



KURARAY CO., LTD. KURARAY REPORT 2018

kuraray

Kuraray Report 2018

KURARAY CO., LTD.

Tokyo Head Office: Ote Center Building, 1-1-3, Otemachi, Chiyoda-ku, Tokyo 100-8115
Osaka Head Office: Umeda Hankyu Building Office Tower, 8-1, Kakudacho, Kita-ku, Osaka 530-8611
TEL: +81-3-6701-1000 FAX: +81-3-6701-1005

<http://www.kuraray.co.jp>



Issued on May 2018



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.

CONTENTS

Introduction

- 03 Kuraray's History of Tackling Challenges
- 05 The Source of Competitiveness That Creates Unique Products
- 07 Revenue and Profit Structure Enhanced by Business Portfolio Improvement and Globalization
- 09 Financial and Non-Financial Highlights
- 11 TOP STATEMENT

Value Creation Report

- 17 Value Creation Process of the Kuraray Group
- 19 At a Glance
- 21 Key Person Interview
 - 21 **1** Coordinating Production and Human Resources Globally with a View to Achieving Further Value Addition
 - 23 **2** Promoting the Project for the New Thai Plant with an Eye to Establishing the Next Pillar after the Vinyl Acetate Business
 - 25 **3** Aiming for a Better Life by Increasing the Workplace Motivation of Individual Employees
 - 27 **4** Kuraray's Transformation into a Company with a Global Mindset by Expanding Its Global Business through Successful M&As

Foundation for Value Creation

- 29 Corporate Governance
- 37 CSR Management
- 39 Advancing Resources That Support Sustainable Growth
 - 39 Technological Development Capabilities
 - 41 Human Resources
 - 43 Safety Activities
 - 45 Environmental Management
 - 47 Trust
- 50 Corporate Data

Editorial Policy

Starting from this year, the Kuraray Group has combined the Annual Report and the CSR Report into this Integrated Report, so that all the stakeholders, including shareholders and investors, can have a deeper understanding of the Group's efforts for value creation over the medium to long term.

This report concisely conveys the Group's financial information as well as the important non-financial information that affects its corporate value. For more details about the Group's products and businesses, please see our website.

Reporting Period

January 1 to December 31, 2017
(Some information after January 2018 is included.)

Scope of the Report

Kuraray Co., Ltd. and the Kuraray Group companies

Italicized product names in this report are trademarks of the Kuraray Group's products.

Kuraray's History of Tackling Challenges

Kuraray was founded in 1926 for the purpose of commercializing regenerated cellulose fiber rayon, which was cutting-edge technology at the time. In 1950 during the post-World War II period, as Japan's first domestic producer of synthetic fiber based on original Japanese technologies, Kuraray became a world leader in the commercialization of PVA (poval) fiber under the *KURALON* brand, ushering in Japan's pioneering era in the chemical synthetic fiber industry.



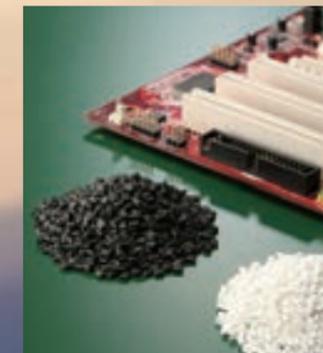
KURALON (PVA Fiber)

Kuraray was the first company in the world to commercialize *KURALON* (PVA fiber), the first synthetic fiber produced using made-in-Japan technology, and expanded the application of *KURALON* during the high economic growth period in Japan. PVA resin was conventionally produced for use as a raw material of *KURALON*, but Kuraray shifted to commercial production of PVA resin considering that its applications were expanding for use as fiber sizing agent and processing agent.



KURARITY

Acrylic thermoplastic elastomer, a unique material offering transparency, elasticity and more. We were the first in the world to succeed in industrializing this material, using proprietary Kuraray technologies. The market rollout in the field of adhesion and molding materials utilizing these characteristics is very promising.



GENESTAR

A new highly heat-resistant polyamide resin created with our proprietary technologies. It is used in electronic parts of smartphones, personal computers, and the like, as well as in LED reflector applications and in the automotive field.

EVAL / Isoprene Chemical

EVAL provides excellent barrier properties against the permeation of gases, superior to those of any other plastics. It became popular as a new food packaging material thanks to its gas barrier properties. Kuraray became the first to succeed in industrializing synthetic isoprene monomer, and started marketing synthetic rubber (polyisoprene rubber) with great demand potential under the trademark of *KURAPRENE*.



Corporate Statements

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

- Philosophy**
 - 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.

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 *CLARINO* (man-made leather), which recreates the structure of natural leather, and *MAGICTAPE* (hook-and-loop fastener). The worldwide number-one businesses* that we have created using our unique technologies account for more than half of the Kuraray Group's total sales.

*Businesses that have the world's top market share, or are the only ones in their category worldwide (in-house survey)

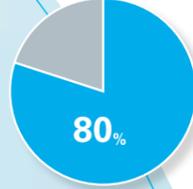


Our worldwide number-one businesses* account for more than half of the Kuraray Group's total sales.

*Businesses that have the world's top market share, or are the only ones in their category worldwide (in-house survey)

PVA resin

PVA resin was industrialized as a raw 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 film. It is used in a wide range of applications such as paper processing agents, adhesives, and as a stabilizer for the polymerization of vinyl chloride resin.



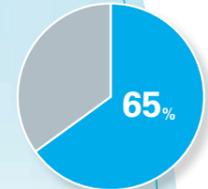
Optical-use PVA film

Used in a wide variety of applications such as polarizing film, which is vital to LCD displays such as large flat-panel TVs and tablets.



Industrial-use PVA film

Used in a wide variety of applications such as individual packaging films for detergents and agrochemicals.
*The number one PVA film in the world for single-use packets for detergents.



EVAL (EVOH resin)

EVAL provides excellent barrier properties against the permeation of gases, superior to those of any other plastics. It is used widely in food packaging materials to block out oxygen and preserve the flavor and quality of foods. It is also adopted in automotive plastic fuel tanks, as it provides a highly effective barrier against fuel vapor permeation. It is being used increasingly in a wide variety of applications, such as vacuum insulation panels for large refrigerators, in order to improve energy efficiency.



KURALON/KURALON K-II (PVA fiber)

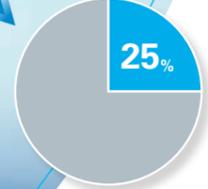
KURALON is a synthetic fiber based on polyvinyl alcohol (PVA) with several unique properties, including high tenacity, low elongation, and hydrophilicity. It is widely used in various industrial fields for applications that include as a substitute for asbestos in cement reinforcement and as a separator for alkaline manganese batteries. *KURALON K-II* is another PVA fiber made by new production technologies. Water-soluble fibers with different dissolving temperatures and high-tenacity fibers can be obtained.

Isoprene chemicals

We apply our unique synthesizing technologies to produce a cleaner MMB that is highly safe and easy to handle, as well as diols, aroma chemical and cosmetic ingredients, pharmaceutical and agrichemical intermediates, and more.
*One-of-a-kind products derived from synthetic isoprene (MMB, MPD, etc.)

GENESTAR (highly heat-resistant polyamide resin)

GENESTAR is a new highly heat-resistant polyamide resin created with our proprietary technologies. It is used in electronic parts of mobile phones, personal computers, and the like, and it is applied in backlights for LED liquid-crystal TV panels and in the automotive field as well.
*The world's only industrialized PA9T resin



CLARINO (man-made leather)

CLARINO is a man-made leather that combines our in-depth knowledge of the fine-grained structure of natural leather with high functionality. It is used for school bags and other kinds of bags, shoes, balls, gloves, clothing, interior accessories, and more.

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 uses, composites, electronic components, ropes, and sporting goods.

Revenue and Profit Structure Enhanced by Business Portfolio Improvement and Globalization

Steady business expansion and high profits

Net Sales



Operating Income / Operating Income Margin (Return on Sales)



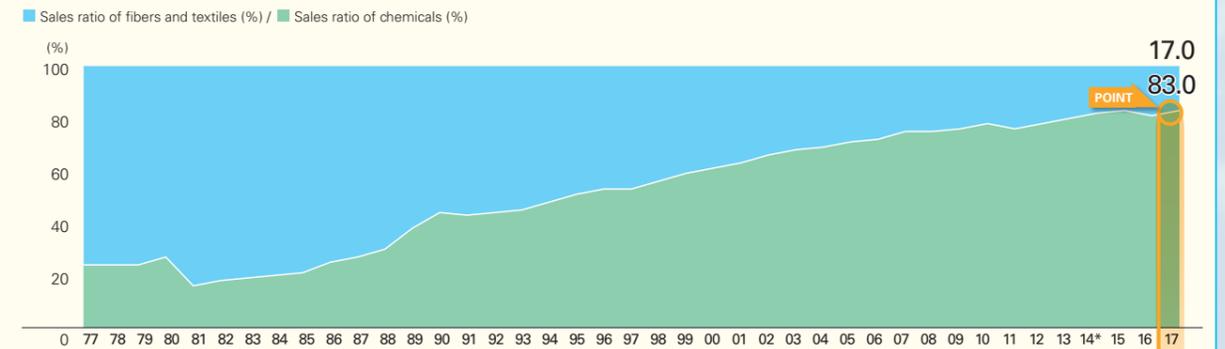
Kuraray is striving to realize high profitability as a specialty chemical company. Operating income margin for fiscal 2017 reached 14.4%, which exceeded the target of 13.8% set out in "GS-STEP", our previous medium-term management plan. Under "PROUD 2020", our new medium-term management plan covering the period from fiscal 2018 to fiscal 2020, Kuraray will continue aiming to boost operating income, while maintaining a high operating income margin.

Operating income margin is rounded down to one decimal place.

Changes in the portfolio

Topics 1

Sales Ratio of Fibers and Textiles / Sales Ratio of Chemicals

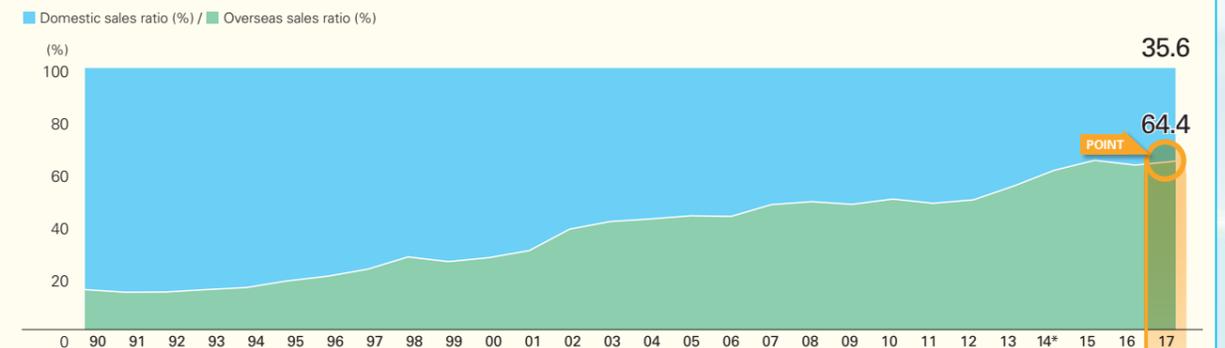


POINT Shifting the Focus from Fibers and Textiles Business to Chemicals Business

Kuraray has expanded business steadily by shifting its business structure drastically. While enhancing efficiency of the fibers and textiles business which are facing a tough business environment, Kuraray is expanding the chemicals-related business which leverages the Group's unique technologies to strengthen its business portfolio. As a result, the sales ratio of fibers and textiles decreased from 70% in 1988 to 17% in 2017, while the sales ratio of chemicals expanded significantly from 30% to 83%.

Topics 2

Sales Ratio (Domestic/Overseas)



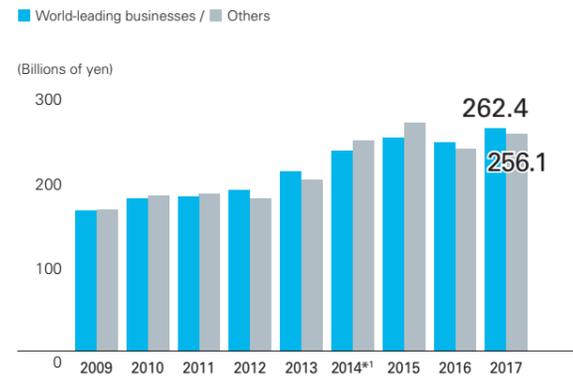
POINT Overseas Sales Ratio Has Exceeded 60%

Kuraray has endeavored to strengthen and expand its businesses by going through several M&As and alliances, in order to realize "a high-profit specialty chemical company with a global presence." As a result, the ratio of overseas sales is getting higher every year, rising from 30% in fiscal 2001 to about 64% in fiscal 2017.

* Kuraray changed its consolidated closing date from March 31 to December 31 starting from fiscal 2014. The consolidated results for fiscal 2014 cover the nine-month period from April to December 2014 for Kuraray and its domestic subsidiaries and the 12-month period from January to December 2014 for its overseas subsidiaries. The above figure for fiscal 2014 is adjusted to reflect the 12 months from January to December 2014 for the Company and its domestic and overseas consolidated subsidiaries.

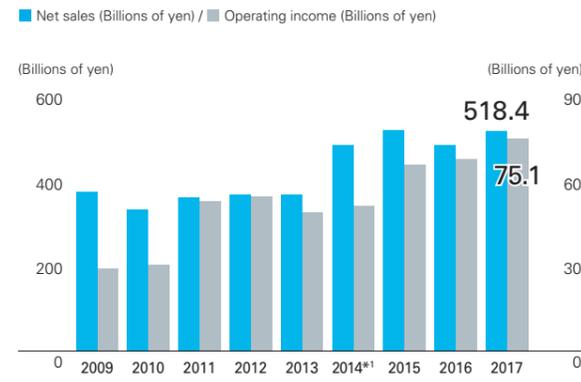
Financial and Non-Financial Highlights

Net Sales of World-Leading Businesses*

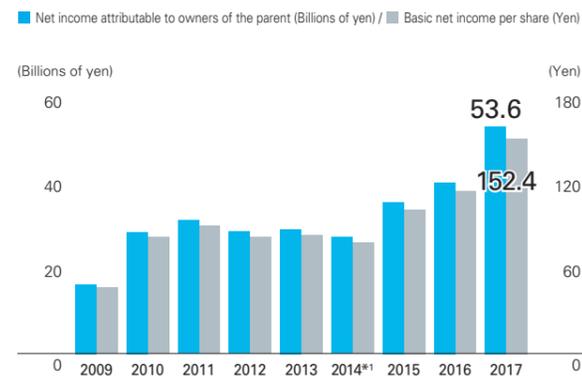


* Businesses that have the world's top market share, or are the only ones in their category worldwide (in-house survey)

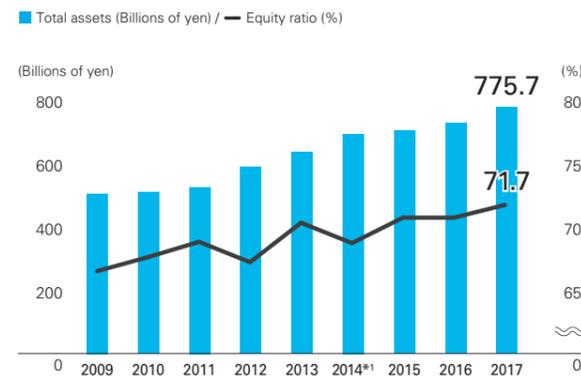
Net Sales / Operating Income



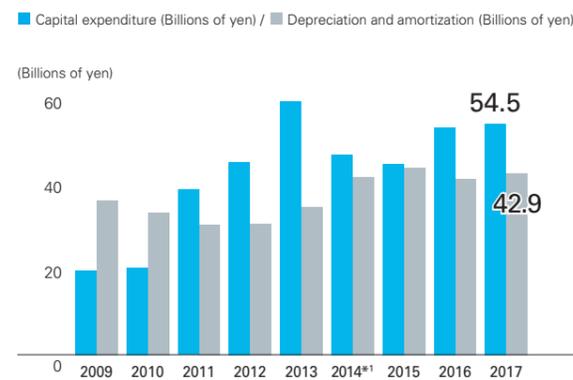
Net Income Attributable to Owners of the Parent / Net Income per Share



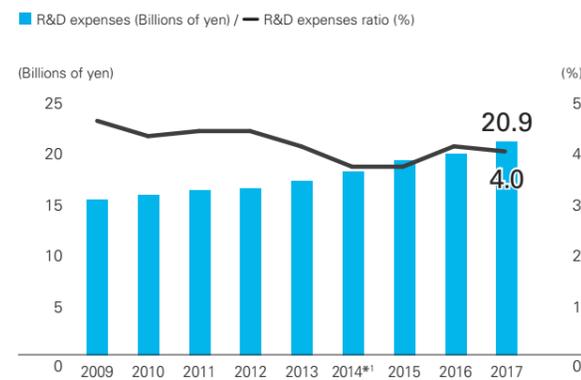
Total Assets / Equity Ratio



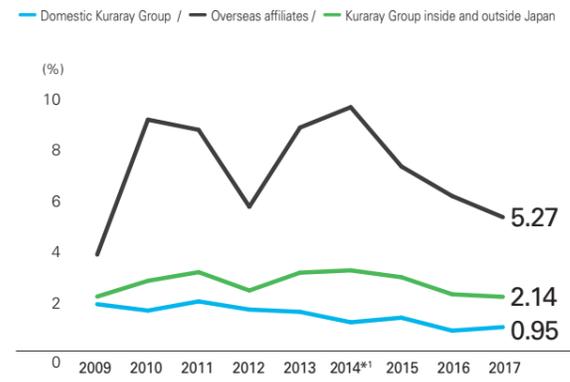
Capital Expenditure / Depreciation and Amortization



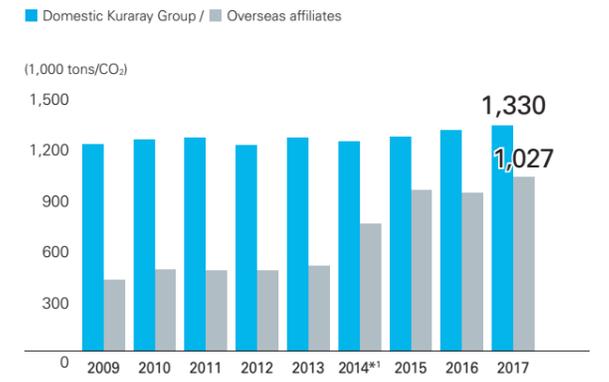
R&D Expenses / R&D Expenses Ratio



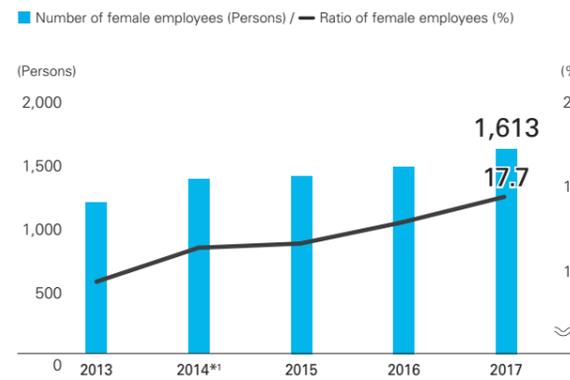
1 Frequency Rate of All Occupational Incidents*2



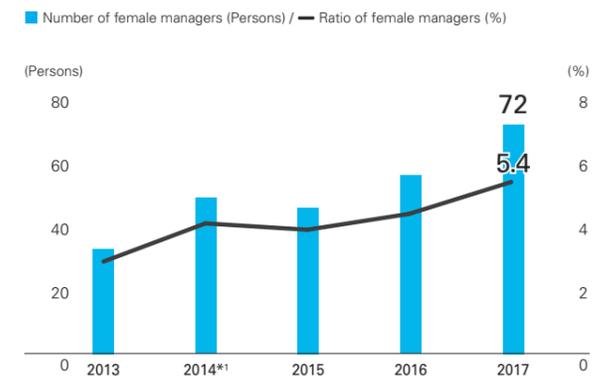
2 GHG Emissions



3 Number of Female Employees / Ratio of Female Employees (Global)



4 Number of Female Employees in Managerial Positions / Ratio of Female Employees in Managerial Positions (Global)



Brief Commentary on Non-Financial Information

1 Frequency Rate of All Occupational Incidents

For Kuraray, which embraces the principle: "Safety is the cornerstone of everything we do," safety is an absolute requirement of its business activities. We consider that realizing "a company where people can work at ease; a company where people can work safely without accidents" is an important theme necessary to keep on stably supplying products and remain trusted by society. Based on such view, the Kuraray Group has established and operates a safety management system and conducts various activities to ensure safety at the workplace. We are promoting various activities to raise the safety awareness of employees and firmly establish safety practices and confirmation as their routine practices when performing work.

2 GHG Emissions

The Kuraray Group is engaged in the corporate activities of producing and providing materials and intermediate materials as its manufacturer on a global basis. In order to reduce the environmental impact of our corporate activities, we believe that the Kuraray Group's mission is to provide materials and intermediate materials that will contribute to the creation of a low-carbon and eco-friendly society and to produce such items with as low an environmental impact as possible. Based on this view, the Kuraray Group, through its global manufacturing, has continuously been working on environmental conservation by promoting global warming prevention measures, management of chemical substance emissions, and effective utilization of waste.

3 Number of Female Employees / Ratio of Female Employees (Global)

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.

*1 Kuraray changed its consolidated closing date from March 31 to December 31 starting from fiscal 2014. The consolidated results for fiscal 2014 cover the nine-month period from April to December 2014 for Kuraray and its domestic subsidiaries and the 12-month period from January to December 2014 for its overseas subsidiaries. The above figure for fiscal 2014 is adjusted to reflect the 12 months from January to December 2014 for the Company and its domestic and overseas consolidated subsidiaries.

*2 Number of occupational incidents requiring at least minor medical attention per million working hours.

To continue providing value to society

Deepen our determination to being a “Specialty Chemical Company, growing sustainably by incorporating new foundational platforms into its own technologies”

At Kuraray, we are actively taking steps based on the “Kuraray Vision 2026” long-term vision to reinforce the platform for achieving business growth as we head toward the centennial of the Company’s founding.

This provides an explanation of our plan going forward under the “PROUD 2020” medium-term management plan, in consideration of Kuraray’s views on providing value to society, an effort that we have been pursuing to date.



Masaaki Ito

Masaaki Ito

Representative Director and President

Kuraray’s Basic Philosophy That Leads to Competitive Superiority

A company is asked what value it can provide to society through its business activities. At the Kuraray Group, we respond to this question through demonstrating actions that are driven by our aspiration, “For people and the planet—to achieve what no one else can.” These words construct our mission as set out in Kuraray’s corporate statements and reflect the strong belief of our second-generation president Soichiro Ohara, “Any profit which a company might gain should be confined to those profits that come from technological innovation and from consideration of the social and economic benefits it brings to the entire nation.”

It was based on 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 became the first textile manufacturer to commercialize *KURALON* (PVA fiber) in 1950 by promoting integrated production using PVA resin as the raw material. And backed by Soichiro Ohara’s view that adopting a substitute for natural things that had the risk of becoming unstable in terms of supply would be comparable to providing added value,

CLARINO man-made leather was developed as an alternative to natural leather, following the launch of *KURALON* as a substitute for cotton. This also led to the development of isoprene rubber as an alternative to natural rubber.

Our focus on proprietary technologies along with our motivation to take on challenges in new field with fortitude has been passed down over the years up to the present day. Kuraray has introduced first-in-the world products, such as *EVAL* gas barrier resin and *GENESTAR* highly heat-resistant polyamide resin. Launching these products required many hours of effort not only for developing production technologies but also for cultivating markets and creating applications.

Kuraray has continued to commit to its roles and duties and persistently worked through and overcame numerous difficulties. Through this process, we have nurtured a technical strength with great originality. Kuraray’s competitive superiority today stands on this technical strength combined with our persistence driven by our philosophy, “For people and the planet—to achieve what no one else can.”

Results and Issues under the Previous Medium-Term Management Plan

In our previous medium-term plan “GS-STEP,” we set out the theme of realizing “a high-profit specialty chemical company with a global presence” and took steps to further deepen our core business and build a business foundation for future growth.

Due to the deceleration of the economy in China and other emerging countries since fiscal 2015, which was the initial fiscal year of the medium-term management plan, the growth in sales slowed down in these regions. As a result, we were unable to reach the targets set for the final year of “GS-STEP”: net sales of JPY650.0 billion and operating income of JPY90.0 billion. However, we posted record highs in operating income for three consecutive periods during the term of the medium-term management plan, and operating profit margin in the final year of the plan increased to 14.4%, exceeding the target of 13.8%.

Kuraray achieved key qualitative results under the medium-term management plan. In the vinyl acetate-related business, the Company’s core business, we put in place a global production structure by establishing a production site in the U.S. for PVA resin with a view to further expanding the business. We

also reinforced our production capacity in line with the growing demand for *EVAL*, water-soluble PVA film and optical-use PVA film, integrated with a vinyl acetate-related business which we acquired from DuPont U.S.A. and created synergies, and steadily implemented other measures.

As part of the effort to establish a next-generation growth model, we took steps to lay a foundation for developing the next pillars after the Vinyl Acetate Business, such as initiating our study toward establishing a new plant in Thailand for our Isoprene Business. Also, in the activated carbon field, we merged our subsidiary Kuraray Chemical Co., Ltd. into the Carbon Materials Division and subsequently decided to acquire the world’s leading U.S.-based Calgon Carbon Corporation. Meanwhile, although we continued to take various initiatives to exploit new R&D themes as a manufacturer of materials, nothing that is ready for commercialization was brought about during the period of “GS-STEP.” In the new medium-term management plan, which will start in fiscal 2018, we will select themes and concentrate resources in an aim to create a new business that can contribute to profit.

Targeted Vision and Basic Policy toward 2026

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. This long-term vision was finalized with recommendations made to management members from a project team composed primarily of young department-head-level employees in Japan and abroad, who will lead the future of the Group.

Our outlook for 2026 indicates changes in the business environment, including major revisions to rules, laws and regulations, emergence of technological innovation and advancement in digitalization on the back of the implementation of information communication networks and AI. We also project an increase in the presence of emerging countries in the economic arena. On the other hand, we may face more environmental and social challenges, such as a shortage of water resources and food.

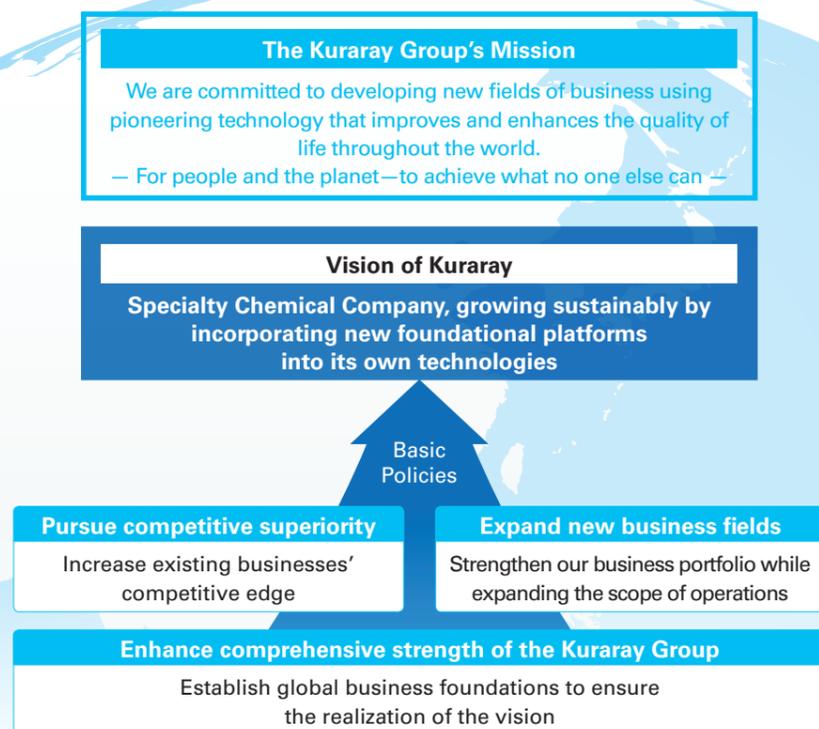
Under such circumstances, the Kuraray Group views that there will be increasing opportunities to apply technical capabilities in chemistry to resolve challenges and problems that might newly arise due to drastic changes that could occur in all types of industries. Meanwhile, we can project a heightening risk that borderless competition will intensify as companies from emerging countries and venture firms make their entries into the market. The Group recognizes the

importance of projecting in advance the changes that might take place in the years ahead, making clear how the Group intends to develop as a business enterprise and then taking respective measures to seize opportunities while responding to risks.

Against this backdrop, we have established the “Kuraray Vision 2026” of being a “Specialty Chemical Company, growing sustainably by incorporating new foundational platforms into its own technologies.” And we have defined three basic policies: “Pursue competitive superiority” to further promote the competitiveness of existing businesses, “Expand new business fields” aimed at expanding of our business portfolio and business domains, and “Enhance the comprehensive strength of the Kuraray Group” to support all endeavors.

As we at the Kuraray Group head toward the centennial of the Company’s founding, we will once again go back to our starting point, which is the aspiration of our second-generation president Soichiro Ohara, and move forward while continually asking ourselves how we can share value with society and take initiatives to realize our goal. The contents of our business activities may change here and there as we pursue our initiatives, but there is no change to the foundation of the Company of being a corporate citizen that is recognized by people and is needed by society.

“Kuraray Vision 2026” Long-Term Vision



Medium-term Management Plan Aims to Make Kuraray a Company That People Can Take Pride In

With the goal of realizing the vision set forth in “Kuraray Vision 2026,” we launched the “PROUD 2020” medium-term management plan in 2018. Based on the key strategies identified—“Pursue competitive superiority,” “Expand new business fields,” “Enhance comprehensive strength of the Kuraray Group” and “Contribute to the environment”—we will aim to achieve our targets in the final year of the plan, fiscal 2020: net sales of JPY650.0 billion and operating income of JPY90.0 billion.

The name of the plan “PROUD” carries our aspiration of becoming a company that all people surrounding the Kuraray Group can take pride in. It also reflects our wish to be a “safe and secure company” in which employees can work to be happy and for which “employees can take pride in working” and of being a “company which continues to grow sustainably by incorporating new foundational platforms into its own technologies.”

Each of the management strategies highlights the direction we should aim for through pursuing initiatives over the three-year period. To pursue competitive superiority, we will actively develop high-value-added products and applications based on customer needs and create new demand. To expand new business fields, we will take a half step ahead from the existing business fields by improving on our own technologies and incorporating external ones. To enhance the comprehensive strength of the Kuraray Group, we will establish global business foundations by adopting a global IT system and building an attractive workplace in which talented employees find their job rewarding. In addition, we will establish more enhanced research centers to reinforce our research & development capabilities to compete in the world and proactively put in place a new training center with a view to enhancing employee training and improving onsite capabilities.

To contribute to the environment, we will provide solutions in the form of products and services to resolve shortages of water, gas emissions and other problems. At the same time, we will take steps to reduce the burden our business activities place on the environment.

In research and development, Kuraray needs to go back to its starting point of being a manufacturer of polymer materials and make reassessments starting from theme selection. Up till now, researchers engaging in R&D activities have led the process of deciding on development themes. Going forward, however, we will closely consider future business endeavors and even synergistic effects that can be expected in connection with our existing businesses and applications and have members of the management team get deeply involved in identifying strong themes. Kuraray has the know-how in polymer processing it has nurtured through engaging in the fibers and textiles business. By leveraging this know-how, we will process high polymers into films, sheets, and fibers and textiles, and focus on processing polymers and developing products with enhanced added value.

Under “PROUD 2020,” we plan to make capital investments amounting to JPY250.0 billion over the three-year period. Of this, approximately 60% is earmarked for strategic investment, including the construction of a new plant for VAM (vinyl acetate monomer) and building a global IT system to increase business profits and reinforce the management platform, and for growth investment aimed at expanding our business. Major growth investment allocations include those to reinforce facilities for optical-use PVA film, water-soluble PVA film and PVB film, construct a new plant for EVAL, and expand production facilities for liquid rubber and dental materials.

While we will continue to actively consider pursuing

promising M&A deals, if any, during the period of "PROUD 2020," our top priority will be placed on promptly generating synergies from the merger with Calgon Corporation with which we completed the acquisition procedure on March 9, 2018 (U.S. time).

As for our financial strategy over the next three years, we project that cash flows from operating

activities in our business will amount to JPY300.0 billion and plan to decide on JPY250.0 billion in capital expenditure. To our shareholders, we will strive to appropriately and stably distribute profits, with a basic policy of targeting a total return ratio of 35% or more and annual dividends per share of JPY40 or higher.

Medium-Term Management Plan "PROUD 2020"



Build a stable business portfolio for the future by executing key management strategies
Developing the Next Pillars after the Vinyl Acetate Business



High-Priority Initiatives in Fiscal 2018 to Ensure Realization of Vision

In fiscal 2018, we expect to expand sales in each of our businesses and increase net sales in all segments. We also anticipate increasing profits except for net income which rose irregularly due to the impact of the U.S. corporate tax cut in the previous fiscal year. In this initial fiscal year of "PROUD 2020," we will uphold our management strategies and carry out initiatives, with a special focus on post-merger integration (PMI) toward creating synergies with Calgon Carbon Corporation.

The business integration with Calgon Carbon Corporation, a global leader in activated carbon materials, is of a different scale compared to our past M&A deals, and we expect that the final organizational structure will be centered on Calgon Carbon's U.S. head office. We believe we can further promote the growth of our activated carbon business by leveraging the strong position Calgon Carbon holds in the activated

carbon industry, accelerating the development of applications with the use of Kuraray's R&D capabilities and analytical technologies and utilizing Kuraray's network in expanding sales in Asia.

In the Isoprene Business, we will push forward with commercialization in Thailand to mitigate the procurement risk associated with raw materials caused by a decline in ethylene crackers in Japan and to realize further business growth on a global basis. During the three year-period of "PROUD 2020," we will open up new markets and create applications, improve the operating rate and production efficiency of the Kashima Plant and initiate operations at the new plant in Thailand in 2021 or thereafter to solidify the foundation toward expanding the business.

Kuraray's Contribution to Mid- to Long-Term Social Issues

Kuraray provides products and services that contribute to resolving medium- to long-term social problems, such as water and food shortages and environmental footprint. The Company hopes to improve the natural environment by not only adopting environmentally friendly production processes, thereby lowering the environmental footprint of its production activities, but also helping customers reduce their burden on the environment in their production activities. As such, we can say that Kuraray leverages the broad possibilities that chemistry has to offer in directly or indirectly helping society to resolve its problems.

In recent years businesses have been actively encouraged to contribute to achieving the Sustainable Development Goals (SDGs) adopted by the United Nations. It is my view that Kuraray already has been carrying out some of these initiatives. Going forward, I intend to make improvements in areas where we need to do more, while considering how the Company should disclose to the world the initiatives it has been taking.

Since it is our people who carry out corporate activities in an aim to resolve these social problems, it is very important to make use of human resources and invigorate our workforce. In our efforts to create a workplace in which each and every employee can "lead a better life," we work to improve our operating efficiency and quality through pursuing workstyle reforms and enhance the work-life balance of employees. In addition, considering that there are still more places, including production sites, in which female workers can play active roles, we are reinforcing initiatives to put in place a working environment with improved schemes for encouraging the active participation of female employees. We believe these

efforts will lead to increasing the number of women in managerial positions.

Meanwhile, given the M&A deals concluded in recent years, the ratio of foreign employees has exceeded 30% and we now have three foreign executive officers. We are establishing personnel systems and education programs to hire globally minded persons and we look forward to more actively appointing foreigners to senior managerial positions.

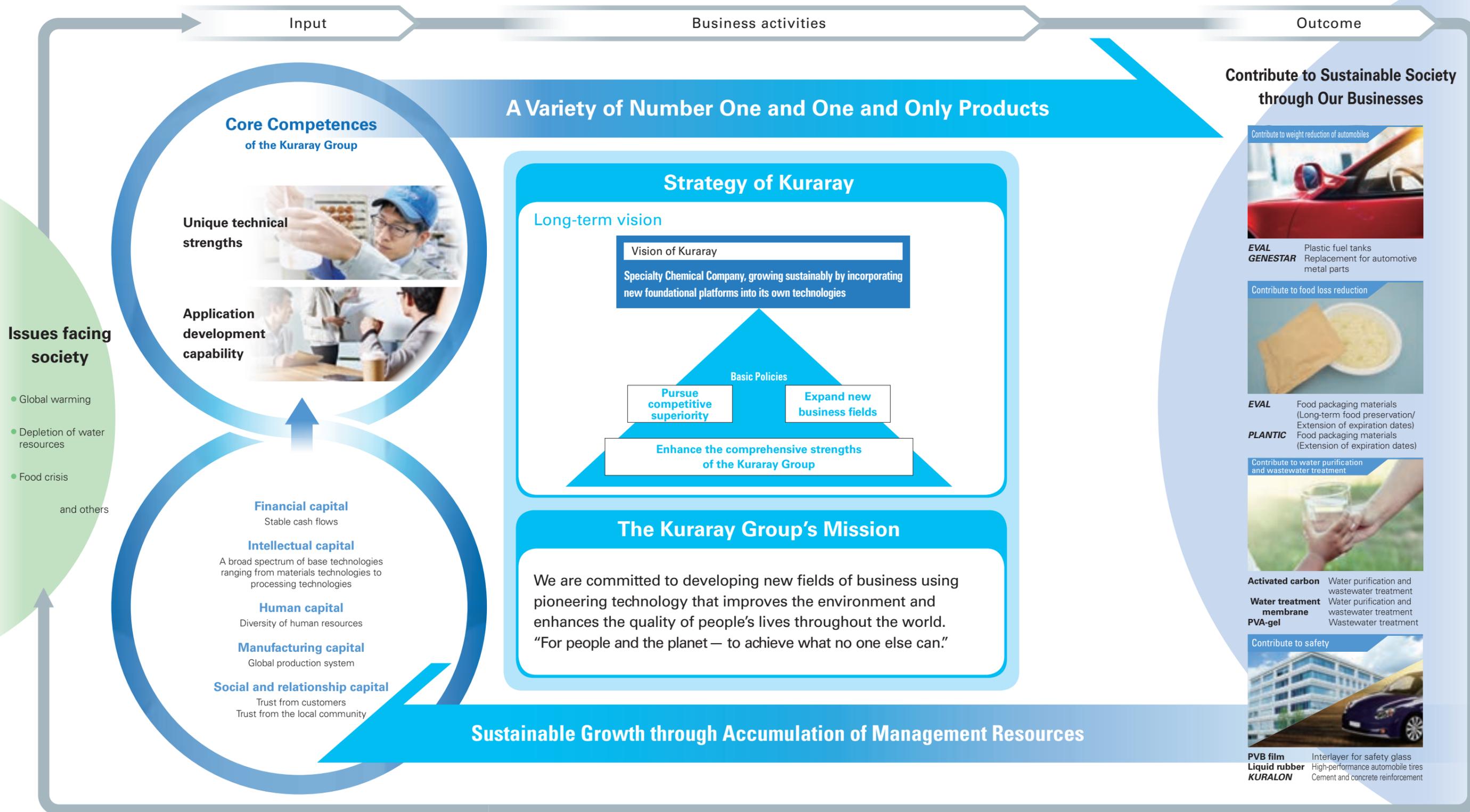
Through pursuing these initiatives, we will aim to realize our vision of being a "company that people can take pride in." To do this, we need to nurture ethics, to raise awareness about compliance and quality improvement. In March 2017, Kuraray received a cease and desist order from the Fair Trade Commission in connection with competitive bidding on textile products purchased by the Acquisition, Technology and Logistics Agency of the Defense Ministry. Also, in February 2017, the Fair Trade Commission made an on-the-spot inspection of the Company in connection with the production and sale of active carbon used in water purification facilities and waste incinerators. We took this series of events seriously and sincerely and have implemented the necessary measures to ensure such incidents are never repeated and have been taking initiatives to ensure compliance. Meanwhile, with regards to quality, we are striving to "constantly develop and provide safe, high-quality products and services" as stated in our corporate statement and continue to take initiatives to step up quality management and quality assurance. We want to be a company with high ethical views that is trusted by society as a good corporate citizen.

From time to time, I share with the rest of the organization my wish to make the Kuraray Group a "safe and secure company," "a company that people can take pride in" and "a company growing stably by incorporating new foundational platforms into its own technologies." For the Kuraray Group to achieve sustainable growth, it is important to share this wish and to have it passed on from one person to another. The philosophy of Soichiro Ohara that any profit which a company might gain should come from its devotion to carrying out duties and providing value to society has been passed down through the generations to the present. With our intention to hand down this approach and the devotion of the Company to future generations as a commitment toward achieving sustainable growth, Kuraray will continue to meet the expectations of its stakeholders.



Value Creation Process of the Kuraray Group

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



At a Glance



World's top market share

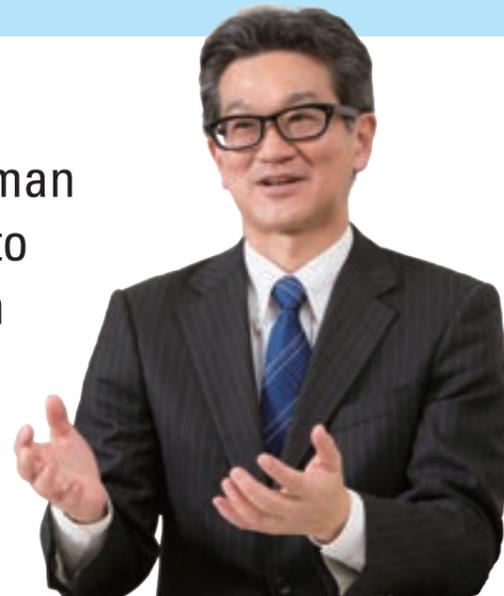


One and only products

Segment name	Percentage of net sales (%)	Net sales (Millions of yen)	Operating income (Millions of yen)	Major products									
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.	43%	253,175 (2016) 266,894 (2017)	58,517 (2016) 61,320 (2017)	KURARAY POVAL, ELVANOL (PVA resin) Global market share: 40% Paper/fiber processing agents, adhesives, stabilizer for polyvinyl chloride polymerization and others TROSIFOL (PVB film and Ionoplast interlayer) Interlayer film for safety glass Optical-use PVA film Global market share: 80% Polarizers for LCDs and others EVAL (EVOH resin) Global market share: 65% Food packaging, automotive fuel tanks, stain-resistant wallpaper, vacuum insulation panels, and others Industrial-use PVA film Single-use packages for detergents and others Plantic (Bio-based gas barrier material) Food packaging materials									
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 polyamide resin with excellent heat resistance.	9%	51,083 (2016) 56,366 (2017)	6,934 (2016) 8,350 (2017)	Isoprene chemicals Cleaner, aroma chemical and cosmetic ingredients, pharmaceutical and agricultural intermediates, and others * One and only products derived from synthetic isoprene (MMB, MPD, etc.) KURARITY (Acrylic thermoplastic elastomer) Adhesives, molding materials and others SEPTON (Thermoplastic elastomer) Global market share: 20% Substitute for rubber, automobile parts, electronic parts, stationary, toys, sporting goods, and others GENESTAR (Highly heat-resistant polyamide resin) Electronic parts of smart-phones and personal computers, LED reflector applications, automobile parts and others									
Functional Materials In this business, we manufacture and sell methacrylate resin, which boasts excellent weather resistance; CLARINO, a man-made leather with a structure and functionality as elaborate as natural leather; dental materials that enable repairs that closely resemble natural teeth; activated carbon, which is used in water and air purification utilizing absorption properties, and others.	11%	67,981 (2016) 69,910 (2017)	4,471 (2016) 7,485 (2017)	Methacrylic resin Light guide plates for LCDs, automobile parts, signboards, construction materials and others KURARAY COAL (Activated carbon) Water purification, wastewater treatment, capacitor electrode materials and others CLARINO (Man-made leather) Global market share: 25% Men's and women's shoes, bags, athletic footwear, large inflatable sports balls and others Dental materials Various organic and inorganic dental materials									
Fibers and Textiles In this business, we manufacture and sell vinyl fiber used as a substitute material for asbestos and for use in automotive brake hose applications, KURAFLEX nonwoven fabric used for lifestyle products and industrial materials, MAGIC TAPE hook and loop fasteners.	8%	48,566 (2016) 51,658 (2017)	5,958 (2016) 6,011 (2017)	KURALON (PVA fiber) Global market share: 100% Reinforcing material for cement and concrete, automotive brake hoses and others *Excluding China VECTRAN (High-strength polyarylate fiber) Aerospace, composites, electronic components, ropes, sporting goods and others KURAFLEX (Nonwoven fabrics) Daily goods, industrial products (wipers, filtration media, automobile applications) and others MAGIC TAPE (Hook and loop fastener) Clothing, sporting goods, industrial materials and others									
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.	20%	119,498 (2016) 128,834 (2017)	3,833 (2016) 3,911 (2017)	Polyester Nonwoven fabrics, industrial materials, woven fabrics, knit fabrics, tents, sheets and others Notice of Change in Business Segments Through fiscal 2017, the Clarino business was included under the Functional Materials segment, but the business will be reported under the Fibers and Textiles segment starting from fiscal 2018. Following the acquisition of Calgon Carbon Corporation, a U.S.-based global leader in the manufacture and distribution of activated carbon products, in March 2018, Kuraray has newly established the Calgon Carbon Division under the Functional Materials segment and integrated Calgon Carbon Corporation into the new business division. It has done this to accelerate the integration of Calgon Carbon into the Carbon Materials business of the Company.									
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 VECSTAR, a liquid crystalline polymer film used mainly for flexible circuit boards.	9%	46,292 (2016) 54,233 (2017)	1,406 (2016) 3,300 (2017)	Aqua business Water purification, wastewater treatment, ballast water management system and others VECSTAR (Liquid crystalline polymer film) High-speed signal transmission flexible printed circuit boards and others <table border="1"> <thead> <tr> <th></th> <th>FY2017</th> <th>FY2018</th> </tr> </thead> <tbody> <tr> <td>Functional Materials</td> <td> <ul style="list-style-type: none"> Methacrylic Medical CLARINO Carbon materials </td> <td> <ul style="list-style-type: none"> Methacrylic Medical Carbon materials Calgon Carbon </td> </tr> <tr> <td>Fibers and Textiles</td> <td> <ul style="list-style-type: none"> KURALON KURAFLEX Fastening </td> <td> <ul style="list-style-type: none"> CLARINO KURALON KURAFLEX Fastening </td> </tr> </tbody> </table>		FY2017	FY2018	Functional Materials	<ul style="list-style-type: none"> Methacrylic Medical CLARINO Carbon materials 	<ul style="list-style-type: none"> Methacrylic Medical Carbon materials Calgon Carbon 	Fibers and Textiles	<ul style="list-style-type: none"> KURALON KURAFLEX Fastening 	<ul style="list-style-type: none"> CLARINO KURALON KURAFLEX Fastening
	FY2017	FY2018											
Functional Materials	<ul style="list-style-type: none"> Methacrylic Medical CLARINO Carbon materials 	<ul style="list-style-type: none"> Methacrylic Medical Carbon materials Calgon Carbon 											
Fibers and Textiles	<ul style="list-style-type: none"> KURALON KURAFLEX Fastening 	<ul style="list-style-type: none"> CLARINO KURALON KURAFLEX Fastening 											

Key Person Interview 1

Coordinating Production and Human Resources Globally with a View to Achieving Further Value Addition



Tomoyuki Watanabe

Executive Officer
 Vice President of Vinyl Acetate Resin Company
 General Manager of Poval Resin Division
 Manager of Poval Resin Sales Management Department

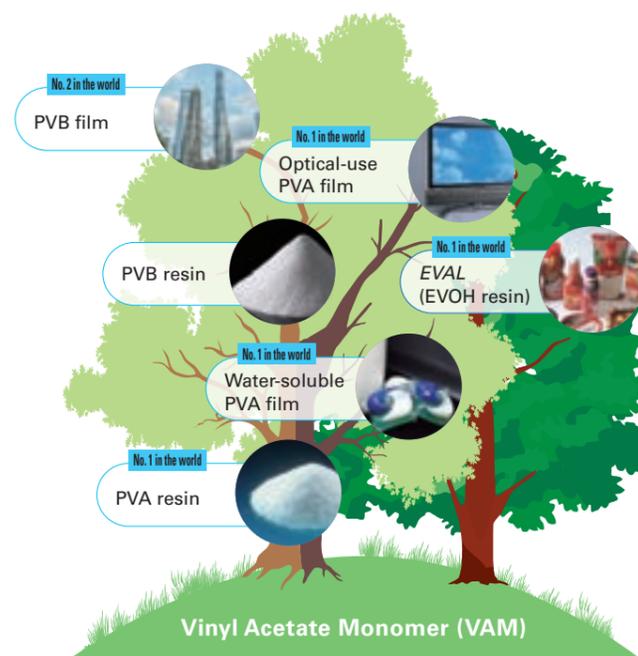
Maintaining the World's Top Share by Exploiting Our Competitive Advantage

2018 is the 60th year since poval resin was brought to the market. It marked the beginning of the challenges faced by Kuraray, originally a synthetic fiber manufacturer, in undertaking the manufacturing and sales of synthetic resin and expanding the scope of business significantly by developing diverse applications of synthetic resin. Kuraray has since then maintained the top market share worldwide for poval resin, its core product.

Kuraray's competitive advantage in poval resin is that we are thoroughly familiar with the needs of customers' industries and have the technological capabilities to promptly meet such needs. We have established cost competitiveness by building a global production structure covering the four regions of Japan, Singapore, Germany, and the United States.

The Vinyl Acetate Segment has maintained a high level of profitability, with operating profit margin at 23.0% for fiscal 2017. Poval resin plays an important role in forming the basis of optical-use PVA film, water-soluble PVA film and PVB resin as their raw material. Kuraray sets prices for external sales by taking a bird's-eye view of the value chain, while working to increase profits through cost reduction and efficiency improvement on the production side.

The Core Vinyl Acetate Material: PVA Resin



Enhancing Global Production Structure with the Full-Scale Launch of the New U.S. Plant

Kuraray has expanded the production structure for poval resin from domestic production at the Niigata Plant and the Okayama Plant to the production base in

Singapore managed by Kuraray Asia Pacific Pte. Ltd., and to Germany in which Kuraray Europe GmbH secured the business base by the Company's acquisition

of the PVA-related business of Clariant AG. Kuraray has expanded further, to the U.S., with the acquisition of the vinyl acetate-related business of DuPont in 2014, securing a U.S. production base operated by Kuraray America, Inc. and with the launch of operations of a new plant in Texas in 2016.

In Japan, the Okayama Plant, with an annual production capacity of 96,000 tons, functions as a mother plant, while the Niigata Plant, with an annual production capacity of 28,000 tons, serves the role of a development-oriented plant, producing high value-added products. Kuraray, while following the standard approach of developing core technologies that will lead to the creation of new added value in Japan and transferring such technologies to plants outside Japan, has also incorporated the technologies of acquired companies and businesses outside Japan and promoted the blending of such technologies with the Group's technologies.

For our global business development, Kuraray, while following the principle of local production for local consumption, concentrates production in the plant with the greatest competitive advantage in regions

where it is beneficial to integrate import and export by taking into account the benefits of Free Trade Agreements (FTAs), etc. However, in accordance with the growing need in recent years for meeting BCP (business continuity plans for use in the event of emergency) requirements, Kuraray has established a production framework of first establishing a main production base at the plant closest to customers and then building up alternative production capacities at other plants.

Poval Resin Annual Production Capacity

Region	Production bases	Production Capacity (tons/year)
Japan	Kuraray Okayama Plant	96,000
	Kuraray Niigata Plant	28,000
Asia	Kuraray Asia Pacific Pte. Ltd. (Singapore)	40,000
Europe	Kuraray Europe GmbH (Germany)	94,000
U.S.A.	La Porte Plant, Kuraray America, Inc.	63,000
	Bayport Plant (new factory), Kuraray America, Inc.	40,000
Total		361,000

Evolving into a True Global Company That Can Generate Cash Flows around the Clock

Looking at the future market outlook, we can expect a growth in poval resin demand by tapping into emerging markets and through horizontal deployment of technologies in developing countries with a focus on the four fields of additives for vinyl chloride resin, coating agents for paper, fiber sizing agents, and emulsion adhesives, which are directly related to the lifestyles of developed countries. We believe this will serve as a source of future growth for us.

In the Poval Resin Business, Kuraray will aim toward higher added value of products under the medium-term management plan "PROUD 2020." In addition, the Company will work to improve the profitability of the overseas businesses by deploying the production line design for high value-added products established at the Niigata Plant to its overseas plants.

Our poval resin production is facing an issue with ensuring product quality uniformity between plants. By achieving a uniform quality of production on a global basis, the Kuraray Group can minimize inventories in the Group as a whole and stably supply products to customers from any of its plants in accordance with BCP requirements.

On the management front, the Kuraray Group will promote sharing of its vision as a global business group among business sites and strengthen mutual coordination and cooperation, working in the same direction.

The Kuraray Group has ensured that management personnel of the Group's affiliates outside Japan have a shared viewpoint through post-M&A alignment. In the three-year period covered by the "PROUD 2020" medium-term management plan, we will work to foster understanding and penetration of our vision among leaders of business sites, and make an effort to incorporate know-how cultivated in each business site with a respect for their cultures and track records. For instance, we will hold discussions and presentations on development themes in which members selected from each business site participate. Through such concrete efforts, we will aim to cultivate human resources who can take the lead in our global operations.

Looking at the current business performance of the Kuraray Group, performance in the affiliates outside Japan is weaker than that in the Group companies in Japan where the ratio of high value-added products is high. However, the Group's businesses outside Japan will undoubtedly be the growth driver in the future. Ideally, the Kuraray Group will build a business foundation for generating cash flows around the clock by further reinforcing coordination and cooperation in the global four-region production structure, with an eye to evolving into a truly global company.

Promoting the Project for the New Thai Plant with an Eye to Establishing the Next Pillar after the Vinyl Acetate Business



Kenichi Abe

President of Isoprene Company,
General Manager of Elastomer Division, Isoprene Company

Toward Expanding the Isoprene Business and Stabilizing Procurement of Raw Materials

For Kuraray, the Vinyl Acetate Business accounts for nearly 50 percent of its net sales and the Isoprene Business is positioned as one of its next pillar after the Vinyl Acetate Business. In reality, sales of isoprene-related products are currently only about one-fifth of sales of vinyl acetate products. However, the isoprene market, where Kuraray is a dominant player, has only a few market players, and isoprene-related products have great growth prospects with large application potential as fine chemicals. By enhancing the production capacity to meet the demand appropriately, there is sufficient scope for us to drive sales of the Isoprene

Business to more than JPY100 billion.

Isobutylene procured from a domestic petrochemical company is used as a raw material for producing isoprene at the Kashima Plant. However, the supply of isobutylene, a by-product of ethylene production, has reached its limit. Butadiene, as another main raw material, has limitations in terms of its procurement from domestic sources, and therefore we are relying on imports from South Korea and other countries. Therefore, our acquisition of butadiene is not stable, either.

With these factors as the background, Kuraray, in an

effort to expand the Isoprene Business and stabilize procurement of raw materials, began a feasibility study on the manufacturing and sales of butadiene derivatives in September 2016. This was done jointly with PTT Global Chemical Public Company Ltd. (hereinafter, "PTTGC") and Sumitomo Corporation, and we signed a joint venture agreement with these companies in March 2018. Based on the agreement, the

three companies will jointly build a production plant for highly heat-resistant polyamide resin PA9T and hydrogenated styrenic thermoplastic elastomer in Thailand, with its launch targeted for fiscal 2021 or thereafter. Kuraray will also produce MPD (methyl-pentanediol), an isobutylene derivative, on its own at the new plant in Thailand.

Three Years' Efforts toward Starting up the New Thai Plant

The new Thai plant will have an annual production capacity of 13,000 tons for highly heat-resistant polyamide resin PA9T, 16,000 tons for hydrogenated styrenic thermoplastic elastomer, and 5,000 tons for MPD. We plan to expand sales globally with a focus on fast-growing Asian markets, including Thailand, Southeast Asian countries, China, and India. The roles of the three companies in the joint venture are that PTTGC will supply competitive raw materials and utilities, Sumitomo Corporation will bring together its marketing channels, and Kuraray will utilize its manufacturing technologies and application development capabilities.

As described above, the new Thai plant will be launched in fiscal 2021 or thereafter and thus will not make a profit contribution to the "PROUD 2020"

medium-term management plan, and the three years covered by the plan will be the time to prepare for starting up the new plant. What we need to do is to raise the capacity utilization rates of the Kashima Plant and other existing plants to their maximum levels by 2021 to prevent any decline in their capacity utilization due to the start-up of the new plant.

During the three-year medium-term management plan period, we will also conduct activities such as developing new butadiene derivative products other than highly heat-resistant polyamide resin PA9T, developing new applications of hydrogenated styrenic thermoplastic elastomer, and creating a new application of isoprene chemicals such as in oil drilling. We will do this to create new markets and new applications with an eye toward the start-up of the new Thai plant.

Increasing Profitability by Promoting the Shift to High Value-Added Products

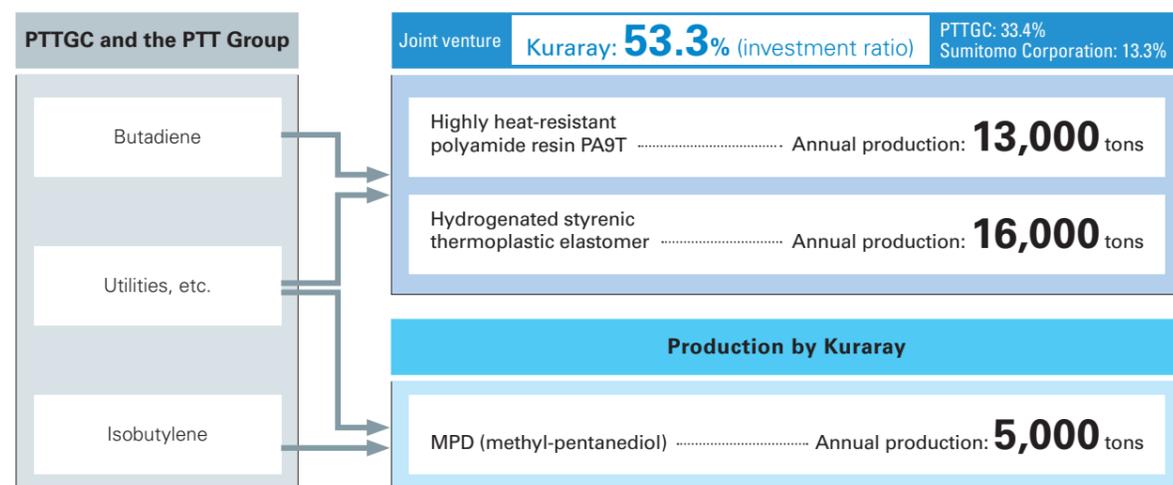
The operating income margin of the Isoprene Business has been increasing and remaining at high levels in recent years, rising from 8.6% in fiscal 2012 to 14.8% in fiscal 2017. The strong growth in profit margin can be explained by the high profitability of the business as well as the absence of large investments for some time. Therefore, we expect to maintain the same level of operating income margin for the three years covering "PROUD 2020." Meanwhile, operating income margin will decline temporarily in fiscal 2021 and thereafter due to depreciation of the new Thai plant. However, we will stably keep the operating income margin of at least 10% and aim to increase profitability by expanding production by leveraging competitive advantages in the procurement of raw materials and promoting the shift to high value-added products.

A yardstick of determining whether the Isoprene Business has become the next pillar after the Vinyl

Acetate Business will be achieving net sales of JPY100 billion. We expect to do this once the new Thai plant starts running at full capacity. As for highly heat-resistant polyamide resin PA9T, our unique product, we will aim to open up new markets by focusing on expanding automotive applications, such as automotive electric equipment components, and developing new polymer products. For hydrogenated styrenic thermoplastic elastomer, for which Kuraray currently holds the second-largest share in the world at nearly 20%, we will place importance on increasing value addition rather than expanding sales volume, in an effort to develop a sophisticated product portfolio by pursuing high functionality of the product.

We will work to extend the possibilities of the Isoprene Business and make progress toward growth globally.

Overview of the New Plant in Thailand



Aiming for a Better Life by Increasing the Workplace Motivation of Individual Employees

Kazuhiko Kugawa

Director and Primary Executive Officer
Officer Responsible for Administration Unit



Long-Standing Corporate Culture of “Valuing People”

In Kuraray’s basic approach to human resources, “respect for individuals,” which is one element of the philosophy set out in the Group’s Corporate Statements, constitutes an important component. Under this philosophy, Kuraray has fostered a corporate culture of “valuing people” over many years.

Since the 2000s, Kuraray has acquired operations outside Japan to accelerate global business development. The acquired businesses take pride in their corporate cultures that have been cultivated until the time of acquisition, so it takes some time for them to blend in with us. Based on such understanding, we communicate, and promote the understanding and penetration of, Kuraray’s philosophy expressed in the Corporate Statements among the acquired businesses, while paying respect to their corporate cultures.

Kuraray manages business operations of those subsidiaries outside Japan. Meanwhile, we have respected their autonomy in human resource management in view of differences among regions and countries. In order for the Group to globally extend the scope of human resource management, it is necessary to establish personnel evaluation criteria shared across the Group. Accordingly, we introduced a global human resource management system in 2017. In line with this system, Kuraray has standardized grading (job ranks) and is promoting the global sharing of various personnel systems by making clear the desired human resources. Kuraray will improve the human resource management system to further utilize its human resources.

Work-Style Reforms toward “Leading a Better Life”

Kuraray is making an effort for work-style reforms as a priority issue in human resource management in Japan. In July 2015, President Ito, in his message, called on all the employees to give thought to how they should work to “lead a better life,” and laid out guidelines designed for the individual employees to find their work satisfying. This message from the President has since been disseminated on occasions when employees gather, and specific initiatives for work-style reforms have been launched in accordance with the guidelines in Japan since 2016.

We started by stocktaking operations. Specifically, each department has identified waste and started with

reducing the number of meetings and their durations. In addition, we distributed the “Kuraray Shigotojutsu Handbook” (work skills handbook) designed to improve operational efficiency and reduce work burden to promote a change in the mindset of employees. We also introduced a “no overtime week” on a trial basis, aimed at preventing long work hours by urging employees to re-examine their ways of working, and plan to introduce the program on a full-scale basis from 2018. Kuraray will endeavor to further increase productivity by enhancing the work-life balance of each employee through a better work environment.

Message from the President (July 2015)

Keep a good “work style” to “lead a better life.” Time is a precious asset bestowed on all people. I believe it is extremely important for all employees to work within a given time, to foster family members and households, to build relationships with communities and to aim at personal growth. Redesign your “work style” to “lead a better life.” Let each person in each workplace make the most of the given time and pursue creation of value and personal growth to “feel job satisfaction.”

The ideal work styles

- 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 whole workplace.
- Keep in mind to get refreshed and stay in good physical condition to gear up for your next work day.

Employment of Female Employees, Expansion of Their Responsibilities, and Improvement of Their Retention to Promote Their Active Participation

In the initiatives for promoting the diversity of human resources, Kuraray has adopted the aforementioned global human resource management system, while embracing the active participation of female employees as a priority theme.

Kuraray has constantly employed female employees in career-track positions since 1999, and the employment ratio of females to males is currently about 25%. Kuraray will aim to increase this to 30%, while striving to expand the job responsibilities and improve retention of female employees. We will try to link this effort to the active promotion of female employees to managerial positions.

In this regard, the Company has faced an issue that female employees cannot easily plan their career path due to lack of active female role models. To address this issue, Kuraray is working to improve the motivation of female employees for career advancement by enhancing the system to support balanced work and family responsibilities and taking measures such as providing group training for female employees who are in the rank next to managerial positions.

Needless to say, the above-mentioned effort for work-style reforms is also an essential initiative for promoting active participation of female employees.

Kuraray Will Work toward Creating a Motivating Workplace during the Three-Year Period

Under the “PROUD 2020” medium-term management plan, Kuraray has designated “workplace,” as well as “society” and “environmental safety,” as the core themes. It has set out “creating a workplace in which employees find their job rewarding” as an action item designed to enhance the comprehensive strength of the Kuraray Group in its management strategies. Kuraray will implement diverse measures over the course of the three years covered by the plan, in order to raise the retention rate of the Group’s employees in Japan.

Specifically, we will take companywide initiatives for creating an open communication work environment by utilizing the mentor program by which employees’

complaints about their workplaces are solicited by employees in other departments who are close in seniority, and providing training for personnel in managerial positions to facilitate smooth and good communication with subordinates. In terms of systemic improvement, we will introduce homeworking and flextime systems on a full-scale basis and adopt a rest/recovery interval between work periods, etc.

Kuraray will continue to work toward creating a workplace in which employees find their job rewarding and supporting employees to achieve a good work-life balance and personal growth, in order to link the efforts to the development of its businesses.

Kuraray's Transformation into a Company with a Global Mindset by Expanding Its Global Business through Successful M&As



Matthias Gutweiler

Senior Executive Officer
President, Kuraray Europe GmbH

Kuraray's Global Mindset Seen from Europe

I joined the Kuraray Group in connection with the business acquisition in 2001. At the time, Kuraray gave me the impression of being a typical Japanese firm. Soon after that, I came to realize that Kuraray was a company that set out extremely high ethical standards and put those standards into practice. And today, I truly feel Kuraray has transformed itself into a firm with a global mindset through expanding its global business over the past dozen or so years.

Looking at Kuraray from Europe, the Company is a chemicals supplier that can view customer relationships from a long-term perspective and provide value to each customer as a business partner. Kuraray has earned high recognition and trust from numerous customers in Europe.

Also from a European viewpoint, it is critical that Kuraray recognizes the importance of sustainability and response to the environment and meets the respective standards. European manufacturers are seeking partners for developing clean and sustainable products and midsize manufacturers of chemical products are undertaking that role. Only chemical manufacturers that maintain high ethical standards and are determined to protect people and the environment can continue to take on that role. Kuraray is widely known in the European market as a development partner that fulfills those conditions at a high level.

Kuraray's global business expanded primarily through M&As and the net sales of its business outside Japan grew to as much as 64% in fiscal 2017. Although M&As statistically have high failure rates, it is the Company's stance to look at business growth from the long-term perspective, pursue investment while giving the acquired company discretion in management, and take initiatives that show respect for

people working that enabled Kuraray to continue carrying out successful acquisitions.

The percentage of foreign staff is inevitably increasing in the Group and it will be a key challenge for the Company going forward to appoint such foreign staff to highly responsible positions and see them perform.

I believe that localization of management by local human resources is the key to success in a global business where we are expected to respect other cultures and understand the differences in business practices, ways to approach people, and market needs depending on each country or region.

KEG's Challenges in the Medium-Term Management Plan

Contributing to "PROUD2020" medium-term management plan is a priority management challenge for KEG. I believe we can contribute significantly to the management strategies relating particularly to "U" = Unique Products & Services and "D" = Diversity, among the five elements set forth in "PROUD2020."

The products and services that customers desire have become increasingly diverse compared to those in the market 10 to 15 years ago. Under such circumstances, we operate on a policy of not limiting ourselves to value creation through new development but to combine unique products and services and adopting more advanced marketing methods to stir new demand in the market with a view to providing the value expected by customers. At the same time, we promote operational excellence through advancing digitalization and automation for our operating processes, from maintenance, future projections,

procurement of raw materials, and utility related to production to customer services so that we can respond to the growing needs and technical requirements of customers.

By taking these initiatives, we work to strengthen our marketing and support for developing markets, such as Africa, the Middle East, and Eastern Europe, and intend also to widen the group products we handle.

Meanwhile, in terms of "diversity," I feel it is important that we fully demonstrate the potential of a diverse group of employees at KEG. We are focusing particularly on promoting programs to enhance leadership skills and supporting our female workers in managerial positions. I believe that promoting diversity is inevitable also to realize our long-term vision, "Kuraray Vision 2026."

Expectations for a "Special and Unique Chemical Manufacturer"

We believe Kuraray is a chemical company with strengths in materials technology and development capability. Taking a long-term perspective for customers, Kuraray prioritizes providing a wide array of solutions for manufacturing. Customers expect us to stand on a partnership where they can identify their essential needs by holding discussions on technology with Kuraray and work together to create a technology to realize those needs.

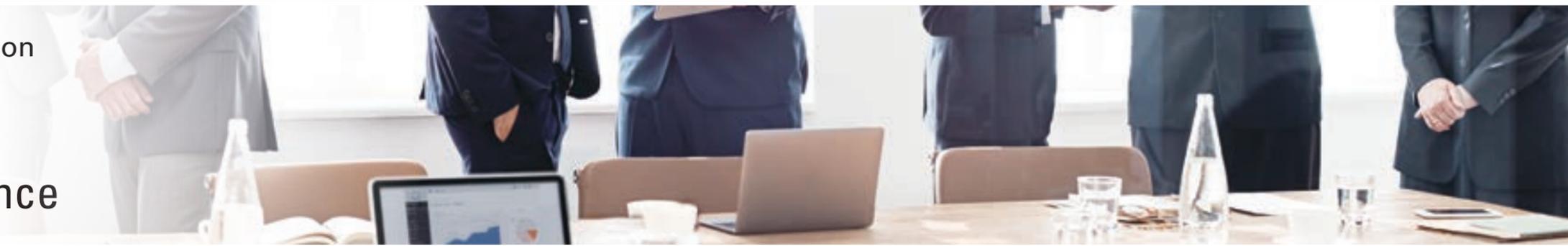
As for Kuraray's long-term vision, I personally hope that the Company will continue to be a special and

unique chemical manufacturer. Even if our net sales were to increase to 10 billion dollars because of future M&As, Kuraray would still be a midsize firm in the chemical industry. Yet I believe that Kuraray can achieve sustainable growth in the future too by pursuing attractive segments in niche fields, building a network of highly talented experts, and contributing to problem-solving and increasing value for customers. KEG will continue to contribute to Kuraray's endeavors to evolve into a truly global company.

Overview of Kuraray Europe GmbH

Company name	Kuraray Europe GmbH
Head office	Hattersheim, Germany (Near Frankfurt)
Representative	Matthias Gutweiler
Number of employees	676 (As of December 31, 2017)
Net sales	€763 million (Fiscal 2017)
Total assets	€656 million (As of December 31, 2017)
Business lines	Import, export and sale of textile products and chemicals; manufacture and sale of PVA resin and PVB resin/film
Production bases	PVA resin, PVB resin: Frankfurt, Germany PVB film: Troisdorf, Germany

Corporate Governance



Basic Approach to Corporate Governance

The Company believes that maintaining appropriate relationships with various stakeholders and fulfilling social responsibilities through establishing a corporate governance system that ensures effective and fair management will contribute to the long-term and sustainable enhancement of corporate value.

The Company has adopted the governance system as “a company with a board of corporate auditors.” Under this framework, the Company has established a corporate governance mechanism centered on its Board of Directors and Board of Corporate Auditors to

improve the effectiveness of the 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.

By establishing this mechanism as described above, the Company believes that the effectiveness of the supervisory and monitoring mechanism will be improved, while maintaining management efficiency, contributing to the long-term and sustainable enhancement of corporate value.

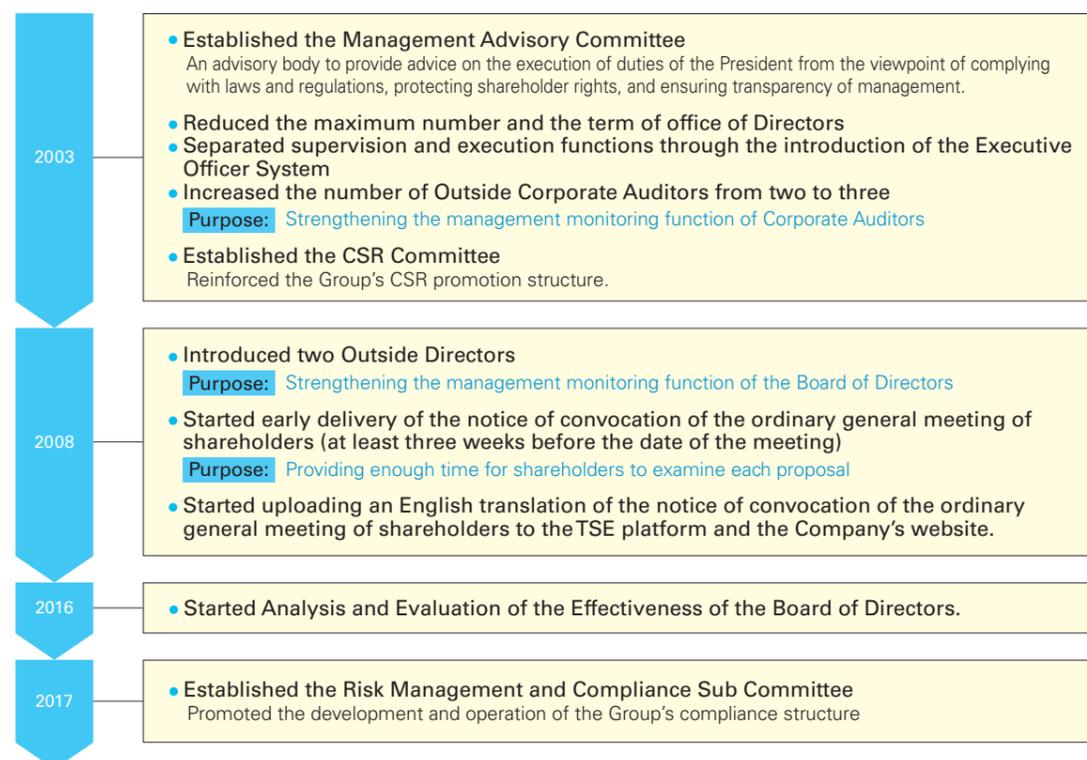
Kuraray’s Steps to Strengthen Corporate Governance

The Company has worked continuously to strengthen corporate governance by taking steps, such as establishing the Management Advisory Committee, 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, and Analysis and Evaluating of the Effectiveness of the Board of Directors.

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



Key Points of Corporate Governance of the Kuraray Group

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

- 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.
- The Company has been appointing Outside Directors since 2008, and two Outside Directors are in office.
- The Company has established the Management Advisory Committee as a discretionary committee corresponding to a nomination committee or remuneration committee. In it, Outside Corporate Auditors and outside experts, etc. provide advice to the President on such matters as resignation of the President, candidates for the successor, remuneration, important management policies, and management issues.

Corporate Governance System

■ The Board of Directors and Business Execution Body

The Board of Directors (convenes at least once a month) according to the Board of Directors’ Regulations and deliberates and decides important management matters, including legal matters, and supervises the execution of business. The maximum number of Directors is set at 12, with the aim of promoting agile management decision-making by the Board of Directors, and the term of office of Directors is set at one year to clarify their responsibilities to the shareholders. There are currently nine incumbent Directors including two Outside Directors who have abundant experience in and broad insight into economy, finance, and management and other fields. These two Outside Directors take on the role of overseeing the 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 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 business execution results of operations. In this way, the Company clearly separates the responsibilities of Directors, that is, decision-making and supervision on the 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 comprising of four males and one female, including three independent Outside Corporate Auditors. The current number of Corporate Auditors is five, including three Outside Corporate Auditors who have extensive experience in and broad insight into areas such as finance, law and management and 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’ performance of duties through inquiries conducted by such means as examining important documents and receiving explanations on the status of business operations. 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 and the implementation status and content of audit. Also, they receive reports on the internal audit result by the Internal Auditors Office (consisting of nine members). The Corporate Auditors also serve as corporate auditors of core subsidiaries to

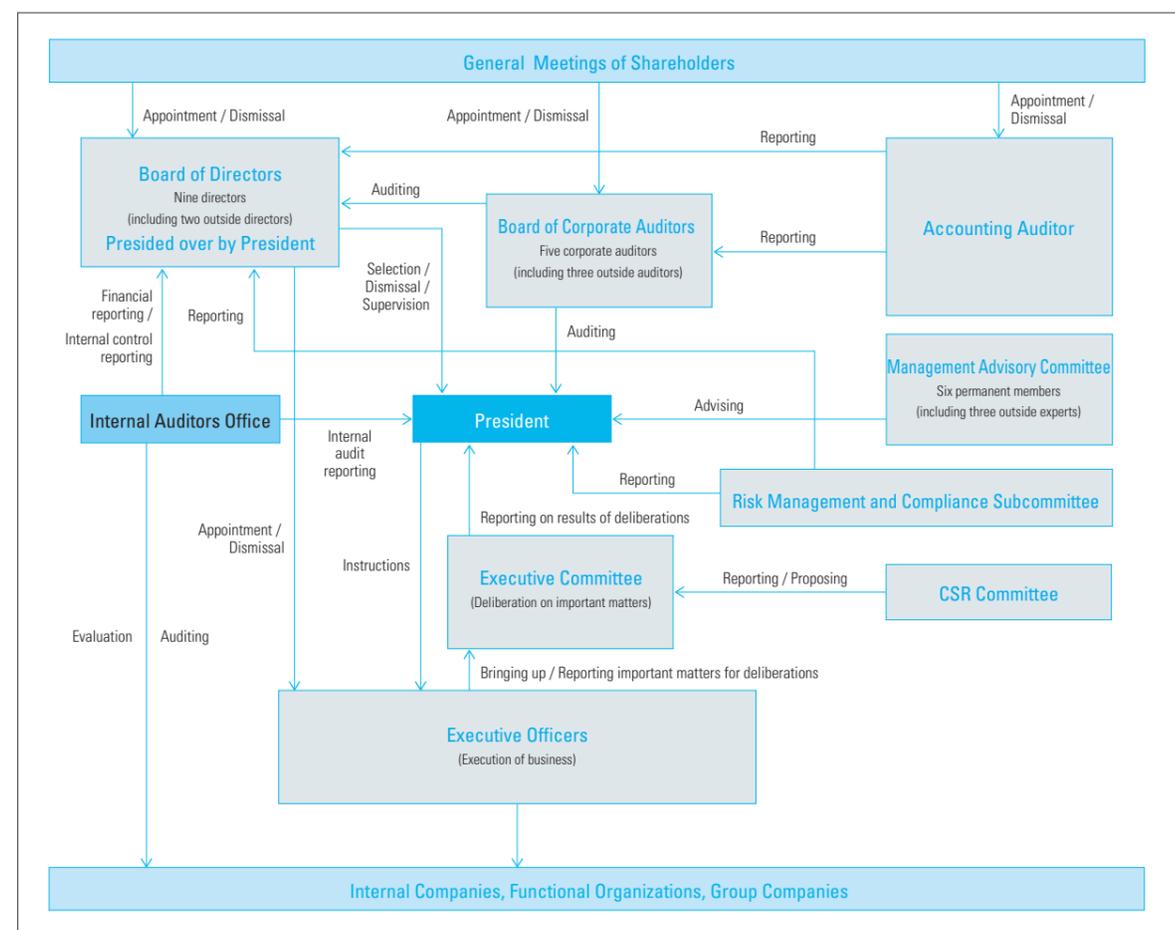
conduct subsidiary audits as needed and attend the Group Auditor Liaison Meeting, which consists of corporate auditors of the Group companies and is held periodically and obtain information about each Group company through the meeting.

The Management Advisory Committee

As an advisory body to provide advice on the execution of duties of the President from the viewpoint of complying with laws and regulations, protecting shareholder rights, and ensuring transparency of management, the Management Advisory Committee has been established. Currently, the Committee is comprised of six permanent members; three outside experts with abundant experience and broad expertise in

economics, finance, management, etc.; one Inside Director (President); and two other members (Advisor, Outside Corporate Auditors). Chaired by the Advisor, the Committee is, in principle, held twice a year to provide advice to the President on such matters as important management policies, management issues, resignation of the President, candidates for the successor and remuneration, etc.

Corporate Governance System (As of March 23, 2018)



Policies for the Appointment of the Candidates for Directors and Corporate Auditors and the Independence Standards for Outside Officers

Policies for the Appointment of the Candidates for Directors and Corporate Auditors

(1) The Company appoints individuals who have experience, knowledge and capabilities required for Directors of the Company as candidates at the Board of Directors meeting with the attendance of Outside Directors and Outside Corporate Auditors (hereinafter, "Outside Officers"), and elect them as Directors with the resolution of the General Meeting of Shareholders. However, the candidates for Outside Directors shall satisfy the criteria of independence provided separately.

(2) The Company appoints individuals who have experience, knowledge and capabilities required for Corporate Auditors of the Company as candidates at the Board of Directors meeting with the presence of Outside Officers and elects them as Corporate Auditors with the resolution of the General Meeting of Shareholders after obtaining the consent of the Board of Corporate Auditors. However, the candidates for Outside Corporate Auditors shall satisfy the criteria of independence provided separately.

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 Company and its subsidiaries (hereinafter collectively referred to as the "Group");
- (ii) A counterparty which has transactions principally with the Group or a business executive thereof;
- (iii) A major business partner of the Group or a business executive thereof;
- (iv) A major lender of the Group or a business executive thereof;
- (v) A counterparty that receives a large amount of donations from the Group or a business executive thereof;
- (vi) A major shareholder of the Company (who possesses 10% or more of the total voting rights either directly or indirectly) or a business executive thereof;
- (vii) A business executive of a party whose major investor (who possesses 10% or more of the total voting rights 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 (ii) through (ix) in the past three years;
 - (xii) A person who belongs to a company which has a relationship with the Company of interlocking Outside Officers; and
 - (xiii) A relative of the person listed in the above criteria (i) through (xi)
- (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 personality, knowledge and other qualities, the Company may appoint him/her as independent Outside Officer on condition that the reasons that the person is deemed appropriate for the post will be explained to the public.

Directors' Remuneration System

Policies for Determining the Remuneration for Directors

(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 extent of the maximum 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 upon deliberation at the Management Advisory Committee comprised of Outside Corporate Auditors 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

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 net income attributable to owners of the parent for the prior fiscal year by a predetermined coefficient. The performance-linked remuneration for Directors shall be

Remuneration-Type Stock Option Scheme

The Company abolished the severance and retirement benefits system for Directors in July 2006 and introduced a remuneration-type stock option scheme that entails the issuance of share acquisition rights for the purpose of further boosting Directors' motivation and morale towards improving the Company's performance. The maximum amount of stock option-based

conjunction with the improved business performance, it was resolved to increase the maximum amount of annual remunerations to Directors to ¥800 million from ¥450 million (including ¥100 million annually for Outside Directors) at the Company's 131st Ordinary General Meeting of Shareholders held on June 22, 2012.

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.

remunerations under this scheme shall be set at ¥90 million, separately from the maximum amount of annual remunerations to Directors. The number of share acquisition rights to be granted shall not exceed 120 units each year (the number of common stock to be issued upon exercise of share acquisition rights shall not exceed 60,000 shares each year).

Corporate Officer Remuneration for Fiscal 2017

Director classification	Total amount of remuneration, etc. (Millions of yen)	Total amount by type of remuneration, etc. (Millions of yen)		Number of eligible officers (persons)*1
		Monetary remuneration	Stock option-based remuneration*2	
Directors (excluding Outside Directors)	533	471	62	10
Corporate Auditors (excluding Outside Corporate Auditors)	50	50	—	2
Outside Officers	59	56	3	5

*1 The above number of eligible Directors and Corporate Auditors include two Directors who retired at the close of the 136th Ordinary General Meeting of Shareholders held on March 24, 2017.

*2 Separately from the above stock option-based remuneration, share acquisition rights amounting to ¥29 million were granted to Directors who concurrently serve as Executive Officers (eight Directors) as stock option-based remuneration for Executive Officers.

Evaluation of the Effectiveness of the Board of Directors

Analysis and Evaluation of the Effectiveness of the Board of Directors

(1) Analysis and evaluation method

The Company distributed "Questionnaire on Effectiveness of the Board of Directors" (non-anonymous) to all the Directors and Corporate Auditors in December 2017 and collected responses and opinions from all members in January 2018. The secretariat of the Board of Directors compiled the responses, and analyzed and evaluated the effectiveness of the Board of Directors based on the data.

Questionnaire items:

- Structure of the Board of Directors
- Operation of the Board of Directors
- Agenda of the Board of Directors
- Systems outside 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

ensured in all aspects, such as its size, composition, diversity, agenda selection, scope of matters to be discussed or reported, timing for scheduling the Board of Directors meetings, frequency of the meetings, operation 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.

Furthermore, proposals made during the evaluation last year for the purpose of enhancing the effectiveness of the Board of Directors, namely, "the timing of materials distribution" and "content and quality of materials," were confirmed to have improved through efforts such as ensuring distribution of materials in advance, and preparation of written summaries of proposals.

Based on the results of this evaluation, the Company will examine and implement necessary measures in the future to make discussions more lively and productive at the Board of Directors meetings.

Message from Outside Director

Accelerating Growth Through External Contacts to Establish the Second and Third Pillars after the Vinyl Acetate Business

As an outside director, my policy is to check the management of Kuraray from the viewpoints of "What decision would I make if I were the President of Kuraray?" and "Hasn't the common practice at Kuraray deviated from that in society?" I try to provide advice to the Company by always considering "What is missing at Kuraray?"

From my experience of working in the information and communications industry where technologies and markets change rapidly, I see that Kuraray is a company that has cultivated engineers and developed unique products over time. It has done this by placing importance on its corporate culture of valuing unity within the Company. However, in order for Kuraray to establish the second and third pillars after the Vinyl Acetate Business with a sense of speed, which is its growth challenge, I believe the Company needs to compensate its weakness through external contacts, such as cross-industrial association and open innovation-oriented development.

The meetings of Kuraray's Board of Directors are a



Tomokazu Hamaguchi

Outside Director

place for unfettered discussion with outside directors and outside corporate auditors, including myself, actively providing opinions and advice. In addition, Kuraray takes active stances on strengthening communication and relationships with shareholders, as can be seen from the question and answer session at the General Meetings of Shareholders. I will continue contributing to enhance the corporate value of Kuraray as an outside auditor.

Message from Outside Corporate Auditor



Mie Fujimoto

Outside Corporate Auditor,
Permanent Member of the Management Advisory Committee

Dealing with Compliance Risks of Global Subsidiaries to Achieve Growth and Development as a Global Company

corporate auditors complementing standing corporate auditors based on the experience, etc. acquired in other sectors and industries.

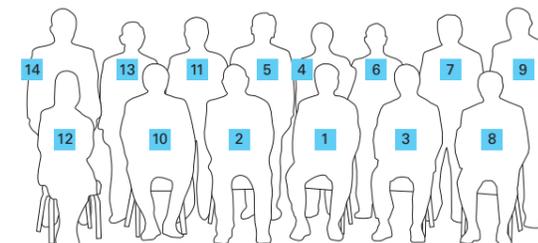
I'm a lawyer specialized in labor laws. And I'm making use of my experience of dealing with labor-related corporate issues and knowledge on building and administering global governance I acquired through my involvement with foreign-affiliated corporate clients in the audit operations and the Management Advisory Committee at Kuraray.

Through the audit operations of the Kuraray Group, I had the impression that Kuraray is an honest, clean, and open corporate group. Unfortunately, violations of the antimonopoly act occurred. The Board of Corporate Auditors has since been focusing on monitoring thorough compliance with the antimonopoly act by setting it as one of the top priorities in the audit operations, and I evaluate that Kuraray is seriously taking measures to prevent recurrence on a company-wide basis.

Management of compliance risks at bases outside Japan, such as corruption prevention and bribery prevention for which regulations are tightening globally, will become more important down the road. I expect that Kuraray will achieve sound growth and development as a truly global company by taking further measures to deal with such compliance risks.

Outside corporate auditors share a common role with outside directors in that we both supervise the management of the company from the viewpoint of outsiders. On the other hand, the duties of outside corporate auditors are very different from those of outside directors and include routinely exchanging opinions with standing corporate auditors and conducting visiting audits to domestic and overseas bases in cooperation with standing corporate auditors. Many of Kuraray's standing corporate auditors have served important positions at business divisions and have a deep and accurate understanding of management issues. The Board of Corporate Auditors is functioning with outside

Executives (As of March 23, 2018)



Board of Directors

1 **Masaaki Ito**
(Date of birth: June 23, 1957)
 Representative Director and President

2 **Sadaaki Matsuyama**
(Date of birth: October 18, 1950)
 Representative Director and Primary Executive Officer
 ● President of Fibers and Textiles Company, Officer Responsible for Osaka Head Office

3 **Kazuhiko Kugawa**
(Date of birth: January 22, 1954)
 Director and Primary Executive Officer
 ● Officer Responsible for Administrative Unit

4 **Hiroaya Hayase**
(Date of birth: February 28, 1956)
 Director and Primary Executive Officer
 ● President of Vinyl Acetate Film Company

5 **Kazuhiro Nakayama**
(Date of birth: January 1, 1956)
 Director and Senior Executive Officer
 ● Officer Responsible for Technology Division, Plants in Japan, and Environmental and Industrial Safety Management Center

6 **Kenichi Abe**
(Date of birth: May 3, 1956)
 Director and Senior Executive Officer
 ● President of Isoprene Company, General Manager of Elastomer Division, Isoprene Company

7 **Yoshimasa Sano**
(Date of birth: April 12, 1956)
 Director and Senior Executive Officer
 ● President of Functional Materials Company, General Manager of Carbon Materials Division, Functional Materials Company

8 **Tomokazu Hamaguchi**
(Date of birth: April 20, 1944)
 Outside Director (Independent Director)
 Apr. 1967 Entered Nippon Telegraph & Telephone Public Corporation
 Jan. 1982 Senior Manager, DATA Communication Division, Shikoku Telecommunication Bureau, Nippon Telegraph & Telephone Public Corporation
 Feb. 1984 Senior Manager, Administration Division, Data Communication Bureau, Nippon Telegraph & Telephone Public Corporation
 Jul. 1988 Senior Executive Manager, Purchasing Department, NTT Data Communications Systems Corporation
 Jul. 1990 Senior Executive Manager, Industrial System Division, Industrial Systems Sector, NTT Data Communications Systems Corporation
 Jun. 1995 Senior Vice President Senior Executive Manager, First Industrial Systems Division, Industrial Systems Sector, NTT Data Communications Systems Corporation
 Jul. 1996 Senior Vice President Senior Executive Manager, Corporate Strategy Planning Department, NTT Data Communications Systems Corporation
 Jun. 1997 Executive Vice President Senior Executive Manager, Public Administration Systems Sector, NTT Data Communications Systems Corporation
 Jun. 2001 Senior Executive Vice President, NTT DATA CORPORATION
 Jun. 2003 President & CEO, NTT DATA CORPORATION
 May 2007 Chairman, Japan Information Technology Services Industry Association
 Jun. 2007 Director & Senior Corporate Advisor, NTT DATA CORPORATION
 Apr. 2008 Board Director, IHI Corporation
 Jun. 2009 Senior Corporate Advisor, NTT DATA CORPORATION
 Jun. 2010 Director, East Japan Railway Company (Current position)
 Apr. 2011 Chairman, Japan Data Management Consortium
 Jun. 2013 Director, Kuraray Co., Ltd. (Current position)
 Oct. 2014 Senior Advisor, NTT DATA CORPORATION
 Director, FPT Corporation (Current position)

9 **Jun Hamano**
(Date of birth: February 27, 1951)
 Outside Director (Independent Director)
 Apr. 1974 Entered Economic Planning Agency of Japan
 Jul. 1999 Director, Minister's Secretariat Division, EPA
 Jan. 2001 Director, Personnel Division, Minister's Secretariat, Cabinet Office
 Jan. 2002 Deputy Director General for Economic and Fiscal Management, Cabinet Office
 Jul. 2004 Director General for Economic and Fiscal Management, Cabinet Office
 Jul. 2006 Vice-Minister for Policy Coordination, Cabinet Office
 Jul. 2008 Deputy Vice-Minister, Cabinet Office
 Jul. 2009 Vice-Minister, Cabinet Office
 Jan. 2012 Advisor, Cabinet Office
 Apr. 2013 Executive Advisor, DENTSU INC.
 Jun. 2014 Director, Ohara Memorial Healthcare Foundation (Current position)
 Jun. 2015 Chairman, the Institute for Science of Labour
 Sep. 2015 Chairman, the Ohara Memorial Institute for Science of Labour (Current position)
 Mar. 2016 Director, Kuraray Co., Ltd. (Current position)

Corporate Auditors

10 **Kunio Yukiyoshi**
(Date of birth: May 2, 1951)
 Standing Corporate Auditor

12 **Mie Fujimoto**
(Date of birth: August 17, 1967)
 Outside Corporate Auditor (Independent Corporate Auditor)
 Apr. 1993 Registered Attorney (Daini Tokyo Bar Association)
 Entered Shin-Tokyo Sohgo Law Office
 Jan. 2003 Partner, Shin-Tokyo Sohgo Law Office
 Jun. 2009 Corporate Auditor, Kuraray Co., Ltd. (Current position)
 Apr. 2015 Partner, TMI Associates (Current position)
 Jun. 2015 Corporate Auditor, SEIKAGAKU CORPORATION (Current position)
 Jun. 2016 Corporate Auditor, Tokyo Broadcasting System Holdings, Inc. (Current position)
 Jun. 2016 Corporate Auditor, Tokyo Broadcasting System Television, Inc. (Current position)

11 **Yukinori Yamane**
(Date of birth: September 8, 1955)
 Standing Corporate Auditor

13 **Yoshimitsu Okamoto**
(Date of birth: October 21, 1948)
 Outside Corporate Auditor (Independent Corporate Auditor)
 Jul. 1971 Entered The Sumitomo Bank, Limited
 Jun. 1990 Vice President, Sumitomo Finance International, London
 Jan. 1994 General Manager, Business Development Department, Sumitomo Banking Leasing Co., Ltd.
 Apr. 2001 Director and General Manager, Finance and Accounting Department, Sumitomo Bank Auto Leasing Co., Ltd.
 Corporate Auditor, Mazda Auto Lease Co., Ltd.
 Aug. 2005 Corporate Auditor, Goldman Sachs Asset Management Co., Ltd.
 Jan. 2010 Auditor, Japan Railway Construction, Transport and Technology Agency Facilities Development Support Organization
 Jun. 2012 Corporate Auditor, Kuraray Co., Ltd. (Current position)
 Apr. 2015 Corporate Auditor, Defactostandard, Ltd. (Current position)

14 **Mitsuhiro Nagahama**
(Date of birth: October 24, 1953)
 Outside Corporate Auditor (Independent Corporate Auditor)
 Apr. 1976 Entered The Fuji Bank Limited
 Apr. 2002 General Manager, Americas non-Japanese Corporate Banking Division No. 2, Mizuho Corporate Bank, Ltd.
 Mar. 2003 Executive Officer and General Manager, Otemachi Corporate Banking Division No. 6 and No. 7, Mizuho Corporate Bank, Ltd.
 Apr. 2005 Managing Executive Officer in charge of corporate banking, Mizuho Corporate Bank, Ltd.
 Mar. 2006 Managing Executive Officer, Head of the Americas, Mizuho Corporate Bank, Ltd.
 Apr. 2010 Deputy President, Head of the Americas, Mizuho Corporate Bank, Ltd.
 Apr. 2013 Chairman of the Board, Mizuho Securities Co., Ltd.
 Apr. 2015 Chairman of the Board, Mizuho Securities USA Inc. Senior Adviser, Mizuho Securities Co., Ltd. (Current position)
 Jun. 2015 Chairman of the Board, Mizuho Securities USA Inc. Outside Audit & Supervisor Board Member, Azbil Co., Ltd. (Current position)
 Mar. 2018 Corporate Auditor, Kuraray Co., Ltd. (Current position)

Please refer to our website for personal histories of Directors and Corporate Auditors.
<http://www.kuraray.com/company/directors/>

Executive Officers

Primary Executive Officer
Hitoshi Toyoura
 ● President of Kuraray America, Inc.

Senior Executive Officer
Hitoshi Kawahara
 ● President of Vinyl Acetate Resin Company

Executive Officer
P. Scott Bening
 ● General Manager of WS Film Division, President of MonoSol, LLC.
 Executive Officer
Koichi Takano
 ● General Manager of Purchasing and Logistics Division

Executive Officer
Hajime Suzuki
 ● Vice President of Kuraray America, Inc.
 Executive Officer
Takaharu Kawahara
 ● General Manager of Production and Technology Management Division, Vinyl Acetate Resin Company
 ● General Manager of Production and Technology Management Division, Vinyl Acetate Film Company

Executive Officer
Katsumasa Yamaguchi
 ● General Manager of Eval Division

Senior Executive Officer
Tsugunori Kashimura
 ● Officer Responsible for Research and Development Division, Officer Responsible for Environmental Business Development and Promotion Division, General Manager of Research and Development Division
 Senior Executive Officer
Keiji Taga*
 ● Officer Responsible for Corporate Management Planning Office, Officer Responsible for CSR Division, General Manager of Corporate Management Planning Office

Executive Officer
Stephen Cox
 ● General Manager of PVB Division

Executive Officer
Nobuhiko Takai
 ● General Manager of Genestar Division
 Executive Officer
Ikuo Nakamura
 ● General Manager of Clarino Division
 Executive Officer
Fuyuo Ueyama*
 ● Vice President of Calgon Carbon Corporation

Senior Executive Officer
Matthias Gutweiler
 ● President of Kuraray Europe GmbH

Executive Officer
Akira Omura
 ● General Manager of Technology Division

Executive Officer
Toshinori Tsugaru
 ● General Manager of Okayama Plant

Executive Officer
Toshihiro Omatsu
 ● General Manager of Isoprene Chemical Division
 Executive Officer
Ichiro Matsuzaki
 ● General Manager of Kurashiki Plant
 Executive Officer
Tomoyuki Watanabe
 ● Vice President of Vinyl Acetate Resin Company
 ● General Manager of Poval Resin Division
 Manager of Poval Resin Sales Management Department

* The responsible positions of both names were appointed on April 1, 2018.

CSR Management



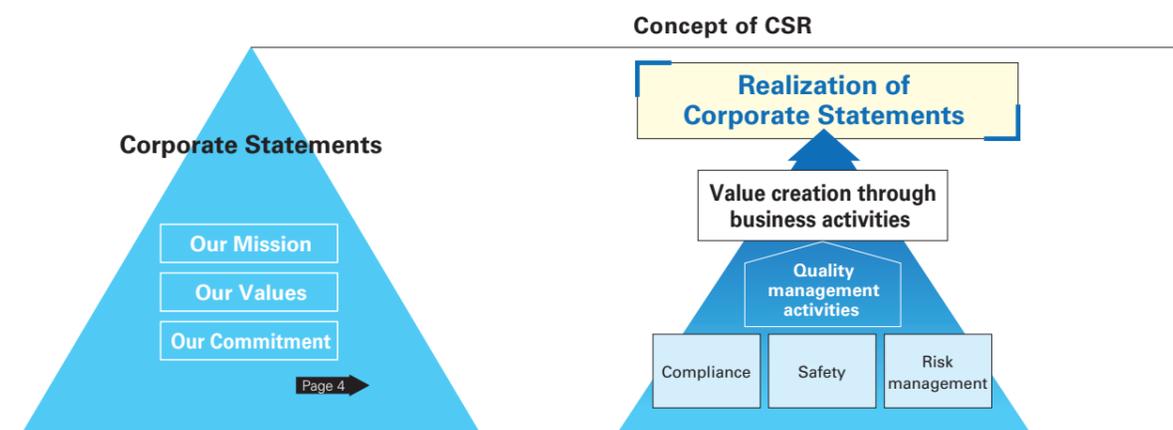
Basic Approach to CSR

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 utilizing its unique technologies is 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 and will endeavor to enhance non-financial capital to realize sustainable growth.



Involvement with Stakeholders

Shareholders and Investors Kuraray will strive to expand its corporate value, will return profits to its shareholders and investors and will appropriately disclose information available to it.	Suppliers and Partners Striving to build a relationship of mutual growth with its suppliers and partners, Kuraray will conduct fair and transparent transactions and CSR procurement activities.	Employees Kuraray will continue creating safe and healthy workplaces in which its diverse human resources are treated fairly and the employees can maximize their capabilities and competencies.
Local Communities Giving its consideration to environmental conservation and work safety and promoting positive communication, Kuraray will build a good relationship of coexistence with the local communities.	Central and Local Governments, NPOs and NGOs We will continue building sound and constructive relations based on transparent corporate governance.	Customers and Consumers Kuraray is committed to building a relationship of trust over many years by providing "safe, trustful and satisfactory" products and services and by providing appropriate information.

Stakeholder Communication

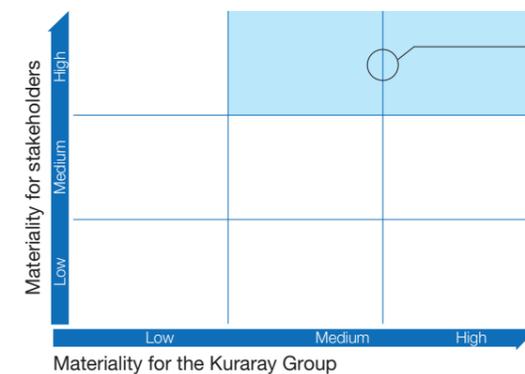
Stakeholders	Communication
Shareholders and Investors	General meetings of shareholders, plant tours, meetings to explain settlement of accounts
Suppliers and Partners	Purchasing activities, safety councils, liaison meetings, etc.
Employees	Employee awareness surveys, labor-management meetings, personnel evaluation interviews, company newsletter, various events
Local Communities	Responsible care regional dialogue, meetings to exchange views with local resident associations, plant tours, chemistry classes for boys and girls, cherry blossom viewing parties, summer festivals and other events
Central and Local Governments, NPOs and NGOs	Plant tours, firefighting drills, volunteer activities
Customers and Consumers	Sales and marketing activities, trade fairs (eco-friendly products fair and other fairs), questionnaires

CSR Materiality of the Kuraray Group

As social requirements towards corporate activities become more diversified, the Kuraray Group has been identifying materiality (priority issues) to clarify initiatives with high priorities in accordance with the CSR guidelines which are considered the international standard.

Each identified materiality item is reflected in the CSR Activity Targets and managed so that results are

achieved. The Kuraray Group is considering whether to further narrow down and prioritize materiality as the Group, together with society, will need to actively link the initiatives to achieve sustainable development with business in the future. Such initiatives include contributions to Sustainable Development Goals (SDGs) adopted by the United Nations Summit in September 2015.



Material Items (18 items)	
Economy	Economic performance
Environment	Raw materials/energy/water sources in region/ emissions/effluents and waste/products and services/overall environment
Labor Practices	Employment/occupational health and safety/ training and education/diversity and equal opportunity
Society	Local communities
Product Responsibility	Product and service labeling/customer health and safety/process safety and disaster/prevention/ safety in logistics/chemical and product safety

Identification process of materiality is posted on the following website:
<http://www.kuraray.com/csr/report2018/materialities>

CSR Activity Target and Results are posted on the following website:
http://www.kuraray.com/csr/report2018/activity_target_and_results

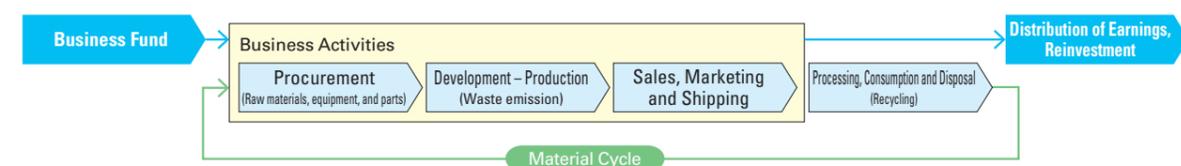
Non-Financial Capital as a Foundation to Support Value Creation

A value chain is formed in our corporate activities where funds received from our shareholders and investors are invested in business, and profits earned through the provision of higher-value added products and services are distributed and reinvested. To continue supporting the chain of value creation for sustainable growth and development, the Kuraray Group is striving to enhance non-financial capital, namely, its unique

technologies and talented individuals, safety assurance, environmental conservation measures, and public trust, by cooperating with stakeholders including our customers, employees, and business clients.

Furthermore, the Group views appropriate return of earnings to society including social contribution activities as an important responsibility to fulfill.

Value Chain



Advancing Resources That Support Sustainable Growth

— Technological Development Capabilities —



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.

Corporate research and development, the center of the Kuraray Group's technological development capabilities, is

conducting activities to fulfill the corporate mission to "Create new businesses," "Strengthen and expand existing businesses," and "Establish and deepen core technologies." We are doing this by closely collaborating with in-house companies, business divisions, and division R&D organizations that belong to subsidiaries, with an eye to expanding the scope of operations and improving earnings.

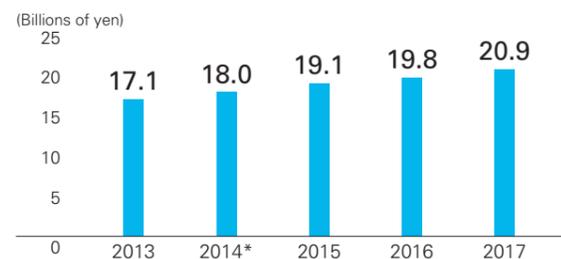
Research and Development Organization

The Company reviewed and changed its research and development organization for corporate research and development under which projects in the basic stage of research and development are handled by the Research and Development Division, while projects in the advanced stage near commercialization by the New Business Development Division. Starting from 2017, it moved to a framework under which all R&D projects are integrated in the Research and Development Division. We regard projects both in the basic stage and the advanced stage near commercialization as those in the process of becoming commercially viable. And we integrate R&D activities into the Research and Development Division, which works to achieve steady progress by checking each step before going on to the next. In this way, we will improve the efficiency of R&D operations and revitalize the efforts toward creating new businesses.

Research and development organizations under the Research and Development Division are the Kurashiki

Research Center, Tsukuba Research Center, KAI Corporate R&D (USA), Functional Products Development Department, Molding Component Business Department, and Vecstar Business Promotion Department. Division R&D activities are conducted by R&D departments at each manufacturing plant established by in-house companies/business divisions.

R&D Expenses



*The figure for FY2014 is adjusted for the 12-month period from January to December 2014.

Research and Development Organization



Priority Policy

Kuraray's corporate R&D activities are guided by its corporate missions to "Create new business," "Strengthen and expand existing business," and "Establish and deepen core technologies." To promote "Strengthen and expand existing business," in particular, the Research and Development Division provides support to solidify the Vinyl Acetate Business, which has achieved a greater scale through M&A executed in recent years. It does this by taking into account differences between regions, histories, and cultures of acquired companies and businesses, as well as differences in markets, customers, and manufacturing methods. We have been conducting activities for deepening discussions with bases outside Japan for a year and a half, with the Head Office, Kurashiki Research Center, and Tsukuba Research Center serving as contact points. And we have identified research and development themes requiring solutions and support by the Research and Development

Division from around the world. We plan to conduct similar verification work for the Isoprene Business and the Carbon Materials Business.

To promote "Create of new business," we examined development themes from the viewpoint of "Why does Kuraray need to work on this project?" and "Can Kuraray contribute to society by working on this project?" Then we narrowed down project themes and cancelled nearly 70 percent of projects. We have thus established a framework for concentrating resources onto projects with a high probability of commercialization, and we will promote research and development activities in a more efficient manner.

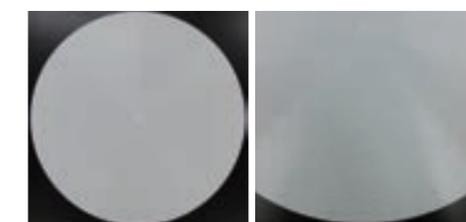
To promote "Establish and deepen core technologies," we will establish and deepen necessary core technologies through the "Create of new business" and "Strengthen and expand existing business."

R&D Focus

R&D Topic 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. We expect that this trend will continue accelerating, and we will proactively pursue business expansion in this area.



R&D Topic 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. Kuraray's CMP pads feature high hardness with excellent properties to polish and planarize devices, very low scratch formation despite their high hardness, and long hours of duration due to their excellent abrasion resistance. Multiple customers have been verified these features in their manufacturing processes. In addition, we have created a business environment in which we can select and propose pads with appropriate hardness that suit customers' requests and allow them to choose suitable pads for their manufacturing processes. At Kuraray, we have set our eye on expanding business beyond Japan into global markets, and we plan to develop a business environment in which we can provide pads that can accommodate both advanced processes and existing processes of customers.

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 of performance, as well as

establishing a healthy corporate culture and creating new employment opportunities, so that each employee can grow personally through work.

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 benefits 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

Executives and Manager 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 first-rate 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 subordinates' career development.
- (2) Provision of opportunities for career consultation
We have a 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 more than 50% (fiscal 2017: 64.4%) in recent years, 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 700 employees in Japan and from overseas operations participated in the program over the 10-year period through fiscal 2017. 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 16 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 between 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 actively 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.

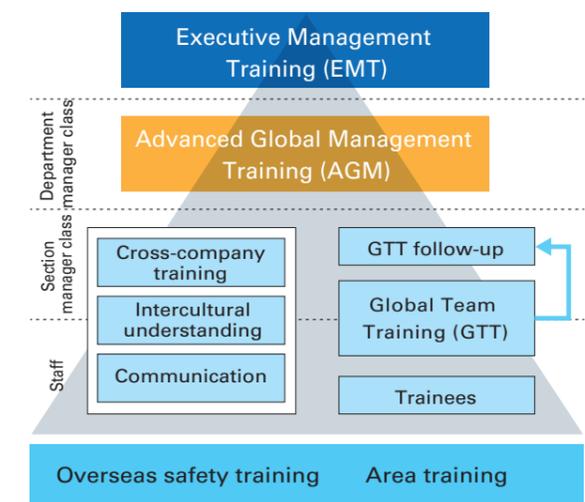
Global Human Resource Management

In human resource management, the Kuraray Group is working to develop a foundation for human resource management that will contribute to improving productivity and strengthening competitiveness from the viewpoint of optimal allocation of human resources on a global basis. In fiscal 2017, we introduced a globally uniform personnel evaluation system and human resource information database mainly for the personnel in managerial positions. Based on these systems, Kuraray will implement the following basic human resource management processes on a global scale: 1) Setting organizational goals, sharing and deploying the goals among members of organizations, and performing personnel evaluation based on the goals; 2) supporting the capacity building and career development of subordinates; 3) finding excellent human resources, rotation and optimal allocation of personnel, and reviewing the personnel succession plan.

Kuraray also introduced behavioral indicators (Kuraray Competency 5x5) that will be applied to the Group companies globally, and is utilizing them as personnel evaluation items and indicators of capacity development. 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.

Global Talent Development Program



Promotion of Diversity and Work-Style Reforms

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.

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 in 2015. We

have begun by striving to create a culture and reform our members' mindsets while examining and implementing measures to improve productivity and introducing a flexible work scheme.

The ideal work styles

- 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 whole workplace.
- Keep in mind to get refreshed and stay in good physical condition to gear up for your next work day.

Topics No overtime week

A system whereby each employee designates any week of a month as "no overtime week" and leaves work on time during the week. This system was introduced to bring about a change in awareness of organizations and individuals so that each employee will "work with an awareness of regular work hours."

The system was implemented on a trial basis in the Headquarters (Tokyo and Osaka) in fiscal 2017, and will be adopted on a full-scale basis in the entire Kuraray, including plants, from fiscal 2018.



Targets and Performance in Safety Priority Activities

Evaluation:○Accomplished,△Nearly accomplished,×Not accomplished

Item	FY2017		FY2018 safety activities items	
	Targets	Performances		
Process Safety and Disaster Prevention, Occupational Safety	Enhancement of Individual Safety Awareness (Suppression of impulsive or inadvertent actions)	Safety activities such as self-review of operations, coaching through conversation, and interactions among departments gained momentum, and this led to a higher safety awareness among individual persons.	○	<ul style="list-style-type: none"> Promotion of integration of safety activities and daily operation (tasks) Cultivation of a sense of acceptance of the value of safety activities Implementation of measures to discover latent risks and to minimize actualization risks Prevention of occupational incidents caused by the unsafe or unconsidered behaviors of individuals Creation and operation of the global safety management system
	Promotion of risk assessment of unusual tasks and situations	We have progressed with extracting risks in a way that goes one step further, such as when things do not go as expected or when a total power blackout or emergency stop has occurred, and with examining measures to deal with such risks.	○	
	Implementation of inherently safe countermeasures for serious risks, or minimizing damage	Ingenious efforts of each department gained ground, and implementation of inherently safe countermeasures for serious risks or minimizing damage progressed.	○	
	Improvement of every operator's ability to detect abnormal signs and deal with abnormal situations (Enhance technological capabilities by accumulating actual experience)	Every operator's emergency response capabilities improved as a result of enhancing training to simulate cases such as detection of abnormal signs during the night-time and holidays, equipment failure, absence of leader in the workplace. We also worked on clarifying criteria for identifying abnormal situations and provided education to increase workers' risk sensitivity, which led to them having a better ability to detect abnormal signs.	○	
	Constructing a base for globalization of safety activity management	We started full-scale implementation of the Occupational Injuries Evaluation System and revised commendation criteria among whole Kuraray Group and enhanced sharing of accident information, etc. This led to progress in the development of foundations for globalization of safety management activities.	○	

safety activities, such as developing a system for sharing information on occupational injuries and process accidents that have occurred and their countermeasures. In addition, we have been preparing for the global deployment of the global meeting of the environment and industrial safety divisions scheduled to start from 2018, as well as the safety activities management system. By conducting these safety management activities, we will work toward improving the safety level of the Group as a whole.



Verification of safety activities at the Niigata Plant

Numerical Targets and Results

		FY2017			FY2018	
		Targets	Criteria for evaluation	Actual results	Targets	Criteria for evaluation
Process safety	Japan	Zero	One or less process safety accidents	3	Zero	Zero process accidents
	Overseas		—	2		Zero process accidents
Occupational safety	Japan	Zero	Two or less A,B rank accidents	1	Zero	Zero A, B rank injuries
	Overseas		—	0		Zero A, B rank injuries
	Japan		Frequency rate of all occupational incidents: 0.8 or less	0.95		The frequency rate of all occupational incidents: 0.5 or less
	Overseas		—	5.27		The frequency rate of all occupational incidents: 3.0 or less

The Kuraray Group inside and outside of Japan adopted the number of occupational incidents that are evaluated as Rank A, B in the labor accident evaluation ranking as the evaluation criteria for 2018. This evaluation ranking for occupational incidents is an indicator unique to Kuraray and rates the levels of seriousness of occupational incidents in accordance with the levels of potential disorders and with the levels of faults that caused such accidents. The rank A, B is for severe accidents. The frequency rate of all occupational incidents is the number of all occupational incidents per million working hours that require at least minor medical attention, based on the definition of a recordable incident by the OSHA (Occupational Safety and Health Administration) of the U.S.

Kuraray's Approach to Safety

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, in order to enhance the safety awareness of employees and firmly establish safety activities and confirmation as routine practice in performing work among employees.

At each workplace, we work to ensure the early discovery of process safety and disaster risks and occupational safety risks through risk assessment activities and implement inherently safe countermeasures for production facilities, in order to prevent the occurrence of accidents. In preparation for occupational injuries and process accidents, we make efforts to minimize damage and to prevent the recurrence of occupational injuries and process accidents, such as emergency drills and sharing information of accidents or lessons.

Safety Activity Management

In accordance with Corporate's Safety Activity Management Regulations, 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 the determined activity policy. A group of safety representatives from the Headquarters, including the executives in charge, visit every plant in Japan twice a year to examine the activity plans, the status, and results of activities.

The Kuraray Group companies in Japan conduct safety priority activities aimed at further enhancing the process safety management level, such as risk assessment of unusual situations, such as in cases of a total power blackout or emergency stop, to identify potential risks and take countermeasures. In addition, we conduct activities to systematically pass on operation techniques and technologies from experienced operators to non-experienced operators. We aim to create safe workplaces that are free of occupational incidents and process accidents, by grasping safety priority points through an assessment of our safety systems and cultures conducted by an external organization and running a PDCA cycle.

On the other hand, for overseas affiliates, we promoted the development of global foundations for

Chemical Products and Product Safety

Each business division of the Kuraray Group assesses and improves products using a risk assessment method when conducting daily activities of new product development and management of product change to ensure product safety and delivers products with guaranteed safety and quality to customers.

For products that require a study on safety (products that are ingested in the body and that use nanomaterials), we have established a system for checking product safety by organizing a deliberation committee comprised mainly of the CSR Division staff members to study such products.

Kuraray Group is managing chemical substances using an information technology (IT) system. To manage chemical substances, we improve and provide training on the software of the IT system on a continuous basis to comply with the laws and regulations of each country. In addition, we periodically provide opportunities for sharing information to the managers responsible for chemical substance management and their staff in each business division and the Kuraray Group companies inside and outside of Japan, in order to ensure strict compliance with the laws and regulations.

Focus

Safety Experience Training Using Hazard Experience Training Systems

Our employees seldom experience being involved in occupational incidents or abnormal situations at their production bases. In order to improve their safety under such circumstances, it is effective to provide practical experience to improve their sensitivity and knowledge about hazardous situations.

In the Kuraray Group, the Okayama Plant established a hazard experience training system in 2015 and has started conducting safety experience training.

By allowing employees to get a simulated experience of hazardous events, such as a roller jamming accident, hanging by a safety belt or sleeve entanglement in a rotating machine using simulator systems, employees will become aware of risks and hazards in a way that cannot be done via books or discussions.

In the Kuraray Group in Japan, following the start of safety experience training at the Okayama Plant, the Saijo Plant started conducting safety experience training from 2017, and the Kurashiki Plant is preparing to introduce the training system.



Training to experience a roller jamming accident

Advancing Resources That Support Sustainable Growth

— Environmental Management —



Activity item	FY2017 targets	Results
Global warming prevention	Kuraray Group in Japan: Implement measures to reduce GHG emissions by 12,000 tons-CO ₂ or more Overseas affiliates: Environmental efficiency*1 (energy consumption) improve by 7% compared with FY2010	<ul style="list-style-type: none"> ● Kuraray Group in Japan: Implemented measures to reduce GHG emissions by 9,600 tons-CO₂ ● Overseas affiliates: Environmental efficiency of energy consumption was 9% below FY2010
Effective utilization of water resources	Overseas affiliates: Improve environmental efficiency (water usage except seawater) by 7% compared with FY2010	<ul style="list-style-type: none"> ● Kuraray Group in Japan: No specific numerical target was set but made efforts for effective utilization of water resources. ● Overseas affiliates: Environmental efficiency of water usage except seawater was 41% below the FY2010
Management of chemical substance emissions	Kuraray Group in Japan: JCIA-designated PRTR substance emissions** Maintain the level of FY2010 emissions (1,104 tons) or less	<ul style="list-style-type: none"> ● Kuraray Group in Japan: JCIA-designated PRTR substance emissions were 1,066 tons. ● Overseas affiliates: No specific numerical target was set but complied with chemical substance emissions regulations in each country and region.
Reduction of waste	Kuraray Group in Japan: Implement measures to reduce waste by the equivalent of 1% relative to FY2016 level (900 tons) or more Overseas affiliates: Environmental efficiency (waste generation) improve by 7% compared with FY2010	<ul style="list-style-type: none"> ● Kuraray Group in Japan: Implemented measures to reduce waste by 1,180 tons. ● Overseas affiliates: Environmental efficiency of waste generation was 32% below the FY2010
Environmental accounting	—	<ul style="list-style-type: none"> ● The amount of investment for environmental conservation: ¥752 million (FY2016: ¥382 million) ● The cost of environmental conservation activities: ¥2,399 million (FY2016: ¥2,359 million)

*1 Environmental efficiency: Net sales divided by environmental load
*2 JCIA-designated PRTR substance: Specific chemical substances in the Law concerning Pollutant Release and Transfer Register (PRTR Law) and substances targeted under voluntary control standards set by the Japan Chemical Industry Association (JCIA).

Environmental Performance

The Kuraray Group in Japan reduced greenhouse gas (GHG) emissions by 9,600 tons-CO₂, against the target of reducing GHG emissions by 12,000 tons-CO₂ or more compared with the fiscal 2016 level, and reduced waste by 1,180 tons, against the target of 900 tons or more. In addition, the Group managed to keep JCIA-designated PRTR substance emissions to 1,066 tons, which is below the fiscal 2010 level (1,104 tons).

By evaluating the above actual performance figures by using Environmental Efficiency as an evaluation index in the Medium-Term Environmental Plan, with figures for the base year fiscal 2010 equal to 100, the result was GHG emissions of 109 (target for fiscal 2020: 140), waste emissions of 100 (target for fiscal 2020: 110), and JCIA-designated PRTR substance emissions of 120 (target for fiscal 2020: 200). These were all at the same level as or better than the levels in the base year of fiscal 2010 but underperformed the targets.

Overseas affiliates aimed to improve environmental efficiency (energy consumption, waste generation, and water usage) in fiscal 2017 by 7% compared with the fiscal 2010 levels, but the results were a decrease of 9% in energy consumption and decrease of 32% and 41%, respectively, in waste generation and water usage.

The main factors for the gap between the targets and results are the following: 1) Net sales of eco-friendly and high value-added products, which had been expected to expand at the time of formulating the current Medium-term Environmental Plan, fell below our expectations due to market factors, such as economic fluctuations, and 2) overseas affiliates shifted to in-house production of vinyl acetate monomer, an intermediate material which had previously been procured from external sources, as a result of business acquisition, which led to increased energy consumption and waste generation but did not contribute to sales.

Kuraray's Approach to Environment-Friendly Manufacturing

As a material and intermediate material manufacturer, the Kuraray Group carries out the corporate activities of producing and providing materials and intermediate materials on a global basis. We believe that our mission is to provide the materials and intermediate materials required for products that are needed to create a low-carbon society and an eco-friendly society; and

producing such items with the lowest environmental impacts possible. With this in mind, we are working consistently to implement environmental conservation activities such as promoting measures against global warming, managing chemical substance emissions, and making beneficial use of waste.

Environmental Management System

The Kuraray Group has established the Kuraray Group Action Guidelines for the Global Environment and Environmental Activity Policy and is conducting environmental conservation activities in accordance with them. In addition, we are making improvements on a continuous basis by running the Plan-Do-Check-Act and Improve (PDCA) cycle among the plants, affiliates, and head office in accordance with Kuraray Environmental Activity Management Rules. Kuraray plants and affiliates have acquired certificates under ISO 14001 (Environmental Management Systems) and are scheduled to complete updating the 14001 system to the 2015 version by the end of 2018.

The Kuraray Group Action Guidelines for the Global Environment

Basic guidelines

We fulfill our responsibility to future generations through sustainable corporate activities that are in harmony with the global environment and the local community. In order to achieve these basic guidelines, we will undertake the following activities.

- (i) We will assign the highest priority to the environment and safety in the course of our corporate operations.
- (ii) We will work to improve the global environment and ensure its sustainability.
- (iii) We will develop technologies and products that contribute to the goal of improving the global environment.

Kuraray Insight

Revised Medium-Term Environmental Plan

We have revised our Medium-Term Environmental Plan under which activities were undertaken since 2011. Our previous Medium-Term Environmental Plan incorporated environmental efficiency as an indicator based on net sales to numerically evaluate the activity results. However, the business environment of the Kuraray Group has greatly changed compared with the time when the targets were set because we have incorporated new business through large-scale M&A and changes in the market environment. As result, we have judged that evaluation using the environmental efficiency based on net sales no longer properly reflects the environmental improvement activities. The revised Medium-Term Environmental Plan is based on evaluation using production volume (production volume per environmental footprint, indexed to 2016 = 100) to allow us to directly evaluate

the results of environmental improvement activities.

The Paris Agreement took effect with the aim of mitigating global warming with 2030 as the time frame. In Japan, however, the government has only started discussing various measures designed to reduce greenhouse gases. Accordingly, Kuraray postponed the target-setting for 2020 and beyond and the revised Medium-Term Environmental Plan covers the period through 2020.

The revised numerical targets are as shown in the table below. The Kuraray Group will work to steadily achieve environmental improvement by solidly implementing the PDCA cycle of environmental improvement activities across the entire Group, including overseas affiliates.

Numerical Targets of the Revised Medium-Term Environmental Plan

Item	Kuraray Group in Japan	Overseas affiliates
Measures against global warming	● Improve GHG emission intensity index at least 1% year on year	—
	—	● Improve unit of energy consumption index at least 1% year on year
Reduction of waste	<ul style="list-style-type: none"> ● Implement measures to reduce waste by the equivalent of 1% or more relative to FY2016 ● Reduce final landfill volume to less than the FY2016 level 	—
Management of chemical substance emissions	● Reduce emission volume of PRTR substances (emissions into atmosphere, water areas, and soil) to less than the FY2016 level	—
Water resources	—	● Improve unit of water usage amount index at least 1% year on year

*Unit: Unit of converted production volume. The conversion factor calculated using the actual results of 2016

Advancing Resources That Support Sustainable Growth

— Trust —



Photo to through the courtesy of JOICFP

Activity item	Target	Results
Contribution in cultural, academic, environmental and social welfare fields	<ul style="list-style-type: none"> • "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 	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.

Social Contribution Activities

The Kuraray Group considers sound and sustainable social development a precondition for corporate growth and prosperity. Therefore, the Group is contributing to society through the provision of products and business services valuable to people and is addressing social issues under certain reasonable standards as a corporate citizen.

Kuraray Group Social Contribution Policy

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

Types of activities

- Activities that lead to a resolution of social 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, science, environment, and social welfare

Activities in Culture Field

The Kuraray Group continues supporting the Ohara Museum of Art, which was established by Magosaburo Ohara, the first president of the Company. The Group also supports cultural activities at its plants and sites.



The Ohara Museum of Art

Activities in Science Field

In fiscal 2017, Some of the Kuraray plants sponsored "Chemistry Classes for Boys and Girls," participated in outside events and sponsored sports tournaments to foster healthy children and teenagers by continuously supporting on-going activities.



Chemistry class

Activities in Social Welfare Field

Aiming to support and continue the employment of people with intellectual disabilities and to undertake the Kuraray Fureai (Rapport) Fund-Raising Campaign, Kuraray's Kurashiki, Saijo, Niigata, and Kashima plants operated workshops and donated money raised in the campaign.



Workshop

Activities in Environmental Field

Aiming at implementing forest conservation work and volunteer cleaning work carried out every year, the Okayama plant undertook "Kuraray Mirai no Mori (Kuraray Forest of Future) Activity," and the Niigata Plant undertook the "MIRABAKESSO Forest Creating Activity." All the plants undertook volunteer cleaning work.



Forest conservation work in Niigata

Risk Management and Compliance

To strengthen the risk management and compliance promotion structure, Kuraray separated the Risk Compliance Committee from the CSR Committee in fiscal 2017 to have the Risk Compliance Committee report directly to the Board of Directors. With the Risk Compliance Committee placed at the core, the Kuraray Group will conduct activities to realize the implementation of priority countermeasures against critical risks, ensure strict compliance with laws and regulations, uphold corporate ethics, and ensure fair business practices.

Risk Management

Each year, the President ensures the Group continuously maintains its long-term basic approach to risk management while focusing attention on basic policies and annual themes in order to enable each business unit to respond in a swift, flexible manner to changes in the risk environment.

Specifically, the head of each organization identifies,

self-assesses, and appropriately responds to the risks in its own organization. From these risks, the Risk Compliance Committee then extracts critical risks which need to be managed on a company management level, reports to the management and the Board of Directors, and designates an executive in charge to proceed with the prioritized measures.

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. The CSR Division undertakes the Group-wide quality management and works for its enhancement.

As for the enhancement of Group-wide quality management, a system has been under operation since fiscal 2016 where the relevant division and CSR Division

jointly proceed with the confirmation of the present status and the improvement of the quality management of individual divisions. The system was upgraded in fiscal 2017 to a PDCA cycle under which confirmation of the status and improvement actions are taken on a company-wide basis concerning issues which include those newly raised and those identified in the previous fiscal year. The Group will continue performing the PDCA cycle with the aim of enhancing Group-wide quality management.

Group Compliance

"Our Commitment" states the principles of our conduct which we should observe 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



Compliance Handbook

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 eight languages, Japanese, English, German, Chinese, Hangul, Russian, Flemish and Czech has been distributed to the Group employees worldwide.

In addition, we have appointed compliance officers at plants, offices and laboratories of Kuraray and Group companies, and have organized regional compliance committees. The regional committees are working to effectively implement not only Group-wide themes decided by the Risk Management and Compliance Subcommittee but also region-specific themes.

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, dispatched staff and part-time employees. Whistleblower contact windows are also provided at major subsidiaries in Europe and North America.

In recent years, as globalization of the Kuraray Group has accelerated rapidly through M&A and other activities, the Group has built a system at most subsidiaries

that did not already have such contact windows, and made it possible to access the contact window, except for certain European bases in fiscal 2017.

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



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 purchased by the Acquisition, Technology and Logistics Agency, Defense Ministry. Subsequently, in March 2017, the commission ruled that Kuraray had violated the Anti-Monopoly Law and issued a cease-and-desist order.

After the on-the-spot inspection, the top executive issued a message to all officers and employees of the Kuraray Group instructing strict compliance with the Antimonopoly Act. Outside experts were also invited to hold seminars relating to the Antimonopoly Act for sales personnel and all managerial personnel in the Tokyo and Osaka Head Offices. At the same time, each division checked its transactions thoroughly in light of violations

and other cases. Furthermore, revision of employment rules with an emphasis on compliance with laws and regulations and the setting of new rules of contact with other companies in the same industry were made.

Nevertheless, in February 2017 the Fair Trade Commission of Japan made an on-the-spot inspection again at Kuraray on the manufacture and sale of activated carbon used in water purification facilities, waste incinerators and other facilities. We take this series of events seriously and sincerely and will implement all necessary measures to ensure that such incidents do not recur. We are cooperating fully with the inspection by the commission and will clarify the points that should be improved in the following respects and reinforce countermeasures.

Message from Top Executive

The President again issued a message to all officers and employees of the Kuraray Group instructing strict compliance with the Antimonopoly Act and a recheck of business operations. Instructions to thoroughly implement preventive countermeasures relating to the Antimonopoly Act were given via video message to members of business related divisions in particular.

Compliance Enhancement Months

The compliance Enhancement Months, from August 2017 to October 2017, were set and the following measures were implemented:

(1) Antimonopoly Act seminar

The seminars were held for all members of business related divisions including group companies in Japan where cases were reviewed by small groups' discussion. The difference between each group's understanding and the actual meaning of the legal standards was checked by comparing the results with comments provided by a lawyer to increase awareness of violations of the Antimonopoly Act. A written pledge to comply with the Antimonopoly Act has also been obtained from all the participants.

(2) Compliance seminar

The seminars were held for all employees (including part-time employees, contract employees, and dispatched staff) including group companies in Japan to allow all members of the relevant division to reflect on the division's potential compliance risks.

(3) Thorough check on transactions

Divisions and affiliated companies rechecked their transactions thoroughly after the Antimonopoly Act Seminar was held.

Establishment of Systems

A system which constantly monitors contacts with other companies in the same industry was established and began operation.

Corporate Data (December 31, 2017)

Corporate Overview

Company Name	Kuraray Co., Ltd.
Representative Director and President	Masaaki Ito
Established	June 1926
Head Offices	[Tokyo Head Office] Ote Center Building, 1-1-3, Otemachi, Chiyoda-ku, Tokyo 100-8115, Japan [Osaka Head Office] Umeda Hankyu Building Office Tower, 8-1, Kakudacho, Kita-ku, Osaka 530-8611, Japan
URL	http://www.kuraray.com
Capital	JPY89 billion
Employees (Consolidated)	9,089
Group Companies	39 consolidated subsidiaries, 1 equity-method affiliate
Major Operations	The United States, Germany, Belgium, China, Singapore

Stock Information

Securities Code	3405
Issued and Outstanding Shares	354,863,603 shares
Number of Shareholders	40,891
Domestic Stock Exchange Listing	Tokyo Stock Exchange
Shareholder Register Agent	Sumitomo Mitsui Trust Bank, Limited 1-4-1, Marunouchi, Chiyoda-ku, Tokyo 100-8223, Japan
Independent Auditor	PricewaterhouseCoopers Aarata LLC

Kuraray Group Network (As of January 1, 2018)

Domestic

Group Main Bases

Tokyo Head Office (Chiyoda-ku, Tokyo)
Osaka Head Office (Osaka)
Kuraray Trading Co., Ltd. (Osaka)
Kuraray Noritake Dental Inc. (Chiyoda-ku, Tokyo)
Kuraray Plastics Co., Ltd. (Osaka)
Kuraray Engineering Co., Ltd. (Osaka)
Kuraray Techno Co., Ltd. (Osaka)
Kuraray Kuraflex Co., Ltd. (Osaka)
Kuraray Fastening Co., Ltd. (Osaka)

Plants

Kurashiki Plant (Kurashiki City, Okayama)
Saijo Plant (Saijo City, Ehime)
Okayama Plant (Okayama City, Okayama)
Niigata Plant (Tainai City, Niigata)
Kashima Plant (Kamisu City, Ibaraki)
Tsurumi Plant (Bizen City, Okayama)

Laboratories

Kurashiki Research Center (Kurashiki City, Okayama)
Tsukuba Research Center (Tsukuba City, Ibaraki)

Major Shareholders (As of Dec 31, 2017)

Name of shareholders	Number of shares held (thousands)
The Master Trust Bank of Japan, Ltd. (Trust Account)	31,928
Japan Trustee Services Bank, Ltd. (Trust Account)	19,776
Nippon Life Insurance Company	10,448
National Mutual Insurance Federation of Agricultural Cooperatives	10,102
Japan Trustee Services Bank, Ltd. (Trust Account7)	6,799
Japan Trustee Services Bank, Ltd. (Trust Account5)	6,722
STATE STREET BANK WEST CLIENT - TREATY 505234	6,205
Meiji Yasuda Life Insurance Company	5,969
NORTHERN TRUST CO. (AVFC) RE - SSD00	5,764
Japan Trustee Services Bank, Ltd. (Trust Account1)	4,993

Note: Kuraray Co., Ltd. holds 4,040,182 shares of treasury stock.

Shareholder Composition (Shareholding Ratio)

