verification

Paper and paperboard used in packaging and utensils that will contact food demand an even higher degree of safety and peace of mind. As such, the Japan Paper Association (JPA) has established voluntary safety standards.

The Oji Group considers safety its utmost priority. We have incorporated voluntary standards, established by the JPA, the Japan Corrugated Case Association, the Japan Federation of Printing Industries, and the Japan Kraft Paper Sacks Association respectively, into internal regulations covering 123 worksites.



Product Safety Audits

The Oji Group companies' head offices perform product safety audits (document audit: annually, on-site audit: every two years) based on survey sheets completed by mills in advance, in order to verify whether internal regulations on product safety and raw materials safety are being properly implemented.

In fiscal 2011, we initiated the following new measures to strengthen our product safety.



Audit in progress

Non-food Application Products

We strive to prevent defective non-food application products that are prone to design or manufacturing flaws using added management checks. We also perform audits covering 85 worksites to continually inspect and improve these checks.

Manufacturing Partners and Suppliers

Each Oji Group company performs document audits and on-site audits on their manufacturing partners and suppliers covering 144 worksites in order to continually inspect and improve management checks on products sourced from them. The audit results are scored and explained to the manufacturing partner or supplier to constantly improve product safety.

Overseas Group Companies

We perform document audits on our overseas Group companies covering 37 worksites. These audits check the status of raw materials and product safety management as well as compliance with customer's green procurement standards to help improve our management practices. We also perform on-site audits at worksites that manufacture products for use in food applications. [See p14](#)

Audits Performed by Customers

Our customers also perform audits on the products we supply. These audits cover 34 worksites. Feedback from our customers is used to help make further improvements to product safety.

Supervision Program on Product Safety

Oji Group companies recognized as in need of improving their management practices and employee awareness are designated as a company requiring product safety supervision.

These companies create improvement plans and when necessary receive training from an external consultant. They seek out continual improvements by conducting management system inspections and in-house training.

Packaging Products that Support Consumer Lifestyles

The Oji Group constantly develops optimized packaging that fulfills the demanding needs of its customers, which include resource conservation, lighter weight designs, display efficiencies, workability and recyclability. This also ensures that merchandise is transported and handled in a safe manner.

Our quality management system spans from packaging design to processing, assembly and delivery to ensure that our packaging products are both safe and highly effective. Packaging products made by the Oji Group were made with the utmost focus on reliability and the rapport we have established with our customers.

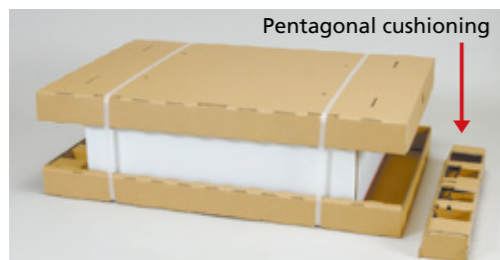
Initiatives with Customers (Japan Packaging Contest 2012 Award Winning Products)

Daikin Industries, Ltd.

Resource Conserving Packaging

Pentagonal Corrugated Containerboard Cushioning

This is a pentagonal-shaped cushioning used to pack commercial air conditioners. This design ensures that the packaging can be made entirely out of corrugated containerboard, which helps conserve resources and improve recyclability. This design also helps prevent shifts during transport and makes it easier to insert the finished product.



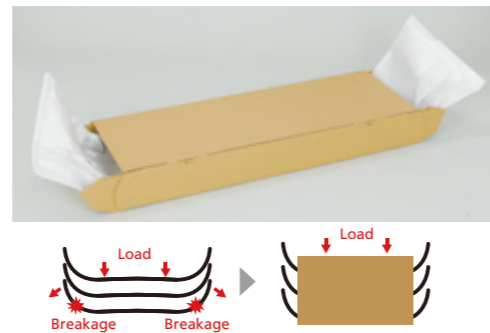
Oji Container Co., Ltd.

Suzuki Motor Corporation

Helping Make Light Weight Designs Possible

Improved Bumper Packaging Materials

To protect lighter weight bumpers, we helped Suzuki Motor change from conventional plastic bag packaging to composite packaging utilizing corrugated containerboard as an external cushioning and protective material.



Oji Container Co., Ltd.

SAKAE ICE SALES Corp.

Super Water-resistant Corrugated Container

Event Coolers made with Ultra Super Protect Containers (USPC)

This highly water-resistant corrugated containerboard case represents a new format in event coolers. In addition to being recyclable, these containers also help to reduce storage space compared to leased coolers.



Oji Container Co., Ltd.

Honda Motor Co., Ltd.

Shared Packaging Specifications

Improved Packaging for Automotive Headlights and Taillights

We worked with Honda Motor to share and standardize packaging materials in order to create common packaging processes for the diverse array of automotive lights. We have also developed processes to complete packaging and sealing simultaneously, which reduces man-hours.



Musashi Oji Container Co., Ltd.

Easy Disposal

Water-straining Paper Garbage Bag

This water-straining paper garbage bag can be left by the kitchen sink to collect food waste.



Oji Adba Co., Ltd.

Fresh System, Inc.

More Effective In-store Displays

Displayable Shipment Tray

This integrated shipment tray features a panel that can be used for display purposes on store shelves. The tray is supported by four corner pillars for strength, making it easy to stack and assemble.



Oji Container Co., Ltd.

Functional Fiber Drum

Recyclable and Water-resistant Fiber Drum SR 200L

This drum is made from water-resistant paper and is ideal for use in refrigerated, freezing and/or transport applications. It is designed to be strong, or capable of carrying up to 200 kg, and easy to handle. It is recyclable, once the paper and iron components are disassembled after use.



Honshu Rheem Co., Ltd.

Safeguarding Packing Work

Improved Packaging for Propeller Shafts used in Construction Equipment

We streamlined packing operations by shifting from plywood boxes to higher strength corrugated container (HiPLE-ACE). These boxes are safer to make as they do not require nails, while they are also recyclable, making them considerate of the environment.



Oji Interpack Co., Ltd.



Performance Testing on Shipment Containers for Hazardous Materials (UN)

Oji Container's packaging testing laboratories in Tokyo and Osaka are registered with and certified by the Ship Equipment Inspection Society of Japan. This means they can conduct performance testing on shipment containers for hazardous materials and provide support to customers wishing to use the UN mark.



UN* standards cover performance testing and inspection criteria for packaging and containers used to transport hazardous materials.

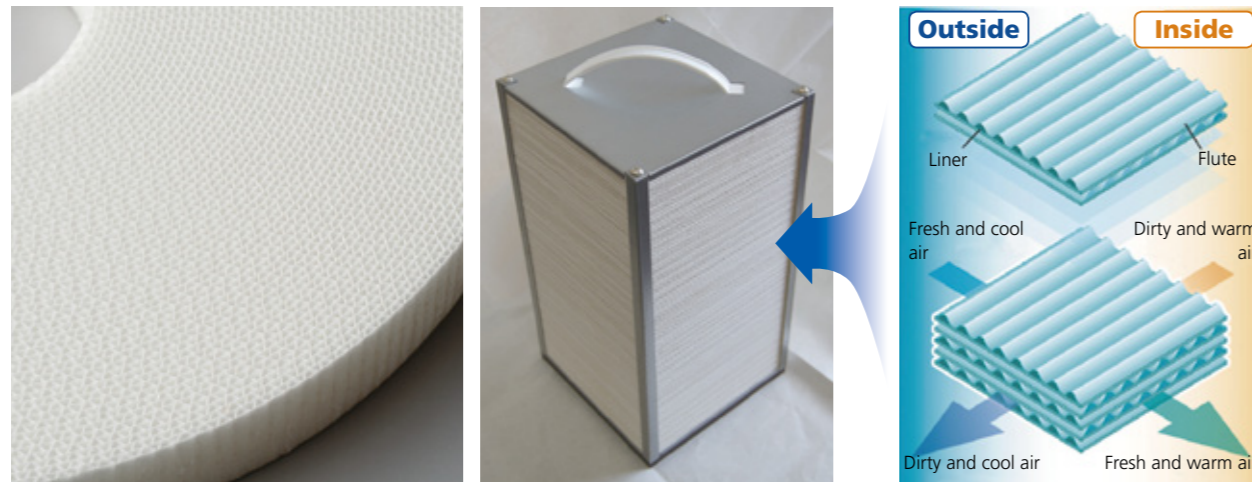
*UN: United Nations

Products that Help Customers Reduce Environmental Impacts

The Oji Group's products not only help reduce environmental impacts during use and disposal, but are also used as a raw material in environmentally-friendly products manufactured by our customers.

Filter Materials

We leverage our papermaking and coating technologies to manufacture filter materials with a wide range of fiber types. Our glass paper featuring glass fibers is utilized as a base material in filters used to remove VOCs, nitric acid and sulfuric acid. Our total heat exchange sheets with cellulose fibers are used as a base material in advanced filters for improving heat exchange efficiency, which helps to reduce energy use in the office and home.



Glass fiber filter

Total heat exchange element

Product made by Oji F-Tex Co., Ltd. and Kunshan Oji Filter Co., Ltd.

Capacitor Films

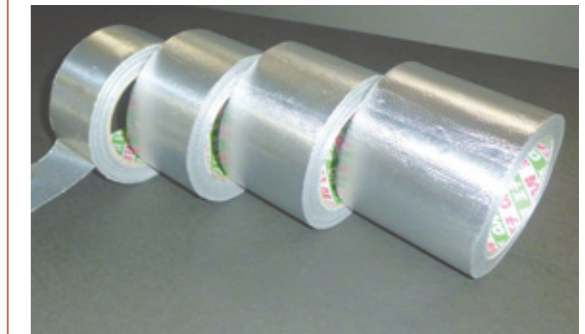
We manufacture polypropylene film used as a core material in capacitors. Today, we have launched some of the world's thinnest film products at 2.5 μm , or one-fourth the thickness of plastic food wrap. These are being used in the base components of hybrid vehicles and electric vehicles, helping to reduce global warming around the world.



Oji F-Tex Co., Ltd.

Aluminum Laminated Glass Cloth (ALGC) Adhesive Tape without Release Paper

ALGC adhesive tape is used to tape together the joints of insulation wrapped around air conditioning and heating ducts. Using our proprietary surface treatment capabilities, we have developed an ALGC adhesive tape that retains strong adhesive properties, despite having no release paper. This product has received highly positive feedback from customers for its workability and because it produces no release paper waste.



Oji Tac Co., Ltd.

Pulfine

Pulfine is a food container with a higher foam ratio than conventional foam-based polypropylene containers. This gives it better insulating and heat retention capabilities, yet makes it lighter weight and more resource efficient compared to existing products. Polypropylene is used in microwave-safe plastic containers because of its high heat resistance, oil resistance and advanced foam technologies.



Ginpo Pack Co., Ltd.

Ecomypit

Ecomypit is a hygienic fixation agent used during emergencies. Its water absorbing polymer quickly absorbs the moisture content of urine and feces, creating a solid gel-like by-product. All natural humic acid prevents foul odors, while after use the by-product is a solid blackish-brown color making for easy and discreet disposal. Ecomypit uses environmentally-friendly materials, meaning the by-product can be incinerated safely. This product was sent to those areas damaged in the Great East Japan Earthquake to be used in the relief effort.



Oji Forest & Products Co., Ltd.

FOCUS

First Tree Thinning Project for an NPO Supporting Tree Thinning Activities

Environmental NPO Office Chonai-kai supports tree thinning activities under its Morino Chonai-kai (Forest neighborhood association) initiative, in which a premium is added to the cost of printing paper to help companies and organizations support tree thinning activities. All proceeds from this premium are used to support tree thinning projects and the effective use of thinned timber.

In support of this initiative, Oji Paper receives thinned timber chips collected from the Morino Chonai-kai at its Kasugai Mill in Aichi Prefecture. In turn, it uses these chips as part of the raw materials for its paper manufacturing. Oji Group has been supporting the Morino Chonai-kai initiative in the Chubu district since 2010. In 2011, the first tree thinning project was completed on a three-hectare plot of land in Iijima Town in Nagano Prefecture to help make the area's forest healthier and more vibrant.



Supporting companies and organizations visiting the tree thinning project site



Thinning has helped to draw in more sunlight and increase CO₂ absorption



(Photos courtesy of: Office Chonai-kai)

Employee Relations

Our human resource programs are designed to ensure employee health and safety, provide comfortable workplaces, and give all employees the opportunity to prosper by realizing their full potential.

Management Based on Respect for People

The Oji Group prides itself in maintaining a labor-management relationship that is grounded in respect and trust. We recognize that our workforce represents our most important intangible asset. As a result, our human resource system is grounded in the vision of management based on respect for people, which stands at the heart of our management philosophy, whereby we leverage the unique abilities and talents of each and every employee to build a solid foundation for all.

In order to further enhance our human capital and invigorate our organization, we have shifted from seniority to performance based evaluations and have further encouraged greater diversity in hiring. We are also developing our human resources globally through overseas training programs in order to help accelerate our overseas expansion.

Main Human Resource Program of the Oji Group*

Performance-based human resources and salary system for managers	Implementing a transparent performance evaluation system and salary system based on clarification of the results and abilities expected of managers.
Ability-based grade system for basic-position employees	Operating an ability-based human resources and salary system based on clear functional qualification standards.
Job rotation	Systematically implementing job rotations to enable individuals to demonstrate their abilities more effectively, based on a commitment to having the right person in every job.
"Self-declaration" system	Implementing annual employee self-declarations in conjunction with supervisor interviews with a view toward long-term, systematic human resource development.
Encouraging employees to pursue new qualifications	Operating a system of providing incentive pay for employees who acquire new qualifications, in order to create a corporate culture where individuals take the initiative to learn and advance their careers.

* Oji Holdings, Oji Paper, Oji Imaging Media, Oji Green Resources, Oji Management Office

Constructive Labor-Management Dialog

Oji Group companies proactively hold dialog with labor unions to help develop and stabilize labor-management relations under the basic approach characterized by our commitment to establishing a stable and cooperative labor-management relationship founded on mutual trust and understanding. This is based on the recognition of our corporate social responsibility and mission as well as the fact that mutual dependence forms the basis for company growth and improving the labor conditions of employees.

5 Principles from the Labor-Management Accord Preface

(From the Labor-Management Accord with the Oji Paper New Workers' Union)

(1) Respect for independence	The company and labor union shall respect each other's independence.
(2) Communication	The company and labor union shall communicate sufficiently based upon mutual trust and understanding.
(3) Peaceful solutions	The company and labor union shall seek solutions to problems between them in a peaceful manner.
(4) Proper impartiality in personnel affairs	The company and labor union shall, after due consultation, establish general standards relating to the personnel affairs of union members, and the company shall use proper impartiality in the application of those standards.
(5) Improvement and optimization of labor conditions	The company and labor union shall work together to promote the modernization of the company and corporate group and thereby ensure their existence and prosperity, maintain, improve, and optimize the labor conditions of union members, and strive to stabilize employment throughout the corporate group.

Human Resource Hiring

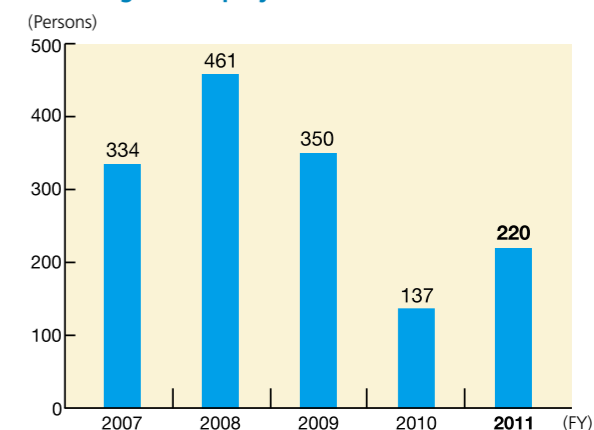
With labor shortages expected due to Japan's aging population and declining birthrate, we are working to find high quality human resources that can work together in small teams to help us become a corporate group that is creative and sensitive to the needs of its customers. Specifically, while examining our headcount over the mid- to long-term, we will systematically hire new employees according to the following three viewpoints:

- (1) Hire and develop core management resources for the Oji Group;
- (2) Train core employees in operating divisions and seamlessly pass on proprietary technologies and skills; and
- (3) Strengthen overseas expansion, new businesses and sales competencies

We will also push forward with a more diverse

approach to hiring unconfined to the status quo where we actively hire foreign nationals as well as mid-career hires throughout the year.

The Oji Group's New Graduate Hires as Regular Employees

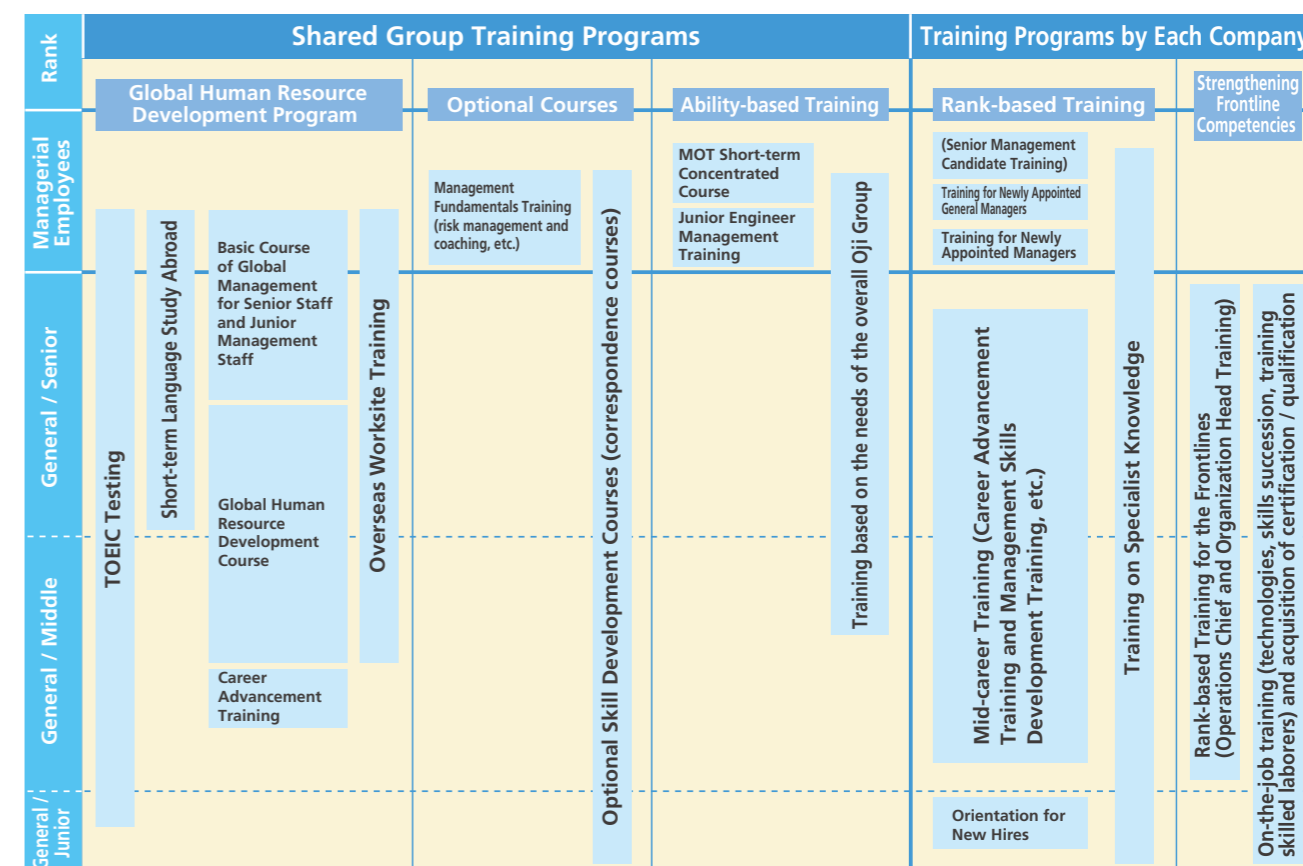


Human Resource Development and Improvement

The Oji Group is committed to being a good corporate citizen that maintains high ethical standards which foster greater trust with society. To achieve this aim, we have formulated a corporate code of conduct and behavior standard. [see p6](#) We are developing and strengthening our human resources in accordance with the following policy to fulfill these important codes and standards.

- | | |
|---|--|
| (1) Maintain and improve employee motivation through their active involvement in the reform process | (4) Develop globally-minded human resources |
| (2) Enhance collaboration among Group employees | (5) Promote diversity |
| (3) Strengthen communication skills | (6) Enhance multi-potential through human resource development and skills building |

The Oji Group's Education Structure



[Employee Relations] Offering Workplaces where Diverse Human Resources can Thrive

Work-life Balance Support Measures

We have created and revised company rules to meet or exceed statutory standards, including the launch of a free childcare hotline, introduction of a shorter working hours program, encouragement of fathers to take childcare leave, and the expansion of our nursing care leave program. These initiatives have enabled us to develop a workplace where both men and women alike can take childcare or nursing care leave as well as achieve a positive work-life balance.

◆ Childcare Support Measures

Free childcare hotline	Oji Group Health Consultation Office
Shorter working hours program	Programs (flextime, part-time) to enable care for children before they start elementary school
Encouraging childcare leave	Encouraging male employees to take childcare leave
Expanding situations under which reserve leave can be taken*	Reserve leave can now be taken to care for children who are sick or injured, before they start junior high school
Paying a partial salary during childcare leave*	Paying a partial salary to employees from the time they start childcare leave until their child reaches one year of age. This goes beyond the requirements of Japanese law.

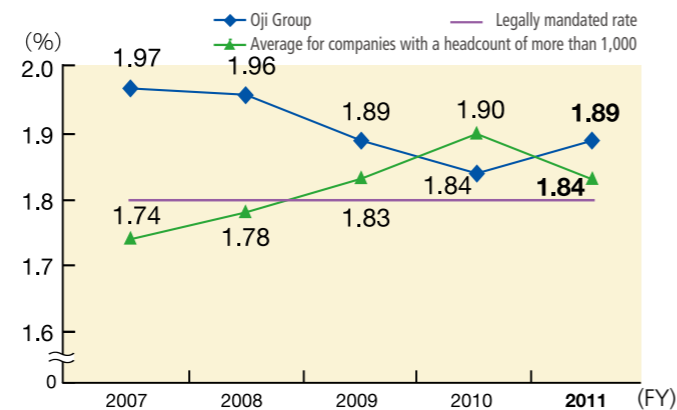
*Implemented at certain Group companies

Hiring of Persons with Disabilities

Since fiscal 2004, we have been working in cooperation with public agencies and NPOs to further the employment of persons with disabilities, including the intellectually disabled, for whom it is considered difficult to secure places of work.

In June 2007, we established Oji Clean Mate Co., Ltd., which was approved in September 2007 for group treatment as a special subsidiary under Japan's Act for Employment Promotion of Persons with Disabilities.

◆ Employment Rate for Persons with Disabilities



• Data covers Oji Holdings, Oji Paper, Oji Nepia, Oji Imaging Media, Oji Green Resources, Oji Management Office, Oji Human Support, and Oji Clean Mate

Number of Group Employees and Hiring of Senior Citizens

As of March 2012, the Oji Group had 24,683 employees and of those 7,070 are employed at our consolidated subsidiaries outside Japan.

We have developed a system that enables employees to continually thrive and work with motivation until the age of 65. This is being accomplished through changes made to our human resource programs and in our workplaces. This includes securing a labor force and long-standing skills for operating divisions, despite the rapid progress seen in Japan's aging society and declining birthrate, as well as enhancing employee benefits by providing employment opportunities that can support a stable senior lifestyle.

◆ Oji Group Employees (Consolidated Basis)

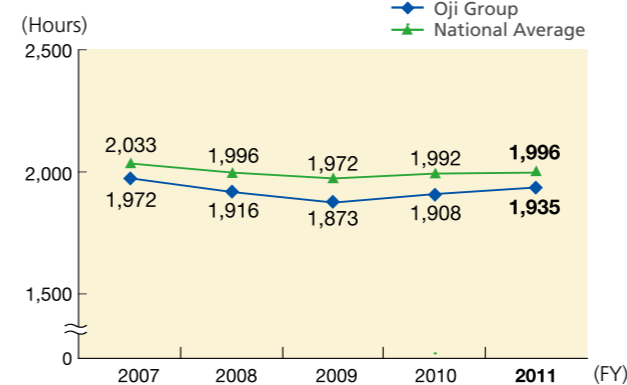


[Employee Relations] Safe Workplaces and Healthy Employees

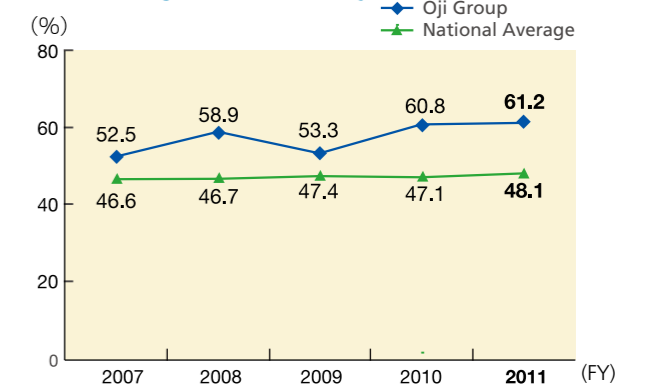
Better Management of Work Hours

Our human resources represent an important management resource. As such, we constantly strive to better manage employee work hours by reviewing and streamlining work processes as well as encouraging employees to take paid holidays as part of our commitment to work-life balance and mental health.

◆ Total Work Hours



◆ Percentage of Paid Holidays Taken



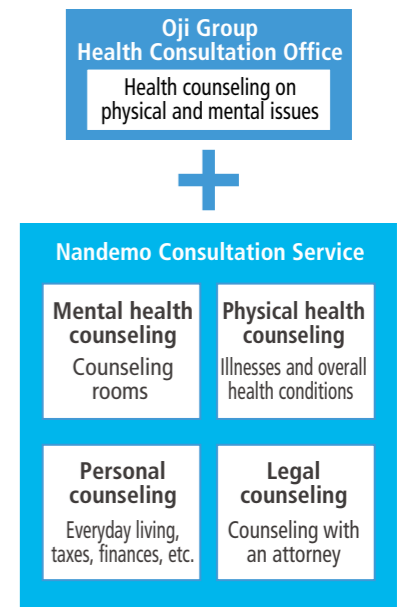
• Data covers Oji Holdings, Oji Paper, Oji Imaging Media, Oji Green Resources, and Oji Management Office

Comprehensively Supporting Employee Healthcare

We are helping to prevent illness as well as encourage early detection and treatment through regular health checkups, specialized health exams, cancer screenings and specific health exams such as brain scans. We also offer follow-up consultations with an industrial physician.

Our 24-hour telephone hotline, the Oji Group Health Consultation Office, helps support the physical and mental health of our employees and their families, while we have established another more comprehensive hotline, the Nandemo (Anything Goes) Consultation Service, which was established to shore up our system for providing daily access to healthcare advice.

With our global expansion, we are also actively working to support the health of our employees outside Japan. We organized seminars led by counselors for the Shanghai area in 2011 and for the Kuala Lumpur area in 2012.



Providing Multifaceted Support for Employee Life Planning

We organize life planning seminars at each of our worksites across Japan to provide information that will help employees consider their choices about the future. This includes such topics as asset building, daily living, career advancement and motivation. Spouses are also able to attend these seminars so that both husband and wife can build a better future together.



[Employee Relations] Safe Workplaces and Healthy Employees

Occupational Safety and Health Initiatives

The Oji Group recognizes that a company's continuity is greatly jeopardized without safe workplaces. As such, we undertake business activities under our fundamental philosophy that safety is always first.

In 2012, we established the shared slogan, "Strive for zero workplace accidents by means of safer equipment and greater awareness toward danger," in order to proactively implement safety measures across the entire Oji Group, both in terms of our infrastructure and employee awareness. Our ultimate goal is to achieve zero workplace accidents by fully leveraging our occupational safety and health management system as well as risk assessments.

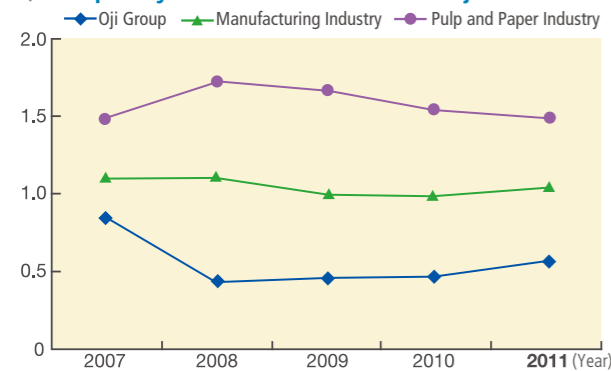
Initiatives to Prevent Occupational Accidents

Most of the workplace accidents resulting in lost worktime that occurred in 2011 involved employees getting caught in equipment, falling from high places, or tripping. Most of these accidents were caused by inattention to safety, including failure to perform safety checks prior to starting work or approaching equipment without turning it off.

Given this, in 2012 we stepped up safety training and strengthened workplace communication in order to help eliminate this inattention to safety.

Our stepped up training included danger training using simulated machinery and repeated training sessions for workers with less experience. As for our steps to enhance workplace communication, we conducted a workplace safety questionnaire to identify the causes behind inattention to safety. We plan to follow up on the results and implement improvements based on discussions at each workplace.

Frequency Rate of Lost Worktime Injuries



Frequency rate = No. of fatalities or persons injured in workplace accidents / 1 million work hours
Data for the manufacturing industry as well as pulp and paper industry is from Ministry of Health, Labour and Welfare statistics

• Data covers Oji Paper, Oji Materia, Oji F-Tex, and Oji Imaging Media

As measures against heat stroke caused by summer heat and our energy conservation initiatives, we encourage employees to hydrate themselves and replenish their salt intake as well as take steps to improve the workplace environment using a WBGT* meter, installing fans, or allowing employees to wear lighter weight work clothing.



Simulated danger training

Safety Awards

In 2011, the following Oji Group mills received safety commendation awards. Other Oji Group worksites also have their own in-house safety commendation programs, which forms part of our broader effort to raise further awareness toward safety.

Japan Paper Association Excellence in Safety Award	Oji F-Tex Ebetsu Mill, Oji Paper Tomioka Mill, Oji Materia Nayoro Mill
Japan Corrugated Case Association Excellence in Safety Award	Oji Container Tsukuba Mill Oji Container Saitama Mill Oji Container Hofu Mill
Tochigi Labor Bureau Director-General's Award	Oji Tac Utsunomiya Mill

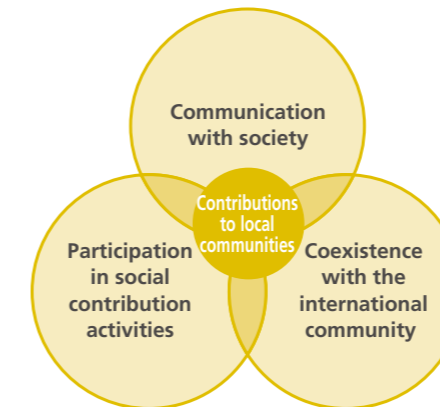


Community Relations

Oji Group companies leverage their inherent strengths in a variety of activities held together with members of the local community.

The Oji Group engages in business activities in accordance with the principles of communication with society, participation in social contribution activities and coexistence with the international community, as laid out in its corporate code of conduct.

We are striving to build relationships of trust through active communication with local communities, to provide environmental education utilizing our company-owned forests, and to be more involved with local environmental and social initiatives. This represents but a glimpse of our wide reaching social contribution activities.



Environmental Monitor System

Each of the mills operated by Oji Paper, Oji Materia, Oji F-Tex, Oji Nepia and Oji Imaging Media has instituted an environmental monitor system that collects feedback and information from members of the surrounding communities.

These mills handout and collect environmental monitor surveys to receive feedback on environmental issues seen in the surrounding area. Environmental monitor meetings are also held annually to provide a platform for local communities to provide their views in person.

This not only helps us implement environmental measures against odors and noise, but also build relationships of trust with local community members through open and active dialog.



Environmental monitor meeting

Restart of Operations at Oji Container's Sendai Mill

Oji Container's Sendai Mill, which is located about one kilometer away from the Port of Sendai, suffered a direct hit from the four meter high tsunami caused by the Great East Japan Earthquake. Fortunately none of the mill's employees were injured, but the mill's corrugated container manufacturing equipment was rendered useless and the building was damaged extensively.

Later, after discussions with Tagajo City and Miyagi Prefecture, we decided to reconstruct the mill in consideration of our half a century relationship with the local community since the start of operations, which included hiring people from the local community and close-knit customer relationships. We moved forward with recovery work and in February 2012 we restarted operations at a new mill in Tagajo City.

After operations were restarted, the mill's workers that had moved to other areas of Japan returned. Since then, production has continued, while at the same time construction projects are also being implemented aimed at a complete recovery. Our commitment to help rebuild the local community represents a mission to give back to those that supported us in the wake of the earthquake and tsunami.



The Sendai Mill after the earthquake and tsunami



The Sendai Mill after operations were restarted

[Community Relations]
Social Contribution Activities at Oji Nepia

Nepia Tender – Helping Those that Help Others – Activities in Support of Senior Citizens Impacted by the Earthquake and Tsunami

Helping those in need with Nepia Tender

NPO Magokoro Service Fukushima Center
 (Parent organization provided care services)



Volunteers helped with activities to bring smiles to the aged as well as set up and run the Uraraka Plaza

Starting in May 2011, shortly after the earthquake and tsunami struck, Oji Holdings and Oji Nepia began donating a portion of their sales of Nepia products to help support the activities of NPOs and other organizations that are providing relief assistance to those in need.

In fiscal 2012, or the second year of this initiative, both companies held a campaign to help support senior citizens impacted by the disaster and living in Fukushima, which will be the site of a new production facility for Nepia Tender, an adult diaper product.

Through this initiative, both companies have been donating a portion of their proceeds through the Japan Philanthropic Association to help fund the Magokoro Service Fukushima Center's project for creating a gathering place for senior citizens. Employees from these companies have also lent a helping hand as volunteers.



Uraraka Plaza opens

“nepia 1,000 Toilets Program”

Oji Nepia has run the Nepia 1,000 Toilets Program since 2008. Through this program, a portion of sales from specific Nepia products purchased by consumers was used to help create better toilet facilities as well as support water and hygiene education in East Timor.

During fiscal 2011 after the Great East Japan Earthquake most donations were rerouted to those in need in Japan, while Oji Nepia decided to implement the Nepia 1,000 Toilets Program 2011 by providing corporate donations to UNICEF to help fund projects locally.



Newly constructed toilet

“nepia GENKI!” supporting the Japan CliniClowns Association

Since 2010, Oji Nepia has donated a portion of sales from nepia GENKI products through the Japan Philanthropic Association to the Japan CliniClowns Association.

The Japan CliniClowns Association dispatches CliniClowns to hospitals across Japan in order to reinvigorate hospitalized children with fun and humor. In fiscal 2011, we helped the association organize a 49-appearance schedule for a total of 12 hospitals.

A portion of sales from nepia GENKI products were also used to help support the association's special program for sending CliniClowns to children's facilities in areas impacted by the Great East Japan Earthquake.



CliniClowns at a hospital

[Community Relations]
International Social Contribution Activities

Quy Nhon Plantation Forest Company of Vietnam Ltd. (QPFL)'s Social Contribution Activities

QPFL, which is located in the Binh Dinh Province of Vietnam, plants trees and logs at its plantation based on dialog with members of the surrounding communities. QPFL also becomes aware of community issues through discussions about its tree plantation at these sessions. As part of its commitment to give back to the local community, QPFL takes part in social contribution activities that help resolve these community issues. To date, QPFL has donated computers and equipment to local schools, helped rebuild a bridge damaged during a typhoon and dispatched doctors to areas where there are none.

Going forward, QPFL will continue to hold dialog with the local community to foster greater understanding of its business and to identify social action programs that can be of benefit to local community members.



We helped install a safety fence around a local kindergarten



We donated computers to a local junior high school



A free medical exam in an area where there are no doctors

The Oji Group's Tree Planting Activities in China

The Oji Group dispatched a team on two occasions, one in June 2011 and the other in April 2012, to help plant trees on the edge of the Kubuqi Desert in the Inner Mongolia Autonomous Region in Northern China. The Kubuqi Desert was once an oasis filled with greenery, but the region was transformed into a desert after a series of conflicts, floods, cattle grazing and logging.

The tree planting team consisted of Chinese and Japanese employees from the Oji Group in China and each session they planted a total of 1,050 trees. We plan to continue with these activities to reach a goal of planting some 10,000 trees over the next decade.



Employee volunteers planting trees

Groundwork Program

The Oji Group became the first company to join the Japan Groundwork Association after it was established in 1995. This association organizes volunteer activities involving local community members, local governments and companies to help improve the environment of local communities. Today, 77 Oji Group companies and 187 of our worksites take part in groundwork activities.

The activities in the areas around our worksites include river and seashore clean-up and beautification, assistance with local tree planting activities, and support for environmental education programs in the local community and schools.



Visiting a welfare facility to help remove snow and clean-up (Oji Paper Tomakomai Mill)



Pruning and weeding around Someiyoshino cherry trees at a park (Oji Paper Yonago Mill)



Created a planter box in front of the mill's entrance as part of the Amagasaki Flower City Campaign (Oji Imaging Media Kanzaki Mill)



Cutting back grass along a riverbank (Oji Materia Nikko Mill)

Paper Workshop at a Paper Manufacturing Mill

Oji Materia's Edogawa Mill hosted the paper workshop at the mill in November 2011 that consisted of a mill tour to see firsthand how paper is made from recovered paper and a series of fun activities to convey a closer connection to paper. Many people attended the workshop, including local elementary school students who were treated to fun and games with paper, featuring a papermaking class, craftwork and coloring.



Participants touring the mill



Papermaking class

Third-Party Opinion on the Oji Group Environmental and Sustainability Report 2012



Yoshiaki Midorikawa

CSR Advisor,
The Valdez Society
Representative,
Green Consumer
Research Group

Profile

Yoshiaki Midorikawa works as the CSR Advisor to The Valdez Society, which researches and advocates corporate social responsibilities, as well as the Representative of the Green Consumer Research Group, an affiliated organization of this society. For the past ten years Midorikawa has also served as a selection committee member for the Minister of the Environment's Global Warming Prevention Award. He is well-versed in consumer perspectives on environmental consideration and in recent years he has been active with the Network for Sustainability Communication in the fields of human rights and labor practices as they relate to ISO26000. Midorikawa has co-authored *Kouka ga Mieru CSR Jissenhou* (Methods for Practicing Effective CSR) as well as *CSR Keiei* (CSR Management), and has written other works as well.

Features and Commendable Areas of This Report

I found this to be a rather unique CSR report that focuses on both the company's management and environmental initiatives. The report clearly illustrates the company's management strategy of business portfolio restructuring and focusing on its core competencies in the six measures, which promotes further expectations from its transition to a pure holding company. The report's title in Japanese *Kigyo Kodo Hokokusho* (or "corporate action report" in English) is often used in similar reports published by companies in the United States and as the name indicates the report educates readers with an overview of the company's core strategies in terms of the environment and sustainability. Prioritizing safety, the environment and compliance over profitability as stated in the message from the president demonstrates the company's fundamental stance toward CSR as it relates to these core strategies. The many confident statements found throughout the report underpinned by the company's excellent environmental activities provide a sense of the integration between the business strategy and environmental management. The promotion of forest recycling and paper recycling, in which



Midorikawa viewing recovered paper processing equipment

Response to Third-Party Opinion

The Oji Group engages in its business activities with the focus of management drawn squarely on safety, the environment and compliance. This fundamental management philosophy is firmly applied to not only our businesses in Japan, but also at our growing businesses outside Japan with an equal emphasis.

Based on this fundamental philosophy, the Oji Group has announced six key measures as its management strategy and is pursuing a restructuring of its business portfolio in order to accomplish the goals of each quickly. Specifically, as part of one of the six measures, or the acceleration of our overseas business expansion (including our expansion in East Asia and Latin America), we fully

the company has a strong track record, is written about in a detailed, yet easy-to-understand manner. The company's global warming countermeasures are quite apparent thanks to information provided on total CO₂ emissions.

Future Challenges Centered on ISO26000

Today, CSR reports published by Japanese companies require significant improvements. This is because they need to adapt to ISO26000, which represents the global standard in CSR. The composition of this report is related to the seven core subjects of ISO26000, while its definition of stakeholder has also been broadened. This indicates that the company has taken its first step toward adapting to ISO26000. The next step the company should take is to first engage stakeholders by holding dialog on each segment. Incorporating all seven of the social responsibility principles into the company's corporate code of conduct is a fundamental area. Establishing these systems that are compliant with ISO26000 should be promoted as part of the mid-term challenge that includes strengthening the oversight function of the new holding company and realizing the synergistic effects of this new corporate structure.

The seven core subjects of ISO26000 should be at the heart of this approach. Yet, Japanese companies are not fully aware of some of these subjects and in particular human rights. Also, Japanese companies' labor practices and systems lack universality, such as employment format disparities and the hiring and promotion of women. These two areas need to be changed in order for Japanese companies to expand further overseas. Automatically rolling out a Japanese-style employment system at a company's subsidiaries outside Japan carries with it the risk of labor strife, as seen in China, Indonesia and India.

Going forward, it will also be important to develop CSR procurement standards that include human rights and labor practices as well as shift from supply chain management to value chain management. In this regard, the company may need to consider establishing a CSR management system that includes a CSR Strategy Committee and CSR Promotion Department.

recognize that human rights and labor practices, as Mr. Midorikawa points out above, are essential to the continuity of our company. In this regard, we will continually strive to comply with the laws and commonly accepted practices of each country in an appropriate manner.



Yoshiaki Koseki

Director of the Board, Executive Officer
In charge of Group Environmental Management

