Overview of the Kuraray Group

Corporate Profile

Business by Region (business scale)

Data on Economic Efficiency

Editorial Policy

This report conveys the CSR activities that the Kuraray Group implemented in fiscal 2013 with the aim of boosting understanding of them among all stakeholders.

The Kuraray Group

33 consolidated subsidiaries/
1 equity method affiliate (35 companies including Kuraray Co., Ltd.)

Reference Guidelines

GRI Sustainability Reporting Guidelines (October 2013)

Issue Date

October 2014 (Overseas: October 2013)
Next issue: July 2015 (planned)

Business Outline

Kuraray was founded for the purpose of commercializing chemical fiber in 1906 in Kurashiki City, Okayama Prefecture. Ever since becoming the first firm in the world to commercialize styrofoam fibers and, following the wave based on domestic technology as well as POYALL, the realm in which it is in its core material, we have made use of this unique technology and have delivered a variety of one and only and number-one products to the world as a specialty chemical manufacturer.

Consolidated Net Sales by Segment (Fiscal 2013)*

- Sales figures include sales to external customers and the amount of core segment internal sales and transfer. They do not include the adjustment expense of ¥9.6 billion.
- Isoprene 11%
- Functional Materials 10%
- Fibers and Textiles 9%
- Vinyl Acetate 6.5%
- Other 13%

Other

Sales

¥179.3 billion

In this business, we manufacture and sell polyvinyl acetate resins and related products to be used for adhesives, coating agents, and heat-resistant materials, etc.

Functional Materials

Sales

¥48.6 billion

In this business, we manufacture and sell CLARION® (acrylic-based) products, as well as acrylic-based emulsion products, such as acrylates, modified acrylates, and other acrylic structural products, as well as DUREZ® copolymer materials and polyester resins.

Isoprene

Sales

¥17.5 billion

Isoprene, which is used for the production of synthetic rubber, is produced as a byproduct of the vinyl acetate production process. In the fiscal year under review, isoprene production was increased to meet market demand.

Fibers and Textiles

Sales

¥46.7 billion

In this business, we manufacture and sell polyester fibers and rayon products, which include various fibers such as Lyocell fibers and acrylic textile products.

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Message from the President

We deliver our Corporate Social Responsibility Report 2014 to all stakeholders.

In fiscal 2013, the global economy was generally weak. While the U.S. remained firm, this weakness was largely attributable to stagnant economic conditions in Europe and a slowdown in the rates of economic growth in emerging countries including China. In Japan, expectations that the economy would enter a period of recovery and that the nation’s deflationary spiral would break, hallowed on the back of pump-priming policies put forward by the Abe Administration, or so called Abenomics. Despite these endeavors and expectations, the market surrounding the Company did not reach a full-scale recovery. Under these circumstances, the Kuraray Group reported consolidated net sales for fiscal 2013 of ¥413.5 billion, an increase of 11.9% compared with the previous fiscal year. From a profit perspective, consolidated operating income edged up 0.7% year on year to ¥49.5 billion. While the Group was unable to achieve its anticipated level of profit, every effort was made to definitively put in place specific measures aimed promoting growth. Following on from the acquisition of Menofib, LLC, a company that manufactures and markets water-soluble films in the U.S., in fiscal 2012, the Kuraray Group completed the acquisition of a vinyl acetate-related business in June 2014 based on an agreement with E.S. du Pont de Nemours and Company (Euron), concluded in fiscal 2013.

Taking each of the aforementioned factors into consideration, the Kuraray Group will look to ensure that the results of all measures implemented to date are reflected in its performance in fiscal 2014, the final year of its GS-III medium-term management plan. At the same time, we will take steps to draw up the next medium-term management plan. Effective from fiscal 2015, Kuraray has decided to change its accounting year to the 12-month period from January to December. As a result, the accounting period for fiscal 2014 will be the nine-month period from April 2014 to December 2014. Over this transition period, we will target consolidated net sales of ¥365.0 billion and operating income of ¥44.0 billion.

Kuraray was founded in 1929 for the purpose of commercializing pioneering innovations. Utilizing its innovative technologies, the Company succeeded in the commercial manufacture of the synthetic fiber EULARON, which is derived from the raw material PVAM, in 1950. In the ensuing period, Kuraray has worked diligently to diversify and expand its business. The ability of today’s employees to consistently develop and expand its business is based on the principles and policies put in place by their predecessors since foundation. It is therefore vital that we continue to hold these principles and policies to our hearts and to overcome every challenge as a bid to contribute to society through our business activities.

Kuraray’s principles and policies are encapsulated in the Company’s Corporate Philosophy, Guidelines for Action, Principles for Business Conduct, and Corporate Mission. Kuraray’s Corporate Philosophy places the utmost emphasis on “respect for individuals,” “cooperation in shared goals,” and “creation of values.” These three key elements make up the basic spirit of each and every member of the Group. Our Guidelines for Action lay out the direction and manner in which to go about our daily activities and focus on “customer needs,” “value in the workplace,” and “acts based on each individual’s initiative.”

While the Corporate Philosophy and Guidelines for Action provide the ground rules for the Group’s principles and behavior, our Principles for Business Conduct outline the manner in which we interact harmoniously with a diverse society. As a result, providing products and services that give full consideration to safety, conducting business in a fair, free, and transparent manner, keeping good communications and maintaining a sound relationship with society, preserving and improving the global environment, and respecting intellectual properties including trade secrets and controlling information properly are integral components of the Kuraray Group’s business activities.

Through each of its Corporate Philosophy, Guidelines for Action, and Group Code of Conduct, the Kuraray Group’s will be committed to fulfilling its enunciated vision of opening new fields of business using pioneering technology and contributing to an improved natural environment and quality of life.

As a manufacturer of chemicals, safety is a paramount concern of the Kuraray Group. In recent years, Japan’s chemical industry has experienced a succession of serious accidents. This has only served to further highlight the importance of maintaining safety. Recognizing that “safety is the cornerstone of everything we do,” we will ramp up endeavors aimed at promoting process safety and disaster prevention as well as occupational safety and health.

Guided by these principles, the Kuraray Group will focus on promoting sustainable growth while working to fulfill its corporate social responsibility.

As we work toward achieving our established goals, I kindly request the continued support and understanding of all stakeholders.

Fumio Ito
Representative Director and President
Kuraray Co., Ltd.
Kuraray Group’s CSR Activities throughout the Product Lifecycle

“Contributing to the World and Individual Well-being through Actions that Others are Unable to Produce.”

While respecting the interests of all stakeholders, Kuraray harnesses the strengths of its pioneering technologies to add value to the resources entrusted to it by society. Every effort is channeled toward helping people lead fulfilling and comfortable lives and to help realize a sustainable society by consistently delivering value.

Product Value Chain

**Procurement**
- We seek understanding from these partners of our CSR procurement policy and ask for cooperation in: (1) respecting human rights, (2) compliance, and (3) promoting green procurement.

**Development-Production-Logistics**
- The Kuraray Group implements voluntarily management activities related to environmental preservation, process safety and disaster prevention, occupational health and safety, as well as innovation safety and product development, life-cycle assessment, and development to production and logistics.

**Usage-Disposition**
- The Kuraray Group aims to provide products and services that improve the natural environment and quality of life using pioneering technology from stage by stage to final disposal of the product.

**Stakeholders with Whom the Group is Deeply Involved**
- Business partners and suppliers
- Shareholders and investors
- Employees
- Local communities
- Customers

**Social Issues Recognized by the Kuraray Group**

- Secure sustainable resources
- Minimize environmental load
- Comfortable workplace environment and human rights
- Reinvigorate the economy and improve social life
- Minimize environmental load

**The Kuraray Group’s Initiatives and Countermeasures**

- Provide water purification technologies and products
- Promote biomass power generation
- Promote CSR procurement
- Compliance Declaration
- Strengthen responsible care initiatives
- Assess the degree to which the Group contributes to reducing GHG emissions
- Develop environmentally friendly products
- Promote water balance
- Establish LSI systems that uphold equality, fairness and transparency
- Support local community cultural and sporting events
- Help people with disabilities lead self-sufficient lives
- Strengthen the global business foundation

**The Kuraray Group Code of Conduct**

1. Safety of Products and Services
2. Development
3. Compliance with Antitrust, Competition and Related Laws
4. Compliance with Laws Relating to Imports and Exports
5. Compliance with Laws Relating to Business Ethics
6. Compliance with Laws Relating to Employees and Inspector
7. Respect for Human Rights, Enhancement of Diversity and Equal Opportunity, and Other Workplace Responsibilities
8. Contributions to Society
9. Disclosure of Corporate Information
10. Compliance with Domestic and Foreign Anti-Bribery Regulations
11. Rules for Donations
12. No Relationship with Anti-Social Groups
13. Prohibition on Anti-competitive Behavior
14. Environmental Prevention
15. Safety and Disaster Prevention
16. Safe and Comfortable Workplace
17. Establish responsible care initiatives
18. Assess the degree to which the Group contributes to reducing GHG emissions
19. Develop environmentally friendly products
20. Promote water balance
21. Establish LSI systems that uphold equality, fairness and transparency
22. Support local community cultural and sporting events
23. Help people with disabilities lead self-sufficient lives
24. Strengthen the global business foundation

**The Kuraray Group’s CSR Activities throughout the Product Lifecycle**

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Kuraray Technologies Support Development of Various Eco Products

Eco-friendly Products are being Developed by a Broad array of Companies. Kuraray Materials and Technologies Support this Process behind the Scenes.

In the 21st Century, dubbed the “environment century,” various eco-friendly products promoted as “green” or “environment friendly” appear to motivate a significant number of consumer purchases. Why are TV commercials and other advertising featuring catchphrases such as “No. 1 energy-saving performance” and “Friendly to the planet” seen most often?

As a chemical materials maker, Kuraray provides materials to manufacturers that contribute to energy savings and eco-friendliness. It is very likely that the eco-friendly products you use everyday contain EVAL, and other materials produced by Kuraray.

**EVAL Properties and Main Applications**

Kuraray began selling EVAL in 1972 under the name Ethylene Vinyl Alcohol Copolymer resin. EVAL features high-level gas barrier properties as a plastic material, shutting unwanted gasses while preventing flavors and aromas from escaping. EVAL is normally used in combination with other plastic resins, playing a useful role in preventing gasses from entering or escaping via microscopic holes at the molecular level. In addition to a wide array of food packaging, EVAL is used in various products, including toothpaste tubes, plastic fuel tanks, wallpaper, and vacuum insulation panel film.

**Product Features**

- High barrier performance: blocks nearly all gasses, including oxygen.
- Oil and organic solvent resistance.
- Highly resistant to soaps and detergents.
- Keeps aromas in and external odors out.
- Non-toxic and non-carcinogenic.
- Does not absorb tastes or medicinal ingredients.

### Three Eco Areas (1)

**High-level Gas Barrier Properties Helping to Extend the Shelf Lives of Food Products**

Using packaging made with EVAL enables the distribution of food products with short shelf lives that would otherwise be difficult thanks to its high-level gas barrier properties. This is but one of numerous examples of EVAL's usefulness.

- Food waste has become a major environmental problem in recent years. In response, efforts have been made to extend the expiration dates of packaged vegetables and fresh meat sold at supermarkets and other stores. EVAL is being used to help achieve these aims. Food exposed to oxygen promotes oxidation and the spread of dangerous bacteria that flourish in these conditions. In other words, minimizing oxygen exposure as much as possible during packaging can extend expiration dates. Yet, oxygen will seep in from outside if such packaging does not have gas barrier properties. Using EVAL in existing packaging prevents oxygen penetration, thereby making it possible to extend product shelf life.

### Three Eco Areas (2)

**Lightweight, Rainproof Plastic Film Using EVAL**

Lightening the weight of automobile bodies is necessary to improve fuel efficiency. As a weight-saving measure, metal fuel tanks are starting to be replaced with lighter plastic ones. However, there had been the issue of hydrocarbons emitted during fuel combustion, which could generate air pollution. To solve this, high-gas barrier plastic tanks with EVAL were developed to contain hydrocarbon emissions. In 1994, the United States became the first country to introduce these plastic fuel tanks, which subsequently went into production in Europe, Japan, and other regions.

Currently, plastic fuel tanks are in the mainstream gaining high marks in water heaters and other hot water tanks as well as vending machines that are becoming more eco-friendly.

### Three Eco Areas (3)

**Using EVAL in Vacuum Insulation Panels Boosting Refrigerator Cooling Efficiency**

Regarding heat insulation materials, it is well known that using vacuum insulation panels is one of the most effective ways. In 1994, the United States developed the EVAL’s vacuum insulation panels containing EVAL. The use of these panels appears to be spreading worldwide, notably China, South Korea, and Europe, and it is gaining high marks in water heaters and other hot water tanks as well as vending machines that are becoming more eco-friendly.

#### Voice

**Jiro Murata**

President, Tomonori Murata

Data gathering is vital in designing EVAL, infrared, and vacuum insulation panels. If problems are not solved by a significant margin, we cannot tackle social issues that need to be addressed. In that manner, our role at Kuraray begins when the R&D activities of client manufacturers become stalled.

Fortunately, we feel that awareness of EVAL is taking hold particularly among food and home electronics makers. My coworkers and I are deeply honored that Kuraray is the choice for those seeking guidance on issues including developing new energy-saving products using gas barrier capabilities and reducing unnecessary food waste by extending expiration dates.

On the other hand, while EVAL gas barrier properties play a role in realizing the energy-saving and eco-friendly features of the products it is used in, many users are unfortunately not aware of this. Going forward, we will engage in aggressive PR activities to ensure as many people as possible know that everyday eco products actually use Kuraray materials and technologies behind the scenes.

Kuraray’s official Facebook page, “What You Need to Know about EVAL Committee,” communicates a wealth of information on EVALs role in today’s eco products.

[https://jp.facebook.com/EVAL.jp](https://jp.facebook.com/EVAL.jp)

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Kuraray CSR Report 2014
Kuraray Is Here to Help People with Diverse Abilities and Unique Personalities Succeed

Diversity Initiatives at the Niigata Plant

Kuraray Niigata Plant Receives the Minister Award of Outstanding Offices for the Employment of Persons with Disabilities. The Minister Award of Outstanding Offices for the Employment of Persons with Disabilities is awarded annually in September to coincide with Disabled Persons Employment Month. The award is intended to motivate persons with disabilities to achieve occupational independence as well as deepen the interest and understanding of business owners regarding the hiring of the disabled. The Kuraray Niigata Plant was awarded the fiscal 2013 Minister Award in recognition of its steady employment of mentally challenged individuals over many years.

Kuraray Niigata Plant is located adjacent to Rainbow House, a vocational aid center for the disabled located nearby. At that time, the Niigata Plant general manager read an article in a local newspaper about the difficulties Rainbow House (a vocational aid center for the disabled located nearby) was having finding employment for its occupants. With the aim of employing individuals with mental disabilities, the Kuraray Workshop was established, kicking off the Plant’s association with Rainbow House. In the 17 years since then, the Kuraray Niigata Plant and Rainbow House have together built a wide-ranging cooperative framework, including negotiations with government agencies and businesses in the region.

Instructors provide respectful guidance. Instructors check operational safety and job details while working to further improve work quality.

Cooperating with Rainbow House

When the Kuraray Workplace was founded, it was mistaken as just like any other welfare facilities for the disabled, only managed by learning interpersonal communication skills based on the teamwork of everyone in the workshop, including instructors. Akira Arai, who worked to gain the understanding particularly of guardians on this point. Naturally job safety comes first, so we must take reasonable precautions.

Cooperating with Rainbow House

The Kuraray Workshop is a part of Kuraray’s operations. Overseeing around 30 jobs, workshop instructors basically select from in-house operations those jobs that pose minimal danger to mentally disabled employees. With workshop employees currently gaining a greater understanding of the production site, other production line workers have not been shy in sharing happy they are about sharing these operations with workshop employees. Workshop employees participate in morning/meeting meetings as well as vacation and field trip events organized by Rainbow House. In so doing, workshop employees gain experience not possible by only working in the Company. Along with smooth workshop operations, enabling mentally disabled employees to hone life skills as members of society is useful for making them more independent. In addition, workshop instructors participate in Rainbow House employee training, giving them the opportunity to learn about numerous topics, including operational know-how.

Cooperating with Rainbow House

Looking ahead, we will make every effort to help people with disabilities become more independent. We have worked to gain the understanding particularly of guardians on this point. Naturally job safety comes first, so we must take reasonable precautions.
Corporate Governance

We at Kuraray view corporate governance as necessary for the maintenance of sound relations with our shareholders and the various other parties in society with a stake in our company. We consider it to be not only in line with the improvement of our performance and the management of our company but also for fulfilling our responsibility to society.

In Fiscal 2008, we executed a program of reforms in which we reshuffled the Board of Directors by adding more outside directors, established the Management Advisory Council, revised the prescribed number of directors while decreasing the term of office, and introduced an executive officer system in order to clarify the responsibilities and executive functions. In Fiscal 2008, we made further enhancements to the Company’s system of corporate governance by appointing outside directors.

Corporate Governance Structure

- **Management Corporate Structure** (as of June 30, 2013)
  - President and CEO
  - Executive Officers
  - Functional Units
  - CSR Committee (Secretariat: CSR Division)
  - Risk Management Center
  - Board of Directors
  - Board of Corporate Auditors

- **CSR Promotion Structure**
  - In 2013, Kuraray instituted the CSR Committee by integrating the Philosophy and Environment Committee and Ethics Committee, and formalized its CSR promotion structure at a Group level. Under the CSR Committee, five subcommittees are set up, namely, the Social Responsibility and Economic Information Committee, Environmental and Industrial Safety Information Committee, Global Warming Measures Information Committee, and Risk Management and Compliance Information Committee. These committees examine Company-wide policies and targets and report to the same manager. The three specific working groups make up the subcommittee and collaborate with various Group units in addressing their respective agendas based on the CSR-related policies. By including responsible directors and the president of all Group companies as members of the CSR Committee, we are taking steps to put in place a system which is capable of coordinating a host of issues from an increasingly wide range of dimensions.

CSR Committee Organization

- CSR Committee (Chair: President, Vice Chair: Executive Officer in Charge of Social Responsibility)
  - CSR Committee Members (including 3 outside directors)
  - CSR Committee Secretariat
  - CSR Committee Secretariat Members

Compliance

Kuraray has built an organizational culture in which executives (with each and every employee) take pride in their roles by giving those roles their best efforts. We have devised approaches to compliance that go beyond mere observance of laws and regulations in order to ensure corporate transparency and sustainability.

**Compliance Declaration**

We will comply with the laws and regulations as well as the Principles for Business Conduct.

**Compliance Education**

We will give priority to laws and regulations, and the Principles for Business Conduct, over corporate policies.

**Compliance Consultation**

We will strive to prevent any act that goes against laws and regulations or the Principles for Business Conduct, or that bears the risk that society has penalized.

Promoting Compliance

As a part of efforts aimed at raising the awareness of employees toward compliance, the Kuraray Group regularly conducts review of cases handled by the Company that have borne social issues on its internal website, providing the opportunity to think about and examine how the organization and individuals can respond in an appropriate manner. A total of 20 such cases were posted on the Company’s internal website in Fiscal 2013. In addition, we conduct compliance education to employees on predetermined themes and to specifically targeted personnel of the Group. For example, specific topics cover countermeasures against financial crimes and the handling of chemical product management targeting affiliated companies in Fiscal 2013.

In Fiscal 2014, we plan to conduct compliance education focusing on effective management and multipurpose solutions suitable for management personnel.

Risk Management

To further enhance our management structure at the Group level, we are working to improve Corporate-wide risk management. Based on self-assessments made by the head of divisions, plants, subsidiaries, and administrative organizations, we are identifying and ranking risks to each structure and identifying those judged to be major risks. The CSR Committee, together with evaluations and deliberations on those risks in particular that management ought to address and promote appropriate responses.

In addition, the President provides instructions to each structure with the aim of ensuring a swift response to changes in the risk environment through the annual Corporate-wide Risk Management Plan.

Kuraray Group Basic Policy on Risk Management for Fiscal 2014

- **Compliance Promotion Policy and Risk Management Plan**
  - Following three general risk categories and process assessment:
    - 2014 Management Indicators (Risk Management Indicators)
    - Environmental and safety management (BCP) and network coverage of the BCP

Companywide Policies for BCP (Business Continuity Plan)

- **Business Continuity Plan**
  - Five core policies for recovery: safety, environment, technology, personnel, and public relations

Quality Management

At the Kuraray Group, we have created a system that enables the constant provision of high-quality products that satisfy the requirements of individuals by way of quality management systems such as ISO9001 and ISO14001, which are primarily managed at the manufacturing site level, and quality management in accordance with the form of goods in each business.

The Kuraray Group has incorporated a project to bellows quality management in its FY2012 business decision in the area of enhancing customer satisfaction for three years from the fiscal year ending March 2012. The first year of goal (FY13) is the most demanding stage, and forward, we will strengthen quality management in each business and promote the standardization of control by expanding their activities across various divisions.

Chemical Substance Management

In fiscal 2012, the Kuraray Group introduced a new IT system to enable efficient management of information on substances related to chemicals in its Group-wide operations. This software enables the Group-wide management of chemicals in a comprehensible manner and supports our commitment to the conservation of resources and the environment.

Although the information on substances related to chemicals has been limited, our Group will continue to use this system in a bid to achieve the quality of product information provided to customers.

Responding to Product Complaints

At the Kuraray Group, we are working to respond quickly to complaints and prevent recurrence through the integrated management of information on complaints. We répond to various causes in accordance with the regulations on Product liability-related Accident Response and Quality Complaint Report.

In fiscal 2013, there were no product recalls or accidents causing major health problems or damage to property such as fire.
Publicity and PR Activities

To ensure its accountability to society as a whole, Kuraray practices timely and appropriate disclosure of information to the entire spectrum of stakeholders: shareholders, customers, suppliers, employees, local communities, etc. in line with the Kuraray Group Disclosure Policy formulated in May 2007.

http://www.kuraray.co.jp/en/disclosure.html

IR Activities

The Kuraray Group provides IR information for shareholders and investors based on a policy of emphasizing the reliability and fairness of investor information. In addition to conducting financial presentations for institutional investors, we are also making timely, appropriate and fair information disclosure that includes the broadcasting of videos of financial presentations for the benefit of individual investors as well as a general meeting of shareholders through our website. To facilitate increased understanding of Kuraray, the Company holds forums for general investors including companies and individual investors as well as explanations for local individual investors.

In addition, Kuraray aims to improve the communication of business information by making available English translations of videos of results meetings and periodically meeting with overseas institutional investors in Europe, North America and Asia.

Interaction with the Community

Kuraray has been promoting community involvement since the company’s foundation. From community assistance to disaster relief, Kuraray is committed to supporting those in need.

Regional Communication with the Responsible Care Committee

Kuraray is taking part in regional communication organized by the Responsible Care Committee of the Japan Chemical Industry Association. The regional communication has been held every year in 15 areas and includes factory tours and an introduction to the industry’s prevention activities and environmental conservation activities of each company as well as providing the opportunity for businesses, administrative agencies and local residents to exchange opinions directly.

In fiscal 2013, Kuraray’s Nippon Plant hosted a regional communication event for Nippon district in March 2014. Kuraray reported on its measures to ensure safety and security at its business sites, and gave tours of its plant. We hope to continue engaging in communication with local residents in the future through opportunities such as these.

Publicity and PR Activities

The Kuraray Group is engaged globally in publicity activities for the timely provision of information on our current status. Besides announcement of corporate news through regular news agencies in Japan and overseas, we have a full assortment of tools for this purpose, including the display of up-to-date company information on our websites in Japanese, English and Chinese, and the preparation of brochures and videos.

To raise awareness of our company and understanding of our business operations, we are promoting PR activities encouraging a corporate advertising campaign centered around TV commercials in Japan, and advertisements in chemistry journals overseas. We also strive to communicate with our stakeholders through appearances at exhibitions and events.

In June 2013, we began to sponsor the world-class ski jumper Sara Takanashi in a professional affiliation. In October 2013, we launched a website to support her career as an athlete, introducing the website activities carried out by Sara Takanashi, such as her debut in TV commercials, donations to children, and coordination of support from our own fan group.

Communication with Local Communities

Kuraray Friendship Recreation

At the Kurashiki Plant, where Nippon Works has a workplace for mentally disabled people, we hold the Kuraray Friendship Recreation event for the first time in 2013. The aim of the event is to create opportunities for our employees to meet and interact with people with disabilities in order to gain a deeper appreciation of the needs held in collaboration with the social welfare organization Kurashiki Rosen and the Kadoka People with Disabilities Work and Lifestyle Support Center “Matsubukan.” The event was successful in deepening mutual understanding through activities including volleyball games and other fan activities.

Kuraray Okayama Festival

At the Okayama Plant, the Kuraray Okayama Festival is held once a year for residents living near the plant. In fiscal 2013, more than 12,000 people attended the two-day festival to enjoy the fantastic, game contents and local and beverage. We also offered free tours of the plant to those interested, and worked to improve communication with local residents.

Plant Tours and Briefing Sessions

Kuraray’s plants as well as the plants of Kuraray Plastics Co., Ltd., Kuraray Chemical Co., Ltd. and Kurashiki Farming Co., Ltd. held tours and outline briefing sessions for the purpose of communication with local residents. In fiscal 2013, a total of 2,064 people took part, which served to deepen understanding of the activities being implemented at our plants.
Occupational Safety and Disease Prevention

"Safety is the Cornerstone of Everything We Do"

Basic Policy and Concepts

In accordance with the Safety Activity Management Regulations, the Kuraray Group translates safety plans every fiscal year and operates them to ensure occupational safety, process safety, and disaster prevention. To be more specific, each year, at the Safety Promotion Committee, attended by the President and the executive in charge, we make an overall assessment of safety activity performance and discuss policy for such safety activities in the coming fiscal year. In line with this policy, we are conducting safety activities that reflect specific action plans of each plant and department. A group of safety representatives from headquarters, including the executive in charge, visit each plant twice a year to conduct safety site inspections in aspects such as the drafting of action plans, action taken based on these plans, and the results.

Each department makes use of a Safety Evaluation System formulated as a tool to objectively assess the level of safety and weakness in each department for identifying the strength and weaknesses relative to safety. In addition to these, each department has been carrying out FGCA cycles of safety activities efficiently and effectively.

### Safety Management

#### Safety Priorities

<table>
<thead>
<tr>
<th>Package</th>
<th>Goal</th>
<th>Action</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Safety Factor</td>
<td>Evaluation of achievement with countermeasures concerning safety activities</td>
<td>We worked to improve facility operators’ capabilities for identifying risks at the Chemical Industry Association guidelines</td>
<td>The atmosphere of a risk prevention-oriented company is maintained.</td>
</tr>
<tr>
<td>Occupational Safety</td>
<td>Safety standards and risk management</td>
<td>We are to pass on younger employees occupational safety and technical operating skills (learning through career development process)</td>
<td>The learning environment for younger employees is improved.</td>
</tr>
<tr>
<td>Environmental Care</td>
<td>Identification of individual safety</td>
<td>We encouraged individual safety via maximum prevention and safety education, ensuring that handbooks at all times, and frequent drills being carried out.</td>
<td>The atmosphere of a risk prevention-oriented company is maintained.</td>
</tr>
</tbody>
</table>

#### Process Safety and Disaster Prevention

At the Kuraray Group, we conduct a primary responsibility to prevent the occurrence of explosions and leakage of hazardous materials, and other accidents that could have an enormous impact on society, as well as to combat the damage in the event of any accident to the minimum level. For these reasons, we have adopted a Company-wide approach in areas such as the link between safety and disaster prevention, quake-proofing measures (for buildings and plants), and conditioning of the safety management system for facilities. We have especially dealt with safety management and change management where the facilities are only built or modified, and operating conditions will be changed.

In fiscal 2013, there were no explosion and leakage accidents reported in Japan, as well as no case of the reported events. However, the damage was minimal and there was no effect on local communities.

#### Kuraray’s Action Plan with respect to Industrial Safety

1. **Commitment to Industrial Safety by the Company**

   - During the Fiscal 2014, the Director of the Company, Mr. Daisuke Ishizuka, delivered the plan for Industrial Safety to the employees at the General Meeting of Shareholders. The Company thereafter announced the plan at the Company’s Annual General Meeting of Shareholders which took place on May 22, 2014.

2. **Safety Targets and Fiscal 2015 Results**

   - 1. Number of Process Accidents

      - **Fiscal 2013**
      - **Fiscal 2014**

   - **Number of Process Accidents**

      - **Fiscal 2013**
      - **Fiscal 2014**

   - **Target**

      - **Fiscal 2015**

   - **Score**

      - **Fiscal 2015**

#### Numerical Targets

<table>
<thead>
<tr>
<th>Package</th>
<th>Goal</th>
<th>Action</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Safety</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Safety</td>
<td></td>
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</tbody>
</table>

#### Number of Process Accidents

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of Process Accidents</th>
<th>Number of Accidents of Accidents</th>
<th>Number of Accidents of Accidents</th>
<th>Number of Accidents of Accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2014</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2015</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

### Acknowledgement

1. **Training using a digital simulation**
4. Action Plan for Plant Safety

Our action plan is based on the Basic Policy and Concepts of Occupational Safety and Health Management Framework of the Company. We provide planning and control of safety-related matters and conduct comprehensive risk assessments in cooperation with local communities.

OCCUPATIONAL SAFETY

We at the Kuraray Group recognize that ensuring employee safety and health is the very heart of a company’s win-win relationship. Through proper operation of our occupational safety management systems, we strive to improve the level of safety for the entire organization as well as for each employee, toward creating safe and accident-free workplaces. In fiscal 2013, we worked to overcome weak points in safety activities identified through the Safety Level Evaluation System and conducted comprehensive risk assessments without overlooking hazards. At Kuraray Group companies in Japan, the number of accidents resulting in hospitalization declined by 7% from the previous year, and the frequency rate of lost-time accidents improved from 1.30 to 1.20.

Frequency Rate of Lost Time Incidents

Since 2011, Kuraray has maintained an “accident evaluation score” that is set as an independent indicator of occupational safety (an assessment of occupational accidents based on the number of lost-time accidents and the accident frequency rate against the accident score). In fiscal 2013, the indicator was 12.70 at overseas companies, versus 13.60 for the Kuraray Group in Japan, for an average of 13.77. Despite this critical indicator falling in the red zone, the direction of the Kuraray Group has been to promote a comprehensive approach to safety management activities.

Meanwhile, for companies outside Japan, the company has currently stopped using the indicator that measures the rate of lost-time accidents. Therefore, we transitioned to assessing the “frequency rate of all accidents” instead of the frequency rate of lost-time accidents.

In fiscal 2013, the indicator was 12.70 at overseas companies, versus 13.60 for the Kuraray Group in Japan, for an average of 13.77. Despite this critical indicator falling in the red zone, the direction of the Kuraray Group has been to promote a comprehensive approach to safety management activities.

Meanwhile, for companies outside Japan, the company has currently stopped using the indicator that measures the rate of lost-time accidents. Therefore, we transitioned to assessing the “frequency rate of all accidents” instead of the frequency rate of lost-time accidents.
Environmental Approaches to the Environment—Aiming to Realize a Sustainable Society—

We believe that the Kuraray Group’s mission as a material and intermediate material manufacturer is as follows:

- Contributing to society by providing the materials and intermediate materials required for products that are needed to create a low-carbon society and an environmentally conscious society; and
- Production of items with as low an environmental impact as possible.

With this in mind, we are working consistently to implement environmental conservation activities that include promoting measures against global warming, managing chemical substance emissions, and the beneficial use of waste resources. (See the organizational chart on page 11.)

Environmental Targets and Results

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Domestic Affiliated Companies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Environmental efficiency (waste) (%)</td>
<td>10%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
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<tr>
<td>- Environmental efficiency (GHG) (%)</td>
<td>10%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>- Water consumption efficiency (%)</td>
<td>10%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>- Solid waste reduction (%)</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>- Chemical substance emissions (PRTR substance emissions)</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>- Environmental load: volume of GHG emissions</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Environmental load: chemical substance emissions</td>
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<tr>
<td>- Environmental load: waste (1,104t)</td>
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<tr>
<td>- Environmental load: chemical substance emissions (2,540t)</td>
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<td>- Environmental load: waste (1,104t)</td>
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</tr>
</tbody>
</table>

Promotion Structure for Environmental Preservation
Kuraray’s Company-wide environmental preservation activities are led by the Global Warming Prevention Promotion Committee and Environmental and Industrial Safety Committees, both of which were established within the Group. These committees work primarily on promoting global environmental conservation, management of chemical substance emissions, and beneficial use of waste resources. (See the organizational chart on page 11.)

Global Warming Prevention

In fiscal 2013, both the domestic Kuraray Group and overseas affiliated companies improved upon the benchmark standard of 186 (FY2010 with results of 107 and 114, respectively). Hypothetical, overseas-affiliated companies, which had already achieved the target set for fiscal 2012 (115) in fiscal 2012, better surpassed the benchmark. Domestic Kuraray Group reduced CO₂ emissions by 40% through a variety of measures including efforts to expand business for the introduction of energy-saving equipment, and a review of operating conditions for manufacturing facilities. As a result, efforts were taken to maintain the single-year reduction amount target of 25%. In contrast, the amount of GHG emissions in fiscal 2013 increased compared with the previous fiscal year. This was largely attributable to fuel-related factors as the base of an increase in operating rates at domestic plants, the incineration of waste (including material recycling at domestic plants and other facilities, and an increase in the use of biomass as a fuel for reducing GHG emissions). As a result of increased purchases of electric power from utilities companies and the incineration of operations at nuclear power plants in Japan, GHG emissions and energy consumption in fiscal 2013 were as follows:

- GHG emissions: 1,258,000t-CO₂
- Energy consumption: 254,000kL (crude oil equivalent)

Because Mitsubishi Jilin joined the Kuraray Group in 2012, total GHG emissions increased. On the other hand, net sales also increased in 2013. As a result, environmental efficiency improved compared to fiscal 2012.

Biomas Fuel Power Generation and High-efficiency Gas Engine Power Generation
The Kuraray Kamatsu Plant (Tottori Prefecture) has introduced biomass fuel to use biomass waste materials as a substitute fuel for coal-fired power generation plants. They are expanding the amount of biomass fuel gradually. In fiscal 2013, they expanded using biomass as well as waste. As a result, the amount increased more than 2,500 t compared with the previous year. We contributed to reducing CO₂ emissions by 18% in total. In addition, the Kuraray Nagaoka Plant introduced and started a high-efficiency gas engine power generation facility in fiscal 2013, which uses natural gas as fuel, and in fiscal 2014, the plant contributed to GHG reduction based on the generation of GHG reduction effects.
Evaluating the Contribution of CO2 Reductions Throughout the Lifecycle of Products Using Kuraray Group Materials

In fiscal 2013, we began assessing our contributions to reducing GHG, taking into account the product lifecycle from the raw material procurement to the disposal stage. As a result, we evaluated awareness of the degree to which we contribute to reducing GHG emissions at the manufacturing stage through to the final disposal of the products we make. In fiscal 2013, we assessed GENESiTA, the results with excellent base emission that is produced only by Kuraray, and found that we had made a significant contribution to a global reduction in CO2 emissions in the component extraction and LED lighting component fields.

In component for automotive applications, substituting metal components with GENESiTA results in a reduction in automobile weight. Due to the resulting improved fuel consumption, the annual CO2 emission reduction effect amounted to approximately 10,000 t CO2.

It has also been calculated that changing from conventional fluorescent lighting to LED lighting (fluorescent lamp type) is having a considerable effect on CO2 reductions across the world and that GENESiTA, too, is making a contribution in the case of replacing conventional fluorescent lighting with LED lighting. However, we will refrain from publishing a value for this effect, since the effect is in terms of total takes, and the extent of any GENESiTA share's contribution has not been determined.

In this paper, we focus on automotive component applications of GENESiTA and the effect arising from the use of the PA6 polyamide resin, which was assessed in fiscal 2012. The CO2 reduction effect totals approximately 10,000 t CO2 per year. This requires an input of 2% of the domestic Kuraray Group’s annual CO2 emission volume amount for fiscal 2013.

Going forward, we plan to assess other products and publish the results in our CSR Report and elsewhere.

<table>
<thead>
<tr>
<th>Finished Product</th>
<th>Emissions Calculation</th>
<th>CO2 Emission Reduction Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Parts</td>
<td>41,000 t CO2</td>
<td></td>
</tr>
</tbody>
</table>

Source: CO2 Reduction Assessment (Kuraray Consulting Report, Ministry of Environment, 2015)

Evaluating the Contribution of CO2 Emission

Scope 3 Emission Calculations Started

Under the GHG Protocol*, GHG emission are categorized in three categories, Scope 1, 2 and 3.

Scope 1: Direct emissions. GHG emissions generated by fuel combustion, such as at places of business.

Scope 2: Indirect emissions. GHG emissions associated with purchased energy, such as purchased electricity.

Scope 3: Other indirect emissions. GHG emissions along the entire supply chain (from raw materials to product disposal).

Based on the Law concerning Pollution Register and Transfer Register (FESL Law), Kuraray’s domestic plants and affiliated companies investigate and figure out the amount of annual emissions of objects that are subject to the regulation in any one of the three categories in the GHG emissions calculation.

The FESL Law aims to reduce GHG and other carbon dioxide emissions during transportation since fiscal 2013. The amount of emissions for fiscal 2013 were roughly at the level of the previous fiscal year.

Diagram Showing Scope 1, 2 and 3 Supply Chain Emissions

Management of Chemical Substance Emissions

Based on the Law concerning Pollution Register and Transfer Register (FESL Law), Kuraray’s domestic plants and affiliated companies investigate and figure out the amount of annual emissions of chemical substances that are subject to the regulation.

In addition, we also figure out and publish, on our website and elsewhere, the emissions of chemical substances set by the Japan Chemical Industry Association (JCIA) that are not subject to the FESL Law. In fiscal 2013, we improved environmental efficiency by 1% compared with fiscal 2011. DCs designed for TVR substances emissions increased slightly with results of 889 t at domestic Kuraray plants (from 887 t in 2011) and 1,380 t at domestic affiliated companies (up 5% from 1,313 t). The increase in emissions was associated with an increase in the consumption of relevant chemical substances owing to such factors as increased production at domestic affiliated companies and changes in product configuration.

Domestic affiliated companies are also working to reduce emission in line with the regulations of the respective regions they are located, and in fiscal 2013, emissions amounted to 1,630 t (up 51 t from 2012).

Kuraray CSR Report 2014
Reduction and Effective Use of Waste and Reduction of Landfill Disposal

Since fiscal 2007, the domestic Kuraray Group has maintained a level of more than 90% of beneficial use of waste and over 95% for landfill disposal. In fiscal 2013, the rate for the beneficial use of waste and landfill disposal were 95% and 91%, respectively. We achieved a reduction in waste generation of 2.40t, thereby achieving the fiscal 2013 target, which was a reduction equivalent to 1% of the waste generated in fiscal 2012 (72t). In contrast, with regards to our medium-term environmental target of a 1% improvement in environmental efficiency by 2020, the rate achieved in fiscal 2013 was 10% (compared with fiscal 2012), a result that fell short of the target. This missed target was due to the start of full-scale operations at a new facility at the Saka Plant that is producing optical-use pump filters and the increase in the amount of artificial precipitation runoff (PC) generated by the demanding of PC recycling facilities at the Okusa Plant.

Production increased at overseas affiliated companies as a result of acquisition, but due to the pickup in the amount of waste generated, environmental efficiency increased 1% compared with fiscal 2010. Going forward, we will focus on trends and strive to optimize operating conditions and waste sources in order to achieve our medium-term environmental target.

Domestic Kuraray Group: Trends in the Amount of Waste Generated and Environmental Efficiency Index

Material Flow in Business Activities (Fiscal 2013)

The Kuraray Group uses large amounts of energy, chemical substances, and water resources in the course of its business activities. We make quantitative surveys of used resources and emitted substances, and use the information to minimize the environmental load associated with our business activities.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Amount (1,000 t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water (excluding seawater)</td>
<td>65.9 million m³</td>
</tr>
<tr>
<td>COD load</td>
<td>510 tons</td>
</tr>
<tr>
<td>NOx</td>
<td>85.8 tons</td>
</tr>
<tr>
<td>SOx</td>
<td>400 tons</td>
</tr>
</tbody>
</table>

Environmental Accounting

- Total investment during the reporting period: 27.1 billion yen
- Total R&D costs during the reporting period: 13 billion yen

Environmental Preservation Costs (million yen)

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social activity costs</td>
<td>675</td>
</tr>
<tr>
<td>Environmental preservation costs (Domestic Kuraray Group)</td>
<td>1,673</td>
</tr>
<tr>
<td>Environmental preservation costs (Overseas affiliated companies)</td>
<td>912</td>
</tr>
</tbody>
</table>

Investment in Environmental Facilities

The Kuraray Group made large-scale environmental investments in fiscal 2013. As a result, the amount of environmental facilities increased over FY2012.

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment in Environmental Facilities (billion yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1,000</td>
</tr>
<tr>
<td>2011</td>
<td>1,500</td>
</tr>
<tr>
<td>2012</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Kuraray CSR Report 2014
Social
Approaches with the Community

We in the Kuraray Group consider the sound and sustainable advancement of society a precondition for corporate growth and prosperity, as well as the ultimate objective of corporate activities. It goes without saying that we see it as our duty to contribute to society through provision of products of genuine value to people. Beyond this, we consider assistance with social issues within an appropriate scope to be another important form of social contribution in our capacity as a corporate citizen.

Social Contribution Activities

Kuraray Group Policy for Social Contribution Activities

For fulfilling its responsibilities as a member of society, the Kuraray Group shall make vigorous approaches to social contribution activities in accordance with the following policy.

Types of Activities

• Activities that lead to a resolution of social problems and issues
• Activities rooted in local communities hosting Kuraray establishments worldwide
• Activities emphasizing participation by employees on their own initiative
• Activities that are sustainable in the long term

Areas of Activities

• Priority areas: culture, science, environment, and social welfare

Science

Chemistry Classes for Boys and Girls

Kuraray conducts the “Chemistry Classes for Boys and Girls” program with the goal of enabling elementary school students to experience the fun of chemistry through hands-on experiments.

From 1992, this program has been held every year at each plant, and 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. In fiscal 2013, a total of 386 children participated in 12 sessions. Since 2012, we have been exhibiting at Drive Chemistry 21, a chemistry experiment show, which was held by the Japan Chemical Industry Association. In fiscal 2013, our experiment for production of aromatics using highly water-soluble reagent attracted the participation of about 1,400 children and their parents.

Sending School Bags across the Sea

“Sending School Bags across the Sea” is an annual program of international cooperation under which we send school bags once used by Japanese elementary school students, along with school supplies and letters, to children in Afghanistan and other countries where wartime destruction ruined their schooling opportunities.

The year 2013 marked the 15th year since the start of the program in 1999. The program has been steadily expanded and we received more than 10,000 school bags from all parts of the country in 2012. Filled with the good wishes of the children, the bags are sorted and packed by the members of the (JICF) (Japanese Organization for International Cooperation in Family Planning) and other affiliated groups as well as Kuraray Group employees, before being sent overseas with the cooperation of many other organizations. This year, we again delivered bags to children in need of them.

In efforts to widen the scope of our activities, we continued to participate in the Sandwich Project held at Akita Prefectural University to bring electric light to elementary schools in developing villages. Through this project, we provided school bags and stationery supplies to Nepalese children.

Supporting Education

In March 2014, Kuraray together with women’s ski jumper (and Kuraray employee) Sara Takanashi carried out the “Sara Takanashi and Kuraray Japanese School Backpack Gift” project for students in Osaka who are about to enter their first year of elementary school. During the event, both schools were presented to children visiting Ishii Memorial Aizen-en Nursery School and the Osaka Prefectural/ Government-run Hoshikarazu Elementary School.

Supporting Sports Programs for People with Disabilities

Kuraray participates in a charity marathon held annually in Frankfurt. In 2013, 12 employees took part in the event. A portion of the participation fees are donated to organizations that support sports programs for children with disabilities.

Social Welfare

Support for Independent Life of the Mentally Challenged

With the inclusion of those engaged in the tasks of cleaning work clothes and making labels to products at our Kurashiki Plant, we employ 11 instructors and 49 workers with disabilities at a total of four locations.

Charity Marathon (Frankfurt, Germany)

Kuraray CSR Report 2014
Kuraray Furusei Fund

In July 2002, Kuraray Furusei Fund was established. Under this fund, companies make donations consisting of those made by their employees plus a matching gift of the same amount. Employees exceeding the goal agree to donate amounts of less than 10 yen from their salaries, and the company matches that amount. The funds collected are tax-assisted for social welfare programs. In fiscal 2013, the fund was used to donate nursing care products, foods, and other various donations mainly to welfare facilities, schools, and local governments in 29 locations near Kuraray facilities or as part of community-based activities.

Activities for the Conservation of Nature

Volunteers from Kuraray plants join both local government and NPOs to conduct activities aimed at conserving nature, with 1,600 employees participating last year. We also continue to participate in a tree-planting activity at Mount Fuji. In fiscal 2013, Kuraray employees planted 3,770 trees for Kuraray plants nationwide taking part.

Saijo Central Hospital

Kuraray’s Central Hospital

Nagahama

Activities for the Conservation of Nature

Kuraray has conducted a number of activities related to the conservation of nature, such as the Kurashiki Central Hospital’s activities to conserve nature. There are also activities held in plants to promote the conservation of nature.

Kuraray’s Green Product Purchasing

In fiscal 2013, Kuraray formulated Green Purchasing Guidelines for 107 items (2022 targets), 27 items (2023 targets). In addition, the composition of products has changed, reducing the burden on the environment.
Social Approaches in the Workplace

The Kuraray Group Global HR Policy

1. We will respect the human rights of individuals.
   - Based upon our Corporate Philosophy, “Respect for individuals,” we will respect the human rights of all group employees.
   - By providing training and education, we will ensure that employees are fully aware of their rights.

2. We will strive to employ personnel who are able to contribute to the development of the Kuraray Group.
   - Kuraray has been enlightened for high ethical standards and good corporate citizenship, and we promote a spirit of growth and improvement, and protect the interests of stockholders and employees.
   - We strive to provide a good corporate culture for all employees.

3. We will place the right person in the right job.
   - We will place each individual in the right job, in due consideration of capabilities and qualities, and with an eye to maximizing operational contributions and job satisfaction.

4. We will implement evaluation and benefits systems that are fairly satisfactory.
   - We will implement an evaluation and benefits system that is fairly satisfactory to employees, with a focus on job description, assessment of potential, performance, attitude and action, through dialogue and evaluation.

5. We will support professional development.
   - We will provide appropriate tools for job description development with a focus on professional development and skill development, and will work closely with all of the Group employees.

6. We will strive to improve the environment of workplaces.
   - In the pursuit of occupational health and safety, we are striving to maintain workplaces that enable people to work safely and with regard for their health.

Basic Employee Data

Number of Employees

<table>
<thead>
<tr>
<th>Year</th>
<th>Kuraray Group as a whole</th>
<th>Group (Kuraray)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>6,630</td>
<td>6,544</td>
</tr>
<tr>
<td>2010</td>
<td>6,912</td>
<td>6,807</td>
</tr>
<tr>
<td>2011</td>
<td>7,194</td>
<td>7,041</td>
</tr>
<tr>
<td>2012</td>
<td>7,462</td>
<td>7,332</td>
</tr>
<tr>
<td>2013</td>
<td>7,772</td>
<td>7,616</td>
</tr>
<tr>
<td>2014</td>
<td>8,076</td>
<td>7,900</td>
</tr>
</tbody>
</table>

Employee Turnover Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Kuraray Group as a whole</th>
<th>Group (Kuraray)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>2010</td>
<td>2.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td>2011</td>
<td>2.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>2012</td>
<td>1.8%</td>
<td>1.5%</td>
</tr>
<tr>
<td>2013</td>
<td>1.6%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Trends in the Number of Employees

- Kuraray Group employees has increased steadily from 6,630 in 2009 to 8,076 in 2014.
- The employee turnover rate is below 2%, indicating a stable workforce.

Diversity and Work-life Balance

Employment Systems and Average Working Hours

Kuraray has implemented systems for flexibility in employment.

- These measures include discretionary labor systems for adaptation to the nature of individual work, the “life balance working hour” system for non-office work, and various working hour systems.
- We also have no-over-time days and are striving to improve the rate of taking yearly paid vacations.

Trends in Average Working Hours and Rate of Taking Yearly Paid Vacations (Kuraray)

- Kuraray has been enlightened for high ethical standards and good corporate citizenship.
- We promote a spirit of growth and improvement, and protect the interests of stockholders and employees.
- We strive to provide a good corporate culture for all employees.

Leave for Childcare and Nursing Care

Kuraray has introduced a system to support childcare and nursing care by employees as a measure to support a good work-life balance.

- On the occasion of commendation for 25 years of continuous service, Kuraray employees may use accumulated yearly paid vacations, which ordinarily lapses with the prescribed passage of time, as special vacations (up to 60 days a year) for social contribution activities.
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- Kuraray employees may use accumulated yearly paid vacations, which ordinarily lapses with the prescribed passage of time, as special vacations (up to 60 days a year) for social contribution activities.
**Global Talent Development Program**

The ratio of the Kuraray Group’s overseas sales in fiscal 2013 was 58% and roughly 30% of all employees are working overseas. In order to further accelerate global growth in the Kuraray Group, our objective is to boost the global implementation of human resources, foster consistent management awareness throughout the group, generate sharing of the Kuraray DNA and develop personnel that can play active roles on the global stage. We started the Global Talent Development Program in fiscal 2017 and continue to plan and conduct the **Global Talent Development Program**.

**Human Resource Development and Assessment**

For the domestic Kuraray Group companies, we have established a company-wide training scheme to support acquisition of the knowledge and skills required for jobs and career-building efforts by employees themselves.

The training is open not only to regular employees but also part-time and contract-based users, as necessary. In addition, Kuraray Group companies annually update training plans and domestic group companies plan and implement their own training programs and provide their employees with fully tailored support for skill development and career-building.

Kuraray also has an innovative system under which it furnishes grants for acquisition of certain public qualifications by employees for their own improvement.

**A Fair, Impartial, and Transparent HR System**

Kuraray has executed a personnel system in which elements such as improvement of job execution capabilities, performance, roles, and skills to challenge demanding targets are appointed to seniority and personal factors are reflected in remuneration.

We have established a scheme of role roles (management positions, under which remuneration differs with the role and performance, and one of skill qualifications for ordinary employees, under which remuneration reflects the extent of skills and performance. Wages and bonuses are determined on the basis of these schemes. We have also incorporated a scheme whereby personnel can change education courses to suit their desired career paths.

With regard to personnel evaluation, we instituted a scheme of target-based management in which actual employee performance is rated with reference to targets for detail and skill development set through consultations with superior. We also provide ongoing training for personnel making the evaluations.

In addition, we periodically conduct surveys of employee awareness to ascertain how employees feel about their job and workplace, and what changes they would like to see. We use the findings for improvement of schemes and the workplace environment.

**Oriental Health**

Global Talent Development Program

To provide a workplace environment where it is possible to work in both a physically and mentally safe and healthy manner, we formulated the Kuraray Basic Policy on Occupational Health.

**Mental Health Counseling Office**

Kuraray has established counseling offices both inside and outside the company, and has made arrangements that make it easy for employees to get counseling over the phone or through face-to-face meetings. To prevent mental difficulties caused by long working hours, we have employees who work a lot of overtime receive a health examination by internal physicians and health-care staff.

**Assistance with Return to the Workplace**

We introduced a rehabilitative attendance system to support a phased return to the workplace of employees who have been off the job for a long time.

**Support for Building Health**

To promote the health of its employees, Kuraray is deploying a company-wide program for improvement of the habits under the banner “Health Up Strategy.” In this program, each employee sets his or her own goals for amount of exercise, eating, etc., and works to attain them on his or her own initiative. This is part of our wider health promotion strategy.

In our employee health exam, besides testing for the items stipulated in the Industrial Safety and Health Act, we have expanded the applicable age and added tests for lifestyle diseases and gynecological testing.

**Relations with Work Unions**

Employees of Kuraray belong to the Kuraray Workers Union and the Federation of Kuraray Workers Unions, which is composed of all workers unions for Kuraray Group companies. Through routine such as labor management rounds and rounds on occupational safety and health, we engage in mutual consultation with representatives of these unions on various issues and work for their realization through mutual cooperation.
The Institute for Science of Labour, a public interest incorporated foundation, was conceived and established by a manager of a private-sector company, Magosaburo Ohara, Kuraray's first president. Magosaburo had the forethought and compassion to care about the safety and well-being of workers. We paid a visit to the current director of the Institute, Mr. Sakai, to talk about the activities of the Institute where Magosaburo's principles and philosophy live to this day.

In the Footsteps of Our Founders

The Institute for Science of Labour

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What role does the Institute for Science of Labour play today?

Our role is to suggest ways to improve sound management of the working environment and working conditions by clarifying their physiological and psychological impact on workers through scientific analysis. Labor science compiles data through objective observations and provides the background and evidence needed for discussion. How this data, based on scientific analysis, is viewed, respected, and used, ultimately depends on the company. Our mission is to provide scientific evidence that can be used as a basis for labor unions and management to discuss work issues.

Employee occupational safety has become a pillar of CSR, and labor-related international standards have emerged lately. Do these international trends have an impact on the activities of the Institute? They do influence our activities. For example, occupational safety in Japan focuses on the workplace, which acts independently to investigate onsite accidents and make improvements on their own accord. In Europe and the United States, however, companies approach safety as systems, focusing accident prevention by incorporating ISO and other standards and certifications into their management systems. Both approaches have their own merits. Here at the Institute, we are advancing research with the objective of establishing a management style in Japan that integrates prevention, improvement, systems, and onsite initiatives. Moreover, we would like this to evolve into an international initiative.

What labor issues are you concentrating on now? Please give us some concrete examples.

A major problem in modern Japan is the low birthrates amid an aging society. We think an ergonomic and scientific approach is needed to address issues such as how people can continue to work as they reach an advanced age, and how to create environments where both younger generations and the elderly can work together.

Another issue is the use of IT in the workplace. Most people are unable to work without a PC and a smartphone, and this raises questions about how IT equipment impacts people’s stress levels and health, as well as working overtime in this fashion. Whether it is in the workplace or the home, people are working on their own accord. In Europe and the United States, however, companies are adopting personnel training systems that target the core of industry. We hope to be of use to society by compiling highly accurate data through research and personnel training. Moving forward in the footsteps of what companies are already doing will be of little use to society.

We aim to discuss solutions from the unique perspective of labor science as we research topics that are ripe ahead of the needs of corporations and society.

Thank you for your time today.

Kuraray’s DNA

Sharing the same founder as the Institute, Kuraray has put in place systems that facilitate the growth of each and every employee through their work. Kuraray works hard to foster a healthy organizational culture and create employment opportunities. From the perspective of occupational safety and health, Kuraray has a policy of making concerted efforts to maintain a working environment that is healthy and safe for both mind and body. The company works to prevent mental health issues from arising, helps employees return to work after leaves of absence, and supports healthy habits. Through the appropriate deployment of an occupational safety management system, Kuraray aims to increase the level of safety throughout organizations for every employee.

Institute for Science of Labour

For more than 90 years, the Institute has compiled labor-related data related to labor, as well as developed and offered labor science-related training and educational courses. The Institute has contributed to the promotion of labor conditions for workers through safety and health.