



## Corporate Social Responsibility Report

**Kuraray CSR Report 2005**

— Environmental and Social Activities —



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# Corporate Social Responsibility Report

Kuraray CSR Report 2005 — Environmental and Social Activities —

## Contents

- Introduction**
  - Management Philosophy — 3
  - The Kuraray Group at a Glance — 4
  - A Message from the President — 6
  - Corporate Governance — 8
- Community and Employee Relations**
  - Social Service Activity Highlights — 10
  - Socially Beneficial Activities — 12
  - Communication — 14
  - Creating an Open Work Environment — 17
  - Personnel Policies — 18
  - Education, Training, and Career Development — 19
  - Occupational Safety and Health — 20
- Environmental and Safety Activities**
  - Environmental Activity Highlights — 22
  - Environmental Impact of Business Activities — 26
  - Environmental and Safety Policies — 28
  - Medium-Term Environmental Plan — 29
  - Environmental Management — 30
  - Chemical Substances Control — 31
  - Industrial Zero Emissions — 32
  - Green Procurement — 34
  - Disaster Prevention — 35
  - Quality Assurance and Product Safety — 36
  - Distribution Safety — 37
- Environmental Data** — 38
- History of Environmental, Safety, and Social Service Activities at Kuraray** — 40
- Question and Answer — 41
- Third-Party Evaluation — 42
- Message to Our Readers, Editor's Postscript — 43

## Editorial Policy

From 1998 to 2002 Kuraray issued the Kuraray Environmental Activities Report, which focused on environmental preservation and disaster prevention activities. Last year the CSR Committee assumed editorial responsibility for the report and issued the first Kuraray CSR Report, which covers all corporate social responsibility (CSR) activities.

### Past Publications

1998 to 2002	Kuraray Environmental Activities Report
2003	Kuraray Environmental and Social Report
2004	Kuraray CSR Report — Environmental and Social Activities —

In preparing this report, we referred to the Ministry of Environment's Environmental Report Guidelines (2003 Edition) and the GRI Sustainability Reporting Guideline 2002.

The reporting period is from April 1, 2004 to March 31, 2005.

All italicized product names in this report are trademarks of the Kuraray Group.

In this report, the terms "Kuraray," "Kuraray Group," and "Domestic Kuraray Group companies" refer to the following companies.

Kuraray	Kuraray Co., Ltd. (the "Company") and its 13 affiliated companies occupying the same premises
Kuraray Group	Kuraray Co., Ltd. and its 31 principal affiliated companies
Domestic Kuraray Group companies	Kuraray Group companies other than the 7 overseas subsidiary companies

## The Kuraray Group (● Affiliated companies occupying Kuraray premises)

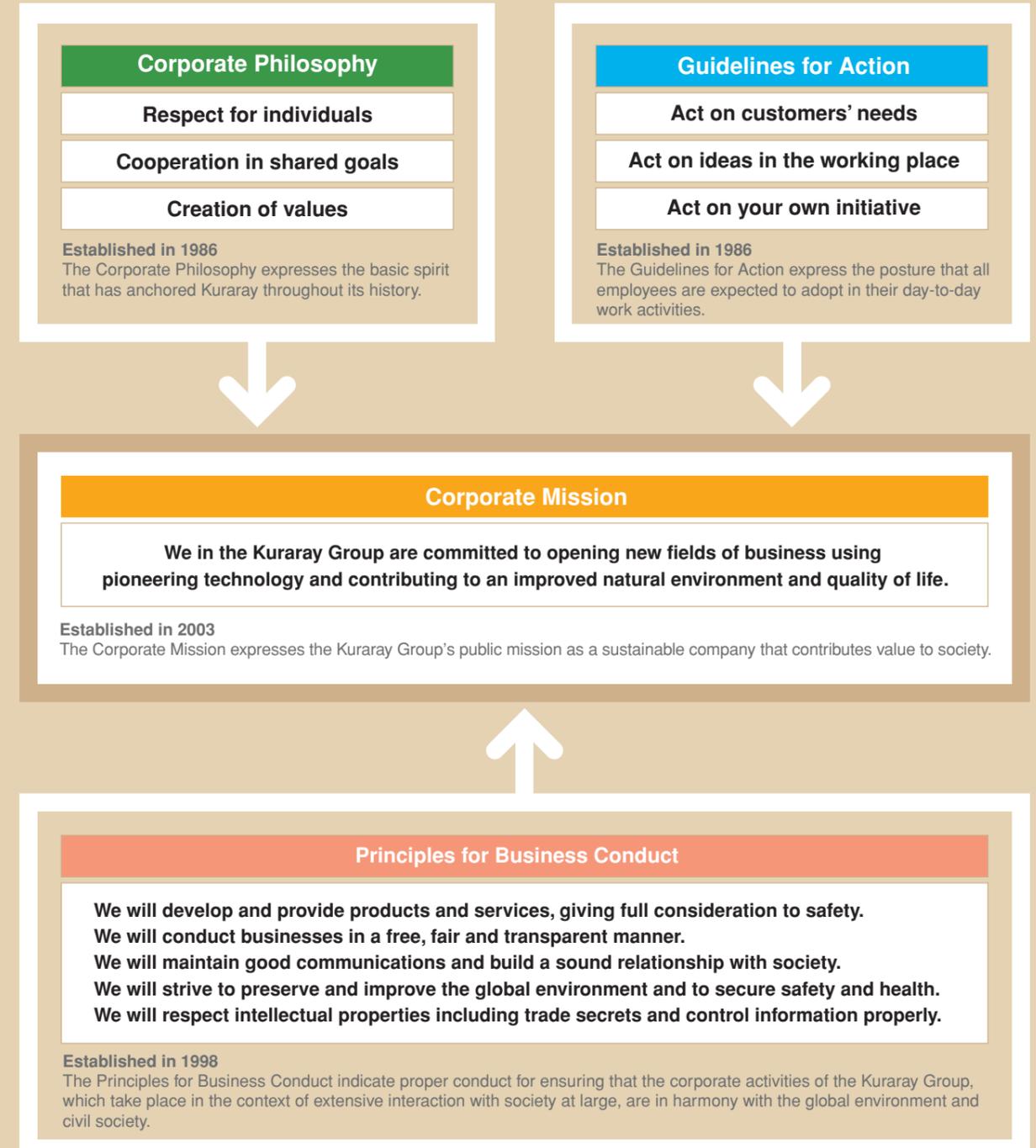
Kuraray Co., Ltd.	Kuraray Saijo Co., Ltd.●
Kuraray Medical Inc.●	Kuraray Tamashima Co., Ltd.●
Kuraray Engineering Co., Ltd.●	Kuraray Techno Nakajo Co., Ltd.●
Kuraray Chemical Co., Ltd.	Kuraray Okayama Spinning Co., Ltd.●
Kuraray Trading Co., Ltd.	Kuraflex Co., Ltd.*●
Kuraray Plastics Co., Ltd.	Nihonkai Acetylene Co., Ltd.●
Ibuki Kosan Co., Ltd.	
Kuraray Fudosan Co., Ltd.	Kuraray America Inc.
Kuraray Living Co., Ltd.	Eval Company of America
Kuraray Techno Co., Ltd.●	SEPTON Company of America
Techno Soft Co., Ltd.	Kuraray Europe GmbH
Kuraray Interior Co., Ltd.	EVAL Europe N.V.
Kuraray Fastening Co., Ltd.	Kuraray Specialities Europe GmbH
Kuraray Business Service Co., Ltd.●	Kuraray Specialities Asia
Kuraray Travel Service Corporation	
Kuraray Family Products Co., Ltd.	
Kuraray Kiko Co., Ltd.●	
Kuraray Niigata Kasei Co., Ltd.●	
Kyosei Chemical Co., Ltd.●	

\* In April 2005 Kuraflex changed its name to Kuraray Kuraflex Co., Ltd.

# Management Philosophy

## The Management Philosophy of the Kuraray Group

For the Kuraray Group, corporate social responsibility means activities to fulfill our corporate mission, which is to discharge our responsibility to society, by ensuring that in the conduct of business all employees ground their attitudes and behaviors in the Corporate Philosophy and Guidelines for Action.



# The Kuraray Group at a Glance

Since its founding in 1926, Kuraray has maintained a basic management stance of contributing to society through product development grounded in creative technological innovation. Embodying this stance are the many products offered around the world by the Kuraray Group that are world firsts, unique, or global market share leaders. These products, even those whose production volume or sales are small, provide value essential to people's lives and to industry.

The Kuraray business concept is to earn fair profits through business activities and benefit shareholders and other stakeholders while investing resources in the search for and development and provision of technologies that spawn products that offer greater social value and reduce environmental load. We believe that this is the path to fulfillment of the Kuraray corporate mission: "We in the Kuraray Group are committed to opening new fields of business using pioneering technology and contributing to an improved natural environment and quality of life."

## Corporate Profile

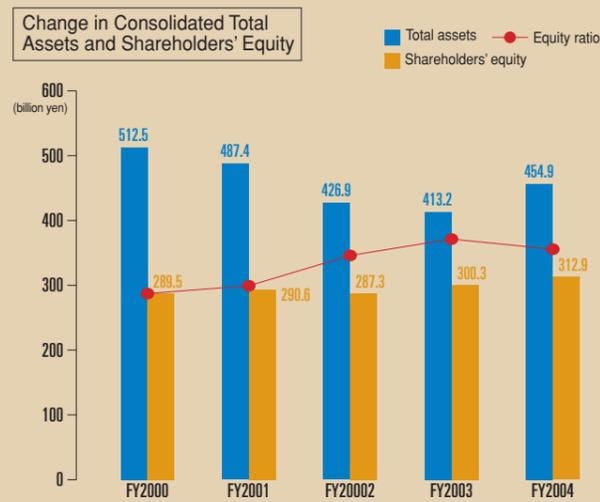
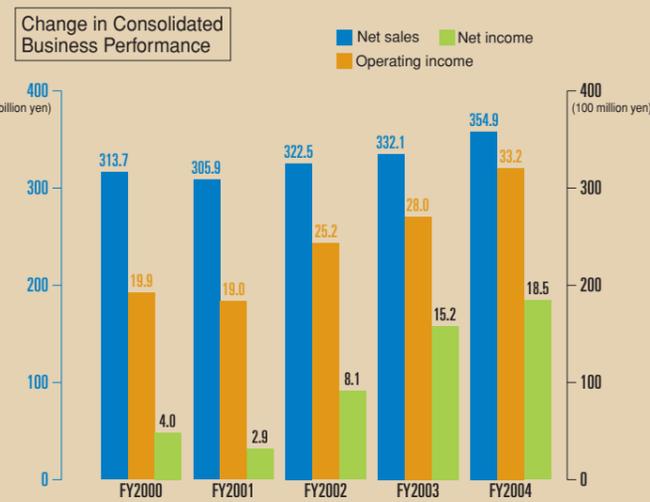
Company name:	Kuraray Co., Ltd.	Principle businesses:	The manufacture and sale of chemicals, resins, chemical fibers and textiles, high performance materials, medical products, and other products
Date of establishment:	June 1926	Head offices:	Tokyo, Osaka
Capitalization:	89 billion yen (as of March 31, 2005)	Plants and laboratories:	Kurashiki, Okayama, Nakajo, Kashima, Tsukuba
Net sales (consolidated):	354.9 billion yen (fiscal 2004)	Group companies:	37 consolidated subsidiaries and affiliates, 10 equity method affiliates
Number of employees:	6,919 (as of March 31, 2005) (consolidated)	Overseas operations:	USA, Germany, Belgium, China, Singapore

## Global Rankings of Kuraray Group Products

No. 1 in Global Market Share	<ul style="list-style-type: none"> <li>Poval (polyvinyl alcohol resin)</li> <li>Poval film for optical use (polarizing film materials for liquid crystal displays)</li> <li>EVAL (EVOH gas barrier resin)</li> </ul>	<ul style="list-style-type: none"> <li>Vinyon (polyvinyl alcohol fiber)</li> <li>CLARINO (man-made leather)</li> </ul>
No. 2 in Global Market Share	<ul style="list-style-type: none"> <li>SEPTON (hydrogenated styrenic thermoplastic rubber)</li> </ul>	
World-First Product	<ul style="list-style-type: none"> <li>GENESTAR (highly heat-resistant nylon resin)</li> </ul>	

(Based on a Kuraray study)

## Financial Highlights



Consolidated Net Sales by Segment FY2004

<b>Chemicals and resins</b> ¥167.3 billion (47.1%)	<b>Fibers and textiles</b> ¥109.8 billion (30.9%)	<b>High performance materials, medical products, and others</b> ¥77.8 billion (21.9%)
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Consolidated Operating Income by Segment FY2004

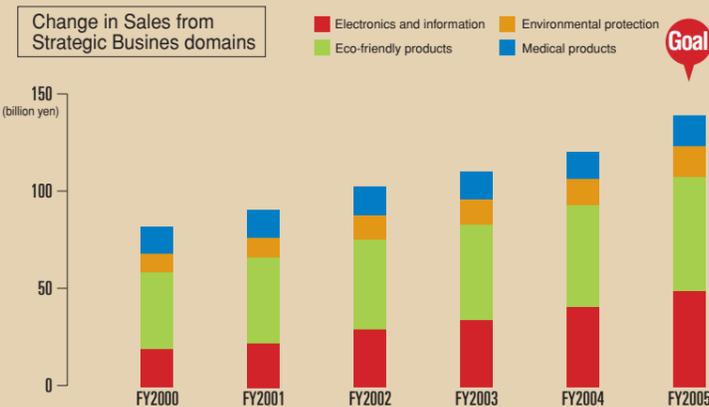
<b>Chemicals and resins</b> (64.8%)	<b>Fibers and textiles</b> (23.8%)	<b>High performance materials, medical products, and others</b> (22.3%)
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## Progress with the G-21 Medium-Term Business Plan

With the aim of being "An eco-friendly enterprise with unique technology," the Kuraray Group is implementing the G-21 medium-term business plan covering the five-year period until fiscal 2005. Although fiscal 2004 brought adverse conditions such as sharp increases in the price of crude oil, we nearly achieved the plan objectives and established solid footing for achieving the goal indicators for the final year of the plan (operating income of ¥40 billion and return on assets of 8% or higher).

### Strategic Business Domains

G-21 sets forth four strategic business domains from which growth is anticipated and in which the Kuraray Group can apply its technologies and expertise. Kuraray is focusing management resources on expanding these businesses.



**Electronics and information**  
Resins, film, precision molded products, and other materials that support the development of the digital equipment field

**Eco-friendly products**  
Low environmental load substitute materials such as gas barrier resins that take the place of metals and glass

**Environmental protection**  
Products that contribute to maintaining and improving the environment, such as activated charcoal used in water treatment

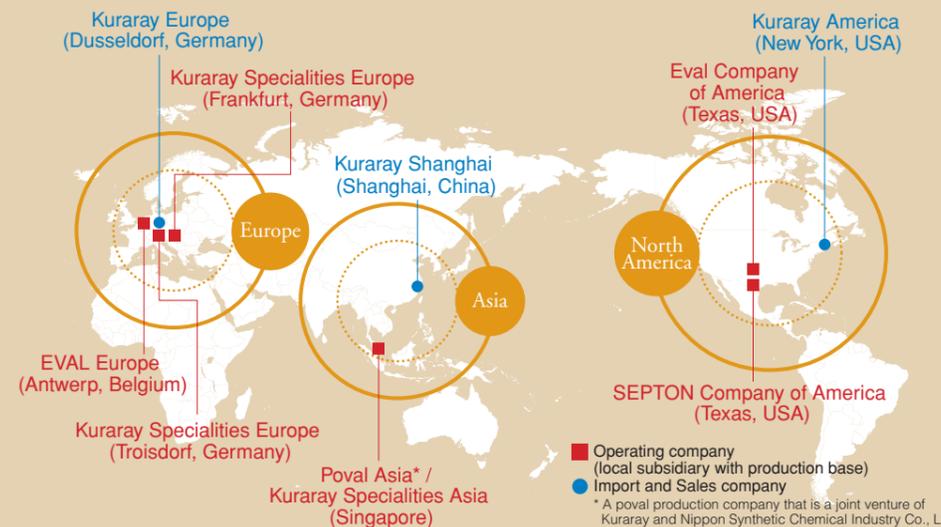
**Medical products**  
Businesses that contribute to the advancement of medicine, such as dental filling materials and artificial organs

### What is G-21?

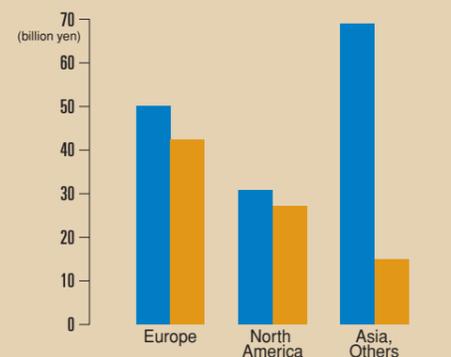
The name "G-21" was derived from four watchwords at Kuraray: "Globalization," "Green," "Growth," and "Group." Of course, "Green" refers to concern for the global environment. The Kuraray Group engages in product development that contributes to the reduction of environmental load and to environmental improvement and is solicitous of the environment in its procurement, production, and selling processes.

## Overseas Operations

The Kuraray Group's sphere of activities extends to North America, Europe, and Asia. Kuraray maintains business operations located near growth markets in order to engage in development, production, and marketing closely attuned to customer requirements.



Foreign Sales FY2004 (sales by destination)



Change in Contribution of Foreign Sales to Total Sales (%)

Fiscal Year	FY2000	FY2001	FY2002	FY2003	FY2004
Contribution (%)	27.5	30.2	38.4	41.3	42.3

## A Message from the President

# Aiming to Continue as an Enterprise that

# Top Message

Ever since it was founded in 1926, Kuraray has its corporate mission as fulfilling its responsibility to society, and actively contributed to society through the pursuit of ingenious technological development and unique businesses.

Takeshi Kakimoto, a young employee in the Kuraray Office of CSR, asked Kuraray President Yasuaki Wakui about the history of social responsibility and social contribution at Kuraray and the outlook for the future. Mr. Wakui explains Kuraray's view that contributing to people and society is the Kuraray DNA.

### Corporate social responsibility is Kuraray's basic philosophy.

Learning from the tradition handed down since Kuraray was founded

#### What is corporate social responsibility to Kuraray?

Some people think that a company can discharge its social responsibility by providing things that consumers need, earning profits, returning profits to shareholders, ensuring the employment of workers, and paying taxes. I, however, believe that that alone is an insufficient reason d'être for a company. Surely the vital public mission entrusted to a corporate citizen is to discharge its responsibility to the natural environment and the international community, to actively commit earnings to subsequent development and investment, and to continuously create value required by society.

Together with the employees who work in the Kuraray Group, I want to pursue at all times a sense of mission to create value and a sense of accomplishment. I want to expand businesses that enable all employees to actively participate in benefiting mankind and the world in which we live. From start to finish, the reason for the existence of a corporation is to do its utmost for people and society. Put another way, I believe that the true meaning of corporate management is to put CSR in practice.

#### How did Kuraray come to develop its stance on CSR?

Kuraray got its start in 1926 in Kurashiki, Okayama Prefecture as Kurashiki Kenshoku Co., a company established to commercialize the chemical fiber rayon. In 1950, Kuraray became the world's first company to commercialize vinylon fibers and textiles. Vinylon was generated from limestone and hydroelectric power, and so could be produced even in resource-poor Japan. Accordingly, in the period after the Second World War when Japan faced a clothing shortage, vinylon contributed greatly to the lives of the Japanese people as a synthetic substitute for cotton.



**Yasuaki Wakui**  
President and Representative Director, Kuraray

Company founder Magosaburo Ohara devoted effort to improving employment conditions for his workers and generously contributed his wealth to social and cultural undertakings, including opening a medical clinic for employees to a local community, financial assistance for orphanages, and the establishment of an art museum. One of his many great achievements was to create

awareness among the public of the social responsibility that business entrepreneurs must shoulder, and he is regarded as a pioneering philanthropist in Japan.



Kuraray's second president, Soichiro Ohara, took the bold and risky decision to export to China a manufacturing plant for vinylon — a product in which the company had invested substantial development funds to industrialize — before the resumption of diplomatic ties between China and Japan. His aim was to share the benefits of an important product with the people of China.

This corporate stance of going beyond the pursuit of profit and maintaining a keen sense of awareness of Kuraray's mission to society impressed me deeply and motivated me to join Kuraray. Of course, at that time the expression corporate social responsibility didn't exist. I firmly believe that this spirit of philanthropy and public service, the precursor to CSR, remains a precious asset of the Kuraray Group even today and is imbued in our corporate DNA.

### Striving to be an eco-friendly enterprise with unique technology.

Environmental preservation and safety activities

#### How has Kuraray, a manufacturer that provides the world with chemical products, approached environmental problems?

Concern for the environment is an obvious responsibility for Kuraray, a chemicals manufacturer that uses vast amounts of raw materials, fuel, water, and air to do business. Conscious of this responsibility, Kuraray established a special section to engage in environmental preservation activities back in 1970. We have participated in the Japan Responsible Care Council since its establishment in 1995, and have put in practice numerous activities including the development of low environmental load products and processes and the development of substitutes for substances that damage the environment. For instance, Kuraray-developed vinylon fiber has been put to good use in buildings around the world as a substitute for harmful asbestos as a cement reinforcing material. I would like to grow what we call the environmental



Takeshi Kakimoto

business, the business of not only providing eco-friendly products, but also of applying unique technologies and products to more efficiently and effectively contribute to reducing environmental load. A good example of this is our business with activated charcoal, a substance beneficial in water treatment and air purification. This is a field in which the Kuraray Group continues to grow as Japan's leading manufacturer.

Promoting the growth of products beneficial to the earth and to people that resulted from the accumulation of technologies we have perfected through our own efforts is a direction the Kuraray Group will pursue as an eco-friendly enterprise with unique technology.

Interviewer **Takeshi Kakimoto**  
Office of CSR, Kuraray

### Applying the DNA of corporate social responsibility.

Valuing the contact between company and society

#### These days considerable attention is focused on the social aspects of corporations. How will Kuraray engage in socially responsible activities in the coming years?

In addition to consideration of environmental problems, concern for society overall, including the employees who work for a corporation, is an important task for a corporation. The first requirement is to be a company in which the employees and all people involved in corporate activities feel joy and purpose through their involvement. That is one reason it is important to engage in fair, clean corporate activities grounded in consideration of safety and health and the observance of rules and regulations.

We will also devote effort to the support of forward-looking socially beneficial activities. A good example of that is Chemistry Classes for Boys and Girls, a program of classes held on plant premises or at nearby elementary schools in which young Kuraray employees

volunteer to serve as instructors or assistants. A total of more than 4,000 children participated in the program during the thirteen-year period up to 2004. This activity, possible only for a chemicals manufacturer, is steadily deepening relations with the communities. The campaign launched last year to send school bags to children in Afghanistan is an initiative that began as a convergence of Kuraray's CLARINO man-made leather business and international charitable activity. We will continue to value socially beneficial activities and harmonious coexistence with society that arise out of contacts between Kuraray and society made possible by spontaneous suggestions from Kuraray employees.

The DNA of corporate social responsibility is a precious asset of the Kuraray Group that has been handed down from the time of Kuraray founder Magosaburo Ohara. My fervent wish is that this DNA take firm root in every member of the Kuraray Group and that together we fulfill of our mission as a global enterprise.

# Corporate Governance

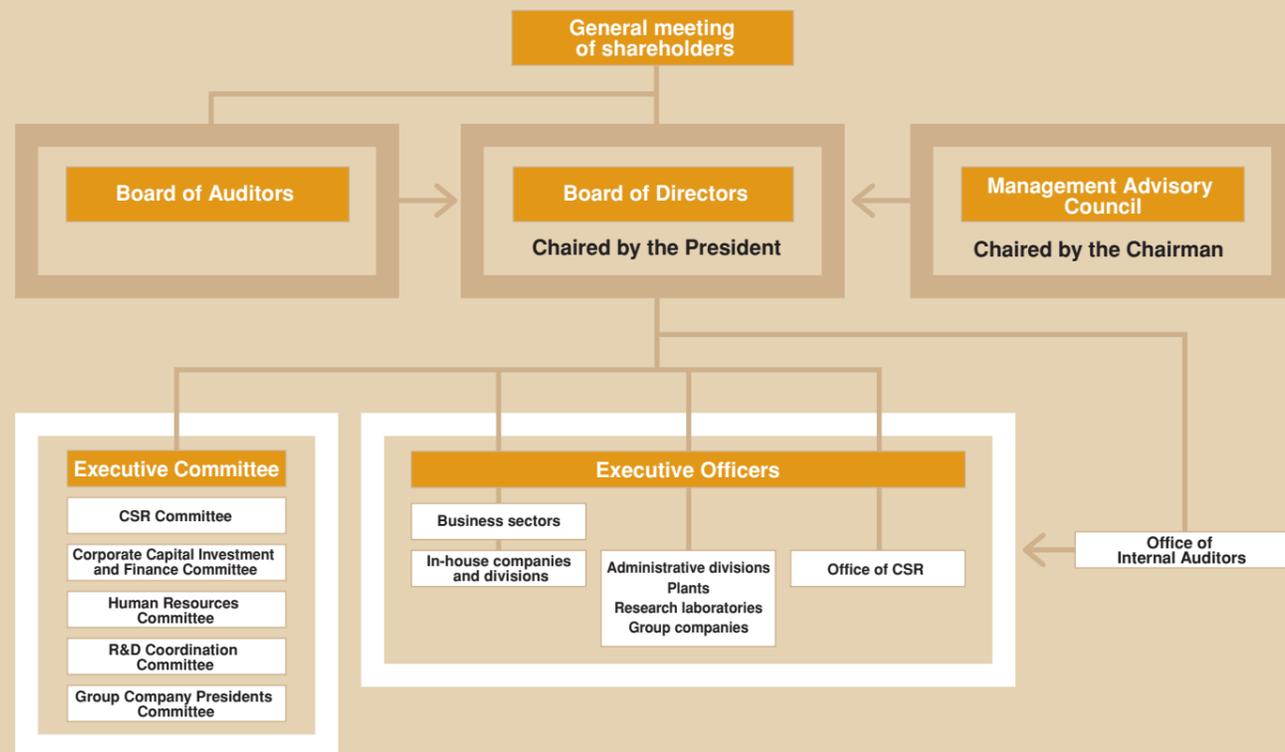
(Organization as of April 2005)

Maintaining appropriate relationships with shareholders and other stakeholders and fulfilling the Kuraray Group's environmental and social responsibilities are essential preconditions to continuing to create new value and achieving long-term, sustainable growth through global business activities. For that reason, Kuraray seeks to fulfill its responsibilities as an enterprise open to society by enhancing the corporate governance function and establishing highly fair and transparent management.

## Corporate Governance System

Kuraray, employing the "company with auditors" system, is building an effective corporate governance system by dividing the business execution and supervision functions.

- To increase the agility of management decision making, Kuraray has reduced the maximum number of directors to ten. Also, Kuraray has introduced an executive officer system to clearly separate responsibility for management decision making and supervision from responsibility for business execution.
- The Board of Auditors consists of five corporate auditors, including three auditors from outside the Kuraray Group. The Board performs auditing activities that contribute to sound corporate management from an objective, specialist standpoint.
- Kuraray has established a Management Advisory Council consisting of five permanent members (including two intellectuals from outside the Group) to serve as a consultative body to the president. The Council advises on important management policies and issues, the president's compensation, and management succession.



## Internal Control and Risk Management

Kuraray strives to ensure transparent, efficient business management by means of administration that conforms to the Group management policies grounded in regulations governing the division of duties and operations.

In addition, Kuraray is building a group-wide framework for ascertaining and coping with risk. In April 2005 Kuraray established the Office of CSR to engage in more comprehensive risk management measures. In times of serious emergency Kuraray puts into operation an Emergency Response Headquarters directed by the president and launches a rapid response that musters the resources of the entire organization.

The independent Office of Internal Auditors collaborates with the corporate auditors and the independent auditors to audit and provide guidance for improvement of organization and administration.

## Compliance

To ensure fairness and transparency in business activities, in addition to putting in place an effective corporate governance system it is necessary to build an organizational culture to encourage individual employees to act appropriately on the basis of a highly developed sense of ethics. For this reason, Kuraray engages in systematic activities to strengthen compliance.

Kuraray compiled and produced the Compliance Handbook for Kuraray Group domestic employees in fiscal 2004 and plans to distribute and explain it to the employees in fiscal 2005.

### History of Compliance Activities at Kuraray

1998	Establishment of the In-House Ethics Committee chaired by the president, formulation of the Principles for Business Conduct
2001	Establishment of the Kuraray Employee Counseling Room as a point of contact for disclosure of misconduct
2003	Publication by the president of the Compliance Declaration, distribution of the Compliance Card* to all domestic employees Reorganization of the In-House Ethics Committee as the Ethics and Compliance Team under the Social Responsibility Subcommittee of the CSR Committee
2005	Planned distribution of the Compliance Handbook to Kuraray Group employees

\* The Compliance Card is a wallet-sized card printed with the Principles for Business Conduct, the Compliance Declaration, and the contact number of the Kuraray Employee Counseling Room.

## Compliance Declaration

On behalf of the Kuraray Group, the President of Kuraray Co., Ltd. publicly announced the Compliance Declaration, making compliance and the practice of corporate ethics the most important corporate activity at Kuraray.

- We will comply with the law and the Principles for Business Conduct.
- We will give precedence to laws and regulations, and to the Principles for Business Conduct, over corporate profits.
- We will strive to prevent any act that goes against laws and regulations or the Principles for Business Conduct, or that betrays the trust that society has placed in us.



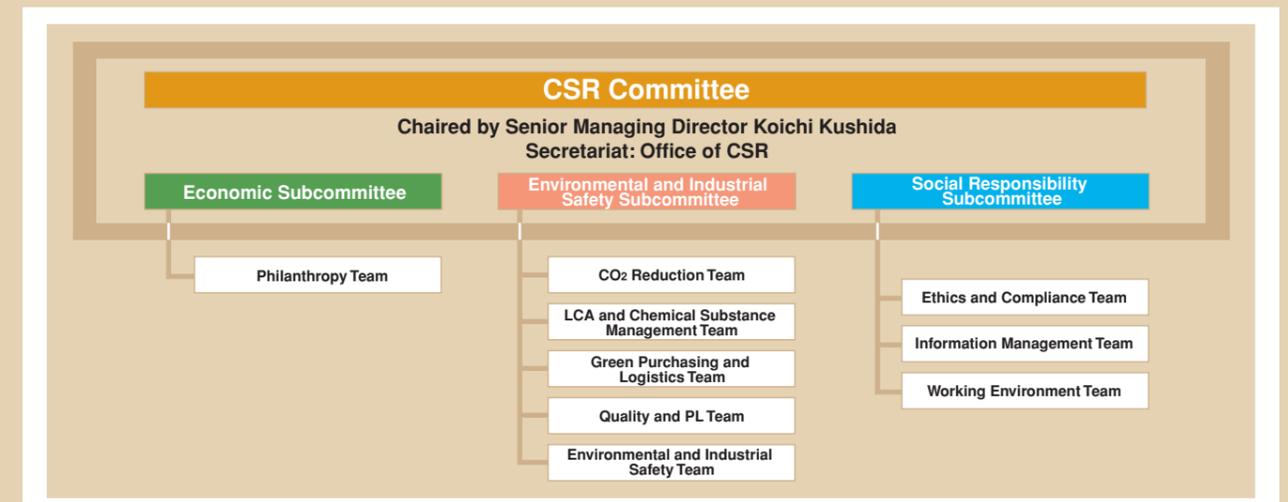
The Kuraray Group Compliance Handbook is an instruction handbook in which conduct guidelines based on the Principles for Business Conduct are presented in an easy-to-understand way in the context of day-to-day work activities.

## CSR Promotion Structure

The far-reaching social responsibility required of companies necessitates a company-wide and systemwide response. To meet this requirement, in 2003 the Kuraray Group launched the CSR Committee and began to extend the scope of CSR activities.

The CSR Committee comprises three subcommittees: the Economic Subcommittee, the Environmental and Industrial Safety Subcommittee, and the Social Responsibility Subcommittee. The subcommittees maintain theme-specific working groups that provide direction to the various sections in the Company and to Group companies, promote CSR activities, and ascertain and evaluate results.

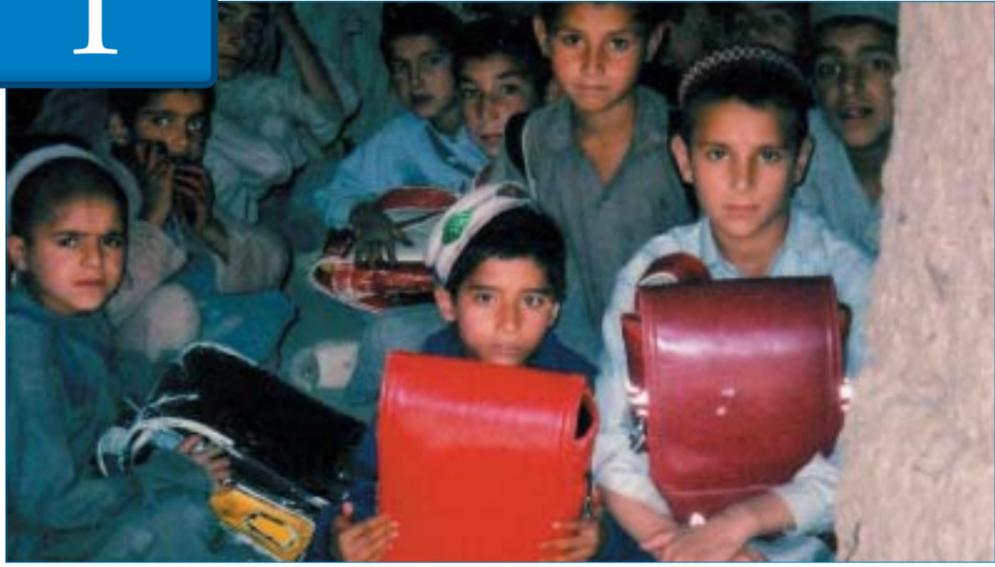
In April 2005 the Office of CSR was established to serve as the secretariat of the CSR Committee. To further strengthen CSR activities, a full-time staff was assigned to the Office of CSR.



2004 Social Service Activity Highlights  
**1**

# Sending School Bags Across the Sea

## A Kuraray Campaign



● Afghanistan children with their school bags



● The school bags were handed to the children one by one.



● Upon arrival in Afghanistan, the school bags were delivered by truck.



● The school bags were loaded into a container for transport to Afghanistan.



● School supplies were placed inside the school bags for the children.



● In a warehouse, the school bags are sorted according to whether they require repair.

Time and again over the years people would ask Kuraray whether there was some way to make use of the school bags Japanese elementary school students strap on their backs (randoseru in Japanese) after the students graduate. As the company that sells the *CLARINO* man-made leather used to make the school bags, Kuraray sought a way to meet this request. In 2004 Kuraray, in cooperation with JOICFP\*, planned the Sending School Bags across the Sea campaign to collect disused school bags and send them to the children of Afghanistan, where bags and other daily necessities are in short supply.

Solicitation of donations of used school bags began on January 16, 2004. The response was great, and the initial target of 1,000 bags was reached in just two weeks. Owing to the overwhelming response, solicitation was continued and ultimately about 8,500 school bags were collected.

School bags requiring repair were repaired thanks to the cooperation of members of the Randoseru Industry Association, and through JOICFP the school bags were delivered to children in Afghanistan and Mongolia in July 2004. (School bags that could not be sent to Afghanistan for religious reasons were sent to Mongolia.)

The campaign is being conducted once again in 2005. Solicitation of donations began on January 19, and donations of about 8,500 bags were received by the end of March for delivery to children in Afghanistan.

\* Japanese Organization for International Cooperation in Family Planning (JOICFP) is a non-government organization that engages in international cooperation in the area of population and family planning in developing nations.

● Japanese children who participated in shipping work



Masashi Uryu  
Fibers and Industrial Materials Company Kuraray Co., Ltd.

### Comments from a Sending School Bags Across the Sea participant

#### A sense of harmonious coexistence, not volunteerism

According to JOICFP, an NGO that has long supported humanitarian activities in Afghanistan, a sense of harmonious coexistence, not volunteerism, is important. Sometimes I vividly imagine children in the sun-baked desert of Afghanistan with their school bags on their backs. These are times when people call for social contributions from manufacturers, and I felt strongly that next year we should continue this beneficial activity that we can undertake.

2004 Social Service Activity Highlights  
**2**

# Cooperative Business with "Niji-no-le"

To promote the employment of disabled people, the town of Nakajo in Niigata Prefecture, social welfare institute "Niji-no-le" Kuraray Workshop, and the Kuraray Nakajo Plant have joined hands to provide the opportunity for participation in society to disabled people who desire employment. In an activity that began in June 1997, Kuraray built and operates a work center on town land adjacent "Niji-no-le", a vocational aid center for people with intellectual disabilities, and employs disabled people to remove protector paper from Kuraray acrylic sheets.

Twenty people were working at the "Niji-no-le" Kuraray Workshop as of March 31, 2005.



● Work Being Performed at "Niji-no-le" Kuraray Workshop

# Diversity and Equal Opportunity

### Policies

Kuraray respects human rights and has a policy of employing and promoting diverse human resources and placing importance on ability without discrimination according to race, nationality, gender, or other personal attributes. In July 2004 Kuraray established the "Council to Promote Respect for Human Rights" to eliminate all forms of discrimination at Kuraray and raise awareness of human rights among employees.

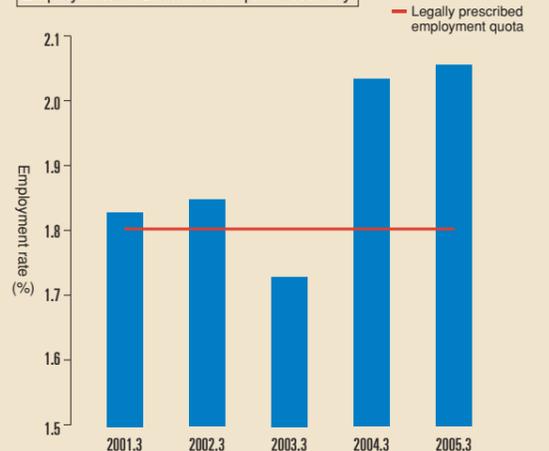
### Activities

Kuraray has prepared an environment to promote employment opportunities for people with physical disabilities, setting up massage rooms at several plants to provide workplaces for disabled people. We also support expansion of employment opportunities for people with physical disabilities through such means as conducting tours of the Tokyo Head Office for students from schools for the deaf (a total of four tours have been conducted since 2000).

### Action Points

Kuraray take it for granted that we maintain a rate of employment of disabled people that exceeds the legally prescribed employment quota, in addition to prepare an environment to promote the employment of disabled people and provide workplaces for disabled people at Group companies.

Employment of Disabled People at Kuraray



# Socially Beneficial Activities

## Policies

As set forth in the Corporate Mission (see p.3), the Kuraray Group's primary mission is to create new businesses by means of highly creative technology and to benefit society through superb products and services.

At the same time, as a good corporate citizen we devote effort to wide-ranging interaction with society and socially beneficial activities, especially in the host communities with which we are closely involved through our business activities.

We engage in steady, community-based initiatives in the areas of education, healthcare, and social services, placing importance on activities that take advantage of the imagination and ingenuity of our employees, activities in which everyone can participate on their own initiative, and activities that can be continued over time.

The Kuraray Group will continue to engage in socially beneficial activities that make the most of our distinctive capabilities and characteristics.

## Activities

### Chemistry Classes for Boys and Girls — A Program for Upper-Grade Elementary Students

In 1992 Kuraray began the Chemistry Classes for Boys and Girls program with the goal of making it possible for children to conduct experiments and directly experience the fun of chemistry. On school holidays, young Kuraray employees volunteer to serve as instructors or assistants to conduct classes at special classrooms on plant premises and at local elementary schools and public facilities. During the more than ten years the program has continued, a total of more than 4,000 elementary students have participated.

#### Fiscal 2004 results

Number of sessions: 13  
 Number of students: 358  
 Kuraray participants: total of 190

Sponsor	Class name	No. of classes to date	No. of participants to date
Kurashiki Plant	Fun Chemistry House	45	1,344
Kuraray Saijo	Exciting Chemistry Class	37	1,157
Nakajo Plant	Wondrous Laboratory	28	822
Kashima Plant	Fun Chemistry Class	3	226
Okayama Plant	Fun Chemistry Class	17	531
<b>Total</b>		<b>130</b>	<b>4,080</b>



● Fun Chemistry House (Kurashiki Plant)



● Youngsters' Science Festival Niigata Convention (held with cooperation from the Nakajo Plant)



● "Dream Chemistry-21" (Participated by the Kashima Plant staffs)

Kuraray also participates and conducts chemistry classes at the "Dream Chemistry-21" event sponsored by The Japan Chemical Industry Association and other organizations (held with cooperation from the Kashima Plant), the Youngsters' Science Festival Niigata Convention (held with cooperation from the Nakajo Plant), and the Okayama Research Park's Interesting Experience event (held with cooperation from the Okayama and Kurashiki Plants).

Kuraray will continue its activities to enable as many children as possible to encounter and experience the fun of chemistry.

### Disaster Relief Activities

Fiscal 2004 was a year of many earthquakes, flood damage, and other major natural disasters. In response to these disasters the Kuraray Group made monetary contributions and donated Hokkaido handcraft furniture manufactured by Kuraray Interior Co., Ltd., dust protective masks, work clothing, and other products. Kuraray employees participated in restoration work and otherwise cooperated in assisting the disaster victims to return to their previous way of life.

The Kuraray Group will continue to actively engage in relief activities to aid victims in times of large-scale natural calamities.

### Ishii Memorial Aizen-en Aizenbashi Hospital (Osaka City, Osaka)

1 Kuraray founder Magosaburo Ohara, influenced by the philosophy of social welfare pioneer Juji Ishii of Okayama, established this hospital in 1937.

### Kurashiki Central Hospital (Kurashiki City, Okayama)

2 This hospital was established in 1923 as a company clinic of Kurabo Industries, Ltd. and subsequently also served as a company clinic for Kuraray predecessor Kurashiki Kenshoku Co. The hospital subsequently came under independent management as a community medical care facility.

### Healthcare Corporation Doshin-kai Saijo Central Hospital (Saijo City, Ehime)

3 This hospital was established in 1954 by Soichiro Ohara, the second president of Kuraray, as a branch of Kurashiki Central Hospital.

### Contributing to Society Through Social and Medical Services

Kuraray also seeks to contribute to society through community social and medical services. In July 2004, we utilized an employee welfare facility at the Nakajo Plant to open Tulip-en, a communal assisted-living facility for people with senile dementia operated by Kuraray Techno Nakajo Co., Ltd. As of March 2005 eighteen residents lived in the homelike atmosphere of Tulip-en, where they receive assistance with meals, bathing, and personal hygiene.



● Tulip-en communal assisted-living facility

Since 2000, Kuraray Saijo Co., Ltd., in collaboration with Saijo Central Hospital, has provided unused housing for use as a geriatric nursing facility. Kuraray Techno Co., Ltd. converted the property for use as a nursing care facility.

In the area of medical care, the Kuraray Group contributes to society through hospitals with which the Kuraray Group has historically maintained close ties, including involvement in their establishment.



### Kuraray Fureai Fund Raising (Matching Gift)

Since 1992, the Kuraray Co., Ltd. employees have donated a small fraction of their pay to benefit community social services, and the Company matches the amount. Employees of Kuraray Chemical Co., Ltd. similarly donate a fraction of their pay and employees of Kuraray Plastics Co., Ltd. use internal events to collect funds for donation, and these companies also contribute matching amounts. In fiscal 2004 these funds were used to purchase nursing care articles, personal computers, and other items donated to a total of 22 social services facilities.



● Okayama Plant



● Kuraray Chemical Co., Ltd. Tsurumi Plant (Okayama Prefecture)

### Clean-up Activities

Employees of Kuraray, Kuraray Chemical Co., Ltd., and Kuraray Plastics Co., Ltd. engage in clean-up activities at roads and parks in the vicinity of company premises. In fiscal 2004, more than 2,000 employees participated in a total of 26 clean-ups.



● Kashima Plant



● Kuraray Plastics Co., Ltd. Ibuki Plant (Gifu Prefecture)

## Action Points

Kuraray makes the application of its distinctive capabilities and characteristics and employee participation the basis of its social service activities. A good example of this is the Chemistry Classes for Boys and Girls program. However, owing to facilities constraints, these activities tend to center on our production plants. Kuraray believes that it is necessary to augment its social service activities in major cities by effectively utilizing the limited opportunities at the Tokyo and Osaka Head Offices, which have little contact with the surrounding communities, and engaging in socially beneficial activities from new perspectives. We will also review our social service activities that extend beyond local communities.

# Communication

**Policies**

Kuraray strives to be a company that enjoys the trust of its wide-range stakeholders and believes that deepening our dialog with society through candid communications activities leads to enhancement of trust and confidence. For this reason, we place importance on contact with our host communities and work to reinforce dissemination of a broad spectrum of information inside and outside the Kuraray Group.

**Activities**

● External Communication

Kuraray strives to broadly disseminate information to its stakeholders and foster understanding of its corporate activities.

● Information Dissemination and Exchanges Targeting Shareholders and Investors

Kuraray regards the ordinary general meeting of shareholders held in June of each year as a venue for dialog and interaction with shareholders. We deepen understanding of the current state of the Company by providing a visual presentation of business results. The reception following the meeting is an event where shareholders enjoy relaxed conversation while viewing displays of representative Kuraray products and listening to explanations from company officers and employees.

Kuraray also employs various means of providing explanations of financial information, business conditions, and future prospects to investors in Japan and overseas.



● Reception desk at the general meeting of shareholders



● Product display at the general meeting of shareholders reception



● Business results briefing for investors

● Website

Kuraray is expanding and enhancing its website. In fiscal 2004, we launched a Chinese-language site to complement the Japanese and English sites. In addition to basic information, we regularly post highly interesting original content, such as the Careers Children Want to Pursue, Occupations Parents Want Children to Pursue questionnaire for first year elementary students and their parents.



**Website address** <http://www.kuraray.co.jp/>

● Pamphlets

Kuraray publishes various pamphlets and reports for people who desire information on the Kuraray Group in printed form. The pamphlets are updated annually and provided to various stakeholders. We intend to enhance the content of the pamphlets to provide wide-ranging information in an easy to understand format.

Principal Publications

Publication name	Contents	Language	Month of publication
Corporate Guide	Coverage of Kuraray products and basic information on Group companies	Japanese	June
		English, Chinese	August
Annual Report	Comprehensive management and financial information for overseas investors	English	July
CSR Report	Activities of the CSR Committee	Japanese	June
		English	July
Kuraray Tsushin	Business report for shareholders	Japanese (semiannual)	June, December



**Activities**

● Communion with Local Communities

Kuraray engages in a wide range of activities to promote interaction with residents of our host communities and intends to continue to seek out opportunities to actively deepen relations with the communities in which we operate.

● Cherry Blossom Viewing Party

Kuraray Saijo Co., Ltd. has more than 80 cherry trees on its premises, including some splendid specimens over 70 years of age. To share the beauty of cherry blossom season with the local community, each year since 1992 the company has invited local residents to a Cherry Blossom Viewing Party. In fiscal 2004 about 7,000 people attended this festive event over a six-day period in the spring.

The Nakajo Plant also invites local residents to view the cherry blossoms on the grounds of its employee welfare facilities. In fiscal 2004, 600 visitors enjoyed the splendor of cherry blossoms in full bloom.



● Cherry Blossom Viewing Party

● Christmas Fantasy

As Christmas draws near, a giant Christmas tree appears. The Christmas Fantasy is a long-established yearend tradition staged by employees of the Kurashiki Plant (Tamashima), who decorate an impressive 15-meter Himalayan cedar that stands near the entrance to the premises with polyester cotton and decorative lights. This event was revived after a hiatus of three years at the request of area residents, and the splendidly decorated tree illuminated the night sky from December 10 to 25, 2004.



● The tree shines brilliantly in the night sky



● Visitors in front of the tree

● Kenaf Diplomas

Local schoolchildren are the proud recipients of diplomas made from Kenaf they themselves planted and harvested. Each year sixth-year students from a nearby elementary school seed, raise, and harvest Kenaf on the grounds of Kuraray Saijo Co., Ltd. This year 70 graduating students were the proud recipients of diplomas made from the Kenaf.



● Planting kenaf seeds

Kenaf

Kenaf is an annual member of the mallow family of plants that in recent years is increasingly drawing attention as a means of preventing global warming and protecting forest resources due to its carbon dioxide fixing properties and the suitability of its stalk for use in papermaking.



Letter of Appreciation from a Participant



Thank you for your assistance at the time of kenaf seeding and harvesting and for watering and caring for the plants in our absence. I am glad to have been able to actually see and have the opportunity to participate in raising kenaf, a plant about which I knew only name, and happy to have received a diploma made from the kenaf we raised. The seed planting and harvesting were fun activities and will be a happy memory of elementary school. We graduate in one week and are eager to do our best in junior high school. I hope everyone at Kuraray remains well and in good spirits.

# Communication

## ●Sports Meets

By holding sports meets and opening its grounds and other facilities to the public, Kuraray promotes interaction with host community residents through sports. For instance, the Okayama Plant uses its grounds and gymnasium to hold the Konan Area Children's Ball Games Meet; in fiscal 2004 more than 1,000 participating children enjoyed games of baseball, volleyball, and other sports from dawn to dusk. Sponsored by the Nakajo Plant, the Kaetsu Area Junior High School Soft Tennis Tournament is familiar to local residents as a gateway to tennis success for area junior high school students.



●Kaetsu Area Junior High School Soft Tennis Tournament (Nakajo Plant)



●Kuraray Cup Soccer Society (Kurashiki Plant)

In addition to these events, Kuraray holds public lectures, public classes, arts and crafts exhibitions, and events to exhibit and sell products from social services facilities.



●Sale of imported handicrafts held in cooperation with an NPO (Tokyo Head Office)



●Summer festival open to community residents (Kuraray Plastics Co., Ltd.)

## ●Dialog with Host Communities

The plants of Kuraray Co., Ltd., Kuraray Plastics Co., Ltd., and Kuraray Chemical Co., Ltd. hold various events to foster better communications with host community residents, including plant tours and briefing sessions for schools and resident's associations. At those events we provide an overview of the plants and their production activities, explain the effects of our business activities on the environment and environmental protection measures, and deepen understanding of what the plants do. We make use of comments and opinions from participants to improve our plants.

Each plant compiles its own environmental report for use in communication with its host community.

Number of Visitors

	Fiscal 2000	Fiscal 2001	Fiscal 2002	Fiscal 2003	Fiscal 2004
Local residents	1,744	2,013	2,075	1,618	1,551
Others	988	926	904	1,256	1,214

Note: Figures for fiscal 2004 include Kuraray Plastics Co., Ltd. and Kuraray Chemical Co., Ltd.



●Tour for elementary students (Okayama Plant)

## ○Internal Communication

Kuraray periodically publishes the Kuraray Times (monthly publication) group newsletter, the Kuraray News Letter (quarterly publication) for overseas employees, and other publications and strives to enhance internal communications. In response to an increase in the number of employees in German-speaking areas, in fiscal 2004 we began publishing a German-language edition of the Kuraray News Letter.



### Action Points

In addition to strengthening its information provision capabilities in Japan and overseas, Kuraray will solicit comments from stakeholders and promote two-way communication to inform business management.

# Creating an Open Work Environment Dialog and Counseling

## Policies

**True to the tenets of the Corporate Philosophy — Respect for individuals, Cooperation in shared goals and creation of Values — each member of the Kuraray Group aspires to attain personal growth through work, join hands in working towards our shared goals, and provide society with new value. Accordingly, the Company implements a variety of measures to ensure that all employees work in a state of physical and mental health, attain self-realization through their work, and engage in work that increases the desire and motivation to contribute to improving business performance.**

## Activities

### ○Dialog with Top Management

To communicate the state of affairs in the Kuraray Group and the thought of executive management, Kuraray creates many opportunities for direct dialog between top management and employees during employee training, plant visits, and at round-table-gathering. For instance, at a gathering held at the most recent annual initiation ceremony new employees held up writing card on which they had written their resolutions upon joining Kuraray and executive managers wrote their expectations for the employees on the cards. Also, a president's page has been opened on the Kuraray intranet as a mechanism for employees to directly ask questions or make proposals.



### Dialog with Top Management



Daisaku Shojo  
Intern  
(joined Kuraray  
in 2005)

The gathering with the president and other executive managers held on the day of the initiation ceremony began with a more amiable and relaxed atmosphere than I had imagined, relieving the tension that had continued since the initiation ceremony. The opportunity to talk with people with whom we seldom come into contact is a wonderful memory. To receive a message concerning my objectives at my first event as working members of society was a great source of encouragement. I want to continue to at all times set high objectives and put forth my best effort.

### ○Dialog with the Labor Union

The Kuraray Group has the Kuraray Labor Union, which is made up of employees, and the Kuraray Group Federations of Labor Unions. The Company exchanges views with the union on the basis of employee opinions expressed at periodic union meetings and workplace committee meetings and takes advantage of these exchanges to create better working environments.

Examples of Kuraray's stance of reflecting the opinions of employees in company systems are the introduction of nursing care leave to enable employees to care for family members and the leave system to enable employee participation in socially beneficial activities, programs that Kuraray introduced in response to employee requests before they became required by law.

### ○Establishment of Points of Contact for Employee Counseling

#### ●Kuraray Employee Counseling Room

To uncover any problems in the Kuraray Group, the Company has established an internal whistleblowing system that applies to domestic Kuraray Group companies. Kuraray has engaged the services of attorneys and specialist consultants at the Employee Counseling Room, putting in place a structure by which individual employees can in complete confidence report wrongdoing directly, consult on compliance issues, and seek advice on thorny problems in the workplace.

#### ●Sexual Harassment Consultation Contact, Sexual Harassment Grievance Committee

In accordance with the Rules of Employment, Kuraray has established the Sexual Harassment Consultation Contact and Sexual Harassment Grievance Committee to respond to any sexual harassment problems that occur in the workplace.

In addition, Kuraray has established the Grievance Procedure Committee in accordance with the collective labor agreement. The role of the Committee is to deliberate on complaints about the Company filed by union members and seek amicable solutions. The Rules of Employment clearly stipulate that the Company will under no circumstances unfairly treat employees who have sought consultation or reported grievances.

### Action Points

In addition to maintaining a structure for responding to problems after the fact, Kuraray is studying proactive measures and policies to create a more open atmosphere within the Company and activate communication among employees (such as holding periodic events and recreation activities in cooperation with the labor union).

# Personnel Policies

## Policies

The Kuraray Group strives for a fair and transparent personnel system that encourages autonomous individuals to work with vitality and dynamism. Kuraray works to establish and operate non-discriminatory hiring, remuneration, and skills development systems that conform to the concept of current international standards, including the Universal Declaration of Human Rights and the Fundamental Human Rights Conventions of the International Labour Organization.

## Activities

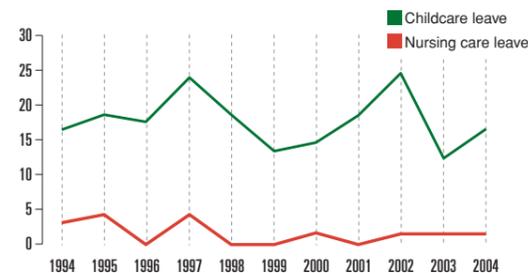
### A Fair, Impartial, Transparent Personnel System

Kuraray believes that designing a compensation system that rewards people in proportion to their efforts increases employee job satisfaction and leads to improvement in business results. Kuraray has eliminated seniority and personal attributes and introduced a merit-based remuneration system. Close communication between supervisor and subordinate is an essential prerequisite to the operation of a merit system satisfactory to employees.

Accordingly, Kuraray has introduced a Management By Objectives system and mandates supervisor-employee interviews to ensure that supervisors and employees proceed to the next step on the basis of mutual consent. Through this process, we aim to promote employee growth and development. Each year we conduct evaluator training for managers to improve interviewing skills.

### Support for Childcare, Nursing Care, and Socially Beneficial Activities

Over the years, Kuraray has maintained various leave of absence programs to support diverse workstyles. When drawing up and revising these programs, we consider to design plans that exceed legal requirements and create a workplace environment that in actual practice makes it easy for employees to take leave of absence.



**Reiko Fuwa**  
Audit Assistant  
Osaka Head Office  
Kuraray Co., Ltd.

### Childcare Leave

I have taken childcare leave three times: in 1995, 1998, and 2003. Although my supervisor and workplace colleagues were different each time, I received support at all times and never once felt offended or unfairly treated. Compared to ten years ago when I became the first employee at the Osaka Headquarters to take a leave of absence for children, the leave of absence systems at Kuraray and other companies have improved greatly and now provide better daycare facilities and benefits. I am grateful for the Kuraray corporate culture and the assistance of my mother and mother-in-law, without which it would have been possible to balance career and childrearing.

### Stock Options

Stock options are rights to purchase Kuraray shares at a certain fixed price (the exercise price) regardless of the price at which the shares are traded on the stock market. If the stock price exceeds the exercise price, the difference in price becomes profit for the option holder.

### Law for Measures to Support the Development of the Next Generation

The purpose of this law, which went into effect on April 1, 2005, is to contribute to the formation of a society in which the children destined to be tomorrow's leaders are born and raised in good health.

### Positive Action

The term "positive action" refers to a variety of measures to eliminate de facto sex discrimination in places of employment.

### Stock Options Grants and the Employee Stock Ownership Plan

The Kuraray Group grants stock options to about 6,500 eligible employees at Group companies in Japan and overseas. Based on the concept of cooperative effort, the grants reflect management's belief that improvement in the Group's business performance is the result of the combined efforts of individual employees. Some employees were able to exercise options beginning in 2004, and 33 employees had exercised options by March 31, 2005. Kuraray also operates an employee stock ownership plan, fostering awareness of corporate value and share price and a sense of participation in management among employees.

### Commendation System and Patent Incentive System

#### Commendation System

The Kuraray Group has a system of publicly recognizing and honoring each year on the anniversary of Kuraray's founding employees who have made great contributions to business performance or performed extraordinary service. As a way of promoting social contributions on the part of employees, Kuraray includes community volunteer and social service activities among the qualifications for commendations.

#### Commendation and Award Programs at Kuraray

Commendations and Awards	
President's Award	Distinguished Service Award
Outstanding Achievement Award	Special President's Award
Special Annual Proposal Award	Length of Service Award
Social Contribution Award	

#### Patent Compensation and the Patent Incentive System

Kuraray acquires from employees the patents to service inventions and provides compensation payment. Kuraray not only pays compensation at the time patents are applied for and registered, but also each year provides compensation in accordance with the importance of patents and the profits they generate.

## Action Points

Kuraray is currently studying positive action based on an action plan and grounded in Law for Measures to Support the Development of the Next Generation and the requirements of society. We are conducting a questionnaire survey to ascertain the current situation and, on the basis of the findings, will devise measures in line with current circumstances.

# Education, Training, and Career Development

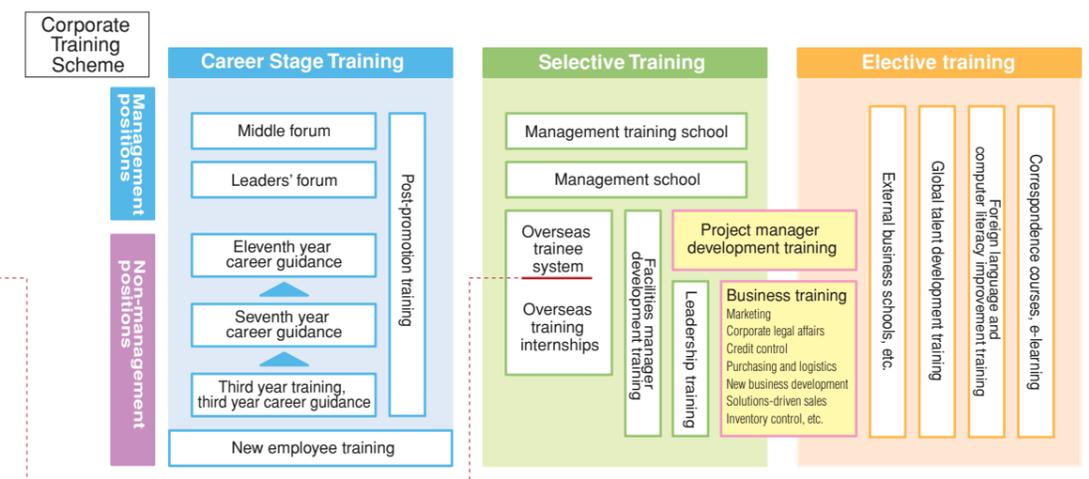
## Policies

Kuraray assigns employees to posts in which they feel motivated, rewarded, and fulfilled and provides employee learning opportunities to satisfy employee aspirations for self-development, skills improvement and lifelong learning. In addition to offering more than 300 correspondence courses to meet the education needs of individual employees, the Kuraray Group has prepared training and educational opportunities for entire companies and business sites.

## Activities

### Training Scheme

Domestic Kuraray Group companies have adopted the training scheme depicted below, which combines training for the purpose of acquiring knowledge and skills required for work with training that satisfies employees' desire to learn. Employees undergo training adapted to their work requirements as well as to their own aspirations. Kuraray also offers financial incentives for employees who successfully obtain public qualifications on their own initiative.



### Overseas Trainee System

This is a system by which employees are dispatched to overseas universities, Group companies, or vendors as trainees to learn local business practices and customs.

### Measures to Support Independent Career Development

#### Career Guidance

Kuraray provides career guidance for management-track employees who have completed their third, seventh, and eleventh years of service as an opportunity to reflect on previous work experience and discuss with immediate supervisors, Personnel Department staff, and supervisors of other sections the work experience they seek in the future. Consisting of the completion of "career sheets," interviews, and career presentation sessions, career guidance is a process by which managers of various departments consider employee aspirations and aptitude and plan job transfers.



**Masaharu Akiduki**  
CLARINO Company  
Osaka Head Office,  
Kuraray Co., Ltd.

### Career Guidance

In my eighth year at Kuraray I was able to realize my longstanding dream of transferring to a sales department. I have been assigned rewarding work that has fulfilled my wishes and find my work highly fulfilling. Although the adjustment period until I became accustomed to my duties was difficult, I feel as though the transfer has broadened my perspective. Career guidance was a perfect opportunity to take a second look at my own aptitudes and at what I wanted to do.

#### Internal Recruitment System

The Kuraray Group engages in extensive internal recruitment of personnel to perform duties in areas of strategic importance, and employees apply for advertised positions suited to their career aspirations. Positions and human resources are matched twice each year under this system, which was instituted in 2001.

#### Results of the Internal Recruitment System

(Number of employees who have transferred under the program since its inception in 2001)

a	Number of posts offered	57
b	Number of applicants	35
c	Number of transfers	22
d	Transfer rate (c/b)	63%

## Action Points

### Competency Modeling

Competency modeling is a method of focusing attention on employee skills as "behavior that produces results." It involves the use of decomposition and establishment of benchmarks.

To more closely align the skills development and knowledge acquisition Kuraray requires of employees with the career advancement opportunities that employees themselves desire, Kuraray will pursue means of identifying knowledge and skills and strive for appropriate job assignments. To this end, we will review and continue to consider improvements to the internal recruitment system and utilization of competency modeling.

# Occupational Safety and Health

## Policies

In keeping with the Principles for Business Conduct, the Kuraray Group recognizes that ensuring the safety and health of employees is the basis of a company's business activity and engages in occupational safety and health activities. We have constructed an occupational safety and health system and strive to provide safe, healthy workplaces.

## Activities

### Kuraray Group Responsible Care Convention

#### ●Kuraray Group Responsible Care Convention

Managers and employees from throughout the Kuraray Group attend a convention to raise awareness of responsible care (RC). Participants seek to increase the group-wide level of RC by introducing and discussing examples of progress with RC initiatives. The main theme of the fiscal 2004 conference was occupational safety, and participants reported on successful examples of Occupational Safety and Health Management System (OSHMS) implementation and of safety improvements and discussed the introduction of continuing activities.



#### ●Experiential Education in Occupational Hazards

In addition to classroom learning about the hazards posed by the equipment and chemicals workers handle in their day-to-day work, the Kuraray Group continuously provides experiential education in occupational hazards conducted by external educational institutions. In fiscal 2004, the course Fire and Explosions Caused by Static Electricity was conducted at the Okayama Plant; about 90 participants experienced the importance of accident prevention.



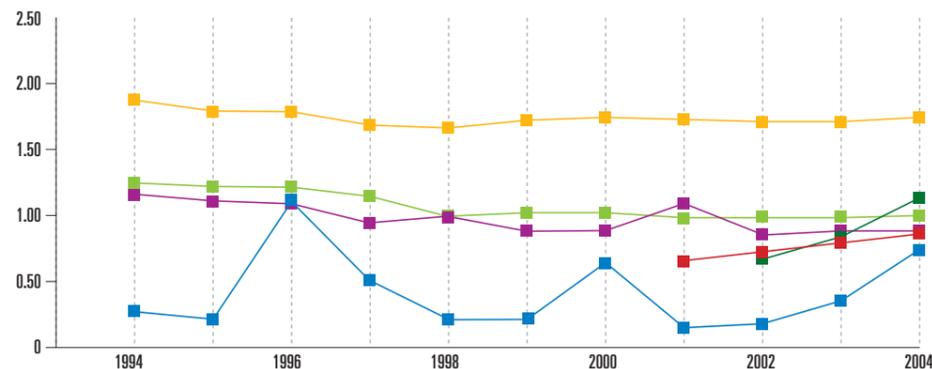
#### ●Special Safety Activities

Kuraray designates as special safety activities organizations plants and departments where a major occupational accident has occurred or where occupational accidents have continuously occurred and conducts activities to increase the level of safety through the intensive implementation of safety measures.

Occupational Safety Performance (Lost Workday Injury Incidence Rate)

Legend: Kuraray (blue square), Domestic Kuraray Group companies (red square), Kuraray Group (worldwide) (green square), All manufacturing (light green square), Chemicals (purple square), All industries (yellow square)

Note: Lost workday injury incidence rate: Number of injuries per million work hours = Number of injuries / Number of hours worked × 1,000,000



## Action Points

Despite the numerous occupational safety activities described above, in fiscal 2004 a total of 21 occupational accidents resulting in loss of work occurred in the Kuraray Group (including accidents involving employees of business partners and other temporary plant visitors, an increase of 7 accidents from the previous year. Kuraray regards this as a crisis situation and is moving forward with special safety activities at plants and reviewing safety management systems, including the safety education system.

## Activities

### Health Initiatives

Kuraray operates clinics and health management offices at all its plants to help employees maintain their health. In addition to the legally prescribed Safety and Health Committee, Kuraray provides physical examinations, health instruction, mental health care, and physical fitness support.

#### ●Augmenting Mental Health Care

Kuraray devotes effort to mental health care activities to prevent stress-related illnesses, which have been on the increase in Japan in recent years. Kuraray opened the Mental Health Consultation Office at the Tokyo Head Office in 1987, putting in place a system for providing consultation to all employees, including those of Group companies. At our plants, we work to prevent mental health problems by conducting mental health training and lectures.



●Mental Health Training

#### 2 Mental Health Care

The term mental health encompasses both mental and spiritual well-being. By actively engaging in mental health care activities, Kuraray aims to prevent depression and other mental disorders and ensure health in mind and body.

#### ●Measures to Promote Health Maintenance

Occupational health staff, public health nurses, and the Safety and Health Committee work in unison on activities in three areas: health guidance, exercise guidance, and mental health care. One health guidance initiative is the provision of nutritional guidance and classes for employees with high blood pressure or hyperglycemia (Okayama Plant). Another initiative is the conduct of lectures and participation of stop smoking contest as part of smoking cessation support activities and the maintenance of smoking and non-smoking separate areas (Nakajo Plant). Exercise guidance includes classes on preventing lower back pain (Kuraray Saijo Co., Ltd.) and inter-departmental softball tournaments (Kashima Plant).



●A softball tournament

#### 2 Stop Smoking Contest

The Nakajo Plant has been participating in activities sponsored by the Association for Preventive Medicine of Japan since 2003. Health-conscious employees attempt to stop smoking by means of a two-week correspondence course followed by a four-week smoking cessation program.

## Action Points

Heretofore the plants have taken the lead in conducting occupational health initiatives, and gaps in implementation from plant to plant have occurred. For this reason, Kuraray plans to put in place a group-wide occupational health management system. We plan to eventually introduce an occupational safety and health management system and expand and enhance health management systems, including those at affiliated companies. As the first step, in fiscal 2005 we will conduct the following four activities as a group-wide policy initiative.

- ① Development of an occupational health management organization
- ② Enhancement of mental health care activities
- ③ Preparation of an occupational health management manual
- ④ Conduct of new health maintenance activities

Index	
Highlights	
Measures to Prevent Global Warming	22
Reducing Environmental Load During Transport	24
Preservation of Biodiversity	25
Environmental Impact of Business Activities	26
Environmental and Safety Policies	28
Medium-Term Environmental Plan	29
Environmental Management	30
Chemical Substances Control	31
Zero Emissions of Industrial Waste	32
Green Procurement	34
Disaster Prevention	35
Quality Assurance and Product Safety	36
Distribution Safety	37

High 2004  
**1**  
 Environmental Activity Highlights

# Measures to Prevent Global Warming

## Targeting a 10% Reduction in Carbon Dioxide Emissions Per Unit of Output

Gases that contribute to global warming include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluorides (SF<sub>6</sub>). Of these, CO<sub>2</sub> and HFC are especially pertinent to Kuraray. Kuraray places particular emphasis on reducing emissions of CO<sub>2</sub>, which accounts for an overwhelmingly high percentage of emissions volume.

Kuraray aims to reduce CO<sub>2</sub> emissions per unit of output in fiscal 2010 by 10% from the fiscal 1990 level. To achieve this target, we have established a reduction plan involving three key measures: ① energy conservation, ② fuel conversion, and ③ introduction of new energy sources. We have steadily achieved results in line with the targets in the plan. The Kuraray Group, including domestic and overseas affiliates, will continue to engage in measures to reduce emissions.

## Discovering New Energy Conservation Themes in Fiscal 2004

In fiscal 2004, Kuraray focused on optimizing operation of the electric power plants at its manufacturing plants, devising a plan and introducing concrete measures. As energy conservation is the basis for CO<sub>2</sub> emissions reduction, Kuraray thoroughly reviewed all energy conservation measures, large and small, at its plants to discover new ways of conserving energy.

With regard to the use of environmentally friendly fuels, following successful conversion at the Nakajo Plant we decided to convert the fuel used in our low-pressure boilers at the Okayama Plant from heavy oil to natural gas. Moving ahead with fuel diversification and the introduction of new energy sources, we are considering the introduction of biomass fuel, sunlight, and wind power.

### 1 Energy Conservation

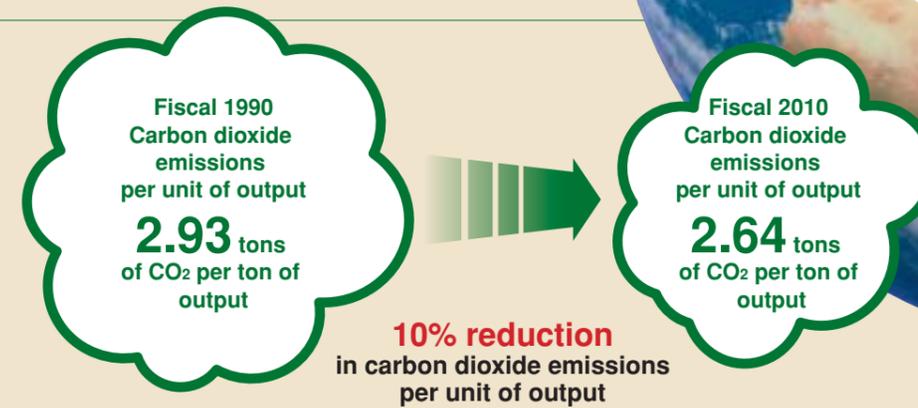
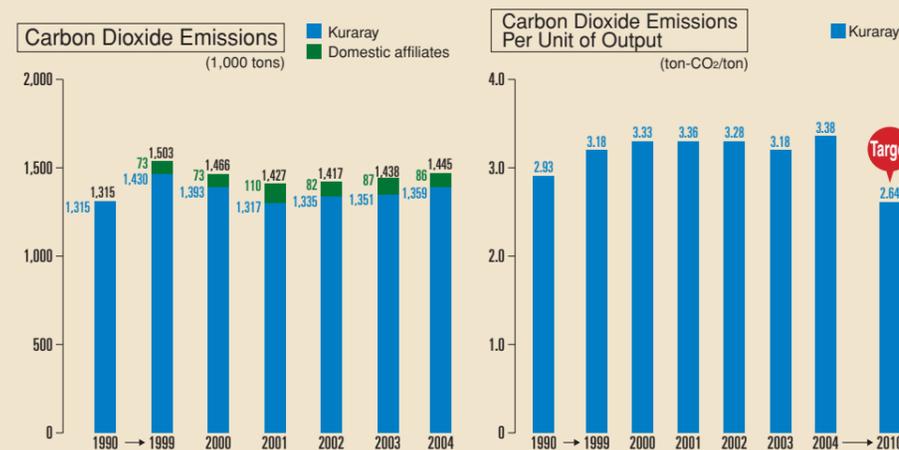
- Power plant energy efficiency improvement by means of installation of condensing extraction turbines (Nakajo Plant)  
 Reduction of 0.08 CO<sub>2</sub> tons per ton of output (reduction of 32,000 CO<sub>2</sub> tons per year)  
 Turbines and other equipment are currently under construction and are scheduled to go into operation in August 2005.
- New energy conservation measures  
 Reduction of 0.14 CO<sub>2</sub> tons per ton of output (reduction of 58,000 CO<sub>2</sub> tons per year in fiscal 2008)

### 2 Fuel Conversion

- Conversion of low-pressure boiler fuel from heavy oil to natural gas (Okayama Plant)  
 Reduction of 0.04 CO<sub>2</sub> tons per ton of output (reduction of 19,000 CO<sub>2</sub> tons per year)  
 Facilities currently under construction and scheduled to go into operation in December 2005

### 3 Introduction of New Energy Sources

- Operation of facilities to increase use of biomass fuel (Tamashima Plant, beginning in December 2004)  
 Reduction of 0.05 CO<sub>2</sub> tons per ton of output (reduction of 22,000 CO<sub>2</sub> tons per year)
- Operation of photovoltaic power generation facilities (50 kw) (Tsukuba Research Laboratories, beginning in January 2005)
- Study of wind power generation facilities introduction (Kashima Plant)



**Tons of CO<sub>2</sub> per ton of output:** the number of tons of carbon dioxide emitted for each ton of product manufactured

## Expansion of Biomass Power Generation Using the No. 8 Boiler at the Kurashiki Plant (Tamashima)

In 2002 the Kurashiki Plant (Tamashima) began introducing RPF\* and biomass fuel (construction and demolition wood waste) as substitute fuels to replace coal, its principle boiler fuel. As prospects for solving supply and technical issues are good, the plant has subsequently undertaken facilities improvement, expanding processing volume from the previous 1,000 tons to 16,000 tons per year. The facility is operating smoothly, and the consequent reduction in environmental load will be 22,000 tons of CO<sub>2</sub> equivalent. Kuraray aims to further expand the introduction of biomass fuel, curtail coal use, and reduce CO<sub>2</sub> emissions.

This initiative has met with the approval of government authorities in the form of Okayama Prefecture recognition as a resource and environment business, the winning of grants from Okayama Prefecture and Kurashiki City, and the awarding of the Kurashiki Regional Development Bureau Director's Commendation.

### \* What is RPF?

RPF is an abbreviation of Refuse Paper and Plastic Fuel, a high-calorie solid fuel made from wastepaper and plastic. Solid fuel made from nonindustrial waste is called RDF (Refuse Derived Fuel).



## Instation of photovoltaic power generation facilities at Tsukuba Research Laboratories.

A key CO<sub>2</sub> emissions reduction measure is the introduction of new energy sources. An example of this is the installation of photovoltaic power generation facilities at the Tsukuba Research Laboratories. The facilities are operating smoothly.

Advances in technology have brought renewed attention in recent years for new energy sources photovoltaic power generation and wind power generation, and an increasing number of companies, local governments, and educational institutions are actively introducing these alternative forms of energy. Kuraray has installed photovoltaic power generation facilities at the Tsukuba Research Laboratories with the aim of raising employee consciousness about the importance of environmental preservation and reducing CO<sub>2</sub> emissions.

The construction was voted a subsidy under the Field Test Projects on Advanced Photovoltaic Power Generation Technology program of the New Energy and Industrial Technology Development Organization (NEDO), and power generation performance data from the Tsukuba Research Laboratories will be used to promote dissemination of photovoltaic power generation facilities.



High 2004  
Environmental  
Activity Highlights  
**2**

## Reducing Environmental Load During Transport

### Activities Policy

To reduce emissions of carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and other substances that place a load on the environment during transport, Kuraray is increasing transport efficiency and proceeding with a modal shift to more efficient modes of transport. In fiscal 2003 we stepped up these activities with the objective of reducing CO<sub>2</sub> and NO<sub>x</sub> emissions in fiscal 2005 by 15% and 10% respectively from the fiscal 2000 level.\*1

### Current State of Activities

In fiscal 2004 Kuraray succeeded in reducing CO<sub>2</sub> emissions \*2 by 24,482 tons and NO<sub>x</sub> emissions by 101.6 tons, reductions of 13.4% and 9.4% from fiscal 2000 levels respectively, through greater transport efficiency, implementation of a modal shift, and cooperation with logistics partners.

### Implementation of a Modal Shift\*3 (Coastal Vessel Feeder Transport of Freight Containers Between Okayama and Kobe)

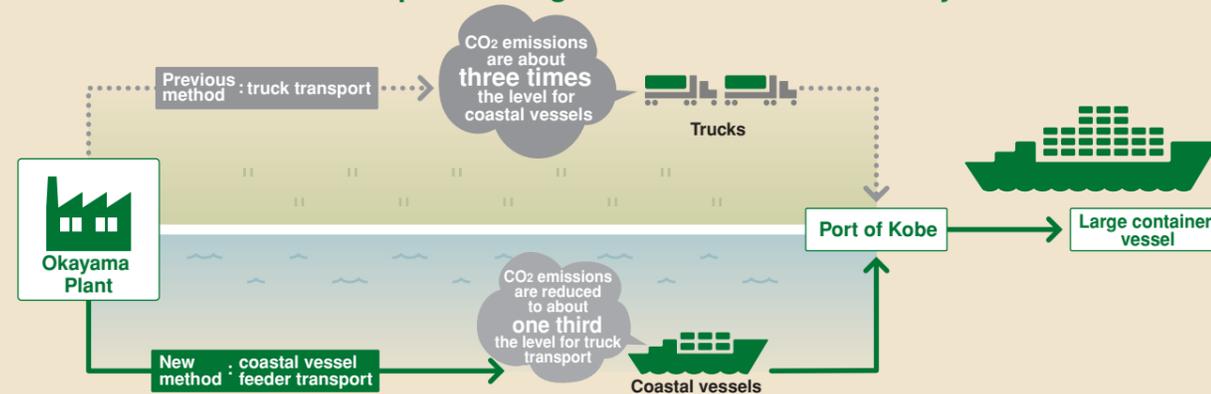
In the past, most of the export freight from the Okayama Plant, Kuraray's principle domestic manufacturing plant, was loaded into containers at the plant and trucked to the Port of Kobe for loading onto oceangoing ships for export. In April 2004 we began shifting from overland container transport to more environmentally friendly transport by coastal vessels, substantially reducing truck exhaust. Although the transport distance is relatively short (150 km one way), this modal shift to coastal vessel transport makes possible a 73% reduction in CO<sub>2</sub> emissions, and we achieved a reduction of 283 tons in fiscal 2004. This initiative was designated a Demonstration Experiment for the Construction of Low Environmental Impact Logistics Systems by the Ministry of Land, Infrastructure and Transportation (MLIT).

\*1 Figures for actual and target emissions are for the transport of products shipped from Kuraray plants.

\*2 CO<sub>2</sub> emissions = weight (tons) x distance (km) x emissions per unit of production  
NO<sub>x</sub> emissions = weight (tons) x distance (km) x emissions per unit of production  
Figures are for the transport of products shipped from Kuraray plants in Japan and exclude the transport of products from commercial warehouses or processing facilities and the transport of non-manufactured products or raw materials. Kuraray calculates CO<sub>2</sub> and NO<sub>x</sub> emissions based on units of output in conformance with the Chiba Prefecture Modal Shift Promotion Manual (1997).

\*3 The term "modal shift" refers to efforts to increase transportation efficiency, conserve energy, and protect the environment by shifting to high-volume conveyance methods such as rail and ship transport.

### Coastal Vessel Feeder Transport of Freight Containers Between Okayama and Kobe



### Cooperation with Logistics Partners

Kuraray continuously assesses the environmental friendliness of logistics partners against its Green Purchasing Guidelines to evaluate the efficiency of their packaging specifications and transport practices in conserving energy and resources and curbing exhaust emissions. In fiscal 2004 the "greenness" of our logistics partners was 64%, an increase of six percentage points from the previous year. We will continue to seek the cooperation of logistics partners by continuously conducting questionnaire surveys to ensure that all our logistics partners conform to the Green Purchasing Guidelines.

\*For details on the "greenness" assessment, see Green Procurement (p. 34).

High 2004  
Environmental  
Activity Highlights  
**3**

## Preservation of Biodiversity

### Activities Policy

#### 1 Promotion of Protection

- Study and assess the impact of business activities on biodiversity on company-owned land.
- Avoid biodiversity destruction from business activities and remedy biodiversity deterioration.
- When planning construction on a larger scale than stipulated by law, conduct an assessment of the natural environment.

#### 2 Awareness Activities and Education

- Engage in awareness and education activities targeting employees and other stakeholders.
- Conduct employee education concerning biodiversity, which should be considered in the conduct of business activities.

#### 3 Support for Activities

- Cooperate with volunteers within Kuraray and stakeholders to evaluate and support their activities.
- Publish information in connection with biodiversity and communicate with stakeholders.

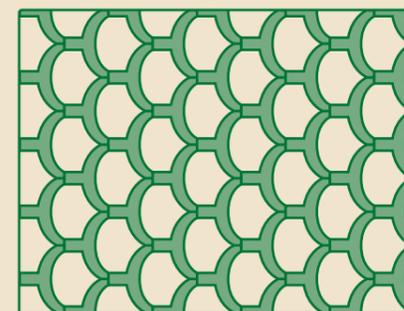
### Current State of Activities

Activities based on this policy include cooperation on the part of Kuraray Saijo Co., Ltd. (Saijo, Ehime Prefecture) with a request from the local fishery cooperative to construct a fishway to assist natural sweetfish to swim upstream in the Kamo River, from which the company draws service water (February 2005).

As a cooperating with external nature conservation activities, Kuraray belongs to the Nature Conservation Society of Japan and the Kansai Organization for Nature Conservation and supports the activities of these organizations.

Kuraray will continue to work to maintain biodiversity in the vicinity of its plants and engage in awareness activities and education through nature observation tour and other activities.

### Fishway pattern diagrams



● Overhead view



● Side view



# Environmental Impact of Business Activities

## Materials Flow in the Kuraray Group

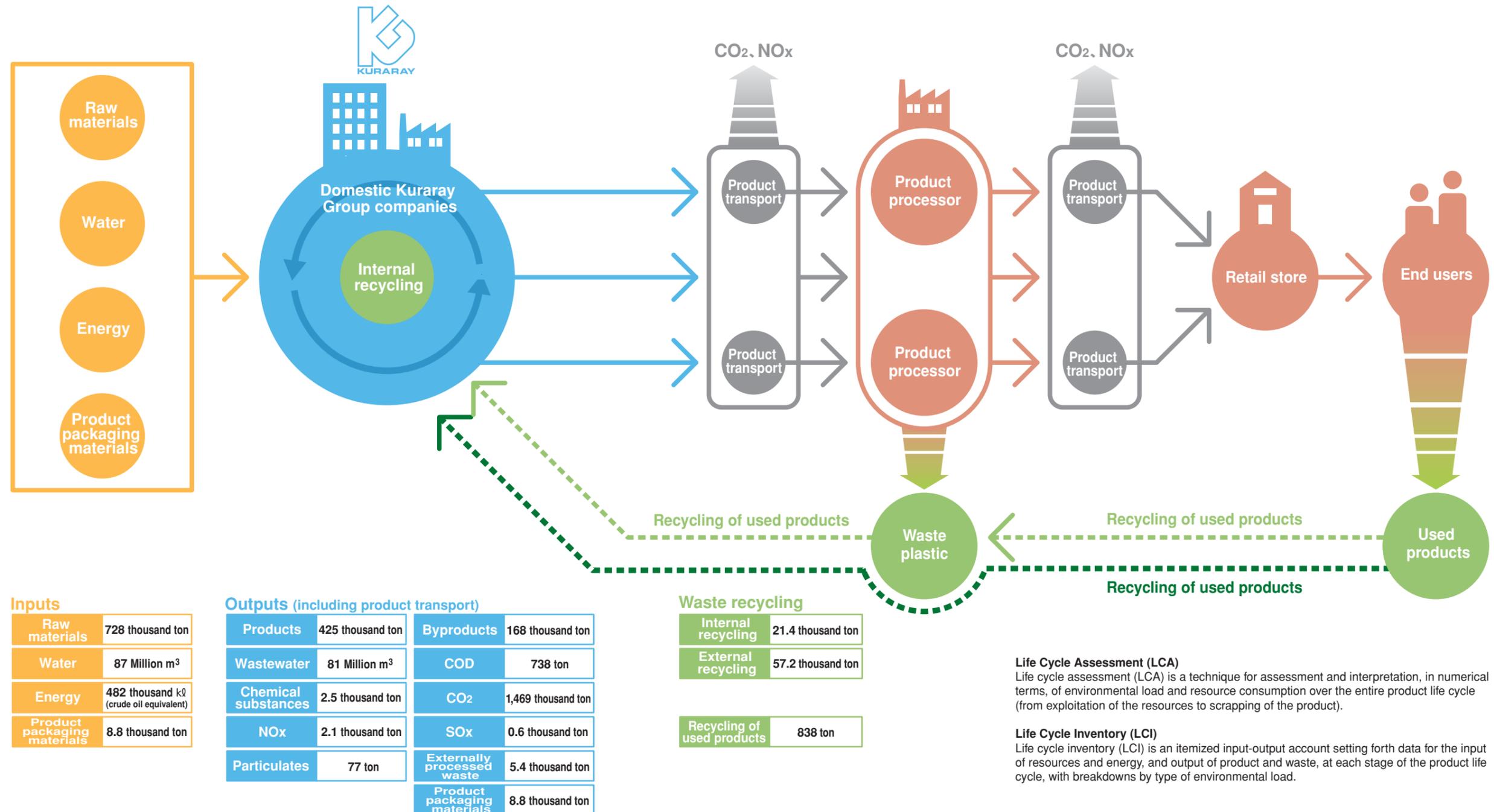
The Kuraray Group uses substantial quantities of energy, chemical substances, and water resources in its business activities. Because these business activities exert various effects on the environment, Kuraray steadily works to minimize their environmental load. The diagram below depicts the flow of materials in business activities in fiscal 2004.

## Lifecycle Assessment Initiatives

To develop and manufacture eco-friendly products, the Kuraray Group engages in lifecycle assessment (LCA). In 2001 we designated the Kurashiki Plant a model plant for LCA introduction and began LCA activities. In fiscal 2003 we launched company-wide LCA activities.

In fiscal 2004, we further ascertained the environmental load of our products and produced lifecycle inventory (LCI) data. Although we aimed to produce LCI data for products that account for more than 80% of total sales in fiscal 2004, to date we have completed data production for products that account for about 60% of sales. We also experimented with a system to assess newly developed products from the perspective of LCA.

Through activities involving the use of LCA we will strive to develop and manufacture low-environmental-load products and provide a indication for evaluating environmental preservation measures throughout the Group.



**Life Cycle Assessment (LCA)**  
Life cycle assessment (LCA) is a technique for assessment and interpretation, in numerical terms, of environmental load and resource consumption over the entire product life cycle (from exploitation of the resources to scrapping of the product).

**Life Cycle Inventory (LCI)**  
Life cycle inventory (LCI) is an itemized input-output account setting forth data for the input of resources and energy, and output of product and waste, at each stage of the product life cycle, with breakdowns by type of environmental load.

# Environmental and Safety Policies

## Basic Responsible Care Policies

In line with the provisions of the Principles for Business Conduct, the following are Kuraray's most basic policies for the promotion of environmental preservation and industrial safety.

### Basic Policy Concerning Global Environmental Problems

The Kuraray Group will fulfill its responsibilities to future generations through business activities that are in harmony with the global environment and local communities.

### Basic Policy on Disaster Prevention and Occupational Safety

The Kuraray Group implements radical, group-wide measures to prevent damage to society from explosion, fire, leakage of toxic substances, or other disasters and to contain damage when a disaster occurs. We recognize that ensuring the safety and health of employees is the basis of a company's business activity and strive to provide workplaces where people can work in safety and health.

### Basic Policy on Product Safety

The Kuraray Group endeavors to contribute to creating an affluent, comfortable society by meeting customer needs through the supply of safe and reliable products.

## Responsible Care

The term "responsible care" refers to responsible activities on the part of companies that handle chemical materials to preserve the environment, ensure safety, and promote health at every stage of the product lifecycle, from product development through manufacturing, use, and disposal.

## Kuraray Group Action Guidelines for the Global Environment

In line with the Basic Responsible Care Policy, these guidelines set forth specific guideposts for actions to preserve the global environment.

### Basic Policy

The Kuraray Group will fulfill its responsibilities to future generations through business activities that are in harmony with the global environment and local communities.

Kuraray puts this basic policy into practice by engaging in the following activities.

- ① Business activities that place the highest priority on the environment and safety
- ② Permanent global environmental improvement activities
- ③ The development of technologies and products that contribute to improving the global environment.

### Principles of Conduct

- ① Continuous reduction of emissions of designated chemical substances into the environment
- ② Reduction in emissions of greenhouse gases and greater energy efficiency to contribute to the prevention of global warming
- ③ Promotion of resource conservation, reuse, and recycling
- ④ Development and provision of technologies for improving the environment and low-environmental-load products
- ⑤ Use of environmentally friendly products
- ⑥ Public disclosure of environmental information and dialog with the community
- ⑦ Raising the level of environmental consciousness and environmental management

# Medium-Term Environmental Plan

## Policies

The Kuraray Group is implementing G-21, a five-year medium-term management plan whose purpose is to transform Kuraray into an eco-friendly enterprise with unique technology. We have established the Medium-Term Environmental Plan as part of G-21 and are actively conducting environmental preservation activities in line with specific numerical targets set forth in the plan. We are also reviewing legal and regulatory trends and progress to date.

## High-Priority Tasks

### I. Environmental load reduction efforts

- ① Reduction in emissions of harmful chemical substances into the environment
- ② Reduction in emissions of carbon dioxide
- ③ Achievement of zero emissions of industrial waste

### II. Expansion of green purchasing, green procurement, and green logistics

### III. Quantification of the environmental load of Kuraray products

- ① Expanded application of lifecycle assessment (LCA)
- ② Introduction of type II environmental labels

### IV. Development and supply of environmentally friendly products

### V. Strengthening and improvement of communications

- ① Greater information disclosure
- ② Enhanced environmental accounting
- ③ Strengthened risk communication with local communities

## Numerical Targets

- a. Reduction of 10% in carbon dioxide emissions per unit of output in fiscal 2010 from the fiscal 1990 level
- b. Increase of 6 percentage points in energy efficiency in fiscal 2005 from the 1999 level
- c. Reduction of 90% in emissions of substances designated under Japan Chemical Industry Association's PRTR program in fiscal 2007 from the 1999 level
- d. Reduction of 90% in the volume of unutilized externally processed waste in fiscal 2005 from the 1999 level
- e. Increase of at least 30 percentage points in waste utilization in fiscal 2006 from the 1999 level (60→90%)

## Progress with Numerical Targets

Target		Unit	Base year	Fiscal 2004	Target year	Activities in fiscal 2004		
Reduction of 90% in emissions of PRTR-designated substances (JCIA program)	Kuraray	All substances	Tons	3,545 (100%)	2,131 (60%)	354 (10%)		
		PRTR Law designated substances	Tons	1,361 (100%)	627 (46%)	136 (10%)		
	Domestic affiliates	All substances	Tons	889 (100%)	394 (44%)	89 (10%)		
		PRTR Law designated substances	Tons	475 (100%)	8 (2%)	48 (10%)		
	Total	All substances	Tons	4,434 (100%)	2,525 (57%)	443 (10%)		
		PRTR Law designated substances	Tons	1,836 (100%)	635 (35%)	184 (10%)		
Reduction of 90% in external disposal volume of unutilized industrial waste	Kuraray	1,000 tons	Fiscal 1999	9.6	2.4	1.0		
	Domestic affiliates		5.0	3.0	0.5			
	Total		14.6 (100%)	5.4 (37%)	1.5 (10%)			
Increase of 30 percentage points or higher in waste utilization	Kuraray	%	Fiscal 1999	63	89	-		
	Domestic affiliates		16	61	-			
	Total		60	87	90			
Reduction of 10% in CO <sub>2</sub> emissions per unit of production	Kuraray group	Tons CO <sub>2</sub> /ton	Fiscal 1999	2.93 (100%)	3.38 (115%)	Fiscal 2010	2.64 (90%)	Generator turbine performance improvement
Increase of 6 percentage points or higher in energy efficiency (one point per year)	Kuraray group	%	Fiscal 1999	-	7.6	Fiscal 2005	6	Expanded use of biomass

# Environmental Management

## Policies

To ensure harmony with the natural environment in procurement, manufacturing, and product supply, the Kuraray Group operates PDCA cycle-based environmental management systems such as ISO14001 and Responsible Care and engages from a medium-term and long-term perspective environmental preservation activities.

## Implementation Structure

The Kuraray Group treats environmental management as a group-wide issue and has established the Environmental and Industrial Safety Subcommittee of the CSR Committee as an organization subordinate to the Executive Committee to engage in environmental conservation activities from a medium-term and long-term perspective. The Environmental and Industrial Safety Subcommittee maintains several specialized teams that implement the Kuraray Group's environmental preservation activities.

(Organization structure as of April 2005)



\* The Environmental and Industrial Safety Team is responsible for environmental preservation issues other than those handled by the other four teams.

## RC Activities Verification Meeting

Kuraray has participated in the Japan Responsible Care Council since its establishment in 1995 and engages in numerous Responsible Care (RC) activities. To ensure steady implementation of these activities, each year we hold the Kuraray Group RC Convention and the RC Activities Verification Meeting.

Kuraray holds the annual RC Activities Verification Meeting to identify issues and confirm progress concerning themes from individual plants concerning a common theme selected from among the following important RC topics: Environmental Preservation, Disaster Prevention, Occupational Safety and Health, Logistics Safety, Chemicals and Product Safety, and Dialog with Society. Individuals are assigned responsibilities, action plans are prepared, and solutions sought for problems identified. At the following year's meeting progress with activities is rechecked and continuous improvement implemented. The results of the meeting are reported to management, and the level of RC activities is raised by means of a group-wide PDCA cycle.

The common topic selected for fiscal 2004 was Occupational Safety and Health, and Kuraray Specialities Europe GmbH, Kuraray Chemical Co., Ltd., and the Tsukuba Research Laboratories were newly included in the scope of verification.

Topics covered at the meeting were Identification of Unsafe Areas in the Workplace and Countermeasures, Safety Education Suited to Individual Skills and Job Grades, Occupational Safety Management Abilities of Managers and Supervisors, and Mental Health as an Aspect of Occupational Health. In addition, disaster prevention topics such as Typhoon Countermeasures and Tsunami Countermeasures were covered.



## Environmental Management Systems

Since 1998 the Kuraray Group has worked to acquire ISO 14001 certification to increase the effectiveness of our environmental preservation activities. As a result, all domestic plants and research laboratories were certified by December 2001. Kuraray Chemical Co., Ltd. is preparing to obtain ISO 14001 certification in fiscal 2005. It will join the other certified domestic affiliates Kuraray Techno Soft Co., Ltd., Kuraray Plastics Co., Ltd., and Kuraray Fastening Co., Ltd.

In October 2003, we introduced an ISO 14001-based environmental management system at the headquarters in Tokyo and Osaka and are conducting energy conservation and resource conservation activities in our corporate offices.

We will continue to utilize environmental management systems in the implementation of measures to reduce the environmental impact of our business activities and other environmental conservation activities throughout the Kuraray Group.

# Chemical Substances Control

## Policies

The Kuraray Group handles a variety of chemical substances for raw materials and finished products. Chemicals involve both benefits and risks, and it is necessary to ascertain and appropriately manage the risks. With this in mind, the Kuraray Group has established the following policy concerning chemical substances management in Kuraray Group Action Guideline for Global Environment and is engaged in measures to reduce risk.

**"To ensure environmental protection, safety, and health and increase the trust society places in us, Kuraray engages in total management of chemical substances in all processes from development to final consumption and disposal in keeping with the basic principles of responsible care" (remainder omitted).**

## Activities

### Activities to Reduce Chemical Substance Emissions

#### PRTR Law

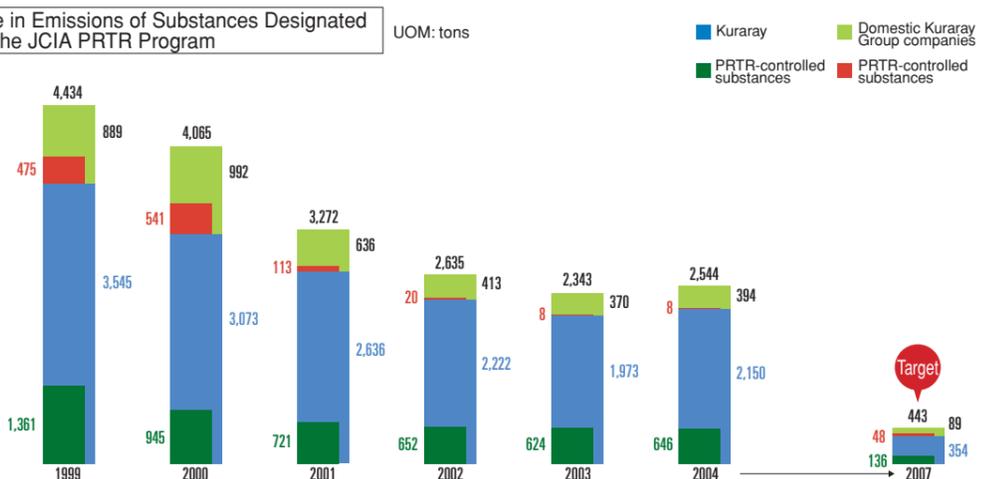
Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

Kuraray has participated in the PRTR program of the Japan Chemical Industry Association (JCIA) since its inception and ascertains the volume of emissions of chemical substances controlled under the Pollutant Release and Transfer Register Law (PRTR Law). The JCIA's PRTR program covers 480 substances (including 354 substances controlled under the PRTR Law), 77 of which are handled by Domestic Kuraray Group companies.

The Kuraray Group works to reduce emissions of these chemical substances on the basis of the Medium-Term Environmental Plan. As a result of a revision to the Medium-Term Environmental Plan, we now aim to achieve a reduction of 90% in emissions of substances designated under the JCIA PRTR program in fiscal 2007 from the fiscal 1999 level. We have augmented exhaust recovery systems in the isoprene manufacturing process at the Kashima Plant and implemented other measures to reduce emissions. As a result, in fiscal 2004 we reduced emissions of these substances to 2,525 tons (including 635 tons of substances controlled under the PRTR Law), a 43% reduction from the fiscal 1999 level but an 8% increase from the previous year. The year-on-year increase in emissions is due to factors including the discovery of methanol vaporization in the wastewater treatment process at Kuraray Saijo Co., Ltd.

In fiscal 2005 we plan about ¥760 million in capital investment for projects such as emissions reduction measures in the CLARINO manufacturing process at the Okayama Plant and the introduction of exhaust incineration facilities in the SEPTON manufacturing process at the Kashima Plant, etc. We will continue to engage in long-term initiatives to reduce emissions, placing priority on comparatively harmful substances.

Change in Emissions of Substances Designated Under the JCIA PRTR Program



#### VOC

An abbreviation for Volatile Organic Compounds. It refers to gaseous organic compounds discharged or dispersed into the air (note, however, that this excludes free particles stipulated separately by law and substances that do not cause the formation of oxidants).

### Asbestos Removal

In Japan, because asbestos has adverse effects on human health, its use is totally prohibited except for exceptional applications such as use for sealing materials at chemical plants. Although some domestic Kuraray Group companies use asbestos for special sealing materials at their chemical plants, we are working to identify alternative materials and eliminate its use as soon as possible. Some facilities at Kuraray plants that were built before current asbestos regulations were enacted use asbestos as an insulating material. We plan to remove aging ducts at one of those facilities in fiscal 2005.

## Action Points

**In May 2004 the Air Pollution Control Law was revised and volatile organic compounds (VOC) regulations came into force. Some facilities at the Kuraray Group are subject to the regulations. Although some facilities can be brought into compliance as part of the chemical substances emissions reduction activities implemented to date, we plan to conduct a new study and implement measures to ensure compliance with the regulations.**

# Zero Emissions of Industrial Waste

## Policies

### Zero Emissions

Zero Emissions is a concept advocated by the United Nations University for an industrial structure that does not produce waste. The goal of this concept is for wastes and by-products of one industry to be used as resources by a new field, so that overall there is no waste produced. It is generally used in the sense of promoting recycling by thoroughly separating all waste, and reducing levels of waste disposed of through incineration and landfilling.

The Kuraray Group aims to achieve zero emissions of industrial waste (refer to the definition below). To reduce and recycle waste, we are improving production processes and developing methods of effectively using waste.

The Medium-Term Environmental Plan established targets for fiscal 2005 of a reduction of 90% in the volume of unutilized industrial waste disposed of in external landfills and by incineration and an increase of at least 20 percentage points in the waste utilization rate from the fiscal 1999 levels. Because the target for waste utilization was achieved ahead of schedule in fiscal 2002, we established a revised target of an increase of at least 30 percentage points in the waste utilization rate in fiscal 2006 from the fiscal 1999 level.

For the long term, we have established targets for fiscal 2010 of reducing the volume of waste destined external landfills for and incineration by 94% from the fiscal 1999 level and maintaining the waste utilization rate at 90% of the fiscal 1999 level.

## Current State of Activities

### Progress in Achieving Zero Emissions

In fiscal 2004, the Nakajo Plant achieved zero emissions for the first time, joining the Kashima Plant, Okayama Plant, and the Kuraray Trading Co., Ltd. Okayama Plant to become the fourth Kuraray Group plant to reduce industrial waste emissions to zero. We will continue efforts to achieve zero emissions at other plants in the coming years.



● Nakajo Plant

### Eco-Friendly Plant Certification

On the basis of the Okayama Prefectural Ordinance to Promote the Formation of a Recycling Society, Okayama Prefecture has instituted a system by which companies evaluate their own environmental preservation initiatives in the areas of environmental management systems construction by means of acquiring ISO 14001 certification, emissions reduction, and recycling in order to have their manufacturing plants certified as Eco-Friendly Plants. Among the Kuraray Group sites in Okayama Prefecture, the Okayama Plant, Kurashiki Plant (Kurashiki), and Kurashiki Plant (Tamashima) obtained certification in March 2005.



● Okayama Plant



● Kurashiki Plant

## The Kuraray Group's Definition of Zero Emissions

The Kuraray Group defines zero emissions as reduction of the final amount of waste disposed of in landfills and by incineration to less than 1% of the total waste generated at a site by promoting the effective utilization of waste.

Although it is possible to reduce the amount of waste disposed of in landfills and by incineration to zero, waste processing requires consumption of great quantities of energy. Because the benefits of this are doubtful from a lifecycle assessment perspective, the Kuraray Group does not aim to completely eliminate the amount of waste disposed of in landfills and by incineration.

### Thermal Recycling

This is a form of recycling, which refers to turning used products into resources and creating new products from them. Unlike "material recycling," thermal recycling re-uses the resources as fuel or another heat source.

### Molten Slag

Molten slag is incinerator ash and other materials produced when waste is incinerated, which melt and fuse under the high temperatures of the furnace, then cool and harden into a glass-like substance.

## Activities in the Medium-Term Environmental Plan

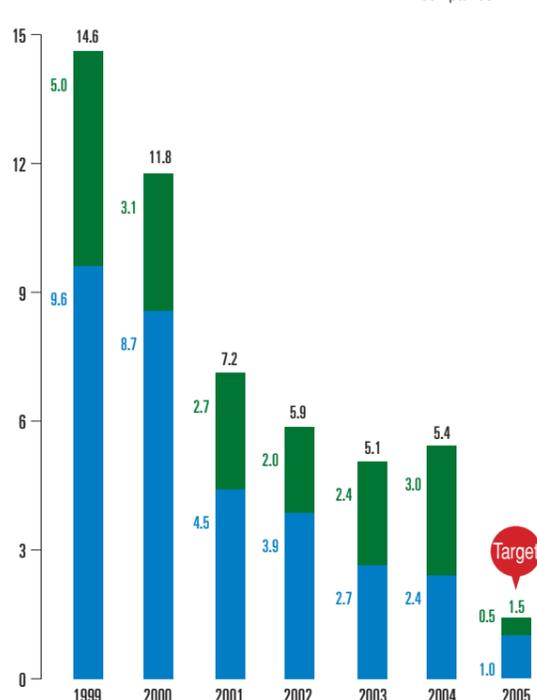
- ① Efficient use of materials and reuse of packaging materials
- ② Development of a zero surplus sludge system for use in treating wastewater
- ③ Effective utilization of waste through waste separation
- ④ Development of methods for the effective utilization of individual types of waste
- ⑤ Thermal recycling of waste plastic
- ⑥ Use of a gasification fusion furnace

Kuraray uses a high-temperature gasification fusion furnace to decompose industrial waste into flammable gases, molten metal, and molten slag. This makes it possible to use the flammable gases as fuel, the molten metal as metal resources, and the molten slag as soil stabilization material. In the coming years, Kuraray intends to utilize this method to increase industrial waste utilization.

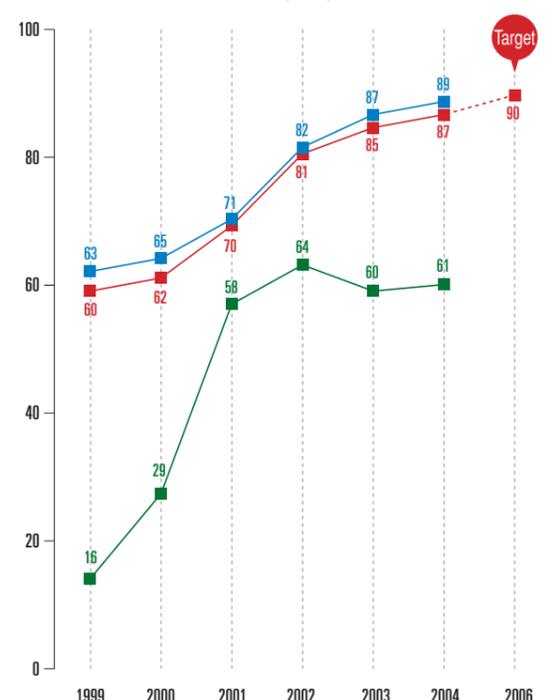
The volume of industrial waste generated by domestic Kuraray Group companies disposed of in external landfills and by incineration in fiscal 2004 was 5,400 tons. This represents a 63% reduction from the fiscal 1999 base year level, but a 6% increase from the previous year. Industrial waste production was 91,000 tons, and the industrial waste utilization rate was 87%, an increase of 27 percentage points from the fiscal 1999 level.

According to the Ministry of Environment of Japan, total industrial waste production in fiscal 2002 was approximately 393 million tons, of which 182 million tons (46.3%) was recycled. (This information was obtained from material published on the Ministry of Environment website.)

Volume of Industrial Waste Disposed of in External Landfills and by Incineration



Industrial Waste Utilization Rate



## Action Points

In fiscal 2005 Kuraray plans to continue efforts to promote the effective use of industrial waste through waste separation and the development of methods of effectively using waste. We aim for industrial waste external landfill and incineration disposal volume of 1,500 tons (a reduction of 90% from the fiscal 1999 level) and an industrial waste utilization rate of 87.9% (an increase of 28 percentage points from the fiscal 1999 level).

To reduce the volume of industrial waste generated, we will promote the effective use of raw materials through various means, including product yield increases and the development of a zero surplus sludge system for wastewater treatment.

# Green Procurement

## Policies

Law on Promoting Green Purchasing, which went into effect in April 2001, requires companies to select low-environmental-load products and services. Eco-friendly commercial activities, product development, and manufacturing hinge on the procurement of parts and materials that place a low load on the environment. The Kuraray Group established internal regulations for green purchasing of office supplies and manufacturing supplies in fiscal 2001, and we give priority to low-environmental-load products and services.

## Activities

### Green Procurement

In March 2002, Kuraray established Green Purchasing Standards applicable to raw materials and manufacturing supplies. We give priority to suppliers that actively engage in environmental conservation. We conducted an assessment of the "greenness" of our principal suppliers in fiscal 2002, and in fiscal 2003 and fiscal 2004 provided individual guidance to suppliers that failed to meet the Green Purchasing Standards. The pie charts to the right show the results of reassessment following the guidance: the percentage of green suppliers increased by more than five points. We plan to step up efforts to ensure that suppliers comply with the Green Purchasing Standards.

### Supplier Assessment Standards

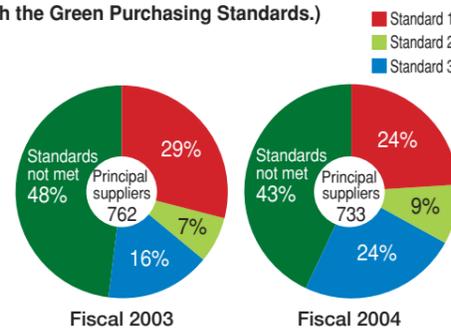
(Conformance with Standards 1, 2, or 3 is deemed compliance with the Green Purchasing Standards.)

**Standard 1:** The supplier is certified to ISO 14001.

**Standard 2:** ISO 14001 certification is planned, and the auditing body and audit date have been decided.

**Standard 3:** The following criteria must be met when neither Standard 1 nor 2 applies.

- Corporate philosophy or policy on environmental preservation
- Organization or plan for environmental preservation
- Environmental impact assessment
- Environmental education and information disclosure
- Environmentally friendly logistics



### Scope of Green Procurement

- Raw materials used in product manufacturing and development
- Equipment and facilities used in product manufacturing and development
- Packaging materials and containers used in product shipment and transport
- Equipment and supplies used in for marketing activities and office work
- Outsourced services pertaining to manufacturing, marketing and logistics

### Green Purchasing

Kuraray purchases green products in accordance with its Green Purchasing Guidelines. In fiscal 2004, we expanded the scope of green purchasing to include stationery.

#### Status of Green Purchasing

Field	Item	Purchase value (million yen)	Green purchasing rate		
			Fiscal 2003	Fiscal 2004	
1	Paper (recycle)	5 items Copier paper, forms, printing paper, sanitary paper, business cards	49	100%	100%
2	Stationery (recycle)	47 items Mechanical pencils, ballpoint pens, markers, pencils, others	10	95%	99%
3	Furnishings (reuse)	8 items Chairs, desks, shelving, cabinets, low partitions, bulletin boards, chalkboards, whiteboards	8	80%	80%
4	Office equipment (energy conservation)	4 items PCs, printers, copiers, facsimile machines	223 (leasing fees)	100%	100%
5	Appliances (energy conservation)	4 items Refrigerators, air conditioners, televisions, video tape recorders	19	80%	88%
6	Lighting (energy conservation)	2 items Fluorescent light fixtures, fluorescent tubes	24	100%	100%
7	Automobiles (pollutant reduction)	1 item Automobiles	77 (leasing fees)	100%	100%
8	Uniforms and work clothes (recycle)	2 items Uniforms, work clothes	-	-	-
9	Work gloves (recycle)	1 item Work gloves	2	50%	50%

\*A policy to use uniforms and work clothes made using Kuraray recycled polyester fibers from the second half of fiscal 2005 is under consideration.

# Disaster Prevention

## Policies

In keeping with the Basic Responsible Care Policies, the Kuraray Group regards the prevention of fires, explosions and other forms of disaster at plants, safety assurance, and the provision of a sense of security to host communities and society at large as critical management tasks. Accordingly, Kuraray engages in disaster prevention activities.

To ensure basic facilities safety, Kuraray has established the Equipment Safety Design Guidelines and Safety Inspection Standards. When facilities are newly installed or rebuilt or when there is a major change in operating conditions, to prevent accidents or disasters we conduct safety inspections at four stages: during design, during construction, before commissioning, and after startup. We are also putting in place a disaster response system and improving public information systems in the event a disaster occurs.

## Activities

### Disaster Prevention Activities

#### Natural Disaster Preparation and Mitigation

A spate of major natural disasters occurred around the world in 2004, including earthquakes, tsunami, and flooding. The Kuraray Group sustained damage from tidal waves and rainstorms in Typhoons 16, 18, and 21. It has been suggested that global warming might be responsible for an increase in natural disasters caused by abnormal weather conditions, and Kuraray is investing to enhance disaster preparedness. For instance, in a test of a state-of-the-art earthquake countermeasure, the Kashima Plant participates in a research project for a system for obtaining earthquake information from observation sites across Japan and making use of the brief time until tremors arrive to conduct an emergency plant shutdown. Last year a basic system for obtaining information went into operation, and it was confirmed that the information can be effectively used in earthquake countermeasures. In another development, previous experience with tidal wave damage has prompted a decision to install seawalls at Kuraray sites in 2005.

#### Total Productive Maintenance

Since 1997 the Kuraray Group has engaged in Total Productive Maintenance (TPM) activities. The purpose of these activities is to increase productivity and prevent malfunctions or accidents due to facilities deterioration by maintaining facilities in optimal condition through constant maintenance activities based on three principles: autonomous maintenance (Jishu Hozen), planned maintenance, and quality maintenance. In fiscal 2004, the Okayama Plant received the Special Award for TPM Achievement and the Kashima Plant received the TPM Challenge Award from the Japan Institute Plant Maintenance.

#### Disaster Prevention Drills

To prepare for accidents, each Kuraray plant maintains a disaster prevention organization unit and engages in periodic drills. In fiscal 2004, the plants conducted disaster prevention drills to prepare for emergency situations, including fire, earthquake, leakage, and nighttime emergency. Diligent drilling paid off when representatives from the Kurashiki Plant and Okayama Plant disaster prevention units participated in firefighting technique training conventions held by the fire departments in their respective cities and received commendations for excellent results in the women's fire extinguisher drills and the men's indoor fire hydrant drills.



#### Independent Fire Brigade

Kuraray uses large quantities of highly flammable chemical materials (hazardous materials) in its day-to-day production activities. For this reason, to guard against fire we maintain firefighting facilities at all sites that handle hazardous materials and organize independent fire brigades at each plant. In fiscal 2004, the Okayama Plant, Kurashiki Plant, and Kuraray Saijo Co., Ltd. updated a total of four firefighting vehicles to maintain and improve the response capabilities of their fire brigades. Also, the Kuraray Plastics Co., Ltd. Ibuki Plant for the first time introduced a firefighting vehicle to improve its fire response capabilities.



#### Crime Prevention

In recent years concern about terrorism or other intentionally caused large-scale disasters has increased even in Japan. To prevent such acts from occurring, the Kuraray Group has augmented its crime prevention systems by installing crime prevention lights and surveillance cameras around the perimeter of its plants, upgrading fencing, and stepping up security patrols on plant grounds.

#### Okayama Prefecture Confederation of Hazardous Materials Safety Associations Chairman's Award

At the Okayama Prefecture Hazardous Materials Safety Convention, a Kuraray employee received the Okayama Prefecture Confederation of Association for Safety of Hazardous Materials Chairman's Award in recognition of achievements during many years of service as a security manager.



## Action Points

Despite the continuing disaster prevention activities described above, in fiscal 2004 six small-scale fires and one organic solvent leak occurred at Kuraray sites. Although all the accidents were discovered quickly and none developed into a serious problem, Kuraray regards the occurrence of such accidents as an alarm that signals weaknesses in its disaster prevention systems and will continue to earnestly implement prevention measures.

# Quality Assurance and Product Safety

## Policies

The Kuraray Group has established the **Basic Policy on Product Safety and Action Guidelines for Product Safety** and constantly strives to ensure product safety. We are obtaining certification in the ISO 9001 international quality management system and engaging in customer-centered quality assurance activities, the basis for product safety.

### I. Basic Policy on Product Safety

The Kuraray Group endeavors to contribute to creating an affluent, comfortable society by meeting customer needs through the supply of safe and reliable products.

### II. Action Guidelines for Product Safety

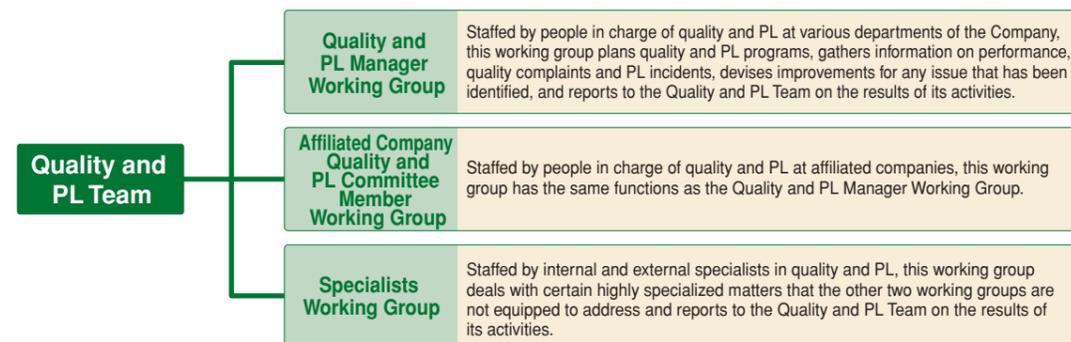
- ① Supply products that meet the level of safety expected by society in compliance with safety-related laws and regulations and on the basis of latest technologies.
- ② Minimize any anticipated risk associated with the products we supply.
- ③ Maintain an appropriate quality management system to ensure that all products meet requisite quality and safety standards.
- ④ Provide accurate product information to customers and end users to prevent accidents due to inappropriate use or handling.
- ⑤ Strive to develop safer products and improve product safety technologies.
- ⑥ Strive to strengthen information gathering and internal and external cooperative frameworks to ensure and improve product safety and quickly respond to accidents.
- ⑦ Strive to raise product safety awareness among all employees and develop product safety specialists.

## Implementation Structure

### Product Liability (PL)

Product liability is the liability that the manufacturer or processor of a product has to provide compensation for damages to life, limb or property due to defects in that product. From the standpoint of consumer protection, if it can be proved that the product is defective, then the manufacturer or processor is liable for damages, regardless of whether that defect was due to error or omission.

Quality and PL Team under the Environmental and Industrial Safety Subcommittee of the CSR Committee ascertains the state of quality and product liability (PL) management based on information received from its three working groups (Quality and PL Manager Working Group, Affiliated Company Quality and PL Committee Member Working Group, and Specialists Working Group) and from various departments. When the team discovers an issue that it believes should be taken up from a company-wide perspective, it discusses countermeasures and submits a proposal to the Environmental and Industrial Safety Subcommittee.



## Quality Assurance

The Kuraray Group is acquiring certification in the ISO 9001 international quality management system and engages in quality assurance activities based on a PDCA cycle. We have established Customer Information Management Regulations and, strictly observing the regulations, ascertain customer wants and needs for Kuraray Group Products through interview and questionnaire surveys and strive to reflect the findings in product quality.

### Sites That Have Obtained Certification in ISO 9001: 2000

Kuraray Nakajo Plant	Kuraray Okayama Plant	Kuraray Kashima Plant	Kuraray Saijo Co., Ltd.	Kuraray Tamashima Co., Ltd.
Kuraray Chemical Co., Ltd.	Kuraray Plastics Co., Ltd.	Kuraray Techno Co., Ltd.	Kuraray Fastening Co., Ltd.	Kuraray Medical Inc.
Eval Company of America	SEPTON Company of America	EVAL Europe N.V.	Kuraray Specialities Europe GmbH	

## Product Safety

### Material Safety Data Sheet (MSDS)

This is a document containing information necessary for the safe handling of a chemical product, including the substance name, physical properties, dangerous toxins, and precautions for use.

Kuraray has established independent standards including the Product Safety Management Standards for the R&D Stage, Product Safety Management Standards up to Market Launch, and Handling Instructions Production and Management Guidelines. In creating products we carefully consider their impact on the environment, safety, and health at every stage of the product lifecycle, from R&D to final disposal.

We have established the Material Safety Data Sheet Management Guidelines to ensure the proper handling of material safety data sheets (MSDS) and have compiled a database so that employees can search for and access MSDS using computers. We also publish MSDS for principal Kuraray products on our website.

In the event that a product liability-related incident (a product liability incident or a complaint or quality problem that could lead to a product liability incident) occurs in the Kuraray Group, we endeavor to take rapid and appropriate action in accordance with the Kuraray Group Product Liability-Related Accident Response Regulations.

## Product Complaints

The Kuraray Group strives to rapidly and properly handle customer complaints in connection with product quality in accordance with the Quality Complaint Handling Regulations. To prevent complaints and avoid their reoccurrence, the Quality and PL Team and its subordinate organizations provide departments in the Company with support for quality improvements.

## Action Points

**Kuraray will work to increase employee awareness of quality and product liability and to develop key personnel to promote product quality. We also plan to improve quality and product liability management at contract manufacturers.**

# Logistics Safety

## Policies

The domestic Kuraray Group companies have established **Distribution Safety Management Standards and the Distribution Safety Management Standards Implementation Procedures to rigorously ensure safety management during the physical distribution of chemical products. On the basis of these standards, Kuraray engages in safety management in the transport, storage, loading, and unloading of hazardous or toxic products and liquid products.**

## Current State of Activities

Distribution safety supervisors periodically provide necessary education and guidance to employees involved with physical distribution and contract distribution companies to maintain product quality and ensure safety during handling. To maintain emergency response preparedness in case of distribution accidents and other emergency situations, Kuraray keeps sandbags and other clean-up supplies at the ready and maintains a communication network.

In accordance with the Guidelines for the Control of Yellow Cards, to prevent the spread of damage in the event that an accident occurs, truck drivers are required to carry Yellow Cards (emergency response cards) that contain information about the hazardous nature and toxicity of the chemical products being transported, emergency contact information, and emergency response procedures. In accordance with the Material Safety Data Sheet Management Guidelines, to increase distribution safety we supply contract distribution companies with MSDS.

In fiscal 2004, we engaged in activities to upgrade the above systems put in place up to fiscal 2003.

- ① Response when accidents occur outside Kuraray premises
  - ② Revision of the Guidelines for the Control of Yellow Cards (including the addition of container yellow card regulations)
- We plan to continue to improve logistics safety systems in fiscal 2005 and beyond.

# Environmental Data

\* Information for individual sites is posted on the Kuraray website.

## Environmental Accounting

### Environmental Preservation Costs

Category	Investments	Costs	Principal Activities
Costs within the sites			
Pollution prevention costs	1,637	2,407	Environmental facilities operating costs Prevention of chemical substance emissions
Global environmental conservation costs	270	569	Increase in the efficiency of electric power generators Introduction of photovoltaic power generation facilities
Resource recycling costs	423	420	Waste reduction and recycling
Total	2,330	3,396	
Upstream and downstream costs	—	1	Recycling and reuse of packaging materials, improvement of container packaging
Administrative costs	—	153	ISO 14001, environmental measurement, environmental education
Research and development costs	—	226	Development of eco-friendly products
Social activity costs	—	1	Afforestation, beautification, provision of environmental information to host community residents
Environmental damage costs	—	—	
Total	2,330	3,777	

Total investment during the reporting period: ¥22,100 million (Totalled in accordance with the scope of environmental accounting)  
Total R&D costs during the reporting period: ¥10,300 million (same as above)

### Environmental Preservation Effects

Category	Unit	Fiscal 2003	Fiscal 2004	Variance	
Pollution prevention effect	SOx emissions	1,000 tons	0.60	0.59	▲0.01
	NOx emissions	1,000 tons	1.92	1.93	0.01
	Particulate emissions	Tons	60	67	7
	Emissions of substances covered under the JCIA voluntary PRTR management program	Tons	1,975	2,150	175
	COD load	Tons	710	734	24
Global environment preservation activities	CO <sub>2</sub> emissions	1,000 tons of CO <sub>2</sub> equivalent	1,351	1,359	8
	Energy consumption	1,000 kJ (crude oil equivalent)	468	468	0
Resource recycling activities	Unutilized industrial waste disposed of in external landfills	1,000 tons	2.7	2.4	▲0.3
	Industrial waste utilization efficiency	%	87	89	2
	Water resource use	million m <sup>3</sup>	85.3	84.7	▲0.6
	Total wastewater	million m <sup>3</sup>	77.7	79.4	1.7

### 1 Basis for environmental accounting calculations

- Reporting period: April 1, 2004 to March 31, 2005
- Scope covered: Kuraray Co., Ltd.

### 2 Environmental conservation cost calculation criteria

- Depreciation: Straight-line method
- Standard for allocating costs: In principle 100% of costs are allocated to environmental individual conservation items. However, a portion of costs are allocated on a pro rata basis.

### 3 Standard for calculating environmental preservation effects

- Effects are calculated in a simple comparison with the total environmental load of the previous fiscal year and are not adjusted for production volume.

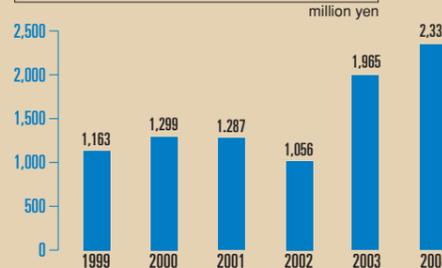
### 4 Standard for calculating economic effects (benefits) of environmental preservation measures

- Although material effects such as income from recycling are known, benefits are deducted from environmental preservation costs.

### 5 Investments

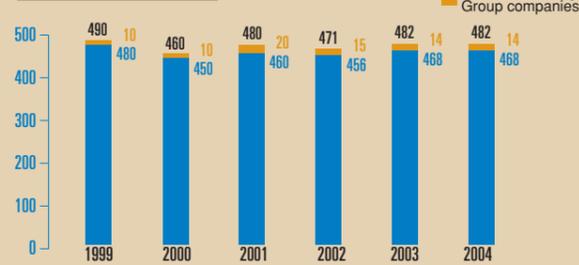
- Budgeted amounts for the period in question

Investment in Environmental Facilities

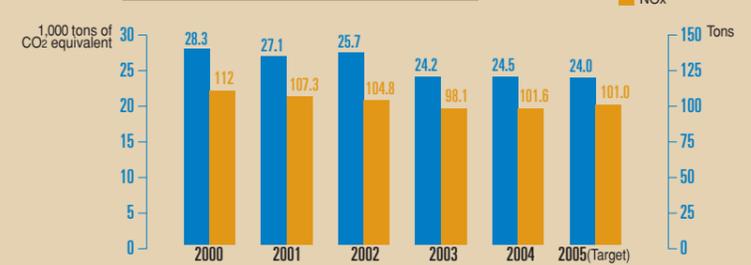


## Global Warming Prevention

Energy Consumption 1,000kJ crude oil equivalent

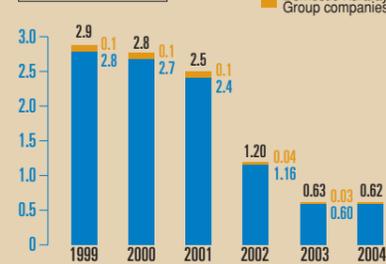


CO<sub>2</sub> and NOx Emissions During Transport



## Air Pollution Prevention

SOx Emissions 1,000 tons



NOx Emissions 1,000 tons



## Water Pollution Prevention

COD Load Tons



## Management of Ozone Layer Depleting Substances

Emissions of Principal Ozone Layer Depleting Substances Tons

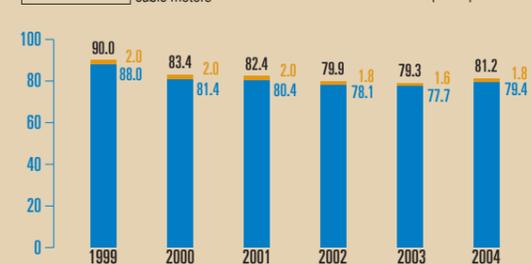
	Ozone Depleting Potential	Emissions				CFC equivalent			
		Fiscal 2001	Fiscal 2002	Fiscal 2003	Fiscal 2004	Fiscal 2001	Fiscal 2002	Fiscal 2003	Fiscal 2004
Hydrochlorofluorocarbons (HCFC-123)	0.02	0.93	1.52	0.31	0.97	0.02	0.03	0.01	0.02
Chlorofluorocarbons (CFC-11)	1.00	0.50	0.46	0.20	0.03	0.50	0.46	0.20	0.03
Carbon tetrachloride	1.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1,1,1-trichloroethane (methylchloroform)	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Three specified halons	3.0~10.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydrobromofluorocarbons	0.1~14.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methyl bromide	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		1.44	1.99	0.52	1.01	0.53	0.50	0.22	0.06

## Resource Conservation

Water Use million cubic meters



Wastewater million cubic meters



# History of Environmental, Safety, and Social Service Activities at Kuraray

# Question and Answer

■ Environmental and Safety Activities   
 ■ Social Service Activities

- 1970** ■ Dedicated organizations responsible for environmental and safety activities are established at the head office and production plants.
- 1977** ■ The Environmental Control and Occupational safety Regulations are established.
- 1991** ■ ■ The Philanthropy and Environment Committee is established.  
■ ■ The Philanthropy and Environment Committee's Ecology Subcommittee and Philanthropy Subcommittee begin activities.
- 1992** ■ The first Chemistry Class for Boys and Girls is conducted at the Kurashiki and Saijo Plants.  
■ The Matching Gift system (a system by which employees donate a small fraction of their pay to benefit community social services and the Company matches the amount) is established.
- 1993** ■ Kuraray Action Guidelines on the Global Environment are established. (The guidelines are expanded to encompass the entire Kuraray Group in 2001.)
- 1995** ■ Participation in responsible care activities begins.
- 1997** ■ The Nakajo Plant's work center is established at "Niji-no-ie" social welfare house (Nakajo, Niigata Prefecture).
- 1998** ■ The In-house Ethics Committee is established.  
■ Activities to obtain ISO 14001 certification for all production plants and research laboratories begin.  
■ Publication of the Kuraray Environmental Activities Report begins.
- 2000** ■ ISO 14001 certification is obtained by the Kashima, Okayama, Nakajo and Kurashiki Plants, Techno Soft Co., Ltd., Kuraray Tamashima Co., Ltd., Kuraray Saijo Co., Ltd., Eval Company of America, and Kuraray Specialties Europe.  
■ The Fruits-no-ie shared residence is opened after conversion of unused company housing at the Saijo Plant.
- 2001** ■ The Medium-Term Environmental Plan is established.  
■ The functions of the Environmental, Industrial Safety and Quality Management Department are upgraded and the department is renamed the Environmental, Industrial Safety and Quality Management Center.  
■ The RC Activities Verification Meeting is inaugurated.  
■ Certification of the Tsukuba Research Laboratories marks the completion of ISO 14001 certification at all Kuraray plants and research laboratories in Japan.
- 2003** ■ ■ The CSR Committee is established and the Environmental and Industrial Safety Subcommittee, Economic Subcommittee, and Social Responsibility Subcommittee begin activities. (The In-House Ethics Committee and Philanthropy and Environment Committee are dissolved and reorganized.)  
■ The one hundredth Chemistry Class for Boys and Girls is held.  
■ Kuraray Plastics Co., Ltd., Magictape Co., Ltd.\*, and SEPTON Company of America obtain ISO 14001 certification.
- 2004** ■ The Tulip-en assisted-living facility opens in an unused employee welfare facility at the Nakajo Plant.  
■ A campaign to donate used school bags to children in overseas countries begins.  
■ Kuraray begins full-scale utilization of renewable energy (such as expansion of biomass fuel use), expanding the scale of renewable energy use.

\* Now Kuraray Fastening Co., Ltd.

We received completed questionnaires from 39 readers of the Kuraray CSR Report 2004. The section of the report in which the readers indicated the greatest interest was Social Contributions, followed by Environmental Preservation Activities and Management Philosophy/Management Organization. The responses suggest a high degree of interest among readers in a wide range of corporate social responsibility issues.

### Sections Readers Found Especially Interesting

1	Social Contributions	51%
2	Environmental Preservation Activities	49%
3	Management Philosophy/Management Organization	46%
4	History of Environmental Preservation and Safety Assurance Activities, and Social Activities	44%
5	Environmental Preservation and Safety Guidelines	41%

We received a number of opinions and questions from the readers. Here we provide some of the questions and our answers to them.

- Q** I would like to know the direction you plan to take in communication and interaction with local communities.
- A** The Kuraray Group places importance on deepening trust through frank and open dialog with society. We place particular emphasis on interaction with the communities that host our production plants and work to promote understanding among host community residents of what the plants do through plant tours and other activities. At the same time, we desire to foster a sense of unity with local communities by actively holding the Chemistry Class for Boys and Girls classes and staging events using our employee welfare facilities.
- Q** What proposals are under consideration for boiler fuel conversion?
- A** We plan to convert the fuel used in the low-pressure boilers at the Okayama Plant (from heavy oil to natural gas) and expect the converted boilers to go into operation in December 2005. This follows conversion of the fuel used in our low-pressure boilers at the Nakajo Plant from heavy oil to natural gas in June 2002 and will contribute to reducing emissions of CO<sub>2</sub> by 19,000 tons per year as well as emissions of sulfur oxides (SO<sub>x</sub>) and nitrogen oxides (NO<sub>x</sub>).
- Q** Do you plan become involved with biomass as a clean energy source?
- A** We plan to expand the use of biomass fuel (wood waste) at the No. 8 Boiler at the Kurashiki Plant (Tamashima). In December 2004 we constructed a new silo for accepting wood waste and began processing at the rate of 16,000 tons per year. This will result in a reduction of 22,000 tons of CO<sub>2</sub> emissions per year. Future plans call for further expansion of biomass fuel use.
- Q** What is the situation with the employment and advancement of female employees?
- A** Neither the percentage of female employees (15.2%) nor that of female managers (0.6%) can be considered high. Our objective is not merely to increase the percentages of female employees and managers; we believe that continuously engaging in substantive activities to create an environment where women find it easy to work (such as increasing the percentage of employees taking childcare leave) and providing work opportunities that enable women to experience self-realization (such as increasing workplace satisfaction) will result in increasing the percentages.

We also received opinions concerning the format and editing of the Corporate Social Responsibility Report and reflected them in the production of the 2005 edition.

- "There are words and phrases I don't understand." → We have included explanatory notes throughout the report. "I wish you'd include explanatory notes."
- "There's too much text." "It's too lengthy to scan through from start to finish." → We have controlled the volume of text and improved the visual presentation and readability.
- "What about including comments from employees?" "It would be good if you included employee opinions and photographs." → As far as possible we have included comments from employees who participated in the activities covered in the report.
- "Devise ways of arousing interest and encouraging people to read the report." "Clearly state the main points in headings and titles." → We have included Highlights that place emphasis on initiatives given special effort.

We plan to continue to reflect reader opinions in our corporate social responsibility activities and strive to improve communication. To assist us, please provide your opinions and impressions of this report.

**URL** <http://www.kuraray.co.jp/en/csr/report/index.html>

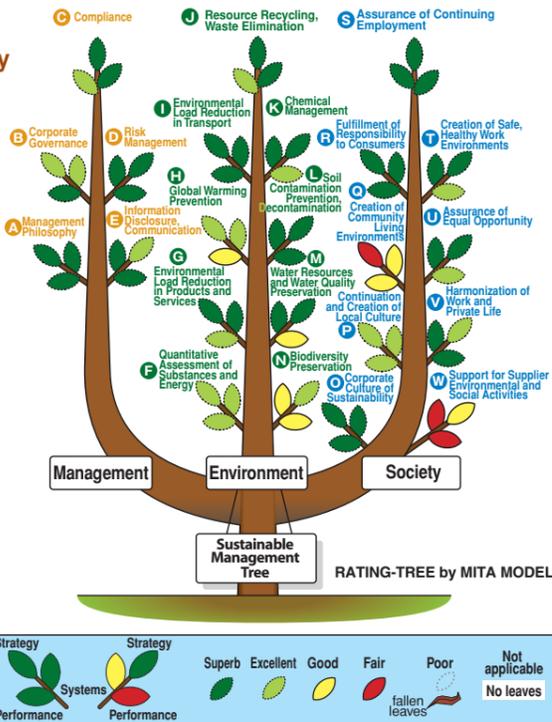
Please access the CSR page of the Kuraray website to fill in a questionnaire.

# Third-Party Evaluation

**The Kuraray Group's corporate social responsibility activities have been evaluated by third parties. We will carefully consider the evaluation results and reflect them in our CSR activities where possible.**

## Sustainable Management Rating

Kuraray received a medium rating among the 64 companies that participated in the third Sustainable Management Rating conducted by the Sustainable Management Rating Institute. We regard continuous efforts to strengthen environmental initiatives at consolidated subsidiaries and affiliates as an issue to be addressed in the coming years.



## Corporate Environmental Management Survey

The Nihon Keizai Shimbun's Eighth Corporate Environmental Management Survey

By-Category Environmental Management Ranking (Domestic)

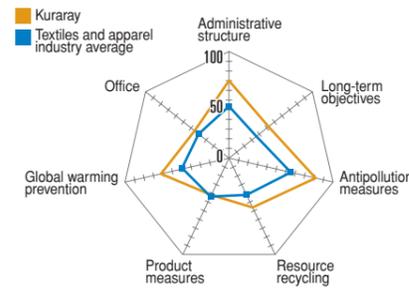
### Domestic ranking

Kuraray ranked 192nd out of 590 companies (108th out of 599 companies the previous year)

### Overseas ranking

Kuraray ranked 65th out of 260 companies (260 of the 590 companies that have overseas production sties for which performance can be compared) (40th out of 217 companies the previous year)

The major factors contributing to the drop in the rankings from the previous year were product recycling measures and a delay in implementing environmental activities in company offices, which was included as an evaluation item for the first time this year.



## Corporate Social Responsibility Survey

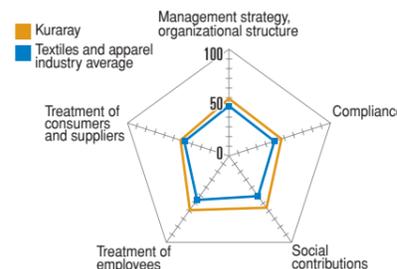
The Nihon Keizai Shimbun's First Corporate Social Responsibility Surveys

By-Category Corporate Social Responsibility Ranking

### Domestic ranking

Kuraray ranked 76th out of 847 companies

This survey indicates the results of analysis of the posture on increasing corporate value by reflecting in corporate management dialog with shareholders, consumer, suppliers, and other stakeholders with respect to five evaluation items: ① management strategy and organizational structure, ② compliance, ③ social contributions, ④ treatment of employees, and ⑤ treatment of consumers and suppliers.



## FTSE4Good

FTSE4Good is a benchmark index for Socially Responsible Investment (SRI) established by the FTSE (a joint venture between the Financial Times and London Stock Exchange). The index is used extensively in Europe, where the SRI market is growing markedly, especially in Scandinavia and the U.K. It is also closely watched in Japan.

Kuraray has been included in the FTSE4Good Global Index for three consecutive years (as of May 2005 the index consisted of 920 issues, 183 of which were Japanese companies). Selection is based on three factors: environmental criteria, social and stakeholder criteria, and human rights.

# Message to Our Readers

Each year since 1998 Kuraray has issued a report mainly on its response to environmental problems. Each year we have enhanced the content of the report, reflecting our belief that as a company whose business is chemistry we have a particularly weighty responsibility to protect the environment.

In recent years the social responsibility required of companies has increased in scope and gravity. In response to this development, in 2003 Kuraray established the CSR Committee, commenced activities that integrate environmental, social, and economic considerations, and issued the CSR Report to report on the results of those activities. This report is the second edition of the CSR Report.

Since its foundation, the Kuraray Group has engaged in management that reflects a strong sense of awareness of the role we should play in benefiting society, and we began many of the activities introduced in this report before the concept of corporate social responsibility became widespread. Accordingly, we have not begun to engage in CSR from scratch; rather, we have begun by reexamining activities we have engaged in over the years

and by discovering activities we have been involved in but have not considered from a CSR perspective.

We seek to establish a corporate culture characterized by high awareness of CSR and to cause it to take firm root so that our day-do-day business activities themselves are CSR activities. The Kuraray Group maintains business sites around the world, and our environmental, social, and economic presence is increasing everywhere. The expansion and enhancement of CSR activities in Japan and overseas is an important management task for the coming years.

We desire to continue to engage in down-to-earth, enduring CSR initiatives. To that end, it is important to solicit and listen to the views of many people and reflect them in our day-to-day activities. I request and encourage our readers to address any opinions, questions, or impressions to our attention.

**Koichi Kushida**  
Senior Managing Director and  
CSR Committee Chairman



# Editor's Postscript

In April 2005 Kuraray newly established the Office of CSR. The mission of the Office of CSR is to serve as the secretariat for the CSR Committee, which commenced activities in 2003, and strengthen CSR activities throughout the Kuraray Group.

This report was compiled under the direction of the CSR Committee and prepared in a cooperative effort by the Office of CSR and involved sections throughout the Kuraray Group. In preparing the report, in response to opinions

provided by readers of the 2004 edition we highlighted initiatives given special emphasis or newly begun and strove to make the layout visually pleasing and improve readability.

We hope that through this report you will gain an understanding of the Kuraray Group's thinking and stance on corporate social responsibility, the current state of CSR at Kuraray, and the issues we are addressing.

**Shuichi Takemoto**  
Manager  
Office of CSR