







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

# **Kuraray Report 2022**

For Fiscal 2021, Ended December 31, 2021







Beyond impossible lies what's possible. Waiting to be discovered by those with the courage to challenge the norm and bring about change.

Nearly a century ago, one such pioneer made it possible for a successful company to serve the greater good and society at large.

While also rewarding and nurturing its employees and stakeholders.

That company is Kuraray.

And today while we face new challenges; The need to protect the environment. The need to improve global health. The need to create cleaner chemicals.

That founding belief in what's possible remains unchanged.

We still work for the benefit of all. We still trust in our expertise in chemistry to go beyond and innovate. And we still embrace the power of collaboration with others.

Knowing we're stronger and better, when working together to change impossible into possible for everyone.

As we make our journey together towards a fairer, safer, more sustainable future, a real possibility.

# Possibility can change the world. And it starts here.

The Kuraray Group established a new corporate tagline in 2022: "Possible starts here." Since our founding, we have taken on the challenge of solving social issues and creating new value through our business activities.

We formulated the phrase "Possible starts here" to express our unwavering corporate attitude as well as our desire to co-create value with society for a better future—starting with the Kuraray Group.

# **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**



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 DNA of the Kuraray Group and its Strengths Gained through the Years

# Developing Solutions to Social Issues and Contributing to Economic Development through our Business Activities

Kuraray was founded in 1926 in Kurashiki City, Okayama Prefecture, for the purpose of commercializing synthetic rayon. Our founder, Magosaburo Ohara, and second President, Soichiro Ohara, sought to build up the business through technological

innovation while emphasizing the importance of fulfilling the company's social responsibilities, such as the response to environmental issues, focusing on addressing social issues through the company's business activities.

In 1950, shortly after World War II, Soichiro Ohara developed a technology to consistently manufacture synthetic fiber, KURALON<sup>™</sup>, from the raw material PVOH resin. The commercialization of this synthetic fiber, KURALON<sup>™</sup>, did not just benefit one company—it helped revitalize Japan's textile industry. This achievement arose out of management's unswerving conviction that "to produce high-quality products with stable profits, we needed to make a product from raw materials without relying on imports."

The pioneering spirit of the company's management has been passed down as the foundational DNA of the Kuraray Group. Since the beginning, it has been important to Kuraray, even before the phrase "corporate social responsibility" became mainstream.





# "All the wealth gained from society should be returned to society."

He established the Ohara Institute for Social Research, the Kurashiki Institute for the Science of Labour (now the Ohara Memorial Institute for Science of Labour) for the improvement and reformation of labor conditions, and the Kurabo Central Hospital (now the Kurashiki Central Hospital). These facilities contributed to the advancement of local medicine, welfare, education, culture, and people's standard of living.



Soichiro Ohara Second President

Magosaburo Ohara

First President

"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."

He was among the first to mention corporate responsibility for emissions at a time when the word "pollution" was still a rarity. In 1950, he pioneered the commercialization of KURALON™, the first synthetic fiber made in Japan using proprietary technology. He continued to help address social issues and advance economic development through business activities, such as the development and commercialization of CLARINO™, the world's first man-made leather to replace natural leather.

1926

Established to commercialize rayon



# Creating KURALON™ and New Businesses

In 1950, Kuraray became the first company to commercialize KURALON™, the first synthetic fiber made in Japan. Since then, we have launched a series of new businesses, including PVOH resin, man-made leather CLARINO™, polyester, EVAL™ (EVOH resin), and isoprene chemicals.



### Creating Highly Functional Synthetic Fibers

Diversification of our business has yielded highly functional synthetic fibers ideal for clothing and more—developing the industrial materials KURALON™ and VECTRAN™ has opened the doors to other business areas. Throughout its history, the Kuraray Group has continually sought to develop new technologies and markets, and has launched numerous pioneering businesses. "For people and the planet—to achieve what no one else can." Grounded in this mission, we have drawn on our creativity and resourcefulness to overcome technical challenges, giving rise to highly distinctive products that provide value to society. These products are widely used around the world.

# Original Technology Yields Products with Top Market Share Worldwide<sup>\*1</sup>

At Kuraray, we use our unique technical strengths to create products that the world has never seen before. Starting with the world's first commercialization of synthetic fiber KURALON<sup>™</sup>, we moved on to produce PVOH resin, which is a raw material of KURALON<sup>™</sup>; optical-use poval film, which is essential to liquid crystal displays (LCDs); EVAL<sup>™</sup> (ethylene vinyl-alcohol copolymer [EVOH] resin), which features excellent gas barrier properties; and, a lineup of various commercialized chemical products that use the world's first synthetic isoprene monomers as materials. We have also launched a wide range of distinctive products, such as CLARINO<sup>™</sup> (man-made leather), which recreates the structure of natural leather, and MAGIC TAPE<sup>™</sup> (hook-and-loop fastener). Sales of products with the highest global market share that we have created using our unique technologies accounted for 59% of the Kuraray Group's total sales in 2021.

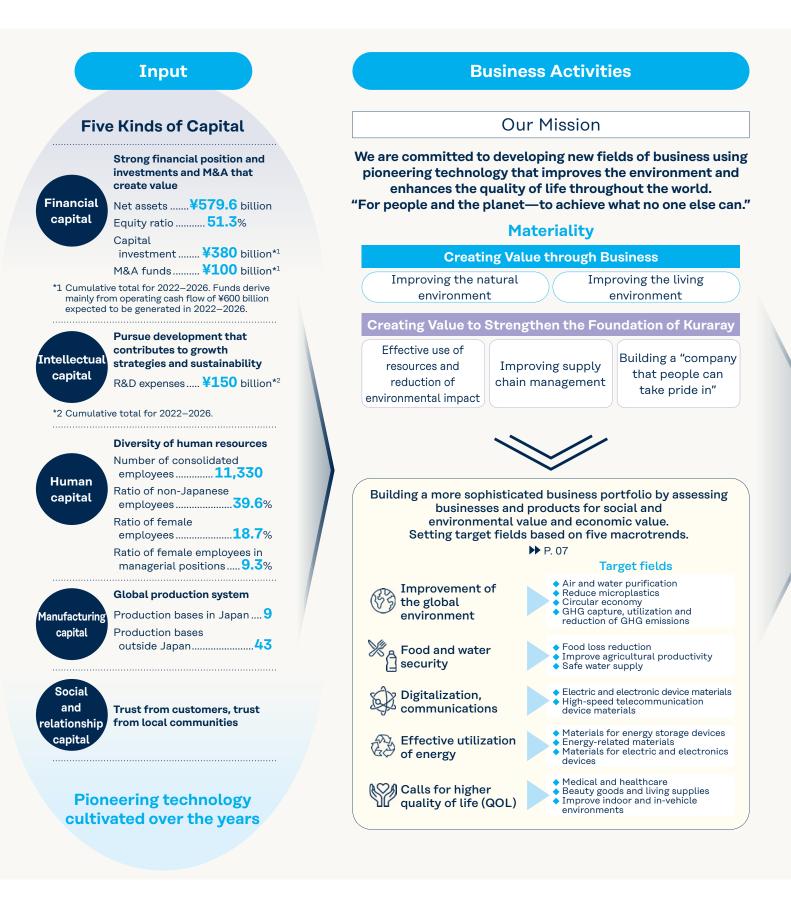


\*1 Based on in-house research

# Products with **Top** Market Share Worldwide



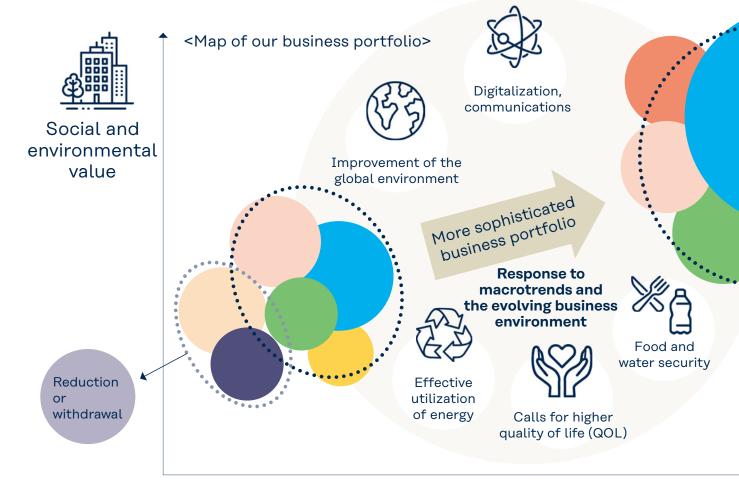
# Value Creation Process



To contribute to improving the environment and enhancing the quality of life through our business activities. This is the mission of the Kuraray Group. Building on five kinds of capital and the pioneering technology we have cultivated over the years, we will seek sustainable growth and carry out our mission through initiatives set out in the Medium-Term Management Plan "PASSION 2026."



# Building a More Sophisticated Portfolio to Achieve Sustainable Growth



# Setting target fields

By revisiting the products, technologies, and services of the Kuraray Group in light of the five macrotrends, we have identified social issues needing to be addressed, setting these as target fields. We will contribute to these areas not only by drawing on solutions already at our disposal, but also by generating innovation through partnerships with customers.

Macrotrends	Improvement of the global environment	Food and water security	Digitalization, communications	Effective utilization of energy	Calls for higher quality of life (QOL)
Target fields	<ul> <li>Air and water purification</li> <li>Reduce microplastics</li> <li>Circular economy</li> <li>GHG capture, utilization and reduction of GHG emissions</li> </ul>	<ul> <li>Food loss reduction</li> <li>Improve agricultural productivity</li> <li>Safe water supply</li> </ul>	<ul> <li>Electric and electronic device materials</li> <li>High-speed telecommunication device materials</li> </ul>	<ul> <li>Materials for energy storage devices</li> <li>Energy-related materials</li> <li>Materials for electric and electronics devices</li> </ul>	<ul> <li>Medical and healthcare</li> <li>Beauty goods and living supplies</li> <li>Improve indoor and in-vehicle environments</li> </ul>

Guided by Our Mission, in seeking to achieve sustainable growth, the Kuraray Group has set target fields for the business portfolio based on social issues needing to be addressed, as indicated by macrotrends. We also use the two axes of social and environmental value and economic value to assess our businesses and, depending on the circumstances, determine whether to pursue proactive expansion, maintain current commitment levels, or scale down or withdraw from the business. We aim to build a strong business portfolio by channeling resources into businesses and products with strong growth potential.

# Main businesses and products targeted for priority resource allocation

Improving the natural environment

Improving the living environment







# Water-soluble PVOH film Getting a production site in Europe up and running and further upgrading of production capacity to meet growing demand

Improvement of Calls for higher quality of life (QOL)

# EVAL<sup>™</sup> (EVOH resin)

New plant construction in Asia to reinforce a stable supply system to meet growing demand for food packaging applications

**Carbon materials** 

New technologies to reduce greenhouse gas emissions, related materials development, and expanded recycled coal business contributing to a circular economy Improvement of the global environm



# **Dental materials**

Expanded production capacity aiming to further expand the lineup of zirconia and other CAD/CAM materials

Calls for higher qu of life (QOL)

Effective utilization

of energy



#### **Highly functional plastics** GENESTAR™, VECSTAR™, etc. **GENESTAR™**

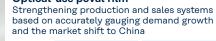
Exploration of a second phase of expansion at the Thai plant to meet globally expanding markets for automotive component applications stemming from the shift toward weight reduction, electronic control, and electric vehicles. VECSTAR™

Exploration of upgrading capacity to meet growing demand stemming from faster communications

Improvement of the global environme Effective utilizati

# Optical-use poval film

Digitalization,



Digitalization, Calls for higher qua of life (QOL)

Economic value

Annual assessments based on the Standards for Business evaluation (profitability and efficiency)

**Growing businesses** 

Starting with the need for improvement of the global

where they have the greatest impact. This will guide our

achieve a more sophisticated business portfolio.

efforts to expand promising segments and businesses and

environment, we will address the macrotrends and changes in

the business environment, continuing to adjust the makeup of

Group products, such as focusing on applications and regions

and products

# Assessing social and environmental value and economic value

We assess the economic value of businesses and products by means of the Standards for Business Evaluation, which use the twin indicators of earning power (operating cash flow) and efficiency (ROIC). In assessing social and environmental value, we have adopted a Portfolio Sustainability Assessment (PSA) system, an objective product portfolio evaluation index established by the WBCSD\*1 which is being widely incorporated by chemical manufacturers in Europe as well (>> p. 17).

Continuing to assess and screen businesses and products using these two axes will enable us to navigate changes in the business environment and in society, as well as leading to the proactive generation of new opportunities and the appropriate response to risks.

\*1 World Business Council for Sustainable Development.

For information on the PSA system, please visit the following website. https://www.kuraray.com/csr/report2022/psa







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# ESG Index Initiatives (As of April 30, 2022)

Kuraray has been included in the following ESG investment indexes.

Japar







FTSE Blossom Japan Sector Relative Index

2021 CONSTITUENT MSCI JAPAN ESG SELECT LEADERS INDEX



**2021** CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)

In line with its corporate mission statement, "For people and the planet—to achieve what no one else can," the Kuraray Group will remain committed to improving the natural and living environments through its business activities and striving to solve social issues, while working to strengthen corporate governance.

THE INCLUSION OF KURARAY CO., LTD. IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF KURARAY CO., LTD. BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

# About Kuraray Report 2022

The Kuraray Report compiles ESG-related financial and non-financial information with regard to the Kuraray Group's efforts to create sustainable value.

The Kuraray Report 2022 uses the Global Reporting Initiative (GRI) Standards as a reference. A comparison between them is shown on our website.

 $\frac{(https://www.kuraray.com/csr/report2022/guidelines)}{For more information about our products, businesses, or other information, please visit the website. The year in$ 

- the title of the report is the year of issue. \*See page 45 for the editorial policy.
- \* All Kuraray financial data contained in this report is on a consolidated basis.
- \* Financial data (results) of Kuraray expressed in this report in billions of yen are rounded to the nearest hundred million yen.

#### **Reporting Period**

January 1 to December 31, 2021

\*Some information from after January 2022 is included.

# Scope of the Report

Kuraray Co., Ltd. and the Kuraray Group companies

# Information Disclosure System •



Kuraray Report (Integrated Report)
 Financial
 information
 Non-financial
 information

https://www.kuraray.com/csr/report\_backnumber



#### General Corporate Information

Financial information Non-financial information



https://www.kuraray.com





https://www.kuraray.com/ir

https://www.kuraray.com/csr



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# **Top Statement**

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We aim to be a Specialty Chemical Company that grows sustainably, co-creating value with society by addressing social issues through our business activities.

Hitoshi Kawahara

President and Representative Director

# What the Kuraray Group Aims For

I assumed the role of President in January 2021, at a time of mounting uncertainties, as the world faced an unprecedented crisis due to the COVID-19 pandemic, which brought about dramatic changes in people's lives and in the economy.

Companies today are increasingly being called into question about the kind of value they can provide to society. The Corporate Statements set forth 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." This expresses the significance of the Kuraray Group to society. Guided by this mission, we share a common spirit of originality and challenge across the entire Kuraray Group as we strive to provide value to society through our business activities.

2022 is the inaugural year of our new Medium-Term Management Plan, "PASSION 2026." 2026, the plan's final year, will mark the 100th anniversary of Kuraray. As we approach this major milestone, we took two steps to mobilize the power of the Group. One was to modify the "Kuraray Vision 2026" long-term vision. Our vision is to become a Specialty Chemical Company that grows sustainably by incorporating new innovation platforms into its own technologies. To this, we added a new message of contributing to customers, society, and the planet. The modified vision gives us a clearer sense of the kind of Kuraray Group we seek to become. The other step was to formulate a new corporate tagline for the Group. Along with the launch of "PASSION 2026," we formulated the phrase "Possible starts here," which we will display together with our corporate logo. This phrase embodies our strong desire for customers to partner with the Kuraray Group to help discover solutions for their needs and co-create new value together. While sending the message to society that our value lies in being an innovative business partner, we hope that the tagline will also inspire pride and motivation in our employees and foster a sense of solidarity among our teams around the world. (Refer to p. 1 for the story of the new tagline)

The Kuraray Group has a long history of contributing to society. The Group includes the Ohara Institute for Social Research, the Kurashiki Institute for the Science of Labour (now the Ohara Memorial Institute for Science of Labour) for the improvement and reformation of labor conditions, and the Kurabo Central Hospital (now the Kurashiki Central Hospital). All of these were founded based on the beliefs of our first President, Magosaburo Ohara, that "all the wealth gained from society should be returned to society." Our second President, Soichiro Ohara, also believed that "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." Rooted in these beliefs, we have long worked to improve the environment and enhance the quality of life throughout the world with our pioneering technology. Since our founding, we have sought both to contribute to society and to grow the business.

In recent years, issues facing society, such as climate change and water resource shortages, have grown even more complex and more severe. I am convinced that the power of chemistry can contribute greatly to solving such problems, and I believe it is vital that the Group work together to harness that power to the fullest extent possible. Both the modification of our Vision and formulation of the new tagline reflect our beliefs and approach to social issues that have been passed down since our foundation.

# Achieving Higher Sales and Profits in an Uncertain Operating Environment

As we were drafting the Fiscal 2021 Management Plan, we faced numerous uncertainties as the world searched for a way to both contain the spread of COVID-19 and maintain economic activities. Although we saw signs during this period of a tentative recovery from the pandemic, there were other unforeseen developments, such as the drop in automotive production due to critical semiconductor shortages and the disruption of global logistics networks. By responding appropriately to this series of changes in the operating environment, we achieved a substantial increase in both sales and profits in 2021, with record net sales of ¥629.4 billion, operating income up 63% year on year to ¥72.3 billion, and net income attributable to owners of the parent of ¥37.3 billion. I consider this to be a significant achievement.

In terms of profits, the double impact of high raw materials and fuel prices as well as soaring logistics costs saddled us with higher production costs. Our sales teams worked hard to negotiate sales at prices that appropriately reflected the higher costs. The fact that customers were willing to accept our cost increases proved once again that the products of the Kuraray Group are essential materials that are truly needed by society.

# Review of Previous Medium-Term Management Plan "PROUD 2020" and Fiscal 2021 Management Plan

During the period of "PROUD 2020," we faced a temporary halt in production and sales following a fire incident at our EVAL plant in the United States in 2018. Alongside those challenges was the impact of a global economic slump arising from U.S.-China trade friction and the COVID-19 outbreak in 2020. As a result, we fell short of both our initial sales and operating income targets. Another ongoing issue was the fact that our new business creation did not move forward as planned. However, as part of our growth strategy, we made a series of large-scale investments to build a stable business portfolio for the future. We acquired Calgon Carbon Corporation, the world's largest producer of activated carbon, and upgraded activated carbon facilities in the United States. We invested in a new isoprene plant in Thailand. We upgraded optical-use poval film and water-soluble PVOH film facilities.

In 2021, we made steady headway on the major projects set forth in "PROUD 2020." In the Isoprene segment construction of the above-mentioned plant in Thailand moved toward completion. In the Functional Materials segment in the Environmental Solutions Division (activated carbon business) we upgraded the capacity of Calgon Carbon in the United States and are also building a new production line in Europe to expand the reactivated carbon business. Based on our wealth of experience in Europe and the United States, we plan to continue expanding our business as a major source of stable earnings and a pillar of growth in the next generation while addressing increasingly strict environmental regulations worldwide. In the Vinyl Acetate segment we are building a new production facility in Poland for water-soluble PVOH film to keep up with the growing demand for unit dose applications for detergents and pharmaceuticals.

In these ways, we will continue moving steadily forward with future-oriented initiatives and the strategic investments decided through 2021. Our focus is on generating results from existing efforts, while implementing new strategies formulated in "PASSION 2026" to boost profitability and growth through new business creation.

# Carrying out the Medium-Term Management Plan with Passion

"PASSION 2026," announced in February 2022, was born from top-down and bottom-up processes. The result is something that is truly unique, unlike any previous plan. Management set the overarching framework of the Plan by establishing the four Group-wide themes of sustainability, innovation, global operations (production and technology), and global indirect functions. We then held workshops for each theme, made up of seven or eight members chosen from around the world. An executive officer was assigned as an advisor to each workshop to facilitate discussions. As in the past, we explored business plans for each division as vertical organizations. This time, however, through the workshops we also introduced the four Group-wide themes as a horizontal element.

The slogan of the Medium-Term Management Plan is "PASSION." This word embodies the process of serious reflection and passionate deliberation by managers and young employees on the front lines both in Japan and overseas that went into drafting the Plan, as well as my desire for the Kuraray Group to be a corporate entity full of vitality and creativity with a forward-looking awareness and attitude.

The management team and I will take the lead in steadily implementing the Medium-Term Management Plan. We want each employee to feel a sense of responsibility for helping the Kuraray Group accomplish these objectives moving forward.



# Three Challenges to Be Met

"PASSION 2026" sets out three challenges to accomplish the "Kuraray Vision 2026" long-term vision. The three challenges correspond to the Group-wide themes developed through the workshops mentioned previously.

The first is "sustainability as an opportunity." Having indicated the direction the Kuraray Group should take in terms of materiality under the three "Ps" of Planet, Product, and People, we have set and will pursue performance indicators in the new Sustainability Medium-Term Plan. The second challenge is "innovations starting from networking." We will create innovation as a new driver of growth by connecting people and technologies both inside and outside the Group. The third challenge is "transformation of people and organization." We will draw on digital technology to change our processes and on diversity to expand our thinking, to transform both people and our organizations. The three challenges build on one another, and we will pursue them in tandem by leveraging digital tools and organizations like the Innovation Networking Center (INC) established in January 2022.

Our challenges are not limited to the period of "PASSION 2026"—we are looking further ahead to 2030 and 2050 to our ongoing efforts to address social issues. For example, initiatives to achieve net-zero carbon emissions call for technological development and capital expenditures to cut greenhouse gas emissions. We plan to invest ¥80 billion by 2030, but first we must generate the resources needed for existing and new businesses. To this end as well, we will seek to reap the fruits of investments made during "PROUD 2020" and the Fiscal 2021 Management Plan in addition to reforming the business portfolio.

Picturing the overall direction of "PASSION 2026" like a car, the front wheels are growth in our businesses. We will first steadily generate resources and channel those resources back into further business growth. In this way, we will expand our businesses while also directing resources to areas such as sustainability, innovation, and digital transformation, which are the rear wheels. Ultimately, we foresee both the front and rear wheels turning together in a balanced way to propel the whole car forward.

# Realizing a Business Portfolio that Incorporates Social and Environmental Values

We have set target fields for the business portfolio based on social issues indicated by macrotrends. In addition to conventional economic value, we will newly add social and environmental value to our evaluation criteria, seeking to build a more sophisticated portfolio.



Economic value is the quantitative assessment of each business's and product's earning power (operating cash flow) and efficiency (ROIC) in each fiscal year, compared against the current year's plan and the previous year's results.

In terms of social and environmental value, we have constructed a Kuraray Group Portfolio Sustainability Assessment (PSA) system based on the Chemical Industry Methodology for Portfolio Sustainability Assessments, which are guidelines offering a consistent methodology for assessing sustainability established by the World Business Council for Sustainable Development (WBCSD) to help chemical companies seeking to build sustainable product portfolios. We are using the system to evaluate our products with a high degree of objectivity and transparency. From the results of the assessments, we will identify PSA-contribution products that help improve environments and then prioritize resource allocations accordingly. Specifically, we will continue to transform the business portfolio by working to expand sales of PSA-contribution products to 60% of all sales by 2026, compared with 46% in 2020.

# Diversity as a Global Company

Since the 2000s, the Kuraray Group has been accelerating the overseas expansion of our priority businesses, including acquiring vinyl acetate-related businesses abroad and launching the production of SEPTON™ in the United States. Currently, the proportion of overseas sales and the size of the overseas workforce are increasing. Although the Kuraray Group is already working globally in many ways, our HR systems have not kept up with this global framework. I strongly believe that there is a great deal of untapped talent in our overseas bases. This stems from my own experience abroad and the process of formulating "PASSION 2026" I described above. In the past, we viewed employees' fit for the company through a Japanese lens. As a global company, we should establish a standardized framework for HR development and recognition that aligns Japan and abroad. To harness our collective strengths as "One Kuraray" as we secure diverse, core human resources, we will actively promote the creation of global HR systems by building an overseas HR database, standardizing manager-level ranks in Japan and overseas, and rolling out new executive training and other educational programs.

# Safety Is the Cornerstone of Everything We Do

"Safety is the cornerstone of everything we do" at our production bases, R&D bases, and offices around the world. Based on lessons learned from the 2018 fire incident at our EVAL plant in the United States, we aim to be a company where all employees keep safety top of mind and where accidents do not occur.

In terms of safety measures going forward, we will build safer workplace environments, such as by automating tasks that carry high human risks, when possible. We will also further reinforce safety audits from an objective point of view. Specifically, we will establish a Global Process Safety Management Audit Team in 2022 to carry out safety audits focusing on our chemical and activated carbon plants. Proceeding according to plan at production sites often tends to take precedent, which makes safety concerns unintentionally secondary. However, ensuring safety is precisely what makes stable production possible, and this is ultimately what feeds into profits. I am convinced that our business continuity depends on all employees having the ingrained mindset that "safety is the cornerstone of everything we do" and acting from a "safety first, production second" perspective.

# Remaining an "Indispensable Company"

There are three words in particular that I value: dreams, ambition, and tenacity. Having a dream comes first, and then ambitiously making it happen. But most important is to see it through with tenacity, without giving up. The Kuraray Group has set targets for net sales of ¥750 billion and operating income of ¥100 billion in 2026, marking the 100th anniversary of our company. We will move forward step-by-step with a firm resolve to meet the three challenges of "PASSION 2026."

Based on our mission, we will strive to co-create value with society by addressing social issues through our business activities, doing our utmost to remain an "indispensable company" admired by and essential to society. I look forward to your continued understanding and support.

# Hitoshi Kawahara

President and Representative Director

# Looking Back at Our Path

# Previous Medium-Term Management Plan "PROUD 2020" (2018–2020)

#### Measures and Results

#### 1) Pursue competitive superiority

- Acquired Calgon Carbon Corporation in the United States, the world's largest activated carbon manufacturer. Decided to expand production facilities for new carbon at existing plant in the United States and for reactivated carbon at a Belgian subsidiary, targeting business expansion
- Decided to invest in an isoprene plant in Thailand
- Contributed to profit growth through capital expenditures in optical-use poval film (Japan), water-soluble PVOH film (United States), PVB film (South Korea), and ionoplast interlayers SentryGlas<sup>™</sup> (United States)

#### 2) Expand new business fields

- Expanded existing production capacity for VECSTAR™ (Liquid crystalline polymer film)
- Decided to invest in resin production facilities in the United States for PLANTIC<sup>™</sup> (Bio-based gas barrier material)

# Fiscal 2021 Management Plan

# 3) Enhance comprehensive strength of the Kuraray Group Generated integration synergies with the environmental solutions

- business (carbon materials) • Established Personnel Development Department for the purpose of
- reinforcing personnel development and handing down technical expertise
- Promoted work-style reforms

#### 4) Contribute to the environment

- Improved the natural environment: Expanded activated carbon business
- Enhanced the living environment: Strengthened EVAL™ and PLANTIC™ (biomass-derived) businesses

#### Measures and Results

1) Steadily implement capital investment decided in previous Medium-Term Management Plan "PROUD 2020"

 Made steady progress on major projects, including construction of the Thai isoprene plant and the water-soluble PVOH film production base in Poland, as well as expansion of activated carbon capacity at Calgon Carbon Corporation

# 2) Expand the environmental solutions business (carbon materials)

• Further integrated operations after organizational consolidation. Steadily captured expanding demand by drawing on our ability to address environmental regulations

#### 3) Increase EVAL<sup>™</sup> production capacity

• While tracking demand trends and business feasibility, explored

candidate sites mainly in the Asian region

#### 4) Promote digitalization across the entire Group

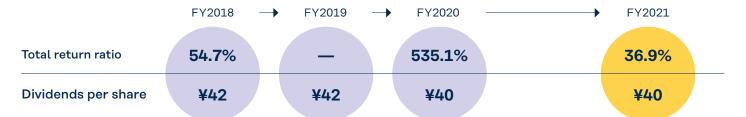
• Launched the Global Digital Transformation (GDX) Office in January 2022 to accelerate existing digital transformation initiatives

#### 5) Initiatives to create innovation

• In the Marketing Group (formerly in the Corporate Management Planning Office), promoted cross-divisional business creation initiatives from a customer-centric standpoint. To bolster these initiatives and create innovation across the Group and globally, established the Innovation Networking Center in January 2022

# Business Performance and Shareholder Return

	FY2018 results	FY2019 results	FY2020 results	FY2021 results
Net sales (Billions of yen)	603.0	575.8	541.8	629.4
Operating income (Billions of yen)	65.8	54.2	44.3	72.3
Operating income margin (%)	10.9	9.4	8.2	11.5
Net income (loss) attributable to owners of the parent (Billions of yen)	33.6	(2.0)	2.6	37.3
Net income (loss) per share (EPS) (Yen)	96.05	(5.66)	7.48	108.32



# Medium-Term Management Plan "PASSION 2026" Information on the Medium-Term Management Plan "PASSION 2026" is posted on the website below. https://www.kuraray.com/ir/library/strategy

Formulating "PASSION 2026"

The Kuraray Group formulated "PASSION 2026," a five-year plan leading up to 2026, which marks the 100th anniversary of our founding. "PASSION 2026" was born out of a combination of top-down and bottom-up approaches: Management set the overarching framework of the Plan by establishing Group-wide themes to make the "Kuraray Vision 2026" long-term vision a reality. These themes were then discussed in workshops for each theme involving members chosen from bases around the world. The Kuraray Group will join forces to take on the challenge of sustainable growth. Our efforts will focus on building a more sophisticated business portfolio that is attuned to social and environmental value as well as economic value, generating innovation through organic collaboration both inside and outside the Group, and transforming people and organizations by harnessing digital technology.

# Modification of "Kuraray Vision 2026" and Formulation of the Sustainability Long-Term Vision

Since its founding in 1926, the Kuraray Group has grappled head-on with ways of addressing social issues through its business activities. This stance is part of the DNA that has been passed down throughout our history.

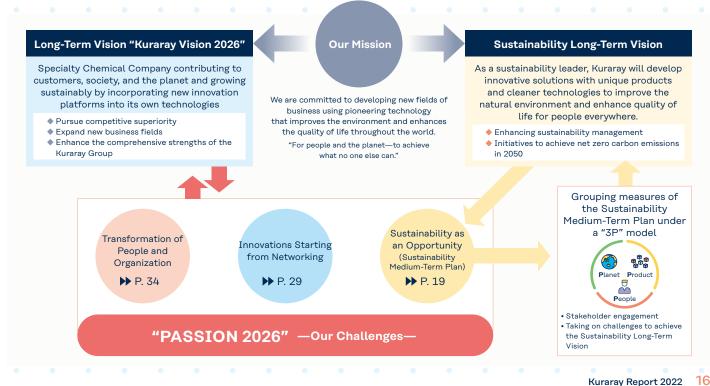
In modifying the "Kuraray Vision 2026" long-term vision, we revisited the Group's roots while also clarifying our commitment to contribute to a wide range of stakeholders, expressed in the addition of the message of "contributing to customers, society, and the planet."

We also formulated a new Sustainability Long-Term Vision, conveying our determination to continue helping to address social issues across the Group through forward-looking measures to achieve sustainability.

# Taking on New Challenges

Looking ahead at the coming era, in which predicting the longer-term outlook for the economy or the operating environment is extremely difficult, we have identified three new challenges for the Kuraray Group to take on in order to continue growing. These are: "Sustainability as an opportunity," "Innovations starting from networking," and "Transformation of people and organization." We will strive to realize "Kuraray Vision 2026" and the Sustainability Long-Term Vision as we make steady headway in meeting these challenges.

# Interrelationship of the Kuraray Group Vision



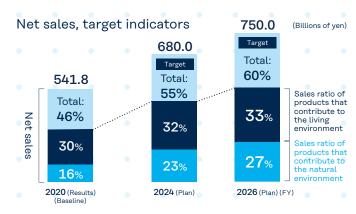
# **Building a More Sophisticated Business Portfolio**

The Kuraray Group has adopted PSA to promote the shift toward a business portfolio that stresses social and environmental value in addition to economic value. Products that contribute to materiality are classified by application and region, and evaluated using a 5-point scale based on criteria such as fundamental requirements, stakeholder requests, and performance comparison against benchmark products. Products receiving the two top rankings are designated as PSA-contribution products.

We will continue to build a more sophisticated business portfolio by expanding sales of PSA-contribution products, from 46% of all sales in 2020 to 60% in 2026.

# PSA-based assessment of contribution





# Fundamental requirements • Chemical and hazardous substance management • Application to Kuraray Action Guidelines • Economic value • Reputational risks

### Stakeholder requests

- Regulatory trends by region
- Sustainability policies across the value chain
- Eco labeling, certification, etc.

# Assessment

• Relative assessment against benchmark

# Strategies by Segments

The following is a segment overview of key strategies and selected measures.

		Business Strategy	Examples of Key Measures
Vinyl Acetate ▶P. 41	• c s • N	everage the strengths of our vertically integrated supply hain making products in-house from raw materials to achieve ustainable growth as the Kuraray Group's core business. 1ake the most of the characteristics of each product to ontribute to a circular economy.	<ul> <li>Strengthening the global supply system.</li> <li>Expanding volume and developing new applications of optical-use poval film and water-soluble PVOH film, upgrading production capacity</li> </ul>
Isoprene P. 42	• • E	arly contribution to profit by launching a new site in Thailand. Boost sales and promote the new development of one-of-a- ind products with high customer value.	<ul> <li>Strengthening the global supply system with the launch of the site in Thailand.</li> <li>Expanding the marketing and technical services framework of the GENESTAR™ business</li> </ul>
Functional Materials		Offer products and services with high environmental and ocial value and contribute to improvement in quality of	<ul> <li>Boosting profitability in the environmental solutions business and reinforcing the reactivated carbon business by leveraging strengths as a comprehensive activated carbon manufacturer</li> </ul>
P. 43			<ul> <li>Developing a supply system to support global expansion of dental materials</li> </ul>
Fibers and	• s	Strengthen profitability by shifting to high-value-added	• Expanding sales of sustainable products in the KURALON™ business
P. 44		products using unique raw materials and manufacturing echnologies.	<ul> <li>Accelerating the expansion of new applications by developing high-value-added products and providing technical services in the VECTRAN™ business.</li> </ul>
Trading P. 44	b	Strengthen profitability by shifting to high-value-added businesses through expansion of proprietary products and processing businesses.	<ul> <li>Expanding proprietary and overseas businesses</li> <li>Expanding the ECOTALK<sup>™</sup> brand<sup>*1</sup></li> </ul>
	• E	xpand overseas sales, primarily in Asia.	

\*1 Brand name applied to products made using manufacturing methods with strong CO<sub>2</sub> emission reduction gains and products that help improve the living and working environments.

#### **Management Targets** (Billions of ven) Net Sales **"PASSION 2026'** Operating income 750.0 680.0 650.0 629.4 100.0 80.0 72.3 73.0 2021 (Results) 2022 (Plan) 2024 (Plan) 2026 (Plan) (FY)

Through the steady implementation of the "PASSION 2026" management strategy, the Kuraray Group targets net sales of ¥750 billion and operating income of ¥100 billion in 2026, marking the 100th anniversary of our founding.

	FY2021 Results	Assumptions during the Medium-Term Management Plan period
JPY/USD	110	110
JPY/Euro	130	130
Domestic naphtha (JPY 1,000/kl)	48	58

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	FY2021 Results		FY2022 Plan		FY2024 Plan		FY2026 Plan		Difference (FY2026 vs FY2021)	
(Billions of yen)	Net sales	Operating income	Net sales	Operating income	Net sales	Operating income	Net sales	Operating income	Net sales	Operating income
Vinyl Acetate	304.7	58.3	320.0	62.0	330.0	66.0	350.0	77.0	45.3	18.7
Isoprene	61.9	6.1	65.0	6.5	75.0	5.0	90.0	10.0	28.1	3.9
Functional Materials	142.4	8.7	145.0	9.0	155.0	11.0	175.0	18.0	32.6	9.3
Fibers and Textiles	61.1	5.6	60.0	3.0	63.0	6.0	65.0	7.0	3.9	1.4
Trading	144.0	<mark>4.</mark> 8	58.0	5.0	6 <mark>0</mark> .0	5.0	70.0	6.0	(74.0)	1.2
Other	44.3	1.2	44.0	1.0	47.0	2.5	52.0	3.0	7.7	1.8
Adjustments	(129.1)	(12.4)	(42.0)	(13.5)	(50.0)	(15.5)	(52.0)	(21.0)	77.1	(8.6)
Total	629.4	72.3	650.0	73.0	680.0	80.0	750.0	100.0	120.6	27.7

\*Corporate Accounting Standards - Revenue Recognition (ASBJ Statement No. 29) is applied from FY2022.

\* Figures for Trading segment net sales and adjustments for FY2022 have significantly changed compared to FY2021, mainly due to changes in accounting methods for revenues attributable to agent transactions in the Trading segment as a result of the adoption of the Accounting Standard for Revenue Recognition and other factors. Because of these changes, revenues from such transactions, which have previously been recorded on the basis of total transactional value, are now recorded on a net basis.

# Financial and Non-Financial KPIs

Under "PASSION 2026," we have established ROIC, EBITDA, and ROE as financial KPIs to guide us in conducting management with an eye toward capital efficiency and steadily expanding our ability to generate cash. We will also shift toward a more sustainable business portfolio, having set quantitative non-financial KPIs for greenhouse gas emissions, the sales ratio of products that contribute to the natural and living environments, and the diversity of core human resources.

# **Financial KPIs**

										FY20	)21 result		FY2026 target
ROIC	•	•	•	•	•	•		•	•	•	6%	•	8%
EBITDA*2										¥133	1.3 billion		¥170.0 billion
ROE 🛛	•	•	•	•	•	•	•	•	•	•	• 7% •	•	10%
EBITDA Ma	rgin (re	ferenc	e)								21%		23%
*2 Operating i	ncome +	depred	iation ar	nd amor	tization								

# Non-financial KPIs

	Result in base year	Target
GHG emissions (Scope 1, 2)	3,230kt (in FY2019)	FY2030 2,230kt (30% less than base year)
Sales ratio of products contributing to natural and living environment	46% (in FY2020)	FY2026 60%
Ensuring diversity of core human resources (Ratio of managers in Japan who are women, foreign nationals and mid-career hires, excluding production sites)	12% (in Sep. FY2021)	FY2030 25%

# Our Challenges (1) Sustainability as an Opportunity

# We will enhance sustainability by strengthening collaboration with our businesses.

# Akiko Ide

Executive Officer General Manager of Corporate Sustainability Division

# A More Robust Sustainability Promotion Structure and Our Long-Term Vision

From our foundation, the Kuraray Group has been working to address social issues through our businesses, based on our founding philosophy that "the wealth gained from society must be returned to society." For many years, our efforts in this vein centered mainly around the CSR Committee, organized in 2003, hailed as the inaugural year of corporate social responsibility in Japan. The CSR Committee was reorganized as the Sustainability Committee in January 2022, giving us a new framework enabling us to act more swiftly in response to issues demanding attention amid increasingly drastic changes in the business environment. The Sustainability Committee, made up primarily of members of the Executive Committee and chaired by the President, is directly linked to business activities.

We have also set out the Sustainability Long-Term Vision in tandem with formulating the Medium-Term Management Plan "PASSION 2026." Many Kuraray Group products are used as materials that are rarely recognized on the outside, but they find a place in a wide array of end-products and applications in the world around us. The Sustainability Long-Term Vision expresses the Group's determination to constantly find solutions and contribute in numerous ways to global issues.

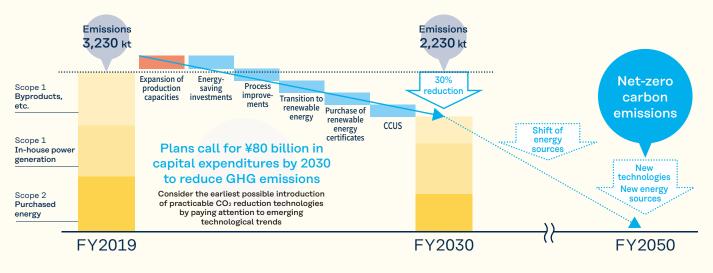
As society calls on companies to link sustainability more robustly to corporate management, top management of the Kuraray Group has clearly expressed its conviction that sustainability is one of its key management strategies and that it is indispensable for the sustainable development of the Group in the future.

# Sustainability Long-Term Vision

As a sustainability leader, Kuraray will develop innovative solutions with unique products and cleaner technologies to improve the natural environment and enhance quality of life for people everywhere.

# Achieving Net-Zero Carbon Emissions in 2050

Based on the Sustainability Long-Term Vision, we formulated a long-term roadmap for achieving net-zero carbon emissions in 2050. The roadmap calls for no increases in Scope 1 and 2 GHG emissions during the period of "PASSION 2026" compared to 2019, and sets a target of reducing emissions by 30% in 2030 compared to 2019



and achieving net-zero emissions by 2050. Particularly in the activated carbon business, although the products themselves make a significant contribution to the natural and living environments, there is an issue with CO<sub>2</sub> by-products in the manufacturing process. To develop this business further, it is essential to create a carbon dioxide capture, utilization, and storage (CCUS)<sup>\*1</sup> system that both reduces CO<sub>2</sub> emissions as much as possible and recovers and utilizes emitted CO<sub>2</sub>. This requires medium- to long-term technological development and capital investment.

We have already started developing a CCUS system, and construction of a trial CCUS plant is included in the roughly ¥30 billion in investments earmarked for greenhouse gas reduction under "PASSION 2026." Subsequently, we plan to invest about ¥50 billion by 2030 mainly in the trial CCUS plant and in the shift to in-house produced power—a total of ¥80 billion in greenhouse gas emission reductions from 2022 to 2030. Furthermore, we will pay attention to emerging technological trends, rolling out practicable GHG reduction technologies as early as possible.

\*1 Carbon dioxide Capture, Utilization, and Storage: An initiative to utilize or store CO<sub>2</sub> separated from exhaust gas from industrial facilities.

# Easy to Understand "3P" Model for the Sustainability Medium-Term Plan

Under "PASSION 2026," sustainability-related measures are summarized in the Sustainability Medium-Term Plan and grouped into three Ps: Planet, Product, and People. The "3P" model aims to convey globally to all of our employees and other stakeholders, in an easy-tounderstand format, the sustainability-related measures we have determined, guided by our areas of materiality. By steadily moving forward with the various measures indicated under the "3P" model, we aim to achieve a fourth "P"—the Prosperity of both society and the Kuraray Group.

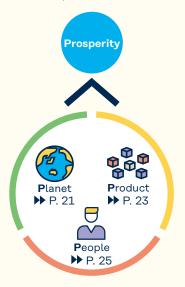
Planet-related measures have to do with the natural environment. In addition to the initiatives to achieve netzero carbon emissions by 2050 mentioned above, we have drafted a concrete plan for reducing Scope 3 GHG emissions and are aiming to obtain SBT\*<sup>2</sup> certification by 2024. Regarding TCFD disclosure, we will analyze the various scenarios and quantitatively assess their impact in 2022. We will continue to review the numerical targets for the areas already identified in previous medium-term environmental plans ( $\triangleright$ p. 21).

Product-related measures include the introduction of a Portfolio Sustainability Assessments (PSA) system to objectively assess the contribution of each product or service to the natural and living environments. We will seek to boost the revenue ratio of PSA-contribution products as we work to promote a circular economy and pursue greater sustainable procurement. We feel that the PSA system is particularly useful not only for our business divisions but also for proposals and application development carried out in collaboration with the Innovation Networking Center to address the unmet needs<sup>\*3</sup> of customers (▶p. 23).

People-related measures have to do with human resources in a broad sense, including more robust occupational safety and process safety fostering a culture that encourages the taking on of challenging endeavors, promoting diversity and inclusion, expanding global HR development systems, and social contribution activities. Regarding process safety and disaster prevention, we will set up a new Global Process Safety Management Audit Team, gathering personnel worldwide who are skilled in chemical plant operations to strengthen safety audits for chemical and activated carbon plants in 2022. Regarding human resources, we will expand our consistent HR platform and personal database to align job grades for management positions from a global perspective and we will promote the visualization of our human resources. Under this HR framework, we aim to build an organization in which diverse human resources can play an active role by placing the right people in the right positions in Japan and overseas, and combining this with an effective training system. We are convinced that the intersection of a range of ideas and ways of thinking increases the likelihood of unexpected breakthroughs and will lead to the creation of a culture that embraces challenges (>> p. 25).

\*2 SBT (Science-Based Targets): Voluntary targets set by business corporations with regard to GHG emission reductions over the course of 5 to 15 years in a manner consistent with the levels required by the Paris Agreement.

<sup>\*3</sup> Unsatisfied or unidentified potential demand or needs.



# Moving Forward with Stakeholders

If we hope to achieve sustainable growth in an era of changing lifestyles and values, amid a global movement toward net-zero carbon emissions, the Kuraray Group must continue to evolve and build a more sophisticated business portfolio. Furthermore, a new mindset is required for each and every employee involved in reaching this goal. This is the core thrust of our sustainability initiatives.

Naturally, we recognize the need to revise our plans as needed to address changes both in the business environment and in what stakeholders expect of us. We will continue to deepen our engagement with our shareholders, investors, and other stakeholders, reflecting their concerns in our activities going forward. For detailed information, please visit the website. https://www.kuraray.com/csr/report2022/Scope1\_2 Kuraray's Approach to Environment-Friendly Manufacturing We believe that the Kuraray Group's mission is to manufacture basic and intermediate materials that will contrib-

facture basic and intermediate materials that will contribute to creating a low-carbon and environment-friendly society and minimize their environmental impact as much as possible. Based on this philosophy, the Kuraray Group

# **Environmental Management System**

The Kuraray Group has established the Kuraray Group Environmental Policy, and is promoting environmental conservation activities. These activities are in the P (plan) D (do) C (check and evaluate) A (act and improve) cycle for constant improvement according to the Kuraray Group Environmental Activity Management Rules. Kuraray plants and subsidiaries have acquired ISO 14001 (Environmental Management Systems) certification and

FY2021 targets

Implement measures to reduce GHG emissions by 13,000

Improve the GHG emission intensity index  $^{\star 1}$  by at least 1.0

Improve the water (excluding seawater) intensity index by at

Improve the energy intensity index by at least 1.0

# **Environmental Performance**

Kuraray Group in Japan:

Kuraray Group in Japan:

tons-CO2 or more year on year.

percentage point year on year.

percentage point year on year

No specific numerical targets were set.

Kurarav Group outside Japan:

Kuraray Group outside Japan:

Activity item

Global

warming

prevention

Effective use

of water

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resources

Ongoing initiatives to reduce environmental burden

- Reducing GHG emissions from the supply chain
- Achieving harmony with society through participation in international initiatives

continues to conserve the environment through global manufacturing, including the promotion of measures against global warming, reduction of chemical substance emissions, and effective use of resources.

### are steadily operating ISO 14001 systems.

Kuraray Group in Japan:

tons-CO2 year on year.

Kuraray Group outside Japan:

Kuraray Group outside Japan:

quantitative control of water usage.

points year on year.

Kuraray Group in Japan:

year on year.



Results

Implemented measures to reduce GHG emissions by 30,000

The GHG emission intensity index improved by 7.7 percentage

The energy intensity index worsened by 0.3 percentage points

Pursued effective use of water resources and implemented

ources	least 1.0 percentage point year on year.	The water (excluding seawater) intensity index improved by 9.5 percentage points year on year.
ission nagement chemical ostances	Kuraray Group in Japan: Control the amount of JCIA-designated PRTR substance emissions* <sup>2</sup> to less than fiscal 2016 result (957 tons). Kuraray Group outside Japan: No specific numerical targets were set.	<ul> <li>Kuraray Group in Japan: JCIA-designated PRTR substance emissions were 985 tons.</li> <li>Kuraray Group outside Japan: Implemented quantitative emission control in compliance with chemical substance emissions regulations in each country/area.</li> </ul>
ective use vaste	Kuraray Group in Japan: Implement measures to reduce waste by the equivalent of 1% relative to fiscal 2016 level (900 tons) or more. Control final landfill volume to less than fiscal 2016 result (251 tons). Kuraray Group outside Japan: No specific numerical targets were set.	<ul> <li>Kuraray Group in Japan: Implemented measures to reduce waste by 4,934 tons.</li> <li>The final landfill volume was 655 tons.</li> <li>Kuraray Group outside Japan: Implemented quantitative control of waste in compliance with legal requirements in each country/area.</li> </ul>
ironmental ounting	_	Amount of investment for environmental conservation: ¥2,080 million (FY2020: ¥2,084 million) Cost of environmental conservation: ¥2,821 million (FY2020: ¥2,609 million)

\*1 Intensity index: A value obtained by dividing converted production volume by environmental impact. The 2016 result was set to 100. (Converted production volume: Production volume converted from the production volume of each product as the production volume of the reference

product using a conversion factor determined based on the environmental load intensity of each product in the reference year.)

\*2 JCIA-designated PRTR substances: 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).

# Initiatives to Reduce Scope 3 GHG Emissions from the Supply Chain

At present, most Scope 3 GHG emissions are only measured in Japan. By 2023, we will extend measurements to the whole Group while also improving their accuracy, seeking to identify categories that account for two-thirds of all Scope 3 GHG emissions. We will also deepen the dialogue with business partners and set Scope 3 reduction targets for the entire supply chain. We aim to obtain Science Based Targets (SBT) certification for our Scope 1 and 2 as well as Scope 3 GHG emission reduction targets.

For information about Scope 3 emissions, please visit the website. https://www.kuraray.com/csr/report2022/Scope3



# **Disclosure Based on TCFD Recommendations**

In November 2020, Kuraray Group endorsed the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD)<sup>\*3</sup> in recognition of the importance of climate change control as one of our high-profile issues. The Sustainability Medium-Term Plan, which started from 2022, includes measures to mitigate climate change such as reducing GHG emissions, pursuing energy savings, expanding products that contribute to improving the natural environment, and responding to the circular economy. In addition to implementing these measures gradually, we will enhance the disclosures of strategy, based on governance and scenario-based analysis, risk-management, indicators, and targets recommended by TCFD.

\*3 TCFD stands for the Task Force on Climate-related Financial Disclosures which was established by the Financial Stability Board (FSB) to review how to respond to climate change disclosures and requirements from the financial sector.

### Governance

In the Kuraray Group, the Sustainability Committee, chaired by the president, promotes sustainability activities. Under this committee, we will establish several project teams to implement the global measures outlined in the Sustainability Medium-Term Plan and promote each project. In addition to confirming the progress of the projects related to climate change control, the TCFD Promotion Project Team, which has been established under the Sustainability Committee, will enhance disclosure based on TCFD guidelines.

Topics discussed in the Sustainability Committee are reported to the Board of Directors and the feedback from the Board will be reflected in future sustainability activities.

#### Risk Management

The Kuraray Group implements risk management in terms of both mitigating and adapting to climate change. Measures to mitigate climate change, such as reducing GHG emissions and expanding products that contribute to improving the natural environment, are mainly managed by the Sustainability Committee, which promotes the reduction of the risk of transition to a carbon-free society.

Meanwhile, each organization conducts risk self-assessments every year as a measure to adapt to climate change to strengthen disaster countermeasures and business continuity. The results of these assessments are discussed by the Risk Management and Compliance Committee (chaired by the director in charge of the Corporate Sustainability Division) and if countermeasures are necessary, the President will appoint a person in charge to pursue countermeasures to improve the situation.

#### Strategy

We identified risks and opportunities for the Kuraray Group from events that occur in the transition to a low-carbon society and physical events that occur due to climate change.

Both an increase in the carbon tax burden and a decrease in the use of plastic products are considered to be risks from the transition to a low-carbon society. In order to reduce these risks, we will work together among Kuraray Group colleagues as well as our business partners to reduce GHG emissions. In addition, we will develop products and technologies that contribute to the circular economy. Furthermore, seizing the process of manufacturing, distributing, and consuming our customers' products and end-products as an opportunity to reduce GHG emissions and the use of plastic products, we will create and expand sales of products and technologies that contribute to the improvement of the natural environment.

In addition, we will prepare for business continuity by implementing measures against catastrophic disasters caused by climate change and aim to realize a society resilient to climate change through disaster countermeasures and products that contribute to securing water and food resources. In the future, we will identify scenarios of climate change and deepen our analysis of risks and opportunities. At the same time, we will analyze the impact on the Kuraray Group.

### Indicators and Targets

As our long-term goal for mitigating climate change, we will target the reduction of our own GHG emissions (Scope 1 and 2) by 30% in 2030 compared with 2019 and the achievement of net-zero carbon emissions in 2050. In the Sustainability Medium-Term Plan, we have set the following targets for reducing GHG emissions related to climate change and for expanding sales of products that contribute to the natural environment.

For information about the climate change-related risks and opportunities of the Kuraray Group, please visit the website.

https://www.kuraray.com/csr/report2022/prevention\_of\_global\_warming

### Measures and Targets Related to Climate Change in the Sustainability Medium-Term Plan

			Benchmarks	FY2024	FY2026	FY2027 and beyond
Planet	GHG emissions	Scope 1+2	FY2019: 3.2 million tons	No increase in emissions compared to fiscal 2019		<ul> <li>FY2030: 30% reduction compared to fiscal 2019</li> <li>FY2050: Carbon Net Zero</li> </ul>
		Scope 3	FY2019: 0.9 million tons (Japan)	<ul> <li>Target the entire Group and identify the category that accounts for more than two-thirds of emission</li> <li>In fiscal 2023, formulate numerical reduction targets for fiscal 2024 and fiscal 2026</li> </ul>		
Product	Revenue Ratio of Natural Environment / Living Environment Contributing Products (Of which, Revenue Ratio of Natural Environment Contributing Products)		FY2020: 46% (16%)	55% (23%)	60% (27%)	



For detailed information, please visit the website. https://www.kuraray.com/csr/report2022/psa\_product

# **Addressing Material Issues with Products**

Guided by the mission stated in the Kuraray Group's Corporate Statements—"For people and the planet—to achieve what no one else can"—we have sought to address material issues by developing businesses that

- Introducing PSA to evaluate contributions to the natural and living environments
- Mitigating social impact in the supply chain by promoting sustainable procurement

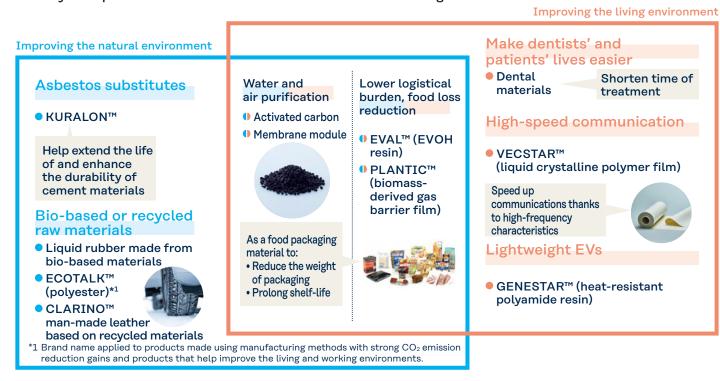
contribute to improving the natural and living environments everywhere. We will continue to contribute to the realization of a sustainable society through our unique technologies and products.

# **Contribution Products for the Natural and Living Environments**

Under "PASSION 2026," products and technologies that contribute to the Kuraray Group's material issues of improving the natural and living environments are incorporated into the business plans of each business division and Group company, as well as the Research and Development Division.

The Kuraray Group has introduced PSA to carry out screening to enhance objectivity and transparency in setting targets for products that contribute to both the

- natural and living environments. Based on the results of screening, high-scoring products are designated as "contribution products," those that contribute to the natural and living environments. The target is to increase the sales revenue ratio of such products from 46% in 2020 to 55% in 2024 and 60% in 2026.
  - For information about the PSA system, please visit the website. https://www.kuraray.com/csr/report2022/psa



# Kuraray Group Products that Contribute to the Natural and Living Environments

# Initiatives toward a Circular Economy

The Kuraray Group works to address the issue of transitioning to a circular economy as a company that develops products made from fossil raw materials. During the "PASSION 2026" period, we will also work with business partners in the supply chain to reduce the use of fossil raw materials and the amount of waste generated over the life cycle of the products.

# **Promoting Sustainable Procurement**

Following growth in social demand for adequate supply chain management, the Kuraray Group revised its CSR Procurement Policy and began requesting the cooperation of some business partners in Japan to comply with the policy in 2019. Under "PASSION 2026," we will extend the scope of this activity to business partners, including overseas partners, representing 80% of the Group's total purchase amount (90% of the purchase amount for raw materials, secondary materials and products).



# **Quality Management**

The Kuraray Group's approach to quality is rooted in the realization of the Kuraray Group's Mission: "For people and the planet—to achieve what no one else can."

Our products and services can only be valuable when their value is recognized and accepted by customers. In other words, we have made it clear that Kuraray's concept of quality is "customer satisfaction." In order to provide products and services that achieve customer satisfaction and contribute to society, we believe that it is essential not only to pursue the performance and quality of our products and services but also to consider multiple aspects, including safety, environmental impact, and sustainability.

For this reason, it is necessary to conduct comprehensive quality management in both manufacturing, such as production and development, and in sales, distribution,

# **Product Safety and Chemical Management**

To ensure the safety of products, the Kuraray Group's respective divisions make evaluations and improvements using risk assessment techniques in developing new products and managing changes to secure and guarantee product safety. In addition, with regard to manufactured products or products under development that are particularly in need of safety validation, such as those that are ingested and those that use nanomaterials, we set up a deliberation committee led by the Corporate Sustainability Division to confirm safety.

In the management of chemical substances, we have set a system that enables us to obtain relevant legal and hazard information and to prepare safety data sheets (SDSs) by linking information on chemical substances contained in raw materials and products registered in our internal database with external databases such as of laws storage, value chains, and so on, and we are promoting initiatives with the participation of all employees.

### Kuraray Group Global Quality Policy

"We contribute to the society by supplying safe, reliable and high-quality products and services."

We vow to provide safe, high-quality products and services with a sense of responsibility and pride and contribute to improved natural environments and living environments to realize a sustainable society.

To that end, each of us will continuously engage in improvement activities to pursue the creation of value to enhance customer satisfaction with better understandings of demands of laws and regulations, society, and customers' needs.

and regulations and safety information on chemical substances. In addition, we appoint people responsible for chemical management and people in charge of actual operations at each division. Those staff take the lead in conducting continuous in-house education to deepen understanding of chemical substance management and laws and regulations. Furthermore, to respond to the expansion of destination countries and regions, the expansion of the Kuraray Group's bases, and the increasing complexity of laws and regulations in each country, we are collaborating with Group companies outside Japan to research and share information on laws and regulations in each country, to achieve accurate chemical substance management across the entire Group.



For detailed information, please visit the website. <u>https://www.kuraray.com/csr/report2022/</u> <u>occupational\_safety\_process\_safety</u>

# 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. It is evident that realizing workplaces where people can safely work at ease without accidents is a critical theme both in maintaining a stable supply of products and in maintaining society's trust.

Based on this view, the Kuraray Group develops and operates safety management systems and conducts various activities. We are putting several measures in place to raise employee awareness of safety and establish safe

Guiding Principle for Ensuring Safety

# Safety is the Cornerstone of Everything We Do

# **Safety Activity Management**

Based on Kuraray's Safety Activity Management Rules, the Kuraray Group develops a safety plan every fiscal year and implements it to ensure occupational safety, process safety. Specifically, at the Safety Promotion Committee attended by the President and executives in charge, we make an overall assessment and have a discussion on safety activity performance of the current fiscal year and establish an activity policy for the coming fiscal year. This policy is reflected in and implemented through specific action plans of each plant and department. A group of safety representatives from headquarters, including executives in charge of safety, visit every production site of the Group in Japan twice a year to examine their activity plans, the management of implementation progress, and the results. In addition, staff members from headquarters visit the Group subsidiaries outside Japan once every three years to confirm their status<sup>\*1</sup>. We perform an overall assessment of results based on the issues found through the surveys made at each plant, the safety results for that year, and other factors. We incorporate this assessment into the formulation of company-wide policies for the next year, thereby operating a management system for safe operations.

There were no process accidents in the Group overseas in 2021, but there were 10 leakage accidents of hazardous materials or freon gas in the Kuraray Group in Japan. Three cases were relatively serious (A, B, and C rank) process accidents, for which our target is zero cases, and seven cases were minor (D1 and D2 rank, e.g., a very small amount of hazardous materials leaked), for which

- Promoting safety activity management to realize workplaces where people can safely work at ease without accidents
- Cultivating a company based on diversity and inclusion where each person can embrace new challenges and continue to create innovation
- Developing the skills and capabilities necessary to the growth of employees and the company by expanding the Global Talent Development Program

actions and safety checks as routine practices.

At each workplace, we uncover risks related to occupational safety and process safety, conduct thorough risk assessment activities, promote fundamental equipment safety measures, and prevent process accidents and occupational injuries. Additionally, in the event of an accident or disaster, we work on preventing recurrence, such as by carrying out training to minimize damage, sharing information on cases of accidents and lessons learned, and horizontally deploying countermeasures.

#### Action Courses for Ensuring Safety (FY2022)

- 1) Ensuring Safety First, Production (Construction and R&D) Second
- 2) Predict Hazards and Make Sure the Safety before Taking Action, then Confirm the Action Results are What You Expected
- 3) Each Employee Acts with the Intention of Ensuring Safety as "Their Own Issue"

our target is three or less cases. We did not achieve either target. We will continue to uncover risks and implement countermeasures at workplaces to achieve zero relatively serious process accidents and to reduce the occurrence of minor accidents. We are working on enhancing the level of process safety management at our chemical plants outside Japan. In addition to continuing the safety audits that began at these plants in 2019, we also introduced a new global process safety management framework and are implementing thorough measures to prevent recurrence of accidents and addressing issues brought to light by the audits ( $\blacktriangleright$ p. 26).

Meanwhile, although the number of occupational injuries of the Kuraray Group in Japan decreased for the third year in a row, the number of injuries in the Kuraray Group overseas increased significantly. There were three A or B rank injuries across the Kuraray Group (zero cases in Japan, one A rank case and two B rank cases outside Japan). We did not achieve our target. Numerous occupational injuries caused by individuals' unconsidered or unconscious behavior, such as slipping or falling, have occurred in the Kuraray Group overseas, although the number is on a downward trend in Japan. We have continued to work on reducing such "behavioral injuries." As many injuries involve inexperienced workers, we will continue to review and enhance safety training for new employees. We will steadily promote activities to address these issues as we aim to realize workplaces where people can safely work at ease without accidents.

\*1 In 2020 and 2021, the verification of safety activities was conducted via web meeting remotely due to the COVID-19 situation.

# Numerical Targets and Results for Occupational Safety, Process Safety

	FY2021		FY2022	FY2026
	Criteria for evaluation	Actual results	Targets	Medium-Term Targets
Dracasa asfatu	A, B, and C rank accidents*2	3 cases	Zero	Zero (including process safety trouble)
Process safety	D1 and D2 rank accidents*2	7 cases	3 or less	3 or less
Occupational	A and B rank injuries* <sup>3</sup>	3 cases	Zero	Zero
safety	Frequency rate of all occupational injuries*4	2.89	2.0 or less	1.3 or less

\*2 Evaluation ranking of process accidents using Kuraray's proprietary system. Five ranks in order of seriousness: A > B > C > D1 > D2.

\*3 Evaluation ranking of occupational injuries using Kuraray's proprietary system. Four ranks in order of seriousness: A > B > C > D.

\*4 Frequency rate of all occupational injuries: Number of all occupational injuries per million working hours, including no lost-time injuries.

# Priority Activities for Occupational Safety, Process Safety

Evaluation:  $\bigcirc$  Accomplished,  $\triangle$  Nearly accomplished, imes Not accomplished

Activity		Items related to			
	Targets	Performance	Evaluation	FY2022 safety activities	
	Ensuring "hazard prediction" to secure the safety of the workplace	We believe our efforts to instill the habits of "predicting hazards" and "making sure the safety" have been conducive to preventing occupational injuries and process accidents to some extent. However, the degree to which such habits have taken root varies among organizations and individuals. Accidents and injuries caused by lack of hazard prediction and safety confirmation have continued to occur. Going forward, continuous efforts are needed to enable every employee to perform basic safety actions in every situation.	0	- Thoroughly	
	Grasping and improving actual conditions of work in the workplace, and reviewing and using operation standards	We reviewed the operation standards by grasping actual conditions of work in the workplace and making sure that work procedures were done according to the standards. Additionally, "5S" activities to better organize workplaces and activities to share safety issues recognized in the workplace led to more active communication between supervisors and employees. We will continue to make use of the reviewed operation standards in the workplace to reflect changes in workplace conditions and the opinions of workers in a timely manner.	0	<ul> <li>Thoroughly implementing basic safety actions to ensure workplace safety</li> <li>Grasping actual conditions in the workplace and making</li> <li>both systemic and structural improvements to raise safety levels</li> <li>Uncovering latent risks related to process safety exploring countermeasures, and implementing measures to minimize apparent risks</li> <li>Ensuring safety of construction and maintenance work</li> <li>Grasping the process safety management level of chemical plants outside Japan</li> </ul>	
Process Safety, Occupational Safety	Implementing measures to discover latent risks and minimize apparent risks with regard to process safety	We have continued to identify risks from the viewpoint of unusual tasks and conditions. We need to continue to conduct activities to identify and assess risks, and explore countermeasures, while clarifying previously unpredicted latent risks individually.	Δ		
Galety	Ensuring safety in construction and maintenance work	We thoroughly conduct preventative safety measures to ensure safe workplaces, confirm actual conditions and facilities by three related organizations, and conduct appropriate information exchange on safety among construction and maintenance workers through reviewing systems and regulations related to construction and maintenance work. We also work on implementing thorough safety measures that are needed by means of a safety supporter system, involving on-site guidance and advice from seniors in technical departments. We will continue to operate this framework to ensure safety in our construction and maintenance work.	0		
	Grasping process safety risks and countermeasures at overseas chemical plants	For issues identified from the results of safety audits for chemical plants outside Japan, we are working on constructing and improving process safety management systems for each production site. We are also identifying latent hazards through risk assessments, informing employees, and implementing countermeasures. Going forward, an in-house team of process safety management experts plans to audit each production site. Horizontal audits by this team will give us a better grasp of the process safety management level of each production site and enable us to take appropriate countermeasures.	0		

# Safety Audits for Chemical Plants outside Japan

To ensure safe and stable plant operations overseas, we have been conducting safety audits for chemical plants outside Japan since 2019, grasping process safety risks, and reviewing and enhancing safety measures. In 2021, we conducted audits on-site at two plants in the United States and remotely at a plant in the United States and a plant in Asia. In the 2021 audits, we confirmed the response status of issues identified in the previous year and identified new issues including thorough cause analysis of process accidents and trouble and progress management of safety measures to completion. In 2022, in addition to the audits by members from Japan, we are planning to form an in-house team of global process safety management experts to audit plants outside Japan. Horizontal audits by this team will give us a better grasp of the process safety management level of each production site and enable us to take appropriate countermeasures.

# **Communication Based on the Kuraray Group Global HR Policy**

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, cultivation of human resources, and fair

The Kuraray Group Global HR Policy

- We will respect the human rights of individuals.
- **2** We will abolish discrimination and respect diversity and individuality.
- We will comply with applicable laws and regulations. We will create and carry out HR systems that uphold equality, fairness, and transparency.
- We will promote dialogues with all people working in the Kuraray Group to build constructive relations.
- 6 We will strive to improve the environment of workplaces.

**Diversity and Inclusion Initiatives** 

The Kuraray Group has set the destination for its diversity and inclusion initiatives as becoming "a company where each employee in a diverse workforce works enthusiastically and tackles challenges without fear of failure, generating a succession of innovations while responding to change and continuing to grow."

To this end, under "PASSION 2026," we will develop a consistent HR platform and personnel data across the Group, and implement measures to promote HR development and diversity based on a long-term perspective. We will seek globally to assign and promote personnel best and just evaluation of performance, as well as fostering a healthy corporate culture and creating new employment opportunities, so that each employee can grow personally through work.

- We will employ personnel who can contribute to the development of the Kuraray Group.
- We will place the right person in the right job.
- We will maintain an evaluation and benefits system that is fair and transparent.
- 9 We will support professional development.
- We will maintain appropriate levels of disclosure of business information and protect privacy.

suited to each job position in a way that allows individuals to reach their full potential and help grow the business. We will foster an organizational culture in which each person respects diversity and tackles challenges without fear of failure.

Our focus in Japan is on promoting diversity in core human resources, defined as the management layer. We will work to advance women, foreign nationals, and mid-career hires to positions of management. Our goal is to boost the ratio of such managers from 12% as of September 2021 to 25% or more by 2030 (excluding production sites).

A company where each employee in a diverse workforce works enthusiastically and tackles challenges without fear of failure, generating a succession of innovations while responding to change and continuing to grow.



# **Enhancing Talent Development**

The Kuraray Group respects the values and career aspirations of each individual and provides opportunities to develop the skills and abilities needed for employees and the Group to grow together. In addition to enhancing education on Kuraray's values and philosophy and to ensure that a diverse range of personnel can take on more active roles globally, we are expanding the scope of eligibility for the Starter Global Team Training program and broadening our Global Talent Development Program as well as providing more opportunities to work overseas through a development-driven global assignment package (short-term assignment). We will also solidify our business operations by building a pool of human resources through an executive candidate development program from a long-term perspective.

Amid the global expansion of the businesses and

Foundation was established in April 2016 with contributions

from Kuraray to pursue sustainable social activities. The

informed by the history of Kuraray to contribute to society

For information about the Kuraray Foundation,

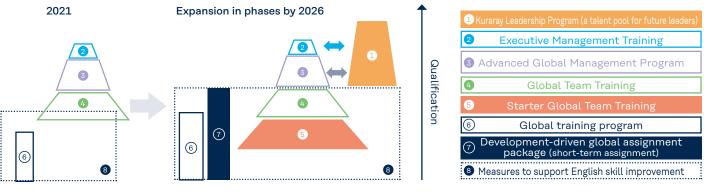
https://kuraray-foundation.or.jp/en/index.html

market presence of the Kuraray Group, the Kuraray

Kuraray Foundation carries out creative activities

please visit the website.

even more broadly and with greater impact.



**Expanded Global Talent Development Program** 

# **Social Contribution Activities**

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

The Kuraray Group carries out activities focusing on culture, science, environment, and social welfare in accordance with its policy for social contribution activities.

# Kuraray Group Policy for Social Contribution Activities

To fulfill its responsibilities as a member of society, the Kuraray Group will 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 employe on their own initiative		
Areas of Activities	Pr	environment, and social we	elfare		
Activities					
Goal	Actual results	Evaluation a	nd challenges	FY2022 goals	
[Science] Steady implementation of "Sending School Backpacks Across the Sea" campaign	<ul> <li>Delivered 7,813 backpace</li> <li>Called for donations of some backpacks through the here backpacks through the here backpack and elementary near Kuraray sites</li> </ul>	chool (uraray hosted again in	the next fiscal Acr	nding School Backpacks oss the Sea" campaign will be adily implemented	
<b>[Science]</b> Hosting "Chemistry Classes for Boys and Girls" more than once a year	event was not held on-site. Held remotely at a local elementary school near the Kashima Plant		Kashima Plant • Spo	<ul> <li>Sponsoring events more than once a year at each plant (excluding Osaka)</li> <li>Sponsoring events outside the Group</li> </ul>	
[Social Welfare] Operating workshops for people with intellectual disabilities	Number of people emploint for the second secon	ally • The targeted nu gata, were hired as p	umber of people • Cor lanned. nur	ntinuing to employ the same nber of people at workshops	
[Culture] [Science] [Environment] [Social Welfare] Steadfastly undertaking existing activities at plants, sites, and affiliated companies focusing on the relationship with local communities Comprehensively grasping the status of activities undertaken by the entire Group including	• Ongoing activities were steadfastly undertaken	steadfastly con conducted. • The status of ac undertaken by <sup>-</sup>	he past could be • Cor tinuously • Cor ctivities of a the overseas ent	ntinuously carrying out the ivities ntinuously grasping the status activities undertaken by the ire Group including overseas erations	

# Our Challenges (2)

# **Innovations Starting from Networking**

Coming together across the Group as "One Kuraray," we will continue to take on the challenge of creating innovation.

# **Toshinori Tsugaru**

Managing Executive Officer Officer Responsible for Innovation Networking Center;

Officer Responsible for Research and Development Division; Officer Responsible for IP Management Center

# Roots of Our Innovation

The Kuraray Group originated with the commercialization of synthetic rayon. Under our mission, "For people and the planet—to achieve what no one else can," we have consistently worked to fulfill our social obligations and create unique technologies. In commercializing KURALON™, Japan's first synthetic fiber, we recognized the importance of integrated production-we could not ensure quality unless we were involved from the raw materials stage. We overcame numerous challenges to establish the in-house production of the raw material PVOH resin. We've done this since the origin of the Kuraray Group, and it has enabled us to create products that capture a high market share. Since then, we have drawn on our base of unique polymer and synthetic chemistry technologies to transition from being simply a fiber manufacturer. We've evolved to become a Specialty Chemical Company creating numerous products and businesses that have won top market share globally in the vinyl acetate sector and beyond.

# Innovation Strategy under the Medium-Term Management Plan "PASSION 2026"

Under "PASSION 2026," as part of our ongoing evolution, in January 2022, we established the Innovation Networking Center (INC) as a step to create a new driver of growth. In an age of VUCA—volatility, uncertainty, complexity, and ambiguity—the mission of the INC is to lead the way in creating frameworks. It is shaping the corporate culture and developing human resources in such a way as to accelerate innovation by integrating internal and external resources, including our ties with customers and partner companies, both worldwide and across the Group. As well as digitalizing collaboration, dialogue, and other customer activities to enable shared access, we will put in place other platforms to drive continued innovation through globally collaborative utilization of the Kuraray Group's comprehensive strengths. These range from proprietary technologies and equipment to a diverse pool of talent.

We also expect this to act as a catalyst to stimulate the corporate culture to create new organizational structures

that do not exist under the existing divisional framework. On the R&D front, we are channeling efforts into

"Development based on the customer perspective," "Development that contributes to sustainability," and the "Planning and promotion of an intellectual property (IP) strategy." We have numerous technologies in the R&D pipeline at present and envision that, with the help of INC in obtaining market information and identifying unmet needs, these technologies will feed into the development of materials that offer new value. By outlining a future corporate vision based on the consumer and customer perspective and then undertaking a backcasting process to identify research themes, we will make inroads into new areas beyond the scope of our current research domains. To promote development that contributes to sustainability, we will not only accelerate the development of greenhouse gas reduction technologies, which is a Group policy, but also continue to offer solutions and develop materials that contribute to improving the natural and living environments. Our efforts will be in the areas of waste reduction, use of biomass and biodegradable products, health and beauty, and high-speed telecommunications. In January 2022, we established the Environment and Energy Research Laboratory, whose mission includes actively developing biomass-derived new carbon materials. To drive the planning and promotion of an IP strategy, we also established the IP Management Center in January 2022. This Group-wide organization supports the IP strategies of our various divisions. The Center will formulate and implement a global strategy for the effective use of IP, including monetizing IP rights through expanded out-licensing.

# Pursuing the Creation of New Technologies

Our greatest mission is to create technologies that lead to new businesses. To do so, coordination with other divisions in areas ranging from customer information to the design of large-scale production equipment is vitally important. Through our current initiatives, we plan for the entire Kuraray Group to come together as "One Kuraray" under a framework that enables closer collaboration toward achieving the corporate mission, as we continue pursuing innovation for the next generation.

# Generating Ongoing Innovation

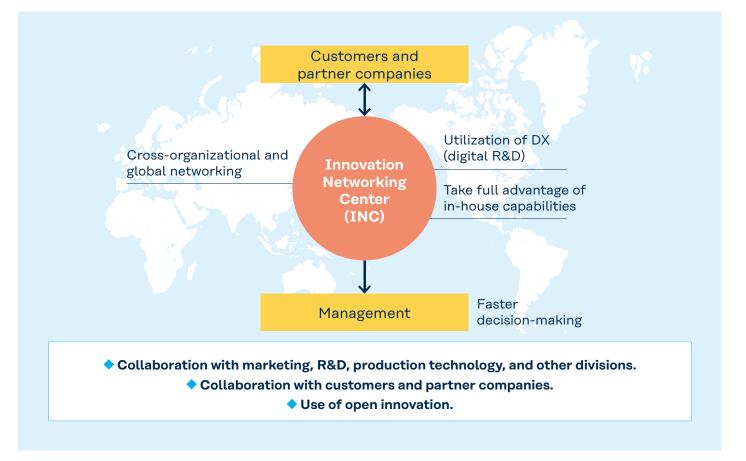
# Establishment of an Innovation Networking Center (INC)

The most important objective of the INC is to generate innovation by integrating internal and external resources.

To empower individual divisions and customers to take the initiative in generating ongoing innovation, the Center will play the role of accelerator in the Kuraray Group's innovation efforts, promoting activities involving the participation of all corporate divisions and employees. We have adopted an ambassador system for the Center, whereby around two dozen core members from diverse backgrounds are collaborating globally in digital venues with over 50 ambassadors representing various Group organizations.

By leveraging the Kuraray Group's resources on a global scale, from its diverse human resources in Japan and overseas and its unique technical capabilities to the customer relationships and market approaches it has cultivated over the years, we will continue to create new business opportunities over the longer term.

# Promotion Structure and Strategies



Innovation in Practice



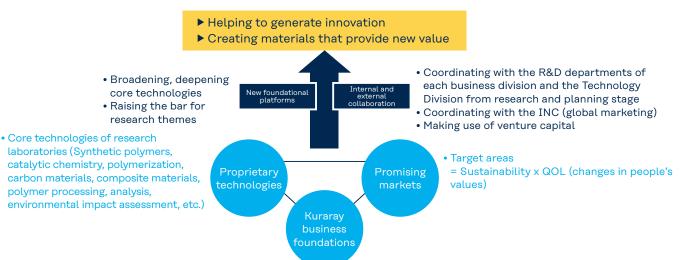
VECSTAR<sup>™</sup> (Liquid crystalline polymer film), VECSTAR<sup>™</sup> FCCL (Flexible copper-clad laminates) Demand for VECSTAR<sup>™</sup> is expected to increase further as an electronic circuit board for electronic devices such as smartphones and vehicle-mounted high-speed communications devices, thanks to its reputation for low transmission loss in the high-frequency wave range and excellent workability. This led us to upgrade existing production facilities in 2018. In 2020, we also upgraded existing production facilities for flexible copper-clad laminates VECSTAR<sup>™</sup> FCCL, which uses liquid crystalline polymer film, at the Kashima Plant. We are currently considering further reinforcement.



# Innovation in R&D

# **Basic Strategy for R&D**

In the Research and Development Division, the corporate organization which is the heart of the Kuraray Group's technological development capabilities, we promote projects that contribute to Group-wide business expansion and profit growth under the corporate missions of "creating new business," "strengthening and expanding existing businesses," and "establishing and deepening core technologies," through close collaboration with in-house companies, business divisions, and R&D divisions in the Group companies. In 2016, we launched the Supporting Project to support the sustained enhancement and expansion of existing businesses. In 2017, we began the full-scale rollout of "new business creation activities" aimed at both discovering promising new opportunities in areas peripheral to our businesses and broadening the scope of Kuraray's business foundation. Under "PASSION 2026," while carrying on existing approaches, we will coordinate with the INC to promote marketing activities for items under development worldwide as well as seek to accelerate innovation by incorporating new foundational platforms through R&D pursued under a backcasting process.



# **R&D Framework**

Central to realizing the Kuraray Group's vision as a Specialty Chemical Company achieving sustained growth is the Research and Development Division, the main thrust of our corporate R&D and new business development activities. The Research and Development Division manages the Kurashiki Research Center, Tsukuba Research Center, Vecstar Business Promotion Department, Functional Products Development Department, Intellectual Property Department, New Business Management Department, and Planning and Administration Department.

Our research centers pursue R&D of new businesses, products, and technologies using their core technologies, which include organic synthesis and synthetic polymer technologies, catalytic chemistry, polymer materials technology, environment- and energy-related technologies, precision polymerization and polymer modification, compound materials, polymer processing, and computational science. Taking advantage of their analytical capabilities and safety assessment techniques, the research centers also serve as analysis hubs for all Kuraray Group companies to address technical problems. We are also actively engaged in R&D of digital technologies to accelerate our research and development efforts.

The Research and Development Division evaluates and analyzes IP data to support business strategies. Each business division has an R&D department at its base plant. Including overseas bases, these plants engage in R&D activities while working closely with corporate and business divisions' research, development, and production bases. The Technology Division, responsible for corporate production technology development, manages the Technology Development Center and the Technology and Maintenance Management Department. It promotes progress in production technology by partnering with the Production and Technology Management Division of each Group company and the Production and Technology Development Department of each plant. It has also begun collaborating with the Research and Development Division in the early stages of development to accelerate the evolution of new businesses and products. Since 2018, this department has taken the lead in implementing digital strategies for Group-wide R&D as well as production technology.

> (Persons) 1,500

> > 1,200

900

600

300

0

(FY)

# R&D Expenses and Number of Researchers



5

0

2016

2017

Number of researchers (Persons) (Billions of yen) 25 21.2 21.2 21.0 20.8 20.6 19.8 20 1,040 1,030 1,029 1.014 934 957 15 10

2018

2019

2020

2021

# Priority Issues of "PASSION 2026"

"PASSION 2026" set forth the priority issues of "development based on the customer perspective," "development that contributes to sustainability," and the "planning and

# Development based on the customer perspective

To bring the ideas and seed technologies generated by the Research and Development Division to market, we will pursue global marketing activities through the INC. With a view to new business creation, we will outline our vision

# Development that contributes to sustainability

Seizing the challenge of sustainability as an opportunity, we will develop materials that contribute to improving the natural and living environments to deliver solutions to the world. Particularly with regard to reducing greenhouse gas emissions, in line with Group policy, we are accelerating the development of technologies for the capture, storage, and use of CO<sub>2</sub>. In January 2022, we established the Environment and Energy Research Laboratory to drive powerful research into environment- and energy-related fields.

# Planning and promotion of an IP strategy

The Kuraray Group's business development has typically concentrated on harnessing unique technologies to create unparalleled products. We have sought to stay out ahead of the competition by filing patent applications and securing IP rights on our R&D achievements in Japan, where our development bases are located. However, due to various pressures, notably mounting competition from startup enterprises and other products in different sectors that have accompanied the globalization of business activities, the existing IP framework alone is no longer sufficient to protect our businesses adequately and promotion of an intellectual property (IP) strategy." By steadily addressing these issues, we will accelerate innovation in R&D.

for future business areas based on the consumer and customer perspective and use this vision to inform our selection of research themes the Kuraray Group needs to address.

### **Examples of development areas**

- Waste reduction
   Recycling
- Biomass and biodegradable materials
- High-speed communications
   Electronic devices
- Health applications
   Beauty applications

maintain our competitive edge. Moreover, in an increasingly complex IP environment, the importance of IP risk management is growing, especially in overseas markets. To meet this challenge, the IP Management Center established in January 2022 will work not only to support the IP strategies of each business division, but will also formulate and implement a globally integrated IP strategy. In this way, we will implement IP activities that go beyond the former strategy, focused on securing rights, to include business development activities.

# Innovation in Practice



### 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<sup>™</sup> man-made leather. Multiple customers have begun shifting to Kuraray's CMP pads since their super-hard surfaces offer outstanding device polishing and smoothening capabilities, create few scratches despite their hardness, and deliver a long service life due to their high abrasion resistance. In addition to these features, a combination with specific general-purpose slurries enables highly efficient polishing and reduction of polishing slurry usage. This has yielded cost reductions in customer production processes. We are currently expanding sales in Japan and gaining ongoing recognition from customers in Japan and overseas, as well as in relation to numerous processes. We have succeeded in strengthening our collaborative system for evaluation with customers and will continue to expand our customer base and sales volume.



# Pursuing Innovations in Sustainable Products

The Kuraray Group has designated target fields based on five macrotrends: concerns for the global environment, food and water security, digitalization and communications, effective utilization of energy, and higher quality of life (QOL). With core capabilities in each of these areas, we are well positioned to help address these issues.

By channeling management resources into businesses and products related to these areas, and by exploring strategic acquisitions and corporate alliances, we will work to grow existing businesses and generate new businesses.

# Target fields



from plants for use as an anode material for lithium-ion secondary batteries, and moving forward with development of manufacturing technology for this material. Owing to its structure, the new hard carbon will enable both excellent output performance and higher battery capacity than graphite. We are currently evaluating its utility as a next-generation anode material, with a view to consumer applications including batteries for smartphones and tablet PCs and automotive uses.





# Our Challenges (3)

# Transformation of People and Organization

We will create an organizational culture of continuous learning, enabling all our employees to become digitally savvy.

# Stanley Fukuyama

General Manager, Global Digital Transformation Office

# Launching the GDX Office and Formulating the DX Vision

The Kuraray Group, in January 2022, established a new Global Digital Transformation (GDX) Office. I was involved in establishing the GDX Promotion Team, the predecessor to this organization, and have been working to create a system for promoting digital transformation (DX). Our team members are chosen for their knowledge of the Kuraray Group's technologies and products and their STEM (Science, Technology, Engineering, and Mathematics) skills and initiative.

When launching the team, we focused on understanding the current state of IT literacy in the Group through detailed surveys and interviews. We then held discussions with the management team about the kind of Group we should aim to become and what is possible with digital transformation. Based on this investigation, we formulated the DX Vision: "Improve competitiveness, continuously evolve, and contribute to the world." Digital technology is evolving rapidly in the world today. To keep up with these changes, each of us must take a personal interest in digital technology and continue learning. Alongside our efforts to hire and train data scientists and other specialized talents, we must create a culture and environment of continuous learning so that all employees can keep up with the digital evolution. We held a series of discussions looking at the gap between the DX Vision and our current circumstances and how we should fill that gap. We developed a digital transformation strategy based on the four priority fields in the Medium-Term Management Plan "PASSION 2026": "Customer experience (CX) reforms," "Operational process reforms," "Business model reforms," and "R&D and production technology simulations." With the participation of global members in the strategic planning process, we were able to create a roadmap that incorporates a variety of perspectives and can respond to various changes.

# Digital Transformation Strategy in "PASSION 2026"

In terms of "Customer experience (CX) reforms," we will promote reforms in marketing and information systems in the area of customer contact. The Kuraray Group has already rolled out a customer relationship management (CRM) system. We moved into the data analysis phase in 2022. In the future, we plan to link the CRM's analysis data with the Innovation Networking Center, each business unit, and sustainability activities. We will connect the data to specific actions, such as customer communications. At this stage, though, we recognize that our challenge is to improve the quality of the source data provided by customers. We are focusing on input training and improving data literacy to enhance the quality of the information we obtain. Ultimately, our goal is to better understand customers through CRM data analysis and design and deliver new solutions using digital technology.

"Operational process reforms" are working to improve performance through the digitalization of each business process. It is a very broad topic. In terms of specific initiatives, our first step is to take an inventory of operations. We will then review processes currently being carried out manually and narrow down and select those where we can expect dramatic productivity gains through digitization. We have also begun to develop IT governance based on the Control Objectives for Information and Related Technology (COBIT) framework<sup>\*1</sup>. We aim to build a system that enables the active use of IT globally in secure environments.

In terms of "Business model reforms," we are actively moving ahead with building a mechanism for creating new value by combining services with digital technology. The Kuraray Group's strength has been using our proprietary technologies to create high value-added products that set us apart from those developed by other companies. In this sense, we have leaned toward a so-called "product-out" business model. One shortcoming with this is that once a social need has subsided, the product loses its adaptability. If we can address this challenge using interactive digital services using IoT, we can meet social needs sustainably while expanding the possibilities for new proposals. We are now starting to create prototypes of this kind of service.

We are looking to R&D and production technology simulations, identifying what kind of R&D experiments to carry out in the future and exploring what can be reproduced in a digital environment. To this end, we are organizing and integrating data that will become the base for such simulations and designing a shared platform. Currently, in its production technologies, the Kuraray Group's technology division is carrying out digital twin simulation, an IoTbased operation optimization system for in-house power generation facilities. Going forward, we plan to expand these efforts and the number of simulations that reproduce physical conditions in a cyber environment.

By realizing our digital transformation strategy in these four priority fields, we anticipate a 20% or more improvement in efficiency, based on past experience. We are working on setting KPIs with reference to these initiatives as well.

### Aiming to Be "a Digitally Savvy Company"

A data-driven mindset ("think in data, decide by data") is already ingrained in our day-to-day lives. For example, we make plans for the day based on weather forecasts, which are calculated by supercomputers using an extremely precise technique called the finite element method. People look at this data and decide what to do. The GDX Office aims to create a system for enabling company plans and strategies to use data for decision-making in the same way. To achieve this, every employee needs to think constantly about how the digital data they handle each day will be used in digital transformation. Employees should develop a habit of collecting, creating, editing, and storing data in a format that is easy to understand—just as they do with paper documents. If we do this, our data quality will improve naturally, making it possible to use for our business.

Alongside this, cultivating talent is also extremely important. We are working with the Personnel Development Department to assess the digital literacy of the organization as we explore training and education programs to fill any gaps. By carrying out these practical activities, we aim to become "a digitally savvy company" where all employees have digital expertise.

\*1 An IT governance and management framework developed by the ISACA

# Digital Transformation Strategy in "PASSION 2026"

"PASSION 2026" sets out four priority fields to be addressed as we pursue Group-wide digital transformation based on the DX Vision: "Customer experience (CX) reforms," "Operational process reforms," "Business model reforms," and "R&D and production technology simulations." The Kuraray Group will draw on digital technology to change our processes and on diversity to expand our thinking, bringing transformation to both people and our organization. This will enable us to grow and contribute to society.

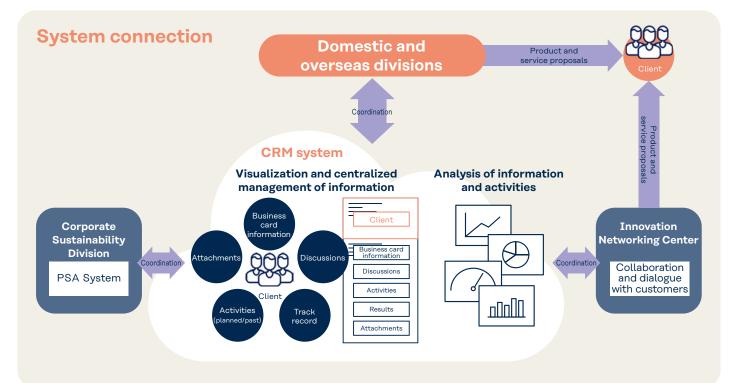
# **DX Vision**

Improve competitiveness, continuously evolve, and contribute to the world as a digitally savvy company



## Digital Transformation Example (1) Customer proposals through CRM system integration

CRM systems are designed to maintain and improve smooth relationships with customers by providing centrally managed records of collaboration and conversations. The Kuraray Group moved into the data analysis phase for its CRM system in 2022. In the future, our goal is to link CRM analysis data with the Innovation Networking Center and each business unit and with sustainability activities. This will enable us to draw on an array of perspectives as we develop new products and services, which will lead to higher levels of satisfaction.



## Digital Transformation Example (2) Digital twin simulation

The Kuraray Group's in-house power stations operate multiple power generation units, supplying electricity and steam within plants. Digital twin simulation collects weather data and boiler and turbine data on an IoT platform. This data is used to forecast demand for electricity and steam at the plant. Once we satisfy the operational constraints for each boiler, turbine, and other type equipment, we will formulate and present an optimal operation plan for all power stations.

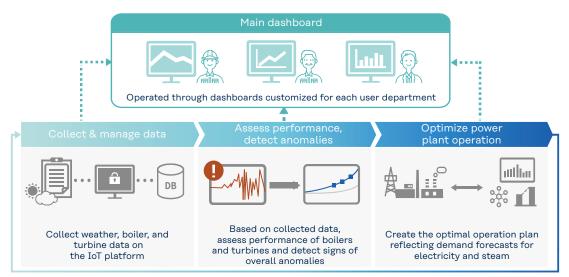


Image courtesy of Toshiba Energy Systems & Solutions Corporation

# Message from the Officer in Charge of Finance

We will actively invest in fields that can help improve the natural and living environments and seek to increase profits and improve capital efficiency by addressing social issues.

## Keiji Taga

Director and Managing Executive Officer Officer Responsible for Corporate Management Planning Office; Officer Responsible for Corporate Sustainability Division; Officer Responsible for Global Digital Transformation Office; Officer Responsible for Accounting and Finance Division



### 2021 Performance and Targets for the Medium-Term Management Plan "PASSION 2026"

The global economy continued on a recovery trend as progress in vaccination efforts enabled the lifting of constraints on behavior, giving momentum to economic activity. In this business environment, performance in the Kuraray Group recovered from the previous year, yielding significant growth in net sales, operating income, and net income attributable to owners of the parent. In each segment as well, although we continued to be hard hit by soaring prices of raw materials and fuel, disruptions in logistics, and elevated logistics costs, demand for our mainstay products remained firm, and both sales and income were up across all segments.

In 2026, the final year of the Medium-Term Management Plan "PASSION 2026," which launched this year, we aim to boost our earning power even further. We are targeting net sales of ¥750 billion, EBITDA of ¥170 billion, and operating income of ¥100 billion, as well as aiming for ROIC of 8% and ROE of 10% through improvements in capital efficiency.

### Investing in Areas That Can Contribute to Better Natural and Living Environments

Under the previous Medium-Term Management Plan "PROUD 2020" (2018 to 2020), we made several large-scale investments, including acquisitions. We are positioning "PASSION 2026" as a period for reaping the fruits of those endeavors, and our priority is on clearly linking the investments made to profits. Total capital investment for the five years of the plan is set at ¥380 billion (decision basis). This includes ¥350 billion in investments, equivalent to the amount of depreciation for the period, plus ¥30 billion in greenhouse gas reduction efforts.

One investment focus is on boosting our capacity to meet the growing demand for products that contribute to the natural and living environments, such as EVAL<sup>™</sup> (EVOH resin), which offers high gas barrier properties and is used in food packaging materials.

In addition, under "PASSION 2026," we are introducing a portfolio sustainability assessment (PSA) system. Using criteria that incorporate third-party perspectives, we will evaluate products for the degree to which they contribute to society and the environment, designating highly rated products as PSA-contribution products. By expanding sales of such products, we aim to transition toward a portfolio that puts emphasis on social and environmental value. Since they tend to carry higher margins than other products, expanding sales of PSA-contribution products will also feed into greater profits for the Kuraray Group.

We will also invest strategically in creating new businesses that bring about innovation. We will focus our spending on expanding R&D, as well as on areas related to the promotion of digital transformation efforts across the Group.

Intending to achieve net-zero carbon emissions by 2050, we plan to invest ¥80 billion in greenhouse gas reductions by 2030. Of this total, ¥30 billion is earmarked for the period of the Medium-Term Management Plan, although we will move up our investments as much as possible.

Actively promoting growth and strategic investments promises to be the driving force behind our realization of the future business portfolio we set out in "PASSION 2026." More than anything, I am convinced that these actions will contribute to better natural and living environments.

#### Capital Investment under "PASSION 2026"



Enhancing Shareholder Return while Investing Aggressively in Growth

"PASSION 2026" forecasts an operating cash flow of ¥600 billion over the five years of the plan. We will draw on this cash to enhance both future growth and shareholder return. In terms of future growth, we will earmark ¥100 billion as funds to be used for acquisitions, in addition to the ¥380 billion in capital investment mentioned above. We will only make acquisitions after carefully assessing the future potential of candidate companies while carefully monitoring the market situation. Specifically, we will consider companies active in businesses we have prioritized for resource allocation, including peripheral areas such as high-performance plastics, dental materials, activated carbon, and related services. Although the Kuraray Group already boasts solid market shares and competitive strengths in these areas, they promise further growth, and we want to target further expansion.

While steadily generating profits through these investments, we will establish a virtuous cycle of reinvesting the profits back into growth areas and areas that contribute to the environment, thus realizing further growth and making returns to shareholders. Specifically, during the period of "PASSION 2026," our basic policy is to ensure a total return ratio of at least 35% as a proportion of net income attributable to owners of the parent and an annual dividend of at least ¥40 per share. We will strive to enhance shareholder returns through the expansion of profit.



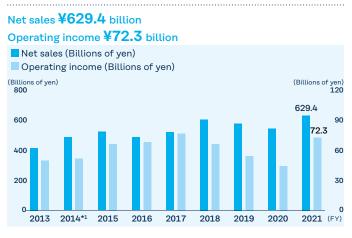
## Charting a Compelling Story of Growth

I think there are several reasons why the Kuraray Group's total shareholder return has been weak in recent years. Apart from pending litigation with some plaintiffs regarding the fire incident at a subsidiary in the United States and less-than-adequate contributions to performance from recent large-scale acquisitions, I think another factor has been our inability to convey the growth story of the Kuraray Group in a compelling way. "PASSION 2026" calls for the Group to continue to grow as an essential company, by contributing to both society and the environment. In it, we tried to set out a concrete, compelling strategy for achieving this. We will work together across the Group to carry out the Medium-Term Management Plan with passion. I hope our shareholders and investors will expect great things of the Kuraray Group as we grow into the future, and ask for their continued understanding and support.

# **Business Performance**

# Financial Data

#### **Net Sales / Operating Income**



# Net Income (Loss) Attributable to Owners of the Parent / Basic Net Income (Loss) per Share

Net income attributable to owners of the parent \$37.3 billion Basic net income per share \$108.32

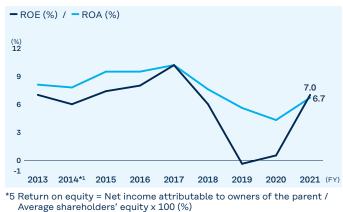
Net Income (Loss) Attributable to Owners of the Parent (Billions of yen)
 Basic Net Income (Loss) per Share (Yen)



\*3 Net income attributable to owners of the parent declined significantly due to the recording of an extraordinary loss of approximately ¥51 billion in fiscal 2019 and approximately ¥22 billion in fiscal 2020 for litigation surrounding a fire incident at a subsidiary in the United States.

ROE\*5 / ROA\*6

## ROE 7.0% ROA 6.7%



\*6 Return on assets = Operating income / Average total assets x 100 (%)

## Sales and Sales Ratio of Products Having the World's Highest Market Shares<sup>\*2</sup>



\*2 In-house survey

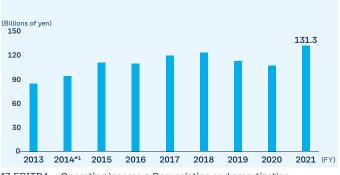
#### Total Assets / Equity Ratio



<sup>4</sup> In fiscal 2018, total assets increased due to the inclusion of Calgon Carbon Corporation in the scope of consolidation.

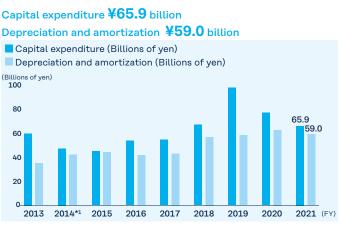
### EBITDA\*7





\*7 EBITDA = Operating income + Depreciation and amortization

#### Capital Expenditure\*<sup>8</sup> / Depreciation and Amortization

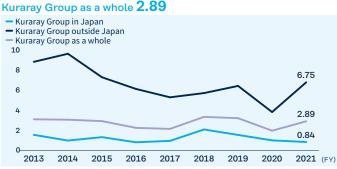


\*8 Capital expenditure is on an acceptance basis.

# <mark>No</mark>n-Financial Data

#### Frequency Rate of All Occupational Injuries\*9

## Kuraray Group in Japan **0.84** Kuraray Group outside Japan **6.75**



\*9 The number of occupational injuries requiring medical treatment per one million work hours

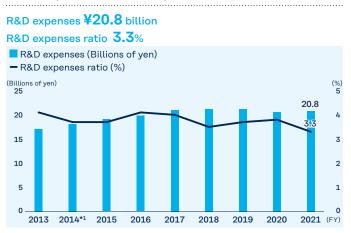
#### Number of Female Employees /Ratio of Female Employees, Number of Female Employees in Managerial Positions / Ratio of Female Employees in Managerial Positions

## Number of female employees **2,121** persons Ratio of female employees **18.7**% Number of female managers **152** persons Ratio of female managers **9.3**%

Number of female employees (Persons) / — Ratio of female employees (%)
Number of female managers (Persons) / — Ratio of female managers (%)
(Persons)
(%)
2,500
18.7
20

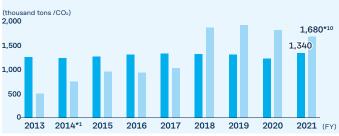


#### **R&D Expenses / R&D Expenses Ratio**



#### **Greenhouse Gas (GHG) Emissions**

### Kuraray Group in Japan **1,340** thousand tons /CO<sub>2</sub> Kuraray Group outside Japan **1,680** thousand tons /CO<sub>2</sub> Kuraray Group in Japan / Kuraray Group outside Japan

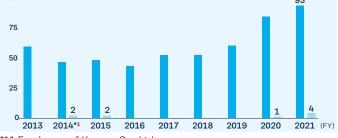


\*10 Calgon Carbon Corporation has been included in data since fiscal 2018.

# Number of Employees Taking Leave for Childcare and Nursing Care<sup>\*11</sup>

Number of employees taking leave for childcare **93** persons Number of employees taking leave for Nursing Care **4** persons Number of employees taking leave for childcare (Persons)

Number of employees taking leave for Nursing Care (Persons) 100 93



\*11 Employees of Kuraray Co., Ltd

\*1 The account closing date changed from March 31 to December 31 in fiscal 2014. The consolidated financial results for fiscal 2014 covered nine months, from April to December 2014, in Japan and 12 months, overseas from January to December 2014. The values shown have been corrected as the results for January to December 2014 for both Japan and overseas.
Kuraray Report 2022 40

# Strategies by Business

## Vinyl Acetate

The Kuraray Group manufactures and sells materials ranging from PVOH resin offering properties such as water solubility and high adhesiveness; materials for LCD display applications; PVOH film used in individual packaging for detergent and other products; PVB film used as an interlayer for safety glass; and EVAL™ (EVOH resin) boasting excellent gas barrier properties.

### Review of 2021

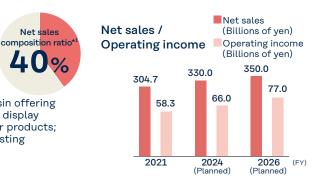
Sales volume of PVOH resin increased for a wide range of applications as demand recovered worldwide, despite the impact of high raw materials and fuel prices. Sales of optical-use poval film remained strong against the backdrop of robust demand for LCD panels, which has continued since the second half of the previous year. Sales volume of PVB film increased from the previous year, despite the impact of reduced automobile production due to the semiconductor shortages from the third quarter onward. Sales grew steadily in water-soluble PVOH film for use in individual product packaging of laundry and dishwashing detergents. Sales volume of EVAL™ increased year on year on the back of continued strong demand for food applications, despite the high raw materials and fuel prices that persisted since the beginning of the year and the impact of reduced automobile production since the third quarter.

### Medium-Term Management Plan "PASSION 2026" Key Measures

We will maximize customer value and expand earnings by integrating production starting with raw materials, by drawing on our global network to strengthen our stable supply system and by optimizing logistics.

In water-soluble PVOH film, we are constructing a new plant in Poland to efficiently supply products to the growing European market. We aim to achieve an average annual growth rate of 8% through volume expansion and the development of new applications.

#### Global Network (manufacturing sites)



Net sales

#### Opportunities and risks ...... Opportunities Risks

- Rising demand for LCD monitors due to stay-at-home and accelerated digitalization trends
- Increased demand for optical films due to a shift toward larger LCDs
- Growing concern about food safety and security amid rising living standards in emerging countries
- Heightened demand to reduce food loss globally
- Increased global demand for individual product packaging of detergent
- Expanding demand for barrier paper and paper straws in line with growing environmental awareness
- Maturing of the LCD market and expansion of the OLED display market
- Increased country risks
- Soaring raw materials and fuel prices and sharp exchange rate fluctuations

PVOH resin Optical-use poval film ● Water-soluble PVOH film ● PVB resin

🔵 PVB film 🛛 🔵 SentryGlas™ ● EVAL<sup>™</sup> ● PLANTIC<sup>™</sup>

V		
	PVOH resin	<ul> <li>Maintain a robust supply system by taking advantage of our strengths backed by our own raw material production capabilities</li> <li>Continue to shift from quantity to quality (new applications and high value-added products)</li> </ul>
	Optical-use poval film	<ul> <li>Strengthen production and sales systems in accurate response to demand growth and the market shift to China</li> <li>Launch and expand sales of value-added products that meet customer needs, such as high-transparency or thin film</li> </ul>
	Water- soluble PVOH film	<ul> <li>Ensure the early and stable launch of a production site in Europe and increase production capacity in a timely manner in response to demand expansion</li> <li>Promote the development of new applications as well as biodegradable and bio-based raw materials to contribute to a circular economy</li> </ul>
14	Advanced interlayer solutions	<ul> <li>Expanding sales of SentryGlas<sup>™</sup>, our unique product</li> <li>Leverage the strengths of the global supply system supported by bases in Europe, the United States and South Korea while accelerating the launch of newly developed products</li> </ul>
	EVAL™	● Strengthen the stable supply system and build a new plant in Asia ● Contribute to reduction in food loss as we strive to meet growing demand for food applications ● Expand rollout of bio-based PLANTIC™

## Isoprene

We manufacture and sell isoprene chemical products made with a synthesizing method as well as SEPTON™ (thermoplastic elastomer) and GENESTAR™ (heat-resistant polyamide resin), which are derivatives of isoprene chemical products.

## Review of 2021

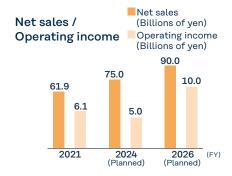
The sales volume of isoprene chemicals and SEPTON™ increased due to a recovery in demand. Sales of GENESTAR™ expanded steadily for both electric and electronic devices and automobiles on the back of strong demand, despite the impact of rising raw materials, fuel, and logistics costs.

## Medium-Term Management Plan "PASSION 2026" Key Measures

We will aim to achieve contributions to earnings as soon as possible and strengthen our global supply system through the startup of operations at the location in Thailand. In the GENESTAR™ business, we will expand our marketing and technical service systems and accelerate development of applications that take advantage of material characteristics. By expanding into global markets, including Europe, the United States,

characteristics. By expanding into global markets, including Europe, the United States, and Asia, we aim to achieve an average annual growth rate of 10%, which will lead to a second round of investment in Thailand.

### Global Network (manufacturing sites)



Net sales composition ratio\*

%

#### Opportunities and risks ...... Opportunities Risks

- Expanding demand for materials development for the weight reduction, electronic control, and electrification of automobiles
- Spread of DDR5 high-speed processing memory for next-generation servers due to faster communication speeds
- Increased demand for bio-based materials due to growing environmental awareness
- Reduced automobile and electrical and electronic device production due to semiconductor shortages
- Decreasing cost competitiveness and supply capacity due to inadequate raw materials procurement capabilities
- Low-cost strategies of competitors will undermine markets for differentiated products
- Soaring raw materials and fuel prices and sharp exchange rate fluctuations

GENESTAR™
 Elastomer
 Isoprene chemical

The base in Thailand is scheduled to start operations in the fourth quarter of Fiscal 2022.

-	Isoprene chemicals	<ul> <li>Expand sales of one-of-a-kind products</li> <li>Quickly commercialize newly developed products to secure new profit contributors</li> <li>Promote sustainability (Reduce GHG emissions via the switchover of raw materials and the improvement of manufacturing process)</li> </ul>
	Elastomer	<ul> <li>Strengthen global supply system of SEPTON™</li> <li>Build a new plant of liquid rubber in the United States</li> <li>Promote development and expand sales of products that are high value-added and made from sustainable raw materials</li> </ul>
	GENESTAR™	<ul> <li>Expanded use of our materials in parts due to the weight reduction, electronic control, and electrification of automobiles</li> <li>Penetrate further into global markets, including Europe, the United States and Asia</li> <li>Consider the second phase of facility construction in Thailand</li> </ul>

\*1 The total of the five segments is not 100% because the engineering business and other businesses not included in the reportable segments are excluded from the net sales composition ratio figures.

## **Functional Materials**



We manufacture and sell methacrylic resin with excellent weatherability, dental materials enabling restorations that closely resemble natural teeth, activated carbon whose high adsorption performance is used to purify air and water, and water treatment equipment.

## Review of 2021

In the Methacrylate business, sales were firm for applications such as spatter-blocking barrier panels and displays, in addition to favorable market conditions. In the Medical business, sales expanded due to strong demand for new dental materials, particularly in Europe and the United States. In the Environmental Solutions business, sales of activated carbon remained strong amid growing demand, particularly for water treatment applications in Europe and the United States.

## Medium-Term Management Plan "PASSION 2026" Key Measures

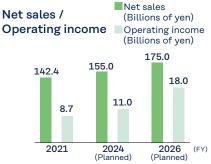
In the Environmental Solutions business, we will leverage our strengths as a general activated carbon manufacturer, strengthening our global supply system by expanding our new carbon production base in the United States and our reactivated carbon production base in Europe. In addition to promoting R&D and production technology development based on the control and design of carbon structures, we will capture growing demand and expand into new applications. We aim to generate ¥10 billion in synergies by 2026 from the Calgon Carbon Corporation acquisition.

We will also strive to grow the Aqua business, which was incorporated into the Functional Materials segment in 2022, through tie-ups with the Environmental Solutions business.

In the dental materials business, we will draw on our technological advantages to develop products that help reduce the burden on patients and dentists, contributing in this way to improving people's quality of life (QOL). By strengthening sales and marketing and improving our product supply framework, we will target an average annual growth rate of 10%, mainly through greater sales in Europe and the United States.

### Global Network (manufacturing sites)

#### Net sales Net sale Operatir



#### Opportunities and risks ..... Opportunities Risks

- Increased demand to develop materials with transparency and optical properties in line with the increasing sophistication of automobiles
- Stable demand for products that help prevent the spread of COVID-19
- Growing demand for cosmetic dentistry in line with rising standards of living
- Digitalization of dental lab work using CAD/CAM
- Increased demand for air and water purification under tighter environmental regulations worldwide
- Global expansion of the circular economy
- Expansion of energy-related markets
- GHG emissions from the activated carbon production process
- Decreasing cost competitiveness and supply capacity due to inadequate raw materials procurement capabilities
- Soaring raw materials and fuel prices and sharp exchange rate fluctuations

Virgin activated carbon

- Reactivated carbon
   Dental materials
   Methacrylic resin
- Membrane module

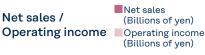
4	Methacrylate	<ul> <li>Develop and realize high-value-added materials and technologies for the next generation</li> <li>Establish a recycling system and achieve production process innovation</li> </ul>
	Medical (dental materials)	<ul> <li>Constantly introduce a stream of new high-value-added products in the CAD/CAM field</li> <li>Optimize the global supply system to expand market share in Europe and the United States</li> </ul>
•	Environmental Solutions	<ul> <li>Expand profitability leveraging strengths as an activated carbon manufacturer</li> <li>Fully realize synergies and growth by enhancing our production capabilities for both virgin and reactivated carbon</li> <li>Develop products related to reducing GHG emissions for electrical material and mobility applications</li> </ul>
-	Aqua*2	<ul> <li>Strengthen the membrane business by leveraging our unique technologies</li> <li>Promote environment-related businesses backed by synergies with the activated carbon business</li> </ul>

\*2 Aqua business to be transferred to Functional Material segment from FY2022.

## Fibers and Textiles

(hook-and-loop fastener) used as fasteners.

Net sales composition ratio\*1 8%





## Review of 2021

Sales of CLARINO<sup>™</sup> remained strong, mainly for shoes. In fibers and industrial materials, demand for both KURALON<sup>™</sup> and VECTRAN<sup>™</sup> (high-strength polyarylate fiber) expanded and sales volume increased. In consumer goods and materials, demand for medical-related products was strong for both KURAFLEX<sup>™</sup> and MAGIC TAPE<sup>™</sup>.

## Medium-Term Management Plan "PASSION 2026" Key Measures

We manufacture and sell CLARINO™ (man-made leather), which has a structure

and functionality similar to natural leather; KURALON™ (PVOH fiber), which is used as a reinforcing material for cement and automotive parts; KURAFLEX™ (nonwoven fabrics) which are used as household and industrial products; and MAGIC TAPE™

For CLARINO<sup>™</sup>, we aim to expand sales of sustainable products in response to heightening environmental awareness among top-brand customers and a trend toward non-animal based products, mainly in Europe and the United States. We will also promote environmental responsibility in terms of both raw materials and manufacturing and processing.

In Fibers and Industrial Materials, we will accelerate expansion of new applications by developing high value-added products and providing technical services for VECTRAN™. We will also boost production capacity in response to increasing sales volumes.

	CLARINO™	<ul> <li>Expand sustainable products using recycled raw materials and bio-based raw materials while shifting to environmentally friendly manufacturing and processing processes</li> <li>Expand our supply system in response to the globalization of supply chains</li> </ul>
	Fibers and Industrial Materials	<ul> <li>Expand VECTRAN™ business by leveraging the characteristics of materials</li> <li>Expand our operations by concentrating resources on such strategic applications as rubber reinforcement and concrete reinforcement</li> <li>Expand the breadth of product applications in fields requiring compliance with environmental regulations (e.g., asbestos substitutes)</li> </ul>
1	Consumer Goods and Materials	<ul> <li>Expansion of environmentally friendly products<sup>*3</sup> and sustainable materials</li> <li>*3 Products that have acquired FSC<sup>®</sup> certification, an international forestry certification system</li> <li>Expand the lineup of unique products, such as MAGIC TAPE™, to meet labor-saving needs for customers' manufacturing processes</li> </ul>

## Trading

In addition to the manufacture and sale of polyester and other fiber and textile products, we sell Kuraray Group products in Japan and other parts of Asia.

## Review of 2021

In fiber-related businesses, sales of sportswear and CLARINO<sup>™</sup> (man-made leather) remained strong. Sales of resins and chemicals expanded in line with increasing demand, mainly in the Chinese market.

## Medium-Term Management Plan "PASSION 2026" Key Measures

- Strengthen profitability by shifting to high-value-added businesses through expansion of proprietary products and processing businesses.
- Expand overseas sales, primarily in Asia.



Net sales\*4 / Operating income

 Net sales (Billions of yen)
 Operating income (Billions of yen)



\*4 Figures for Trading segment net sales for FY2022 have significantly changed compared to FY2021, mainly due to changes in accounting methods for revenues attributable to agent transactions in the Trading segment as a result of the adoption of the Accounting Standard for Revenue Recognition and other factors. Because of these changes, revenues from such transactions, which have previously been recorded on the basis of total transactional value, are now recorded on a net basis.

Expansion of ECOTALK™ Add n value recycled made plastic b	e to Expand the use d fiber — of biomass- from based materials.	Promote other materials designed to help curb environmental burden.	ЕСОТЯЦК
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● Shift from raw yarn and fabric sales centered on CLAVELLA™ polyester filaments to product sales including wearable materials ● Expansion of value-added processed products

Overseas expansion adapted to growing Asian markets
 Utilization of Vietnamese production sites

\*1 The total of the five segments is not 100% because the engineering business and other businesses not included in the reportable segments are excluded from the net sales composition ratio figures.

## **Corporate Governance**

For details, please visit our website: <u>https://www.kuraray.com/csr/report2022/</u> <u>corporate\_governance</u>

We aim to realize the long-term, ongoing enhancement of corporate value through constructive dialogue.

Chairman and Director

As "a company with a board of corporate auditors," the Kuraray Group is working to establish a management framework that is highly efficient as well as sound and transparent. To enhance the effectiveness of our supervisory and monitoring functions, we are augmenting corporate governance functions centered on the Board of Directors and the Board of Corporate Auditors. We seek to set the course for management through repeated discussions on various issues, including management remuneration, cultivation and selection of new company officers, internal controls, and risk management.

For the Board of Directors, what contributes to the advancement of global businesses and appropriate supervision and decision-making is the knowledge, experience, and abilities of Board members, and their multifaceted perspectives, born out of diversity in terms of gender, nationality, and background. We also stress independence, with nearly half of our Directors and Corporate Auditors coming from outside the company. Going forward, we will draw on diverse human resources to further enhance corporate governance, aiming to build corporate value sustainably over the long term.

To enable all of our stakeholders, including shareholders and investors, to gain a deeper understanding of the Group's efforts toward value creation over the medium to long term, the Kuraray Group also actively engages in IR activities and has been issuing the "Kuraray Report" since 2018.

This year, we launched a new Medium-Term Management Plan, "PASSION 2026," leading up to 2026, which marks the 100th anniversary of our founding. Through this Report, I would like to convey how the Kuraray Group will work to fulfill its social responsibilities and contribute to society through our business activities.

In compiling the "Kuraray Report 2022", we referred to the International Integrated Reporting Framework of the Value Reporting Foundation (VRF)<sup>\*1</sup>, the Guidance for Collaborative Value Creation from the Japanese Ministry of Economy, Trade and Industry, and other sources, creating a summary of our approaches across the Group. I attest that the process of creating the Report and its contents are accurate.

We will continue to pursue constructive dialogue with all of our stakeholders, using the "Kuraray Report" as one of our engagement tools. At the same time, we will make every effort to build corporate value as a Specialty Chemical Company contributing to customers, society, and the planet while growing sustainably. I look forward to your continued understanding and support.

\*1 Established in June 2021 through the merger of the International Integrated Reporting Council (IIRC) and the Sustainability Accounting Standards Board (SASB).

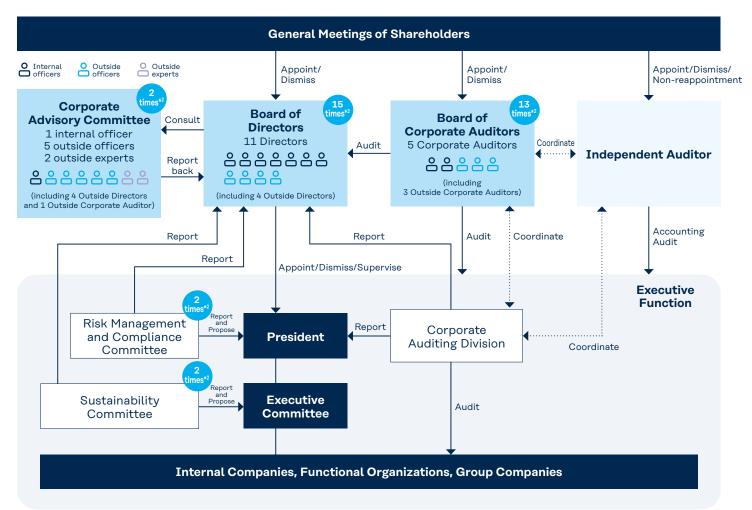


#### **Corporate Governance Highlights**

## Kuraray's Steps to Strengthen Corporate Governance

	Initiative	Purpose
	Reduced the maximum number and the term of office of Directors Introduced Executive Officer system	
2003	Increased the number of Outside Corporate Auditors from two to three	Strengthening the management monitoring function of Corporate Auditors
	Established the CSR Committee	Reinforcing the Group's CSR promotion structure
	Established the Management Advisory Committee	Establishing an advisory body for the President
	Introduced Outside Directors (two)	Strengthening the management monitoring function of the Board of Directors
2008	Started early delivery of the notice of convocation of the ordinary general meeting of shareholders (at least three weeks before the date of the meeting)	Providing enough time for shareholders to examine each proposal
	Started uploading an English translation of the notice of convocation of the ordinary general meeting of shareholders to the Tokyo Stock Exchange platform and the Company's website	Enhancing disclosure targeting overseas shareholders
2016	Started analysis and evaluation of the effectiveness of the Board of Directors	
2017	Split off the Risk Management and Compliance Committee from the CSR Committee	Strengthening risk management and compliance measures
2018	Abolished the Management Advisory Committee and established <b>the</b> <b>Corporate Advisory Committee</b> as an advisory body to the Board of Directors, comprised mainly of Outside Officers and outside experts	Improving the transparency, fairness, and objectivity of decision-making on important management matters such as the appointment and remuneration of Directors, etc., and further enhancing corporate governance
2020	Increased the number of Outside Directors from three to four (one-third of the Board of Directors)	Strengthening the management monitoring function and independence of the Board of Directors
2022	CSR Committee reorganized into Sustainability Committee	To step up sustainability promotion initiatives

## Corporate Governance System (As of March 24, 2022)



\*2 Number of times held in 2021. The Sustainability Committee previously met as the CSR Committee.

## Corporate Governance System

#### **Board of Directors**

The Board of Directors is chaired by the Chairman and Director. The maximum number of Directors is set at 12, to promote agile management decision-making by the Board of Directors. The term of office is set at one year to clarify their responsibilities to the shareholders. There are currently 11 incumbent Directors, of whom one is female, and one of whom is non-Japanese. The four Outside Directors have a wealth of experience in and broad insight into the economy, finance, and corporate management, and are responsible for supervising management from an independent, third-party standpoint. Board meetings are held at least once a month.

#### **Corporate Advisory Committee**

The Company has established a Corporate Advisory Committee comprised mainly of Outside Officers and outside experts to serve as an advisory body to the Board of Directors. The committee works to improve the transparency, fairness, and objectivity of decision-making on important management matters such as the appointment and remuneration of Directors and further enhance corporate governance. Corporate Advisory Committee meetings are held twice a year in principle.

The committee consists of eight members: the Chairman and Director (Mr. Masaaki Ito), four Outside Directors (Mr. Jun Hamano, Ms. Keiko Murata, Mr. Satoshi Tanaka, and Mr. Kiyoto Ido), one Outside Corporate Auditor (Ms. Tomomi Yatsu), and two outside experts (Mr. Takeshi Komura and

#### **Board of Corporate Auditors and Internal Audits**

The Board of Corporate Auditors consists of five Corporate Auditors, including three independent Outside Corporate Auditors, a majority. Four members are male and one is female. The Board of Corporate Auditors convenes monthly, in principle.

Corporate Auditors meet regularly with the Independent Auditor and receive reports on audit planning, implementation status, and audit content. They also receive reports on the results of internal audits from the Corporate Auditing

#### **Risk Management and Compliance Committee**

The committee, under the direct control of the President, is tasked with ensuring the appropriate management of risks that could have a significant impact on business management, thorough compliance with laws and regulations and corporate ethics, and fair business practices. The committee identifies material risks and proposes them to the President in its regular monitoring of risks for Group companies. The President then specifies those that require countermeasures as management risks and appoints a supervising officer for each risk to implement risk avoidance and mitigation measures. The committee checks the progress of the efforts to ensure the steady execution of the risk countermeasures (▶p. 55).

#### Sustainability Committee

The former CSR Committee was reorganized in January 2022 and the Sustainability Committee was established. The committee is chaired by the President and is made up primarily of members of the Executive Committee. The committee will help to better promote sustainability by enabling swift

## Major Proposals and Reports of the Board of Directors in Fiscal 2021

- Formulation, revision of various policies to enhance governance (HR and tax policies, basic policy regarding development of internal controls systems, etc.)
- Verification of significance of holding cross-held shares
- Introduction of internal carbon pricing
- Measures against unauthorized access

Mr. Go Egami [listed under the name Mr. Haruki Kohata]). No head of the committee has been appointed; meetings are run by the Chairman. As Outside Directors and Outside Corporate Auditors make up the majority of committee members, the independence of the Corporate Advisory Committee is sufficiently ensured.

#### Major Discussions and Reports of the Corporate Advisory Committee in Fiscal 2021

- Officer remuneration, officer personnel matters
- Next Medium-Term Management Plan
- Change in Tokyo Stock Exchange listing
- Revisions to corporate governance code

Division, the in-house audit department. In addition, Corporate Auditors serve as corporate auditors at major Group companies and conduct Group company audits as appropriate. They also attend the periodic Group Auditor Liaison Meetings consisting of the Group company auditors to gain information on the respective companies.

There are also staff to assist the Corporate Auditors in carrying out their duties.

#### Priority issues for Fiscal 2021

- Conduct a comprehensive review of the facilities of overseas plants in particular, not only to confirm their safety designs but also management aspects (operation management and facility management) and establish highly effective countermeasures for identified issues in order to mitigate the risk of safety-related accidents occurring.
- Establish a globally unified confidential information management system and strengthen measures to protect data in a timely manner.
- Ensure the thorough prevention of recurrence of any violation recurring through the use of globally established programs to comply with the Antimonopoly Law.
- Ensure business continuity in response to the pandemic by thoroughly implementing measures to prevent infection and the spread of infection based on the emergency response to COVID-19.

decision-making on sustainability projects at the management level and expedited planning and implementation of such projects. The Sustainability Committee also reports on a range of activities to the Board of Directors and reflects the results of Board discussions in sustainability initiatives.

# Policies and procedures for the election and dismissal of executives<sup>\*1</sup> and the appointment of candidates for Directors and Corporate Auditors.

The Company appoints individuals who have the experience, knowledge, and capabilities required for Directors of the Company at Board of Directors meetings with the attendance of Outside Officers, and elects them as Directors with a resolution of the General Meeting of Shareholders. However, candidates for Outside Directors will satisfy the criteria of independence provided separately.

The Company appoints individuals who have the experience, knowledge, and capabilities required for Corporate Auditors of the Company at Board of Directors meetings with the attendance of Outside Officers, and elects them as Corporate Auditors with a resolution of the General Meeting of Shareholders after obtaining the consent of the Board of Corporate Auditors. However, candidates for Outside \*1 The Company defines executives as Directors and Corporate Auditors. Corporate Auditors will satisfy the criteria of independence provided separately.

The election and dismissal of Directors and the appointment and removal of Representative Directors and Directors with special titles are determined by the Board of Directors after deliberation by the Corporate Advisory Committee.

 For details on Independence Standards for Outside Officers, please visit the website below.
 Corporate Governance Report <u>https://www.kuraray.com/ir/library/governance</u>
 Points of Corporate Governance <u>https://www.kuraray.com/csr/report2022/corporate\_governance</u>

		Board of	Knowledge, Experience of Officers								
	Name	Directors Board of Corporate Auditors Attendance* <sup>3</sup>	Corporate Management	Global	Sales and Marketing	Production and Equipment Technology	R&D	Legal Affairs and Risk Management	Finance and Accounting	Environment and Society	Human Resources and Labor Management
	Hitoshi Kawahara	100%	0	0	0						
	Hiroaya Hayase	100%	0	0		0	0				
	Masaaki Ito	100%	0	0		0	0				
	Yoshimasa Sano	100%		0	0						
()	Keiji Taga	100%		0	0			0	0		
Directors	Matthias Foreign national	80%	0	0		0	0				
	Nobuhiko Takai	100%		0	0						
	Jun Hamano <sup>Outside</sup> Independent	100%								0	0
	Keiko Murata Outside Independent	100%		0					0	0	
	Satoshi Tanaka <sup>Outside</sup> Independent	100%	0	0	0						0
	Kiyoto Ido Outside Independent	100%		0					0	0	
Ś	Kazuhiro Nakayama	100%		0		0	0			0	
Auditors	Naoya Uehara	100%		0				0			
rate Au	Mitsuhiro Outside Nagahama	100%	0	0					0		0
Corporate	Tomomi Yatsu Outside Independent	100%						0	0		
0	Kenji Komatsu Outside Independent	100%	0	0	0						

#### Main Areas of Expertise and Experience of Directors and Corporate Auditors\*<sup>2</sup>

\*2 The above table shows up to four areas of knowledge or experience possessed by Directors or Corporate Auditors. It does not represent all of their

knowledge or experience.

\*3 Rate of attendance rate from January 2021 to December 2021.

## Support System for Outside Officers

Information is shared with Outside Officers by distributing and explaining in advance the proposals to be deliberated at the regular and extraordinary meetings of the Board of Directors. Staff from the Secretariat Group of the General Affairs Department assist in sharing this information with Outside Directors. Staff are appointed to assist Corporate Auditors including Outside Corporate Auditors. Staff collect and provide information necessary for their auditing activities and offer other forms of support.

## Analysis and Evaluation of the Effectiveness of the Board of Directors

#### **Analysis and Evaluation Method**

The Company evaluates the effectiveness of the Board of Directors once a year. A signed questionnaire for evaluating the effectiveness of the Board of Directors was distributed to all Directors and Corporate Auditors in December 2021 and responses and opinions from all members were collected in January 2022. The secretariat of the Board of Directors aggregated the responses, and the effectiveness of the Board of Directors was analyzed and evaluated based on the data.

#### **Outline of Analysis and Evaluation Results**

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

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

### Officers' Remuneration System

#### **Basic Policy**

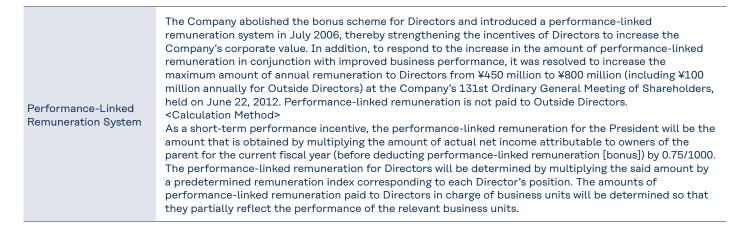
The Company's basic policy for the remuneration of its officers is to have a competitive level and system of remuneration that can secure and retain competent Directors fit for their positions and responsibilities to achieve long-term and sustainable improvements in corporate performance and corporate value. The remuneration system for Directors comprises three parts: (1) fixed remuneration as basic remuneration per job responsibilities, (2) performance-linked remuneration as an incentive to achieve yearly business results, and (3) stockbased remuneration designed to enhance corporate value over the medium to long term and sharing of value with shareholders through appropriate corporate management, provided that remuneration for Outside Directors will solely comprise fixed remuneration without performance-linked or

#### Sample Questionnaire Items

- Is the size of the Board of Directors appropriate?
- Is the Board of Directors made up of Directors with different backgrounds in terms of knowledge, experience, and expertise, and is diversity ensured?
- Is the selection of agendas for Board meetings appropriate?
- Does the Board of Directors deliberate to set the strategic direction of the Company?
- Are Board discussions constructive regarding specific management strategies and plans?
- Are the number and frequency of Board meetings appropriate?
- Is the time allowed for deliberation at Board meetings appropriate?
- Do Outside Directors have sufficient opportunities to speak at Board meetings and express frank, active, and constructive opinions from an independent standpoint?
- Is a place ensured for cooperation between the Internal Auditors Office of the Company and Directors and Corporate Auditors?
- Is a system in place for providing information to Outside Directors and Outside Corporate Auditors?

stock-based remuneration, as their role is to supervise management from an independent standpoint.

The specific level and system of remuneration will be verified and deliberated by the Corporate Advisory Committee, mainly comprising outside officers and outside experts, on whether the level and system of remuneration are appropriate, based on the results of a survey by a specialized external research institution on executive remuneration covering companies such as those listed on the First Section of the Tokyo Stock Exchange, and the salary of the managers of the highest level in the Company. The Board of Directors receives reports on the results from the Committee and gives it due consideration to determine the level and system of remuneration.



(EV2021)

Restricted Stock	At the 140th Ordinary General Meeting of Shareholders held on March 25, 2021, the Company resolved to abolish the existing stock option plan and introduce a restricted stock compensation plan, with the aim of incentivizing Internal Directors and Executive Officers to improve the Company's corporate value in a sustainable manner as well as raise the degree to which they share value with shareholders. Restricted stock compensation for Directors under this plan will not exceed the annual amount of ¥90 million, separately
Compensation Plan	from the maximum amount of fixed remuneration by position and performance-linked remuneration. The number of shares to be granted under the plan will not exceed 60,000 shares each year. Restricted stock compensation is not paid to Outside Directors. Monetary compensation linked to stock price (phantom stock) has been introduced in lieu of restricted stock compensation for Directors who are non-residents of Japan.

As the stock option scheme was abolished in March 2021, no new stock options will be granted. However, the exercise of previously-granted stock options held by Directors and Executive Officers on retirement will continue until such time as all Directors and Executive Officers currently holding stock options have retired.

#### Total Amount of Remuneration, etc., Paid to Directors and Corporate Auditors

							(F12021)
Category	Total amount of remuneration, etc. (Millions of yen)	M	Number of				
83		Fixed remuneration	Performance-linked remuneration*1	Other*2	Restricted stock compensation*3	Stock option-based remuneration*4	persons paid* <sup>5</sup>
Directors [of which Outside Directors]	510 (61)	343 (56)	98 (—)	0 (—)	25 (—)	42 (4)	13 (5)
Corporate Auditors [of which Outside Corporate Auditors]	92 (35)	92 (35)	—	—	—	—	6 (3)

\*1 Performance-linked remuneration is calculated based on net income attributable to owners of the parent for fiscal 2021. The target set for net income attributable to owners of the parent for fiscal 2021 was ¥30 billion, while the actual result was ¥37.2 billion (rounded down to the nearest ¥100 million based on figures given in the securities report).

\*2 One Director who is not a resident of Japan received monetary compensation linked to stock price (phantom stock) instead of restricted stock compensation within the range of the monetary remuneration limit.

\*3 ¥25 million of restricted stock compensation was granted to seven Directors and another ¥14 million was granted to five Directors concurrently serving as Executive Officers of the Company as compensation for their service in that capacity, as resolved at the meeting of the Board of Directors held on March 25, 2021.

\*4 ¥42 million (including ¥4 million to four Outside Directors) of share purchase warrants as stock options for a stock-linked compensation was granted to 11 Directors and another ¥28 million was granted to six) Directors concurrently serving as Executive Officers of the Company as compensation for their service in that capacity, as resolved at the meeting of Board of Directors held on January 20, 2021.

\*5 The number of persons paid includes one Director and one Corporate Auditor who retired at the conclusion of the 140th Ordinary General Meeting of Shareholders held on March 25, 2021.

## **Cross-Shareholdings**

## Policy on Cross-Shareholdings

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

- 1) Coming from the viewpoint of stable and long-term business operation, the Company may hold the shares of its business partners, etc., if maintaining and strengthening the relationships with such business partners are deemed to contribute to corporate value enhancement.
- 2) Regarding the shares held pursuant to the preceding paragraph (hereinafter, "cross-held shares"), the Company regularly examines economic rationality and significance of holding individual stock at the Board of Directors meetings in consideration of benefits and risks associated with such holding, capital cost and other factors. The Company will sell shares of stocks, as necessary, whose holding was deemed not to be appropriate based on the examination to reduce such stocks.
- 3) Concerning the voting rights pertaining to the cross-held shares, the Company appropriately exercises such voting rights in light of the objectives of shareholdings set forth in the preceding two paragraphs, taking into consideration the business conditions of the companies and potential impact to the business operation of the Company or a subsidiary of the Company (hereinafter "the Group"). Particularly, the Company carefully exercises such voting rights in a case where performance of the companies has been sluggish for a long period of time or a serious scandal has occurred or in a case where a proposal that would impair shareholders' value was made.

#### **Examination of the Propriety of Holding Cross-Held Shares**

In 2021, the Company sold all shares of two stocks and part of two stocks of its cross-held shares. Additionally, as the result of an examination at the Board of Directors meeting held on February 9, 2022, of the economic rationality and significance of holding individual cross-held stock for 2021 (examination of cross-held shares as of the end of December 2021) in consideration of benefits and risks, capital cost, and other factors associated with such holding, the Company plans to continue to sell some stocks.



Concerning the policies on cross-shareholdings and standards for exercising voting rights pertaining to cross-held shares, please visit the website below. Corporate Governance Report https://www.kuraray.com/ir/library/governance Points of Corporate Governance

https://www.kuraray.com/csr/report2022/corporate\_governance

## **Messages from Outside Officers**



## Looking Forward to Strong Growth as a Global Leader in the Materials Industry

Kiyoto Ido Outside Director

The very active discussions in Board of Directors meetings have impressed me the most in the year since I assumed my position as Outside Director. Outside Directors join in, offering keen insights and direction from various angles based on a range of experience and knowledge. I sense that we have been able to engage in highly effective discussions.

Looking at developments in the international economy, it is clear that the materials industry is a field that promises further growth globally. Drawing on my experience in global economics and monetary policy, I am actively offering advice from a macroeconomic perspective.

I also very much appreciate President Kawahara's qualifications as a top manager. Given the location of the materials industry upstream in the supply chain, the market environment differs significantly between divisions. Because each division has its own management strategy, it is not easy to establish a unified policy across the entire Group. Here, President Kawahara brings a clear vision to the task of leading and holding together the entire Group. I admire his competence as a top leader.

The recently announced Medium-Term Management Plan "PASSION 2026" was formulated at a good time. The plan coincides with a period of transition in which the materials industry as a whole is facing questions about purpose, not just in terms of carbon neutrality and ESG compliance. We Outside Directors were also actively involved in discussions around the plan. In drafting the plan, we discussed a wide array of issues related to the supply chain, from procuring raw materials to accurately gauging consumer trends, centered on the theme of sustainability. Over the past several years, the Kuraray Group has developed numerous sustainable products that positively contribute to society and the environment. We talked at length about how to best utilize these achievements and incorporate them into future management strategies. Going forward, I would like to explore the theme of sustainability from a long-term perspective as the central axis of the Group's management strategy. I would like to

continue to bring the objective viewpoints of stakeholders into this discussion.

I think the Kuraray Group faces three major challenges in pursuing strong growth globally.

The first is to construct a global management framework. An agile response to changes in government policy and markets in each country and region requires delegating certain decision-making authority to overseas bases and enabling the pursuit of autonomous business activities. I think the challenge is how to strike the best balance between centralized and local authority.

The second challenge is getting new businesses that will drive future profits off the ground quickly. Naturally, in rapidly changing times, aiming for management stability is important. However, making forays into new fields also stimulates the development of new technologies and new products in existing businesses. I would like the Group to move forward in this area.

The third challenge is the development of more diverse, more sophisticated human resources. Achieving this requires a more proactive approach to hiring female talent, overseas talent, and talent from outside industries. It also requires measures to further cultivate employees' potential after they enter the company by actively providing in-house training and outside learning opportunities. I am convinced that human resources are one key to the Group's further business growth going forward.

Kuraray has a wonderful corporate ethos, expressed in its mission statement: "For people and the plan—to achieve what no one else can." The Group is not content with simply incorporating Western knowledge and technology into a Japanese way of doing business. It has a history of harnessing truly original technology to address issues that face society. In light of this history, I think the strength and the corporate culture to accomplish Kuraray's objectives are rooted in the company's foundation. I look forward to Kuraray's strong growth as a global leader in the materials industry. Enhancing Global Risk Management, Promoting Sustainability, and Becoming an "Indispensable Presence" for the World

> Mitsuhiro Nagahama Outside Corporate Auditor

As someone external to the company, I believe the fundamental role of an Outside Corporate Auditor is to help enhance corporate value by monitoring and overseeing the execution of duties by Directors from an objective, third-party perspective. Based on this recognition, I strive daily to carry out highly effective auditing according to Kuraray's corporate nature. When I deem it necessary, I may offer opinions that touch on the legality and the reasonableness of actions.

The Kuraray Group is a global chemical manufacturer—a leading Japanese material manufacturer that uses advanced technological capabilities to produce a lineup of competitive products and supply them throughout the world. My primary duty as an Outside Corporate Auditor is to grasp the core issues the Group inevitably faces, given its corporate nature, and check how it responds from an external perspective. I am currently focusing on two main themes: ESG and the SDGs, and globally integrated risk management.

Due to the nature of their business, chemical companies have to wrestle head-on with numerous ESG issues, including safety, quality control, and the reduction of GHG emissions. At the same time, the Kuraray Group is a global company with large-scale production and sales bases in various regions worldwide, including those it has acquired. For crucial management issues, and risk management issues, in particular, it is essential to reinforce the Group's framework not only in Japan but on a global basis as well.

It has been four years since I assumed my role as an Outside Corporate Auditor. During that time, Kuraray has steadily enhanced its sustainability approach in close alignment with its business activities. In January 2022, the company established the Sustainability Committee under the direct control of senior management, chaired by the President. It also formulated a new Sustainability Long-Term Vision and a Sustainability Medium-Term Plan, an action plan for putting the vision into effect. I sense that these steps have dramatically expanded the framework for promoting sustainability, including ESG.

In terms of risk management, the Legal Department and other responsible organizations are establishing a global

framework for centrally managing risks. I am very encouraged by this development. Looking at changes in the operating environment and the future expansion of Kuraray's business and operations, the Group will inevitably face a greater range of diverse risks. It is critical to build an integrated risk management framework and a robust management framework that goes to the next level, looking beyond present circumstances toward what lies ahead.

With bases all over the world, the Kuraray Group faces many specific issues. As with other management issues, the company has to determine whether to construct a risk management unit for each region separately or manage risks directly. It must also consider where there needs to be oversight of the "three lines of defense" and how to allocate staff. Achieving more sophisticated risk management requires sustained effort and focus. The initiatives involved are by no means simple, but the company is making steady progress in its response under management's strong determination and leadership. I am confident that Kuraray, as a representative Japanese global company, will continue to boldly address this key management issue.

I think the Kuraray Group has tremendous potential to achieve sustainable growth going forward. In an era of drastically changing lifestyles and significant shifts in industry structure, chemical manufacturers have a prime opportunity to produce materials that can contribute to a broad array of areas.

On the other hand, because it is the industry closest to raw materials, the chemicals sector is also fraught with numerous issues in terms of ESG and the environment in particular. To address these issues and fulfill its mission of supplying excellent materials, every Kuraray employee must be firmly "committed to developing new fields of business using pioneering technology that improves the environment and enhances the quality of life throughout the world," as declared in the Corporate Statements. It is also essential to thoroughly incorporate the perspective of sustainability into corporate activities. My desire is for Kuraray to value this foundational way of thinking, becoming a truly "indispensable presence" for the world.

# Executives (As of March 24, 2022)



The reasons for the election of Directors and Corporate Auditors are disclosed in the reference documents for the general meeting of shareholders at the time of election: https://www.kuraray.com/ir/stock/meeting

Mar. 2018 Managing Executive Officer

#### **Representative Directors**



Hitoshi Kawahara President and Representative Director

- Apr. 1984 Joined Kuraray Co., Ltd. Apr. 2014 General Manager, Poval Film Division, Vinyl Acetate Company Jan. 2016 Vice President, Vinyl Acetate Film Company

- Mar. 2016 Executive Officer Jan. 2018 President, Vinyl Acetate Resin Company



Hiroaya Hayase Representative Director and Senior Managing Executive

Officer

- Apr. 1980 Joined Kuraray Co., Ltd. Apr. 2012 General Manager, Poval Resin Division,
- Resin Company Jun. 2012 Executive Officer
- Apr. 2013 General Manager, Poval Resin Division, Vinyl Acetate Company; and General Manager, Division and Trabaclary Managerment Division

Mar. 2019 Director and Managing Executive Officer

Jan. 2021 President and Representative Director (Current position)

- Mar. 2015 Director and Managing Executive Officer Jan. 2016 President, Vinyl Acetate Resin Company Mar. 2016 Director and Senior Managing Executive Officer Mar. 2020 Representative Director and Senior Managing Executive Officer (Current position) Jan. 2021 Executive Supervisor, Vinyl Acetate Resin Company

Tokyo Metropolitan University (Current position) Mar. 2020 Director, Kuraray Co., Ltd. (Current position)

		Production and Technology Management Division, Vinyl Acetate Company un. 2014 Managing Executive Officer an. 2015 President, Vinyl Acetate Film Company	Jan. 2022	(Current position); Executive Supervisor, Vinyl Acetate Film Company (Current position) President, Vinyl Acetate Film Company (Current position)
		Board of Directors		
a b	man and Director	pr. 1980 Joined Kuraray Co., Ltd. pr. 2010 General Manager, Methacrylate Division, Chemicals Company un. 2012 Executive Officer pr. 2013 Vice President, Functional Materials Company un. 2013 Managing Executive Officer	Jun. 2014 Jan. 2015 Jan. 2021 Apr. 2021	Officer Responsible for Corporate Management Planning Division; Officer Responsible for CSR Division Director and Managing Executive Officer President and Representative Director Chairman and Director (Current position) Chairperson, Saijo Central Hospital (Current position)
Direct	or and Senior ging Executive Officer Ju A	pr. 2010 General Manager, Elastomer Division,	Jan. 2018 Jan. 2020 Mar. 2020	General Manager, Carbon Materials Division, Functional Materials Company President, Functional Materials Company President, Fibers and Textiles Company (Current position); Responsible for Osaka Office (Current position) Director and Senior Managing Executive Officer (Current position)
Direct	or and Managing tive Officer M	pr. 1984 Joined Kuraray Co., Ltd. pr. 2014 General Manager, Medical Division, Functional Materials Company lar. 2017 Executive Officer an. 2018 Officer Responsible for Corporate Management Planning Office (Current position); Officer Responsible for CSR Division lar. 2018 Managing Executive Officer pr. 2018 General Manager, Corporate Management Planning Office	Jan. 2020 Jan. 2022	Director and Managing Executive Officer (Current position) Officer Responsible for Administrative Unit Officer Responsible for Corporate Sustainability Division (Current position): Officer Responsible for Global Digital Transformation Office (Current position): Officer Responsible for Accounting and Finance Division (Current position)
Direct	or and Managing D	un. 1996 Plant Manager, Mowiol Plant, Hoechst AG	Mar. 2018 Mar. 2020	General Manager, PVB Division, Vinyl Acetate Company Managing Executive Officer Director and Managing Executive Officer (Current position)
Direct	or and Managing tive Officer M	pr. 1984 Joined Kuraray Co., Ltd. pr. 2014 General Manager, Genestar Division, Isoprene Company lar. 2016 Executive Officer an. 2019 Vice President, Functional Materials Company; General Manager, Carbon Material Division, Functional Materials Company	Jan. 2020 Mar. 2020	Managing Executive Officer President, Functional Materials Company (Current position) Director and Managing Executive Officer (Current position)
Outsic (Indep	de Director Ju bendent Director) Independent Ju Independent Ju	pr. 1974 Entered Economic Planning Agency of Japan (EPA) ul. 1999 Director, Minister's Secretariat Division, EPA ul. 2004 Director General for Economic and Fiscal Management, Cabinet Office ul. 2006 Vice-Minister for Policy Coordination, Cabinet Office ul. 2008 Deputy Vice-Minister, Cabinet Office ul. 2009 Vice-Minister, Cabinet Office an. 2012 Advisor, Cabinet Office pr. 2013 Executive Advisor, Dentsu Inc.	Mar. 2016 Apr. 2020 Jun. 2021	Chairman, Ohara Memorial Institute for Science of Labour (Current position) Director, Kuraray Co., Ltd. (Current position) Representative Director and Vice Chairperson, Ohara Memorial HealthCare Foundation Representative Director and Chairperson, Ohara Memorial HealthCare Foundation (Current position)
Outsid	de Director A	pr. 1986 Entered Economic Planning Agency of Japan (EPA) ug.2005 Director for Overseas Economies, Directorate General for Economic Research, Cabinet Office ug.2006 Director for International Affairs, Secretariat of the Science Council of Japan, Cabinet Office ul. 2008 Professor, Graduate School of Social Sciences.	Jul. 2017 Apr. 2018	Advisor to the President, Tokyo Metropolitan University Trustee, Nippon Life Insurance Company (Current position) Professor, Graduate School of Management, Tokyo Metropolitan University (Current position)

Jul. 2008 Professor, Graduate School of Social Sciences, Tokyo Metropolitan University

Outside Independent

Kenji Komatsu Outside Corporate Auditor (Independent Corporate Auditor) Outside Independent	<ul> <li>Jun. 2009 Outside Corporate Auditor, Calbee, Inc.</li> <li>Jun. 2010 Outside Corporate Auditor, Taiko Pharmaceutical Co., Ltd.</li> <li>Apr. 1978 Entered Mitsubishi Corporation Feb. 1996 Entered GE International Inc.</li> <li>Jul. 2005 Representative Director and President, Ecolab Inc. (the present Ecolab GK)</li> <li>Apr. 2007 Ecolab Inc. Senior Vice President</li> <li>Dec. 2010 Senior Executive Officer, Sanden Corporation (the present SANDEN HOLDINGS CORPORATION)</li> <li>Nov. 2011 Entered Bain Capital Asia, LLC Mar. 2013 Director, President and CEO, BELLSYSTEM24, Inc.</li> </ul>	<ul> <li>Mar. 2021 Outside Corporate Auditor, Kyowa Kirin Co., Ltd. (Current position)</li> <li>Mar. 2016 Director and Chairman, BELLSYSTEM24 Holdings, Inc.</li> <li>Jun. 2016 Advisor, COACH A Co., Ltd.</li> <li>Dec. 2018 Advisor, API Consultants CO., LTD.</li> <li>Mar. 2019 Corporate Auditor, Kuraray Co., Ltd. (Current position)</li> <li>May 2020 Executive Vice President, FUJITSU COMPONENT LIMITED (Current position)</li> </ul>
	Jun. 2010 Outside Corporate Auditor, Taiko Pharmaceutical	
Tomomi Yatsu Outside Corporate Auditor (Independent Corporate Auditor) Outside Independent	Apr. 1983 Entered Tokyo Electron Ltd. Oct. 1986 Entered Tohmatsu Awoki & Sanwa (the present Deloitte Touche Tohmatsu LLC) Sep. 1990 Registered as a Certified Public Accountant Oct. 2001 Registered with Tokyo Bar Association; Entered Shin-Tokyo Sohgoh Law Office (later merged with Bingham Sakai Mimura Aizawa- Foreign Law Joint Enterprise)	Mar. 2012 Outside Corporate Auditor, KOKUYO Co., Ltd. Mar. 2015 Outside Corporate Auditor, Yamaha Motor Co., Ltd. Apr. 2015 Partner, TMI Associates (Current position) Jun. 2016 Outside Director, SMBC Nikko Securities Inc. (Current position) Jun. 2017 Outside Corporate Auditor, IHI Corporation Mar. 2019 Corporate Auditor, Kuraray Co., Ltd. (Current position)
Mitsuhiro Nagahama Outside Corporate Auditor (Independent Corporate Auditor) Outside Independent	<ul> <li>Apr. 1976 Entered The Fuji Bank Limited (the present Mizuho Bank, Ltd.)</li> <li>Apr. 2002 General Manager, Americas Non-Japanese Corporate Banking Division No. 2, Mizuho Corporate Bank, Ltd. (the present Mizuho Bank, Ltd.)</li> <li>Mar. 2003 Executive Officer and General Manager, Otemachi Corporate Banking Division No. 6 and No. 7, Mizuho Corporate Bank, Ltd.</li> <li>Apr. 2005 Managing Executive Officer in charge of corporate banking, Mizuho Corporate Bank, Ltd.</li> <li>Mar. 2006 Managing Executive Officer, Head of the Americas, Mizuho Corporate Bank, Ltd.</li> </ul>	<ul> <li>Apr. 2010 Deputy President, Head of the Americas, Mizuho Corporate Bank, Ltd.</li> <li>Apr. 2013 Chairman of the Board, Mizuho Securities Co., Ltd.; Chairman of the Board, Mizuho Securities USA Inc.</li> <li>Apr. 2015 Senior Advisor, Mizuho Securities Co., Ltd.</li> <li>Jun. 2015 Outside Audit &amp; Supervisory Board Member, Azbil Co., Ltd.</li> <li>Mar. 2018 Corporate Auditor, Kuraray Co., Ltd. (Current position)</li> <li>Mar. 2019 Outside Director, Tokyo Tatemono Co., Ltd.</li> <li>Jun. 2019 Outside Director, Azbil Co., Ltd. (Current position)</li> <li>Jun. 2020 Outside Director, NSK Ltd. (Current position)</li> </ul>
Naoya Uehara Full-time Corporate Auditor	Apr. 1982 Joined Kuraray Co., Ltd. Apr. 2013 Vice General Manager, Corporate Management Planning Division Jun. 2014 Vice General Manager, GLS Division, Kuraray America, Inc.	Mar. 2020 Corporate Auditor (Current position) Jan. 2018 Vice President, Kuraray Europe GmbH Mar. 2020 Executive Officer, Kuraray Co., Ltd. Jan. 2021 Assistant to the President Mar. 2021 Corporate Auditor (Current position)
Kazuhiro Nakayama Full-time Corporate Auditor	Apr. 1980 Joined Kuraray Co., Ltd. Apr. 2012 General Manager, Kurashiki Plant	<ul> <li>Jan. 2016 Officer Responsible for Technology Division;</li> <li>Officer Responsible for Plants in Japan;</li> <li>Officer Responsible for Environmental Business</li> <li>Development and Promotion Division</li> <li>Mar. 2016 Director and Managing Executive Officer</li> <li>Jan. 2018 Officer Responsible for Environmental and</li> <li>Industrial Safety Management Center</li> <li>Jan. 2020 Assistant to the President</li> </ul>
	Director-General, International Bureau, MOF	(Current position)
Outside Director (Independent Director)	Frankfurt in Germany Jul. 1989 Deputy General Manager, Finance Dept., Inter-American Development Bank, Washington, D.C. Jul. 1998 Deputy Vice Minister of Finance for	Jul. 2002 Deputy Director-General, International Bureau, MOF Jul. 2004 Director-General, International Bureau, MOF Aug.2006 Executive Director, Bank of Japan Apr. 2011 Vice Chairman, Institute for International Economic Studies Mar. 2021 Director, Kuraray Co., Ltd. (Current position) Director (Outside), Japan Investment Adviser Co., Ltd.
Kivoto Ido	Officer); CPO (Chief Privacy Officer), Mitsui & Co., Ltd Apr. 1973 Entered the Ministry of Finance (MOF)	(Current position) Jun. 1999 Minister, Embassy of Japan, Washington, D.C.
Outside Independent	Apr. 2015 Senior Executive Managing Officer, COO of Asia Pacific Business Unit, Mitsui & Co. Apr. 2017 Executive Vice President and CAO (Chief	Apr. 2020 Outside Director, Sekisui House, Ltd. Jan. 2021 Independent Director, IHH Healthcare Berhad (Current position)
Outside Director (Independent Director)	Apr. 2007 General Manager, Corporate Strategy & Planning, Mitsui & Co. Apr. 2011 Managing Officer, Mitsui & Co.	Mitsui & Co. Apr. 2019 Director, Mitsui & Co. Jun. 2019 Counselor, Mitsui & Co. Mar. 2020 Director, Kuraray Co., Ltd. (Current position)
	(Independent Director)  Outside Independent  Kiyoto Ido Outside Director (Independent Director)  Outside Independent  Kazuhiro Nakayama Full-time Corporate Auditor  Naoya Uehara Full-time Corporate Auditor  Mitsuhiro Nagahama Outside Corporate Auditor (Independent Corporate Auditor)  Outside Independent  Tomomi Yatsu Outside Corporate Auditor (Independent Corporate Auditor)	Outside Director       Apr. 200' General Manager, Corporate Strategy & Planning, Mitsui & Co.         Outside Director       Apr. 2011 Managing Officer, Mitsui & Co.         Outside Independent       Apr. 2013 Executive Managing Officer, Mitsui & Co.         Apr. 2013 Executive Managing Officer, COO of Asia Pacific Business Unit, Mitsui & Co.       Apr. 2013 Executive Managing Officer, COO of Asia Pacific Business Unit, Mitsui & Co.         Outside Independent       Apr. 1973 Entered the Ministry of Finance (MOF)         Mar. 1980 Consul, Consulate-General of Japan, Frankfurt in Germany         Jul. 1989 Deputy General Manager, Finance Dept., InternAmerica Afrairs, MOF Deputy Unerton-General, International Eureau, MOF         Corporate Auditor         Jul. 1980 Doined Kuraray Co., Ltd.         Apr. 2012 General Manager, Curbonal Afrairs, MOF Deputy Director-General, International Eureau, MOF         Mar. 1980 Joined Kuraray Co., Ltd.         Apr. 2013 General Manager, Curbonate Manager, Gureseas Business, Vinyl Acetate Company         Apr. 2013 Vice General Manager, GLS Division         Apr. 1976 Entered The Fuji Bank Limited (the present Manager, GLS Division, Nuraray America, Inc.         Mitsui & Co.         Mitsui & Co.         Apr. 1976 Entered The Fuji Bank Limited (the present Manager, GLS Division, Nuraray America, Inc.         Mitsui & Corporate Banking Division No. 6 and No. 7, Mitsui Corporate Banki, Ltd.

Managing Executive Officers				
Akira Omura	Officer Responsible for Technology Division; Officer Responsible for Plants in Japan; Officer Responsible for Environmental and Industrial Safety Management Center; and General Manager of Technology Division			
Toshihiro Omatsu	President, Isoprene Company			
Toshinori Tsugaru	Officer Responsible for Innovation Networking Center; Officer Responsible for Research and Development Division; Officer Responsible for IP Management Center			
Satoru Fujinami	Officer Responsible for General Affairs and HR Division; Officer Responsible for Purchasing and Logistics Division; and General Manager of General Affairs and HR Division			

**Executive Officers** Stephen Cox Koichi Takano

Hajime Suzuki

Officer Responsible for Technology Division;	Fuyuo Ueyama	Vice President, Calgon Carbon Corporation				
Officer Responsible for Plants in Japan; Officer Responsible for Environmental and Industrial Safety	Tomoyuki Watanabe	President, Vinyl Acetate Resin Company, General Manager, Poval Resin Division				
Management Center; and General Manager of Technology Division	Stevan R. Schott	General Manager, Environmental Solutions Division, Functional Materials Company;				
President, Isoprene Company		President, Calgon Carbon Corporation				
Officer Responsible for Innovation Networking Center;	Yoji Ikemori	General Manager, Genestar Division				
Officer Responsible for Research and Development Division; Officer Responsible for IP Management Center	Kazushige Sakamoto	General Manager, Okayama Plant				
Officer Responsible for General Affairs and HR Division;	Koichi Daifuku	General Manager, Poval Film Division				
Officer Responsible for Purchasing and Logistics Division; and General Manager of General Affairs and HR Division	Junichi Fujiwara	General Manager, Corporate Management Planning Office				
	Hideo Ohi	General Manager, Corporate Auditing Division				
	Hiroyuki Shimo	General Manager, EVAL Division				
General Manager, Advanced Interlayer Solutions Division	Yoshinobu Nakamura	General Manager, Methacrylate Division				
	Akiko Ide	General Manager, Corporate Sustainability Division				
General Manager, Purchasing and Logistics Division						
Vice President, Kuraray America, Inc.		Kuraray Report 2022 54				

President, Kuraray America, Inc.

Vice President, Calgon Carbon Corporation

Takaharu Kawahara

Fuyuo Ueyama

# **Risk Management and Compliance**

For details, please visit our website: <u>https://www.kuraray.com/csr/</u> report2022/riskmanagement

#### Risk Management and Compliance Promotion System

The Kuraray Group monitors risks regularly, led by the Risk Management and Compliance Committee, and identifies risks that could have a significant impact on business management. Such risks are proposed to the President, who then specifies critical management risks and priority countermeasures are carried out after deliberation by the

#### **Risk Management Policy**

The Kuraray Group Risk Management Policy, which the President disseminates to each Group organization, consists of two elements: a long-term, ongoing Basic Policy encompassing overall Group risk management, and priority issues that are the focus for a particular fiscal year in light of social conditions and trends facing the Group and other companies. This framework allows flexible and Board of Directors. The Risk Management and Compliance Committee works to ensure thorough priority countermeasures against business management risks as well as compliance with laws and regulations and corporate ethics and the realization of fair business practices.

prompt actions to be taken in response to changes in the risk environment while maintaining the underlying approach to risks. The priority issues are tasks that the President clearly indicates for the organization to mitigate priority risks, instructing the organization on how to carry them out.

### Fiscal 2022 Kuraray Group Risk Management Policy

#### **Basic Policy**

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

#### **Priority Issues**

Based on the above policy and recent social conditions and trends at our company and other companies, the following are the priority issues for fiscal 2022.

- 1) Implement immediate measures to prevent the recurrence of confidential information leakage.
- 2) In order to mitigate the risk of occurrence of safety-related accidents, objectively evaluate through the audits by in-house expert teams and steadily improve the status of action towards the countermeasures which were recognized through the survey of not only safety design but also management aspects (operation management and facility management) including human resource development at overseas plants.
- 3) For supply risks or raw materials, fuels, and secondary materials, review all including commodity materials from a supply chain perspective and formulate a more comprehensive BCP (Business Continuity Planning).
- 4) Continue ensuring preparation for COVID-19 pandemic.

#### **Risk Management**

The Kuraray Group's risk management is characterized by a two-tier approach. In terms of vertical risk management, each business division, office, plant, and affiliate identifies risks facing their own organization, evaluates such risks independently, and devises and implements an appropriate response. In terms of horizontal risk management, the corporate staff departments evaluate and manage pure risks across the organization, such as natural disasters and infringement of laws and regulations that have purely a negative impact. Among these risks, the Risk Management and Compliance Committee discusses and selects significant risks that require a Group-level response. The President then designates these as critical management risks and reports them to the Board of Directors, while assigning them to an officer in charge. In 2022, Critical management risks are classified as the four priority risks as described priority issues or the eight risks listed below requiring ongoing monitoring, and proper measures are taken for both types of risks. The risks requiring ongoing monitoring are: risks concerning product quality, regulations of chemical substances, natural disasters, utility outages, antitrust violations, bribery, management of intellectual property risks, and harassment.

## Group Compliance

The statement "Our Commitment" outlines the principles of conduct to which the Kuraray Group should adhere in our business activities, which involve diverse points of contact with society. The "Kuraray Group Code of Conduct" serves as a guideline for putting the commitment in practice in day-to-day operations. The President has declared that we will comply with laws and regulations and "Our Commitment" under all circumstances. To share these principles and commitment among all Kuraray Group employees worldwide, we compiled a Compliance Handbook, containing the foregoing declaration by the President and explanations of the "Kuraray Group Code of Conduct", and distributed it to all Group employees in Japan and overseas. In 2021, we have updated the design and translated it into

### Whistleblower System

We have set up a Kuraray Group Employee Counseling Room and a Global Compliance Hotline for Group employees around the world as an internal reporting system for either preventing or detecting and resolving at an early stage any compliance violations. Consultation and reporting encompasses all aspects of compliance, including any transactions involving bribery or corruption, violations of internal rules, and respect for human rights, harassment, 12 languages to make it easier for all employees to use.

In addition, we have appointed compliance officers at plants and overseas offices of Kuraray and Group companies, and have organized regional compliance committees. Since 2019, we have linked the timing of the activities of the regional compliance committees and Risk Management and Compliance Committee to raise awareness of compliance throughout the Group.



Compliance Handbook

The Compliance Handbook is available on the website below: <u>https://www.kuraray.com/csr/report2022/compliance</u>

and other personnel-related matters. In 2021, the Employee Counseling Room handled 11 consultations in Japan, which included personnel and labor issues related to the work issues and workplace environment under the COVID-19 pandemic. Consultation and reporting can be anonymous, and internal rules ensure the protection of employees who report or seek consultation so that they are not treated unfavorably.

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Kuraray Group Employee Counseling Room Consultations in Japan	1	3	4	9	16	35	23	11

### Thorough Risk Management and Compliance Measures

#### Preventing Leakage of Confidential Information

In October 2021, we ascertained that a server operated by the Kuraray Group was accessed illegally and some information it contained was leaked. Subsequent investigation found that some of the information that may have been leaked contained personal data, such as the names and company contacts of business partners and Kuraray Group employees. We have taken necessary response measures, including contacting the relevant parties.

Based on the recommendations of an outside expert institution, we are currently taking measures to ensure information security immediately after detection of any unauthorized access. We have reformulated the Kuraray Group Confidential Information Management Policy throughout the Group worldwide and have carried out online training for employees on information security and how to handle suspicious emails.

To prevent further leakages, we will implement even more robust information security and tighten the information management framework, including stronger network monitoring, practical training in the response to information security incidents, and ongoing education and training to improve IT literacy.

#### **Anti-Bribery Initiatives**

The Kuraray Group Code of Conduct indicates to both Group employees and outside partners action guidelines for preventing bribery and the handling of donations and gifts. Our basic policy on bribery is set forth in the Kuraray Group Global Anti-Bribery Policy. In accordance with these policies, we are developing and reinforcing a bribery prevention framework at the Group level, including formulating relevant internal rules for each Group company, providing education and training for officers and employees, and introducing procedures for managing bribery risks through agents or other third parties.

#### Efforts to Comply with the Antitrust Law

In 2021, we continued to monitor the compliance framework in high-risk businesses and areas and took measures such as providing education and training to officers and employees and conducting an annual audit of public bid projects. From 2022 onward, the entire Kuraray Group will steadily implement the Antitrust Law Compliance Program to prevent Antitrust Law violations and monitor compliance status.

#### **Departmental Compliance Education**

Since 2017, we have carried out departmental compliance education for all employees in Japan to improve communication and openness within departments. In 2021, we held an online seminar for managers (section managers) of Group companies in Japan. Through dialogue with outside lecturers, participants learned basic knowledge about ways of giving guidance to department members while avoiding harassment. The training aimed for a level at which participants could talk about what they learned in their own words to subordinates. Subsequently, participants brought back the knowledge and awareness gained at the seminar to their departments, seeking to raise understanding of compliance and improve communication through interactive departmental education.

# Corporate Data (December 31, 2021)

## Kuraray Group Network

## In Japan

#### **Group Main Bases**

 Head Office (Chiyoda-ku, Tokyo)
 Osaka 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

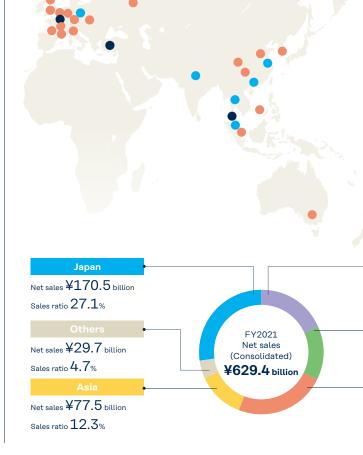
- Kurashiki Plant (Kurashiki City, Okayama)
- Saijo Plant (Saijo City, Ehime)
- 🛑 Okayama Plant (Okayama City, Okayama)
- 🛑 Niigata Plant (Tainai City, Niigata)
- 🛑 Kashima Plant (Kamisu City, Ibaraki)
- Tsurumi Plant (Bizen City, Okayama)

#### Laboratories

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

## Corporate Overview

Company Name	Kuraray Co., Ltd.
President and Representative Director	Hitoshi Kawahara
Established	June 1926
Head Office	Tokiwabashi Tower, 2-6-4, Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan
URL	https://www.kuraray.com
Capital	JPY89 billion
Employees (Consolidated)	11,330
Group Companies	76 consolidated subsidiaries, two equity-method affiliates
Major Operations	United States, Germany, Belgium, China, Singapore



## Stock Information

Securities Code	3405
Issued and Outstanding Shares	354,863,603 shares
Number of Shareholders	98,126
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



Major Shareholders

## Outside Japan

## Regional Headquarters

- Kuraray America, Inc. (Texas, U.S.A.)
- Kuraray Europe GmbH (Frankfurt, Germany)
- Kuraray Asia Pacific Pte. Ltd. (Singapore)
- 🔵 Kuraray (Shanghai) Co., Ltd. (Shanghai, China)
- Kuraray Hong Kong Co., Ltd. (Hong Kong, China)
- Kuraray India Private Limited (New Delhi, India)
- 🔵 Kuraray South America Ltda. (São Paulo, Brazil)
- Kuraray (Thailand) Co., Ltd. (Bangkok, Thailand)

#### Plants

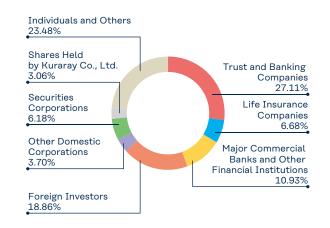
- Kuraray America, Inc. (Texas, North Carolina, and West Virginia, U.S.A.)
- MonoSol, LLC (Indiana, U.S.A., Worcestershire, U.K.)
- Kuraray Europe GmbH (Frankfurt and Troisdorf, Germany)
- EVAL Europe N.V. (Antwerp, Belgium)
- Kuraray Europe Moravia s.r.o. (Czech Republic)
- OOO TROSIFOL (Nizhny Novgorod, Russia)
- Kuraray Asia Pacific Pte. Ltd. (Singapore)
- Kuraray Methacrylate (Zhang Jia Gang) Co., Ltd. (Zhang Jia Gang, China)
- Kuraray Korea Ltd. (Ulsan, South Korea)
- Plantic Technologies Limited (Victoria, Australia)
- Calgon Carbon Corporation (Pennsylvania, Kentucky, and Mississippi, U.S.A., U.K., France, Italy, and other countries)

#### Laboratory

- KAI Corporate R&D (Texas, U.S.A.)
- Major sales locations not included in the above list

Number of shares held (thousands)
60,336
21,887
10,882
10,448
6,772
6,036
5,969
5,550
4,999
4,992

### Shareholder Composition (Shareholding Ratio)



Note: Kuraray Co., Ltd. holds 10,858,263 shares of treasury stock.



## KURARAY CO., LTD.

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