In order to make today better than yesterday, and tomorrow better than today, we at Kuraray have made completely new and unique things by harnessing the power of chemistry. Many industries and people around the world now choose Kuraray’s technologies, products, and services. We take pride in this fact and are deeply grateful to our customers around the world for making this possible.

Since our founding, we have valued the pioneering spirit. We continually ask ourselves what we can do for the world of tomorrow and the people living in it. “For people and the planet—to achieve what no one else can.” Passed down through the generations, this has been our constant motivation.

We still maintain this mission firmly today. It is Kuraray’s value and our driving force. We continue to cultivate our unique traits, in order to benefit society and the environment. Our goal is continual corporate growth, and we have already taken the next step forward.

Our Mission
We are committed to developing new fields of business using pioneering technology that improves the environment and enhances the quality of life throughout the world.

For people and the planet—to achieve what no one else can.

Our Values
• Respect for individuals
• Close cooperation to attain shared goals
• Constant creation of new value

Guiding Principles
• Safety is the cornerstone of everything we do
• Customers’ needs are our top priority
• We act on ideas in the workplace

Our Commitment
• We will constantly develop and provide safe, high-quality products and services.
• We will maintain a sound relationship with society through good communication.
• We will strive to preserve and improve the global environment, and to secure safety and health in all our workplaces.
• We will value all members of the Kuraray community and respect their rights.
• We will always conduct businesses in a free, fair and transparent manner.
• We will honor all intellectual property and secure data and information in a proper manner.

Our Philosophy
• Respect for individuals
• Close cooperation to attain shared goals
• Constant creation of new value

Corporate Statements

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Introduction

The Kuraray Group’s History

Moving Through Shifts in Business Structure to Become a Specialty Chemical Company

Kuraray was founded in 1926 for the purpose of commercializing regenerated cellulose fiber rayon, which was cutting-edge technology at the time. The company has expanded ever since, with a focus on fibers and textiles. Following the eventual transition of fiber and textile production moving overseas and other changes to the business environment, and drawing on its accumulated base of unique technologies in polymer and synthetic chemistry, Kuraray has continued to expand in the field of chemical products. This includes playing a leading role in the global vinyl acetate-related business, as well as strengthening its business portfolio.

Creating Highly Functional Synthetic Fibers

Promoting diversification of our business has yielded highly functional synthetic fibers ideal not only for clothing—developing the industrial materials KURALON™ and VECTRAN™ has opened the doors to other areas of business, too.

Overseas Expansion in the Chemicals Business

We have been reducing and withdrawing businesses from the multipurpose fiber and textile market due to decreased market competitiveness. On the positive side, however, we have achieved increased sales overseas in the chemicals business owing to a high market share, and have constructed production systems at overseas locations.

1983
- Commercialized KURALON™ short fiber for reinforcing concrete
- Commercialized meltblown non-woven fabric
- Commercialized VECTRAN™

1990
- Eval Company of America began production of EVAL™
- Eval-Europe began production of EVAL™
- Withdrew from the rayon business

2000
- 61%

2010
- 22%

2018
- 15%

Expansion in the Vinyl Acetate-Related Business through M&As

Since 2001, we have been actively pursuing overseas M&As in the vinyl acetate-related business to advance downstream developments and business expansion, as well as to strengthen our business portfolio.

2001
- Acquired the PVA- and PVB-related businesses of Clariant AG
- Acquired HT Trotplast GmbH (PVB film)
- Acquired MonsoSet LLC (water-stable polyvinyl)
- Acquired the VAM, PVA, PVB resin and film businesses of DuPont
- Acquired Plantic Technologies Limited (biomass-derived gas barrier materials)

2016
- Established a PVA resin brand in the U.S.A.
- Merged Kuraray Chemical, Co., Ltd. (activated carbon)

2017
- Acquired Calgon Carbon Corporation (activated carbon)

2018
- Decided to invest in a plant in Thailand for elastomers, GENESTAR™, and isoprene chemicals

Challenges for a Renewed Business Portfolio

To maintain sustainable growth as a chemical company, we are developing and expanding the next pillars after the Vinyl Acetate Business.

2016
- 61%

2018
- 15%

Changes in the portfolio

Shifting the Focus from Fibers and Textiles Business to Chemicals Business

Sales Ratio

- Fibers and Textiles
- Chemicals

<table>
<thead>
<tr>
<th>Year</th>
<th>Fibers and Textiles</th>
<th>Chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>39%</td>
<td>61%</td>
</tr>
<tr>
<td>2010</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>2018</td>
<td>15%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Domestic sales (Billions of yen) / Overseas sales (Billions of yen)
The Kuraray Group’s Strengths

The Source of Competitiveness That Creates Unique Products

We at Kuraray have used our unique technical strengths to create products that the world had never seen before. We were the first company in the world to commercialize KURALON™ (PVA fiber), the first synthetic fiber produced using made-in-Japan technology. Other businesses we have created include poval resin (PVA resin), which is a raw material of KURALON™; PVA film, which is essential for LCDs; EVAL™ (EVOH resin), which features excellent gas barrier properties; and a lineup of various commercialized chemical products that use the world’s first industrialized synthetic isoprene monomers as materials. We have also launched a wide range of products that have become an integrated part of people’s lives, such as CLARIND™ (man-made leather), which recreates the structure of natural leather, and MAGICTAPE™ (hook-and-loop fastener).

Sales of products having the highest global market shares* that we have created using our unique technologies account for more than half of the Kuraray Group’s total sales in FY2018.

The Kuraray Group Products with Top Market Share Worldwide*

- **PVA resin**: PVA resin was industrialized as a new material for the synthetic fiber KURALON™. It has a number of characteristics: it is water soluble, emulsifiable, resistant to oil and chemicals, and easy to form into fibers. It is used in a wide range of applications such as paper processing agents, adhesives, and as a stabilizer for the polymerization of styrene chloride resin.

- **Optical-use PVA film**: Used in a wide variety of applications such as polarizing films, which is key to LCDs display such as large flat-panel TVs and tablets.

- **Water-soluble PVA film**: Water-soluble PVA film is used for individual packaging for detergents, cosmetics, food, agrochemicals, pharmaceuticals, and other products.

- **Isoprene chemicals**: We apply our unique synthesizing technologies to produce a cleaner MMB (isoprene) that is highly safe and easy to handle, as well as dials, aroma chemical and cosmetic ingredients, pharmaceutical and agrochemical intermediates, and more.

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*In-house survey

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Kuraray Group Products with Top Market Share Worldwide*

- **GENESTAR™** (highly heat-resistant polycarbonate resin): GENESTAR™ is a new highly heat-resistant polycarbonate resin created with our proprietary technologies. It is used in electronic parts of mobile phones, personal computers, and the like, and is applied in backlight for LED liquid-crystal TV panels and in the automotive field as well.

- **Activated carbon**: Activated carbon is created through a reaction with gas and chemical agents at high temperatures using a carbon substrate, such as bituminous coal and coconut shells, and has micropores (diameter 10 – 200 Å, 1 Å = 1 nm). The micropores form a meshwork structure inside the activated carbon, and the walls of these micropores give the material a large surface area (600 – 2,500 m²/g) for adsorbing a wide range of substances.

- **VECTRAN™** (high-strength polyarylate fiber): VECTRAN™ fiber has about seven times the tensile strength of steel by weight and provides excellent abrasion, flex fatigue, and chemical resistance, among other physical properties. It is used in a range of applications including aerospace use, composites, electronic components, ropes, and sporting goods.
The Kuraray Group’s Aims

Value Creation Process

As a corporate group engaged in manufacturing, Kuraray Group creates economic and social value through providing its excellent products and services to the market.

**Introduction**

The Kuraray Group’s Aims

Value Creation Process

**Strategy of Kuraray**

Long-term vision

- **Vision of Kuraray**
  - Specialty Chemical Company, growing sustainably by incorporating new foundational platforms into its own technologies

Basic Policies

- **Pursue competitive superiority**
- **Expand new business fields**
- **Enhance the comprehensive strengths of the Kuraray Group**

A Variety of Number-One Products

**The Kuraray Group’s Mission**

We are committed to developing new fields of business using pioneering technology that improves the environment and enhances the quality of life throughout the world.

“For people and the planet—to achieve what no one else can.”

Sustainable Growth through Accumulation of Management Resources

**Contribute to Sustainable Society through Our Businesses**

- **Contributions to food loss reduction**
- **Contributions to providing cleaner water and air, and help to conserve resources**
- **Contributions to fuel efficiency improvement by reducing the weight of automobiles**
- **Contributions to safety**

**Issues facing society**

- Global warming
- Depletion of water resources
- Food crisis and others

**Core Competences**

- Unique technical strengths
- Application development capability

**Financial capital**

- Stable cash flows

**Intellectual capital**

- A broad spectrum of base technologies ranging from materials technologies to processing technologies

**Human capital**

- Diversity of human resources

**Manufacturing capital**

- Global production system

**Social and relationship capital**

- Trust from customers
- Trust from the local community

**Contributions to:)**

- Food packaging materials
- Long-term food preservation
- Extension of expiration dates
- Bio-based gas barrier material
- Long-term food preservation
- Extension of expiration dates
- Interlayer for safety glass
- Liquid rubber
- High-performance automobile tires
- Cement and concrete reinforcement
- Plastic fuel tanks
- Replacement for automotive metal parts
- Replacement for automotive metal parts
- Food packaging materials
- Long-term food preservation
- Extension of expiration dates
- Plastic fuel tanks
Financial and Non-Financial Highlights

**Net Sales / Operating Income**

![Net Sales / Operating Income Chart]

**Net Income Attributable to Owners of the Parent / Net Income per Share**

![Net Income Chart]

**Total Assets / Equity Ratio**

![Total Assets / Equity Ratio Chart]

**Net Sales of Businesses Having the World’s Highest Market Shares**

![Net Sales of Businesses Chart]

**Capital Expenditure / Depreciation and Amortization**

![Capital Expenditure Chart]

**R&D Expenses / R&D Expenses Ratio**

![R&D Expenses Chart]

**Introduction**

We believe that the Kuraray Group’s mission is to manufacture basic and intermediate materials that will contribute to creating a low-carbon and eco-friendly society and minimize their environmental impact as much as possible. Drawing from this philosophy, the Kuraray Group is continuing to conserve the environment by promoting measures to combat global warming, curb chemical emissions, and effectively use by adopting global manufacturing.

**Brief Commentary on Non-Financial Information**

- **Frequency Rate of All Occupational Incidents**
  - Kuraray is striving to enhance its organizational strengths by making the most of the abilities of its diverse human resources. From the viewpoint of promoting women’s active participation in the workplace, Kuraray is making various efforts with a focus on three points—employing more female employees, expanding areas of their responsibility at work and improving the retention of female employees.

*The account closing date changed from March 31 to December 31 in fiscal 2014. The consolidated financial results for fiscal 2014 covered 9 months, from April to December 2014, in Japan and 12 months, from January to December 2014, overseas. Values shown have been corrected in the results for January to December 2016 for both Japan and overseas.*
The Kuraray Group is aiming to grow sustainably according to the long-term vision set out in “Kuraray Vision 2026” by further expanding our existing businesses and creating a portfolio of new ones, as well as bolstering our initiatives to promote diversity and other workstyle reforms.

Please read on to discover our vision and the progress of the “PROUD 2020” medium-term management plan launched in 2018.

Aiming to Become a Company That All People Surrounding the Kuraray Group Can Take Pride In

The Kuraray Group began as a fiber and textile manufacturer in 1926 to produce regenerated cellulose fiber rayon. At the time, the Japanese fiber and textile industry depended on raw materials and technologies from overseas, but Kuraray launched determined initiatives to use only domestic resins as raw materials for production, and succeeded in 1950 to commercialize synthetic fiber made with Japanese technologies under the KURALON™ brand. It was Kuraray’s willingness to take on challenges ahead of others in a new field, on top of its intent to pursue high quality and high added value, that the Company dared as a fiber and textile manufacturer to integrate production starting with resin as the raw material. This spirit reflects the strong belief of our second-generation president Soichiro Ohara: “It is only through originality that a business can truly contribute to society and generate profits.” Since day one, the Kuraray Group has worked tirelessly to develop technologies and cultivate markets, and has focused on manufacturing unique products. The words “For people and the planet—to achieve what no one else can” in the Kuraray Group’s Corporate Statement express the strong belief of the Company’s founder and second-generation president. These words demonstrate the Kuraray Group’s stance of constantly providing value to the world. The result of the Kuraray Group applying its unique technologies to boldly take on the unknown has been to create many businesses that have clinched the world’s top market share in their respective fields. In fact, currently our businesses with world-leading market share account for as much as 58% of the Kuraray Group’s total sales and are the source of our competitiveness.

The Source of Our Competitiveness: The Kuraray Group’s Basic Stance

Looking toward celebrating its centennial in 2026, Kuraray has set the vision it aims to achieve along with the basic policy as outlined in the “Kuraray Vision 2026” long-term vision. We predict that several factors will inflict dramatic changes in the Kuraray Group’s business environment in the medium to long term. These are likely to include major revisions to rules, laws and regulations, the emergence of technological innovation and advances in digitalization through information networks and AI. In addition, while development of emerging countries is further expanding the world economy and their presence strengthens, it is predicted that social and environmental issues such as water shortages and food crises will surface.

In light of such circumstances, we see increasing opportunities to apply our technical capabilities in chemistry to resolve the challenges and problems that may newly arise from drastic changes that could occur right across the industrial landscape.

In the long-term vision set out in “Kuraray Vision 2026,” we have defined three basic policies: “Pursue competitive superiority,” “Expand new business fields,” and “Enhance the comprehensive strength of the Kuraray Group.” In addition, we established our targeted vision for 2026 as being a “Specialty Chemical Company, growing sustainably by incorporating new foundational platforms into its own technologies.” Based on these principles, we will strive to achieve sustainable growth and build a stable business portfolio through further expanding our existing businesses and spawning new ones.

Targets and Long-Term Vision Toward 2026

Masaaki Ito
Representative Director and President

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Starting in fiscal 2018, our medium-term management plan “PROUD 2020” was established with four key management strategies: the three strategies included in “PROUD 2020” was established with four key management strategies: the three strategies included in “PROUD 2020” was initially determined as 250 billion yen. Also seeing steady progress were initiatives to achieve “Kuraray Vision 2026” through activities that offer a promising future, such as acquiring Calgon Carbon Corporation, a global leader in the manufacture of activated carbon products, and deciding to invest in a manufacturing plant for butadiene derivatives in Thailand.

### Activities Conducted in FY2018

**Pursue competitive superiority**
- Optical-use PVA film: Decided on capital expenditure to cater to market needs
- PVF film: Increased the production capabilities for highly functional film at our Korean plant
- Water-soluble PVA film: Finished increasing the production capabilities in the U.S.A., and decided to invest in building new plants in the U.S.A.
- EVAL™: Boosted production capabilities in the U.S.A. and began running at 11,000 ton/year
- Isoprene: Decided on investing in new plant facilities in Thailand
- Defined target areas for the newly established Corporate Marketing Group, and commenced cross-functional work

**Expand new business fields**
- VECTSTAR™ (liquid crystalline polymer film): Increased production capabilities in response to higher demand
- PLANTIC™ (bio-based gas barrier material): Decided to invest in resin production facilities in the U.S.A. with the aim of expanding this business

**Enhance comprehensive strength of the Kuraray Group**
- Promoted integration with Calgon Carbon Corporation, after completing acquisition in March 2018
- Installed the Global SAP System
- Strengthened initiatives for workstyle reforms

### Priority Activities for FY2019

**Pursue competitive superiority**
- EVAL™: Consider investment for a new plant
- Water-soluble PVA film: Consider plots and investments for building new plants
- Isoprene: Proceeded with the project for the new plant in Thailand
- Calgon Carbon Corporation: Consider investment to increase capabilities in the U.S.A.
- Meltblown nonwoven fabric: Decide on boosting production capabilities
- Strengthen initiatives that use IoT to improve production efficiency and quality

**Expand new business fields**
- VECTSTAR™ (liquid crystalline polymer film): Consider investment regarding facilities for full-scale mass production
- Search for new opportunities and create new uses by strengthening corporate marketing functions

**Enhance comprehensive strength of the Kuraray Group**
- Promote integration of Calgon Carbon Corporation businesses, and realize synergy
- Promote workstyle reforms

The planned amount for capital expenditure during “PROUD 2020” was initially determined as 250 billion yen. However, owing to investments for the butadiene derivative manufacturing plant in Thailand and to increase the activated carbon production capabilities to further expand this business, we forecast that the three-year investment figure will exceed 300 billion yen. Moving forward, we will take care to maintain healthy finances while investing in infrastructure to reinforce our future competitive strength. In this way, we are focusing on building the Kuraray Group’s corporate value with a medium-to-long-term mindset, in view of our centenary in 2026.

### Recognizing Problems and Taking Concrete Approaches to Sustainability

Recent years have seen a demand for corporate management to carry out proactive initiatives for sustainability. To be a truly global corporate group, and to be “a company that people can take pride in.” We understand workstyle reform is to mean the creation of a workplace where a diverse range of people can be confident in their individuality as they work, and where people can feel more comfortable at work and experience high job satisfaction. We are conducting Group-wide initiatives to achieve such workstyle reforms, including those to encourage greater participation by women in the workplace. In addition, we have made progress in achieving diversity among the management, with a female external director and corporate auditor newly joining us in fiscal 2019, together with four foreign executive officers (one of whom is a managing executive officer). We will continue promoting diversity across the Group by building a “safe and secure company” and “a company that people can take pride in.” On top of these initiatives to reinforce our foundations, we will continue with our aim to be a proud company “growing sustainably” by solving social and environmental issues through “incorporating new foundational platforms into our own technologies.”
Medium-term management plan/strategies for each business

**Vinyl Acetate**
- **PVAc resin**: Increase the scale of business in Asia
- Expand new business fields focused on the realization of the vision
- Develop new business areas by M&A and alliance
- Capture new business areas by M&A and alliance
- Create new business opportunities through diversification
- Establish a new business model building technology and services
- **Medium-Term Management Plan “PROUD 2020”**: Making Kuraray a Company That People Can Take Pride In

**Isoprene**
- **Polyisoprene chemicals**: Increase the scale of business in Asia
- Expand new business fields focused on the realization of the vision
- Develop new business areas by M&A and alliance
- Capture new business areas by M&A and alliance
- Create new business opportunities through diversification
- Establish a new business model building technology and services
- **Medium-Term Management Plan “PROUD 2020”**: Making Kuraray a Company That People Can Take Pride In

**Fibers and Textiles**
- **CLARINO™**: Increase the scale of business in Asia
- Expand new business fields focused on the realization of the vision
- Develop new business areas by M&A and alliance
- Capture new business areas by M&A and alliance
- Create new business opportunities through diversification
- Establish a new business model building technology and services
- **Medium-Term Management Plan “PROUD 2020”**: Making Kuraray a Company That People Can Take Pride In

**Marketing**
- **Polymer Materials**: Increase the scale of business in Asia
- Expand new business fields focused on the realization of the vision
- Develop new business areas by M&A and alliance
- Capture new business areas by M&A and alliance
- Create new business opportunities through diversification
- Establish a new business model building technology and services
- **Medium-Term Management Plan “PROUD 2020”**: Making Kuraray a Company That People Can Take Pride In

**Trading**
- **New business areas**: Increase the scale of business in Asia
- Expand new business fields focused on the realization of the vision
- Develop new business areas by M&A and alliance
- Capture new business areas by M&A and alliance
- Create new business opportunities through diversification
- Establish a new business model building technology and services
- **Medium-Term Management Plan “PROUD 2020”**: Making Kuraray a Company That People Can Take Pride In

**Others**
- **New business areas**: Increase the scale of business in Asia
- Expand new business fields focused on the realization of the vision
- Develop new business areas by M&A and alliance
- Capture new business areas by M&A and alliance
- Create new business opportunities through diversification
- Establish a new business model building technology and services
- **Medium-Term Management Plan “PROUD 2020”**: Making Kuraray a Company That People Can Take Pride In

**Medium-Term Management Plan “PROUD 2020”**
- **The Kuraray Group’s Mission**
- **Value Creation Report**
- **KURARAY REPORT 2019**

**Business Overview**

<table>
<thead>
<tr>
<th>Segment name</th>
<th>Medium-term management plan/strategies for each business</th>
<th>Review of the medium-term management plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vinyl Acetate</strong></td>
<td><strong>PVAc resin</strong>: Increase the scale of business in Asia</td>
<td>Developed to enhance the PVAc business in Asia to expand sales to high-added-value products.</td>
</tr>
<tr>
<td><strong>Isoprene</strong></td>
<td><strong>Polyisoprene chemicals</strong>: Increase the scale of business in Asia</td>
<td>Developed to enhance the polyisoprene business in Asia to expand sales to high-added-value products.</td>
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<tr>
<td><strong>Fibers and Textiles</strong></td>
<td><strong>CLARINO™</strong>: Increase the scale of business in Asia</td>
<td>Developed to strengthen the CLARINO™ business and expand sales to high-added-value products.</td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td><strong>Polymer Materials</strong>: Increase the scale of business in Asia</td>
<td>Developed to enhance the polymer materials business in Asia to expand sales to high-added-value products.</td>
</tr>
<tr>
<td><strong>Trading</strong></td>
<td><strong>New business areas</strong>: Increase the scale of business in Asia</td>
<td>Developed to strengthen the trading business and expand sales to high-added-value businesses.</td>
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<td>Developed to enhance the new business areas in Asia to expand sales to high-added-value businesses.</td>
</tr>
</tbody>
</table>
Vinyl Acetate

In this business, we manufacture and sell PVA resin, which features water solubility and adhesive properties, PVA film, which can be applied to liquid crystal displays and is also used for single-use packets for detergents and so on; PVB film used as an interlayer for laminated glass; and EVAL™, which has an excellent gas barrier property.

Isoprene

In this business, we manufacture and sell synthetic isoprene chemical products; and SEPTON™, a thermoplastic elastomer that is a derivative of synthetic isoprene chemical products; as well as GENESTAR™, a new polyimide resin with excellent heat resistance.

Functional Materials

In this business, we manufacture and sell methacrylate resin, which boasts excellent weather resistance; dental materials which enable repairs that closely resemble natural teeth; activated carbon, whose adsorption properties are used to purify water and air; equipment for water treatment; and others.

Fibers and Textiles

In this business, we manufacture and sell CLARINO™, a man-made leather with a structure and functionality as elaborate as natural leather; vinyl fiber, used in automotive components and to reinforce concrete; KURAFLEx™ nonwoven fabric, used for lifestyle products and industrial materials; and MAGIC TAPE™ hook-and-loop fasteners.

Trading

In this business, we manufacture and sell polyester and other fiber and textile products, as well as export/import and wholesale resin and chemical products.

Others

In this business, we manufacture and sell highly functional membranes and systems used in water treatment, and conduct the engineering business, as well as manufacture and sell VECCSTAR™, a liquid crystalline polymer film used mainly for flexible circuit boards.

Changes in Business Activities

Since fiscal 2018, we have implemented the first-in, first-out (FIFO) method as a unified evaluation method for products, raw materials, and semi-manufactured items among our consolidated results. We have also moved the CLARINO™ business from the functional materials segment to the fibers and textiles segment, following organizational reforms effective from January 1, 2018. All segment information is based on the categories as they are after this change.

Finally, Calgon Carbon Corporation has been included in consolidated results from January 1, 2018 onward.
MonoSol specializes in manufacturing water soluble films. The company has continued to steadily grow since its founding in 1953 in the U.S. state of Indiana, focusing mainly on industrial applications for release films and other products. Every year since its integration into the Kuraray family in 2012, MonoSol has registered double-digit growth, with sales of single-use (water soluble unit dose, or SUD) pods for laundry and dishwashing detergents—created using technology and know-how acquired for industrial film applications—leading the way as the world’s leading supplier of water soluble films. As the world’s No. 1 manufacturer of water soluble films, we are currently leveraging these films’ unique properties, such as solubility and biodegradability, to create packaging materials with an even smaller environmental impact. In addition, we are branching out from our mainstay single-use detergent packets using the water soluble poval film and solidifying our position as the world’s No. 1 manufacturer of water soluble films. We are currently focused on building value with a view to ultimately adopting by the top five global detergent suppliers. We intend to deepen our technology and expand our business while contributing to the improvement of living conditions and the solutions of the environmental problems in not only developed countries but also emerging markets.

On the other hand, in parallel with growth in the size and complexity of the overall business, the supply chain challenges are also increasing. In “PROUD 2020,” we will plan a “Glocal” future through improvements in the efficiency of inter-Group procurement of raw materials, optimizing locations for film production bases which are currently concentrated in the U.S. Midwest, and enhancing our distribution network. Our ultimate goal is to establish a regional supply chain and thereby avoid any external risk.

MonoSol’s Purpose and HR Development to Support Growth

MonoSol is focusing its efforts on employee training. We are especially focusing on “coaching and developing” in “PROUD 2020.” We are training employees who can act globally and excel in MonoSol’s highly specialized business. We support our employees’ growth by providing unique training programs related to MonoSol’s operations alongside Kuraray’s HR training programs.

Before joining the Kuraray family, MonoSol had long been focused on building value with a view to ultimately selling the company. However, building long-term value and securing rapid earnings growth through increased volume are not necessarily the same goal. Our purpose is to grow in breadth and depth for the people and the planet. Yes, we must work hard to deliver financial results and returns for all the stakeholders. But above all, we always remember our purpose. By focusing on what is important to customers and society, we will build a company that can deliver both growth and profit over the long term.

Kuraray Group has been globalized rapidly in recent years. As a non-Japanese Executive Officer of the Kuraray Group, I always keep in mind that I have to take on the role of “bridge between different cultures” and make intentional efforts to play a role in the sustained growth of the Kuraray Group.
Transforming Carbon Materials into One of Kuraray’s Core Businesses: Toward True Leadership in Activated Carbon

Nobuhiko Takai
Vice President of Functional Materials Company, Senior Executive Officer

History and Overview of the Carbon Materials Business

The Kuraray Group’s history in the carbon materials business started with manufacturing and selling activated carbon in 1965.

Activated carbon is the product of a reaction between bituminous coal, wood, coconut shells or other raw materials with gas and chemical agents at a high temperature. This process creates micropores (measuring 20 nanometers or less in diameter) that purify gases or liquids by selectively separating and removing particular substances. The micropores form a meshwork structure within the activated carbon to give the material high adsorption strength owing to their large surface area (500 to 2,500 m²/g). For this reason, the activation process that forms and controls the size of these micropores is critical. Kuraray possesses refined manufacturing technologies used in the activation process that keeps pore diameter within a suitable range to adsorb particular materials.

Activated carbon is used in a variety of fields, such as waterworks plants, sewage treatment, household water purifiers, food and drink processing, and other areas related to water treatment, as well as exhaust-gas treatment, air purifiers, and other applications connected to air treatment. Activated carbon also plays an important role in electrical materials such as capacitors in the energy-related fields and in the chemical and food industries. Recently, the material has also shown promise in value-added areas like automotive applications.

Creating Synergy by Acquiring Calgon Carbon Corporation and Achieving Integration

The Kuraray Group considers the fields of water, the environment, and energy as areas for focused strategies. The Group has promoted initiatives to strengthen and enhance its carbon materials business in line with the “Next-generation growth model” and “Contribution to the environment,” the key business strategies in “GS-STEP,” our previous medium-term management plan. As part of these initiatives, in January 2017 we merged our subsidiary Kuraray Chemical Co., Ltd., which was handling the manufacture and sale of activated carbon, and newly established Carbon Materials Division, to concentrate the Kuraray Group’s resources. Meanwhile, we continued discussions on expansion through M&As to grow our presence in the activated carbon market and accelerate the development of our global business. One fruit of these discussions was March 2018’s acquisition of Calgon Carbon Corporation, a global leader in activated carbon materials.

As mentioned earlier, the raw materials for activated carbon are categorized into three groups: coconut shells, bituminous coal, and wood. Kuraray’s original expertise with activated carbon extended mainly to coconut shells, handling bituminous coal and wood to a limited extent only. Calgon Carbon Corporation, on the other hand, includes activated carbon from bituminous coal and wood in its product lineup, and the company has particularly strong production capabilities in activated carbon from bituminous coal, one of its major products. Through this acquisition, Kuraray has become the world’s largest overall manufacturer of activated carbon that can produce all three types of products, taking the lead among the world’s many activated carbon manufacturers. This acquisition will bring a wide range of benefits. In terms of raw materials, coconut shells are susceptible to risk from variations in supply volume and price, but the unified purchasing strength of Kuraray with Calgon Carbon Corporation enables us to secure more stable procurement from the many coconut shell providers in Southeast Asia. We will also be able to procure bituminous coal and wood while leveraging our presence as a leading manufacturer. In terms of sales, Calgon Carbon Corporation has mainly developed its businesses in Europe and the U.S.A., while Kuraray has focused on Japan and Asia, allowing us to complement each other’s business regions. In addition, by further accumulating client information, we can expect to cultivate new markets.

Our Ideals for Future Business

In 2019, we will concentrate on achieving quick results to gain some tangible synergy through this acquisition, and act to more closely integrate our carbon materials business. In addition, as worldwide demand grows for activated carbon in response to ever tighter environmental regulations, we are considering making investments to boost the production capacity of Calgon Carbon Corporation’s American plant, which is operating at full capacity. We plan to swiftly make such decisions.

Regarding the market outlook, we can expect growth at an annual rate of 3% to 5% with highly versatile bituminous coal-based and wood-based activated carbon, in line with the world’s annual economic growth rate. As such, we will work to further amplify our presence and expand sales in these areas that already have a large market scale. In addition, we will add further value to our coconut shell-based products, and aim for an annual growth rate of 10% or more in our high-end product group within the activated carbon market.

In this growing market, it is imperative to swiftly grasp changes in the world as well as the needs of the market, and take advantage of the Kuraray Group’s technological capabilities to provide comprehensive solutions for environmental problems. In this way, we will contribute to improving people’s health and comfort around the world, as well as to sustainability of the global environment.

In the “PROUD 2020” medium-term management plan, Kuraray identified the key strategies of “Expand new business fields” and “Contribute to the environment.” Our initiatives to strengthen and expand the carbon materials business are precisely in line with these strategies, and we will endeavor to grow this business into a large pillar of the Kuraray Group.
Aiming to Create Economic Value by Applying our Technological Prowess

Tsugunori Kashimura

Value Creation Report

Key Person Interview

Shifting to a Viewpoint and Actions with a Focus on Earning

The Research and Development Division has two functions. The first involves research and development through two research centers. The second involves developing new business through the business promotion departments for molding materials and in VECTAR™, as well as the Functional Products Development Department that deals with CMP polishing pads for semiconductors. In addition to these two functions, the organizational structure at the Research and Development Division includes a base for information gathering in the U.S.A. as well as the Intellectual Property Department, the Market and Business Development Department, and the Planning and Administration Department. The New Business Development Division (in charge of projects close to commercialization) was previously an independent organization, but was reintegrated into the Research and Development Division in January 2017 with the aim of fundamentally reviewing all development operations.

Together with this organizational reform, we spent a year selecting the most important themes for development, and narrowed these themes down to those that should be worked on as part of corporate R&D. All people in charge of the themes were consulted to address points that were missing from previous judgment criteria, including the questions of “Why should Kuraray do it?” “How can we commercialize it and win?” and “Can it both contribute to society and bring profit to the company?” The result was to cancel approximately 70 percent of the research themes, allowing us to focus on what remained. We are currently making progress in about 30 projects, including new themes that sprouted after the reforms. In addition to these measures, researchers in the Research and Development Division are expected to maintain a perspective and conduct their actions so as to focus on generating profits in addition to achieving results in the research theme they are working on. This is achieved through encouraging researchers to view themselves as “technological pillars” who work in an appropriate way to solve the wide range of problems in technology and development tackled by business departments in terms of corporate development. We also grasp this challenge by quantifying the contributions to results gained through solving these problems.

When fostering human resources to support our technologies, it is vital to accumulate a bank of successful experience. To this end, we nurture outstanding researchers by having them actively engage in personal interactions with business divisions and accumulate experience while directly involving themselves in business as they produce results. Occupying around 100th place in global sales rankings among chemical manufacturers, Kuraray is not large in scale; however, we wish for our researchers to be confident that they will succeed in their individual endeavors.

Promoting the Partnership and Support Program Together with Strategies for Intellectual Property

Kuraray’s strength is in its technological capabilities that originate from developing novel vinyl acetate-based chemical products. We see our home turf centered around this strength, and set targets for new businesses within walking distance of this home turf. We engage in initiatives with the goal of expanding into new territory step by step. Meanwhile, the Research and Development Division plays a crucial role in organizing verification activities throughout the entire Group to more firmly secure our vinyl acetate-related businesses as well as other core businesses that support our growth as the Group’s foundations.

As a part of these initiatives, the Research and Development Division launched a “Supporting Program” for the Kuraray Group, with the Tokyo Head Office serving as its main point of contact. Over the past two years, the division has launched projects in which its researchers visit bases in Europe, the U.S.A., and other regions to hold discussions. Over many sessions, the researchers listened to the concerns and issues faced by people at each base and discovered various problems in each region that had been left unsolved and overlooked. In fact, there were over 80 problems regarding precision analysis and technical matters for which the Research and Development Division could offer support. Some of these can be solved relatively quickly, while others may need long-term attention. In this light, we will strive to take these discussions of these problems to a deeper level on a global scale and address all of these issues without fail over the next few years, working to secure the foundations of businesses across the entire Group and protect this foundation from cracks.

Adding to these initiatives, the Research and Development Division supports the entire Group through surveying and management work conducted by the Intellectual Property Department in relation to patents. In a similar vein to the Supporting Program mentioned above, the Intellectual Property Department has created a system in which it first conducts patent surveys covering all regions targeted by each base at the Group. This is essential for understanding the actual conditions in each region. The Program then provides support for filing patents and utilizing patent rights in the global market. In addition, “Intellectual Property Strategy Conference” have been established through appointing intellectual property staff in each business division, thereby further honing value to derive profit from our technologies and knowledge.

The Kurashiki Research Center celebrated its 50th anniversary in July 2018. This facility comprises of four laboratories, with each one linked to one of its core technologies: catalyst and synthetic technologies, rubb-related polymer technologies, battery material design technologies, and analytical technologies. The Kurashiki Research Center has maintained three unwavering missions across the past five decades: “Create new businesses,” “Strengthen and expand existing businesses,” and “Establish and deepen core technologies.” Together with the Tsukuba Research Center serving as an Eastern Japan research base, the Kurashiki Research Center will continue to operate as an R&D facility that is trusted by all stakeholders both inside and outside the Kuraray Group, and one that fulfills its expectations. In 2026, the year marking the 100th anniversary of company foundation, we have plans to build a new R&D facility in Kurashiki City to expand our functionality, as well as plans to reorganize the R&D system across the entire Group.

As the company’s corporate statement highlights, Kuraray aspires to help solve social problems through our businesses. Contributing to this effort is the Research and Development Division’s ambition to create economic value by taking advantage of its technological strengths; we believe that such an endeavor is essential for the company’s continued existence as a part of society. This Division will not simply engage with research themes to solve a specific social problem. Rather, we will continue exploring possibilities for research themes that carry the potential to create economic value acceptable to greater society and that will ultimately deliver solutions to a range of many social problems.
supervision and execution functions through the corporate governance by taking steps such as separating
the Company has worked continuously to strengthen Kuraray's Steps to Strengthen Corporate Governance
the Company has established corporate governance mechanism centered on its Board of Directors and Board of Corporate Auditors to improve the effectiveness of supervisory and monitoring mechanism while maintaining management efficiency and to handle issues including management remuneration, selection of new company officers, internal control and risk management. Through the above establishment of mechanism, the Company believes that the effectiveness of supervisory and monitoring mechanism would be improved while maintaining management efficiency, contributing to the long term and sustainable enhancement of corporate value.

Kuraray's Steps to Strengthen Corporate Governance
The Company has worked continuously to strengthen corporate governance by taking steps such as separating supervision and execution functions through the introduction of the Executive Officer System, appointing and increasing the number of Outside Directors and Outside Corporate Auditors, establishing the CSR Committee and the Risk Management and Compliance Sub Committee, evaluating the effectiveness of the Board of Directors, and establishing the Corporate Advisory Committee. The Company will further strengthen the corporate governance system through measures such as managing compliance risks in its overseas operations.

Kuraray's Efforts for Improving Corporate Governance Thus Far

- **2008**
  - Increased the number of Outside Corporate Auditors from two to three
  - Established the CSR Committee
  - Introduced two Outside Directors
  - Started early delivery of the notice of convocation of the ordinary general meeting of shareholders (at least three weeks before the date of the meeting)
  - Started uploading an English translation of the notice of convocation of the ordinary general meeting of shareholders to the TSE platform and the Company’s website

- **2016**
  - Started Analysis and Evaluation of the Effectiveness of the Board of Directors

- **2017**
  - Established the Risk Management and Compliance Sub Committee

- **2018**
  - Established the Corporate Advisory Committee

The key points of Kuraray’s corporate governance are as follows:

1. Kuraray has adopted the governance system as “company with board of corporate auditors” and established the Board of Corporate Auditors comprised of five Corporate Auditors, at least three of whom are Outside Corporate Auditors. It has done this to ensure the fairness and transparency of management.

2. The Company has been appointing Outside Directors since 2008, and three Outside Directors are in office.

3. The Company has established “Corporate Advisory Committee” comprised of Outside Officers and outside experts, as an advisory organ to the Board of Directors, with a view to enhancing transparency, fairness and objectively in decision making concerning important matters of management, including nomination and remuneration of Directors, and further strengthening its corporate governance. The Corporate Advisory Committee is comprised of six members: three Outside Directors, one Outside Corporate Auditor and two outside experts, as of March 31, 2019.

Corporate Governance System

**Board of Directors and Business Execution Body**
The Board of Directors (convenes at least once a month), according to the Board of Directors’ Regulations, deliberates and decides important management matters, including legal matters, and supervises the execution of business. The maximum number of Directors is 12 in order to promote agile management decision-making by the Board of Directors, and the term of office is one year to clarify their responsibilities to the shareholders. There are currently 12 incumbent Directors, including three Outside Directors, whom one is female, with wealth of experience in and broad insight into economy, finance, management and corporate legal affairs. These three Outside Directors are supervising management from an independent third-party standpoint. As the chief executive responsible for business execution, the President appointed by the Board of Directors exercises control over the execution of business in the Company and its subsidiaries (hereinafter “the Group”). Every executive officer (one-year term of office) appointed by the Board of Directors is responsible for business execution in the Group organization. As the heads of internal companies, divisions and major functional organizations, the executive officers bear responsibilities for operations and business results.

In this way, the Company clearly separates the responsibilities of Directors, that is, decision-making on and supervision of management, from the responsibilities of business execution. Some Directors hold concurrent positions as executive officers. The President has established the Executive Committee (in principle, convenes twice a month) and various other councils and committees to deliberate and report on important matters concerning the Group’s management policies and business execution.

**Board of Corporate Auditors and Internal Audit**
The Board of Corporate Auditors consists of five Corporate Auditors, of which four are males and one is female, and three of them are independent Outside Corporate Auditors, the majority thereof. The current number of Corporate Auditors is five, including three Outside Corporate Auditors with extensive experience in and broad insight into areas such as finance, law and management, who perform their duties from an independent third-party standpoint. Corporate Auditors attend meetings of the Board of Directors and other important meetings, and monitor the Directors’ execution of duties through inquiries conducted by such means as the examination of important documents and requests for explanations of the state of business affairs. In principle, the Board of Corporate Auditors convenes monthly.
The Corporate Auditors regularly have meetings with the Accounting Auditor to receive reports on audit planning, implementation status and audit content. Also, they receive reports on internal audit results from the Internal Auditors Office (consisting of ten members). The Corporate Governance System (As of March 31, 2018)

Corporate Auditors also serve as corporate auditors of core group companies to conduct company group audits as needed and attend periodic Group Auditor Liaison Meetings consisting of the group company auditors to deepen their understanding of each company. Corporate Auditors also serve as corporate auditors of core group companies to conduct company group audits as needed and attend periodic Group Auditor Liaison Meetings consisting of the group company auditors to deepen their understanding of each company.

**Independence Standards for Outside Officers**

1. The Company judges that its Outside Officers and the candidates for the Outside Officers are fully independent from the Company if they do not fall under any of the following items:
   i. A business executive of the Group
   ii. A counterparty which has transactions principally with the Group, or its business executive thereof
   iii. A major business partner of the Group, or its business executive thereof
   iv. A major lender of the Group, or its business executive thereof
   v. A counterparty that receives a large amount of donations from the Group, or its business executive thereof
   vi. A major shareholder of the Company (who possesses 10% or more of the total voting right either directly or indirectly), or its business executive thereof
   vii. A business executive of the party whose major investor (who possesses 10% or more of the total voting right either directly or indirectly) is the Group
   viii. A consultant, certified public accountant or other accounting professional, attorney or other legal professional who receives a large amount of monetary or other assets from the Group other than the executive remunerations (in case of a legal entity, association or other organization, a person belonging thereto)
   ix. A person who belongs to an accounting firm that conducts the statutory audit of the Company
   x. A person who has fallen under the above criteria (i) in the past ten years
   xi. A person who has fallen under any of the above criteria (i) through (ix) in the past three years
   xii. A person whose position constitutes him/her as having an Outside Officer’s intersecting relationship with the Group
   xiii. A relative of the persons listed in the above criteria (i) through (x)

2. Even in cases where a person falls under any of the above items, if the person is deemed to be appropriate for the post of an independent Outside Officer in light of his/her personality, knowledge and other qualities, the Company may appoint him/her as independent Outside Officer on the condition that the reasons why the person is deemed appropriate for the post are explained to the public.

**Directors’ Remuneration System**

1. Remunerations for Directors are determined by taking into consideration the remuneration level of other companies and other factors so that the remuneration will function as one of the incentives for mid to long term and sustainable enhancement of the corporate value.

2. Remunerations for Directors are comprised of monetary remuneration consisting of fixed remuneration by position and performance-linked remunerations, and stock option-based remunerations. However, monetary remuneration for Outside Directors does not include performance-linked remunerations.

3. Remuneration for each Director is determined based on the calculation method stipulated by the Board of Directors within the limit amount resolved at the General Meeting of Shareholders. The remuneration for the President which serves as the basis for calculating the remuneration for each Director is determined after the deliberation at the Management Advisory Committee comprised of Outside Officers and outside experts.

**Performance-Linked Remuneration System**

The Company abolished the bonus scheme to Directors and introduced a performance-linked remuneration system in July 2006, thereby strengthening the incentives of Directors for increasing the Company’s corporate value. In addition, to respond to the increase in the amount of performance-linked remuneration in conjunction with the improved business performance, it was resolved to increase the maximum amount of annual remunerations to Directors from ¥450 million to ¥800 million (including ¥100 million annually for Outside Directors) at the Company’s 131st Ordinary General Meeting of Shareholders held on June 22, 2012.

**Calculation Method of Performance-Linked Remuneration**

As a short term performance incentive, the performance-linked remuneration for the President shall be the amount that is obtained by multiplying the amount of actual consolidated net income for the prior fiscal year with a predetermined coefficient. The performance-linked remuneration for Directors shall be determined by dividing the said amount in proportion to the index corresponding to each position of Directors. The Company does not have a performance-linked remuneration system for Outside Directors based on the above calculation method.

**Remuneration Type Stock Option Scheme**

The Company abolished the prior severance and retirement benefits system for Directors in July 2006 and introduced a remuneration-type stock option scheme that entails the issue of share acquisition rights for the purpose of further boosting Directors’ sensitivity and motivation towards improving the Company’s performance. The stock option-based remunerations under this scheme shall not...
exceed ¥10 million, separately from the maximum amount of annual remunerations to Directors. The number of share acquisition rights to be granted shall not exceed 60,000 shares each year.

Corporate Officer Remuneration for Fiscal 2018

<table>
<thead>
<tr>
<th>Director classification</th>
<th>Total amount of monetary remuneration</th>
<th>Total amount by type of remuneration, etc.</th>
<th>Number of eligible officers (person)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors (including Outside Directors)</td>
<td>481</td>
<td>129</td>
<td>8</td>
</tr>
<tr>
<td>Corporate Auditors (excluding Outside Corporate Auditors)</td>
<td>56</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Outside Officers</td>
<td>63</td>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>

1. The above number of eligible Directors and Corporate Auditors include one Director and two Corporate Auditors who retired at the close of the 137th Ordinary General Meeting of Shareholders.
2. Separately from the above stock option-based remuneration, share acquisition rights amounting to ¥21 million were granted to Directors who concurrently serve as Executive Officers (seven Directors) as stock option-based remuneration for Executive Officers.

Evaluation of the Effectiveness of the Board of Directors

(2) Outline of Analysis and Evaluation Results

The evaluation confirmed that the Company’s Board of Directors is generally functioning properly and that the effectiveness of the Board of Directors is secured in all aspects such as its size, composition, diversity, agenda selection, the scope of matters to be discussed or reported, the timing for scheduling the Board of Directors meetings, frequency of the meetings, operations of the Board of Directors including deliberation time, provision of additional information to the Directors, systems outside the Board of Directors such as those for providing training opportunities, etc.

In light of the results from this evaluation, the Company will continue to examine and implement necessary measures to make discussions more lively and productive at the Board of Directors meetings.

Cross-Shareholdings

The Company has set forth the policy on cross-shareholdings and standards for exercising voting rights pertaining to cross-held shares as follows.

1. Coming from the viewpoint of sustainable and long-term business operation, the Company may hold the shares of its business partners, etc. if maintaining and strengthening the relationships with such business partners are deemed to contribute to corporate value enhancement.

2. Regarding the shares held pursuant to the preceding paragraph (hereinafter, “cross-held shares”), the Company regularly examines economic rationality and significance of holding individual stock at the Board of Directors meetings in consideration of benefits and risks associated with such holding, capital cost and other factors. The Company will sell shares of stocks, as necessary, whose holding was deemed not to be appropriate based on the examination to reduce such stocks.

3. Concerning the voting rights pertaining to the cross-held shares, the Company appropriately exercises such voting rights in light of the objectives of shareholdings set forth in the preceding two paragraphs, taking into consideration the business conditions of the companies and the potential impact to the business operation of the Company or a subsidiary of the Company (hereinafter “the Group”). Particularly, the Company carefully exercises such voting rights in a case where performance of the companies has been sluggish for a long period of time or a serious scandal has occurred or in a case where a proposal that would impair shareholders’ value was made.

Content of Examination on the Propriety of Holding Cross-Held Shares

In the fiscal year ended December 31, 2018, the Company sold all shares of 8 stocks and part of 1 stock of its cross-held shares. Additionally, as the result of an examination at the Board of Directors meeting held on February 21, 2019 of the economic rationality and significance of holding individual cross-held stock for the fiscal year ended December 31, 2018 (examination on cross-held shares as of the end of December 2018) in consideration of benefits and risks, capital cost and other factors associated with such holding, the Company plans to continue with the sale of some stocks.
<table>
<thead>
<tr>
<th>Name</th>
<th>Positions and Tenure</th>
</tr>
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<tbody>
<tr>
<td><strong>Jun. 2019</strong></td>
<td></td>
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<tr>
<td><strong>Masaaki Ito</strong></td>
<td>President (as of March 27, 2019)</td>
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<tr>
<td><strong>Hiroaya Hayase</strong></td>
<td>President of Nippon Electric &amp; Tel. Co., Ltd., President of NTT Docomo, Inc.</td>
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<tr>
<td><strong>Yoshimasa Sano</strong></td>
<td>President of Nippon Telecommunications Co., Ltd.</td>
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<tr>
<td><strong>Tomokazu Hamaguchi</strong></td>
<td>Director (as of March 28, 1946)</td>
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<tr>
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<td><strong>Masaaki Ito</strong></td>
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<td><strong>Jan. 2005</strong></td>
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<tr>
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<tr>
<td><strong>Tomokazu Hamaguchi</strong></td>
<td>Director (as of March 28, 1946)</td>
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<tr>
<td><strong>Aug. 1996</strong></td>
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<tr>
<td><strong>Masaaki Ito</strong></td>
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<tr>
<td><strong>Tomokazu Hamaguchi</strong></td>
<td>Director (as of March 28, 1946)</td>
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<td><strong>Apr. 1995</strong></td>
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<tr>
<td><strong>Masaaki Ito</strong></td>
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<tr>
<td><strong>Mar. 1992</strong></td>
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<td><strong>Masaaki Ito</strong></td>
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</table>

*1 Tomokazu Hamaguchi, Jun Hamano and Mie Fujimoto are Outside Directors.
*2 Mitsuhiro Nagahama, Tomomi Yatsu and Kenji Komatsu are Outside Corporate Auditors.
The Kuraray Group creates economic and social value through the provision of its excellent products and services to the market and aims to contribute to the realization of a sustainable society.

The Kuraray Group’s business utilizes its unique technologies that are related to various social issues such as resource saving, energy saving, environmental conservation, and improving the quality of life. The Group believes that its most fundamental responsibility is to resolve these issues, and therefore we aim to fulfill our corporate social responsibility by sustaining value creation through quality management in manufacturing with compliance, safety, and risk management serving as a base. The Kuraray Group’s corporate activities are established by relationships with many stakeholders including customers and consumers, shareholders and investors, suppliers and partners, employees, local communities, and central and local governments. The Group will further deepen dialogue and cooperation with each stakeholder to realize sustainable growth.

Involvement with Stakeholders

**Corporate Statements**

- **Our Mission**
- **Our Values**
- **Our Commitment**

**Sustainability Concept**

- **Realization of Corporate Statements**
- **Value creation through business activities**
- **Quality management activities**
- **Risk management**

**Involvement with Stakeholders**

- **Shareholders and Investors**
  - Kuraray will strive to respond to corporate value, will retain profits to the shareholders and investors and will appropriately disclose information available to it.

- **Suppliers and Partners**
  - Staying in touch with a relationship of mutual growth with suppliers and partners, Kuraray will conduct fair and transparent transactions and CSR procurement activities.

- **Central and Local Governments, NPOs and NGOs**
  - Kuraray will maintain and strengthen the social and cultural environment and the welfare of the local communities.

- **Local Communities**
  - Given its consideration to environmental conservation and work safety, it contributes to the long-term, continuous development of the local community in a spirit of coexistence with the local communities.

- **Customers and Consumers**
  - Kuraray will continue creating safe and healthy products and services with higher added value, and distribute or reinvest financial value obtained through offering these products and services. To support the chain of value creation with the aim of sustainable growth and development, the Kuraray Group strives to strengthen its non-financial capital—including intellectual capital—that provides a broad spectrum of core technologies ranging from materials technologies to those for processing, human capital to achieve human resource diversity, manufacturing capital such as a global production system, and social and relationship capital based on the trust of stakeholders. Furthermore, the Group views appropriate return of earnings to society including social contribution activities as an important responsibility to fulfill. It will also aim to create sustainable supply chain that is friendly to non-financial capital.

**Stakeholder Communication**

- **Shareholders and Investors**
  - General meetings of shareholders, plant tours, meetings to explain settlement of accounts

- **Suppliers and Partners**
  - Purchasing activities, safety councils, labor meetings, etc.

- **Employees**
  - Employee awareness surveys, technical agreement meetings, personnel evaluation interviews, company newsletter, various events

- **Local Communities**
  - Environmental events, NPOs and NGO support for fire prevention, cleaning activities, various events

- **Customers and Consumers**
  - Sales and marketing activities, trade fairs, business fairs products for and other local activities

**Non-Financial Capital as a Foundation to Support Value Creation**

Our corporate activities create a value chain in which we invest funds from shareholders and investors into the business, offer various top-level or one-of-a-kind products and services with higher added value, and distribute or reinvest financial value obtained through offering these products and services. To support the chain of value creation with the aim of sustainable growth and development, the Kuraray Group strives to strengthen its non-financial capital—including intellectual capital—that provides a broad spectrum of core technologies ranging from materials technologies to those for processing, human capital to achieve human resource diversity, manufacturing capital such as a global production system, and social and relationship capital based on the trust of stakeholders. Furthermore, the Group views appropriate return of earnings to society including social contribution activities as an important responsibility to fulfill. It will also aim to create sustainable supply chain that is friendly to non-financial capital.

**Materiality of the Kuraray Group**

The range of the Kuraray Group’s material issues is currently under review. It will include some of the Sustainable Development Goals (SDGs), adopted at the United Nations Summit in September 2015, that we can contribute to, and will be finalized by the end of FY2019. In addition, we will review it regularly.

| Year | Selection of social issues | Incorporation of SDGs | Materiality analysis and material issue selection | Offsetting and company procurement
|------|---------------------------|-----------------------|-----------------------------------------------|----------------------------------|
| 2018 | Social issues in the fields of economics, society, and environment were identified from various guidelines such as OECD. | Goals were incorporated to which the Kuraray Group can contribute. | Materiality analysis was performed from the perspectives of stakeholders and their importance for the Kuraray Group. | Offsetting and company procurement will be held at the Expanded CSR Committee meeting.
| 2019 | The materiality analysis result was discussed at the Expanded CSR Committee meeting, which includes the business manager (FY2019). | Material issue will be selected at the board meeting after being discussed again at the Expanded CSR Committee meeting (FY2019). | Material issues will be performed by the Expanded CSR Committee members. |

**Regular review**

Changes in the social landscape, stakeholders’ expectations, and opportunities and risks for the Kuraray Group will be incorporated into the material issues in a timely manner to effectively employ resources.

For the current material issues, please visit our website:


**Value Chain**

- **Business Fund**
- **Procurement, Distribution (Sales and Shipping)**
- **Value creation**
- **Value distribution**
- **Material Cycle**

**Material Cycle**

- **Materiality**
- **Kuraray’s value chain**
- **Kuraray’s value creation**

**Kuraray’s value chain**

- **From materials technologies to those for processing, human capital to achieve human resource diversity, manufacturing capital such as a global production system, and social and relationship capital based on the trust of stakeholders.**

**Kuraray’s value creation**

- **Kuraray’s value chain**
- **Kuraray’s value creation**

**Kuraray’s value distribution**

- **From materials technologies to those for processing, human capital to achieve human resource diversity, manufacturing capital such as a global production system, and social and relationship capital based on the trust of stakeholders.**

**Kuraray’s value cycle**

- **From materials technologies to those for processing, human capital to achieve human resource diversity, manufacturing capital such as a global production system, and social and relationship capital based on the trust of stakeholders.**
The Technology Division, which is responsible for corporate production technology development, manages the Technology Development Center and the Technology and Maintenance Management Department. It promotes progress in production technology by collaborating with the Production and Technology Management Division of each in-house company and the Production and Technology Development Department of each plant. It has also begun collaborating with the Research and Development Division in the early stages of development to accelerate the evolution of new business and products. Since 2018, this department has taken the lead in implementing digital strategies for company-wide research and development as well as production technology.

Priority Policy
Kuraray’s corporate R&D activities are guided by its corporate missions to “Create new businesses,” “Strengthen and expand existing business,” and “Establish and deepen core technologies.”

To promote “Create new business,” our policy is to commercialize materials that society needs in areas where only Kuraray can commercialize them. Focusing on our strengths, we set out our target in the area within “walking distance” from our home ground (existing business), repeatedly taking half-steps or full strides forward from the home ground to expand our business into new domains.

To advance the concept to “Strengthen and expand existing business,” every one of our business divisions and group companies collaborate in sympathy to quickly resolve problems in production and development fundamentals to fortify Kuraray’s core business.

To promote “Establish and deepen core technologies,” we will establish and deepen necessary core technologies through the “Create of new businesses” and “Strengthen and expand existing business.”

Basic Strategy for Research and Development

Competition is increasing in the chemicals industry due to the entry of companies from emerging countries and the commoditization of specialty chemicals is also underway. Technological development capabilities to create value-added products are increasing in importance as an essential management resource for maintaining and strengthening global competitiveness.

In corporate research and development, which is the core of the Kuraray Group’s technological development capabilities, projects that contribute to group-wide business expansion and profit increase are promoted under the corporate missions of “Create new businesses,” “Strengthen and expand existing businesses,” and “Establish and deepen core technologies” through close collaboration with in-house companies, business divisions, and R&D divisions in group companies.

Research and Development Organization

The Research and Development Division, which engages in corporate research and development, manages the Kurashiki Research Center, Tsukuba Research Center, KAI Corporate R&D (U.S.A), Functional Products Development Department, Molding Component Business Department, Vecstar Business Promotion Department, Intellectual Property Department, Market and Business Development Department, and Planning and Administration Department.

The two research centers promote research and development of new business, products, and technologies using their core technologies, which comprise organic synthesis and synthetic polymer technologies, catalytic chemistry, VA-related polymer materials technology, carbon materials technology, battery material design technology, precision polymerization and denaturation, molding, polymer processing, and computational chemistry. Taking advantage of their analysis and safety assessment techniques in addition to their research and development capabilities, the research centers also play a role as analysis hubs for all Kuraray Group companies to solve their technical problems.

Each business division has its own R&D department at Kuraray Group’s base plants. Including overseas bases, these plants engage in research and development activities while closely working with corporate and business divisions’ research, development, and production bases.

R&D Expenses

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<th>Year</th>
<th>2015</th>
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<th>2018</th>
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<td>Value (Billion yen)</td>
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*The figure for FY2016 is adjusted for the 12-month period from January to December 2014.

R&D Focus

1. VECSTAR™ Liquid Crystalline Polymer Film

There is increasing demand for high-speed signal transmission through high-frequency waves, such as vehicle-mounted millimeter-wave radar and 5G antennas. In this connection, the sales volume of VECSTAR™ increased due to its high reputation for low transmission loss in the high-frequency wave range and excellent workability as a flexible printed circuit board. This has led us to upgrade the existing production facilities in 2018. Since it is expected that demand for high-speed signal transmission will rise even faster, we are considering investments in full-scale mass production facilities, and will continue to actively expand this business.

2. Polishing Pads for Semiconductors (CMP Pads)

Polishing pads for semiconductors are made of high-hardness polyurethane, a new material developed by leveraging the polyurethane design and manufacturing technologies cultivated through the development of CLARINO™ man-made leather. Multiple customers have begun to shift to Kuraray’s CMP pads since their superb hardness offers outstanding device polishing and smoothing capabilities, create few scratches despite their hardness, and deliver a long service life due to their high abrasion resistance. We have a system in place to provide pads that meet customer needs, and overseas customers are increasingly rating the products. We will continue to refine the business structure to accommodate customer needs for both advanced and existing processes.
Advancing Resources That Support Sustainable Growth

Human Resources

Basic Approach to Human Resource Management

Based on the Kuraray Group Global Human Resource (HR) Policy, the Kuraray Group is making efforts to develop its organizational system regarding the promotion of diversity, fostering of human resources, and fair and just evaluation.

The Kuraray Group Global HR Policy

1. We will respect the human rights of individuals.
2. We will abolish discrimination and respect diversity and individuality.
3. We will carry out our HR activities in full compliance with applicable laws and regulations.
4. We will create HR systems that uphold equality, fairness and transparency.
5. We will strive to improve the environment of workplaces.
6. We will strive to employ personnel who are able to contribute to the development of the Kuraray Group.
7. We will place the right person in the right job.
8. We will implement evaluation and benefit systems that are fairly satisfactory.
9. We will support professional development.
10. We will strive to promote communication and disclose information as appropriate.

Mechanisms and Systems for Human Resource Development

Executive Managers and Candidate Development (EMT)

To strengthen our management capability, the Kuraray Group has been providing Executive Management Training since 2012 for our business heads, as well as those heading corporate and administrative divisions, in addition to the presidents and similar level personnel of the Group’s subsidiaries outside Japan. Executive Management Training enables participants across businesses and regions to hold discussions and more fully perceive the direction the Kuraray Group should take. At each training seminar, we have frustrate consultants who provide information on a variety of themes to participants.

Career Support (Career Training)

Amid rapid changes in the business environment, the Kuraray Group supports the career development of employees through the following systems to enable them to improve their human resource value independently and autonomously.

1. **Training for designing one’s own career**
   - We provide training for employees at turning-point ages at the Company (ages 30, 42, and 50) to give them opportunities to look back on their career and design their future career path. At the training, employees’ superiors also receive guidance and participate in supporting subsidiaries’ career development.

2. **Provision of opportunities for career consultation**
   - We have an in-house career advisors to help employees design their career and implement career programs.

Responding to Globalization of Operations (Global Talent Development Program)

Kuraray Group’s sales ratio outside Japan has grown to 68% in fiscal 2018, and approximately 30% of the Group’s employees are working in the Group’s operations outside Japan.

In order to foster human resources who can actively take part in conducting business internationally with the aim of achieving growth on a global basis, the Kuraray Group has been providing the global human resource development program since fiscal 2007, and more than 800 employees in Japan and from overseas operations participated in the program over the 12-year period through fiscal 2018. This program has been provided continuously, with the content of training revised every year.

Global Team Training (GTT), designed to develop global leadership capabilities for the section manager class, has been provided 17 times, with a total of 300 employees participating. The network of training alumni has contributed significantly to the promotion of cross-border communication within the Group.

A trainee system, whereby younger employees are dispatched to the Head Office in Japan and overseas subsidiaries for a limited period of three months, has had about 100 employees participating, and many of the participants are actually taking part in conducting business internationally as global personnel by going on assignments to the Group’s subsidiaries outside Japan after they finish the trainee program.

Global Human Resource Management

The Kuraray Group is developing a foundation for global human resource management to optimize the way we apply our human resources right across the Group’s global operations. Specifically, in FY2017, the Group began phased introduction of globally standardized personnel evaluation and development systems. With these in place, we plan to implement basic human resource management on a global basis that encompasses (1) work goal-setting and personnel evaluation based on those goals; (2) support for capability and career development; and (3) discovery of competent human resources, rotation and optimal allocation of human resources, and development of a succession plan.

Meanwhile, the globally standardized Kuraray Group behavioral index “Kuraray Competency 5x5” is being implemented and used as a personnel evaluation item and capability development benchmark. In addition, Kuraray sorted out job grades, which were different in each country and company, as global grades based on the duty size and is utilizing them for personnel allocation and selection of participants for human resource development programs.

Work-Style Reforms and Promotion of Diversity

Work-Style Reforms (Productivity Improvement, Working Hour Management, etc.)

Kuraray is promoting work-style reforms toward realizing the ideal work style conveyed in the Top Statement. While driving the creation of a healthy corporate culture and employee mindset reform, Kuraray is also examining and implementing initiatives to enhance productivity and introducing flexible work programs. In FY2018, it launched the telework program at the Head Offices (Tokyo and Osaka). Also, the rate of taking paid holidays by regular employees, excluding managers, was about 84%.

Furthermore, to support employees’ active engagement in productivity improvement, by the end of this mid-term management plan, Kuraray will start paying employees the amount equivalent to overtime compensation for overtime hours reduced from the previous year.

Promotion of Women in the Workplace

Kuraray is placing emphasis on creating a corporate culture to promote more active participation by female employees with a focus on three points—employing more female employees, expanding areas of their responsibility at work and improving retention of female employees. It is doing this in order to enhance its organizational strengths by making the most of the abilities of its diverse human resources. Specifically, we provide workshops for employees in managerial positions (division general manager class and department general manager class) and training for female employees aimed at fostering career development and leadership development, etc.

The ideal work style:

- Carry out your tasks with awareness of regular work hours.
- Aim to deliver high-quality work within a given time.
- Cooperate with the people around you and share an efficient work style throughout the company.
- Keep in mind to get refreshed and stay in good physical condition to gear up for your next work day.

Global Talent Development Program

Executive Management Training (EMT)
In the Kuraray Group’s business activities, safety is the cornerstone, an absolute requirement that forms the basis for all activities. Realizing workplaces where people can safely work at ease without accidents is an important theme we need to work on to maintain stable supply of products and continue to be trusted by society.

Based on this view, the Kuraray Group develops and operates safety management systems and conducts various activities. We are putting various measures in place to raise employees' awareness of safety and establish safe actions and safety checks as routine practices. At each workplace, we carry out risk assessments to evaluate the risk of process accidents and occupational incidents, promote fundamental equipment safety measures, and prevent accidents and incidents. In order to prepare for such situations, we share information such as cases of process accidents and occupational incidents, are preventing recurrence by horizontal deployment of measures, and are training to minimize damage.

Safety Management

In accordance with Corporate’s Safety Activity Management Rules, the Kuraray Group develops safety activity plans every fiscal year and operates them to ensure occupational safety and process safety. Specifically, at the Safety Promotion Committee attended by the President and executives in charge, we carry out an overall assessment of the safety activity performance of the current year and decide an activity policy for the next fiscal year. Each plant and department conducts safety activities in accordance with their action plans that reflect fiscal year. Each plant and department conducts safety activities in accordance with their action plans that reflect fiscal year. Each plant and department conducts safety activities in accordance with their action plans that reflect fiscal year. Each plant and department conducts safety activities in accordance with their action plans that reflect fiscal year.


Chemical Products and Product Safety

To ensure our products are safe, each business division of the Kuraray Group companies evaluates and improves its products using the risk management method when developing a new product or managing product changes. For products that require a particularly stringent safety evaluation, such as those using nanomaterials or that are ingested, a deliberation committee mainly comprising the CSR Division checks their safety.

To ensure product safety, Kuraray conducts risk assessments and establishes safety activities.kuraray

In the area of chemical management, these divisions use IT systems and constantly educate managers and staff members in charge of chemicals management to ensure compliance with laws and regulations that are increasingly tightening around the world. The divisions also work with overseas group companies to conduct studies and share information to achieve group-wide effective chemical management.

The First Global Environment and Industrial Safety Meeting

With the expectation of synergy and sharing of the philosophy and policy on environment and industrial safety, the first Global Meeting was held at the Okayama Plant, KAI and MonoSol from the US, KEG from Germany, EE from Belgium, KAP from Singapore, Pantic from Australia, MonoSol from the UK, Kuraray Korea from South Korea, and personnel from environment and industrial safety divisions in Japan gathered for the conference. Although it was only the first meeting, the participants introduced their safety activities and actively exchanged opinions, providing a good opportunity for information sharing. It will take place again in the next fiscal year and onward.

Foundation for Value Creation

Advancing Resources That Support Sustainable Growth

Safety Activities
Environmental Performance

The Kuraray Group in Japan met the target of reducing at least 13,000 tons-CO2 of greenhouse gas (GHG) emissions (from FY2017) by reducing 13,000 tons-CO2. It however failed to achieve the GHG emission intensity index target (FY2018 target: at least 1% increase from FY2017) with the result of a 3.5% decrease from FY2017. Although the total GHG emissions decreased by 10,000 tons-CO2 from FY2017, the decrease in production (equivalent production) caused a further decrease in the GHG emission intensity index.

The Group achieved the FY2018 target of waste reduction by at least 900 tons with the result of a 2,327-ton decrease. On the other hand, it did not meet the target of keeping the emissions of JCIA-designated PRTR substances below the FY2016 result (957 tons). The FY2017 result was 1,004 tons. Overseas affiliates met the target of adding 1% to the energy intensity index and the water usage amount (production) index from the previous year.

Environmental Management

Environmental Data Audit

In FY2018, the Kuraray Group audited the environmental data of plants and affiliates in Japan. While problems such as falsification of quality or quality check data are occurring at famous companies in Japan, the Kuraray Group focused not only on quality check data but also on environmental data, and reexamined if those data have been properly handled, falsification of quality or quality check data are occurring at famous companies in Japan. As a result, the Kuraray Group confirmed that effluent, air emission, wastes, and discharging of chemicals (PRTR substances) measurement data for manufacturing sites were appropriately managed and stored in verifiable state, and that environmental-related reports and notifications were submitted appropriately based on actual measurement data. The Kuraray Group will audit environmental data to prevent problems from occurring.
The Kuraray Group shall make vigorous approaches to social contribution activities in accordance with the following policy.

Foundation for Value Creation

welfare fields in cultural, Contribute at our plants and cultural activities owned art museum—in Kurashiki, the Museum of Art—Japan’s first privately

With the understanding that sound and sustainable social development is a requirement for corporate growth and prosperity, we, the Kuraray Group, contribute to society through our products and businesses that provide value to people and, as a corporate citizen, address social issues within a reasonable scope.

Kuraray Group Social Contribution Policy

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 issues
Activities rooted in local communities where Kuraray’s plants and sites are located
Activities emphasizing participation by employees on their own initiative
Activities that are sustainable in the long term

Areas of activities

Priority areas: Culture, social welfare, environment, and science

Activities in Culture Field

The Kuraray Group supports the Ohara Museum of Art—Japan’s first privately owned art museum—in Kurashiki, the place where our company began, and cultural activities at our plants and facilities.

Activity

Contribution in cultural, academic, environmental and social welfare fields

Target

“Sending School Backpacks Across the Sea” “Chemistry Classes for Boys and Girls” Operating workshops for people with intellectual disabilities “Kuraray Fureai Fund” Activity with emphasis on link to local community

Results

Activities were undertaken with a focus on the culture, art and science, environment and welfare fields in accordance with the Kuraray Group Social Contribution Policy.

Activities in Social Welfare Field

With the goal of supporting the employment, maintaining the employment level, and increasing the employment opportunities for individuals with intellectual disabilities, the Kuraray Group operates workshops for them at plants and donates to the Kuraray Fureai (Report) Fund (a matching gift program).

Activities in Environmental Field

The Kuraray Group hosts greening activities such as forest conservation and cleanup volunteering around our plants.

Activities in Social Welfare Field

The Kuraray Group invites students to join workshops now also taking place in the US and Germany. For example, Kuraray America, Inc. hosted a chemistry class for local children. They made slime and kaleidoscopes using polyl resin to experience the fun of chemistry. Also, volunteer employees offered a plant site tour and explained Kuraray’s business. Meanwhile, Kuraray Europe GmbH invited a teacher and 18 students from a local school to the Polyl plant in the Höchst Industrial Park. These students were at the age of Japanese senior high school students and wanted to major in chemistry. The plant manager gave a Polyl plant tour and outlined its production. One of the participants commented that, “I now have a much clearer picture of my career as a potential future chemist.”

Global Initiative to Foster Interest in Chemistry

Plants in Japan hold Chemistry Classes for Boys and Girls to foster interest in chemistry. This initiative began in Japan and workshops now also take place in the US and Germany. For example, Kuraray America, Inc. hosted a chemistry class for local children. They made slime and kaleidoscopes using polyl resin to experience the fun of chemistry. Also, volunteer employees offered a plant site tour and explained Kuraray’s business. Meanwhile, Kuraray Europe GmbH invited a teacher and 18 students from a local school to the Polyl plant in the Höchst Industrial Park. These students were at the age of Japanese senior high school students and wanted to major in chemistry. The plant manager gave a Polyl plant tour and outlined its production. One of the participants commented that, “I now have a much clearer picture of my career as a potential future chemist.”

For more details, please visit our website: https://www.kuraray.com/csr/report2019/relationship_with_society

Risk Management

In the Kuraray Group, each year the President announces to the whole organization the basic risk management policy and risk management tasks for the fiscal year.

FY2019 Kuraray Group Risk Management Policy

Basic policy

(1) Completely prevent illegal or inappropriate conduct that breaches the trust of society.
(2) Completely prevent accidents and injuries e.g. fires, process accidents, occupational injuries, pollution, and product defects that threaten the health and safety of employees, the local community, clients, partners, and so on.
(3) Should an event occur that seriously impacts the business or society, be sure to secure trust from society, safety, and health, and implement measures to achieve business continuity or early recovery. (Prioritize trust from society, safety, and health, and then work to continue or restore the business.)

Tasks for the fiscal year

(1) Reassess the risks of existing laws such as the Anti-Monopoly Law and fully implement appropriate measures.
(2) Completely identify, improve, and modify the quality assurance system to enhance its reliability.
(3) Recognize the importance of information and data, and strengthen the security measures.

Based on these tasks, the Group ensures that each business unit can flexibly and promptly accommodate changes in the risk environment while maintaining the long-term, continued approach to address risks.

Quality Management

The Kuraray Group implements quality management systems such as ISO 9001 in each major manufacturing site. Divisions have developed systems for each business operation to supply products incorporating the requirements of customers. Aiming to strengthen quality management for the whole group, in 2017, business divisions and the CSR Division worked together to create a PDCA cycle for company-wide progress checks on issues introduced the previous year and on performance of improvement activities. In 2018, the PDCA cycle was used to share the outcomes of each division’s quality improvement activities, provide education using the Kuraray Group Quality Handbook, and develop internal quality assurance rules to meet heightened demand from customers and society.

The Group will continue to run this PDCA cycle to strengthen quality management for the entire group.
*Our Commitment* states the principles of our conduct which we shall adhere to in doing our business. The “Kuraray Group Code of Conduct” serves as guidelines to implement the commitment in performing day-to-day work. The Group’s top executive has declared that we will comply with laws and regulations and “Our Commitment” under any and all circumstances. To share these principles and commitments among all Kuraray Group personnel throughout the world, the Compliance Handbook has been compiled containing the foregoing declaration by the top executive and explanations of the “Kuraray Group Code of Conduct.” To disseminate these principles and commitments among all Kuraray Group employees, a compliance handbook written in ten languages, got to be access the contact desk. The internal compliance seminar, which began in 2017 raised the recognition of the Kuraray Group Employee Counseling Room. The number of consultations seems to reflect such heightened recognition.

**Number of Consultations at the Kuraray Group Employee Counseling Room in Japan**

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**Compliance Seminar**
Since 2017, department-based compliance education has been provided to all group employees in Japan (including contractors, temporary employees, and part-time employees). In the training held in 2018, employees discussed compliance violation cases with department managers. Through such training, Kuraray aimed to create a work environment where employees can always exchange honest opinions. We believe that compliance violations can be prevented if department members always pay attention to each other and are able to talk to coworkers, superiors, or supervisors when they have questions or worries. Kuraray will continue holding similar training in futures.

**Thorough Compliance Measures**
In March 2016, the Fair Trade Commission of Japan made an on-the-spot inspection of Kuraray, involving competitive bidding on textile products acquired in conjunction with the Acquisition, Technology and Logistics Agency, Defense Ministry. Subsequently, in March 2017 the commission ruled that Kuraray had violated the Anti-Monopoly Law and bribery act and imposed a ¥1 billion fine. Following an on-the-spot inspection, the Kuraray Group implemented various measures to ensure compliance with the Anti-Monopoly Law and bribery act. These measures include:
- **Anti-Monopoly Law**
  - Between FY2017 and FY2018, Kuraray in Japan introduced an internal system that requires advance approval for bid participation and transactions and meetings with competitors to monitor bid participation and competitor contact. Bilateral negotiations are conducted.
  - For overseas operations, between 2017 and 2018, Kuraray created guidelines and compliance seminars for overseas employees. The seminars cover the Anti-Monopoly Law and bribery act and distributed them to employees in each region.
- **Compliance**
  - In 2018, Kuraray established a Compliance Seminar to disseminate the results of the on-the-spot inspection.
  - Kuraray’s approach to compliance education includes on-the-spot inspections of overseas offices.

**Whistleblower System**
As a whistleblower system to prevent, identify and troubleshoot any compliance violation at an early stage, the Kuraray Group Employee Counseling Room has been set up for all employees of the Kuraray Group in Japan, including contract employees, temporary and part-time employees. A whistleblower contact desk is also provided for major subsidiaries in Europe and North America. Due to the recent rapid globalization of the Kuraray Group through M&A and other events, we created access to the contact desk for overseas subsidiaries that hadn’t had one yet. By the end of FY2018, all group companies