



# CHALLENGE, DIVERSITY, ONE TEAM

MITSUI CHEMICALS REPORT 2022



# Our CHALLENGE



We never forget our constant quest  
to balance the natural environment  
with comfortable lifestyles.

ADMER Section, Modifier Department,  
Polymers & Composite Materials Laboratory  
(Joined Mitsui Chemicals, Inc. in fiscal 2020)



Realizing sustainable procurement  
is the source of the value we  
deliver to customers.

Sustainable Feedstocks Division,  
Basic & Green Materials Business Sector  
(Joined Mitsui Chemicals, Inc. in fiscal 2018)

## Striving toward VISION 2030

The key to realizing the Mitsui Chemicals Group's VISION 2030 is the accumulation of the relentless endeavors of each and every employee. Just as we have done so far, we will continue to take up challenges to transform society with the power of chemistry.



We will create a network of trust  
by swiftly responding  
to customer requests.

Manager, Elastomers Materials Section,  
Functional Polymeric Materials Department,  
Nagoya Branch  
(Joined Mitsui Chemicals, Inc. in fiscal 2004)



We will help build a sustainable  
future by pioneering  
the development of  
new businesses without being  
bound by conventional thinking.

Phenols Division,  
Basic & Green Materials Business Sector  
(Joined Mitsui Chemicals, Inc. in fiscal 2021)



We aim to be a world-leading team  
whose members feel the responsibility  
and fulfillment that comes with  
providing global products.

Pellicle Team Leader,  
Optical & Packaging Materials Department,  
Semiconductor & Optical Materials Division,  
ICT Solutions Business Sector  
(Joined Mitsui Chemicals, Inc. in fiscal 2017)



To realize stable production and  
safe operations as the foundation of  
our business, we will not overlook  
even small anomalies.

Elastomer Section-1,  
Manufacturing Department-2,  
1TF Operator  
(Joined Mitsui Chemicals, Inc. in fiscal 2016)





About publication of Mitsui Chemicals Report 2022

## Achieving continuous growth in corporate value through a positive cycle of dialogue and feedback

The Mitsui Chemicals Group has a long history of addressing social challenges, and in 2021 we formulated our long-term business plan, VISION 2030, which outlines a range of strategies including a transformation of our business portfolio. The Mitsui Chemicals Report 2022 contains a review of our performance in fiscal 2021 and our past business plans. It also provides an in-depth look at the business and sustainability strategies we will pursue under our new structure and direction, as well as the human resources strategies and corporate governance approaches that will form the foundation of these efforts, with an emphasis on how we are integrating financial and non-financial perspectives in our management—a key focus of our current management strategy. We hope that this report will help our stakeholders better understand how the Group is working to create value.

In preparing and editing this report, we have drawn on the International Integrated Reporting Framework issued by the Value Reporting Foundation (VRF) and the Ministry of Economy, Trade and Industry's Guidance for Collaborative Value Creation. The process involved cooperation among the Corporate Communications Division and other divisions across the Group. I have confirmed that the process of preparing the report was appropriate and that the content is valid.

We intend to use this report as an opportunity to engage in dialogue with our stakeholders, and we welcome your candid feedback on our activities. We will work to continuously increase our corporate value by reflecting the results of this dialogue in the Group's strategies going forward. I hope that you will provide us with your continued support and feedback.

**HASHIMOTO Osamu**

Representative Director, President & CEO

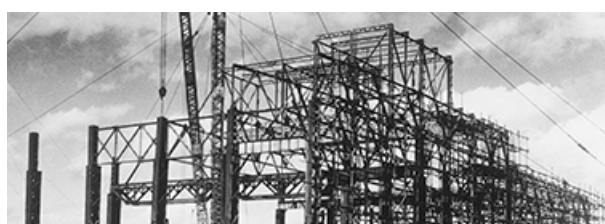
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## Scope and Principles

- Period: April 1, 2021 to March, 31 2022 (fiscal 2021). Please note some data may postdate April 2022.
- Scope: Mitsui Chemicals, Inc. and the Mitsui Chemicals Group (Other entities, if included, are identified in the text.)
- Accounting principles: International Financial Reporting Standards (IFRS)



## Editorial Policy

In compiling this Mitsui Chemicals Report 2022, we sought to present a comprehensive overview of our various strategies and performance from both the financial and non-financial perspectives with the ultimate goal of creating a platform for meaningful dialogue with all stakeholders. While we have drawn on the International Integrated Reporting Framework issued by the Value Reporting Foundation (VRF) and the Ministry of Economy, Trade and Industry's Guidance for Collaborative Value Creation, we have tried to avoid a rigid format. Our goal has been to provide a useful document that allows readers to gain a deeper understanding of our efforts toward the creation of value through innovation over the medium- to long-term.

## Forward-Looking Statements

This report contains forward-looking statements about future plans and strategies as well as forecasts and expectations regarding the performance of the Mitsui Chemicals Group. Actual results may differ materially from those projected due to a variety of factors, and the Mitsui Chemicals Group cannot guarantee that any forward-looking statements herein are accurate or that targets will be achieved. The outlook for fiscal 2022 contained in this report is as of May 13, 2022.

### Inclusion in ESG investment indices (as of September 2022)



2022 CONSTITUENT MSCI JAPAN  
ESG SELECT LEADERS INDEX

2022 CONSTITUENT MSCI JAPAN  
EMPOWERING WOMEN INDEX (WIN)



External Assessments  
<https://jp.mitsuichemicals.com/en/sustainability/evaluation/>



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## Strategies toward realization of VISION 2030

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# At a Glance



## Life & Healthcare Solutions

Contributing to improved quality of life and the assurance of food safety and security by offering solutions that support life, health, and comfortable lifestyles

### Business areas

- Life care solutions
- Wellness solutions
- Medical solutions

### Key products

Plastic ophthalmic lens materials, materials for disposable diapers, masks, and medical gowns, insecticides, fungicides, oral care materials, and others

### Pick Up

Accelerating the global expansion of agrochemical products

- We are pushing forward with overseas sales expansion with a focus on insecticides dinotefuran and TENEBENAL™.



▶▶ Life & Healthcare Solutions, P. 41

FY2021 results

Sales revenue **¥225.2bn** Operating income before special items **¥24.9bn**



## Mobility Solutions

Providing unique materials, features, and services to help solve social challenges and achieve sustainable business growth

### Business areas

- Materials business
- Solutions business

### Key products

Auto bumper and instrument panel materials, encapsulant sheets for solar cells, and others

### Pick Up

Developing TAFMER™ for use in solar cell encapsulants

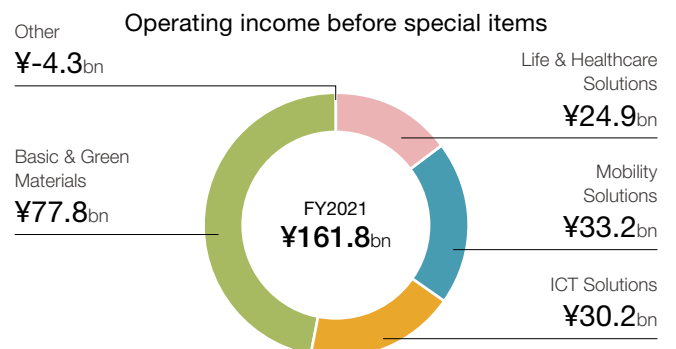
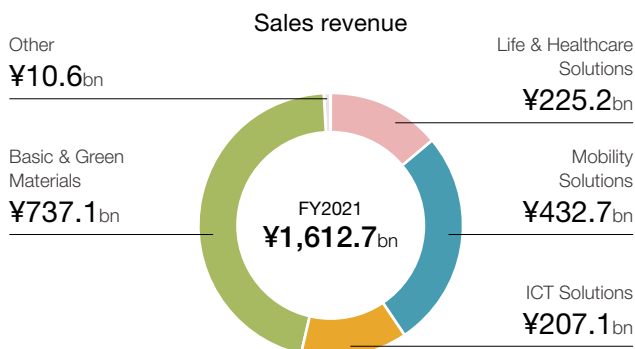
- TAFMER™, which boasts the top market share as an automotive material, is being increasingly adopted for use in the rapidly expanding solar cell market.



▶▶ Mobility Solutions, P. 46

FY2021 results

Sales revenue **¥432.7bn** Operating income before special items **¥33.2bn**



\* Results for FY2021 based on the new business segments are reference figures which have been prepared for the purpose of comparison.



## ICT Solutions

Creating and growing a “unique” ICT Solutions business that contributes to the evolution of AI, beyond-5G, and other such technologies that can support safe and pleasant infrastructure, healthy living, and a sustainable global environment

### Business areas

- Semiconductor & assembly solutions
- Imaging solutions
- Battery material solutions
- Converting solutions

### Key products

Semiconductor manufacturing process tapes, industrial films and sheets, smartphone camera lens materials, high-performance packaging materials, packaging films, and others

### Pick Up

Continuing high growth for ICROS™ Tape, which enjoys the global top market share

- ICROS™ Tape, a semiconductor manufacturing process tape, is expected to grow further as electronic devices become more functional and efficient.



▶▶ ICT Solutions, P. 50

FY2021 results

Sales revenue **¥207.1**bn Operating income before special items **¥30.2**bn



## Basic & Green Materials

Accomplishing business restructuring as well as leading the Mitsui Chemicals Group's efforts to bring about a circular economy revolution with the aim of reducing environmental impacts and realizing a decarbonized society

### Business areas

- Petrochemicals
- Basic chemicals
- Polyurethane raw materials

### Key products

Polyolefins and others

### Pick Up

Accelerating promotion of green chemicals

- We introduced Japan's first bio-based hydrocarbons and will expand our bio-based products.

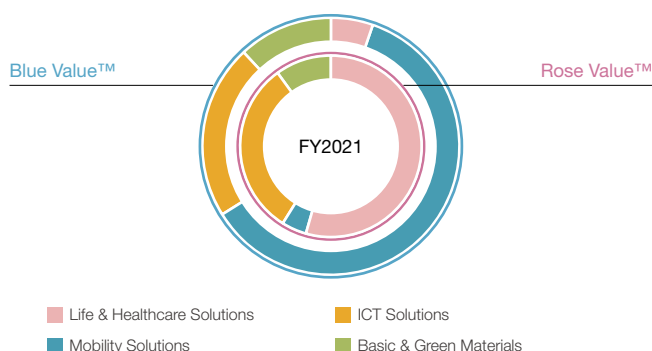


▶▶ Basic & Green Materials, P. 54

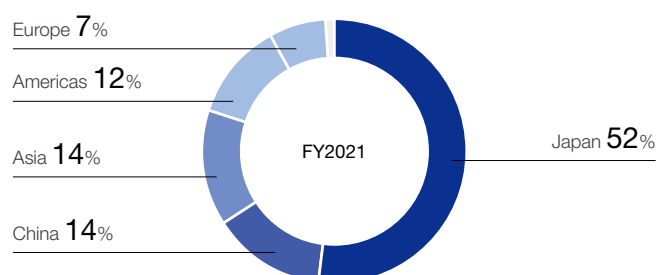
FY2021 results

Sales revenue **¥737.1**bn Operating income before special items **¥77.8**bn

Sales revenue composition by business segment of Blue Value™ and Rose Value™ products



Sales revenue by region





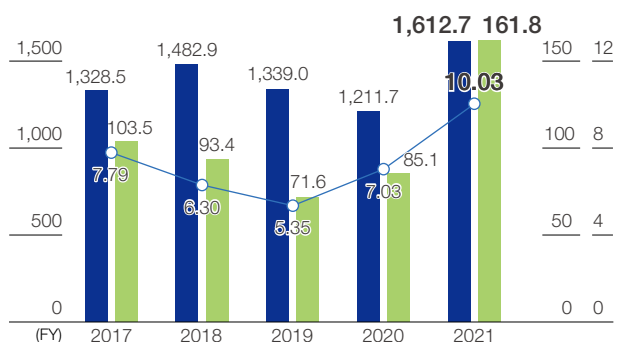
# Data Highlights

## Financial highlights

Mitsui Chemicals has voluntarily adopted International Financial Reporting Standards (IFRS) from fiscal 2020. Figures for fiscal 2019 and before are reported under Japanese Generally Accepted Accounting Principles (J-GAAP), while figures for fiscal 2020 and later are reported under IFRS.

### Sales revenue/Operating income before special items/ROS

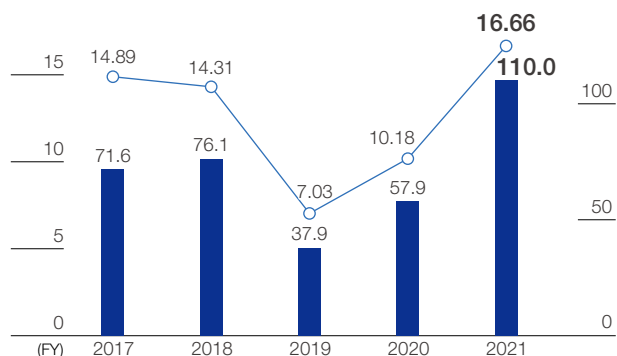
(¥bn) (¥bn) (%)  
2,000 200 16



■ Sales revenue/Net sales (J-GAAP) (left scale)  
■ Operating income before special items/Operating income (J-GAAP) (right scale)  
○ ROS: return on sales (right scale)

### ROE/Net income attributable to owners of the parent

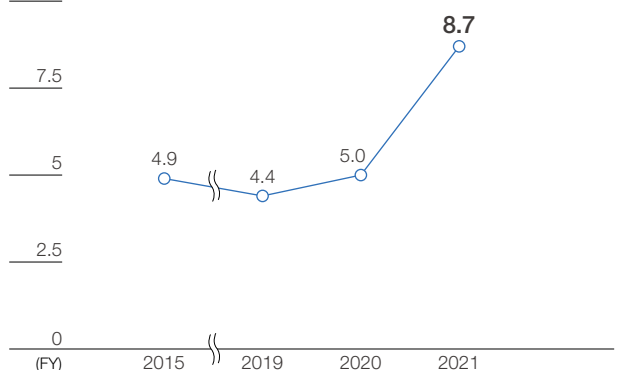
(%) (¥bn)  
20 150



■ Net income attributable to owners of the parent/Profit attributable to owners of parent (J-GAAP) (right scale)  
○ ROE: Return on equity (left scale)

### ROIC

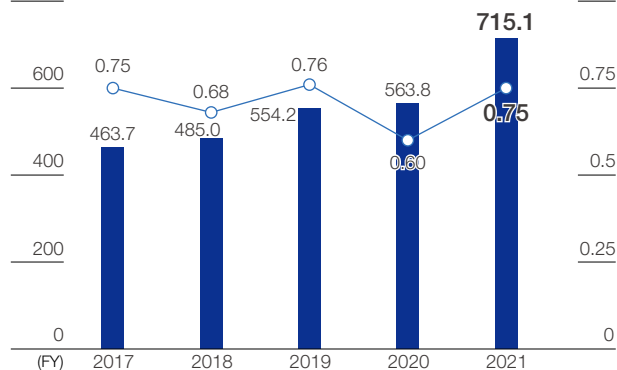
(%)  
10



\* ROIC: Return on invested capital=NOPAT/Invested capital

### Interest-bearing debt/Net D/E ratio

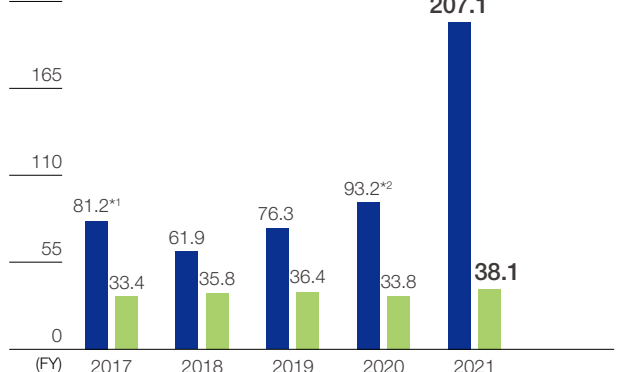
(¥bn) (Times)  
800 1.0



■ Interest-bearing debt (left scale) ○ Net D/E ratio (right scale)

### Capital expenditure/R&D expenses

(¥bn) 220

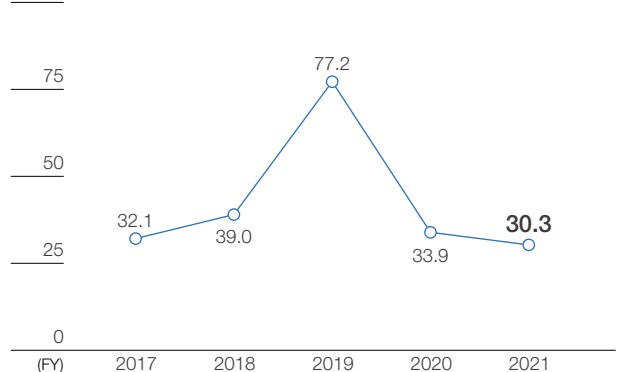


■ Capital expenditure ■ R&D expenses

\*1 Includes acquisition of shares of ARRK Corporation of ¥23.9 billion  
\*2 Includes increase from the recognition of regular maintenance and repair costs, etc., under IFRS

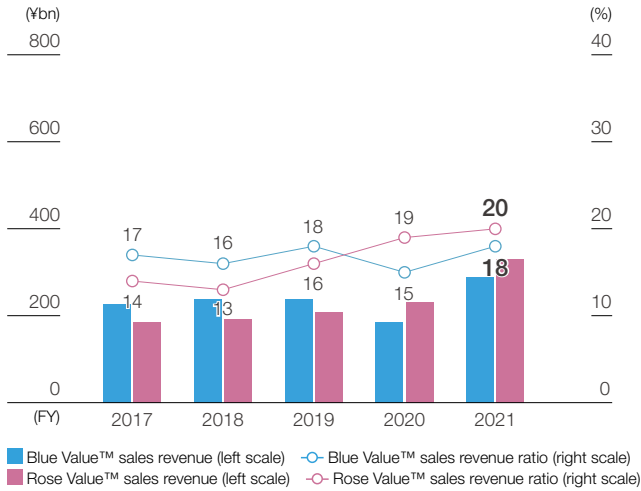
### Total return ratio

(%) 100

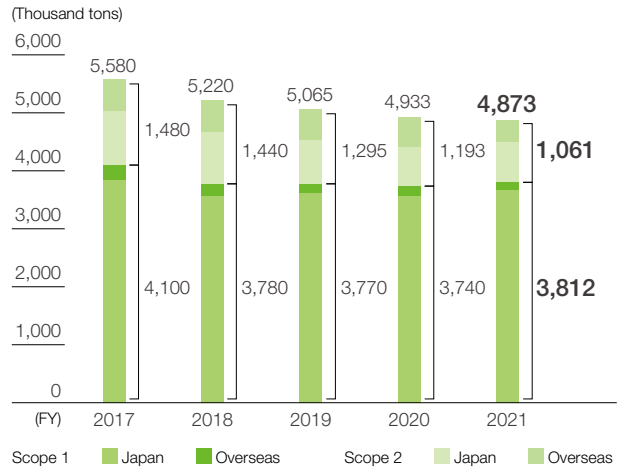


# Non-financial highlights

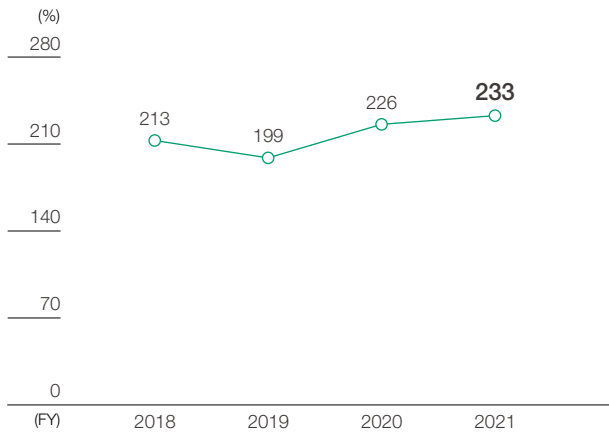
Blue Value™ and Rose Value™ products sales revenue ratios TCFD



GHG emissions TCFD

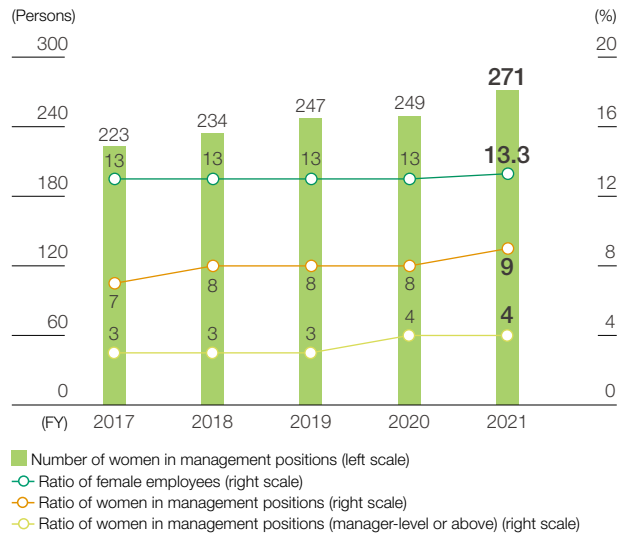


Successor coverage rate for critical positions\*



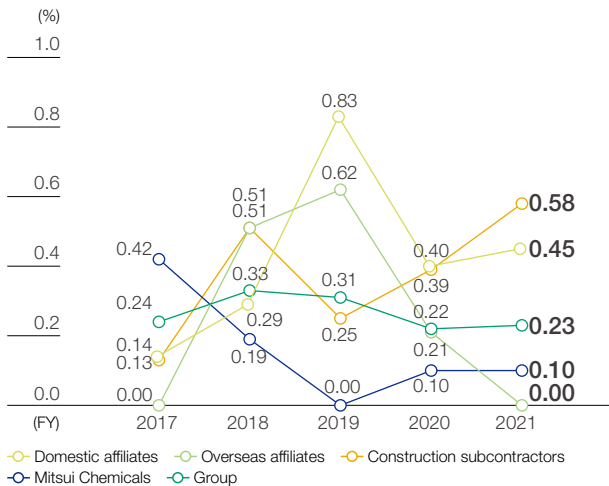
\* Successor coverage rate for critical positions: Number of successor candidates for critical positions / Number of critical positions  
The successor coverage rate for critical positions has been collated since FY2018.

Ratio of female employees



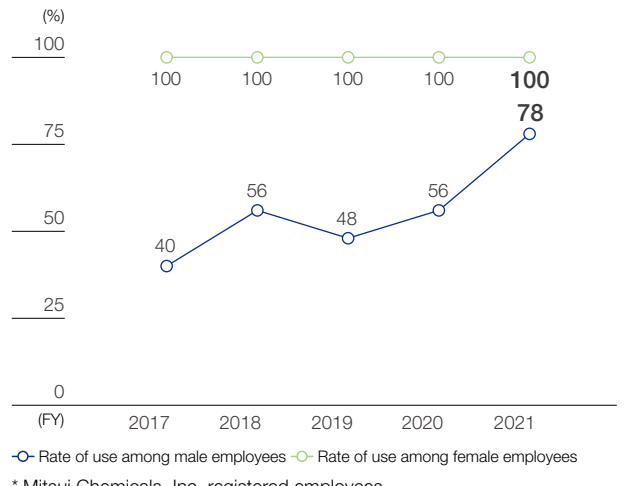
\* Mitsui Chemicals, Inc. registered employees

Significant occupational injury\* frequency



\* Significant occupational injuries (SOIs) refer to occupational injuries that resulted in absence from work or death. SOIs also include lighter occupational injuries that, due to the potential danger in the cause of the injury, could have led to absence from work or death. SOIs do not include those injuries that are not directly related to operations.

Childcare leave usage rate



\* Mitsui Chemicals, Inc. registered employees

## CEO Message



**HASHIMOTO Osamu**

Representative Director  
President & CEO

**Amid an ever-changing environment,  
we will steadily work to transform  
the Mitsui Chemicals Group to realize VISION 2030.**



## **Building on record profits achieved in fiscal 2021 we will continue pushing forward with our transformation, targeting further growth.**

The external environment has shifted dramatically since we announced our VISION 2030 in 2021, including developments in countries and regions across the world in response to the COVID-19 pandemic, and Russia's invasion of Ukraine. In such an environment, I feel that dealing with uncertainty is becoming an increasingly important management task. However, despite these circumstances, our policy remains unchanged: we will continue pushing forward with our transformation by carefully discerning where to focus our major investments while trialing a range of new initiatives across the Group, based on our understanding that growing environmental awareness is a long-term trend that will continue in the future.

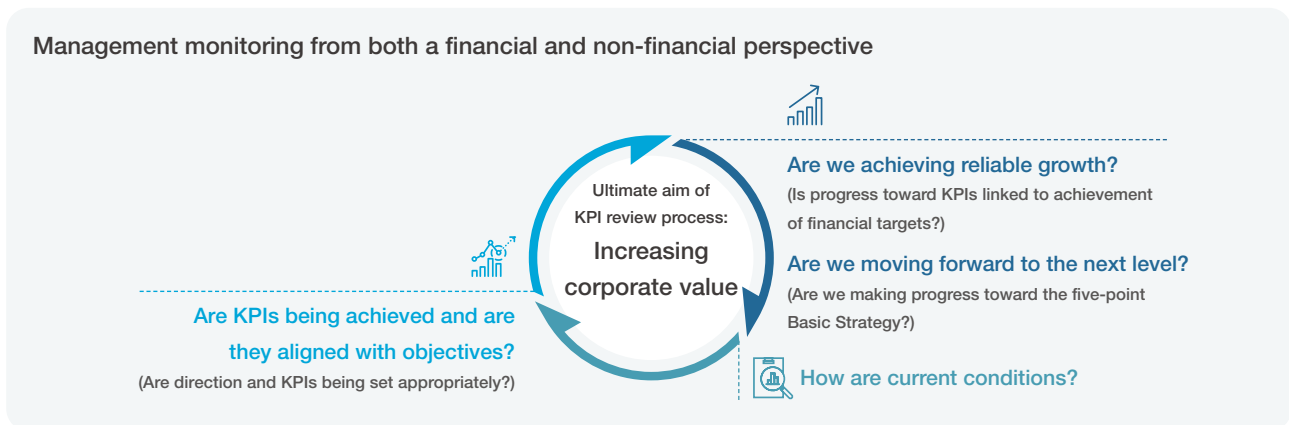
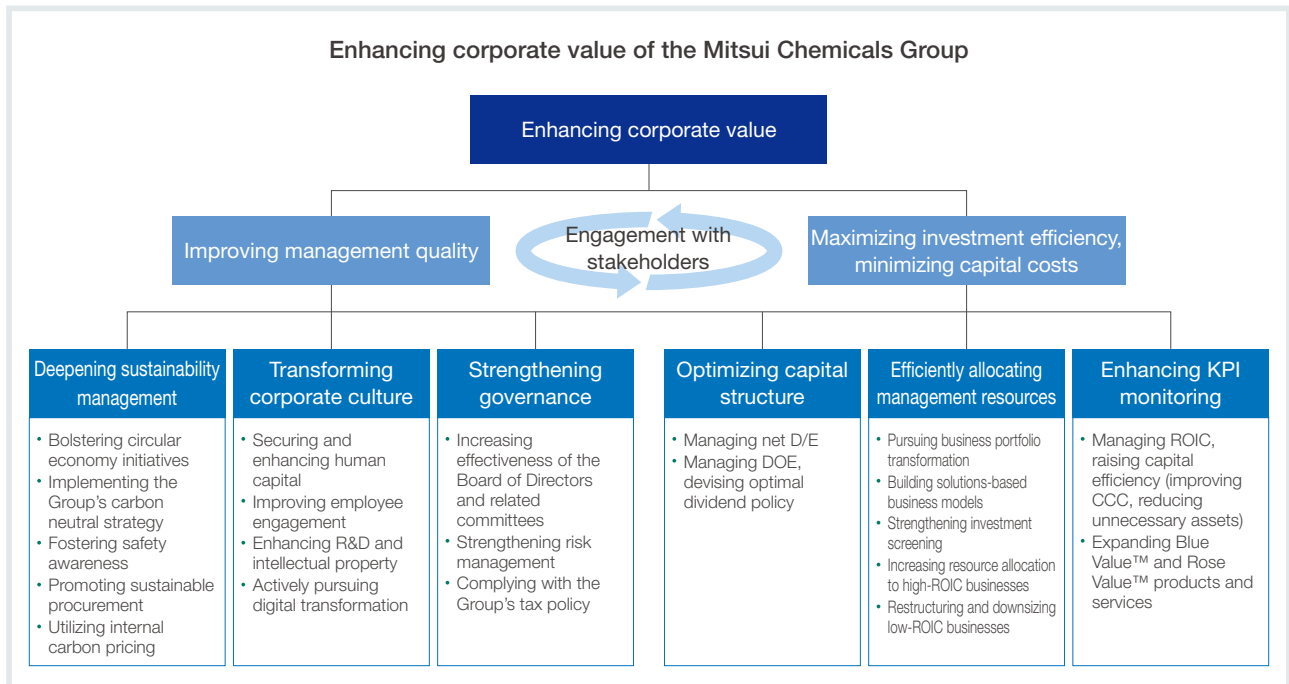
Looking back on our performance in fiscal 2021, while some products benefited from a tailwind in terms of market conditions, I feel that one of our major achievements was the growth of our operating income before special items in the growth domains, which had remained flat at around 70 billion yen through to fiscal 2020, to a level where we are positioned to target 100 billion yen. Going forward, we expect further growth as the facilities in which we have been investing aggressively commence operation, and the anticipated benefits of the mergers and acquisitions (M&A) we have made start to be realized.

### Realizing a new management system

## **We aim to increase our corporate value by monitoring performance from both a financial and non-financial perspective.**

We revised our material topics in fiscal 2020 as the foundation of our VISION 2030, and I believe that the understanding of their importance is growing within the Group. In fiscal 2021, we formulated non-financial key performance indicators (KPIs) corresponding to these material topics, and are promoting a management style that integrates both financial and non-financial perspectives. I often use a sporting analogy to explain management using financial and non-financial KPIs. For example, if a runner's target time represents a financial KPI, then non-financial KPIs can be thought of as the elements that form the foundation for achieving this goal, such as physical conditioning, nutrition management, post-training recovery, and mental conditioning. By breaking down the necessary elements required to run a certain time into smaller pieces, and by meeting each of these targets, an athlete is able to achieve their overall goal, and I believe that the same principle applies to the activities we undertake across the Group. Organically linking our activities to achieve non-financial KPI targets, such as the degree of employee engagement, the ratios of Blue Value™ and Rose Value™ products sales revenue to total sales revenue, and our GHG emissions reductions will strengthen our business foundation, laying the way for us to realize VISION 2030 and achieve our profit targets. Of course, each KPI must constantly be verified against the vision we are striving to achieve, and also be reviewed and revised periodically in light of changes in the external environment.

In the past, our discussions focused heavily on whether or not profit targets could be achieved, but by defining the process for reaching these targets—or applying a scientific approach to management, so to speak—we will also be better positioned to evaluate the growth of the Group from a more sustainable perspective. Rather than simply aiming to be a strong company with outstanding financial KPIs, we aim to be a strong and good company that also achieves the non-financial KPIs that measure our purpose as a company existing to contribute to society. By monitoring our management from both financial and non-financial perspectives, our management team will review not only the achievement status but also all aspects of KPIs including their appropriateness, in order to increase the corporate value of the Mitsui Chemicals Group. Our KPIs span not only environmental consideration and respect for human rights, but also human resources/organization, logistics/quality management, procurement, and other metrics, and for each KPI, an executive officer has been assigned responsibility for achievement. The establishment of the new positions of chief strategy officer (CSO) and chief human resources officer (CHRO) aims to clarify the roles of each division and strengthen awareness of their respective responsibilities. I believe that this type of framework will help the entire Group regardless of business or functional division—including each and every employee working at our sites—to move forward toward a common goal while maintaining an awareness of the challenges in their respective fields.



Transforming our business models through our VISION 2030 strategy

## Striving to transform our business models to create new value.

The first point of our Basic Strategy set out in VISION 2030, *Pursuing business portfolio transformation*, is the most important strategy that we have carried over from VISION 2025. For materializing this, *Building solutions-based business models*, which is another pillar of our Basic Strategy, centers on how we can enhance the added value of our business. Instead of simply providing materials, we will identify social challenges and also provide ideas and business models that will contribute to their resolution. In order to realize this goal, we will actively

collaborate with other companies, academic institutions, local governments, and other external organizations.

One such example is the touchless aerial display point-of-sale cash register for which field trials began in January 2022 at convenience stores operated by Seven-Eleven Japan Co., Ltd. This solution, jointly developed with five other companies including Asukanet Co., Ltd., responds to the need for space saving, as well as touchless technology due to the COVID-19 pandemic. In addition to supplying our adhesive product for use in the

display, we are also assisting in the planning and management of the joint development project, as well as providing technological support.

Another example is in the dental materials business, where in addition to providing 3D printers for use in dentistry, we offer a lineup of inks for diverse applications. We have established a multi-faceted software and hardware business, proposing solutions based on our clinical dental knowledge, which specialized printer manufacturers cannot offer.

Although we have only just begun building this solution-based business model and have experienced both successes and setbacks thus far, I believe it is important that we continue working to build on our cumulative efforts. Going forward, I look forward to seeing employees at our worksites further transform the business via a flexible mindset and repeated challenges employing a variety of approaches.

*Bolstering circular economy initiatives*, another point in our Basic Strategy, also aims to advance the transformation of our business models. By establishing the Green Sustainable Chemicals Division within the Basic & Green Materials Business Sector, we aim to further accelerate the development of circular economy-based business models. I view the development of environmental initiatives as not only our duty as a chemical company, but also a prime opportunity to transform our Group and drive our future growth. For example, our ongoing effort to expand use of bio-based hydrocarbons will help drive our shift to biomass-derived raw materials upstream in the chemical product value chain, which in turn adds new value to our derivatives downstream. We view this as both an advantage and a business opportunity for the Mitsui Chemicals Group, as we own naphtha crackers and possess an integrated value chain that extends to the production of derivatives. Going forward, we intend to utilize this advantage in new initiatives that contribute to solving social challenges.

Meanwhile, we are pushing forward with a variety of initiatives to achieve carbon neutrality by 2050. Although we expect to achieve an approximate 70 to 80% reduction in CO<sub>2</sub> emissions from the Group's manufacturing by utilizing current technologies and resources, in order to reduce

CO<sub>2</sub> emissions beyond this level, we believe it will be essential to develop new technologies. Accordingly, we have established the Mitsui Chemicals, Inc. – Carbon Neutral Research Center in collaboration with the International Institute for Carbon-Neutral Energy Research, Kyushu University to accelerate the development of carbon neutral technologies and promote their rapid social implementation. We are also developing fuel conversion technology for naphtha crackers utilizing the Green Innovation Fund, aiming to contribute to the reduction of CO<sub>2</sub> emissions across the petrochemical industry through the social implementation of entirely ammonia-fired crackers.

We also see it as our important duty as a chemical company to contribute to the reduction of CO<sub>2</sub> emissions throughout the value chain via our products and services. To this end, we are actively working with other companies to establish mechanical and chemical recycling technologies and implement them in society.

The Group's unique Blue Value™ and Rose Value™ initiatives are aligned with the business model transformation we are pursuing, including building solutions-based and circular economy-based business models, with the aim of resolving social challenges. Our Blue Value™ products and services, which help reduce environmental impact including CO<sub>2</sub> emissions throughout the entire product life cycle, and Rose Value™ products and services, which help improve the quality of life (QOL) from such perspectives as health and livelihood, highly livable communities, and food security, represent the types of solutions that we aim to provide to our ideal future society. As part of our non-financial KPIs for VISION 2030, we have set the targets of achieving sales revenue ratios of 40% each for Blue Value™ and Rose Value™ products, and have also established KPIs for our business sectors to promote growth of these products in order to achieve these goals. Currently, approximately 80% of our Blue Value™ and Rose Value™ certified products are positioned in the highly profitable growth domains. I therefore believe that developing new businesses and products with a focus on Blue Value™ and Rose Value™ starting from the technology development and product design stages will contribute to profits in the future.



Creating a culture of change and innovation

## Working to create a foundation to support our transformation.

Although fostering our corporate culture is essential in order to promote change, simply saying, “Let’s change our corporate culture,” in an authoritative manner will not result in any meaningful progress. As we work toward VISION 2030 from both a financial and non-financial perspective, an area I touched on earlier, I feel that the ideal scenario is one in which each and every employee shares a sense of ownership regarding the challenges facing us, thereby transforming our collective mindset, actions, and as a result, our corporate culture. It is therefore important that we communicate and share our vision thoroughly and monitor our progress.

At the same time, in order to transform ourselves it is essential above all that each and every employee has a flexible mindset and a willingness to take on new challenges without fear of failure, and for this to happen, we need to put systems in place to support our employees in their endeavors. In addition to relaxing our dress code in August 2020, we established our Guidelines for Side Jobs in January 2021. This step was taken in the hope that personnel with more specialized skills will gain experience, expanding their perspectives and further developing their abilities across a broader network, including outside the Group, and bring back and apply the knowledge and experience they have gained to their work at the Group. From fiscal 2022, we also introduced a new performance evaluation system for recognizing efforts to take on new challenges. The system is designed to allow employees to

engage in trial and error based on a solid understanding of issues, even if the endeavor in question does not ultimately result in success. We are also currently studying how to upgrade our IT infrastructure and office layout to accommodate changing work styles, such as remote work, in preparation for the accompanying relocation of our Head Office. I believe that the combined effect of these inter-linked measures will help transform the mindset across our employee base and further accelerate the implementation of the VISION 2030 Basic Strategy.

At the Mitsui Chemicals Group, we have conducted regular employee engagement surveys since 2018, and have set the improvement of our engagement score as one of our non-financial KPIs. John Rawls, a well-known American scholar of political philosophy, lists “the principle of fair equality of opportunity” and the right to “equal liberty” as two important social principles. I believe that the same applies to companies, with employees seeking “fair equality of growth opportunities” and the “liberty to think and act freely.” With these principles in mind, we will continue pushing forward with a range of initiatives to promote greater engagement and provide growth opportunities.

We have also established successor coverage rate for critical positions as one of our human resources-related KPIs. While there are a wide range of personal attributes required for critical positions, if I had to pick just one, it would be selflessness. I believe that only by freeing ourselves from our egos can we create a corporate culture



## Work style reform: Phase II onward

Self-initiative, autonomy, and collaboration:  
Combining the power of individuals to form an organization of comprehensive strength



that allows free and multi-dimensional ideas to emerge organically and provides fair and equal opportunities for our employees. With this attribute as a baseline for future executives, we are seeking people with competencies appropriate for the given era and business environment.

From a management perspective, a sound foundation of corporate governance is also important. We must fulfill

our accountability as a public entity by ensuring that we are transparent and fair to our diverse stakeholders. We have thus far made ongoing reforms to improve the effectiveness of our corporate governance, and going forward we will further refine our efforts, including introducing metrics for executive compensation that are aligned with the non-financial KPIs for VISION 2030.

Looking beyond VISION 2030

## A good relationship with all of our stakeholders will lead to sustainable growth.

From the perspective of increasing corporate value, we believe it is important to ensure the sustainability of both the Group and society.

I believe that a company and its employees should work together as equals, rather than one being superior to the other. For employees, a company is a place where they can both earn a living and achieve personal growth, and the relationship between the company and its employees is one in which each employee performs to the best of their ability in order to maximize profits, which can then be redistributed to employees. Ideally, both grow in synergy with one another.

I also believe that the relationship between companies and society is similar. A company can exist only if it is able

to contribute to solving social challenges, while also generating solid profits. As I outlined earlier regarding a management style that integrates both financial and non-financial perspectives, in order to achieve this goal we must create an environment in which our employees, as stakeholders, can work with vitality, while continuing to deliver value to all stakeholders through the Group's business. Combining these efforts will help solve social challenges and ultimately enhance our corporate value, leading to sustainable growth for both the company and society.

Going forward, we will continue to pursue a range of transformations to achieve our Corporate Target and ideal future society set out in VISION 2030.

## Our dedication to solving social challenges

# Our Journey in Using Our Strengths to Solve Social Challenges

Ever since we started up our coal chemical business in 1912 in Omuta (Fukuoka), the Mitsui Chemicals Group has continued to work on solving social challenges through our business activities. And after operations at Japan's first ethylene plant came online in 1958, we started to accumulate state-of-the-art technologies in the petrochemicals field. Since the establishment of Mitsui Chemicals in 1997, we have built a global customer and human resource base and are striving to reach further heights.

## 100 years of technological prowess

Over the course of our history, we have built our competitive advantage on the pillars of precision synthesis technology and polymer science as well as the manufacturing process technology that underpins both. These technologies continue to be the driving force behind our broad lineup of products to this day.

### Our History

<https://jp.mitsuichemicals.com/en/corporate/history/index.htm>

### Precision synthesis technology

derived from coal chemicals

Making fertilizer from exhaust gas produced as a byproduct of the coal business was our starting point. Since then, we have honed our precision synthesis technology in the course of creating various products.

- **1912**  
Started operations at Mitsui Mining's Omuta Works
- **1915** **First in Japan**  
Industrialized synthetic dye alizarin
- **1932**  
Started production of synthetic dye indigo
- **1963**  
Polyurethane material TDI
- **1987**  
TREBON™ MR™
- **2001**  
STARKLE™

### Polymer science

to meet varied customer needs

We have cultivated our polymer science by developing resins to meet various needs, mainly with our cutting-edge polyolefin technology.

- **1958** **First in Japan**  
Ethylene plant operations came online (Japan's first petrochemical complex)
- **1975**  
TAFMER™
- **1986**  
Established Advanced Composites, Inc.
- **1987**  
ICROS™ Tape
- **1995**  
APEL™
- **1998** **World's first**  
EVOLUE™

### Manufacturing process technology

The bedrock of our strong competitive advantage

Through a process of developing and improving various methods over the course of our long history, we have continued to raise the level of our technology so that we can stably manufacture high-quality products at low cost.



## Global platform & diverse human resources

We are continuing to actively expand our global operations—overseas sales revenue currently accounts for 48% of total sales revenue. Globalization of our business is accelerating with close to 40% of employees now based overseas.

Global operations	Employees	Consolidated companies	Overseas sales revenue ratio
28 countries	18,780	161	48%
	[ Percentage of overseas employees 39% ]		

### A history of solving social challenges

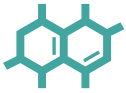
#### — Resolving the postwar food crisis through the production of urea for fertilizer —

In the postwar 1940s, Japan was hit by a food crisis and a national policy was launched to increase the production of chemical fertilizers, but there was a shortage of sulfuric acid, which had previously been used as a raw material. Toyo Koatsu Industries, which at the time was responsible for the synthetic ammonia business, built the world's first mass production plant in Hokkaido (now Hokkaido Mitsui Chemicals) to begin mass production of urea, a chemical fertilizer made by synthesizing ammonia and carbon dioxide. The company continued to improve its manufacturing processes and expanded its manufacturing facilities, supporting Japan's postwar recovery.



Synthetic ammonia plant at Toyo Koatsu Industries' Hokkaido Works (1941)





## Diverse range of products & services



## Robust customer base

Backed by the technology honed over our 100-year history, we develop a diverse range of competitive and high-value-added products and services.

Our products are rated highly by industry-leading companies, so much so that we boast a number one or number two share in certain global markets.

### Precision synthesis technology

Contributing to solving social challenges	Main products	Main applications	Market share
Eye health management and disease prevention through improved quality of vision (QOV)	MR™ (ophthalmic lens materials)	Plastic ophthalmic lens materials	Global <b>No.1</b> (Share: 45%)
Stable supply of safe and secure food	TREBON™ (etofenprox) STARKLE™ (dinotefuran)	Insecticides	Japan <b>No.2</b>

### Polymer science

Contributing to solving social challenges	Main products	Main applications	Market share
Automobile lightweighting	Polypropylene compounds	Auto bumper and instrument panel materials	Global <b>No.2</b> (Share: Approx. 20%) Asia <b>No.1</b>
Automobile lightweighting Spread of renewable energy	TAFMER™ (alpha-olefin copolymer)	Auto bumper and instrument panel materials Solar cell encapsulants	Global <b>No.2</b> Asia <b>No.1</b>
Contributes to digitalization as a lens material for various IT devices	APEL™ (cyclic olefin copolymer)	Smartphone camera lens materials	Global <b>No.1</b> (Share: >50%)
Increased functionality and efficiency of electronic equipment	ICROS™ Tape	Semiconductor manufacturing process tapes	Global <b>No.1</b>
Contributes to the reduction of plastic waste as a highly functional packaging material	EVOLUE™ (metallocene linear low density polyethylene)	High-performance packaging materials	Asia <b>No.1</b>

### Manufacturing process technology

## Corporate Mission

Contribute broadly to society by providing high-quality products and services to customers through innovation and the creation of materials, while keeping in harmony with the global environment



## Corporate Target

To be a corporate group that continues to grow by solving social challenges and creating diverse value with the power of chemistry

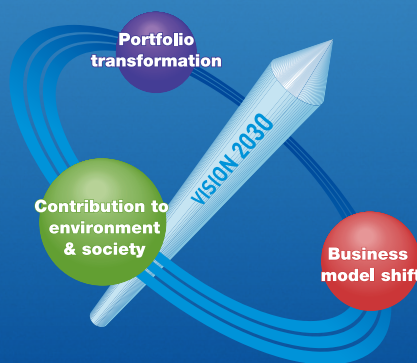
When establishing our new Long-Term Business Plan, VISION 2030, we revised our Corporate Target for the next 15 to 20 years. With this revision, we return once again to our purpose of solving challenges faced by society, and redefine our direction going forward.

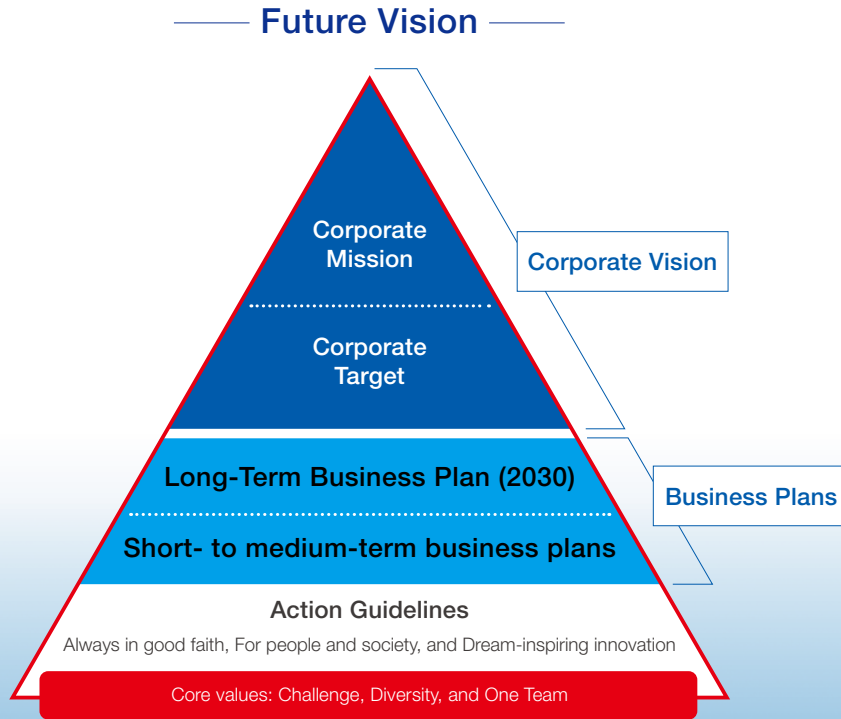
Tackling a wide range of social challenges arising from accelerating environmental changes, the Mitsui Chemicals Group will continuously provide solutions making full use of the power of chemistry—the very thing that allows us to create diverse value.

## Our Ideal Vision for 2030

### Chemistry for a Sustainable World

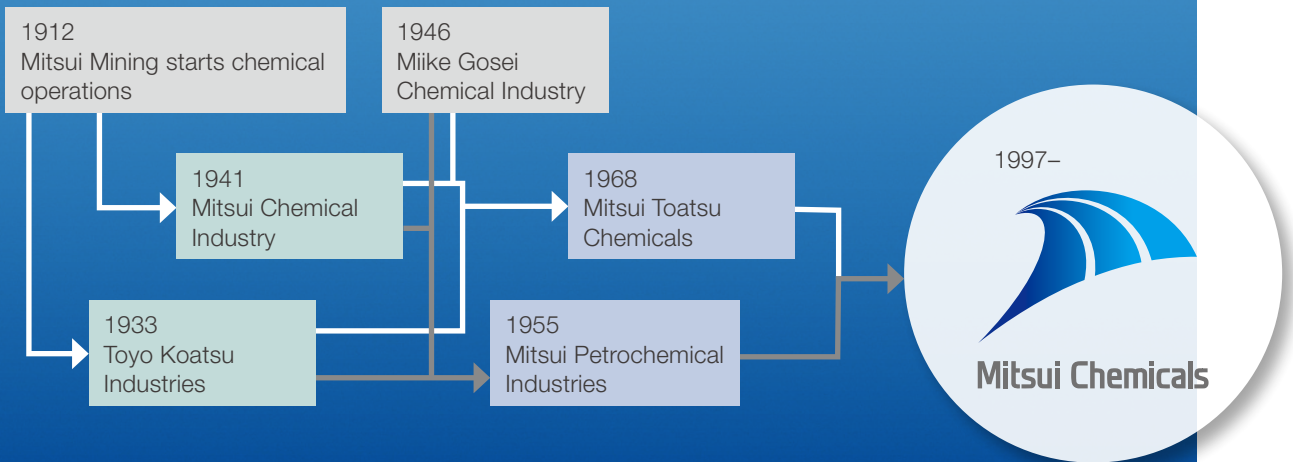
A global solutions company that leads change and contributes to a sustainable future  
Mitsui Chemicals





### Mitsui Chemicals core values etched in history

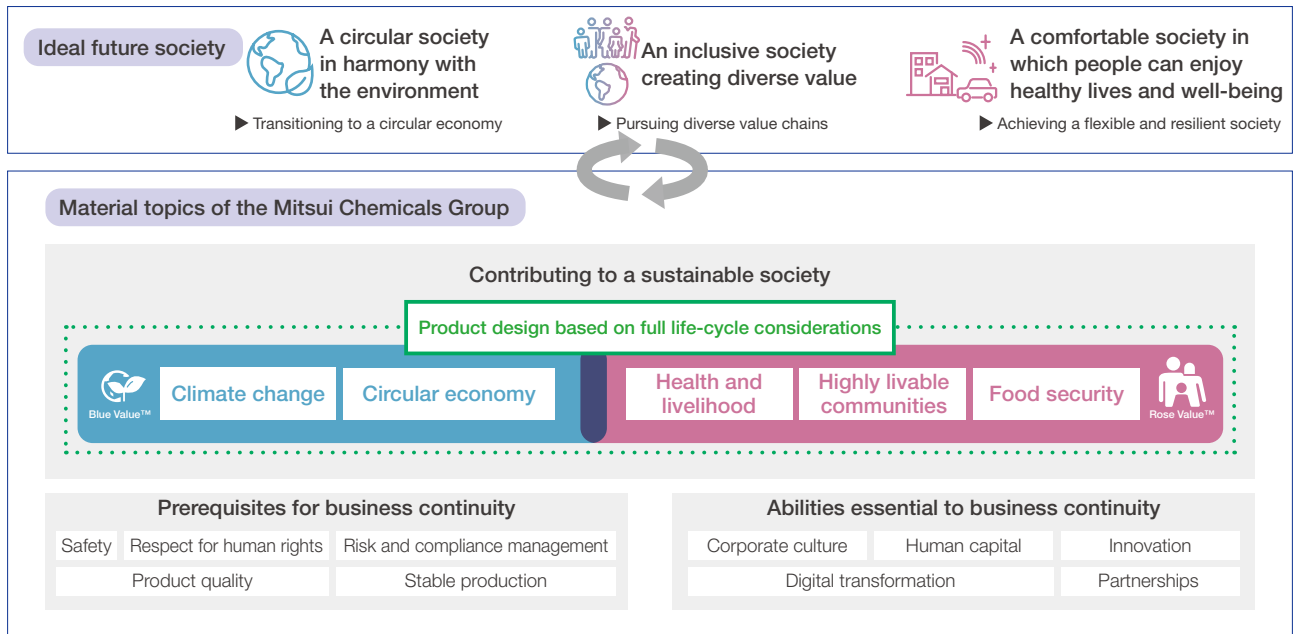
The core values of the Mitsui Chemicals of today were shaped by our history going back to the coal chemical business of Mitsui Mining in 1912 with multiple companies joining forces to pursue solutions to social challenges through various chemicals businesses.



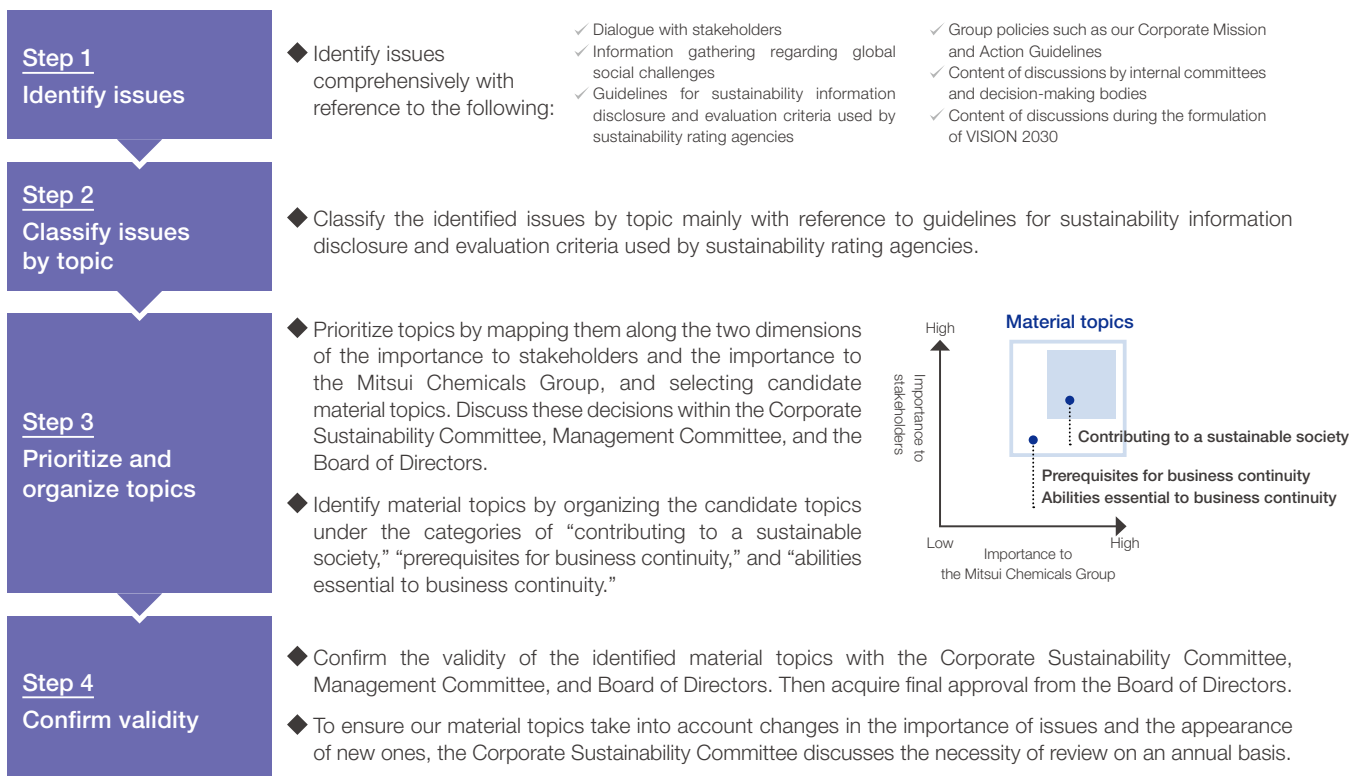
# Our Material Topics

In VISION 2030, the Mitsui Chemicals Group redefined its ideal future society from the standpoints of transitioning to a circular economy, pursuing diverse value chains, and achieving a flexible and resilient society. And in order to achieve this, we identified the topics material to our business. The identified material topics are the premise of our Basic Strategy for VISION 2030. We will also monitor key performance indicators (KPIs) related to our material topics as non-financial metrics for VISION 2030, and will ensure that they translate into steady improvement of our corporate value.

▶▶ For more information on the non-financial metrics that are linked to our material topics, see p. 20.



## Our materiality process





## Contributing to a sustainable society

We have organized our material topics so that those directly connected to the creation of both social value and corporate value are grouped under the category of “contributing to a sustainable society,” which in turn is underpinned by the categories of “prerequisites for business

continuity” and “abilities essential to business continuity.” The process for selecting each of the topics included in “contributing to a sustainable society” entailed analysis of opportunities and risks as detailed below.

<b>Product design based on full life-cycle considerations</b>	The intricately intertwined nature of social challenges requires a big-picture approach in tackling them. That is why business activities need to take into account the environment and society throughout the entire product life cycle. Amid advances in digitalization and the growing calls for a circular economy, new business opportunities will arise by taking on these perspectives.
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	🕒 Opportunities	🔴 Risks (Examples)
<b>Climate change</b>	<ul style="list-style-type: none"> <li>🕒 Shift to EVs, renewable energies becoming mainstream</li> <li>🕒 Transition to renewable raw materials</li> <li>🕒 Increased demand for low-carbon and decarbonized products and technologies</li> <li>🕒 Increased demand for products that support disaster prevention/mitigation, infection control, etc.</li> </ul>	<ul style="list-style-type: none"> <li>🔴 Tightening of regulations such as restrictions on greenhouse gas (GHG) emissions and carbon taxes</li> <li>🔴 Decreased demand for products with high environmental impact</li> <li>🔴 Shortage and depletion of water resources</li> <li>🔴 Damage to production sites from storms and flooding</li> <li>🔴 Supply chain interruptions</li> </ul>
<b>Circular economy</b>	<ul style="list-style-type: none"> <li>🕒 Increased opportunities for solutions business that take an ecosystem perspective</li> <li>🕒 Increased demand for resource conservation and recycling technologies</li> <li>🕒 Increased importance of traceability throughout the product life cycle</li> </ul>	<ul style="list-style-type: none"> <li>🔴 Tightening of regulations on use of single-use plastics and decreased demand for plastics</li> <li>🔴 Tightening of regulations/international standards related to natural capital</li> <li>🔴 Increased risk of litigation arising from extended producer responsibility, etc.</li> <li>🔴 Reputational damage due to shift in consumer sentiment</li> </ul>

**KPIs:** Blue Value™ products sales revenue ratio, Rose Value™ products sales revenue ratio, GHG emissions reduction rate

▶▶ For more information, see p. 20

**Relevant SDGs**

	🕒 Opportunities	🔴 Risks (Examples)
<b>Health and livelihood</b>	<ul style="list-style-type: none"> <li>🕒 Increased demand for products in mobility, medical equipment, pharmaceutical packaging materials, ICT fields, and residential construction materials in line with growing demand for healthier and more affluent lifestyles for all</li> <li>🕒 Increased demand for services/products that support participation in society by all people regardless of age, gender, race, disability, etc.</li> </ul>	<ul style="list-style-type: none"> <li>🔴 Growing needs for comfortable and safe lifestyles and support for pre-symptomatic illness, in addition to measures concerning illness and health</li> <li>🔴 Increased demand for products that improve hygiene and prevent the occurrence and spread of infectious diseases</li> <li>🔴 Uncertainty due to the VUCA era</li> <li>🔴 Increased risk of litigation in the health care and medical sectors</li> </ul>
<b>Highly livable communities</b>	<ul style="list-style-type: none"> <li>🕒 Increased demand for smart and resilient community development in accordance with population size (community ICT/infrastructure improvements)</li> <li>🕒 Increased demand for products that support disaster prevention/mitigation, infection control, etc.</li> </ul>	<ul style="list-style-type: none"> <li>🔴 Recruitment and training of personnel for an advanced ICT-based society</li> <li>🔴 Increased need for disaster prevention measures at production sites and sophisticated risk management in business operations</li> </ul>
<b>Food security</b>	<ul style="list-style-type: none"> <li>🕒 Response to improvement of food preservation/distribution technologies (cold supply chains, etc.)</li> <li>🕒 Increased demand for products and services that contribute to stable production and supply of food, as well as to reduced burden on workers</li> <li>🕒 Development of new technologies and expansion into new markets through collaboration with food and beverage manufacturers</li> </ul>	<ul style="list-style-type: none"> <li>🔴 Increased demand for packaging containers that contribute to reduced food loss/food waste</li> <li>🔴 Tightening of regulations on agrochemicals and food packaging materials</li> <li>🔴 Risk of restrictions on business activities due to severe water shortages, etc.</li> </ul>

**KPI:** Rose Value™ products sales revenue ratio ▶▶ For more information, see p. 20

**Relevant SDGs**

## Non-financial metrics TCFD

We have set KPIs and targets that are linked to our material topics as non-financial metrics for VISION 2030. By strengthening our managerial monitoring from both a financial and non-financial perspective, we aim to enhance our corporate value. For each KPI, we have designated an officer or a general manager responsible for monitoring progress, and the respective divisions manage these KPIs by incorporating them into their annual budgets and targets. In addition,

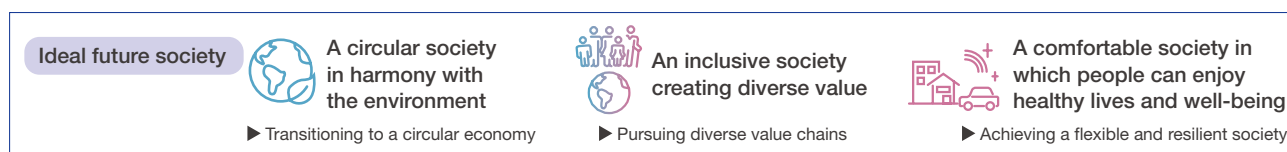
the Corporate Sustainability Committee and the Company-wide Strategy Committee will review progress and related issues from the perspective of how progress toward KPIs each fiscal year will contribute to the achievement of non-financial targets for 2030 (appropriateness of KPI/target setting) and how efforts to achieve non-financial targets will contribute to the achievement of financial targets (relationship between financial and non-financial targets).

Material topics	Non-financial KPIs	2022 Outlook	2030 Target	Responsible executive officer
<b>Contributing to a sustainable society</b>				
<ul style="list-style-type: none"> <li>Climate change</li> <li>Circular economy</li> <li>Health and livelihood</li> <li>Highly livable communities</li> <li>Food security</li> <li>Product design based on full life-cycle considerations</li> </ul>	<ul style="list-style-type: none"> <li>Blue Value™ products sales revenue ratio</li> </ul>	<ul style="list-style-type: none"> <li>22%</li> </ul>	<ul style="list-style-type: none"> <li><b>40%</b></li> </ul>	IZAWA Kazumasa Responsible officer for Corporate Sustainability Division
	<ul style="list-style-type: none"> <li>Rose Value™ products sales revenue ratio</li> </ul>	<ul style="list-style-type: none"> <li>25%</li> </ul>	<ul style="list-style-type: none"> <li><b>40%</b></li> </ul>	
	<ul style="list-style-type: none"> <li>GHG emissions reduction rate (Scopes 1 and 2) * compared to FY2013</li> </ul>	<ul style="list-style-type: none"> <li>21%</li> </ul>	<ul style="list-style-type: none"> <li><b>40%</b></li> </ul>	
<b>Prerequisites for business continuity</b>				
<ul style="list-style-type: none"> <li>Safety</li> </ul>	<ul style="list-style-type: none"> <li>Incidence of major accidents &amp; serious occupational injuries</li> </ul>	<ul style="list-style-type: none"> <li>Zero</li> </ul>	<ul style="list-style-type: none"> <li><b>Zero</b> (over the course of VISION 2030)</li> </ul>	HOSOMI Yasuhiro Center Executive, Production & Technology Center
<ul style="list-style-type: none"> <li>Respect for human rights</li> </ul>	<ul style="list-style-type: none"> <li>Response to human rights risks</li> </ul>	<ul style="list-style-type: none"> <li>Revision and announcement of Human Rights Policy; formulation of a medium- to long-term plan for human rights due diligence, and launch of on-site assessments</li> </ul>	<ul style="list-style-type: none"> <li>Identification &amp; correction of risks by setting up a human rights due diligence system for all of our bases, both domestic and abroad</li> </ul>	IZAWA Kazumasa Responsible officer for Corporate Sustainability Division
<ul style="list-style-type: none"> <li>Risk and compliance management</li> </ul>	<ul style="list-style-type: none"> <li>Incidence of major legal and regulatory violations</li> </ul>	<ul style="list-style-type: none"> <li>Zero</li> </ul>	<ul style="list-style-type: none"> <li><b>Zero</b> (over the course of VISION 2030)</li> </ul>	NAKAJIMA Hajime Responsible officer for Risk & Compliance Committee
<ul style="list-style-type: none"> <li>Product quality</li> </ul>	<ul style="list-style-type: none"> <li>Incidence of PL accidents &amp; serious product quality incidents</li> </ul>	<ul style="list-style-type: none"> <li>Zero</li> </ul>	<ul style="list-style-type: none"> <li><b>Zero</b> (over the course of VISION 2030)</li> </ul>	YOSHINO Tadashi Responsible officer for RC & Quality Assurance Division
<ul style="list-style-type: none"> <li>Stable production</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of advanced technologies</li> <li>Implementation of advanced production technology centered on AI/IoT</li> </ul>	<ul style="list-style-type: none"> <li>10 instances</li> </ul>	<ul style="list-style-type: none"> <li><b>100 instances</b> (over FY2021–2030)</li> </ul>	HOSOMI Yasuhiro Center Executive, Production & Technology Center
<b>Abilities essential to business continuity</b>				
<ul style="list-style-type: none"> <li>Corporate culture</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of employee engagement</li> <li>Engagement surveys</li> </ul>	<ul style="list-style-type: none"> <li>Implementation rate for improvement plans from our FY2021 survey: 100%</li> </ul>	<ul style="list-style-type: none"> <li>Engagement score: <b>50%</b></li> </ul>	ANDOU Yoshinori Chief Human Resources Officer
<ul style="list-style-type: none"> <li>Human capital</li> </ul>	<ul style="list-style-type: none"> <li>Key talent management</li> <li>Successor coverage rate for critical positions</li> </ul>	<ul style="list-style-type: none"> <li>235%</li> </ul>	<ul style="list-style-type: none"> <li><b>250%</b></li> </ul>	
	<ul style="list-style-type: none"> <li>Diversity</li> <li>Executive officers with diverse backgrounds (women, non-Japanese, mid-career hires) * Mitsui Chemicals, Inc.</li> <li>Ratio of women in management positions (manager-level or above) * Mitsui Chemicals, Inc.</li> </ul>	<ul style="list-style-type: none"> <li>Diversity rate of future executives: 20%</li> <li>6%</li> </ul>	<ul style="list-style-type: none"> <li>Executive officers with diverse backgrounds: <b>10</b> or more (including at least 3 women)</li> <li><b>15%</b></li> </ul>	
	<ul style="list-style-type: none"> <li>Health-focused management</li> <li>Average rate of lifestyle-related disease * Mitsui Chemicals, Inc.</li> <li>Frequency of absences from work due to mental health disorders * Mitsui Chemicals, Inc.</li> </ul>	<ul style="list-style-type: none"> <li>9.5%</li> <li>0.50</li> </ul>	<ul style="list-style-type: none"> <li><b>8.0%</b></li> <li><b>0.25</b></li> </ul>	
<ul style="list-style-type: none"> <li>Digital transformation</li> </ul>	<ul style="list-style-type: none"> <li>Training of DX specialists</li> <li>Number of data scientists</li> </ul>	<ul style="list-style-type: none"> <li>26</li> </ul>	<ul style="list-style-type: none"> <li><b>165</b> (by FY2025)</li> </ul>	SAMBE Masao Chief Digital Officer
<ul style="list-style-type: none"> <li>Innovation</li> </ul>	<ul style="list-style-type: none"> <li>Pipeline expansion</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of corporate venture capital (CVC) funds; Stage 1 themes registered: 30 or more</li> </ul>	<ul style="list-style-type: none"> <li>Number of development themes in the latter half of our Stage Gate System (vs. FY2020): <b>double</b> or more</li> </ul>	SHIBATA Shingo Center Executive, R&D Center
	<ul style="list-style-type: none"> <li>Value creation for beyond 2030</li> <li>Number of new areas of development at our Frontier Technology Center</li> </ul>	<ul style="list-style-type: none"> <li>3 or more candidates</li> </ul>	<ul style="list-style-type: none"> <li><b>3</b> or more areas</li> </ul>	
<ul style="list-style-type: none"> <li>Partnerships</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable procurement</li> </ul>	<ul style="list-style-type: none"> <li>Bolster communications with partners to solidify our efforts in this area (Interviews; requests for improvement; revision of guidelines, and turning these guidelines into common sense)</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable procurement ratio: <b>80%</b></li> </ul>	SAMBE Masao Chief Digital Officer

# Realizing Our Ideal Future Society—Blue Value™ and Rose Value™

Our Blue Value™ and Rose Value™ help visualize the contributions our products and services make to the environment and society and enable us to share those values with stakeholders. We have established Blue Value™ and Rose Value™ to respectively represent environmental contributions and quality-of-life (QOL) improvements of our products and services. We evaluate and review products using our unique Blue Value™ and Rose Value™ Indices, and certify those that make significant contributions as Blue Value™ and Rose Value™ products, respectively.

We also believe Blue Value™ and Rose Value™ inform our efforts toward addressing the following material topics of our Group, which were set in order to realize our ideal future society: climate change, a circular economy, health and livelihood, highly livable communities, food security, and product design based on full life-cycle considerations. By maximizing our contributions throughout the entire product life cycle through expanding and providing Blue Value™ and Rose Value™ products and services, we hope to realize corporate growth for the Group and our ideal future society.



**Environmental contributions**  
**Blue Value™**

**Earth blue** Instead of green, which is associated with nature and ecology, blue represents something much bigger—the earth. It is also our corporate color and signifies harmony with the global environment and our contributions to society.

Certify products and services that make significant environmental contributions throughout the life cycle

- Life cycle assessment (LCA)
- Our unique index Blue Value™ Index
- Assessment by application

**Visualization of provided value**

Maximizing products and services to achieve a low-carbon, recycling-oriented, and cohesive society in harmony with the environment

- Reducing CO<sub>2</sub>
- Conserving resources
- Coexisting with nature

**QOL improvements**  
**Rose Value™**

**La Vie en rose** Days brimming with happiness and hope for people from all walks of life.

Certify products and services that improve everyone's QOL

- SDGs
- Our unique index Rose Value™ Index
- Assessment by application

**Visualization of provided value**

Maximizing products and services to achieve better QOL and a smart society

- Enriching life and society
- Extending healthy life-span
- Protecting food

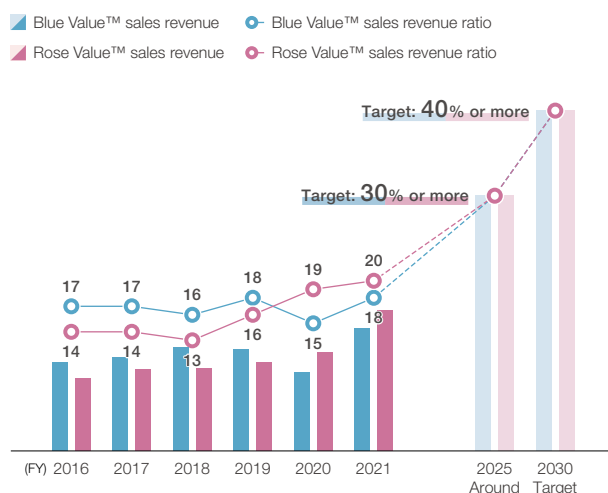
## Incorporating into business strategy

In VISION 2030, we set the sales revenue ratios of Blue Value™ and Rose Value™ products as non-financial metrics, with their targets both set at 40% or more. In order to encourage proactive investment that will lead to the growth of sales of Blue Value™ and Rose Value™ products and services, we have created a mechanism for reflecting ESG elements in investment decisions. Since fiscal 2019 we have mandated that the application format for large-scale investments include description of the opportunities and risks the project entails from social issue perspectives, such as by indicating the project's Blue Value™ and Rose Value™ contributions. **▶▶ CFO Message, p. 36**

Since fiscal 2020, we have set annual targets for the expansion measures and sales revenue of certified products in each business division, and worked to incorporate them into their business strategies.

**▶▶ Sales revenue and sales revenue ratios of Blue Value™ and Rose Value™ products in each business, p. 24**

**Blue Value™ and Rose Value™ products sales revenue ratios**



## Assessment, review, and certification process

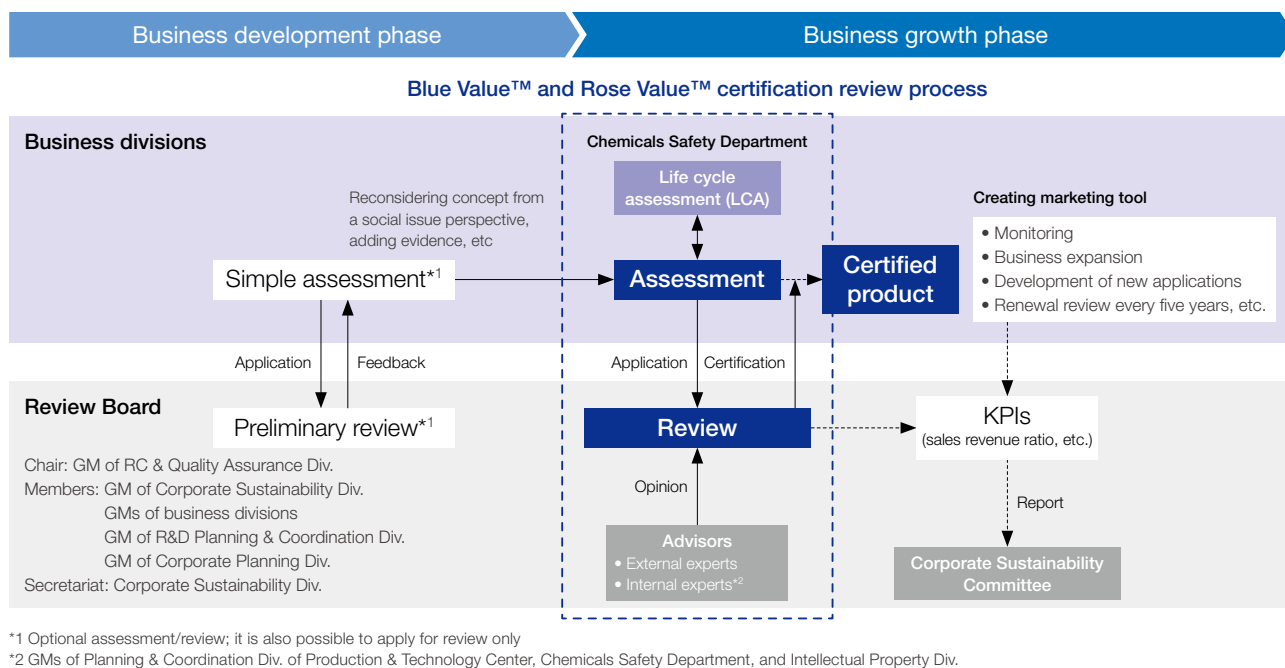
Business divisions evaluate the contributions their own products and services make to the environment and improved QOL based on the respective Blue Value™ and Rose Value™ assessment indices, and submit an application to the review board. Assessment and application is conducted according to the envisaged use of the product or service. This is because the same product or service could have a different impact on the environment or QOL throughout the entire life cycle based on its envisaged use. When submitting an application, applicants also provide evidence of the product or service's contribution impact and whether there are any negative impacts or other factors throughout the entire life cycle.

The review board will confirm and deliberate on factors such as the rationale behind the assessment of the contributions, whether the concept and selling points of the submitted products and services are consistent with the

contribution categories of Blue Value™ or Rose Value™, and whether the level of contribution is sufficient. Those that meet the criteria are certified as Blue Value™ or Rose Value™ products. In order to ensure objectivity and appropriateness of the certification, we also obtain opinions from external experts.

The certification criteria are updated as appropriate to reflect changes in material topics, business strategy, and the external environment, with advice from external experts. In addition, certified products and services are re-assessed every five years to assess whether they still make significant contributions and to determine whether their certification can be continued. Starting in fiscal 2020, we began preliminary review of pre-launch R&D products and services. We use this preliminary review to discover candidates of Blue Value™ and Rose Value™ products and services.

▶▶ R&D initiatives to expand Blue Value™ and Rose Value™ products and services, p. 85



### External experts (Blue Value™ and Rose Value™ advisors)

In the Blue Value™ and Rose Value™ product certification process, we design assessment methods and review criteria based on advice from the external experts shown on the right. We also ask these experts to present their opinions prior to the review board regarding the requested product's level of contribution.

Messages from external experts

[https://jp.mitsuichemicals.com/en/sustainability/mci\\_sustainability/contribution\\_value/blue\\_value.htm](https://jp.mitsuichemicals.com/en/sustainability/mci_sustainability/contribution_value/blue_value.htm)

[https://jp.mitsuichemicals.com/en/sustainability/mci\\_sustainability/contribution\\_value/rose\\_value.htm](https://jp.mitsuichemicals.com/en/sustainability/mci_sustainability/contribution_value/rose_value.htm)



**Dr. ITSUBO Norihiro**  
 Professor, Faculty of Environmental Studies  
 Dean, Graduate School of Environmental and Information Studies,  
 Tokyo City University






**Mr. ADACHI Eiichiro**  
 Senior Counselor,  
 Japan Research Institute,  
 Limited



### Blue Value™ assessment index and certification criteria

- Products and services are evaluated based on three contribution categories: (1) reducing CO<sub>2</sub>, (2) conserving resources, and (3) coexisting with nature.
- We use the Blue Value™ Index, our unique assessment index that is a simplified version of Life-cycle Impact assessment Method based on Endpoint modeling (LIME2)\*. More rigorous and quantitative evaluations are also conducted as needed.
- The environmental impact of a product throughout the entire life cycle is comparatively assessed against general products on the market and our own existing products.
- Certification criteria are that the product's environmental contributions over its entire life cycle must be recognized as being of a sufficient level in one or more of the three contribution categories, and that no negative impacts are found in the evaluation of any of the three contribution categories.




\* Damage assessment-type life cycle environmental impact assessment method based on environmental conditions in Japan

Contributions	Blue Value™ Index	
	Assessment index	Related assessment items
<b>Reducing CO<sub>2</sub></b> 	<b>Reduction of GHG emissions</b> • Reduce GHG emissions at the raw materials acquisition, manufacturing/processing, and end products use/disposal stages  <b>Saving of energy, electricity, and fuel</b> • Reduce energy such as electricity and fuel at the raw materials acquisition, manufacturing/processing, and end products use/disposal stages • Use of end products in the field of energy conservation	<ul style="list-style-type: none"> <li>• Weight and volume reduction</li> <li>• Long service life</li> <li>• Natural energy sources</li> <li>• Non-fossil raw materials</li> <li>• Environmental cleanup</li> </ul> <p>The above items are assessed for their contributions to any category of the assessment index.</p>
<b>Conserving resources</b> 	<b>3Rs, ease of sorting, conservation of resources</b> • Use reusable/recyclable materials at the manufacturing/processing stages for products, processed items, and end products as well as reduce material usage • Products, processed items, and end products based on reuse/recycling • Possible separation at the time of disposal	
<b>Coexisting with nature</b> 	<b>Ecosystem conservation (human health/ environmental organisms)</b> • Reduce the impact on human health and ecosystems from chemical substances across product life cycles; specifically, reduce the addition of chemical substances toxic to humans and harmful to ecosystems, curb their formation, and use chemical substances that are less toxic  <b>Prevention of environmental contamination</b> • Reduce the impact on the global environment excluding people/living organisms from environmental pollutants across product life cycles; specifically, reduce the addition of environmental pollutants harmful to ecosystems, curb their formation, and use substances that do not pollute the environment	

\* GHG emission-related global warming substances, chemical substances harmful to ecosystems, and environmental pollutants are all substances for which characterization factors have been calculated in LIME2.

### Rose Value™ assessment index and certification criteria

- Products and services are evaluated based on three contribution categories: (1) enriching life and society, (2) extending healthy life-span, and (3) protecting food.
- We use the Rose Value™ Index, our unique assessment index developed based on the Sustainable Development Goal (SDG) targets and other social issue perspectives, including universal design and amenity, resilient and smart city, universal health coverage, and food security.
- Evaluation is not limited only to the contribution made by the final product, but broadly considers contributions in the interim processing stage and the resultant contribution to the supply chain.

Contributions	Rose Value™ Index assessment index	
<b>Enriching life and society</b> 	<b>Improving comfort in people's lives</b> Provide products, buildings and spaces that take into consideration the needs of a variety of people	Of those that improve comfort in people's lives, those that are specifically for nursing and caregiving  Promote disaster prevention/mitigation measures, longer service life of infrastructure, and shift to ICT in communities
	<b>Enhancing nursing care</b>	
	<b>Ensuring the sustainability of communities</b>	
<b>Extending healthy life-span</b> 	<b>Supporting physical well-being</b> Assist, improve, and heighten functions throughout the body, either directly or indirectly	Assist, improve, and heighten functions throughout the body, either directly or indirectly  Raise the level of medical technology and service in every phase of health, from pre-symptomatic disease to illness. Or improve aspects of medicine functionality, quality, and production  Prevent or take action against infectious diseases  Simplify and/or improve production and/or the delivery of nutrition and water
	<b>Advancing medical care and pharmaceuticals</b>	
	<b>Preventing and taking action against infectious diseases</b>	
	<b>Improving accessibility to nutrition and water</b>	
<b>Protecting food</b> 	<b>Improving food productivity</b> Raise food yields as well as work efficiency; improve related equipment capabilities	Raise food yields as well as work efficiency; improve related equipment capabilities  Secure and raise the level of safety and stability in food distribution  Reduce waste from the perspectives of maintaining food freshness, extending "best-before date," packaging for contents separation and compartmentalization, loss when shipping, and other factors
	<b>Guaranteeing safe and stable food distribution</b>	
	<b>Reducing food loss and food waste</b>	

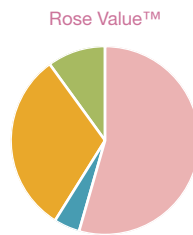
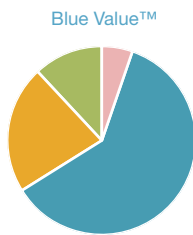
Examples of Blue Value™ and Rose Value™ products

Blue Value™ products				Rose Value™ products			
<b>Basic &amp; Green Materials</b> Exhaust gas reduction and lighter weight <b>AdBlue™</b> <b>Nextyo ™</b> 		Use of bio-based raw materials <b>ECONYKOL™</b> 		Vision correction and comfort <b>Do Green™ MR-174™</b> 		Comfort and fit <b>MR™</b> 	
				Comfort and fit <b>SYNTEX™</b> 		For water purifier filters <b>SWP™</b> 	
						Stable production <b>STARKLE™</b> <b>TENEBENAL™</b> Mosquito control <b>VECTRON™</b> 	
<b>ICT Solutions</b> Power generation diagnostics and power generation loss reduction Diagnostics and consulting services for solar power generation plants <b>SOLAR ASCET™</b> 		<b>Mobility Solutions</b> Paintless auto parts and lighter weight <b>PP compounds</b> <b>MOSDIO™</b> 				Disaster prevention and mitigation <b>Geopool</b> <b>Toughness Coat™</b> <b>Mitsui Gas Pipe System</b> 	
						Prevention of oil dispersion <b>TAFNEL™</b> <b>Oil Blotter™</b> 	
Reduction of battery material manufacturing loss <b>HI-ZEX MILLION™</b> 		Reduction of semiconductor manufacturing loss and environmental impact <b>Mitsui PELLICLE™</b> <b>TPX™</b> <b>ICROS™ Tape</b> 		Ultra-compact and high image quality <b>APEL™</b> 		Maintaining medicinal quality <b>CMPS™</b> <b>SPASH™</b> 	
						Easy-open and keep-fresh films 	

\* AdBlue is a trademark of the VDA (Verband der Automobilindustrie).

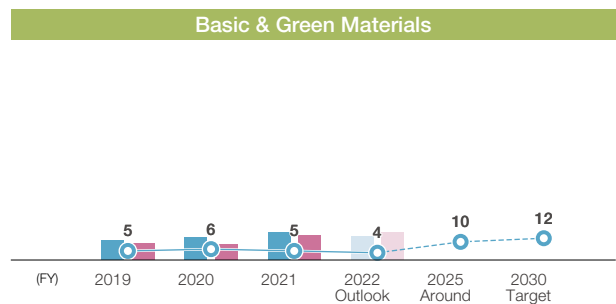
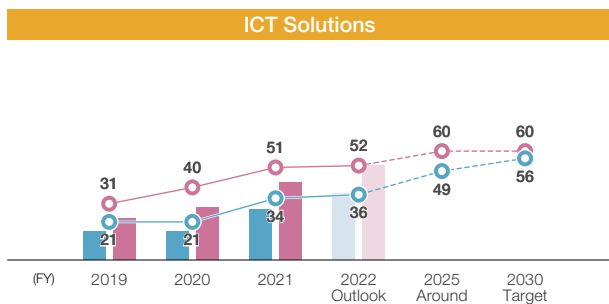
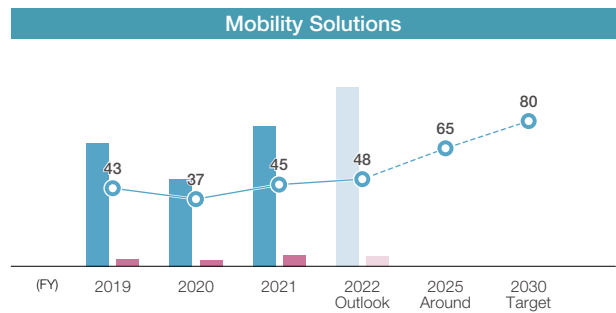
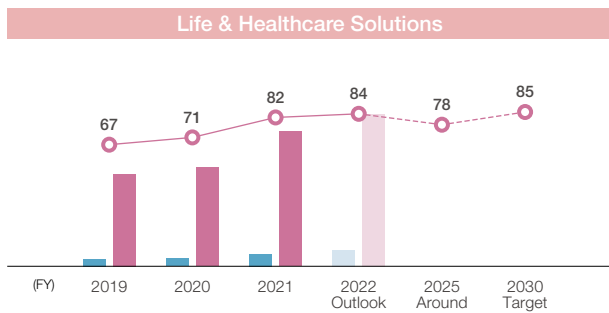
Sales revenue composition by business segment of Blue Value™ and Rose Value™ products (FY2021)

- Life & Healthcare Solutions
- Mobility Solutions
- ICT Solutions
- Basic & Green Materials



Sales revenue and sales revenue ratios of Blue Value™ and Rose Value™ products in each business

- Blue Value™ sales revenue
- Blue Value™ sales revenue ratio (%)
- Rose Value™ sales revenue
- Rose Value™ sales revenue ratio (%)






## Strategies toward realization of VISION 2030

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# Value Creation Process

In light of changes in the internal and external environments and demands from our stakeholders, the Mitsui Chemicals Group aims to realize a circular society in harmony with the environment, a comfortable society in which people can enjoy healthy lives and well-being, and an inclusive society creating diverse value as our ideal future society. We draw on six types of capital, the strengths arising from our 100-year history, and other foundations to engage in business activities and create new customer value. Through the materials, services, and solutions created in our various business activities, we will continue to help solve social challenges and build a sustainable future society.

## Inputs Business Models

**Financial capital** 


Consolidated total assets  
**¥1,935.0bn**  
Invested capital  
**¥1,384.2bn**

**Manufactured capital** 


Manufacturing sites  
**7 sites in Japan**  
**45 sites overseas**  
Capital expenditure  
**¥207.1bn**

**Intellectual capital** 


R&D sites  
**10 sites**  
R&D expenses  
**¥38.1bn**

**Human capital** 

Global human resources  
**18,780**

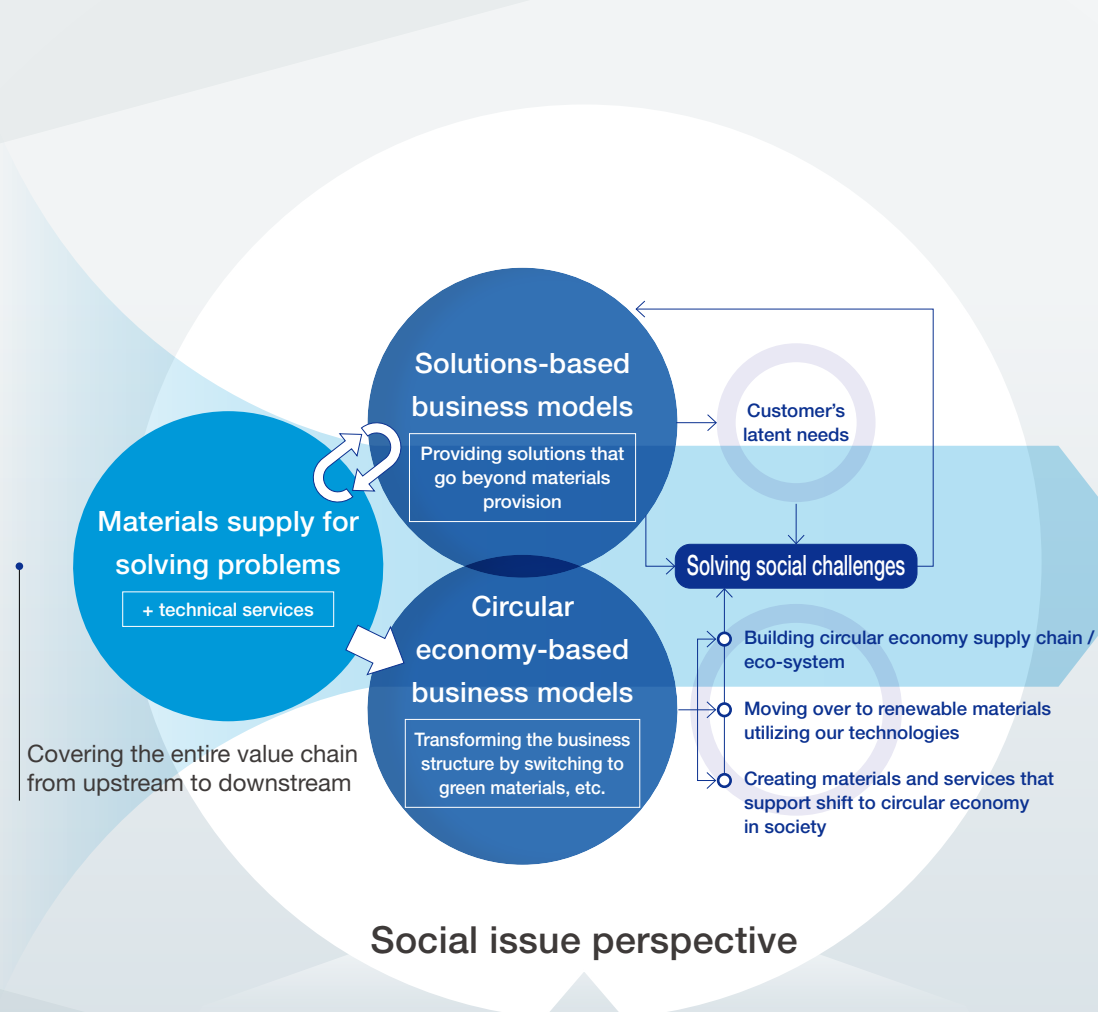
**Social and relationship capital** 

Local production for local consumption at global sites  
Consolidated companies  
**161**

**Natural capital** 

Energy consumption  
**88.0 PJ**

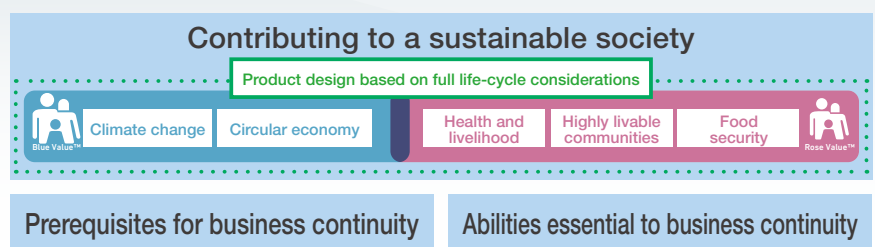
\* FY2021 results



### Social issue perspective

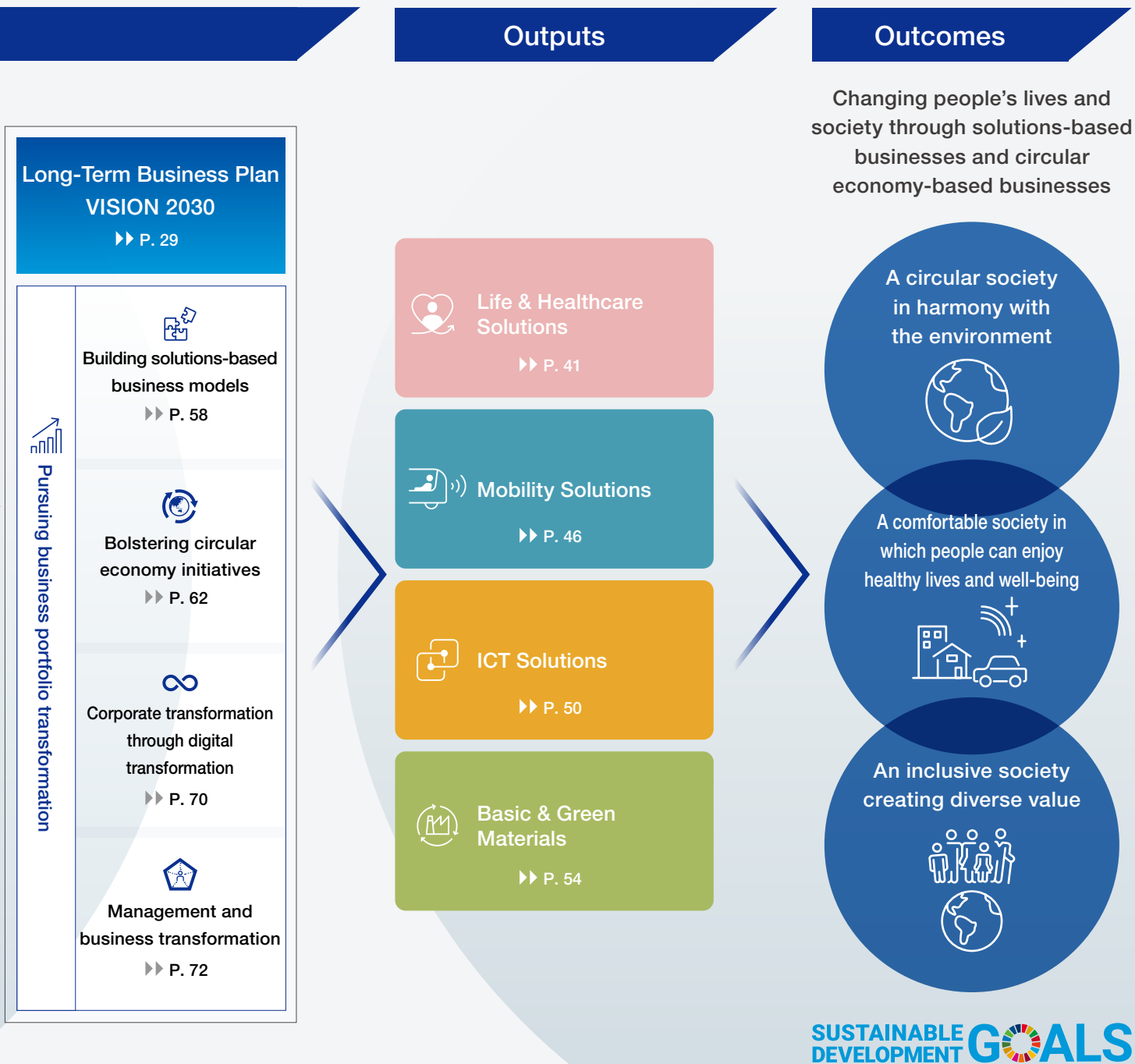
### Our material topics

▶▶ P. 18



### Governance as foundation for value creation ▶▶ P. 88

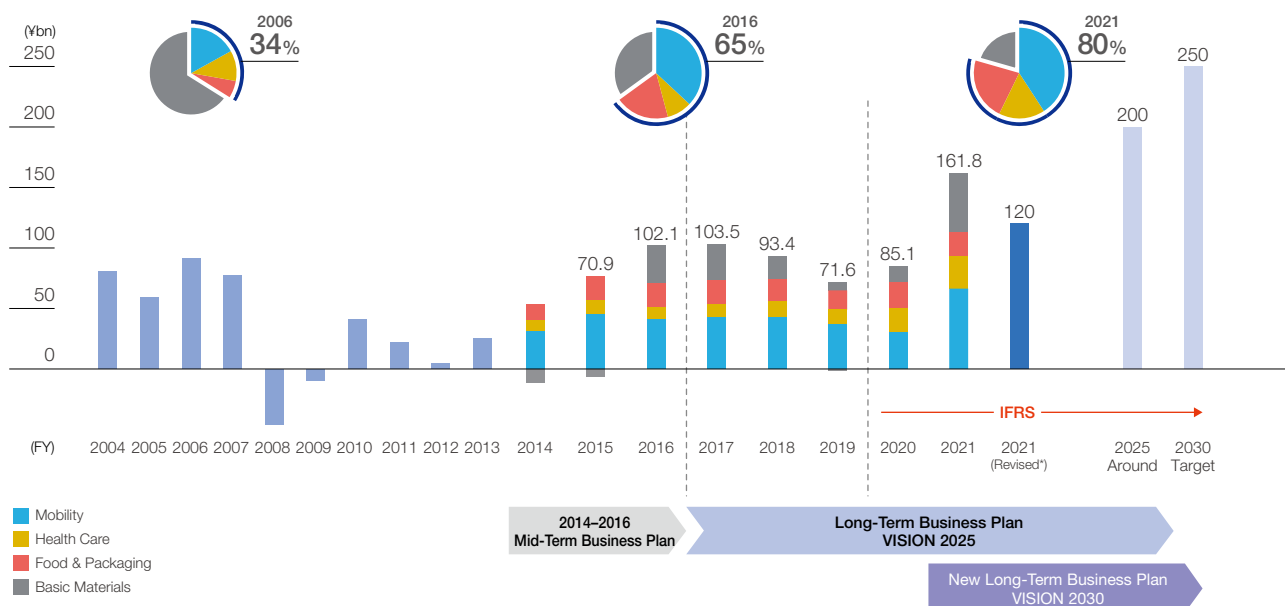




# Review of Our Business Plans

The Mitsui Chemicals Group has formulated its mid-term and long-term business plans based on a clear understanding of changes in the internal and external environment and the social challenges it must help address through its business activities. We have steadily pursued strategies toward these goals and have continued to grow our business.

## Operating income/Operating income before special items



\* Excluding impact of market conditions and inventory adjustments for certain products

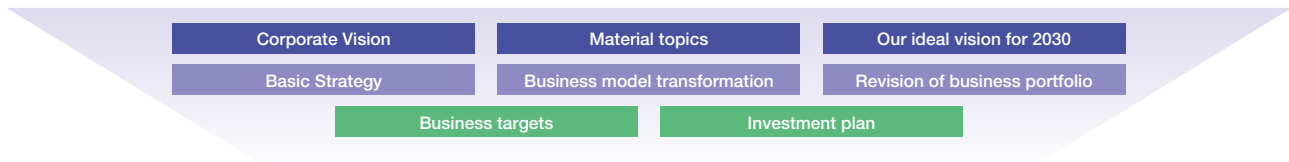
2014–2016 Mid-Term Business Plan				
Basic Strategy	<ul style="list-style-type: none"> <li>Complete the restructuring of the bulk and commodity product businesses</li> <li>Expand earnings by recouping growth investments</li> <li>Concentrate management resources in targeted business domains</li> <li>Accelerate the creation of new business and products</li> <li>Improve and strengthen the Group's financial structure</li> </ul>			
Review	<ul style="list-style-type: none"> <li>Implemented 70 billion yen in growth investments over the three-year period from FY2014 to FY2016.</li> <li>Operating income in three target domains* grew from 47.0 billion yen in FY2013 to 71.4 billion yen in FY2016.</li> <li>* Mobility, Health Care, and Food &amp; Packaging</li> <li>Implemented structural reform in the Basic Materials segment</li> <li>Examples of restructuring measures from 2013–2016: Withdrawal from Keiyo Ethylene, termination of operations at three commodity polyolefin plants and three phenol plants, closure of Kashima Works</li> </ul>			
Main KPIs and achievement status		Achievement status	Results (2016)	Targets (2016)
	Operating income	Achieved	¥102.1bn	¥60bn
	Net income	Achieved	¥64.8bn	¥30bn
	Net sales from new businesses/products*	Not achieved	¥75.0bn	¥100bn
		* Total net sales from new businesses/new products launched from 2012–2016		
Issues identified	Target for net sales from new businesses and products for the period was not achieved due to delays in their development. Achieving a portfolio transformation and increasing the competitiveness of the Basic Materials business remained a challenge.			

Long-Term Business Plan VISION 2025				
Basic Strategy	<ul style="list-style-type: none"> <li>Pursuing innovation (shifting to a customer-driven business model)</li> <li>Accelerating global expansion</li> <li>Strengthening the competitiveness of existing business</li> </ul>			
Review	<ul style="list-style-type: none"> <li>Although the percentage of operating income before special items in the three target domains has increased compared to FY2016, profit levels have remained largely unchanged since FY2015.</li> <li>Volatility in Basic Materials business reduced due to restructuring efforts.</li> </ul>			
		Results (2018)	Results (2021)	Targets (2025)
Operating income/Operating income before special items		¥93.4bn	¥161.8bn	¥200bn
Net sales		¥1,482.9bn	¥1,612.7bn	¥2,000bn
ROIC		6.0%	8.7%	8% or more
Blue Value™ products sales revenue ratio		16%	18%	30%
Rose Value™ products sales revenue ratio		13%	20%	30%
Issues identified	We are still only partway through our portfolio transformation, and we believe that it is essential to further increase resistance against market fluctuations. In addition, we must further accelerate the implementation of our growth investments in accordance with changes in the business environment.			

# Long-Term Business Plan VISION 2030

The Mitsui Chemicals Group formulated a new Long-Term Business Plan looking 10 years ahead to 2030 in light of the significant changes that have occurred in the external environment and the limitations of the growth strategy that have become apparent in the internal environment since VISION 2025 was drawn up.

## Outline of VISION 2030



### Corporate Vision

As our Corporate Mission, we at the Mitsui Chemicals Group aim to contribute broadly to society by providing high-quality products and services to customers through innovation and the creation of materials, while keeping in harmony with the global environment. We are also implementing a triple bottom line management approach based on economic, environmental, and social considerations, and working to solve social challenges through our business activities.

In formulating VISION 2030, we have revised our Corporate Target, which is focused on where we want to be in 15 to 20 years. Our new Corporate Target is to be a corporate group that continues to grow by solving social challenges and creating diverse value with the power of chemistry. Returning once again to our purpose of solving challenges faced by society, the Mitsui Chemicals Group

will make full use of the power of chemistry—the very thing that allows us to create diverse value—to tackle a wide range of social challenges that arise in the face of accelerating environmental change. Aiming to become a corporate group that continuously provides solutions to these challenges, we will endeavor to make Group-wide efforts.

Corporate Mission
Contribute broadly to society by providing high-quality products and services to customers through innovation and the creation of materials, while keeping in harmony with the global environment
Corporate Target
To be a corporate group that continues to grow by solving social challenges and creating diverse value with the power of chemistry

### Material topics

In light of megatrends as well as the internal and external environments we face, we have defined our ideal future society—a vision of society the Mitsui Chemicals Group aims to realize by contributing to solving potential environmental and social challenges—as a circular society in harmony with the environment, an inclusive society creating diverse value, and a comfortable society in which people can enjoy healthy lives and well-being.

To bring about the sort of future society mentioned above, we have identified a number of areas in which the Mitsui Chemicals Group should contribute, as well as prerequisites and essential abilities needed to make these contributions, as our revised material topics. These material topics will be embedded in our Long-Term Business Plan, including in the plan’s Basic Strategy, as we endeavor to achieve our goals.

▶▶ P. 18 Our material topics

### Our ideal vision for 2030

As we head toward 2030—a checkpoint for our Corporate Target—we are looking to confront the rapidly changing social environment and social challenges before us in a head-on manner. To this end, we have created a vision for realizing our new growth strategies based on the transformation we are pursuing as a company, with the ideal vision we have for the Mitsui Chemicals Group in 2030 defined as shown on the right.

### Chemistry for s Sustainable World

A global solutions company that leads change and contributes to a sustainable future  
Mitsui Chemicals

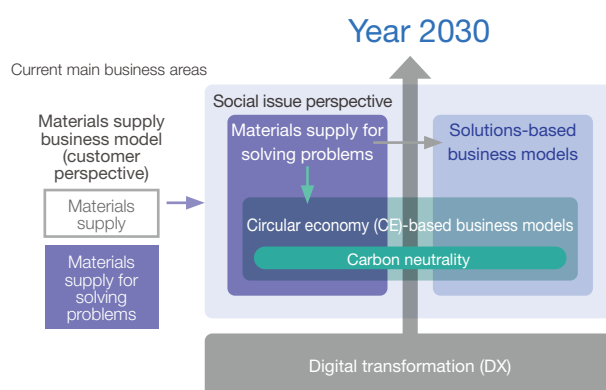
## Basic Strategy

To achieve our Corporate Target, the Mitsui Chemicals Group is pursuing, on a Group-wide level, the VISION 2030 Basic Strategy, which we have developed based on the analysis of the internal and external environments and material topics.



## Business model transformation

If we are to help solve social challenges—and use our efforts toward this as a driver of continuous growth—we will need to move away from our historical business focus on materials supply, instead getting our entire Group and all of our businesses to base themselves on a social issue perspective, solutions-based business models, circular economy-based business models, and digital transformation. Rather than simply resting on our laurels with the business model and approach that has brought us success in the past, we will work hard on carrying out this business model transformation, looking to better create the value sought by society, consumers, and customers.



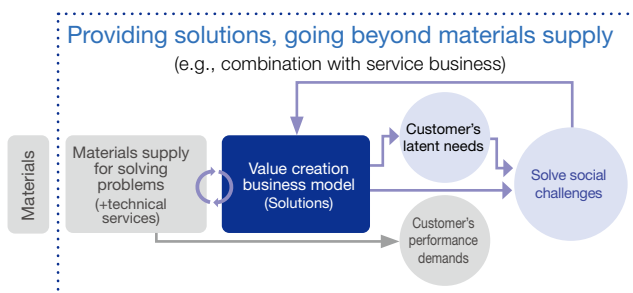
### (1) Social issue perspective

We will look to roll out a social issue perspective across all of our companies and businesses. This will allow us to get closer to society, consumers, and customers; capture latent needs and pain points in an advanced and precise manner; and tie this into product and service development, performance testing, and other such efforts.

Based on this approach, we aim to further grow and flesh out all of our businesses, and to actively pursue open innovation, as well as tie-ups with external partners, as necessary means toward solving social challenges.

### (2) Solutions-based business models

With the demands of society continuing to give rise to increasingly complex needs, we intend to create high added-value offerings that better fit these needs. To this end, we will scale up our solutions-based business models, through which we will combine conventional materials supply with services and more to deliver solutions.

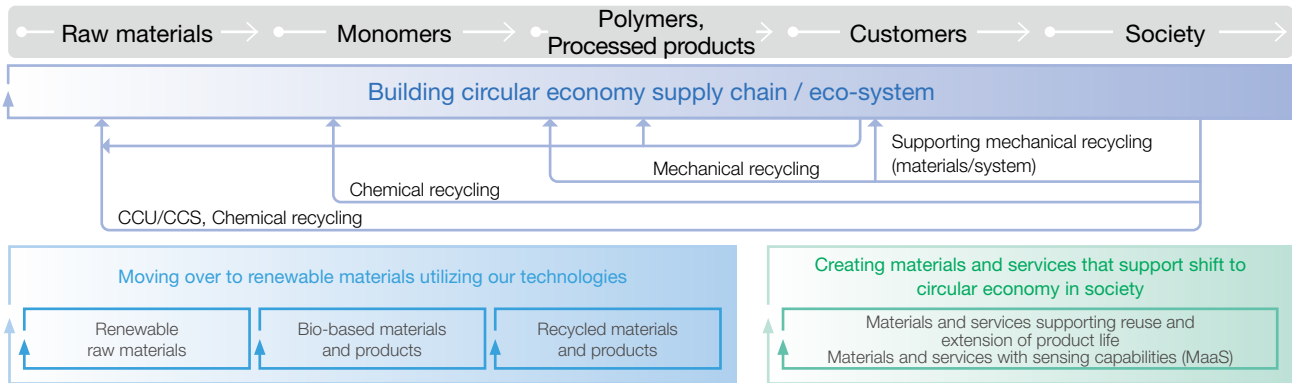




**(3) Circular economy-based business models**

Having reached the conclusion that it will be difficult to maintain businesses with high energy consumption going forward, we will look to launch circular economy-based business models. This will see circular economy efforts—

which are becoming increasingly important—pursued Group-wide and will also involve reforming our business structure by such means as transitioning to greener materials.



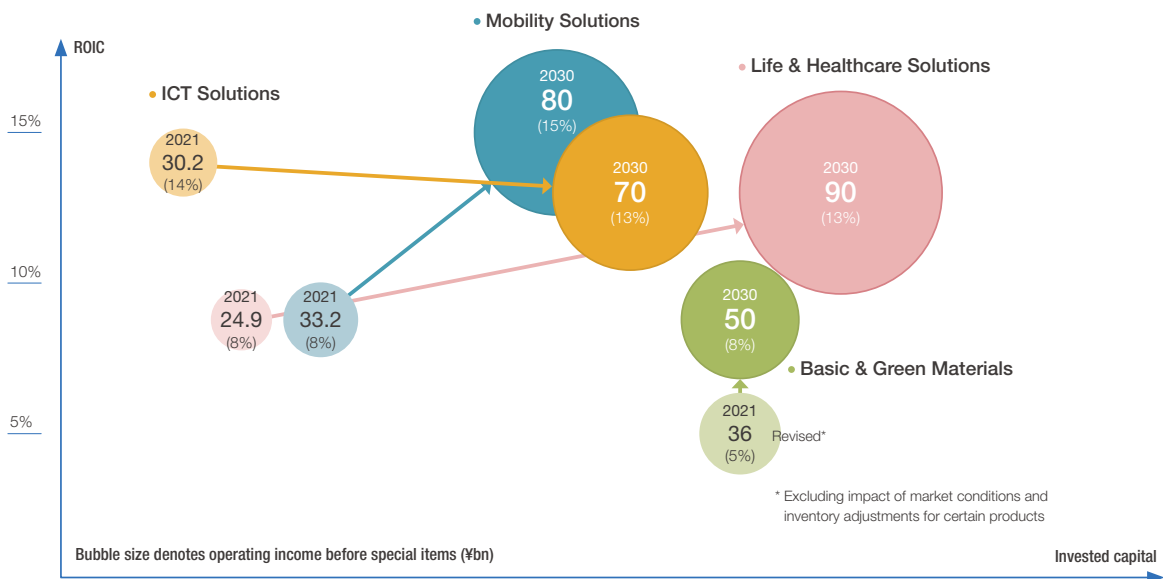
**(4) Digital transformation**

By rolling out Group-wide digital transformation efforts, we aim to further improve our various business models, operational processes, organizational capabilities, and more, thereby realizing corporate transformation (CX).

**A portfolio strategy that leverages our strengths and maximizes value**

We have decided to revise our business portfolio to help carry out our Basic Strategy for creating value. The new four-part portfolio will consist of Life & Healthcare Solutions, Mobility Solutions, ICT Solutions, and Basic & Green Materials. Going forward, we aim to achieve

operating income before special items of 250 billion yen in 2030 through an investment strategy that leverages the Group’s strengths, with a focus on Life & Healthcare Solutions and ICT Solutions.



## Numeric targets for VISION 2030

In order to realize our ideal future society, we have set KPIs from multiple perspectives in order to steadily implement the VISION 2030 Basic Strategy and to monitor progress toward our goals. We will periodically review these KPIs in

order to assess the Group's growth from a sustainability perspective and update our initiatives as necessary in response to changes in the business environment, with the aim of enhancing our corporate value.

	FY2021 Results	2022 Outlook	2025 Around	2030 Targets
Operating income before special items	¥161.8bn	¥140bn	¥200bn	¥250bn
Net income attributable to owners of the parent	¥110.0bn	¥100bn	¥110bn	¥140bn
ROE	16.7%	13.4%	10% or more	10% or more
ROIC	8.7%	6.7%	7.0% or more	8.0% or more
NET D/E	0.75	0.76	0.8 or less	0.8 or less
Total return ratio	30%	30.0% or more	30.0% or more	30.0% or more
Blue Value™ products sales revenue ratio	18%	22%	30%	40%
Rose Value™ products sales revenue ratio	20%	25%	30%	40%
GHG emissions reduction rate (Scopes 1 and 2) * compared to FY2013	21%	21%		40%
Incidence of major accidents & serious occupational injuries	Zero	Zero	Zero	Zero (over the course of VISION 2030)
Response to human rights risks	Conducted human rights risk assessment	Revision and announcement of Human Rights Policy; formulation of a medium- to long-term plan for human rights due diligence, and launch of on-site assessments		Identification & correction of risks by setting up a human rights due diligence system for all of our bases, both domestic and abroad
Incidence of major legal and regulatory violations	1 instance	Zero	Zero	Zero (over the course of VISION 2030)
Incidence of PL accidents & serious product quality incidents	Zero	Zero	Zero	Zero (over the course of VISION 2030)
Introduction of advanced technologies Implementation of advanced production technology centered on AI/IoT	10 instances	10 instances		100 instances (over FY2021-2030)
Improvement of employee engagement Engagement surveys	Engagement score: 34%	Implementation rate for improvement plans from our FY2021 survey: 100%	Engagement score: 40%	Engagement score: 50%
Key talent management Successor coverage rate for critical positions	233%	235%	250%	250%
Diversity · Executive officers with diverse backgrounds (women, non-Japanese, mid-career hires) * Mitsui Chemicals, Inc. · Ratio of women in management positions (manager-level or above) * Mitsui Chemicals, Inc.	· Executive officers with diverse backgrounds: 3 (including 1 woman) · 4%	· Diversity rate of future executives: 20%  · 6%	· 10%	· Executive officers with diverse backgrounds: 10 or more (including at least 3 women)  · 15%
Health-focused management · Average rate of lifestyle-related disease * Mitsui Chemicals, Inc. · Frequency of absences from work due to mental health disorders * Mitsui Chemicals, Inc.	· 10%  · 0.54	· 9.5%  · 0.50		· 8.0%  · 0.25
Training of DX specialists Number of data scientists	16	26		165 (by FY2025)
Pipeline expansion		Establishment of corporate venture capital (CVC) funds; Stage 1 themes registered: 30 or more		Number of development themes in the latter half of our Stage Gate System (vs. FY2020): double or more
Value creation for beyond 2030 Number of new areas of development at our Frontier Technology Center		3 or more candidates		3 or more areas
Sustainable procurement	Sustainable procurement ratio: 61% * Mitsui Chemicals, Inc.	Bolster communications with partners to solidify our efforts in this area (Interviews; requests for improvement; revision of guidelines, and turning these guidelines into common sense)		Sustainable procurement ratio: 80%

## CFO Message



We will support the Group's VISION 2030 strategy via a financial strategy that combines discipline with flexibility, while integrating both financial and non-financial perspectives to our management approach in order to maximize our corporate value.

### NAKAJIMA Hajime

Member of the Board,  
Senior Managing Executive Officer & CFO

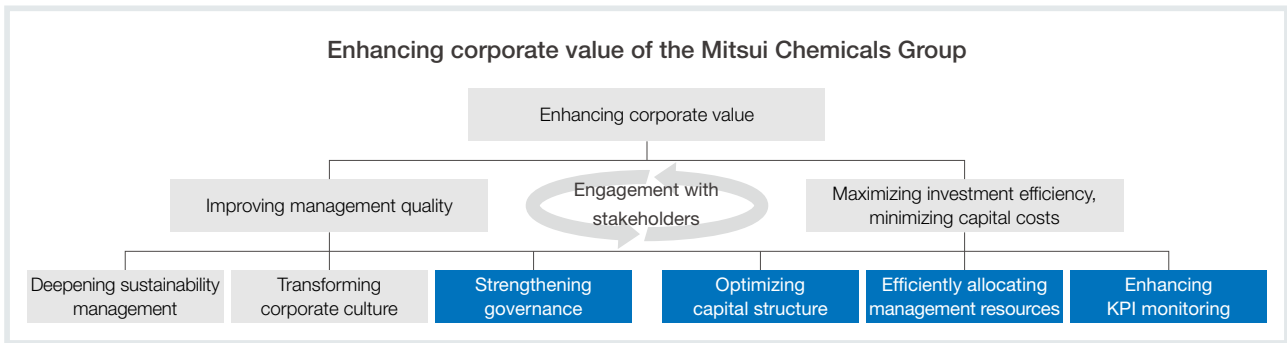
## Having achieved record profits in fiscal 2021, we will further leverage the Mitsui Chemicals Group's strengths to realize significant growth in the next stage of our development.

In fiscal 2021, operating income before special items and net income attributable to owners of the parent reached record highs of 161.8 billion yen and 110.0 billion yen, respectively, despite the prolonged impact of factors including the COVID-19 pandemic and a sharp rise in raw material prices. Although we estimate that around 40 billion yen in additional profit was generated due to rising market prices, I believe that the fact that even without this boost we were able to achieve operating income before special items of approximately 120 billion yen, markedly higher than in fiscal 2020, represents a significant accomplishment for the Group.

Looking back over the past 10 years, we have persevered in our efforts to restructure our business following the global financial crisis of 2008, and resumed capital

investment in target domains in earnest from around 2014. However, from fiscal 2019 through to fiscal 2020, just as the results of these efforts were beginning to emerge, the impact of the COVID-19 pandemic and other factors weighed on profits, resulting in somewhat sluggish financial performance. However, I feel that with our results in fiscal 2021, we have finally reached a stage in which we can realize significant growth.

We are unique in that we possess the facilities—starting with naphtha crackers—as well as products and technologies across the entire chemical product manufacturing chain. It is essential that we continue actively promoting our strength in flexibly meeting the needs of our customers utilizing this array of capabilities.



\* For full diagram, see CEO Message on p. 10. ■ colored items are mentioned in this message.

## Cash flow management

**■ Revenue from business**  
(Cash flows from operating activities)

- Source of value creation
- Enhance cash generation capabilities  
(Pursue both the improvement of capital efficiency and the resolution of social challenges)
- KPIs: ROIC of 8.0% or more  
Blue Value™ and Rose Value™ products sales revenue ratios: 40% or more

**■ Financing**

- The key to fiscal discipline
- Secure funds through flexible and diverse means with a focus on optimal capital structure
- KPI: Net D/E of 0.8 or less



**■ Growth investments**

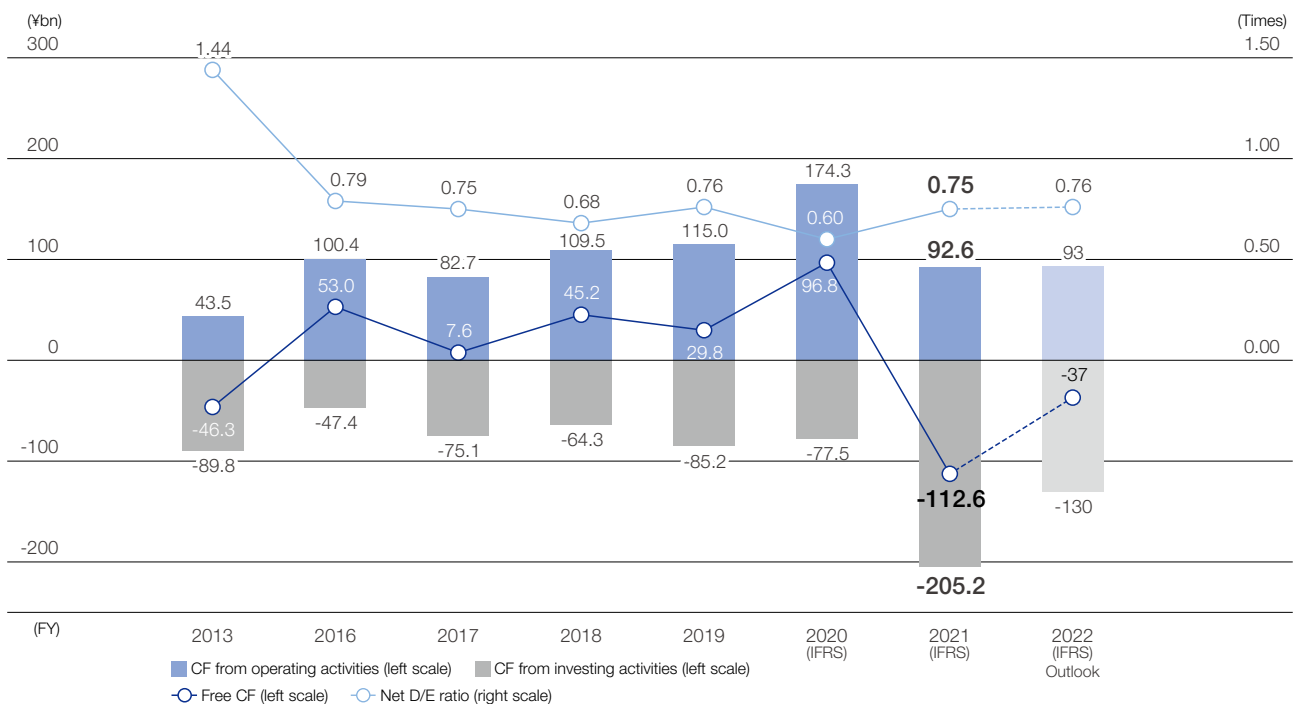
- Funding for continued growth
- Prioritize resource allocation to growth investments
- KPIs: ¥1,800bn  
Internal growth investments: ¥900bn  
Strategic investments: ¥900bn (Digital transformation: ¥100bn; Carbon neutral strategy: ¥140bn)

**Maintenance investments**

**■ Shareholder returns**

- Provision of returns with a focus on stable long-term shareholders
- Stable and continuous dividend payment  
Flexible acquisition of treasury stock
- KPIs: Total return ratio of 30% or more  
DOE of 3.0% or more

## Cash flows and net D/E ratio





## Implementing our VISION 2030 strategy by maintaining a sound financial profile and monitoring our profitability.

As we work toward the realization of VISION 2030, we will allocate a total of 1.8 trillion yen to growth investments, while simultaneously setting a net D/E target of 0.8 or lower with a view to maintaining our credit rating as a metric of financial discipline, and a ROIC target of 8.0% or higher as a metric for measuring profitability. We will, however, adopt a flexible approach to capital investment and financing as required to implement our VISION 2030 strategy. For example, in order to transform ourselves into a solutions-based business that is mindful of social challenges, we will need to explore options such as alliances or mergers and acquisitions (M&A) with other companies that possess leading expertise. We will study such options on the assumption that investments will be funded within cash flow and short-term liquidity, but for projects that are expected to generate sufficient returns, we will proactively consider investing capital even if our net D/E ratio temporarily exceeds 0.8 as a result. Furthermore, from a financing perspective we believe that sustainable finance, such as green bonds, is a promising means of raising funds. We will therefore strengthen our systems for monitoring cash flow management as well as the progress of Group-wide sustainability initiatives, both of which are prerequisites for utilizing such financing options.

With respect to ROIC, we will not manage it as a single-year target, but rather as a medium- to long-term target that is to be achieved after implementing necessary strategies and resource investments through a rolling medium-term strategy based on our overall long-term strategy.

We will invest proactively, particularly in the Life & Healthcare Solutions business segment, and will supplement areas where we lack the necessary resources through M&As and alliances. In addition, in the Mobility Solutions business segment we will ensure that we recoup the proactive investments we have continued to make since 2016, while further improving profitability through a shift to high-performance products and to solutions businesses. In the ICT Solutions business segment, although ROIC is expected to decline temporarily due to proactive investments through to around 2025, we plan to increase the profitability of the segment towards 2030.

Meanwhile, to set single-year milestones on the path to reaching our ROIC target, we have established a system in which we monitor not only profit items but also components of ROIC such as the cash conversion cycle (CCC) as part of annual performance targets for each division, to encourage each employee to approach their work with a constant awareness of return on investment. Furthermore, as we pursue business portfolio transformation as part of our VISION 2030 Basic Strategy, we are monitoring our performance on the twin axes of ROIC and growth in operating income before special items. For businesses that do not meet our criteria, we are operating on a policy of swiftly implementing structural reforms or withdrawing from them.

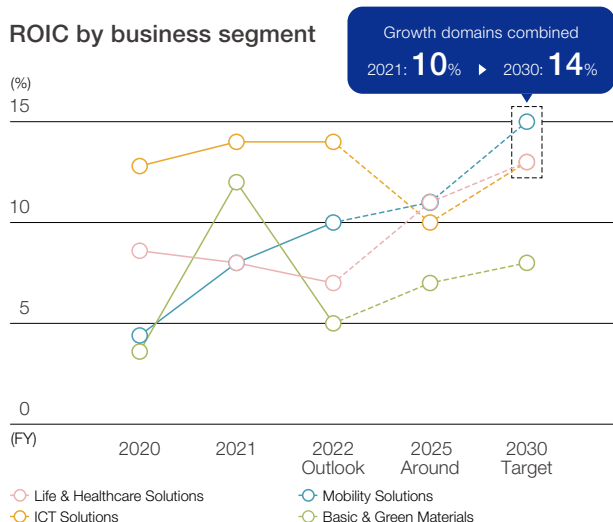
On the investment front, in addition to expanding existing production capacity in line with our growth strategy, M&As are also an option. Due to the fact that some of our past M&A projects required time for their anticipated benefits to be realized, we are placing a keen focus on evaluating post-merger integration from the investment decision-making stage. Specifically, in addition to the internal review process conducted when making regular investments, we have established an M&A review meeting to discuss strategies for achieving anticipated benefits as swiftly as possible.

In addition, to ensure the steady implementation of efforts to bolster circular economy initiatives, from this fiscal year we have introduced c-IRR, an internal rate of return metric that incorporates internal carbon pricing (ICP). Taking into account increases and decreases in GHG emissions converted into monetary values has enabled us to make holistic investment decisions that are not biased toward the conventional concept of profit.

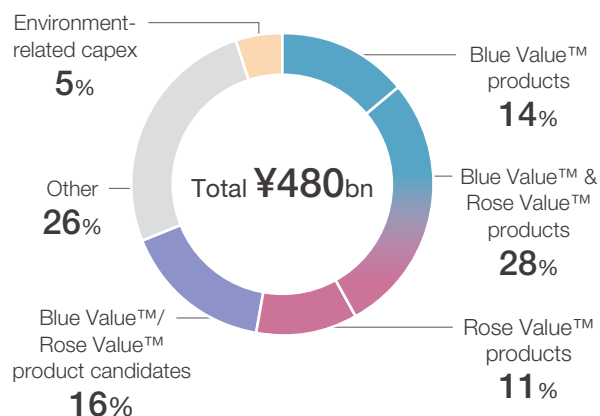
With regard to shareholder returns, we will continue to place emphasis on stable and continuous dividend payment, with a DOE\* of 3.0% or more and a total return ratio of 30% or more as targets, based on the premise of securing a solid capital base in conformity with an optimal capital structure. We will endeavor to acquire treasury stock in a timely and appropriate manner and increase dividends in line with the growth in our corporate value, while striking a balance with the growth and maintenance investments necessary to advance our VISION 2030 strategy.

\* DOE: Dividends on equity

ROIC by business segment



FY2022–2024 large-scale investments\*

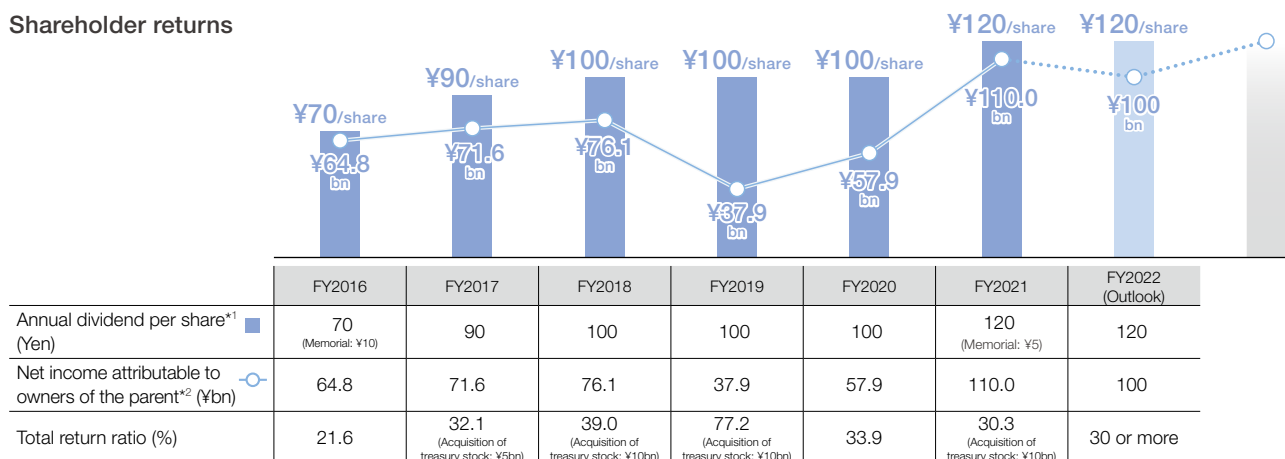


\* Not including alliances, M&A, financial assistance, etc.

Status of major investments

Major investment projects		Capacity	2021	2022	2023 onwards
Life & Healthcare Solutions	Orthopedic surgery sector: business and capital alliance with Japan Medical Dynamic Marketing, Inc.	—			
	Mitsui Chemicals Agro, Inc.: acquisition of agrochemicals business	—			
	Capacity expansion of MR™ high refractive index ophthalmic lens material (Japan)	—			
Mobility Solutions	New base for long glass fiber reinforced PP (China)	3.5 KT			
	Capacity expansion of TAFMER™ (Singapore)	25 KT			
	New LUCANT™ base (Japan)	20 KT			
	Establishment of new TAFMER™ plant (Singapore)	120 KT			
ICT Solutions	Establishment of new EUV pellicle production facility (Japan)	—			
	Capacity expansion of cyclic olefin copolymers APEL™ (Japan)	+50%			
	Acquisition of pellicle business	—			
	Capacity expansion of ICROS™ Tape (Taiwan)	3,800,000 m <sup>2</sup>			
Basic & Green Materials	Honshu Chemical Industry Co., Ltd. becomes a consolidated subsidiary	—			
	Dissolution of polyurethane raw materials joint venture	—			
	Capacity expansion of MDI at Kumho Mitsui Chemicals (South Korea)	200 KT			
	New plant for high-performance PP (Japan)	200 KT			
	Investment in Apeiron Bioenergy to increase procurement of bio-based raw materials	—			
New businesses/products	Establishment of corporate venture capital funds	—			
Optimization and restructuring	Shutdown of purified terephthalic acid (PTA) production (Japan)	400 KT			Shutdown
	Share transfer of phenols subsidiary (Singapore)	—			Share transfer

Shareholder returns



\*1 Mitsui Chemicals conducted a 5-to-1 share consolidation on October 1, 2017. Annual dividends per share have been adjusted retrospectively to reflect the share consolidation for all periods presented.

\*2 Mitsui Chemicals has voluntarily adopted International Financial Reporting Standards (IFRS) from fiscal 2020. Figures for fiscal 2019 and before are profit attributable to owners of parent under Japanese Generally Accepted Accounting Principles (J-GAAP).

## Our efforts to strengthen our non-financial performance in anticipation of changing societal consciousness will serve to enhance our corporate value.

Of the 1.8 trillion yen in growth investments set out in VISION 2030, we expect to invest around 140 billion yen toward our carbon neutral strategy to bolster circular economy initiatives. We believe that investments in non-financial fields will translate into financial value over the long term as society's values continue to change.

We anticipate that a shift in financial and non-financial value will occur in the future, and are currently working to integrate the financial and non-financial aspects of our management. However, it will likely be some time before we see tangible results in the form of increased corporate value for the Group. The expansion of Blue Value™ and Rose Value™ products and services can also be considered an initiative to convert the provision of non-financial value into financial value, and it has taken us about 10 years since the inception of the concept in 2011 to reach our current standing. In order to accelerate these efforts, under VISION 2030 we have set ourselves the goal of increasing the sales revenue ratio in each of the two categories to 40% or more. To achieve this goal, we will also strengthen our branding to communicate to the market the value that the Group provides to customers and society. We are also examining ways to express value and its connection to profit growth, as well as how to manage and disclose this value in a more easily understandable manner.

The Basic & Green Materials business segment is currently working to promote the commercialization of green chemicals, including the introduction of bio-based hydrocarbons and the social implementation of chemical recycling technology, with the aim of increasing future corporate value by helping to solve social challenges. Although this endeavor is possible only because the Group possesses naphtha crackers, we are also aware that there are a range of opinions, particularly among investors, regarding the positioning of the Basic & Green Materials business which owns these crackers, from viewpoints such as the volume of CO<sub>2</sub> emissions and the

inherent volatility of the business. However, we believe that by investing capital in green chemicals initiatives ahead of our competitors in parallel with our ongoing efforts to swiftly restructure the Basic & Green Materials business, the Group's overall chemical product value chain will produce significant added value, which will lead to a significant increase in our corporate value, when the time comes for society's values to shift in a major way. To add my personal view, I believe that improving the profitability of the Basic & Green Materials business, which can be regarded as the foundation of domestic chemical product manufacturing, and putting the profits earned through this business back into the realization of green chemicals and environmental initiatives, are essential steps in order to realize a sustainable chemical industry of the future.

At the same time, one of the important roles of a company working to further expand its global business activities is to observe the tax systems of each country and region. The Mitsui Chemicals Group has established a tax policy\* to properly fulfill this role and will promote a tax strategy based on fair and appropriate tax planning.

As CFO, in addition to strengthening cash flow management and maintaining a sound financial position, I intend to make business decisions with an eye on the future while giving full consideration to non-financial value as well. Together with our CEO and CSO, I will work to achieve the transformations and increase in corporate value that we are striving for in VISION 2030. We will continue to enhance dialogue with our stakeholders by such means as disclosing both financial and non-financial information and holding explanatory meetings in order to provide our stakeholders with a deeper insight into the Group's vision and strategies.

\* Tax Policy

[https://jp.mitsuichemicals.com/en/sustainability/risk\\_compliance/tax.htm](https://jp.mitsuichemicals.com/en/sustainability/risk_compliance/tax.htm)

# CSO Message

## As CSO, I will work together with each division within our Group to implement our VISION 2030 Basic Strategy.

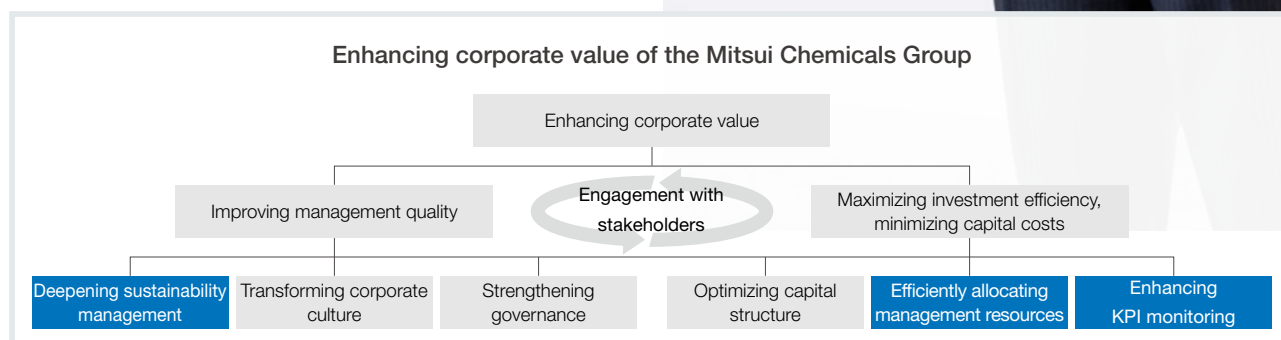
As the Mitsui Chemicals Group's business expands further across the globe and becomes increasingly complex, I have been appointed to the newly-established position of chief strategy officer (CSO) with the task of promoting and supporting the execution of Group-wide strategy. My view of what the CSO role entails is to optimize the Group's business portfolio by carefully assessing financial KPIs and investment profitability, while at the same time improving the quality of our management by utilizing non-financial KPIs with the aim of building a company that can continuously create value. The word *strategy* in CSO spans two meanings: to formulate strategies, and to execute strategies. I believe that our immediate mission in the implementation phase of VISION 2030 is to ensure that the Basic Strategy outlined in VISION 2030 is executed from both a financial and non-financial perspective.

Since my appointment as CSO, I have had discussions with the heads of each business sector and other key members in order to determine the most effective way to approach my role. As I have worked in the business sectors in the past, I am fully aware that each sector has its own logic and organizational dynamics, as well as their own priorities when it comes to execution of corporate strategy. One of my important roles is to facilitate synergies among the business sectors from a holistic perspective, while ensuring that the Group's vision and the focus of each business sector are closely aligned.



**IZAWA Kazumasa**

Managing Executive Officer & CSO



\* For full diagram, see CEO Message on p. 10. ■ colored items are mentioned in this message.

## The Mitsui Chemicals Group will undergo major changes as it implements the VISION 2030 Basic Strategy.

In view of the accelerating speed of change in the external environment, the Basic Strategy of VISION 2030 reflects a sense of urgency that the Mitsui Chemicals Group must transform and evolve from its past self. In particular, *Pursuing business portfolio transformation* and *Building solutions-based business models* are two important drivers that will enable us to achieve dynamic change.

In *Pursuing business portfolio transformation*, we have set a new goal of achieving growth by expanding and fleshing out our businesses in growth domains, for example, by positioning the Life & Healthcare Solutions business segment as our first earnings pillar. We aim to achieve operating income before special items of 90 billion yen in Life & Healthcare Solutions in fiscal 2030. Naturally, this requires not only expanding our existing businesses, but also pursuing inorganic growth including acquiring new business platforms through mergers and acquisitions (M&A) and alliances with external partners. However, looking back over the past M&As conducted by the Group, some of these projects may not necessarily be considered successful, and on occasion we have received harsh feedback from investors regarding our performance in this area. However, after analyzing past projects within the Group and holding discussions on the feedback received from external parties, we feel that the accuracy of our project screening and our ability to implement post-merger integration and other measures have steadily improved. In addition, in the Mobility Solutions business segment we aim to shift to a business model of providing products and services that meet the changing social needs related to mobility by leveraging the solution capabilities that we have worked to strengthen, in addition to our technological expertise as a materials manufacturer.

One other major change is the establishment of the ICT Solutions business segment. This segment brings

together the ICT-related products, technologies, and human resources that were previously dispersed across the respective business segments in response to the megatrend of exponential growth in ICT-related businesses. In doing so, we aim to respond to changes in the market environment and the speed of technological innovation characteristic of the ICT sector, which differs significantly from other business fields, while at the same time generating a range of technological and human resource synergies.

We have also relaunched with a new organization the New Business Incubation Center, which has been responsible for developing new businesses within the Group as the core organization for creating next-generation businesses. By utilizing the newly established corporate venture capital fund and through other means, we will proactively incorporate external knowledge and utilize the Group's resources in new ways. By working with the same sense of speed as startup companies and other partners, we will raise the success rate of new business and new product creation. I also believe that this initiative may help spark the transformation of our corporate culture, building a foundation for further innovation.

In *Building solutions-based business models*, we are breaking away from our conventional business model of supplying materials. Going forward, we will adopt a higher point of view and work to swiftly identify changes in society so that we can provide materials, propose applications for these materials, and deliver solutions that also integrate our services to help solve challenges faced by our customers and society as a whole. In order to achieve this, the way we carry out operations at each worksite must also evolve. As flexible and innovative thinking is more important than ever, we will also work to promote change at the business segment level.

## We view the contribution we make to solving social challenges as a differentiation strategy, and will work to create added value.

The Group's ESG promotion policy is to pursue the sustainable development of society and the Group by seeking business opportunities linked to ESG issues, striving to solve these challenges through our business activities, and recognizing and addressing future risks while upholding our corporate social responsibility.

Based on this policy, when formulating VISION 2030, we redefined our ideal future society and reviewed our material topics. For each of our material topics, we have established new metrics (non-financial KPIs), which are used in processes including business evaluations and investment decision making. In such ways, we have



adopted a management approach that integrates financial and non-financial perspectives. An executive officer has been assigned responsibility for each non-financial KPI, and the Corporate Sustainability Committee, the Company-wide Strategy Committee, and other decision-making bodies will conduct thorough reviews not only verifying the achievement status of these KPIs, but also analyzing progress in light of changes in the environment and examining the appropriateness of targets.

As one of our non-financial KPIs, we have also established targets for the sales revenue ratios of Blue Value™ and Rose Value™ products—initiatives unique to the Group—at the Group-wide and business segment levels toward the year 2030. Our Blue Value™ and Rose Value™ products exemplify the creation of social and corporate value we are striving for. In the 10 years since we launched this concept in 2011, each of our business segments have grown increasingly aware of the importance of this initiative and the value it contributes to society. We are also working across the Group to expand the range of products and applications certified through collaboration and information sharing. I consider Blue Value™ and Rose Value™ products and services as a type of differentiation strategy. In practice, these products have helped us provide unique solutions to our customers' manufacturing cost-reduction challenges, as well as the prevention and mitigation of disasters and reduction of food loss—issues that are difficult to quantify in terms of tangible losses. I believe that further refining these efforts and incorporating

a Blue Value™ and Rose Value™ perspective from the product design and marketing stages will lead to tangible results in the form of profit contribution.

*Bolstering circular economy initiatives*, another point in our Basic Strategy, includes the expansion of the Blue Value™ products I mentioned above, the utilization of digital technology, and the initiatives we are pursuing at the Carbon Neutral Research Center, which we established through a collaboration with Kyushu University. The Basic & Green Materials business segment will play an important role in implementing this strategy. Our Group is unique in that we have manufacturing facilities for petrochemicals and basic chemicals, such as naphtha crackers, which are positioned upstream in the chemical product value chain, and the Basic & Green Materials segment plays a key role in supporting the creation of added value in the growth domains. In order to achieve carbon neutrality and a circular economy, we are striving to establish advanced proprietary technologies in order to leverage the strength of our presence across the value chain, including introducing bio-based hydrocarbons, chemical and mechanical recycling, and developing technologies to reduce greenhouse gas (GHG) emissions from naphtha crackers, which account for a significant portion of our GHG emissions. We believe these technologies will have a tremendous impact, as their widespread implementation in society will lead to product differentiation from the perspective of environmental friendliness and help to realize a circular society.

## Building a trusted corporate group through continuous innovation— an essential part of Mitsui Chemicals.

As a chemical manufacturer, I believe that our Group shoulders a great responsibility as the global community increasingly focuses on addressing a range of social challenges, as exemplified by the SDGs. At the same time, this is also an opportunity for us to give full play to the technological capabilities we have developed over the course of our history. VISION 2030 reflects our resolve to not only reduce the negative impacts from GHGs and other sources to zero, but also to generate positive impacts. As stated in our Corporate Mission, throughout our history we have contributed to the resolution of social challenges through technological innovation, and I always emphasize to our employees that innovation is a key part of who we

are as a company. Of course, change also brings with it risks. However, I believe that if we can build up solid profits in the short-term while also managing risk, and if each and every employee is aware of both our financial and non-financial objectives and works to implement positive changes step by step, a wide range of stakeholders will recognize the value that the Group provides to society. In my role as CSO with responsibility for the Corporate Planning Division and the Corporate Sustainability Division, I am committed to leading these changes and ensuring that the Mitsui Chemicals Group continues to be trusted by a wide range of stakeholders.

## Pursuing Business Portfolio Transformation



# Life & Healthcare Solutions

Business vision (Our ideal vision for 2030)

Contributing to improved quality of life and the assurance of food safety and security by offering solutions that support life, health, and comfortable lifestyles

## Challenges and needs of society

- Increase in global population
- Extension of healthy life-span
- Increase in needs for hygienic environments due to COVID-19 pandemic
- Improvement in quality of life (QOL)
- Assurance of food safety and security

## Competitive advantages

### Life care solutions

#### Vision care materials

- Broad product lineup

#### Nonwovens

- Consistent technological capabilities, from base resins to processing

#### Personal care materials

- R&D capabilities founded on enzyme technology and organic synthesis technology

### Wellness solutions

#### Agrochemical products

- Overseas expansion, particularly in Asia
- Broad product lineup

### Medical solutions

#### Oral care materials

- Global brand power
- Comprehensive R&D capabilities spanning base materials to processed dental materials

#### Orthopedic materials

- Materials technology applied to dental materials, etc.

## Issues

### Life care solutions

#### Vision care materials

- Securing supply capabilities in line with demand growth
- Increasing the resilience of global supply chains

#### Nonwovens

- Enhancing cost competitiveness in the mature hygiene materials (disposable diapers) market

#### Personal care materials

- Acquiring a business foundation for launching new businesses

## Risks and opportunities

### Life care solutions

#### Vision care materials

- Global market growth

#### Nonwovens

- Stagnation in Japanese market for disposable baby diapers
- Stable growth in domestic demand for materials used in adult diapers and feminine care products
- Intensifying competition in East and Southeast Asia; soaring raw materials and other costs

#### Personal care materials

- Increasing need for hygienic environments

### Wellness solutions

#### Agrochemical products

- Growing agrochemicals markets in Asia and South America
- Growth in the market for agrochemical-related products (disease prevention field)
- Growth in solutions business through extension of the value chain

### Medical solutions

#### Oral care materials

- Rapid changes in trends (shift towards smaller instruments, etc.) in, and expansion of, the digital dental technology market

#### Personal care materials

- Spread of preventive and personalized medicine

#### Orthopedic materials

- Growing needs for extending healthy life-span and improving QOL

### Wellness solutions

#### Agrochemical products

- Strengthening domestic presence together with newly acquired business
- Increasing the resilience of supply chains
- Expanding our lineup of eco-friendly agrochemicals

### Medical solutions

#### Oral care materials



- Increasing presence in the Americas market


#### Orthopedic materials


- Accelerating product development and strengthening and expanding the business foundation

Pursuing Business Portfolio Transformation

Strategies and main products

Life care solutions	
Strategy	Main products
<p><b>Vision care materials</b></p> <ul style="list-style-type: none"> <li>Developing high-added-value materials to meet diverse customer needs</li> </ul> <p><b>New fields</b></p> <ul style="list-style-type: none"> <li>Cultivating other pillars beyond vision care (new businesses and products in the living environments and aquatic environments field)</li> </ul>	 <p><b>Vision care materials</b> Ophthalmic lens materials (MR™, RAV 7™, Do Green™), Photochromic lens materials (SunSensors™), Coating materials (Crystal Coat™)</p>  <p><b>Nonwovens</b> Nonwovens (AIRYFA™, SYNTEX™, TAFNEL™), Synthetic pulp (SWP™), Shape holding material (TEKNOROTE™), Breathable films (ESPOIR™)</p> <p><b>Personal care materials</b> Acrylamide, Methacrylamide, Antibacterial and anti-mold agents (YOHTOL™ DP95, YOHTOL™ DP-CD), DMI™</p>

Wellness solutions	
Strategy	Main products
<p><b>Agrochemical products</b></p> <ul style="list-style-type: none"> <li>Accelerating the expansion of our insecticides in growth markets</li> <li>Fleshing out our lineup of eco-friendly agrochemicals</li> <li>Expanding business in non-agrochemical areas (termite-proofing, veterinary drugs, living environments)</li> </ul> <p><b>New fields</b></p> <ul style="list-style-type: none"> <li>Expanding business in areas related to health technology and biotechnology (new business and new product development in nutrition field)</li> </ul>	 <p><b>Agrochemical products</b> Insecticides, Fungicides, Herbicides, Non-crop specialty chemicals, Pet medication ingredients</p> <p><b>Personal care materials</b> Medical materials (taurine)</p>

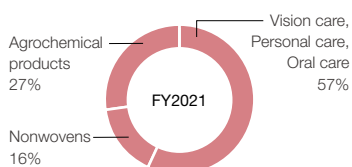
Medical solutions	
Strategy	Main products
<p><b>Oral care materials</b></p> <ul style="list-style-type: none"> <li>Bolstering group ties</li> <li>Digitalization</li> </ul> <p><b>New fields</b></p> <ul style="list-style-type: none"> <li>Expanding into orthopedic surgery sector and pharmaceutical CDMO operations</li> </ul>	 <p><b>Oral care materials</b> Restoratives (Charisma™, Venus™), Adhesives (Super-Bond™, iBOND™), Artificial teeth, Denture materials (PALA™), Impression (Flexitime™), Digital equipment/materials (cara™, DIMA™)</p> <p><b>Personal care materials</b> Medical materials (taurine, serine, PLGA™)</p>

Market share and market growth rate of key products (FY2021)

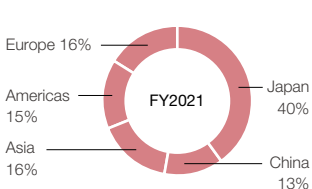
		Share	Market growth rate
Vision care	Ophthalmic lens materials (MR™ series, RAV7™ series)*1	45%	Overall 3% High refractive index 6-7%
Nonwovens	SYNTEX™ (spunbonded nonwoven hygiene materials)*2	ASEAN	No. 4 in market 8%
		Japan	No. 1 in market 1.2%
Agrochemicals		Global	— 5.0%*3
		Asia	— 9.9%*3
		Japan	6.4% 1.3%*3
Oral care	3D printer ink	—	16%*4

\*1 FY2014–2021 (including impact from COVID-19) \*2 FY2019–2021 (Japan) \*3 FY2020–2021 \*4 FY2019–2024

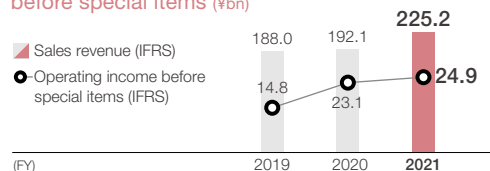
Sales revenue by product



Sales revenue by region



Trends in sales revenue and operating income before special items (¥bn)



\* Figures for previous fiscal years are approximations based on new business segments.

### Message from Business Sector President

Under our new organizational structure, the entire business segment will work as one to address society’s global challenges and needs.

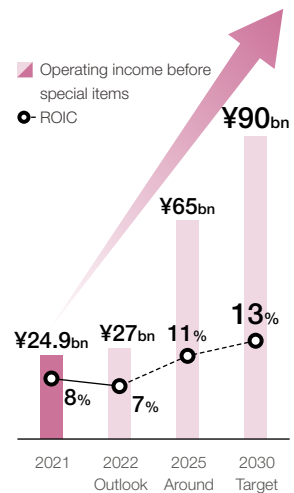
The Life & Healthcare Solutions business segment was formed by separating the agrochemical products business from the former Food & Packaging business segment and merging it with the former Health Care business segment. As these businesses share the same technological foundation, we anticipate a range of synergies, including on the production front. There is a wide range of social challenges and needs that our business segment can help address, including the increasing level of health and hygiene consciousness, shortage of food resources, and assurance of food safety and security. We aim to realize our business vision by leveraging our strengths—the wide range of products that utilize our advanced technological and R&D capabilities and the market network that we have developed via these products. We have set ambitious targets of 65 billion yen in operating income before special items and return on invested capital (ROIC) of 11% or higher by 2025 and to achieve this we will continue to expand our business foundation and markets, increase our production capacity to meet growing demand, and accelerate the development of new technologies and products through mergers and acquisitions (M&A) and other means. Through these measures, we will expand the lineup of Rose Value™ products, which our business segment has been offering primarily in life care solutions, in wellness and medical solutions as well, with the aim of achieving a Rose Value™ products sales revenue ratio of 85% by 2030. As we look to expand our business through M&As and external alliances, there is a pressing need to develop internal human resources that can reliably implement measures such as post merger integration. When formulating VISION 2030, we included our younger employees in the discussion throughout the process, which has fostered a sense of ownership of our business vision. Going forward, we will continue working as a unified team to further advance and grow the business.



#### TANAKA Hisayoshi

Managing Executive Officer,  
Business Sector President,  
Life & Healthcare Solutions Business Sector

#### Operating income before special items/ROIC targets

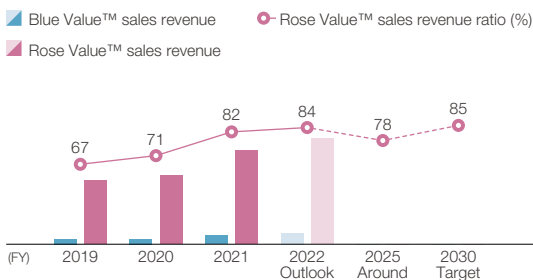


Target for Rose Value™ products sales revenue ratio  
FY2030: 85%

## The status of Blue Value™ and Rose Value™ products

Our business segment’s certified Rose Value™ products include vision care materials, personal care materials, nonwoven fabrics, oral care materials, and agrochemical products, which contribute to a more comfortable lifestyle and to improving food productivity. In particular, demand for agrochemical products is growing, even during the COVID-19 pandemic, and we are working to expand sales of the insecticides dinotefuran and TENEBENAL™. From fiscal 2022 onward, we will work to develop and launch new products to meet changing needs in response to digitalization in the oral care area. With respect to Blue Value™ products, the Mitsui Chemicals Group manufactures acrylamide, a raw material for polymer flocculants used in wastewater treatment, via an eco-friendly bio-process. By licensing this manufacturing technology and supplying highly active bio-catalysts on a global scale, we also contribute to the reduction of global greenhouse gas emissions. In addition, we will work to expand sales of our hollow-structure nonwoven fabric (AIRYFA™), which uses less plastic, and enhance our lineup of ophthalmic lens materials made from plant-derived raw materials (Do Green™).

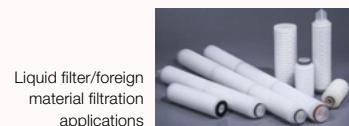
#### Sales revenue and sales revenue ratio



Ophthalmic lens materials <b>MR™</b>	Contributes to vision correction, eye health, and comfort.	Extends healthy life-span
Nonwoven fabric for disposable diapers <b>AIRYFA™</b>	Reduces amount of waste by using a hollow fiber structure. Utilized in adult and baby diapers to support a comfortable lifestyle.	Reduces CO <sub>2</sub> / Conserves resources / Enriches life and society
Insecticide <b>STARKLE™</b>	Helps to boost food production and stabilize agricultural production in rice paddies, farms, and orchards through its insecticidal effect against a variety of pests.	Protects food

### Topics Industrial applications for nonwoven fabrics

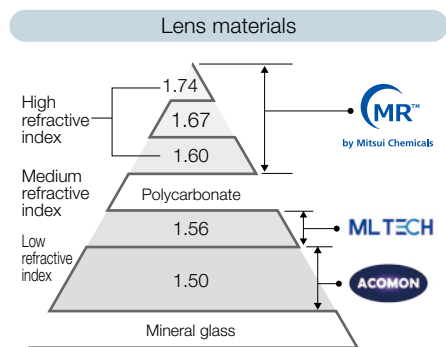
Our main nonwoven fabric product, SYNTEX™ MB, which leverages our proprietary fine fiber technology, is used in chemical mechanical planarization (CMP) slurries for cutting-edge semiconductors, as well as for filtration of foreign materials in the manufacturing process for multilayer ceramic capacitors (MLCC), etc. We will expand our SYNTEX™ MB manufacturing facilities from April 2023 in order to meet future demand growth.



**Life care solutions: Vision care** —A broad product lineup that contributes to improved quality of life (QOL)—

**A world leader in ophthalmic lens materials**

The Mitsui Chemicals Group develops plastic ophthalmic lens materials, ranging from low refractive to high refractive indices. In particular, our MR™ brand of high refractive index ophthalmic lens material is rated highly as a material brand that underpins the superb quality of the world's top brand lenses. We also aspire to enhance the coating solutions we offer. So, in 2020, we acquired COTEC GmbH, a manufacturer of hydrophobic and anti-reflective coatings, to join our affiliates SDC Technologies, Inc., which deals in high-quality abrasion-resistant coatings, and FSI Coating Technologies, Inc., which excels in anti-fog coatings.



Global market share **45%**

**Wellness solutions: Agrochemical products** —Adding new active ingredients as growth drivers for further business expansion—

**Global operations of Mitsui Chemicals Agro, Inc.**

Mitsui Chemicals Agro, Inc. possesses advanced agrochemical discovery technologies based on many years of experience in molecular design, organic synthesis, and biological evaluation, and is carrying out invention of highly unique next-generation active ingredients and the development of agrochemical products.

The company is currently working to strengthen its business foundation overseas. As a specific example, it is focusing on expanding sales of dinotefuran, which displays superior efficacy against major pests and is highly anticipated by agricultural producers in Brazil, the largest market in the world (registered for agricultural use in 41 countries and for non-agricultural use in 28 countries). Likewise, it is expanding registration of products containing TENEBENAL™ as the active ingredient to more countries (registered for agricultural use in 10 countries and for non-agricultural use in 5 countries). Moreover, the company is contributing to improved QOL through the expansion of vector solutions business in emerging countries.

**Expansion of growth driver lineup**

	Number of active ingredients of Mitsui Chemicals Agro, Inc.	+	Number of active ingredients of MMAG Co., Ltd.
Insecticides	6 Dinotefuran, TENEBENAL™, etc.	+	3 Flupyrimin, etc.
Fungicides	6	+	4 Probenazole, etc.
Herbicides	3	+	1 Glufosinate-P
Development stage	4		
Research stage	5	+	2

Expansion of eco-friendly active ingredients such as flupyrimin, etc.

**Medical solutions: Oral care/Orthopedic materials**

—Making full-scale entry into the orthopedic surgery sector by leveraging the development and technological capabilities we have cultivated—

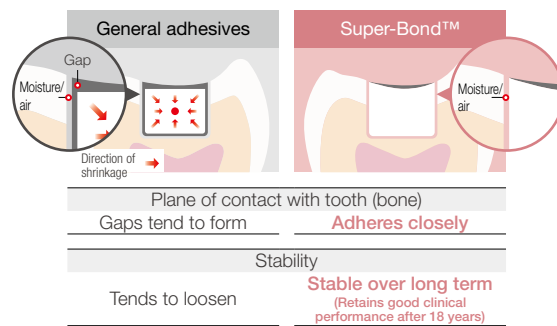
**Oral care**

In the oral care field, a transition from metal to resin materials is taking place. By bringing to bear our development capabilities in materials, we aim to contribute to improved QOL in the field of dental care with innovative products and services needed by dental surgeons and laboratories alike.

Forty years ago, we established Sun Medical Co., Ltd. and while working to accumulate clinical dental knowledge and dental materials technologies, the company has developed and released products with distinctive features such as Super-Bond™, which has high biocompatibility and a proven track record in the clinical field. Furthermore, we have continued to achieve steady business growth by integrating our proprietary polymer science technology with Kulzer's global presence and dental materials technology and DENTCA, Inc.'s digital technology to launch new products in focus areas such as restorative materials, dentures, and 3D printers. In particular, in the 3D printer area we will contribute to the digitalization of the dental treatment workflow by delivering solutions to dentists and laboratories leveraging our clinical dental knowledge, as well as by expanding our lineup of inks for a variety of applications.

**Polymer development & technological capabilities for bone-like dental materials**

**Properties of Super-Bond™ dental adhesive**



Adhesion of metal to tooth

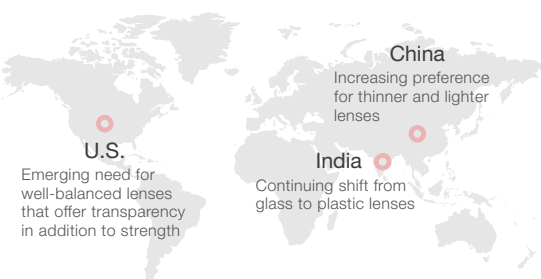


### Future growth strategy

In the key U.S. market, we are working to promote a shift away from polycarbonate materials through such developments as Costco Wholesale Corporation's adoption of lenses using MR™ as a standard feature of the glasses it sells. Meanwhile, in the Chinese market, we are working to increase our market share by promoting awareness of MR™ at major opticians. In addition, in order to meet environmental needs, we have expanded our portfolio by launching Do Green™ products, a plant-derived lens material, in the 1.60 refractive index market. We also plan to increase the production capacity at Omuta Works to meet the growing demand for high refractive index lenses. Hereafter, we will strive to develop products that deliver the best Quality of View (QOV\*) to all people who need eyewear, through innovative lens materials, coating materials, and new technologies.

\* Quality of View is a scale for measuring a person's QOL and level of satisfaction regarding their eyes, such as optimization of vision, vision comfort, eye health management, and disease prevention.

#### Three key regions

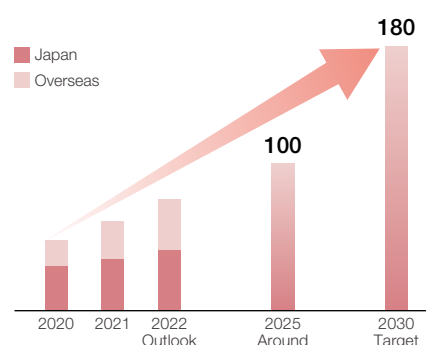


### Acquisition of agrochemicals business of Meiji Seika Pharma Co., Ltd.

With research and development as its foundation, Mitsui Chemicals Agro, Inc. aspires to be a global solutions company that drives change and contributes to sustainable food and lifestyles through its products and services.

The company's acquisition of the agrochemical business of Meiji Seika Pharma Co., Ltd. (newly established as MMAG Co., Ltd.) in January 2022 is anticipated to accelerate business growth by (1) bringing new growth drivers and human resources to the company, (2) strengthening its presence in the Japanese domestic market, (3) strengthening its portfolio and licensing business outside Japan, (4) expanding its eco-friendly product portfolio, and (5) enhancing its drug discovery capabilities. In particular, dinotefuran and TENEBENAL™, the growth driver chemicals offered by Mitsui Chemicals Agro, Inc., will be supplemented by probenazole, flupyrimin, and glufosinate-P, offered by MMAG Co., Ltd. The company will also work to further broaden its portfolio of active ingredients, including eco-friendly active ingredients, and expand business in Japan as well as in key overseas countries and areas (Brazil, India, and Southeast Asia).

Sales revenue of agrochemicals (¥bn)



### Expansion into the orthopedic surgery sector



The orthopedic surgery sector is expected to continue to grow against the backdrop of an increasing need to extend healthy life-spans and improve QOL. In addition, with technological trends shifting from metal to resin materials, we are working to develop new orthopedic materials by utilizing capabilities including materials technologies for biocompatibility and stability that we have developed in the dental materials field, which is seeing a similar trend. Going forward, we will continue to propose new solutions such as transitioning to alternative materials and treatment methods.

In December 2021, the Group invested in Japan Medical Dynamic Marketing, Inc. (Japan MDM), entering into a business and capital alliance agreement with a view to expanding into the orthopedic surgery sector. This agreement is anticipated to (1) strengthen our capability to collect clinical needs information through utilization of Japan MDM's network, (2) accelerate joint development of new products, and (3) enable us to utilize Japan MDM's sales channels in Japan and the U.S. and its medical business foundation, including pharmaceutical affairs.

In order to pursue synergies between the two companies, we have dispatched officers and employees from the Group to work with our counterparts, established several working groups consisting of members from both companies, and initiated joint development projects. Going forward, we will work to further grow our orthopedic business by launching newly developed products as well as expanding our business foundation through M&As and alliances.

#### Proposing new materials for orthopedic applications (example)

**Current**

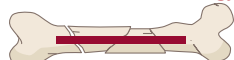
Complicated and technical
Secured with metal plates

Complicated procedure of binding bone fragments with threads  
Many screws required to hold plates in place  
Common for screws to become detached

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**Proposal**

Plates fixed onto bone fragments with use of our dental adhesive technology





# Mobility Solutions

Business vision (Our ideal vision for 2030)

Providing unique materials, features, and services to help solve social challenges and achieve sustainable business growth

## Challenges and needs of society

- Reduction of environmental impact in the supply chain
- Lightweighting and utilization of sustainable materials, including recycled materials and biomass materials
- Energy conservation and increased utilization of renewable energy
- More comfortable mobile space and higher functionality of vehicle cabins amid advances in CASE and MaaS

## Competitive advantages

- Extensive lineup of materials
- Advanced technological capabilities and product quality
- Extensive customer base that taps into our global network
- Technical service
- Ability to propose total solutions across the value chain

## Issues

- Insufficient production and supply capacity to respond to market changes and rising demand; establishment of a flexible production system

## Risks and opportunities

- Delayed recovery in automobile demand and production due to global economic stagnation and supply chain disruptions
- Changes in the important players and development cycle of automotive-related components
- Expanding need for materials development associated with lightweighting, increased comfort, and electrification of automobiles
- Expanding utilization of recycled and bio-based raw materials in the context of accelerating efforts to reduce environmental impact
- Creation and expansion of solutions business opportunities driven by a trend toward MaaS in vehicles

Strategies, main products, and affiliates

Materials business	
Strategy	Main products
<ul style="list-style-type: none"> <li>• Focusing sales and development on fields where growth potential and contribution to sustainability overlap with our competitive edge</li> <li>• Increasing production capacity to meet demand and building resilient production system that maximizes the utilization of global sites</li> </ul>	  <p><b>Elastomers</b></p> <ul style="list-style-type: none"> <li>• Ethylene-Propylene Terpolymer (Mitsui EPT™), Alpha-olefin copolymer (TAFMER™), Liquid polyolefinic oligomer (LUCANT™)</li> </ul> <p><b>Composite materials</b></p> <ul style="list-style-type: none"> <li>• Adhesive polyolefin (ADMER™), Thermoplastic olefinic elastomer (MILASTOMER™), Engineering plastics (ARLEN™), PP compounds, Metal/resin integral molding parts (POLYMETAC™), Unsaturated polyester (POLYHOPE™), Molding compound (POLYMAL™ MAT)</li> </ul>
Solutions business	
Strategy	Affiliates
<ul style="list-style-type: none"> <li>• Pursuing a business model of “concept driving,” created through collaboration with other companies and the functions, technologies, and materials possessed by the Mitsui Chemicals Group</li> <li>• Exploring business opportunities by providing services that utilize our technologies and expertise</li> </ul>	<ul style="list-style-type: none"> <li>• ARRK Group, Kyowa Industrial Co., Ltd.</li> </ul>  

## Market share of key products (FY2021)

	Share	
PP compounds	Global	No. 2
	Asia	No. 1
	Japan	No. 1

### Message from Business Sector President

Viewing the major shifts taking place in the mobility field as an opportunity, we will work to capture new business opportunities.

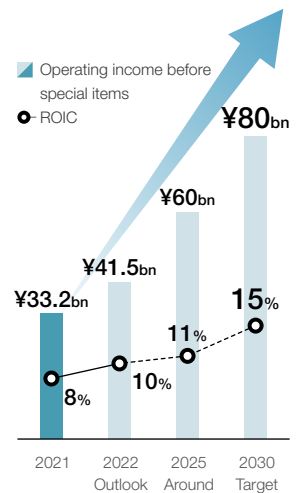
The Mobility Solutions business segment was launched under a new organizational structure after transferring the performance polymers business, which is closely connected to ICT, from the former Mobility business segment to the newly-formed ICT Solutions business segment. The mobility field is currently in the midst of a major transformation, commonly referred to by the acronyms CASE (connected, autonomous, shared, and electric) and MaaS (mobility as a service), driven by a growing awareness of the need for sustainability, among other factors. In response to this external environment, our business segment aims to help solve social challenges through our materials business, which leverages the Group's advanced technological capabilities, high quality, and broad lineup of materials, and our solutions business, which integrates our materials and services. In the materials business, we will work to optimize our entire global production system in order to meet future increases in demand, while at the same time concentrating our resources in high-growth and sustainability-related fields where we can leverage our competitive advantages. In the solutions business, we will collaborate with other companies to pursue a "concept driving" business approach, in which we propose solutions to customers with a view to mass production and development from the early development stage. We will also explore new business opportunities by delivering services that leverage our technologies and expertise as a materials manufacturer. Through the above strategies, we will work to increase the ratio of sales revenue from Blue Value™ products, which help address environmental issues, as well as to expand the lineup of Rose Value™ products by providing services and other products. Going forward, we will work to realize our business vision by incorporating the digital transformation (DX) and corporate transformation (CX) strategies being pursued at the Group-wide level into the Mobility Solutions business segment, or in other words, to improve our operational efficiency and organizational soundness through CX initiatives at the business segment level.



#### KOMORIYA Atsushi

Managing Executive Officer,  
Business Sector President,  
Mobility Solutions Business Sector

Operating income before special items/ROIC targets

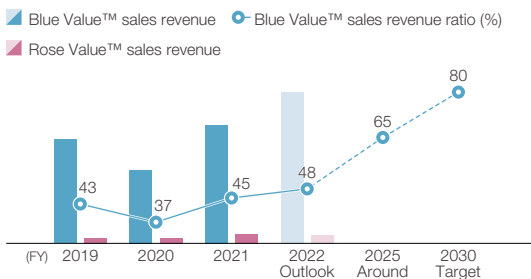


Target for Blue Value™ products sales revenue ratio  
FY2030: 80%

## The status of Blue Value™ and Rose Value™ products

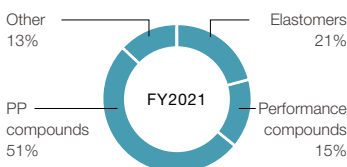
The Mobility Solutions business segment is working to develop products and services that contribute to lighter weight, energy conservation, and recyclability of automobiles, as well as improved functionality in their renewable energy applications, in line with development trends in the value chain that are occurring in response to growing environmental awareness around the world. In fiscal 2021, we expanded our lineup of Blue Value™ products, primarily items that contribute to a reduction in energy consumed in manufacturing and processing through the supply chain. Going forward, we will strive to contribute to society through our business by continuing to enhance the performance and quality of our Blue Value™ products. We will achieve this by developing products and services that help realize a circular economy, and by pushing forward with sales, development, and production strategies with the same objective, such as through efforts to support mechanical recycling.

#### Sales revenue and sales revenue ratio

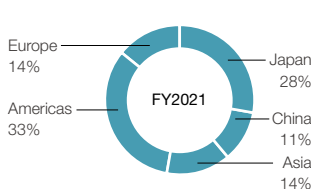


Bumper and instrument panel materials <b>PP compounds</b>	Reduce GHG emissions by roughly 13% by not requiring painting process.	Reduces CO <sub>2</sub>	Conserves resources
Adhesive polyolefin for plastic fuel tanks <b>ADMER™</b>	Lightens fuel tanks by 10–30% with the use of plastics instead of metal.	Reduces CO <sub>2</sub>	
Lubricant additive for automobiles <b>LUCANT™</b>	Improves fuel efficiency by reducing temperature dependence of lubricant's viscosity and maintaining appropriate viscosity.	Reduces CO <sub>2</sub>	
Concrete surface reinforcement agent <b>Toughness Coat™</b>	Resin film formed on the surface of concrete structures gives greater durability and impact resistance. Extends infrastructure service life and prevents/mitigates the effects of disasters.		Enriches life and society

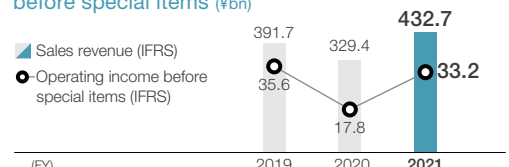
#### Sales revenue by product



#### Sales revenue by region



#### Trends in sales revenue and operating income before special items (¥bn)



\* Figures for previous fiscal years are approximations based on new business segments.

**Materials business**

**Elastomers:**

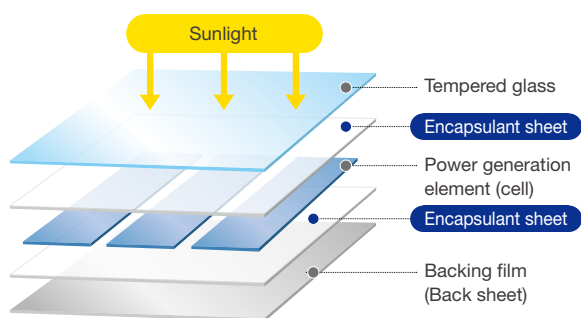
**TAFMER™** —Strengthening profitability through expansion into other applications and higher added value, as well as bolstering supply system for growing demand—

The Mitsui Chemicals Group’s TAFMER™ enjoys the second highest global market share and highest Asian market share for use in auto bumper and instrument panel materials.

TAFMER™ is a resin modifier and soft molding material with features such as flexibility and light weight that can be used in a wide range of applications. Currently, the solar cell market is expanding rapidly against the backdrop of the spread of renewable energy promoted by various national governments, and use of TAFMER™ as an encapsulant sheet for solar cells is expanding. When used in solar cell encapsulants, compared

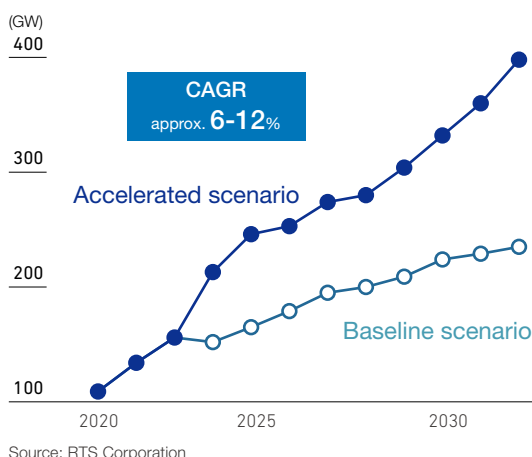
to conventional EVA-based encapsulant sheets, TAFMER™ can be expected to maintain output for a longer period of time, resulting in improved total power generation, and its low water absorption rate improves water resistance, enabling continued power generation even in harsh environments.

Aiming at future growth of the solar power generation market and capturing growing demand through further development of other applications, we have made a decision to increase production capacity by 120 KT (scheduled for completion in fiscal 2024) to strengthen our supply system.



Inside a solar cell, elements called “cells” are lined up to generate electricity, which are fixed to a frame by a transparent encapsulant sheet.

**Solar battery market forecast**

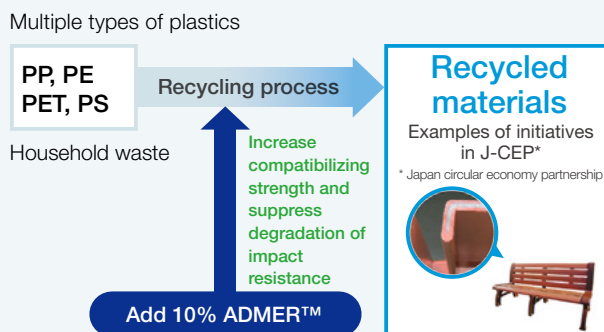


**Topics**

**Mechanical recycling initiatives** —Contributing to the realization of a sustainable society by building a recycling system—

With an eye to realizing the social implementation of chemical and mechanical recycling, the Mitsui Chemicals Group is working with local governments and brand owners to conduct demonstration testing of resource collection and recycling, as well as to develop recycling-related technologies.

As part of this, we add ADMER™, which is used in applications such as automobile fuel tanks, into the plastic recycling process in an effort to add compatibility to recycled materials and to suppress the degradation of impact resistance. These efforts are expected to contribute to furthering the popularization of plastic recycling.



**Contributing to the popularization of plastic recycling**



**Materials business**

**Composite materials:**

**PP compounds** —Utilizing high global market share and technological capabilities to capture growth markets—

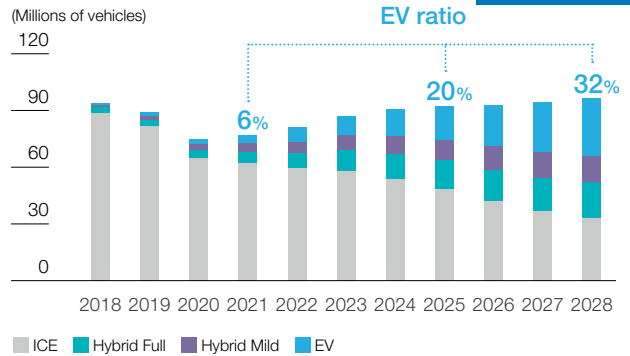
Our automotive material PP compounds, which enjoy a high global share, are materials that enhance impact resistance and rigidity because other polymers and additional agents, such as elastomers and talc, are added to polypropylene, which has superior moldability. PP compounds are used in items such as bumpers and instrumental panels. In particular, we have earned a reputation for providing high-quality products that meet various customer needs through technologies that extend back to raw materials and the design of the resin itself. Currently, approximately 50 to 60 kg of PP compounds are used per vehicle, but the amount used per vehicle is expected to increase due to stronger demand for vehicle lightweighting as the shift to EVs accelerates in future. We have built a system capable of quickly accommodating the global strategies of automobile manufacturers, by maintaining nine production sites\*1 and seven R&D sites\*2 in key regions around

\*1 The Netherlands; China; India; Japan; Thailand; Ohio, U.S.; Tennessee, U.S.; Mexico; Brazil  
 \*2 The Netherlands; China; India; Japan; Thailand; Ohio, U.S.; Tennessee, U.S.



the world. In addition to PP compounds, recent years have seen the increasing adoption of plastic materials such as our glass fiber-reinforced polypropylene (GFPP) in places such as rear doors and sliding doors as a replacement for metal. Hereafter, we will capitalize on the technological superiority and supply capabilities of the Group to solve social challenges and contribute to further lightweighting of electric vehicles. At the same time, we will strive to further strengthen our business by accurately identifying growth markets to meet demand growth and increased market share.

**Number of automobiles produced globally** CAGR 0.2%



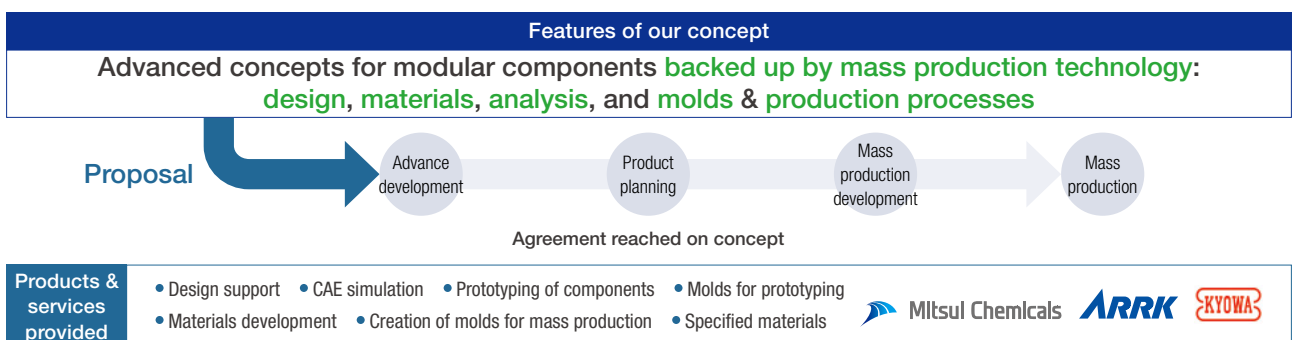
**Solutions business**

**Business focused on offering concepts for modular components** —Aiming to establish a new business model by leveraging the technology and expertise cultivated to date—

In the mobility domain, the business environment is currently undergoing major changes due to the progress of CASE and MaaS, such as diversification of automotive needs, streamlining of development processes in the mobility industry, horizontal specialization, and entry of companies from other industries. Against this backdrop, we are building a business focused on offering concepts for modular components to capture new business opportunities. In response to the demand for further lightweighting and improved comfort in automobiles, we propose concepts for modular components backed up by mass production technology from the early development stage, and provide not only materials at the mass production stage but also services at each stage of the mass production

development process.

We will combine the solution functions of design, analysis, and mold design that the Group has strengthened and acquired through actions such as the acquisition of ARRK Corporation as a wholly owned subsidiary, with our technologies and expertise as a materials manufacturer, and we will also utilize our collaboration with external partners to push forward with progress. Conceptual proposals for exterior, interior, and other components are already underway. By rapidly establishing a new business model in line with the solutions-based business models outlined in VISION 2030, we will help solve social challenges and capture business opportunities in the mobility domain.



**Providing products and services that combine the technologies of a materials manufacturer with solutions capabilities**





# ICT Solutions

Business vision (Our ideal vision for 2030)

Creating and growing a “unique” ICT Solutions business that contributes to the evolution of AI, beyond-5G, and other such technologies that can support safe and pleasant infrastructure, healthy living, and a sustainable global environment

### Challenges and needs of society

- Progress of digitalization
- Safe and pleasant infrastructure
- Healthy living
- Evolution of AI and beyond-5G that support a sustainable global environment

### Competitive advantages

- Unique products with high market share in the semiconductor and assembly field and in the imaging field
- Advanced technological capabilities, product quality, and technical support
- High brand power, especially in Asia
- Global customer base
- Ability to propose total solutions across the value chain


### Issues

- Creating a system suitable for the fast pace of ICT customers
- Building a network with digital platform companies
- Strengthen research and development functions such as customer process compatibility evaluation

### Risks and opportunities

- Market stagnation due to short supply of semiconductors
- Soaring raw material prices and supply chain disruptions due to heightened geopolitical risks
- Stagnation in global economy due to the renewed spread of COVID-19
- Continued solid expansion of semiconductor market and market for smartphones and other devices
- Rapid market expansion due to emergence and popularization of new devices such as XR
- Continued expansion of lithium-ion batteries and next-generation battery markets
- Emerging recycling needs associated with the trend to reduce waste plastics

Strategies and main products

Semiconductor & assembly solutions	
Strategy	Main products
<ul style="list-style-type: none"> <li>• Aligning individual business strategies with our semiconductor technology roadmap, and creating new businesses and products through a Group-wide effort</li> </ul>	<ul style="list-style-type: none"> <li>• Dust covers for photomasks (MITSUI PELLICLE™), silane/disilane, soluble polyimide varnish (PIVAR™), high frequency printed circuit board material (Gigafreq™), resist raw material (MILEX™), piezoelectric material (PIEZOLA™), semiconductor manufacturing process tapes (ICROS™ Tape), silicone-coated film (SP-PET™), heat-resistant release film (Opulent™)</li> </ul>
Imaging solutions	
Strategy	Main products
<ul style="list-style-type: none"> <li>• Developing and offering new optical materials that match the market's growth from simply “photographing” to “viewing” and “sensing”</li> </ul>	 <ul style="list-style-type: none"> <li>• Lens materials (APEL™), materials for reflective films (TPX™), LCD and OLED sealing materials (STRUCTBOND™), transparent polyimide varnish (ECRIOS™)</li> </ul>
Battery material solutions	
Strategy	Main products
<ul style="list-style-type: none"> <li>• Expanding our business in the realm of lithium-ion batteries while also bolstering our development of next-generation battery</li> </ul>	<ul style="list-style-type: none"> <li>• Capacitor material (TPX™), materials for LiB separator/binder (HI-ZEX MILLION™), electrolyte for LiB (MILLET™), adhesive for LiB pouch (UNISTOLE™), heat resistant coating material (BONRON™)</li> </ul>
Converting solutions	
Strategy	Main products
<ul style="list-style-type: none"> <li>• Capturing Asian demand for high-performance packaging materials and environmental measures, and targeting industrial applications that make use of our packaging adhesives technology</li> </ul>	<ul style="list-style-type: none"> <li>• L-LDPE film (T.U.X™), resource-saving and environmentally friendly L-LDPE film (L-Smart™), heat sealant for environmentally friendly paper packaging materials (CHEMIPEARL™), barrier coating materials (TAKELAC™ WPB), packaging adhesives (TAKENATE™ &amp; TAKELAC™)</li> </ul>

### Market share and market growth rate of key products (FY2021)

	Share	Market growth rate
ICROS™ Tape, semiconductor manufacturing process tapes	Global No. 1	7%
APEL™, cyclic olefin copolymer	Global Over 50% (No. 1)	Smartphone lens market 7%

### Message from Business Sector President

#### Capturing the needs of growing markets and creating unique products.

In April 2022, the Mitsui Chemicals Group established the new ICT Solutions business segment by consolidating the ICT-related products and services that were previously handled by the respective business segments. Our business segment will play a central role in providing new solutions for markets where long-term growth is projected, including semiconductors and assembly, imaging, and battery materials. In this highly competitive market, it is vital to speedily develop unique products that deliver new added value in order to gain an edge over the competition. To further strengthen our research and development foundation toward this objective, we have established the Innovative Solutions Center for Information & Communication Technology as a central organization that concentrates and coordinates our core technologies, including the molecular design and synthesis technologies we have developed to date.

Collaboration between the employees gathered from many different divisions is proceeding very smoothly, and development themes are being generated rapidly. In addition, there are heightening expectations for synergies with organizations both inside and outside the company. We also expect that these collaborations will accelerate the launch of Blue Value™ and Rose Value™ products related to mobility, health care, and other areas that are closely connected to ICT.

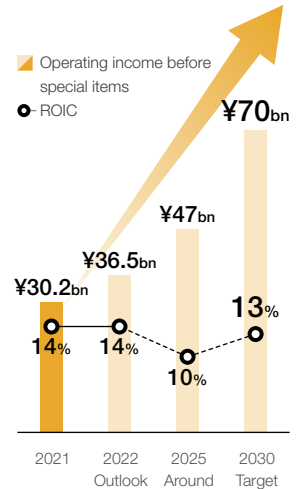
Under VISION 2030, the Mitsui Chemicals Group is breaking out of its past mold and dynamically evolving. The ICT Solutions business segment will continue to boldly take on challenges in order to spearhead this effort and serve as a driving force for the entire Group.

#### HIRAHARA Akio

Senior Managing Executive Officer,  
Business Sector President,  
ICT Solutions Business Sector



#### Operating income before special items/ROIC targets



Target for Blue Value™ products sales revenue ratio  
FY2030: 56%

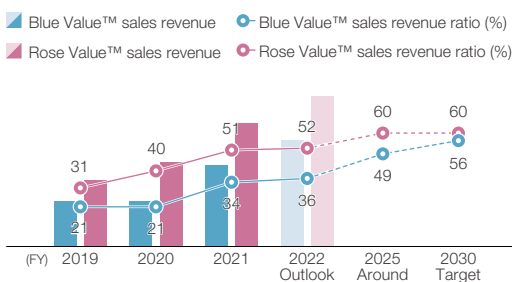
Target for Rose Value™ products sales revenue ratio  
FY2030: 60%

## The status of Blue Value™ and Rose Value™ products

The ICT Solutions business segment's products contribute to ensuring the sustainability of communities and improving comfort in people's lives by contributing to the evolution of AI, beyond-5G, and other such technologies that support a sustainable global environment.

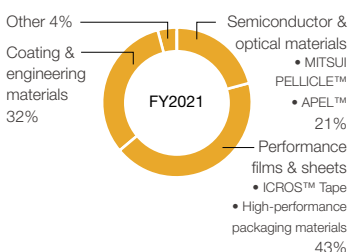
In fiscal 2021, Blue Value™ products and Rose Value™ products account for over 30% and 50%, respectively, of sales revenue in this business segment. Going forward, we will continue to further enhance the performance and quality of our existing certified product lineup and develop new certified products in response to changing social needs.

#### Sales revenue and sales revenue ratios

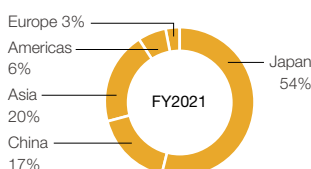


Sealant film <b>T.U.X™</b>	Saves energy by using a lower heat seal temperature, while its improved film strength means less resin is used. Its excellent sealing performance and impact resistance reduces the amount of food wasted in food production and distribution.	Reduces CO <sub>2</sub>	Conserves resources	Protects food
Heat sealant for environmentally friendly paper packaging materials <b>CHEMPEARL™</b>	Reduces the volume of resin used because it can form an even thinner film than that on polyethylene (PE) laminated paper. Paper coated with it is easily turned into a recycled pulp slurry, improving recyclability.	Reduces CO <sub>2</sub>	Conserves resources	

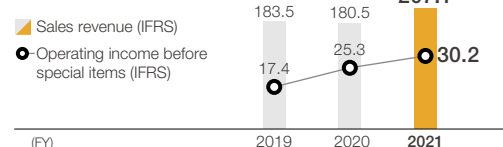
#### Sales revenue by product



#### Sales revenue by region



#### Trends in sales revenue and operating income before special items (¥bn)



\* Figures for previous fiscal years are approximations based on new business segments.

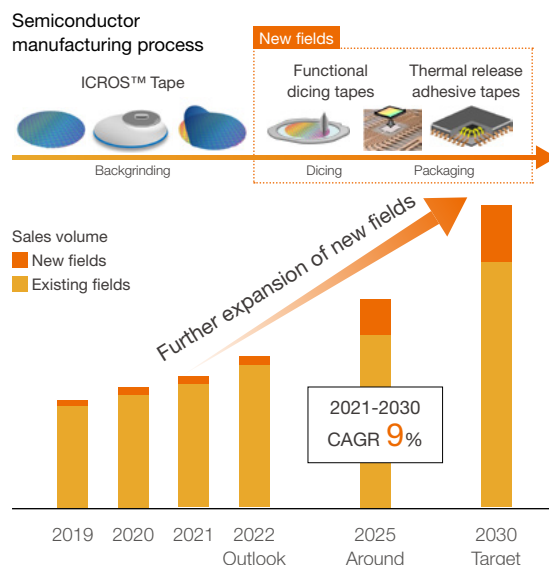
### Semiconductor & assembly solutions:

#### ICROS™ Tape —A wide product lineup that contributes to improved quality of life—

ICROS™ Tape is a surface protection tape used during silicon wafer backgrinding in the manufacturing process for semiconductors that boasts the top market share in the world.

High growth is expected to continue in the semiconductor market due to the spread of AI utilization, progress in IoT, and the increasing functionality and efficiency of electronic devices in the automotive, industrial, and infrastructure sectors where efforts to achieve decarbonization and renewable energy are progressing.

In order to appropriately respond to such growing demand for semiconductors, we are expanding capacity at our Taiwanese plant (more than doubling the current capacity) aiming to start its commercial operation in October 2023, to expand the supply capacity of ICROS™ Tape together with the Nagoya Works in Japan, as well as to strengthen the BCP system. In addition to these applications, we are also focusing on development into new fields, aiming to expand our business areas by offering new products with high proposal capabilities, such as functional dicing tapes that combine heat resistance and pick-up performance, and thermal release adhesive tapes.



#### MITSUI PELLICLE™ —Aiming for the world's top pellicle manufacturer through portfolio expansion and technological development—

### EUV pellicles

Extreme ultraviolet (EUV) pellicles are dust covers for photomasks compatible with EUV lithography technology, which offers an ultra-short wavelength for semiconductors used in cutting-edge devices with a line width of 7 nm or less.

In April 2021, the Mitsui Chemicals Group received an exclusive license agreement from ASML Holding N.V., the global No. 1 company in the field of semiconductor lithography systems, and began the only commercial production of EUV pellicles in the world, and is making smooth progress toward mass production. In addition, we will continue to improve EUV transmittance through continuous technological development to help our customers improve their productivity.

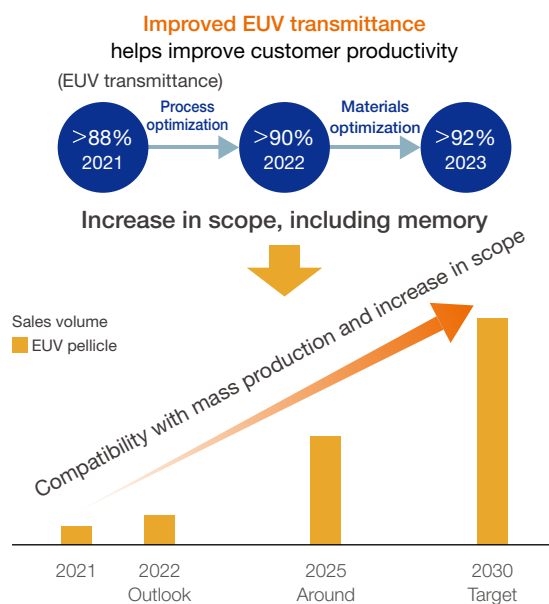
### Acquiring the pellicle business of Asahi Kasei Corporation

In the pellicle business, further technological development and continuous additional investment are required to respond to the trend toward higher resolution and more advanced quality assurance standards in the LSI pellicle\*1 market. Against this backdrop, we decided to acquire the pellicle business of Asahi Kasei Corporation, which has advanced technology and a solid business foundation, in May 2022. In addition to driving the FPD pellicle\*2 market as its number one player, the company is also pushing forward with improvements in the manufacturing process and expansion of production capacity in the LSI pellicle market. In particular, recent years have seen it expand its share in the cutting-edge market posed by ArF immersion lithography.

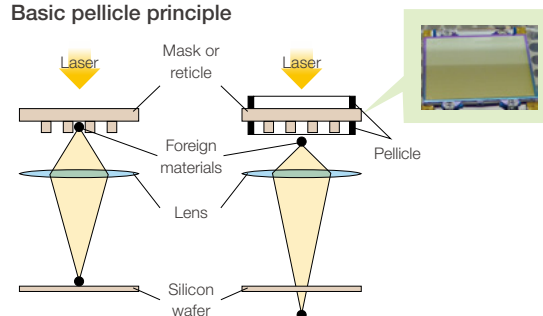
Through the synergistic effects of this business acquisition, we aim to become the world's leading comprehensive pellicle manufacturer by strengthening our technological foundation and expanding our product lineup in the pellicle business.

\*1 LSI pellicles: for semiconductors.

\*2 FPD pellicles: for LCD and OLED panels. Main applications are smartphones, tablets, PCs, and TVs.



### Basic pellicle principle



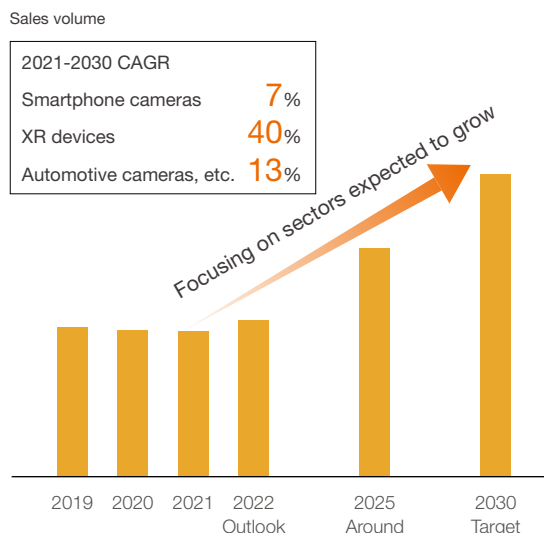
\* Foreign materials on the pellicle will not be transcribed onto the wafer.

### Imaging solutions:

**APEL™** —Aiming for further growth by increasing capacity and launching products in new markets—

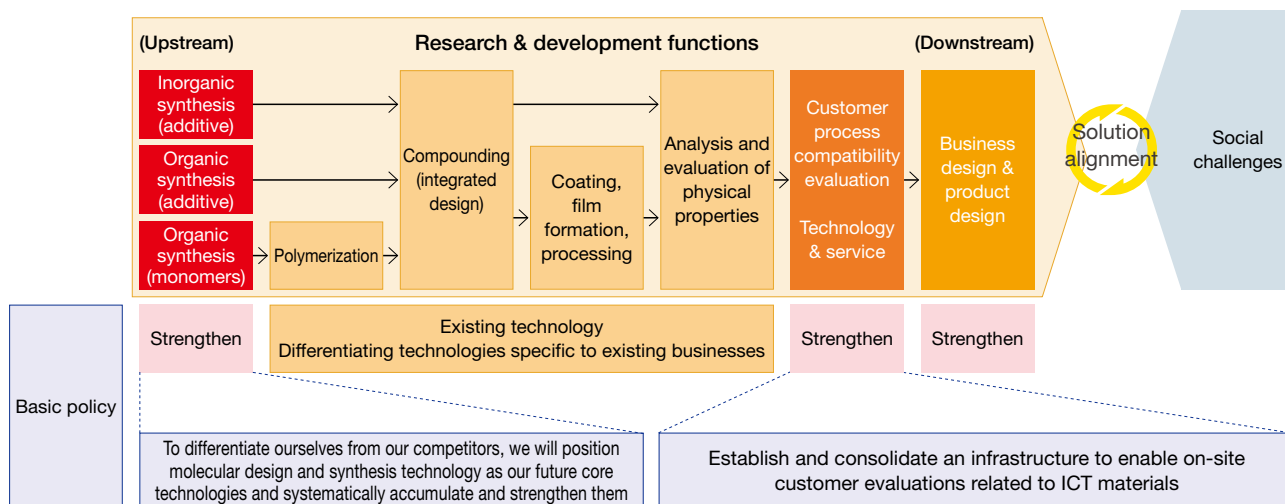
APEL™ is our proprietary cyclic olefin copolymer (COC) which combines the performance characteristics of polyolefin resins and amorphous resins. With the highest refractive index among the amorphous polyolefins, these superior optical properties make it ideal for high-transparency optical lenses and optical components. Furthermore, sales are expanding for the main application of smartphone camera lenses on the back of continued growth in the number of cameras in smartphones. In addition to this, we are working to expand its applications even more, including automotive camera lenses (used in sensing cameras, surround view cameras, dashboard cameras, and rearview monitors, etc.), lenses for XR devices (AR/VR, etc.), and head-up display components (such as condensing lenses and combiners).

With the development of these new applications and the start of commercial operation of the new plant in August 2022, the Mitsui Chemicals Group will steadily respond to rapidly growing market needs and further expand our business.



### Strengthening competitiveness to create new businesses and products

Vertically integrated product development from molecular design and synthesis technology to customer process compatibility evaluations



In the R&D function related to the ICT business, the Mitsui Chemicals Group has organized its current technologies and identified problem areas that need to be further strengthened, and formulated a basic policy to strengthen competitiveness for the creation of new businesses and new products. A key point in strengthening is that, in order to differentiate ourselves from our competitors, we will position molecular design and synthesis technology such as upstream inorganic and organic synthesis as our future core technologies, and systematically

accumulate and strengthen them. At the same time, we will develop an infrastructure that enables on-site customer evaluations, including downstream customer process compatibility evaluations and technical services.

Furthermore, with the new establishment of the Innovative Solutions Center for Information & Communication Technology, we will pursue product superiority (uniqueness) by bringing together the core technologies of the Group.





# Basic & Green Materials

Business vision (Our ideal vision for 2030)

Accomplishing business restructuring as well as leading the Mitsui Chemicals Group's efforts to bring about a circular economy revolution with the aim of reducing environmental impacts and realizing a decarbonized society

### Challenges and needs of society

- Provision of products with even greater added value
- Increased environmental awareness
- Reduction of greenhouse gas (GHG) emissions through energy efficiency, the use of renewable energy and bio-based raw materials, etc.
- Reduction/reuse of plastic waste

### Competitive advantages

- Globally competitive naphtha crackers
- Metallocene and other polyolefin catalytic technologies
- High-performance polyols and high-performance MDIs to differentiate polyurethane products
- Development of bio-polyols, related manufacturing technology

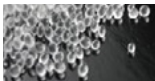


### Issues

- Further reducing volatility
- Strengthening and expanding high-performance products
- Reducing GHG emissions
- Bolstering efforts toward a circular economy

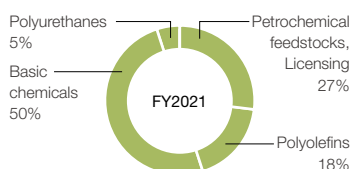
### Risks and opportunities

- Effect of Russian invasion of Ukraine on global and Japanese economy
- Deceleration in global economy due to COVID-19 pandemic
- Acceleration in depreciation of Japanese yen due to rise in U.S. interest rates
- Depreciation of emerging countries' currencies due to rising U.S. interest rates and resulting impact on their economies
- Rise in crude oil (naphtha) prices
- Growing need for eco-friendly solutions (bio-based raw materials)
- Expansion of high-value-added product offering (e.g., packaging materials, insulation materials, etc.)
- Evolution in digital transformation (DX) technology

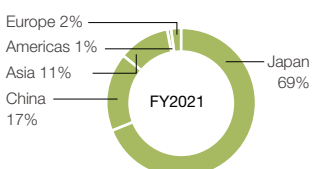
Strategies and main products

		Strategies		
		Restructuring	Downstream improvement	Green chemicals
		Reducing volatility by speeding up restructuring of phenols, PTA, and polyurethane businesses <ul style="list-style-type: none"> <li>• Cost-cutting</li> <li>• Product chain optimization at various bases</li> <li>• Going more asset-light by way of tie-ups, etc.</li> </ul>	Stabilizing earnings by bolstering downstream businesses, such as by expanding our operations for high-performance and niche products <ul style="list-style-type: none"> <li>• High-performance PP, high-performance MDI</li> <li>• Honshu Chemical Industry Co., Ltd. (health care, ICT materials)</li> <li>• HQ, catalyst licensing</li> </ul>	Bolstering eco-friendly efforts by expanding green chemical operations <ul style="list-style-type: none"> <li>• Bio-based raw materials</li> <li>• Bio-based derivatives (bio-polyolefins, bio-polyols)</li> <li>• Recycle (mechanical &amp; chemical recycling)</li> </ul>
Main products	Petrochemicals		• Ethylene, Propylene, High density polyethylene, Metallocene linear low density polyethylene (EVOLUE™), Linear low density polyethylene, Polypropylene, Olefin polymerization catalysts	
	Basic chemicals		• Phenol, Bisphenol A, Acetone, Isopropyl alcohol, Methyl isobutyl ketone, Purified terephthalic acid, PET resin, Ethylene oxide, Ethylene glycol, Hydroquinone, Meta/Para-cresol, Ammonia, Urea, Melamine	
	Polyurethane raw materials		• TDI (COSMONATE™), MDI (COSMONATE™), PPG (ACTCOL™, ECONYKOL™)	

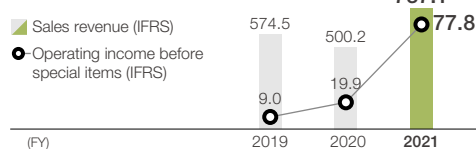
Sales revenue by product



Sales revenue by region



Trends in sales revenue and operating income before special items (¥bn)



\* Figures for previous fiscal years are approximations based on new business segments.



## Message from Business Sector President

Recognizing our key role as a foundation of the Group's strength, we will lead the Group's transformation going forward.

### Role of the business segment

The Basic & Green Materials business segment, which was created by integrating the Green Sustainable Chemicals Division into the former Basic Materials business segment, provides essential materials for a wide range of products used in all areas of our daily lives, including petrochemicals and basic chemicals. *Keizai*—the Japanese term for economy—is derived from the meaning “to govern a nation and provide relief to its people.” This implies that the essence of companies, which play a role in the economy, is to work toward resolving social challenges. I believe that for our business segment, ensuring a stable supply of products is the key to maintaining the quality of life and convenience for everyone, and that this directly leads to the resolution of a variety of social challenges. Another feature of our business segment is that we possess globally competitive naphtha crackers, which are a source of strength for the Mitsui Chemicals Group. The chemical materials produced in naphtha crackers are essential materials in the products that the Group supplies in the growth domains of Life & Healthcare, Mobility, and ICT Solutions. This integrated upstream-to-downstream approach to the value chain is the source of the Group's strength, as it delivers benefits in terms of cost control, supply stability, product safety assurance, technological development, and other aspects.

On the other hand, from the perspective of protecting the natural environment, which is a pressing social challenge, the CO<sub>2</sub> emitted by our business segment accounts for approximately 70% of the Mitsui Chemicals Group's total CO<sub>2</sub> emissions, and we therefore have a very large responsibility in order to realize the Group's goal of carbon neutrality. In addition, the basic raw materials that our business segment produces include commodity products, and volatility is also a challenge as the business is susceptible to market conditions. Overall, our business segment exemplifies both strengths that the Mitsui Chemicals Group possesses and the challenges it faces.

### Leading the Group's transformation in order to create sustainable value

In light of the above, we are working to reduce volatility in this business segment through restructuring, as well as to bolster downstream businesses by expanding operations for high-performance and niche products. In parallel with these efforts, we are also striving to expand the green chemicals business. In addition, we are working to utilize digital transformation (DX) in order to prevent plant problems that could lead to significant lost opportunities. With regard to bolstering downstream businesses, we have decided to build a new high-performance PP plant and expand our high-performance MDI production capacity in order to strengthen our lineup of high-value-added products. In addition, we are providing our technology, human resources, and other resources to our newly-consolidated subsidiary Honshu Chemical Industry Co., Ltd. in order to give support for production technologies and to optimize production. We anticipate that this will lead to the generation of even greater synergies in the future. In our efforts to further expand the green chemicals business, we are promoting initiatives unique to the Mitsui Chemicals Group, which owns crackers, in collaboration with other companies. These initiatives include the shift to bio-based raw materials and mechanical recycling. Furthermore, we are working on a Group-wide level to advance the business in an efficient manner by consolidating and sharing information related to the green chemicals business of each business segment. We have already received inquiries regarding our bio-based derivatives, primarily from European chemical manufacturers, and we expect this market to continue growing in the future.

We have set targets for operating income before special items of 40 billion yen and return on invested capital (ROIC) of 7% by around 2025, and we hope to achieve these by streamlining our production facilities, increasing added value, and realizing synergies with Honshu Chemical Industry Co., Ltd. in the future. We also anticipate that growth of our product lineup related to bio-based hydrocarbons will contribute substantially to achieving our goals of increasing the sales revenue ratios of Blue Value™ and Rose Value™ products and achieving carbon neutrality.

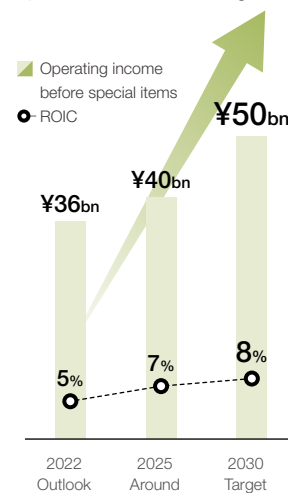
As I mentioned earlier, our business segment exemplifies both the strengths and challenges of the Mitsui Chemicals Group, and it is also true that we receive a range of opinions, particularly with regard to our ownership of crackers. However, our business segment, which is positioned upstream in the value chain, is one of the strengths of the Mitsui Chemicals Group, and it is important that we, including our younger employees, acknowledge that it is this strength that enables us to realize sustainable value including the stable supply of products and the achievement of high added value throughout the value chain. Based on this understanding, we must meet society's expectations by committing ourselves to carrying out the reforms necessary to transform our business, regardless of the difficulties involved.



### YOSHIZUMI Fumio

Managing Executive Officer,  
Business Sector President,  
Basic & Green Materials Business Sector

### Operating income before special items/ROIC targets



Target for Blue Value™  
products sales revenue ratio  
FY2030: 12%

## Initiatives to reform product portfolio and bolster and expand downstream businesses

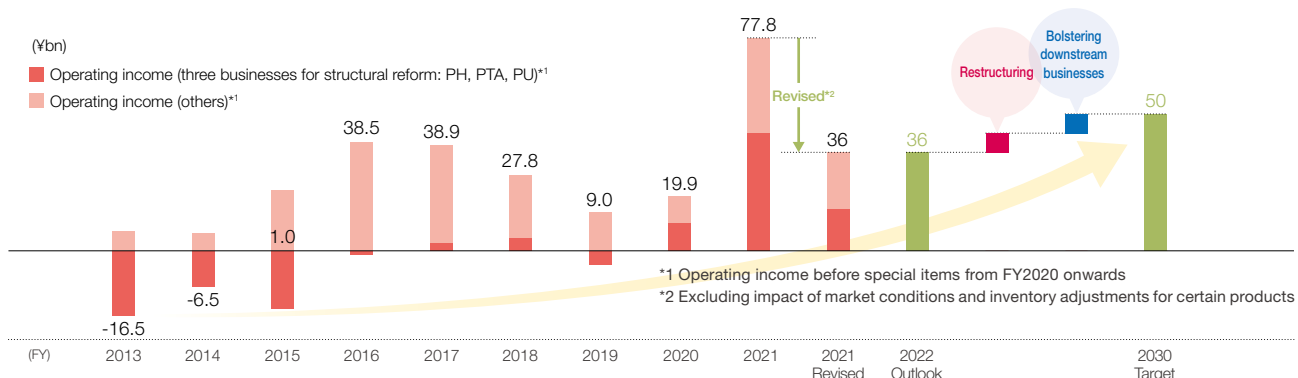
As for our efforts to restructure our business through portfolio transformation, we have already completed downsizing efforts such as facility shutdowns and plant closures, and we have newly decided to shut down and withdraw from domestic production facilities in the PTA business. In the phenols (PH) business, we also decided to transfer shares in a manufacturing and sales company in Singapore. We are also currently restructuring our polyurethane (PU) business, including the consideration of new alliances with other companies.

To bolster downstream businesses, we are proceeding with a plant scrap-and-build plan for high-performance PP plants. While the new plant is scheduled to start producing high-performance PP in November 2024, which will contribute to lighter weight, thinning, and mechanical recycling for

automotive and other applications, we have decided to shut down the 1PP plant at the Anesaki Works in January 2023 in order to optimize the supply-demand balance. This will reduce GHG emissions by 70,000 tons/year through significant streamlining and energy efficiency.

Regarding high-performance MDI, the MDI production facility in South Korea, whose capacity will be increased to 610,000 tons/year, will start operation in July 2024. This will allow us to promote timely development in response to increasing quality requirements for high-functional sheets (improving seating comfort) and noise, vibrations, and harshness (NVH) materials in the automotive field, as well as to cultivate applications for non-automotive materials such as coatings, adhesives, sealants, and elastomers (CASE).

### Securing stable profits through portfolio transformation



Examples of past restructuring	
Stopping facility operations	Chiba PH, Ichihara BPA, Omuta MDI
Closing plants	Kashima Works closure (end of TDI production)
Going more asset-light	PTA in Indonesia, PTA & PET in Thailand
Introducing price formulas linked to raw material costs	Put in place with over 70% of domestic customers

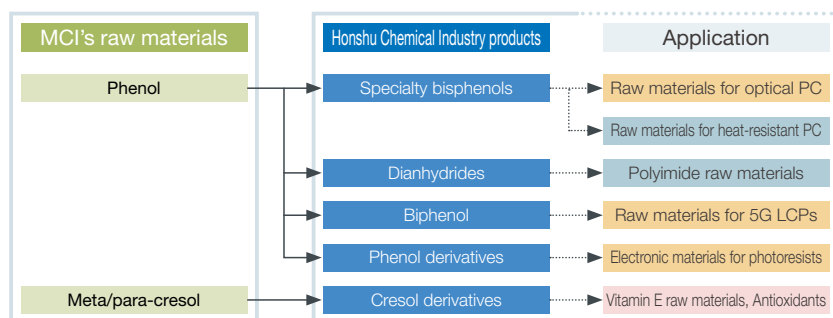
Further portfolio transformation	
<b>Restructuring</b>	<b>Bolstering downstream businesses</b>
End of domestic PTA production	(Decided)
Transfer of Singapore PH shares	High-performance PP (scrap & build)
Polyurethane (in progress)	High-performance MDI
	Synergy with Honshu Chemical Industry

Furthermore, concerning Honshu Chemical Industry Co., Ltd., which became a consolidated subsidiary in October 2021, we have achieved a certain level of success in improving the productivity of existing plants and considering the construction of new plants by investing the Mitsui Chemicals Group's management resources, including technology, information, and

human resources. In the future, we will expand our lineup of aromatic derivatives based on organic synthesis technology and link them to the bolstering of downstream business in the Basic & Green Materials business segment, as well as create new products and businesses through synergies with the ICT and health care domains.

### Bolstering and expanding downstream businesses

Expanding our lineup of aromatic derivatives that make use of organic synthesis technology (across our Life & Healthcare, Mobility and ICT domains)



### Early manifestation of synergistic effects

Support for production technologies relating to ICT sector products\*  
Improving productivity of existing plants, considering the establishment of new plants, etc.

Accelerated development of new products & businesses  
Expanding ICT sector products by leveraging the likes of materials informatics

\* Raw materials for optical PC; raw materials for liquid crystal polymers to be used in 5G sector; electronic materials for photoresists

## Speeding up commercialization for green chemicals

In April 2022, our business segment established the Green Sustainable Chemicals Division to lead the Group-wide shift to circular economy-based business models. We will accelerate the promotion of the green chemicals business by sharing information on the green chemicals business in each business segment and collaborating with related departments throughout the Group. We aim to leverage the business and equipment base that our business segment possesses, ranging from crackers to diverse chemicals and various polymers, to develop businesses in a wide range of fields, including bio-based raw materials, plastics recycling, and CCUs.

As part of our efforts regarding bio-based raw materials, we introduced bio-based hydrocarbons for the first time in Japan in 2021 through a partnership with Neste Corporation of Finland. This received a lot of interest from customers in Japan and overseas, and we plan to introduce the third lot in October 2022. In the future, we intend to acquire ISCC certification\* at other works as well to expand our bio-based products, and are also considering diversification of bio-based raw materials and alliances with other companies.

In addition, we are promoting fuel conversion of crackers as part of the efforts to become carbon neutral. By converting conventional methane to clean ammonia, we aim to reduce CO<sub>2</sub> emissions during combustion. We plan to develop ammonia burners and test furnaces by 2026, and to develop and start operation of demonstration crackers in 2030.

With regard to mechanical recycling, in which waste plastic is reused as plastic products, through participation in J-CEP (Japan Circular Economy Partnership) and collaboration with local governments and brand owners, we have already started demonstration tests on products owned by other business segments such as performance films and sheets in the packaging field. In addition, regarding chemical recycling, which enables the recycling of waste plastics into chemical raw materials, we are actively collaborating with other companies with superior technologies, such as BASF Japan Ltd. and Microwave Chemical Co., Ltd. and aiming to speed up the social implementation.

\* International Sustainability & Carbon Certification

### Topics

#### Toward increasing procurement of bio-based raw materials

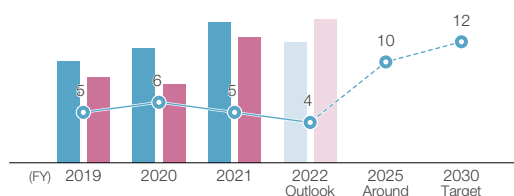
In June 2022, the Mitsui Chemicals Group invested in Apeiron AgroCommodities Pte. Ltd., one of the largest collectors and sellers of used cooking oil, a raw material for bio-based hydrocarbons, in the Southeast Asia and China region. While there is an accelerating global movement to switch from petroleum-derived to bio-based raw materials and fuels in order to realize a carbon neutral society, competition for procurement of bio-based raw materials is expected to intensify in the future, as supply is limited in relation to growth in demand. Although there are various types of major bio-based raw materials, used cooking oil is the type that contributes the most to avoided GHG emissions. It also does not conflict with food issues as it is inedible. We will continue to contribute to the realization of a carbon neutral society through stable procurement of bio-based raw materials.

## The status of Blue Value™ and Rose Value™ products

To date, we have been expanding our range of Blue Value™ and Rose Value™ products, which includes EVOLUE™ and Nextyol™, by capitalizing on the catalyst and resin design technology that has characterized our business. In fiscal 2021, a new application of ECONYKOL™ derived from bio-based raw materials was certified as a Blue Value™ product, while HI-ZEX™, NEO-ZEX™, Prime Polypro™, and ACTCOL™ were certified as Rose Value™ products. With regard to petrochemicals and basic chemicals derived from fossil materials, we will promote the shift to bio-based raw materials in line with the Group's plastics strategies, thereby expanding sales of Blue Value™ products and helping reduce GHG emissions through the supply chain.

#### Sales revenue and sales revenue ratio

■ Blue Value™ sales revenue ● Blue Value™ sales revenue ratio (%)  
 ■ Rose Value™ sales revenue



Seat cushion materials <b>Nextyol™</b>	Improved automotive fuel economy delivered from lighter weight and drastic reduction in VOCs and odor contribute to mitigating climate change and to creating a comfortable living environment.	Reduces CO <sub>2</sub>	Extends healthy life-span
Exhaust gas reduction agent <b>AdBlue™*</b>	Reduces NOx emissions. Contributes to fuel efficiency. * AdBlue is a trademark of the VDA (Verband der Automobilindustrie).	Reduces CO <sub>2</sub>	Coexists with nature



## Building Solutions-Based Business Models

### Message from the General Manager of the New Business Incubation Center

**We will accelerate our efforts to create a solutions business that leverages the strengths of the Mitsui Chemicals Group by strengthening our business design capabilities and promoting the creation of new businesses by pursuing cross-organizational ties and deepening cross-company partnerships.**

The New Business Incubation Center has been creating new businesses through collaboration with external partners such as startups and academia that have a high affinity with the Mitsui Chemicals Group, and building and developing solutions-based business models, one of the Basic Strategies of VISION 2030. Launched as a new organizational structure in April 2022, it actively seeks to strengthen internal collaboration by participating in Group-wide strategy meetings in order to further accelerate the creation of new business.

In July 2022, we established a corporate venture capital (CVC) as a new initiative. This CVC, which is called 321FORCE™, will promote not only collaboration with internal and domestic partners, but also strengthen ties with external partners with an eye to the global market. In addition, by utilizing this CVC, we will model an intelligence platform across the entire Group to strengthen our business design capabilities, and through the sharing of entrepreneurial spirit among all employees, the New Business Incubation Center will become the driving force for business portfolio transformation in the VISION 2030 strategy. In this way, we will aim to contribute to the realization of a sustainable society through chemistry.



**SAIMOTO Yoshimasa**

General Manager, New Business Incubation Center

#### New Business Incubation Center Organization

##### New Business Incubation Center

Marketing & Innovation Department (M&I Department)

Data Solution Department (DS Department)

Energy Solution Team

Robot Solution Department (RS Department)

#### Principal responsibilities of the New Business Incubation Center

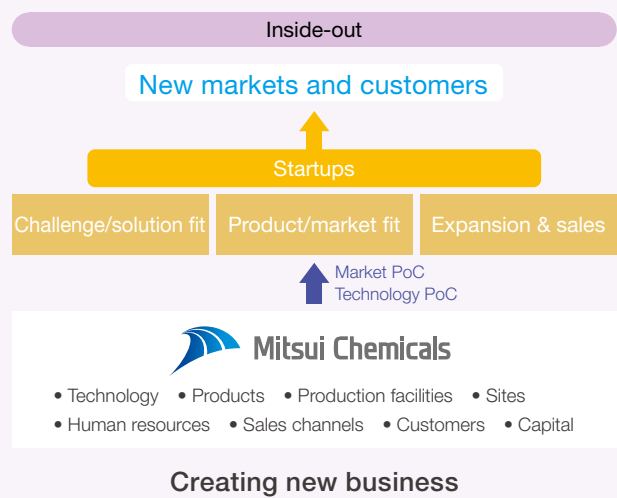
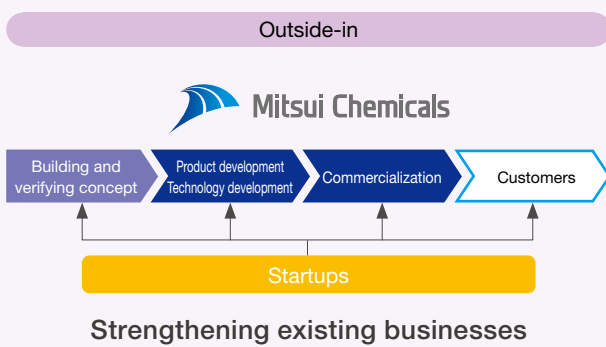
- (1) Exploring and creating new businesses
- (2) Exploration of new business ideas and early-stage development in all fields, including our four business segments
- (3) Building and operating an intelligence platform for cross-organizational ties and cross-company partnerships

## Methodology for exploring and creating new businesses

The New Business Incubation Center is responsible for new business development in all fields, including the Group’s four business segments. As part of its activities, it actively engages in open innovation, in which we seek external partners, mainly startups, to co-create new businesses with technologies and business models that are not available in-house.

When it comes to new business, we often face technical and business challenges with which we have no experience, in processes of development, manufacturing, and sales. On the other hand, startups aim to create new markets and customers by

solving social challenges based on their proprietary technologies and business models. The Mitsui Chemicals Group is actively promoting the “inside-out open innovation,” which refers to initiatives to co-create business while providing missing assets to and mutually complementing external partners such as startups that are approaching new markets and customers with these cutting-edge technologies and business models. In these initiatives, we believe that the key to new business development is to formulate business hypotheses together with our partners and implement Proof of Concept (PoC) as fast as possible.



## New Business Incubation Center initiatives

### Solar power generation diagnostic solutions

Using the Mitsui Chemicals Group’s assets, which are knowledge, experience, and data related to solar power generation as described below, we have been providing services for forecasting solar panel degradation and expected power output calculation as a third-party institution in the financing of solar power generation plant.

- Mitsui Chemicals Tohcello, Inc. offers solar panel encapsulants, which it has manufactured and sold for more than 30 years, and technology for predicting solar panel degradation
- Experience in the development and operation of solar power generation plant as an operator in Tahara City, Aichi Prefecture since 2014
- Accumulation of power generation and weather data using demonstration solar power generation plant in Mobarra City and Sodegaura City, Chiba Prefecture

As of June 2022, we have contributed to the financing of a cumulative total of approximately 2,000 solar power generation plants (5 GW in capacity). For small-scale solar power generation plants, which are expected to grow in the future, there has been no simple way to accurately forecast power generation. As a result, we were unable to forecast power generation in our portfolio of more than 100 small-scale solar power generation plants. To solve this issue, in August 2021, we began offering a service that enables any user to easily obtain expected power output calculations and reports online, using the latest AI and other technologies. As of June 2022, it has been utilized for acquisitions and financing of over 500 power plants.





## Robot solutions

The Robot Solution Department contributes to the robot industry by providing one-stop solutions for functions such as material selection, design, mold fabrication, molding and processing, prototyping, mass production, and evaluation, leveraging the Mitsui

Chemicals Group's knowledge as a comprehensive chemical manufacturer to address social challenges such as resolving labor shortages due to the declining birthrate and aging population, and improving the quality of life of the elderly.

### Social contribution case 1

Jointly developed assist suit with Power Assist International Corp. Achieved weight reduction by replacing metal parts with plastic parts. Demonstration test underway at own works.

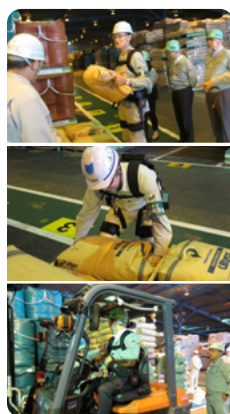


Wakayama University venture  
Power Assist International Corp.

Outstanding weight reduction by using plastic for structural materials and reducing the number of parts



- Weight reduction and lower number of parts
- Optimal shape proposal to handle complex movements
- Optimal design proposal to make it easy to put on/off



Introduced at own works  
(Ichihara, Mobara, Osaka)

### Social contribution case 2

Developed a model eyeball for glaucoma surgery training (Bionic-EyE™) that faithfully reproduces the feel of the human sclera in partnership with Nagoya University and Tokyo University as part of the Cabinet Office's ImpACT Program. Helped young physicians gain proficiency at an early stage.

Realized layered structure of human collagen fibers in a model eyeball for glaucoma surgery training

Bionic-EyE™



#### Social challenges

- Glaucoma: Leading cause of blindness in Japan  
Number of operations: 200,000 a year in Japan
- Up until now, there had been no elaborate models for surgical practice and physicians relied on skill improvement through real-world experience

#### Technology

- Realized elaborate model eyeballs with material combination technology



Ophthalmologists

"Similar in feel to the human eye"  
"The model allows practice of a series of surgical procedures"

## Topics

### Established CVC fund 321FORCE™

On July 4, 2022, the Mitsui Chemicals Group established the CVC fund 321FORCE™ together with Global Brain Corporation, one of the leading independent venture capital firms in Japan. The logo represents the idea of raising a flag toward the future and powerfully counting down.

321FORCE™ was established to more actively promote the search for startups globally and to accelerate the creation of new businesses as a Group-wide initiative through investment and information gathering activities from CVC. The New Business Incubation Center will connect 321FORCE™ to the Mitsui Chemicals Group to promote new business development. We plan to invest in all industry sectors—including Life & Healthcare, Mobility, ICT, carbon neutrality, digital transformation, smart cities, and space—and form a broad investment portfolio that includes the startup business stage. We will seek to solve social challenges by combining the chemical expertise that we have cultivated for over 100 years with the innovative technologies, services, and business models of startups.



At the establishment signing ceremony, with CEO YURIMOTO Yasuhiko of Global Brain on the left

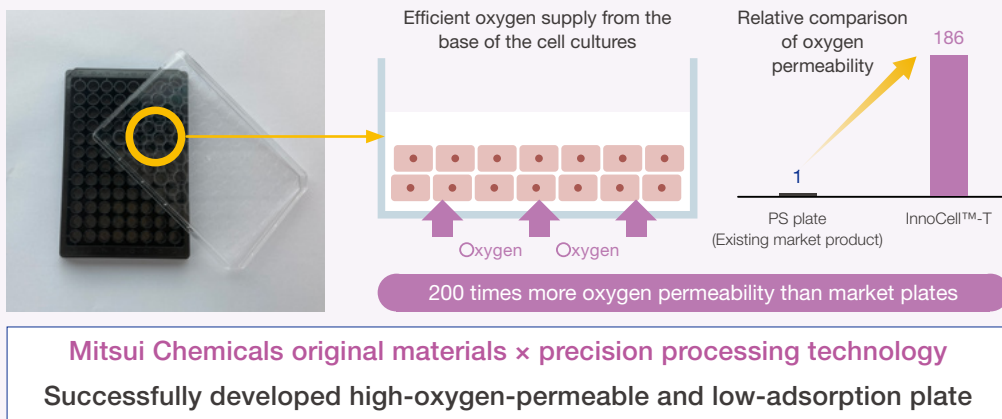
**Innovations in cell culture technology**

The Marketing & Innovation Department has developed InnoCell™ (oxygen-permeable cell culture vessels) using TPX™ (4-polymethyl-1-pentene polymer, PMP), which has the highest level of oxygen permeability among plastic materials. Making the base of the cell culture vessels from TPX™ enables about 200 times more oxygen supply capability than when conventional culture plates are used. TPX™ also offers superior releasability, in addition to which precision processing technology prevents the leaching of cytotoxic chemical substances and inhibits drug adsorption. As a result, InnoCell™ products are expected to be suitable not only for research applications but also as a drug discovery assay tool. InnoCell™ creates a way for a new in vitro culture method in which oxygen can be readily supplied. Hopes are high that this method will be used for regenerative medicine research and as a drug

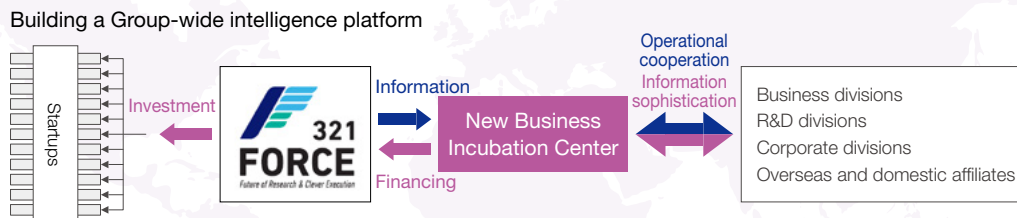
discovery support tool, specifically in toxicity testing, pharmacokinetic studies, and efficacy testing.

The high-density, large-scale stem cell culture device developed by startup FullStem Co. Ltd. optimizes the shape and material of nonwovens as scaffolding to enable the large-scale culture of stem cells.

In the next-generation business domain, we are strengthening our solutions business by leveraging our research and development capabilities and assets. We will contribute to the reduction of animal testing and the use of animal raw materials by developing a solutions business that solves customer issues in the medical and drug discovery fields, including testing and drug discovery applications such as culture plates and microfluidic devices, and the synthesis of high-quality stem cells using nonwoven materials.



All employees have an entrepreneurial spirit and communicate ideas to create new businesses through the concerted efforts of the entire Group.



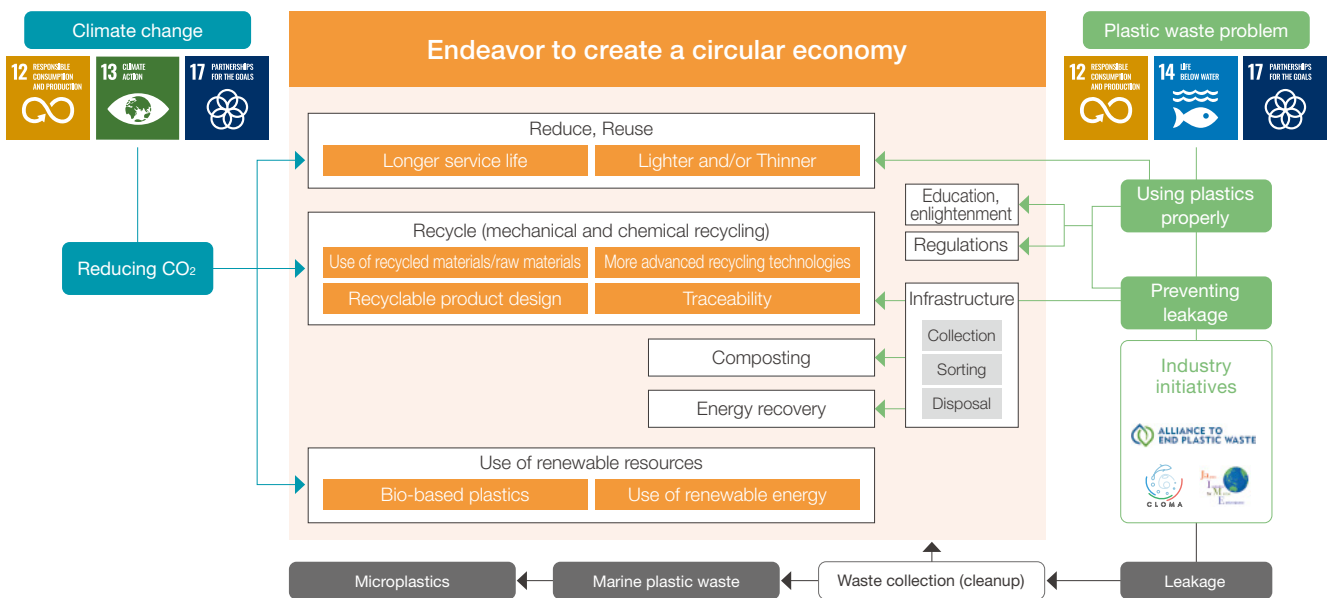
**Access to advanced information across the whole Group**  
**Globally open discussion**

# Bolstering Circular Economy Initiatives

Through the supply of chemicals and highly functional plastic products, the Mitsui Chemicals Group has contributed to improving convenience in people's lives and helped to solve challenges in society by, for example, reducing food loss and improving energy efficiency. At the same time, our business activities require the substantial use of fossil resources and energy, which emits large volumes of greenhouse gases (GHGs). Also, in recent years there is growing concern over environmental pollution caused by plastic waste that has leaked into the oceans. We see these problems pertaining to climate change and plastic waste as serious challenges for society that must

be earnestly addressed.

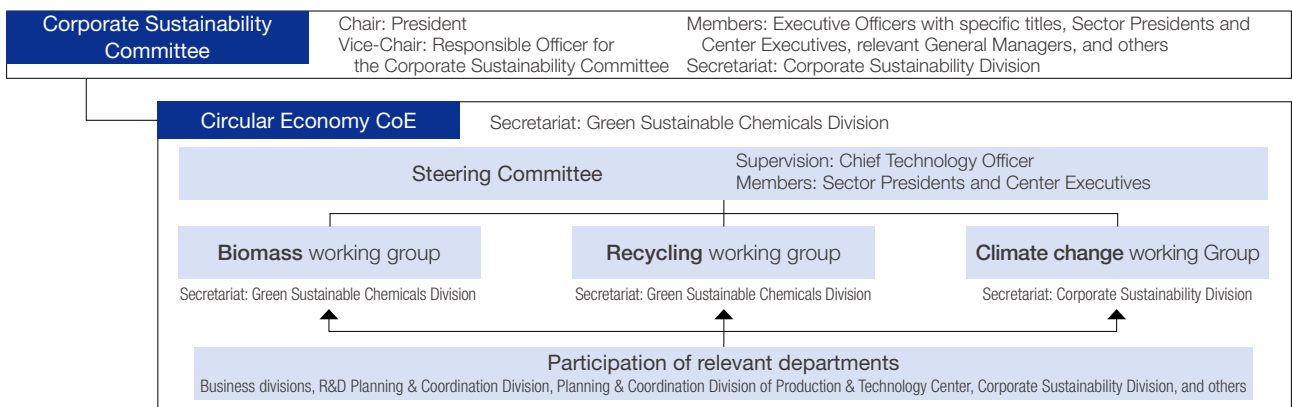
To resolve these challenges, we believe that a transition is needed from a so-called linear economy of consuming resources and disposing of products, to a circular economy in which renewable resources are used and other resources are utilized efficiently as well as collected for reuse to prevent waste. The Mitsui Chemicals Group will promote resource recycling through action on carbon neutral strategy, biomass strategy, recycling strategy, and the problem of marine plastic waste, and contribute to the realization of a circular economy.



## Circular economy-related governance TCFD

In order to strengthen our support for a circular economy, we newly established the Circular Economy Center of Excellence (CoE) under the Corporate Sustainability Committee in April 2022. The Circular Economy CoE comprises the steering committee and three working groups on biomass, recycling, and climate change. The Green Sustainable Chemicals Division, which was also newly established in April of the same year, serves as its

secretariat. Through participation in each working group by related departments and information sharing and discussion, it is working to efficiently promote both projects run individually by departments and cross-organizational projects. In addition, policies discussed at the steering committee are fed back to working groups, thus ensuring consistency with Group-wide strategy.



**Carbon neutral strategy** TCFD

The Mitsui Chemicals Group believes that as a chemicals company we have an important role to play in helping to build a sustainable society that can limit the average global temperature rise to 1.5 degrees Celsius. Therefore, in November 2020, we declared our commitment to become carbon neutral by 2050. Our carbon neutral strategy is centered around the two pillars of (1) reducing our own

greenhouse gas (GHG) emissions (Scopes 1 and 2), and (2) maximizing the avoided emissions of our products over their entire life cycle. We are starting off with the purpose of contributing greatly to the transformation of society.

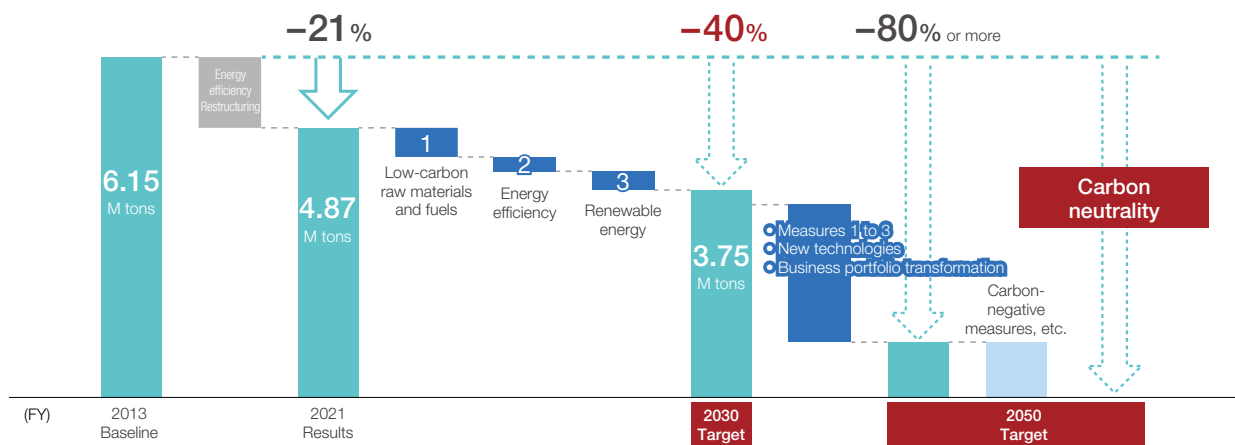
We are considering investing an amount to the scale of 140 billion yen in carbon neutrality by 2030, and we will flexibly invest funds across the entire Group.

**Reducing GHG emissions (Scopes 1 and 2) of the Mitsui Chemicals Group**

We plan to focus our efforts to reduce GHG emissions (Scopes 1 and 2) on production sites with greater emissions volumes. Specifically, we aim to reduce our GHG emissions by 40% by fiscal 2030 compared to fiscal 2013 through transitioning to low-carbon raw materials and fuels, conserving energy by installing highly energy-efficient equipment and the like, and adopting renewable energy. We have set this as one of our non-financial targets in VISION 2030. In order to reach carbon neutrality by 2050, in addition to the aforementioned measures, we intend to achieve 80% or more of these reductions mainly through development of new technologies and the transition of our business portfolio—though this presupposes external

factors concerning markets and customers falling into place or changing. We also plan to pursue policies which include the development and implementation of carbon-negative technologies, such as carbon capture, utilization, and storage (CCUS), to handle the remaining 20%.

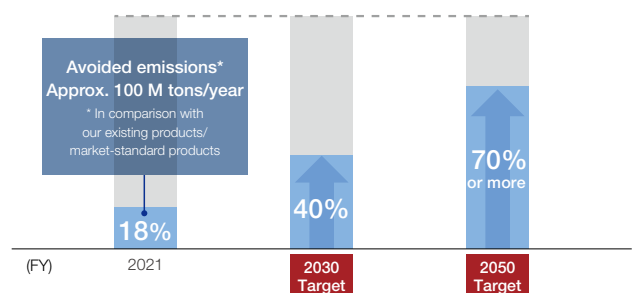
As one measure to accelerate our strategy, we revised our internal carbon pricing from 3,000 yen/tCO<sub>2e</sub> to 15,000 yen/tCO<sub>2e</sub> in April 2022. By adding IRR that takes ICP into account (c-IRR) as a factor in decision-making for large-scale investments, we have a system that discusses the necessity of investments not only from an economic standpoint, but also from the perspective of reducing environmental impact.



**Maximizing avoided emissions through provision of our products**

Many of the chemical products we provide go through various life stages in the hands of our customers, including processing, use, and disposal. Through our supply of Blue Value™ products that make significant contributions to the environment, we aim to maximize GHG emissions avoided over the entire product life cycle. In this way, we intend to help all of society achieve carbon neutrality. We have set a 40% or greater Blue Value™ products sales revenue ratio as one of our non-financial targets in VISION 2030, and have reflected this in the strategy of each business. We are also working on the visualization of the level of contribution by monitoring the avoided emissions of our Blue Value™ products and sharing the results with all stakeholders.

**Blue Value™ products sales revenue ratio**





**Example**

**Low-carbon raw materials and fuels: switching to alternative fuels for naphtha crackers—ammonia utilization**

While naphtha crackers are key for a chemicals company, they also emit a large amount of GHGs. By switching from the conventional methane-based fuel to one in which ammonia is the principal component in naphtha crackers, the Mitsui Chemicals Group hopes to bring the amount of CO<sub>2</sub> generated in combustion as close to zero as possible and contribute to reduction of GHG emissions across the entire petrochemicals industry.

Ammonia, which does not contain carbon, has well-established transport and storage technologies, and it is said to be easier to handle as a heat source than hydrogen. With Mitsui Chemicals, which has both naphtha cracker and ammonia businesses, acting as the leading company, we are proceeding with demonstration tests in collaboration with Maruzen Petrochemical Co., Ltd., Toyo Engineering Corporation, and Sojitz Machinery Corporation, which have knowledge and technical expertise in ethylene plants. The demonstration period is envisaged to be the 10 years from fiscal 2021 to fiscal 2030, with a goal of developing ammonia burners and test furnaces by 2026 and social implementation of entirely ammonia-fired crackers by 2030.

This project has been selected as a demonstration test for “development of advanced technologies for naphtha crackers” by the Green Innovation Fund program publicly solicited by the New Energy and Industrial Technology Development Organization (NEDO).



**Example**

**Carbon-negative measure: Establishment of Mitsui Chemicals, Inc.—Carbon Neutral Research Center**

▶▶ See p. 87



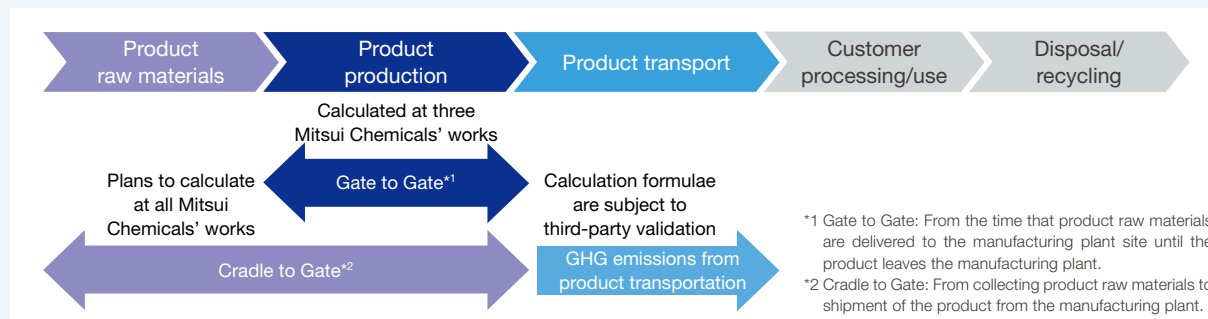
**Example**

**Visualization of environmental impact through calculation of product carbon footprint (PCF)**

As part of product stewardship, the Mitsui Chemicals Group has been building a life cycle assessment (LCA) system, which also touches upon product carbon footprint (PCF), for over 10 years. By assessing the environmental impact of the Group’s products and services through a simplified LCA (Blue Value™ Index), products that make environmental contributions are certified as Blue Value™ products and are broadly shared with society. Recent years have seen growing demand in society for visualization of the environmental impact of the product life cycle as a whole, and the Group is further strengthening its PCF/LCA information provision system.

We have already completed Gate to Gate\*1 PCF calculations for products manufactured at three Mitsui Chemicals’ works (Ichihara, Osaka, and Iwakuni-Ohtake). Moving forward, we plan to expand the range of calculation to Cradle to Gate\*2 and make calculations for products, excluding those for which data on raw materials and other factors cannot be used, at all Mitsui Chemicals’ works during the first half of fiscal 2022. In addition, we are pushing forward with calculations based on calculation methods that encompass international transport with regard to GHG emissions in transport from product shipping to customer delivery (conforming to the Global Logistics Emissions Council [GLEC]) framework.

Going forward, we will continue to work with stakeholders in the supply chain to further strengthen our system in order to provide highly accurate and timely PCF/LCA information.



**Biomass strategy**

Bio-based plastics made from plants—which grow by absorbing carbon dioxide—are attracting much attention as a possible substitute for conventional petroleum-derived plastics. As we believe that a shift to bio-based

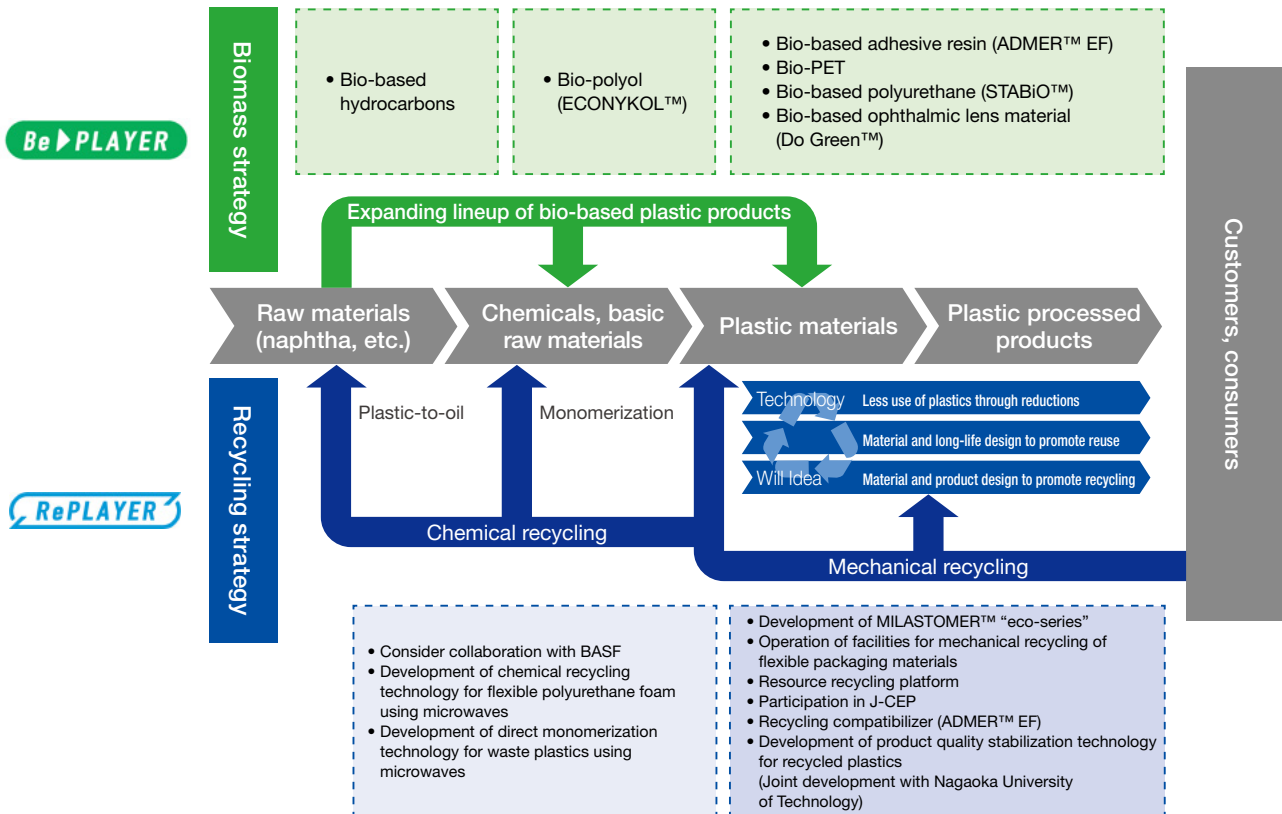
raw materials encourages the recycling of resources, curbs the use of new fossil fuels, and therefore helps mitigate climate change, we aim to expand our lineup of bio-based plastic products.



## Recycling strategy

As social challenges related to waste management, such as resource depletion and the problem of marine plastic waste, become more serious, the Group considers waste plastics and other materials as resources, and is promoting initiatives to effectively utilize them. Through the development of new materials, recycling systems, and value chains, we

will make the circle of the circular economy bigger and broader, such as through chemical and mechanical recycling of waste plastic, development of mono-material packaging, and support for startup businesses.



### Example

#### A key PLAYER creating the future: Toward value co-creation and social implementation through the value chain

A significant social transformation is necessary to realize carbon neutrality and a circular economy society. As a materials manufacturer that supports life infrastructure of the population, the Mitsui Chemicals Group has the potential to change people's lifestyles from the ground up. Recognizing this strength and role, we have the responsibility to broadly provide cross-Group solutions to society. In order to fulfill this responsibility, it is important to continue proactive communications and gain societal recognition as a comprehensive solutions company in the field of carbon neutrality and circular economy. To this end, the Group has launched two brands with the key messages of "we explore the materials of materials" and "we're reshaping the world from a material level"—BePLAYER™, which achieves carbon neutrality with biomass, and RePLAYER™, which creates a circular economy through recycling. By promoting both of these solution brands, which aim to utilize renewable resources and manage stock resources, we aim to resolve multi-faceted and complex social challenges, and take sustainability a step further and provide regenerative lifestyles from the material level.

Looking back, the history of Mitsui Chemicals is also a history of switching to alternative raw materials. Starting with the production of chemical fertilizers from the byproduct gas of coal coke in 1912, we have expanded our business while switching raw materials and shifting to the chemical business using gas and petroleum naphtha as raw materials. Now is the time for a shift to the chemical business using biomass and recycled resources as raw materials. With the two brands at the center of communications with society, we aim to contribute to the realization of carbon neutrality and a circular economy society and achieve further growth by once again switching to alternative raw materials.

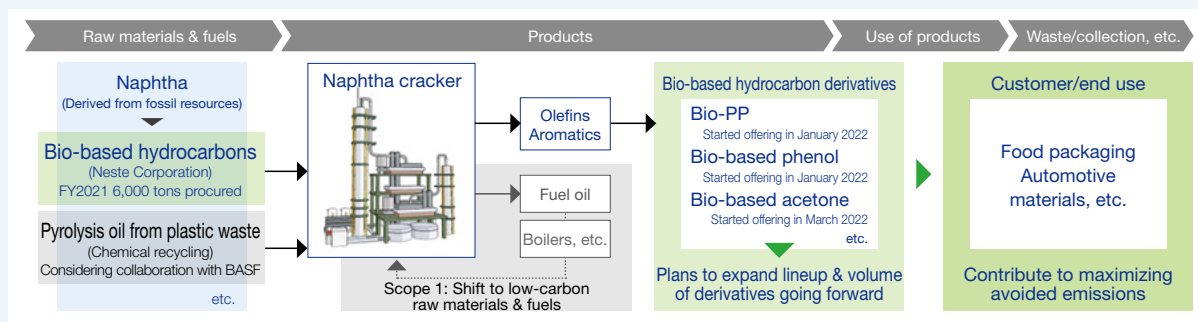
<https://jp.mitsuichemicals.com/jp/sustainability/beplayer-replayer/>



**Example**

**Starting production and sales of Japan's first bio-based chemicals and plastics from bio-based hydrocarbons**

The Mitsui Chemicals Group has introduced bio-based hydrocarbons produced by Neste Corporation (in Finland) from renewable raw materials, such as bio-based waste and residue oils, as feedstock for our naphtha crackers at our Osaka Works. At the same time, we have started producing and marketing bio-based chemicals (such as phenol and acetone) and bio-polypropylene (PP) under the mass balance approach, which allows for the allocation of bio-based content to specific products. In order to expand the lineup of bio-based hydrocarbon derivatives that we can offer, we are currently in the process of obtaining ISCC PLUS certification for a variety of our products. Furthermore, in fiscal 2021 we procured a total of 6,000 tons of bio-based hydrocarbons. Moving forward, we will increase the amount procured in order to meet demand, and contribute to the popularization of bio-based chemicals and plastics.



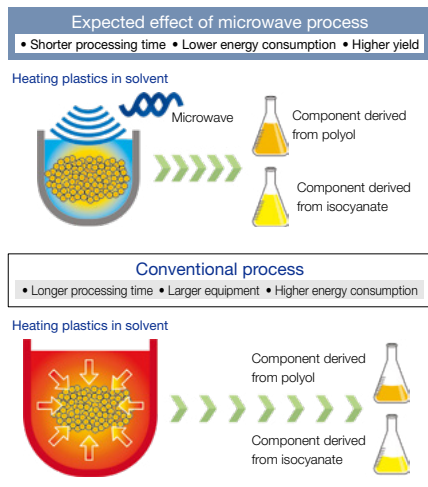
**Example**

**Development of chemical recycling technology using microwaves**

Chemicals borne out of chemical recycling can be used in the production of new materials such as plastics, without compromising on quality in even the most sensitive applications. This fact makes it a promising complementary solution for recycling waste plastic that is not suitable for mechanical recycling. Based on a strategic alliance with Microwave Chemical Co., Ltd., we are working on the joint development of chemical recycling technology using microwaves.

Microwaves are electromagnetic waves used in household microwave ovens and in the field of telecommunications. Being able to transfer energy to materials directly and selectively, microwaves have the potential to make conventional chemical processes significantly more energy-efficient. Furthermore, as microwaves can be generated from renewable energy sources, this is an environmentally friendly technology able to reduce CO<sub>2</sub> emissions. We are working on the chemical recycling of plastics that have conventionally been difficult to recycle, including automotive shredder residue (ASR), which is a mixture of principally polypropylene-based plastics, thermosetting sheet molding compound (SMC), which is used in bathtubs and vehicle parts, and flexible polyurethane foam, which is used in items such as mattresses. All of them have achieved good results in the initial study. In the future, we plan to start demonstration testing as soon as possible after conducting verification testing at a bench facility.

**Chemical recycling of polyurethane using microwaves**



**Example**

**Resource circulation platform: Pursuing traceability of recycling materials through blockchain**

▶▶ See p. 70

**Problem of marine plastic waste**

The problem of marine plastic waste owes to plastics that have escaped from the process for recycling resources and ended up in marine environments due to inappropriate waste management. Preventing plastic waste from leaking into rivers and the sea is of utmost importance, and requires a united effort by companies in the entire



plastics supply chain. We are tackling this problem by participating in global alliances such as the Alliance to End Plastic Waste (AEPW) as well as the Japan Clean Ocean Material Alliance (CLOMA) and the Japan Initiative for Marine Environment (JaIME).

## Implementing the recommendations of the TCFD



In January 2019, the Mitsui Chemicals Group announced its support of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). From fiscal 2019 to fiscal 2021, we made the following efforts and disclosures as an initial support for the recommendations. Based on this foundation, from fiscal 2022 onwards we will proceed with proactive disclosure in line with the TCFD disclosure items (governance, strategy, risk management, metrics and targets), including support for the updated recommendations in October 2021.

### Initial support for recommendations of the TCFD (until FY2021)

1	<b>Assessing materiality of climate-related risks</b> Qualitatively analyze risks and opportunities concerning climate change in our key businesses	<ul style="list-style-type: none"> <li>Assessment scope: Mobility, Petrochemical feedstocks, Agriculture, Health Care, Electricals and electronics, Packaging, Energy solutions</li> </ul>
2	<b>Identifying and defining range of scenarios</b> Forecast the changes in our business environment concerning climate change (scenarios) and examine their impacts	<ul style="list-style-type: none"> <li>Business areas: Mobility business, Petrochemicals business (priority on areas that have significant impact on finances and GHG emissions)</li> <li>Time horizon: 2020–2050 (physical risks until 2100)</li> <li>Scenarios: 1.5–2°C world, 3–4°C world</li> </ul>
3	<b>Quantifying business impacts</b> Quantify impacts on future business strategies and financials based on our scenarios and reflect them in strategies	<ul style="list-style-type: none"> <li>Identifying business impacts (qualitative)</li> <li>Reflected strategy: carbon neutral strategy</li> </ul>
4	<b>Identifying potential responses</b> Determine the measures for climate change strategy and select management control indicators	<ul style="list-style-type: none"> <li>Response: low-carbon raw materials and fuels, promotion of energy efficiency, and introduction of renewable energy as measures to reduce GHG emissions</li> <li>Management metrics: GHG emissions reduction rate (FY2013 baseline), Blue Value™ and Rose Value™ products sales revenue ratios</li> </ul>

#### Disclosure item 1

### Governance

The responsible officer for the Corporate Sustainability Committee is responsible for addressing climate change.

Policy, strategy, and planning to address climate change are discussed at the Corporate Sustainability Committee. Results of discussion are reported to the Management Committee. Particularly important matters are decided and supervised by the Board of Directors upon discussion at the Company-wide Strategy Committee and deliberation by the Management Committee.

▶▶ Sustainability Governance, p. 101

Furthermore, we newly established the Circular Economy CoE under the Corporate Sustainability Committee in April 2022. The Circular Economy CoE comprises the steering committee and three working groups (biomass, recycling, and climate change). It conducts detailed discussion on climate change and it is structured so that matters that should be discussed at the management level are raised to the Corporate Sustainability Committee.

▶▶ Circular economy-related governance, p. 62

#### Agenda items related to climate change at the Board of Directors (FY2021)

- Setting VISION 2030 (May 2021)
- Carbon neutral roadmap (May 2021)
- Setting non-financial metrics in VISION 2030 (February 2022)

#### Disclosure item 2

### Risk management

The Mitsui Chemicals Group has established a Group-wide risk management system. Each department assesses risks based on risk models and written procedures, and reports risk information to the Company-wide Strategy Committee, the Corporate Sustainability Committee, and other committees, depending on the type and severity of the risk. Each meeting body discusses how to respond to risks and notifies or advises each division of policy. The Management Committee receives risk information from across the Group as input for making management decisions, and discusses and decides on action plans. Climate-related risks are also managed within this system.

▶▶ Risk and Compliance Management, p. 104

Regarding climate-related risks in particular, as part of risk management under VISION 2030 and the carbon neutral strategy, all divisions are obligated to identify short-, medium-, and long-term challenges (risks and opportunities) and to budget for the consideration and implementation of countermeasures, which are managed centrally throughout the Group. Key climate-related risks that are identified are discussed in the Circular Economy CoE and are put on the agenda of the Corporate Sustainability Committee where necessary. These risks are incorporated into the risk management structure of the entire Group.

▶▶ Sustainability Governance, p. 101 ▶▶ Circular economy-related governance, p. 62

Disclosure item 3

Strategy

The Mitsui Chemicals Group believes that VISION 2030 and our carbon neutral strategy are relevant to the transition plan to a low-carbon economy. Regarding the business impact identified by fiscal 2021, we have quantitatively estimated the impact that is expected to occur in the context of implementing measures toward VISION 2030, including the carbon neutral strategy.

▶▶ VISION 2030, p. 29; Carbon neutral strategy, p. 63

Risk

Risk classification	Events	Impact calculation target	Calculation approach	Impact	
				Medium-term (2030)	Long-term (2050)
<b>3–4°C world</b>					
Physical risks	Catastrophic worsening of natural disasters	Increase in damage at production sites due to river and coastal flooding	Calculated asset damage at production sites due to flooding, taking into account the probability of occurrence. * FY2020 baseline. * Does not include operational impact. We plan to consider this in future. * Reference scenario: IPCC RCP8.5	¥5bn	¥40bn
<b>1.5–2°C world</b>					
Transition risks	Strengthened laws and regulations	Increased costs due to introduction of carbon tax	Carbon tax calculated based on predicted carbon price. * FY2020 baseline for GHG emissions. * Reference scenario: IEA WEO	¥80bn	¥160bn
Transition risks	Market changes	Increased cost of fuel and electricity	Cost of fuel and electricity calculated based on inflation rate. * FY2018 baseline for fuel and electricity costs. * Reference scenario: IEA WEO, EIA, and Agency for Natural Resources and Energy forecasts	¥60bn	¥70bn * FY2040

Toward minimizing risks

- While the medium-term asset damage from catastrophic worsening of natural disasters is not that great, we will assess its impact, including the impact on operations, and where necessary incorporate it into the Basic Strategy of VISION 2030, “Management and business transformation,” in order to respond.
- The business impact of increased costs due to introduction of carbon tax and increased cost of fuel and electricity will become large over the medium- to long-term. As part of carbon neutral strategy measures, we will promote low-carbon raw materials and fuels and energy efficiency, and push forward with introducing renewable energy by fiscal 2030. Furthermore, we will progress with steady reductions of GHG emissions through further considerations.

Opportunities

Opportunity classification	Events	Impact calculation target	Calculation approach	Impact	
				Medium-term (2030)	Long-term (2050)
<b>3–4°C world</b>					
Transition opportunities	Increased demand for products to adapt to global warming	Increased sales revenue of Rose Value™ products, which contribute to disaster prevention/mitigation measures and prevention of infectious disease	Set as a non-financial metric. * FY2021 Rose Value™ product results: sales revenue ¥330 billion, sales revenue ratio 20% * Reference scenario: the Group’s VISION 2030	Rose Value™ products sales revenue ratio 40%	—
<b>1.5–2°C world</b>					
Transition opportunities	Increased demand for low-carbon products and services	Increased sales revenue of Blue Value™ products, which contribute to reduction of GHG emissions	Set as a non-financial metric. * FY2021 Blue Value™ product results: sales revenue ¥290 billion, sales revenue ratio 18% * Reference scenario: the Group’s VISION 2030	Blue Value™ products sales revenue ratio 40%	Blue Value™ products sales revenue ratio 70%
Transition opportunities	Preemptive response to carbon tax	Expense avoided by reducing GHG emissions	Reduced carbon tax calculated from reduction in GHG emissions and predicted carbon prices. * FY2013 baseline for GHG emissions (Scopes 1 and 2: 6.15 million tons). * Reference scenario: the Group’s VISION 2030 and carbon neutral strategy, IEA WEO	¥40bn	¥160bn

Toward maximizing opportunities

- We will pursue increasing the sales revenue of Blue Value™ and Rose Value™ products and services through the VISION 2030 Basic Strategies of “Pursuing business portfolio transformation,” “Building solutions-based business models,” and “Bolstering circular economy initiatives.” We will increase contribution to building a sustainable society through products and services by expanding the social issue perspective, including addressing climate change, to all of our businesses, thereby creating opportunities for the Group.
- Reductions in GHG emissions are deeply related to expanding the revenue of the Group, and it is therefore necessary to not only execute the announced carbon neutral strategy measures, but continually implement further considerations.
- As capturing the three opportunities listed in the above table links into the growth of the Group, we set them as VISION 2030 business targets (non-financial metrics) and manage their progress.

## Improving resilience

- Based on the results of the impact assessment, we recognize the need to reflect the risk and opportunity perspectives listed here in our Group-wide strategy. Moving forward, we will update our VISION 2030 and carbon neutral strategy on a rolling basis, and aim to minimize risks and reverse risks to maximize opportunities in our Group-wide strategies, including business strategy and site strategy. In doing so, we plan to improve the resilience of the Group.

### Disclosure item 4 Metrics and targets

The Group sets metrics and targets for use in managing climate-related risks and opportunities. We have positioned these as non-financial metrics and business targets for VISION 2030 and are managing their progress.

▶▶ Non-financial metrics, p. 20; Carbon neutral strategy, p. 63; Data Highlights, p. 07

	Classification	Metric	Target	FY2021 results
Mitigation	Reduction of Scope 1 and 2 GHG emissions	GHG emissions reduction rate (vs. FY2013)	40% (FY2030) 100% (FY2050)	21%
	Maximizing avoided emissions	Blue Value™ products sales revenue ratio	40% (FY2030) 70% (FY2050)	18%
Adaptation	Contribution to disaster prevention/mitigation measures and prevention of infectious disease	Rose Value™ products sales revenue ratio	40% (FY2030)	20%

In addition, information in accordance with the climate-related metrics categories is as follows.

(1) GHG emissions	<ul style="list-style-type: none"> <li>Scope 1: 3.81 million tCO<sub>2</sub>e (FY2021)</li> <li>Scope 2: 1.06 million tCO<sub>2</sub>e (FY2021)</li> <li>Scope 3: 9.33 million tCO<sub>2</sub>e (FY2020) * Mitsui Chemicals non-consolidated</li> <li>Per unit of sales revenue for Scopes 1 and 2: 30.2 tCO<sub>2</sub>e/billion yen (FY2021)</li> </ul> ▶▶ Data Highlights, p. 07
(2) Transition risks	Outlined in “Disclosure item 3: Strategy”
(3) Physical risks	Outlined in “Disclosure item 3: Strategy”
(4) Climate-related opportunities	Outlined in “Disclosure item 3: Strategy”
(5) Capital deployment	<ul style="list-style-type: none"> <li>Carbon neutrality-related investments up to 2030 are expected to be on the scale of 140 billion yen.</li> </ul> ▶▶ Carbon neutral strategy, p. 63
(6) Internal carbon pricing (ICP)	<ul style="list-style-type: none"> <li>Of large-scale investment projects* in FY2022, investments related to Blue Value™ and Rose Value™ products account for 53%, or approximately 255.5 billion yen.</li> <li>* Not including alliances, M&amp;A, financial assistance, etc. For FY2022–2024.</li> </ul> ▶▶ CFO Message, p. 36
(7) Executive compensation	<ul style="list-style-type: none"> <li>ICP is set as 15,000 yen/tCO<sub>2</sub>e, and IRR that takes ICP into account (c-IRR) is used as a factor in decision-making for large-scale investments.</li> <li>The performance evaluation of the responsible officer is linked to the state of progress of the GHG emissions reduction rate and Blue Value™ and Rose Value™ products sales revenue ratios.</li> </ul> ▶▶ Carbon neutral strategy, p. 63
	<ul style="list-style-type: none"> <li>Blue Value™ and Rose Value™ products sales revenue ratio targets are set for each business sector in accordance with Group-wide targets, and the performance evaluation of each responsible officer is linked to these targets.</li> </ul> ▶▶ Business Segments, pp. 43, 47, 51, 57



# Corporate Transformation Through Digital Transformation

## Message from Digital Transformation Sector President

**We will implement digital transformation across the entire Group as a driver to drastically transform the Mitsui Chemicals Group.**

One of the Basic Strategies of VISION 2030 is corporate transformation through digital transformation (DX), and in April 2022, we established the Digital Transformation Sector to promote its implementation throughout the Group. This sector is a cross-divisional organization that includes each business segment, Head Office divisions, and affiliate companies including those overseas. Its mission is to thoroughly implement cross-functional discipline (CFD), plan and execute Group-wide DX strategies, and promote DX acceleration and business transformation in the supply chain. In addition, in order to strengthen cross-divisional efforts, each division appoints a “DX Champion” who is well-versed in the business content, can exert influence within the sector, has a certain level of digital literacy, and is proactive about DX. Each DX Champion is responsible for understanding the challenges in the business and designing solutions through DX implementation.

Furthermore, we have established the MCI DX Vision as the vision that we aim to achieve through Group-wide DX implementation. We have established four basic strategies for achieving this: improving our digital literacy, pursuing innovation for our operations, bolstering our development capabilities, and transforming our business models. By implementing these strategies, we will significantly change the way the Mitsui Chemicals Group does business in the future. Specifically, it is a change in the skill and mindset to achieve more challenging goals through a shift in commercial products from selling goods to selling services, a shift from pull-type sales to existing customers and the mass market to push-type sales with personalized marketing to new customers and new markets, and agile business development based on real-time data analysis. We will realize the corporate transformation (CX) of the entire Mitsui Chemicals Group through transformation in all these aspects.



### SAMBE Masao

Managing Executive Officer &  
Chief Digital Officer  
Digital Transformation Sector President

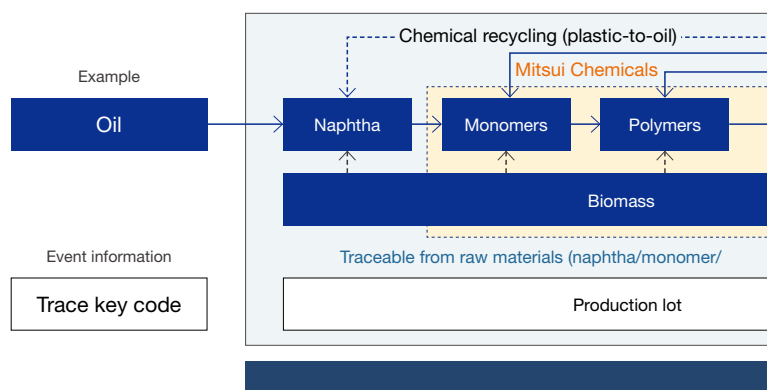
## RePLAYER™\* blockchain platform

Since April 2021, the Mitsui Chemicals Group has been collaborating with IBM Japan, Ltd. to build a resource circulation platform that enables traceability of plastic materials, and has been supporting demonstration testing using the platform and holding study groups with multiple companies. As one of the results of these efforts, sales of recycled plastic materials with traceability through the use of highly secure blockchain technology began in February 2022. Used goods to serve as raw materials for this recycling will be collected and broken down by Tsuruoka Co., Ltd. with ISHIZUKA CHEMICAL SANGYO Co., Ltd. then carrying out the production and sale of recycled plastics. The issue of ensuring traceability has come about for recycled plastic materials, including details on the likes of what substances these materials contain. By using the resource circulation platform (RePLAYER™ blockchain platform), this demonstration sales project will be able to visualize things such as production processes from raw materials, inspection processes, physical information, quality information, and GHG emissions reference values, making it a groundbreaking initiative. In a three-company collaboration with IBM Japan, Ltd. and Nomura Research Institute, Ltd., a consortium for the realization of a recycling-based society is scheduled to be established in

the fall of 2022. In the future, we will continue to work toward the realization of a recycling-based economy by collaborating with current and new platform participants to conduct a series of demonstration tests on other products and promote activities for their implementation.

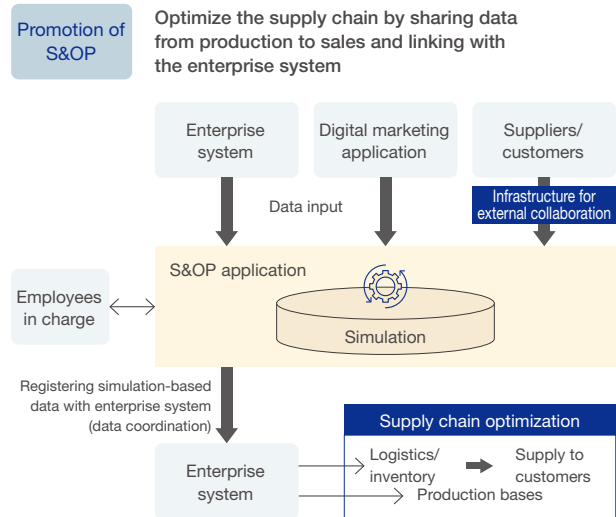
\* RePLAYER™ is a Mitsui Chemicals solution brand that represents our efforts to reuse waste plastics and other waste materials as resources.

### Scope of RePLAYER™ blockchain platform



## Pushing forward with Sales & Operations Planning and promoting AI utilization

As an initiative to strengthen the IT and data infrastructure that will support the realization of VISION 2030, the Mitsui Chemicals Group has already begun to build Sales & Operations Planning (S&OP), which optimizes the supply chain by sharing data from production to distribution and sales and linking it to the enterprise system, using some of its businesses as models. We will horizontally expand this system to each business division in the future. As an example of the use of AI, we are building a system for predicting price fluctuations of market products using machine learning technology, and we will actively seek to put this system to practical use in the future, as the accuracy of its predictions is increasing.



### Comments from those participating in the RePLAYER™ blockchain platform

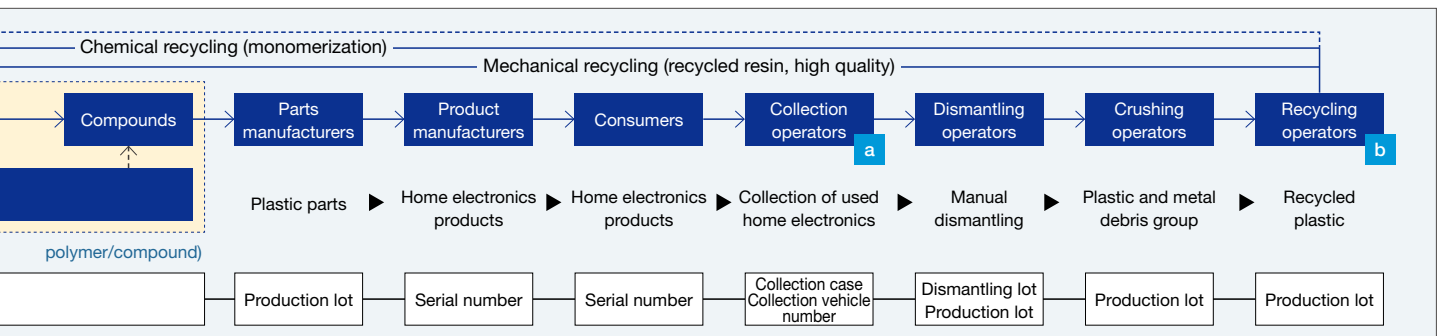
- a Tsuruoka Co., Ltd.**  
 Mr. TSURUOKA Masaaki  
 President

Due to the difficulties of eco-friendly design, used goods that meet the needs of traceable recycled plastics are still rather scarce in society. Being an intermediate processing company that collects and breaks down used goods to serve as a key point in safe, secure and stable recycled material supply, Tsuruoka intends to make the most of business under the new platform, which enables the creation of cross-sector partnerships to improve product life cycles. We will use this business to expand the scope of the recycled raw materials we handle, as well as to try and get these materials popularized across other companies in the same industry, as we look to invigorate the market.
- b ISHIZUKA CHEMICAL SANGYO Co., Ltd.**  
 Mr. ISHIZUKA Katsuichi  
 President

In recent years, we've seen an increase in inquiries for plastic recycling. However, much of that has taken the form of consultations about recycling in-house products; we haven't yet had many consultations from players wanting to use recycled plastics. As for why that is, perhaps these players have concerns about the quality or safety of recycled materials, or they aren't sure how these contribute to the global environment. ISHIZUKA CHEMICAL SANGYO, as a long-time player in plastic recycling, feels a duty to popularize recycled plastic materials. We are confident that these recycled plastic materials with traceability will help to eliminate such concerns and uncertainties, thereby contributing to the widespread use of recycled plastic materials.
- IBM Japan, Ltd.**  
 Mr. SHIBATA Yuichiro  
 Managing Partner, Strategic Sales  
 IBM Consulting

IBM Japan aims to bring about a circular economy and reach net-zero greenhouse gas emissions. With these goals in mind, we have taken on the assorted experience and skills we have built up to date and used these as a basis to support the construction of this resource circulation platform, as well as the calculation of CO<sub>2</sub> emissions from plastic recycling. Following this latest agreement, we are thrilled to see that a proper traceability-based platform will be put in place and facilitate the start of recycled plastic sales in an effort to bring about a recycling-based society. Going forward, IBM Japan will continue to leverage cutting-edge technologies—including not only the blockchain but also the likes of our Cloud, OpenShift and AI technologies—as we pursue Good Tech worldwide to create a better future. And we will continue to work with customers on making a sustainable society a reality.

Promoting mechanical/chemical recycling can also reduce GHG emissions by decreasing the thermal recycling ratio



### Building a platform that ensures traceability\*

\* Production process, inspection process, physical property information, quality information, recycled material ratio, number of times recycled material is recycled

# Management and Business Transformation – Human Resources Strategy –

## CHRO Message

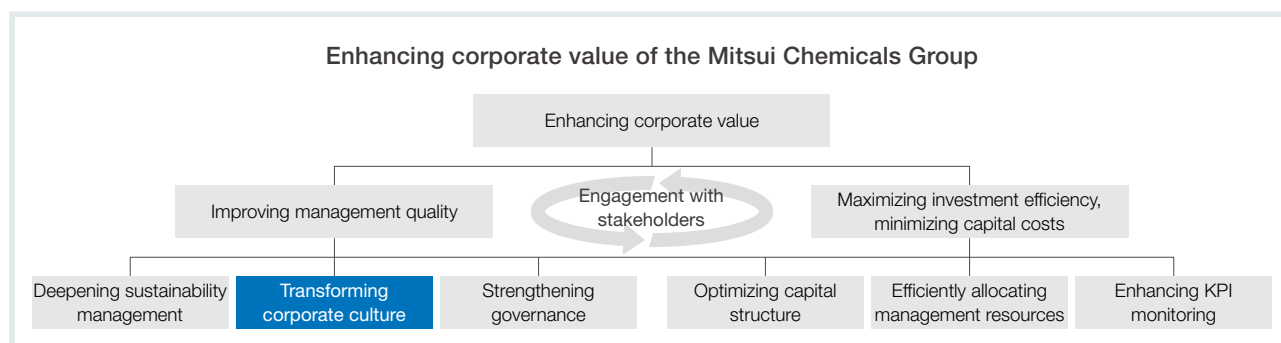
Through our human resources strategy linked to VISION 2030, we will push forward with business portfolio transformation and build an ideal human resources portfolio.

As part of efforts to strengthen the chief officer (CxO) system in order to reinforce executive responsibility and the promotion of change on a global basis for the Mitsui Chemicals Group, I was appointed chief human resources officer in April 2022, the first year of VISION 2030, and was assigned responsibility for formulating, implementing, and leading the human resources strategy to realize VISION 2030. In addition to stepping up efforts to strengthen the link between business plans and human resources strategy from a medium- to long-term perspective, I believe it will be important to accelerate the transformation of our business portfolio by boldly investing in and reallocating resources to our human capital in a more timely manner at the Group level.

We recognize the need to appropriately communicate information through engagement opportunities with various stakeholders, including employees, shareholders, and investors, on the unique and intangible corporate value of our group. This value includes: (1) human resources and organizational capabilities that can achieve continuous corporate value creation; (2) an organizational culture that attracts diverse human resources (race, nationality, gender, age, experience, expertise, etc.) over the medium- to long-term and enables them to maximize their individual potential by taking on challenges; and (3) an environment embodying self-initiative, autonomy, and collaboration, in which employees think autonomously about the best mix of work styles for both the organization and the individual.

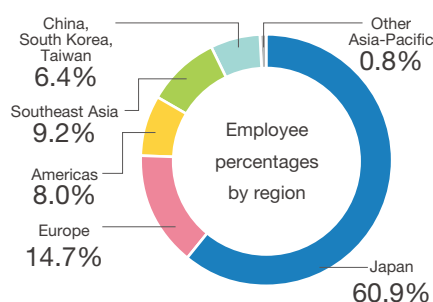
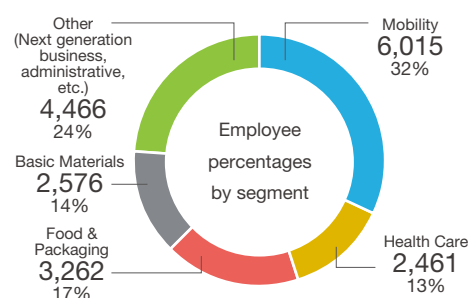
In fiscal 2021, we again analyzed changes in the external environment that could affect our human resources strategy, such as dramatic changes in values regarding work styles against the backdrop of Japan's declining working population, revisions to the Act on Stabilization of Employment of Elderly Persons, further advances in digital technology, heightened geopolitical risk, and other factors, as well as increased demand from investors and others for disclosure of information regarding non-financial metrics. Based on this, we reviewed our priority issues and policies toward our ideal vision for our organization in 2030, and established new non-financial KPIs.

By implementing various human resources measures toward 2030 and aiming to achieve the non-financial KPIs, we endeavor to gain the organizational capabilities that will enable us to sustainably create corporate value and build our ideal human resource portfolio.



\* For full diagram, see CEO Message on p. 10. ■ colored item is mentioned in this message.

## Human resources portfolio of the Mitsui Chemicals Group



Consolidated companies  
**161**




Overseas sales revenue ratio  
**48%**

Employees  
**18,780**

\* As of March 31, 2022, excluding contract employees

\* Employee ratios are displayed as per previous segments.

Priority issues and main policies for the VISION 2030 human resources strategy

Priority issues and main policies for the human resources strategy	Non-financial KPIs (2030)	Our ideal vision for 2030
<p><b>1</b></p> <ul style="list-style-type: none"> <li>• <b>Strategic recruiting, development, and retention of future executives*1 with diverse backgrounds</b> <ul style="list-style-type: none"> <li>· Promotion of key talent management and job-based human resource management</li> </ul> </li> <li>• <b>Design of human resources portfolio aligned with the ideal business portfolio</b> <ul style="list-style-type: none"> <li>· Development and training of human resources for digital transformation (165 specialists)</li> </ul> </li> </ul>	<p><b>(1) Critical positions</b> · Successor coverage rate: 250%</p> <p><b>(2) Diversity</b> · Executive officers with diverse backgrounds*2: 10 or more (including at least 3 women) · Ratio of women in management positions*3: 15%</p>	 <p><b>Human resources who can work with customers and partners to create businesses that address social challenges are being acquired, developed, and retained.</b></p>
<p><b>2</b></p> <ul style="list-style-type: none"> <li>• <b>Embodiment of self-initiative, autonomy, and collaboration</b> <ul style="list-style-type: none"> <li>· New working styles to achieve the best mix of work styles</li> <li>· Continued action to improve engagement score</li> <li>· Evaluation and compensation system that fosters a culture of taking up the challenge of change</li> </ul> </li> </ul>	<p><b>(3) Engagement score</b> · 50% (Group and global)</p>	 <p><b>Transformation to a corporate culture that increases the engagement of human resources and converts it into organizational strength has been achieved.</b></p>
<p><b>3</b></p> <ul style="list-style-type: none"> <li>• <b>Upgrading of human resources governance to accommodate for mergers and acquisitions (M&amp;As), etc.</b></li> <li>• <b>Creation of an integrated Group-wide human resources platform</b></li> </ul>	<p>—</p>	 <p><b>Human resources governance has been established, and the value of Group human capital is being communicated both internally and externally.</b></p>

Health-focused management

\*1 Future sector presidents and center executives of Mitsui Chemicals, Inc.

\*2 Number of women, non-Japanese, and mid-career hires among executive officers at Mitsui Chemicals, Inc.

\*3 Management positions at Mitsui Chemicals, Inc.

Priority issue 1

**Strategic recruiting, development, and retention of future executives with diverse backgrounds**

**1 Key talent management: Future executives with diverse backgrounds**

Key Talent Management is an initiative that plays a central role in human resources management, embedding within the organization a culture of discussing the career, individual interests and aspirations, and development plan of each potential leader who could become a future executive. The system has been introduced as a Group and global system since fiscal 2016.

In fiscal 2021, we held 10 Sector and Corporate Key Talent Management Committee meetings, which were attended by all top management as consultative members, including the Company president, CxOs, sector presidents, center executives, and general managers of each division and department, and a total of more than 40 hours of discussion was conducted on individual development plans for approximately 1.2% of all Group employees.

In addition, the Corporate Key Talent Management Committee identifies critical positions that are of key importance in the execution of Group-wide strategies, as well as development positions for the strategic training of future executives, and succession plans for approximately 120 positions have been developed. In particular, the successor coverage rate\*1 for critical positions has been established as a non-financial KPI by which to quantitatively and qualitatively evaluate the quality and effectiveness of succession planning over time. In fiscal 2021, the successor coverage

rate was 233%, up 7% from fiscal 2020, which means that at least two successor candidates per position have been nominated. This indicates that the talent pool pipeline as a whole is being built up stably in terms of overall number.

In addition, the diversity rate of future executives\*2 is set as a leading indicator for the number of executive officers with diverse backgrounds (women, non-Japanese, and mid-career hires), which was set as a VISION 2030 non-financial KPI. In fiscal 2021, of the future executives selected from among employees across the entire Group (approximately 0.5%), the diversity rate among future executives was approximately 20%. In fiscal 2022, one of the most important themes will be the design of specific measures to increase the diversity of future executives.

Under the Corporate Governance Guidelines, the status of these initiatives is a matter to be reported to the Board of Directors every fiscal year, and the effectiveness of these measures is ensured based on feedback from inside and outside directors.

At the same time, in order to promote business portfolio transformation, it is becoming increasingly important to recruit not only internal talent, but also highly specialized external human resources with knowledge, networks, and experience that do not exist in the company. From fiscal 2016, we have expanded our



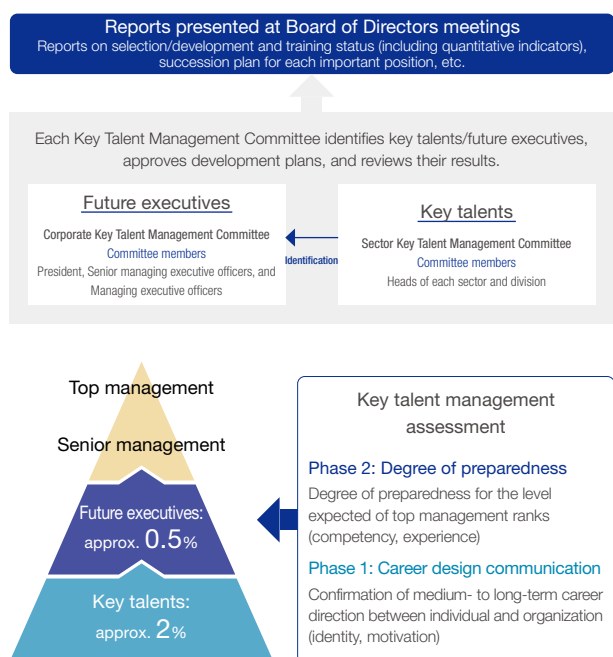
recruiting of mid-career hires that are work-ready. Of these external human resources, 16% were appointed to positions at the manager-level or above, which require higher levels of knowledge, experience, and management, and their turnover rate was 1.5%\*3. It is recognized that we have succeeded at forming an organizational culture that accepts people with diverse career backgrounds and values from outside the company.

In addition, in order to identify the next generation of leaders and train them early on, we introduced the Global Leadership Program in 2012, which is now in its 10th year. This training program is designed for the next generation of leaders in each global site so that they can acquire management literacy and build a global network. This is a collaborative practice with Mannheim Business School and Hitotsubashi Business School, each among

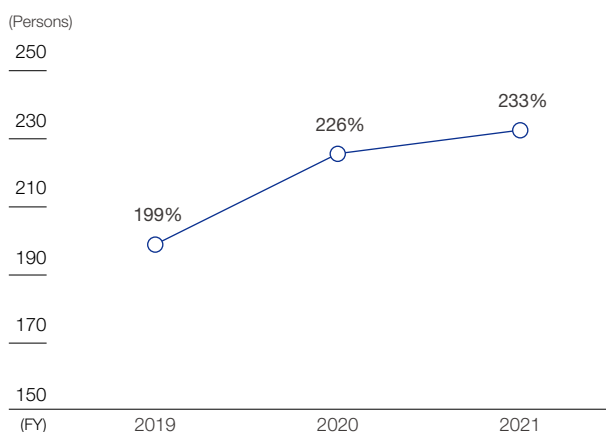
the top business schools in Germany and Japan. It is our unique training program that lasts about 10 months and includes sessions focused on strategic thinking skills, global leadership, and action learning. Initially adopted in response to the COVID-19 pandemic, a remote participation system adaptable to any environment allows simultaneous participation from all global sites. In addition to this, we have created a training model that has been updated with content that is focused on VISION 2030. Module#1 started in February 2021 and the final session will be held in November 2022. Graduates of this program have gone on to hold and be active in key positions in our company.

\*1 Successor coverage rate: Number of successor candidates for critical positions / Number of critical positions  
 \*2 Future executives (women, non-Japanese, or mid-career hires) / future executives \* 100  
 \*3 Turnover rate since FY2016 (yearly average)

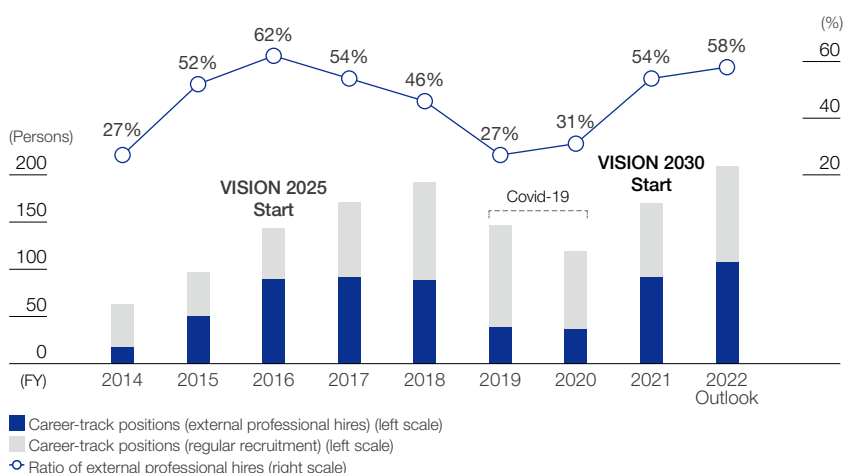
### Key talent management system



### Successor coverage rate for critical positions



### Percentage of external professional hires



- **VISION 2025**  
 Strengthened hiring of external professionals **toward portfolio transformation** since the start
- Under **VISION 2030**, take a step further to actively recruit **human resources who will contribute to business in growth and priority domains, and to the implementation of Basic Strategy**

## Key talent management

## Career story

**Antonios GRIGORIOU**

Executive Officer  
 Representative in America  
 President, Mitsui Chemicals America, Inc.  
 \* Became executive officer in April 2022



After working for several chemicals companies, I joined SDC Technologies, Inc. in the Mitsui Chemicals Group. Through several M&A's, SDC was able to grow its footprint globally. As part of that process, I worked closely with colleagues across different regions and skill sets. By working together to overcome both simple and complex business situations, I gained

an understanding of approaches and mechanisms for how decisions are made within an organization, while at the same time building a strong network; these remain a great asset to me to this day. It is important for business operations to respect diverse thinking transcending nationality and gender, while creating opportunities for everyone to speak up so as to introduce different perspectives into the organization. There is a need to provide a pathway that diverse talent can identify and relate to, and my new role is hopefully the start of that transition that others can see that with hard work, commitment and dedication, the opportunity to be rewarded and presented opportunities to build and grow your career is there.

## Key talent management

## Career story

**MATSUE Kaori**

Executive Officer  
 General Manager, Planning & Coordination Division,  
 Production & Technology Center  
 \* Became executive officer in April 2022



I have the impression that the position of general manager of the Planning & Coordination Division had been filled to date by engineers who had acquired specialized manufacturing knowledge and experience at manufacturing sites. However, since joining the company, I have had a long career in chemical safety, followed by responsible care, product quality, and pharmaceutical affairs. I believe that my mission is to bring about change, and

that I need not to think what is expected of me, but what I can do. Many challenging themes have been launched in fiscal 2022. One of them is a project to draw up a picture of next generation plants. I have begun discussing with interested employees what kind of plant they would like to see in 2030, and their vision for the future, which varies depending on the region and environment. We discuss, for example, work styles, women's participation, and relationships with local communities and supply chains. By creating an environment where unique and diverse colleagues with different backgrounds and expertise can frankly share their opinions while respecting each other so that new ideas and values can be generated, I too would like to grow even more.

## 2 Position management: Promotion of job-based human resource management

The Mitsui Chemicals Group has developed a position management policy that serves as the foundation for its talent management. Position management refers to the organizational design required to achieve the business plan. In other words, it is the design of job positions and assignment to those positions based on a common, Group-wide approach. To make this a reality, the process for the creation, elimination, and modification of job positions in the Group

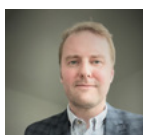
has been clearly defined and implemented on a Group-wide basis. In rolling out the policy, Mitsui Chemicals, Inc. established a global grade structure linked to the job evaluation system introduced in 2004 for management-level employees. This ensures visibility and transparency of job positions within the Group, and leads to the appropriate placement of talents.

## Position management

## Career story

**Johannes ROEMER**

General Manager  
 Compounds Business Division, Mitsui Chemicals  
 America, Inc.



Since I had joined Mitsui Chemicals Europe in Germany in 2006, I had the opportunity to see many different countries and cultures while traveling for business. Initially in our original sales territory (Europe, Middle East, Africa), later also in Asia and the Americas. It is always rewarding and inspiring to get to know people with different cultural backgrounds. There is the saying

that "travel broadens the mind", and I can definitely relate to that. I cannot stress enough how much I value the experiences and acquaintances made during all these years. In February 2022, I joined our office in the US to take on a new challenge in our Compounds Business. I am supported by an experienced and ambitious team here in the US and am glad to be part of making Mitsui Chemicals a truly global company. I am looking forward to promoting cross-regional activities and projects by bringing in my global experience gained throughout the years. It is great to see that Mitsui Chemicals is offering such an opportunity to its employees and is providing extensive support during the entire relocation process.

### 3 Diversity and inclusion

As we shift our business models and approach markets closer to consumers, we are required to have an understanding of diverse values and sensitivities. Creating a corporate culture that values diversity and inclusion and allows a diverse workforce to flourish without losing their individuality is one of the key management priorities for our Group. We are working to hire and train more women and change the way managers think. As KPIs to measure the empowerment of women in the workplace, we track the ratio of women in management positions (manager-level or above) and the percentage of women among regular hires. These efforts have also been recognized by external organizations, in such ways as the Company being selected as a Nadeshiko Brand enterprise and included in the MSCI Japan Empowering Women Index (WIN).

In fiscal 2021, we implemented several initiatives based on the theme of dialogue to change the awareness and behavior of both managers and female employees. We set up multiple opportunities for dialogue between role models and female employees, and introduced a mentoring system for research departments with a large number of female manager candidates to be developed and trained.

As for the ratio of female hires, in recent years, we have consistently hired women for around 50% of career-track administrative positions. As a result, there has recently been a growing number of female managers in business sectors and administrative divisions, and the range of occupations in which women can play an active role is expanding.

Priority issue 2

## Embodiment of self-initiative, autonomy, and collaboration

### 1 Improvement of engagement

The Mitsui Chemicals Group has been conducting the global employee engagement survey for all Group and global employees since 2018, and the second survey was conducted in fiscal 2021 (response rate: 88%). Since the last survey, there have been major changes in the environment, such as working styles, due to the COVID-19 pandemic. Nevertheless, the overall Group engagement score was 34%\*1, a 3% improvement from the previous survey. Given the fact that the market average score has declined globally\*2, we believe that the post-survey actions we have taken since fiscal 2018 have had some effect. Organizations that were particularly energetic in their activities improved their scores by 20% or more compared to the previous survey. In addition, the score for “delegation of authority/autonomy”\*3, which was identified in the previous survey as the Group’s uniqueness (strength), increased another 4% to 42%, and that for “teamwork,” which was given as an area for improvement, also improved by 7% to 38%. We regard this as a step toward self-initiative, autonomy, and collaboration, which is the organizational culture that the Group aims to achieve.

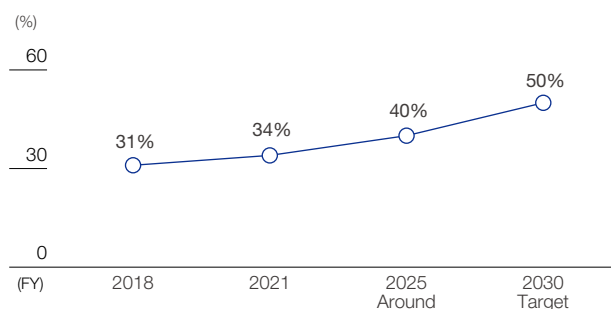
In fiscal 2021, we conducted monthly online roundtable discussions with the president to promote communication and

collaboration beyond one’s own organization and company. And to strengthen learning and self-development, which had been raised as an issue, we have also decided to globally expand the LinkedIn Learning program, which had been implemented on a trial basis, to approximately 9,000 employees or more, and are proceeding with its introduction. In addition, during the top management intensive discussions for strategic items, issues toward the realization of VISION 2030 were identified from various perspectives, including by employee attribute and the content of free comments, and policies for dealing with them to improve engagement have been discussed. Important themes that can lead to corporate culture change were created and have materialized through this process, including further encouragement of challenge and change, a fair evaluation system that rewards performance, and promotion of autonomous career building.

As in the previous survey, we will continue to formulate, implement, and review post-survey action plans for the entire Group and each organizational unit to further improve scores (the next survey is scheduled for fiscal 2023).

\*1 Percentage of employees whose responses averaged 4.5 or higher on six engagement-related questions (4: Somewhat agree, 5: Agree, 6: Strongly agree)  
 \*2 Data provided by Kincentric Japan  
 \*3 Example questions: (1) At work, my opinions and ideas seem to count, (2) I have sufficient influence and involvement in decisions about my projects / roles.

Engagement score and target



Engagement factor score

Three areas of strength	Compliance with laws and company rules	Safety	Delegation of authority/ autonomy
	61%	51%	42%
Three areas for improvement	Compensation and recognition	Career opportunities	Utilization and placement of human resources
	25%	22%	19%

Post-survey action

Inside story

### Life & Healthcare Solutions Business Sector

In response to the results of the previous survey, at the Planning & Coordination Division of the Life & Healthcare Solutions Business Sector, we executed a post-survey action plan with a particular awareness of issues in “support for subordinates” and “teamwork.” Instead of directly pursuing score improvement, the discussion started from using the problematic items as inspiration to identify such points as the essential management and organizational structure issues in our department. Due to the nature of the work in the Planning & Coordination Division, while the members have their own expertise, their work is diverse, and they often work independently, making horizontal cooperation difficult. Against this backdrop, the extent to which individual growth and horizontal connections could be felt was a significant theme.

One of the actions was to newly establish a Planning & Coordination Division Human Resources Committee, creating a venue for all leaders of each group to discuss the development and training of each of their subordinates. In order to develop job descriptions for group members and share them with other group leaders, a deep understanding of the actual work situation and clarification of their roles and expectations is indispensable. This process was very meaningful for each leader to see talent development as a matter of personal relevance and to be aware of the importance of training everyone across the board.

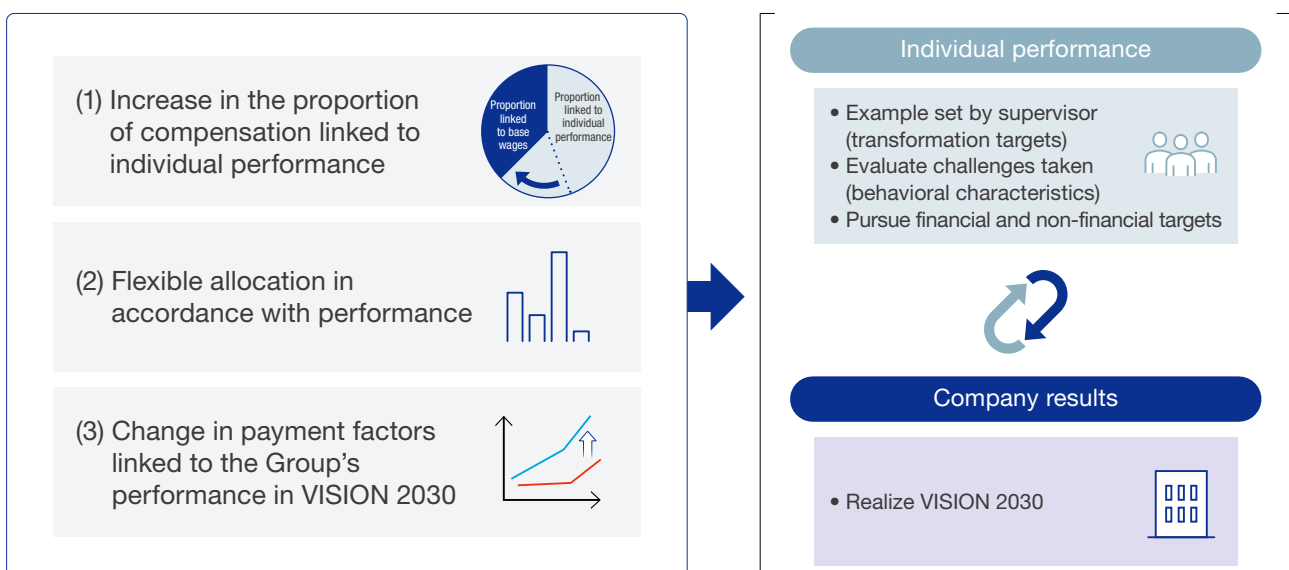
New insights and new opportunities to play an active role were discovered through discussions with other leaders. As a result, we believe that because concrete action was taken, the group members themselves were able to realize that many leaders are involved in their careers and development.

## 2 Evaluation and compensation system that fosters a culture of taking up the challenge of change

Mitsui Chemicals, Inc. has revised its human resources evaluation and compensation system in April 2022. This was implemented as a human resources initiative to address performance management and compensation and recognition, which were identified as areas for improvement in engagement surveys, and for strengthening the organizational culture and ability to take on challenges, which was identified as an issue in the VISION 2025 review. By rewarding the challenges taken on, achievements, and contributions by individuals in a timely and appropriate manner, we aim

to create an organizational culture that encourages each employee to persevere in pursuit of higher goals without fear of failure, while enhancing the credibility of performance evaluations. In addition to fostering a culture of taking up the challenge of change necessary to realize VISION 2030, we aim to accelerate human resource development and increase engagement by improving the quality of dialogue during the evaluation process, including appropriate goal setting between supervisors and subordinates and daily feedback.

### Strengthening the cycle to promote taking on challenges without fear of failure





Base challenges

Health-focused management

Health-focused management that brings together the company and its workforce based on the mission of promoting the happiness and fulfillment of employees

“Promoting the happiness and fulfillment of employees” is stated as part of the Mitsui Chemicals Group’s Corporate Mission. We also believe that the health of employees leads to the happiness of employees and their families, enhances the meaning and joy of work, serves as the foundation of our Group, contributes to local communities, and leads to the sustainable development of society. Based on this, our ideal vision is to promote health-focused management that autonomously promotes occupational health and wellness by enhancing both the physical aspects, such as the workplace environment and facilities where employees can work in good health, and the intangible aspects, such as health management and health promotion.

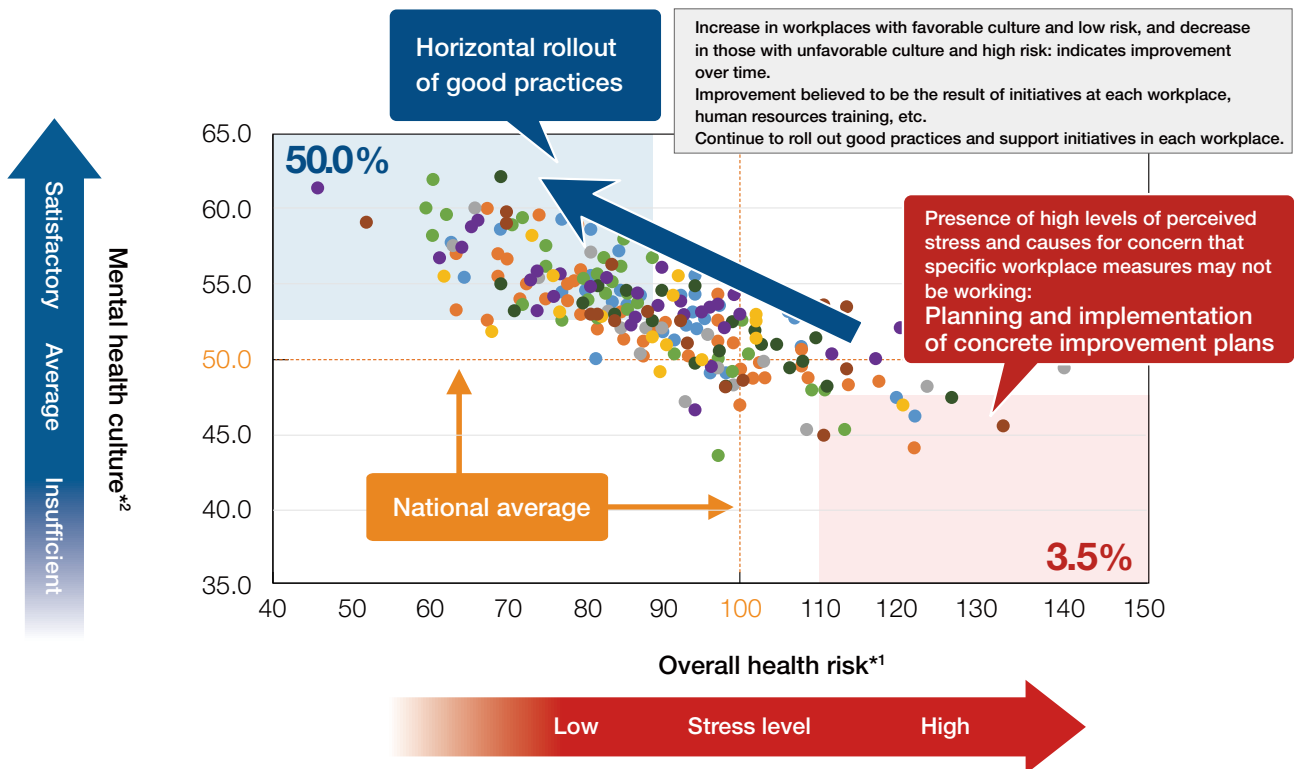
In VISION 2030, based on the above mission, we set the following non-financial KPIs for high-priority themes: the average rate of lifestyle-related disease of 8.0% or less, and the frequency of absences from work due to mental health disorders of 0.25 or less. We are also implementing unique initiatives such as promoting various health checkups, smoking cessation support, online fitness, health promotion measures through the utilization of a portal site called MCI Health Navi, and e-learning and support interviews related to mental health (interviews held twice a year for two years after joining the company) not only for new graduates

but also for mid-career hires.

In addition to the simple occupational stress survey, a new workplace stress survey, which includes a mental health culture survey to provide hints for improving the workplace, has been conducted company-wide since 2011. In addition to feedback and follow-up of results for individuals, organizational results are explained to each division head to help improve the workplace. In workplaces with high levels of stress, we conduct interviews with division heads and workplace members, and develop and implement stress reduction plans (communication improvement plans).

Starting in fiscal 2018, a dedicated system was introduced to allow employees to check their individual results and their division’s results on the web. An increasing number of workplaces are proactively using the survey results as a catalyst for voluntary improvement of their workplaces. As a result, improvements in workplace atmosphere are evident, with the number of workplaces seen as having “low noticeable stress levels and are considered to be functioning well in various categories” increasing from 22.1% in fiscal 2015 to 50.0% in fiscal 2021, and the number of workplaces judged as having “high levels of perceived stress, and causes for concern that specific workplace measures may not be working” decreasing from 8.7% to 3.5%.

FY2021 results of new workplace stress survey (Mitsui Chemicals and contracted affiliates)



\* Each point in the graph represents a workplace (divisional level at the Head Office, and section level at other business sites).  
 \*1 Overall health risk: calculated from a subjective sensory scale of workload, sense of control, and sense of support from supervisors and co-workers. A relative measurement with 100 as the national average. A score of 120 implies that the workplace has a 20% higher incidence of health problems than the average workplace.  
 \*2 Mental health culture: Scale-based measurement of the appropriateness of the chain of command, labor management, collaborative cooperation, and training opportunities. A relative measurement with 50 as the national average; higher figures imply a better workplace culture.

## Panel Session

## The Mitsui Chemicals Group's Human Resources Strategy to Accelerate Transformation and Realize VISION 2030



ONO Shingo

General Manager, Global  
Human Resources Division

ANDOU Yoshinori

Member of the Board  
Senior Managing Executive Officer & CHRO

SAMPEI Hiroki

Founder & Principal, Astonering Advisor LLC  
Visiting Researcher of Hitotsubashi University CFO Education  
and Research Center, Co-founder & member of the steering  
committee of the Forum of Investors Japan

### Working to create a human resources portfolio rich in diversity

**Andou:** As we have indicated by selecting human capital as one of the abilities essential to business continuity, which is one of our material topics, our human resources strategy will play an important role for the Group as we work to realize VISION 2030. We place particular importance on the link between our human resources strategy and our overall management strategy. Based on our ideal vision for 2030, we have established priority issues and measures for realizing this strategy, as well as non-financial key performance indicators (KPIs) as monitoring metrics for each of our priority issues.

Our priority issue No.1 is the evolution of our key talent management in order to acquire, develop, and retain human resources. As part of our key talent management initiative launched in fiscal 2016, we have defined around 100 critical positions globally across the Group, and have set a KPI unique to the Group of successor coverage rate, which represents the ratio of the number of successor candidates to the number of positions.

**Sampei:** I think it is commendable that you have set such detailed KPIs and are committed to achieving them. When working toward these goals, it is important to explain to external stakeholders what the basis for the goals you have disclosed is, and that you have not simply set targets that can be achieved by continuing your past approach. The process of working to set well-grounded targets also gives you the opportunity to conduct a thorough analysis of the company's current situation.

**Ono:** I agree. At present, we have two or three successor candidates selected for each position, which gives us a coverage rate for fiscal 2021 of 233%. We believe that the current target is appropriate, given that the number of positions may increase in future as the business grows. I also believe that we must update our KPIs as required in response to changes in the environment.

**Sampei:** You have set a successor coverage rate target of 250% in 2030, but how do you evaluate the quality of your human resources? Won't the skill sets and other attributes required differ according

to the business environment and the positions themselves at any given time? You may need, for example, individuals who are skilled at responding to crisis scenarios, those who excel at top-down management, or those who adopt a balanced approach.

**Andou:** You raise an important point. We are mindful of the time frame for our pipeline of successor candidates, and create succession plans for the Group for the next generation of leadership as well as the generation after that. We also place importance on each candidate's aspirations and passion, while identifying each candidate's characteristics, competencies, and experience through external assessments and other means. Just under 100 of employees out of the Group's approximately 20,000-strong workforce have been identified as future executives in our Key Talent Management program for fiscal 2021, and as CHRO, I place a high priority on personally engaging in dialogue with each of these individuals working across our global organization. We also define position profiles when creating succession plans. The position of business sector president, where



**SAMPEI Hiroki**

Joined Nippon Life Insurance Company after graduating from Waseda University's Faculty of Science and Engineering. After serving as the CEO of a joint venture asset management company in the U.K., he managed stewardship initiatives at Nissay Asset Management Corporation and FIL Investments (Japan) Limited before founding Astonering Advisor LLC in April 2021 to counsel publicly listed companies on how to improve their corporate value and support institutional investors in their stewardship efforts. He is a member of several study groups of the Ministry of Economy, Trade and Industry (METI), a member of expert groups of the Financial System Council, a member of the Financial Services Agency (FSA) Council of Experts Concerning the Follow-up of Japan's Stewardship Code and Corporate Governance Code, and a member of the Corporate Law Subcommittee of the Legislative Council of the Ministry of Justice, among others. He is also co-founder and member of the steering committee of the Forum of Investors Japan, a forum for institutional investors to share their awareness of relevant issues.

the mission is to maximize business value, requires different qualities and personality traits than a position in a corporate division, as well as different career experience.

**Ono:** Even if they possess the same skill sets, human resources have diverse capabilities, such as those who excel in a crisis, or those who relish the challenge of exploring uncharted fields. The Mitsui Chemicals Group emphasizes a culture in which there is regular communication between managers and their subordinates regarding the type of career they aspire to and the experiences they would like to have in their future careers. We believe it is key to uncover the passion and aspirations of each individual through a two-way dialogue process.

**Sampei:** While some people have the ability to take the lead and drive the organization forward, others are skilled at obtaining consensus and unifying the members of an organization. The type of person required changes with the type of business environment. As you stated, creating a system that helps people to recognize their own aspirations and what they personally want to do is a very important perspective.

**Andou:** In addition to securing sufficient human resources, we consider diversity to be another key factor. Accordingly, in VISION 2030 we have set the number of executive officers with diverse backgrounds and the ratio of women in management positions as KPIs.

**Sampei:** I understand that your definition of the number of executive officers with diverse backgrounds includes the number of mid-career hires in addition to women and non-Japanese, and I was impressed by the high proportion among your workforce of mid-career hires recruited to meet immediate business needs, and by their very high retention rate. This retention rate in particular really stands out among Japanese companies.

**Andou:** The Mitsui Chemicals Group has a history of mergers between a variety of companies since it began operations in 1912. Through this process, our Group has embraced diverse businesses, cultures, and human resources, helping foster a corporate climate in which each individual can fully utilize their strengths. Our Group is not mono-cultural, but rather a collection of diverse cultures, and I believe that we have a corporate climate of acceptance of the uniqueness of each individual. On the other hand, the ratio of women in management positions is still less than 5%, which is behind other companies, and we are aware that this is an area we must focus greater efforts on going forward.

**Sampei:** On the topic of promoting women's careers, I note that the Japanese government has recently made it mandatory for companies to disclose the wage gap between their male and female employees. This is likely to lead to further analysis of diversity at companies going forward. Gender wage disparity could be due to a variety of reasons. It may be a

skewed age composition between genders, or that there are differences in length of service, job type, and other factors. Analysis of the causes of a particular phenomenon is an important first step toward improvement.

**Improving engagement to realize self-initiative, autonomy, and collaboration**

**Andou:** Another factor that is an important step toward advancing diversity of our human resources is our priority issue No.2: improving employee engagement. We have set an employee engagement score of 50% as a KPI for 2030, and are implementing a variety of measures based on the concept of embodying self-initiative, autonomy, and collaboration.



**Sampei:** I see that you have set yourselves the goal of work style reform, by pursuing new working styles to achieve the best mix of work styles. Is this a slightly different concept from the work-life balance that has often been talked about in recent years?

**Andou:** As we have stated in our policy of achieving the best mix in accordance with conditions in each country and region, we aim to pursue what is best for the Group as a whole. We hope to do so by establishing the optimum work style for each part of the Group, not only with regard to optimum work style at the individual level, but also at the organizational unit and Group company level. As one example, Mitsui Chemicals, Inc. is implementing Phase II of its work style reform, which includes relaxation of dress code and creating guidelines regarding side jobs. These measures were developed by a cross-organizational project team

within the division to tackle the task of “creating a productive work environment,” which was identified as an area requiring improvement in the results for the Human Resources Division in the employee engagement survey conducted in fiscal 2018.

**Sampei:** What is your aim in creating guidelines for side jobs?

**Ono:** By engaging in side jobs, we hope that employees will acquire diverse experience outside the company, expanding their perspectives and further developing their abilities, which they can then apply in their primary job. More than 30 of our employees have already utilized the scheme.

**Andou:** We also conducted the second employee engagement survey in fiscal 2021. This survey, which we once again conducted in 11 languages, was completed by approximately 90% of employees across the Group on a global scale and resulted in a three percentage point improvement to 34%, versus 31% in 2018. The top-scoring engagement factors were “safety,” “brand as an employer,” followed by “delegation of authority/autonomy,” and I believe these results helped us identify the strengths that make us unique.

**Ono:** On the other hand, the survey also identified issues, such as stagnant motivation among young employees in their 20s. As a manufacturer it is particularly important that our young employees working in our plants, which are the source of our value creation, are able to gain fulfillment from their work, and maintain good physical and mental health. We will report the results of these analyses to management, so that each of our leaders are fully aware of the issues, while proactively promoting post-survey actions, including specific measures aimed at employee retention.

**Sampei:** I understand that you are also working to update your performance evaluation system to support a culture that encourages employees to take on new challenges. I believe that as more examples of challenges that have been attempted, or even those that have failed but led to positive evaluations, are shared within the company, a proactive

culture that motivates employees to tackle challenges will develop within the organization.

### Promoting transformation through an integrated Group-wide human resources platform

**Andou:** Our priority issue No.3 is to reinforce Group management. Specifically, we are building an integrated Group-wide human resources platform by introducing the Workday Human Capital Management provided by U.S.-based Workday, Inc. This platform visualizes a database of approximately 20,000 job positions within the Group as well as information linked to human capital, such as the abilities and aspirations of each Group employee. We believe that this will help strengthen our Group and global management, while also helping our employees to forge a career path on their own initiative, which is another issue that was identified in our employee engagement survey.

**Sampei:** This is a very positive step. The conventional top-down approach to personnel transfers in Japanese companies impose a heavy burden on employees, for example, by forcing them to leave their families behind to take up a position in a new location. Having this type of human resources platform in place will enable open positions to be appropriately matched with employees who meet the necessary skill requirements across the Group and on a global basis. This could be achieved, for example, by asking interested employees to apply for a particular position. This is also in line with the concept of “self-initiative, autonomy, and collaboration” that your Group emphasizes, from the perspective that the company not only works to develop its employees, but also provides an environment that allows them to grow.

**Ono:** I have high hopes that centrally managing information related to human capital in this way will make our global human resources strategy more transparent and effective, particularly in implementing measures including key talent management, which I mentioned earlier. In particular, critical positions within the



Group may shift in line with our business strategy, and we must be able to respond quickly to these changes. This platform can also be utilized, for example, to identify the human capital of a company that joins the Group through a merger or acquisition.

**Sampei:** The Mitsui Chemicals Group is currently undergoing major changes in the way it does business, including a shift to a solutions-based business model. This will require human resources with a range of different capabilities, including those who can think outside of the conventional business-to-business approach and conceive new ideas, as well as those who can organize and coordinate these ideas.

**Ono:** With respect to the future executives that I mentioned earlier, we not only take into account the personal attributes and aspirations of each individual, but also conduct discussions involving top management as well based on macro-level network analysis and other factors.

**Sampei:** I see that you are conducting very detailed analyses, which is fitting for a chemicals company. Most of all, it is evident to me that you have held extensive discussions in developing the KPIs toward the vision you are aiming for.

**Andou:** Thank you. Our team at the Human Resources Division is committed to driving change through our human resources strategy in order to realize VISION 2030.



# Management and Business Transformation

## —Responsible Care Safety Initiatives—

Responsible Care <https://jp.mitsuichemicals.com/en/sustainability/rc/index.htm>

Safety and Prevention [https://jp.mitsuichemicals.com/en/sustainability/rc/safety\\_prevention/index.htm](https://jp.mitsuichemicals.com/en/sustainability/rc/safety_prevention/index.htm)

The Mitsui Chemicals Group recognizes ensuring safety to be the foundation of continuous growth for the Group. It is the cornerstone of the trust placed in us by society, and at the same time, it increases our manufacturing quality, leading to improvement of corporate value.

With this approach, based on the management policy that states “Safety is our top priority,” our Responsible Care Policy declares: “We pledge that safety is our top priority and will focus on achieving zero accidents and occupational injuries.” Top management repeats this on many occasions, such as in fiscal-year kick-off addresses, plant visits, Safety Day messages, and in the president’s message within Company newsletters.

Safety has also been given as one of the “prerequisites for business continuity” in our material topics, and VISION 2030 defines our ideal safety vision as fostering a culture of safety by ensuring that “safety is our top priority” and achieving a high level of safety throughout the Group, even with diverse personnel, equipment, and technology. Each and every member of staff working for the Group, including construction subcontractors, will work steadily to foster a culture of safety.

### Topics

#### Smart industrial safety initiatives

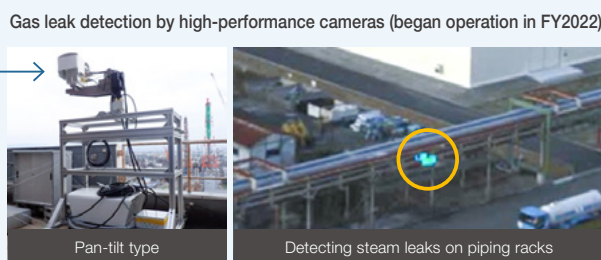
The Mitsui Chemicals Group aims to establish highly efficient, safe, and stable next-generation plants by effectively introducing advanced technologies.

In fiscal 2021, we began full-scale operation of our occupational injury hazard detection AI, which is an AI-powered search system for past occupational injuries, problem reports, and near misses, and of our remote online safety education for overseas affiliates with AI-based simultaneous machine translation. We are also pushing forward on developing systems such as operation support systems using AI and online simulators and product abnormality detection and plant monitoring systems using image-based AI, as well as on introducing devices such as wearable terminals to support field work and wireless sensors and drones to enhance facility management.

For these initiatives, in June 2022, Ichihara Works was designated a Super Accredited Business as established by the Ministry of Economy, Trade and Industry (Osaka Works was accredited in March 2021). Super Accredited Businesses are businesses that are implementing advanced safety initiatives such as the use of the internet of things, big data, advanced risk assessment, and third-party safety capability assessment in order to address the aging of plants and the decrease in the number of skilled employees. Accreditation also leads to a greater competitive advantage on the global stage.



High-performance cameras



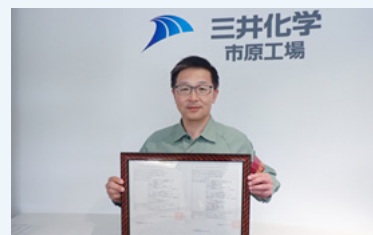
Gas leak detection by high-performance cameras (began operation in FY2022)

Pan-tilt type

Detecting steam leaks on piping racks



Full view of Ichihara Works



General Manager Abe with accreditation certificate



Topics

**Safety dialogue between experts and president**

To raise awareness of safety assurance, the Mitsui Chemicals Group has held several safety dialogues between experts and the president. The year 2022 marks a decade from the explosion and fire of the resorcinol production facility at the Iwakuni-Ohtake Works in 2012. During the safety dialogue conducted this year, NAKAMURA Masayoshi, a specially-appointed professor at Tokyo Institute of Technology and a member of the accident investigation committee at the time, joined President HASHIMOTO in his first safety dialogue since assuming the position of president, exchanging memories of the accident, lessons learned, and ideas for further improvement of safety management in the future.



NAKAMURA Masayoshi, Ph.D, specially-appointed professor at Tokyo Institute of Technology on the left

**Key points for safety management gained from the dialogue**

- It is important to have measures to ensure safety that take into account both process safety (whether equipment itself is safe) and personal safety (whether it is being operated safely).
- While ensuring that important technologies are passed down to the next generation, we must also work to introduce new safety technologies by utilizing our diverse human resources.
- Rather than attempting to completely eliminate risk, it is necessary to consider the balance with limited management resources and control risk within an acceptable level.

## Management and Business Transformation — Respect for Human Rights —

**Basic philosophy**

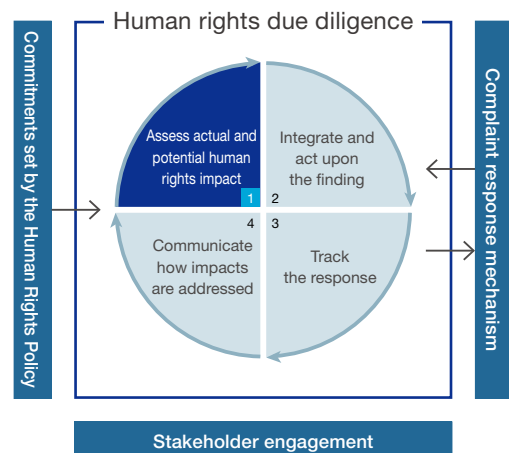
The Mitsui Chemicals Group pursues just business throughout the supply chain based on the belief “having a high regard for people” is important. The Group lists “respect for human rights” as part of the Group’s material topics as one of its pre-requisites for business continuity, and incorporates its status of response to human rights risks into its business targets as non-financial metrics in VISION 2030.

The Group revised its Human Rights Policy in July 2022, after obtaining approval from the Board of Directors. In order to implement “management that respects human rights,” we have declared our commitment both within and outside the Group to take further initiatives in line with the latest global developments.

Mitsui Chemicals Group Human Rights Policy  
[https://jp.mitsuicheicals.com/en/sustainability/society/rights/pdf/basic\\_policy.pdf](https://jp.mitsuicheicals.com/en/sustainability/society/rights/pdf/basic_policy.pdf)

**Human rights due diligence initiatives**

Based on the above philosophy, we are working to conduct thorough human rights due diligence. In order to gain a grasp of the human rights challenges that arise from each region around the globe that we should consider, we reference information from the United States State Department’s “Country Reports on Human Rights Practices” as well as survey materials such as “Human Rights Watch World Report” from NGOs and other organizations involved in human rights, and conduct investigations of challenges with regard to regional human rights where the Group’s business sites exist. Under collaborations with external experts, we started confirming the situation and organizing the status in fiscal 2021 while taking into account the impact of climate change, pollution, waste, etc., on human rights as a new viewpoint of investigation, in addition to the conventional viewpoints on human rights issues such as discrimination related to employment status or occupation, unfair labor conditions, and forced labor.



# R&D and Intellectual Property Strategy

## R&D Strategy

R&D Policy and Strategy <https://jp.mitsuichemicals.com/en/techno/strategy/index.htm>

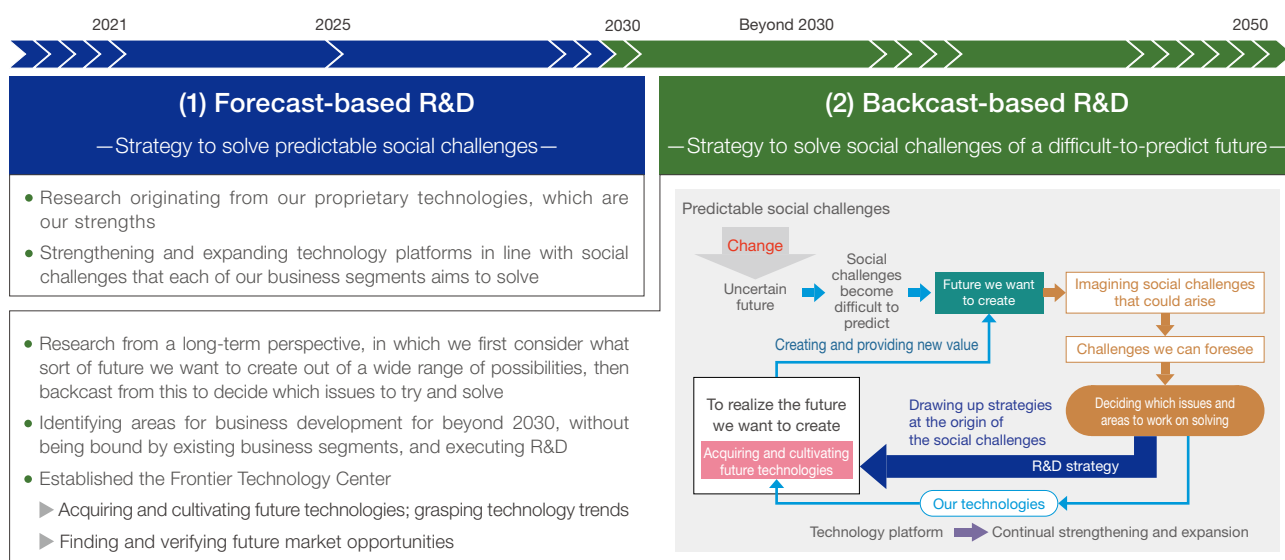
### Strategy toward achieving targets of VISION 2030

As part of VISION 2030, the Mitsui Chemicals Group has formulated an R&D strategy that combines two approaches in order to promote R&D from a long-term perspective: short- to medium-term, and medium- to long-term.

Based on Mitsui Chemicals' core technologies of polymer science, material science, and process technology, we will strengthen human resources, which are of paramount importance, while implementing a cycle of functions, organization, and technology to execute the following two R&D measures.

- (1) R&D originating from our proprietary technologies that are our strengths, in which we identify and address social challenges that we aim to solve in each of our business segments
- (2) R&D from a long-term perspective, in which we look forward to a difficult-to-predict world of 2030 and beyond, consider what sort of future we want to create out of a wide range of possibilities, and then backcast from this to decide which issues to try and solve

### Two R&D measures

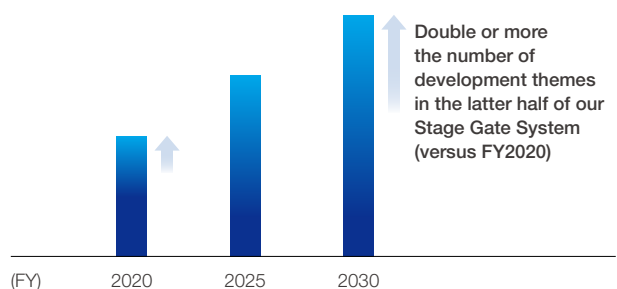


We have introduced a Stage Gate System for new product development, and we divide new products into five stages from thematization to market launch, and conduct such activities as safety evaluation, investigation of environment-related laws and regulations, and risk assessment necessary for each stage. Under VISION 2030, we believe that activation of the pipeline and securing a certain number of themes are necessary as a precondition for innovation creation, and we have set a non-financial target of increasing the number of development themes, especially in the latter half of this Stage Gate System (close to market launch). Value creation for beyond 2030 is also vital. We have set a non-financial target for the number of new areas of the Mitsui Chemicals Group for the post-2030 themes that the newly established Frontier Technology Center will address as its mission.

In addition to research fields aligned with the social challenges that each business segment aims to solve, we will also focus on research fields that help create solutions to social challenges according to VISION 2030, as well as

on technological development that contributes to carbon neutrality. We will also pursue the development of cutting-edge foundational technologies such as materials informatics and sensory evaluation technologies, as well as research and development at the Mitsui Chemicals Singapore R&D Centre with a view to creating new businesses originating from the Asia-Pacific region.

### Number of development themes in the Stage Gate System



## R&D initiatives to expand Blue Value™ and Rose Value™ products and services

In order to further expand our Blue Value™ and Rose Value™ products and services, we are pushing forward with the establishment of a system for product design and application development that incorporates the Blue Value™ and Rose Value™ perspectives from the research and development stage, in addition to self-evaluation via the check sheets used to date.

From fiscal 2020, we have been using this preliminary review before market launch to discover potential Blue Value™ and Rose Value™ products and services. Unlike the main review process after the launch, which determines whether or not it can be certified as Blue Value™ or Rose Value™ products and services, the preliminary review is a

process to share how to reflect the performance and value required for environmental and social contribution from the Blue Value™ and Rose Value™ perspectives in the concepts and envisaged business models of R&D products and services. Discussions with the review board members sometimes generate ideas for expanding applications from new perspectives not envisioned by R&D divisions, or uncover new value, which is also helpful in marketing. The preliminary review is also used as an opportunity to confirm the direction and adjust the course of research and development toward the market launch, as it also confirms missing data and verification processes in preparation for the main review.

### Examples of products that were selected as Rose Value™ product candidates in the preliminary review and were actually certified as Rose Value™ products after market launch

#### ■ STRUCTBOND™

Certified as having the Rose Value™ contribution of “enriching life and society” because its new functions as a sheet-type sealant and thin film encapsulation can be applied to flexible displays.

- STRUCTBOND™ sheet-type sealant  
<https://jp.mitsuichemicals.com/en/service/product/structbond-sheet.htm>
- STRUCTBOND™ thin film encapsulation  
<https://jp.mitsuichemicals.com/en/service/product/structbond-encapsulation.htm>

#### Example of application of touchless, aerial display technology using transparent adhesive

STRUCTBOND™ (Transparent adhesive)



Adopted



Trial launched at Seven-Eleven Stores

Use in POS registers

- Provides a new retail experience
- Lets staff operate registers safely
- Optimizes register counter space



- 1 Holographic image
- 2 Optical element
- 3 Display
- 4 Sensor

Installation at town hall in Sakai, Ibaraki Prefecture

Use in ticket machines

- Potential use in neighborhood facilities
- Going contactless to help prevent infection

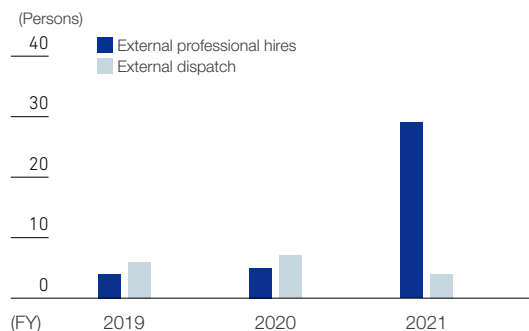
#### ■ UNISTOLE™

Certified as having the Rose Value™ contribution of “enriching life and society” because the new functionality of liquid polyolefin-type adhesives enables lithium-ion batteries to be made into pouches, leading to weight reduction, greater freedom of shape, and improved design

- UNISTOLE™ liquid polyolefin-type adhesive  
<https://jp.mitsuichemicals.com/en/service/product/unistole.htm>

## R&D human resources

In order to acquire skills, capacities, knowledge, and experience in new areas, we proactively dispatch staff externally and recruit external professionals. Moving forward, we will particularly focus on external dispatch.



#### External dispatch initiatives

With a view to the future of 2030 and beyond, the Frontier Technology Center dispatches researchers to universities and research institutes in Japan and overseas in order to acquire cutting-edge science, technology, and knowledge. We have two people stationed in Silicon Valley in the United States with the aim of launching new R&D projects through open innovation with universities and startups.



**UEHARA Yoshikazu**  
General Manager,  
Frontier Technology Center

#### Example

We will work with the marketing team of Mitsui Chemicals America, Inc. to search for market trends and build an innovation ecosystem with U.S. universities and startups. I will personally discover new technologies to be the core of Mitsui Chemicals in the future, and link them to new business and products.



**YAMAZAKI Mai**  
Mitsui Chemicals America, Inc.  
and Frontier Technology Center

Research examples

Providing total “sensibility” solutions to achieve even greater comfort and convenience

In April 2022, the Polymeric Materials Laboratory and part of the Functional Materials Laboratory were merged to form the Polymers & Composite Materials Laboratory, which conducts research not only on materials but also on processed products. Within this laboratory, the Frontier Science Department focuses on utilizing new technologies such as sensory control technology and additive manufacturing, particularly in the area of functional evaluation of processed products.

Until now, as a materials manufacturer, the Mitsui Chemicals Group has focused on pursuing functional value that can be expressed in numerical specifications, such as heat resistance, rigidity, and formability. However, in the future, in addition to functional value, the importance of sensibility value, which appeals to the sensibilities of consumers, is expected to increase further. For example, if vehicles change from being a space for transport to a living space as autonomous driving spreads, a major theme will be how to enhance the sensory comfort and amenity, or “sensibility value,” of the interior design and the like. The Frontier Science Department is promoting efforts to evaluate, analyze, and then design comprehensive “comfort” by consolidating research related to the senses, such as hearing and touch. We translate the sensibility value sought by customers into the functional value of materials, and propose solutions and solve challenges in terms of comfort. This entity truly serves as a hub connecting our customers with our polymer product line, which is consistent with the Group’s ideal vision of becoming a solution provider rather than a material supplier.



**NAKASHIMA Tomonori**  
 KANSEI Engineering Team Leader,  
 Frontier Science Department,  
 Polymers & Composite  
 Materials Laboratory

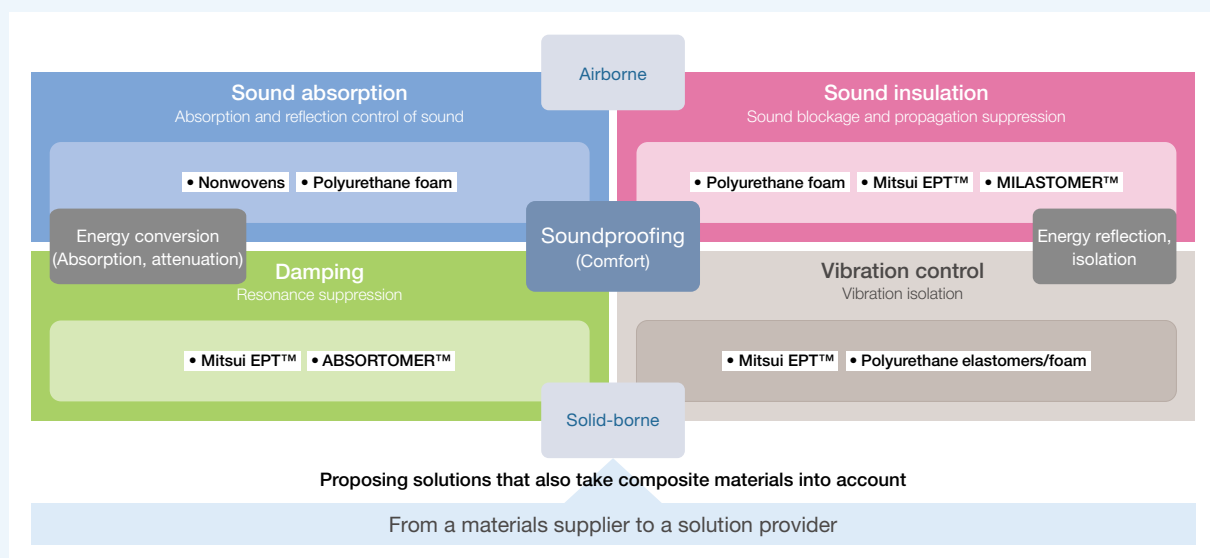
Acoustic solutions

Currently in the mobility field, as electrification of automobiles accelerates, various types of noises that were previously unnoticeable due to engine noise are becoming more noticeable. The Mitsui Chemicals Group has provided a variety of soundproofing materials in the past, and these trends mean that the materials to be used need to be changed to suit the type of sound to be suppressed—in other words, the frequency and the method of propagation. We are working to adapt to these challenges as quickly as possible through activities such as inviting customers to the Group’s acoustic testing laboratory to actually test how they hear.

Tactile solutions

We are working to propose materials that appeal to the sense of touch, such as pleasant texture and quality, in order to enhance the comfort of automobile interiors. We are working on proposals for pleasant materials by utilizing numerical data on factors such as deformation, pressure distribution, friction, and vibration of touching fingers to capture complex and vague tactile sensations that can be expressed with words such as “smooth” and “silky.”

Overview of soundproofing technology (Mitsui Chemicals’ ideal vision)



## Topics

### Established Mitsui Chemicals, Inc. - Carbon Neutral Research Center (MCI-CNRC) within Kyushu University's International Institute for Carbon-Neutral Energy Research (I<sup>2</sup>CNER)

Kyushu University and the Mitsui Chemicals Group have signed a comprehensive collaboration agreement to develop and acquire cutting-edge environmental infrastructure technologies that contribute to carbon neutrality, as well as pursue practical use and commercialization of these technologies in relevant fields, and have established the Mitsui Chemicals, Inc. - Carbon Neutral Research Center (MCI-CNRC).

We will drive initiatives to resolve social challenges and achieve carbon neutrality, aiming to create leading-edge commercialization technologies with Kyushu University toward the creation of a sustainable society.



Signing ceremony



Research building of Kyushu University where MCI-CNRC is located



MCI-CNRC website  
<https://i2cner.kyushu-u.ac.jp/mci-cnrc/en/>

## Intellectual Property Strategy

Intellectual Property Strategy  
<https://jp.mitsuichemicals.com/en/techno/ip/index.htm>

### Strategies and initiatives to achieve VISION 2030 targets

Under the Group-wide Basic Strategy of VISION 2030, and in close collaboration with business divisions, R&D divisions, production/technology divisions, and other relevant departments, within and outside of the Group, we will review our policy for acquiring and utilizing intellectual property (IP) that keeps the Group predominant over the competitors. By constructing such business-specific intellectual property portfolios, we aim to maximize the business opportunities afforded by intellectual property and minimize any business risks associated with intellectual property.

A particular focus in recent years has been the promotion of IP digital transformation (DX). By presenting combined knowledge we have obtained through research and analysis of intellectual property information and business information from internal and external sources, we have discussions on potential fields for new business development, and are deepening cooperation with the relevant business and R&D divisions. We are regarding such activities, so-called IP landscape, as the core of our IP digital transformation, and we are proactively recruiting external professionals with expert knowledge in intellectual property DX.

Active roles played by  
an external professional hire

#### SATO Koji

Information Analysis Team Leader,  
Intelligence & Information Department,  
Intellectual Property Division



In recent years, one of the DX initiatives in the intellectual property field, known as IP landscape, has been particularly active. It is necessary to have a corporate strategic viewpoint and to view IP information not only

in terms of rights and technologies, but also from a business perspective, such as the degree of influence on other companies, and to integrate and utilize market information as well. I make use of various experiences from my prior job in research, sales, production, and external activities.

I am examining analytical methods to extract the IP information necessary for business and research from a data scientist's perspective. Currently, collection of related information, linking data with different information sources, and improving internal sharing are inadequate, so I am working to develop a data infrastructure, including the use of AI.





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## Outside Directors' Roundtable Discussion

How to realize VISION 2030 and  
become a corporate group that helps shape the future



The Mitsui Chemicals Group's VISION 2030 calls for a range of transformations rooted in social challenges. In this feature, Mitsui Chemicals' outside directors discuss the recommendations they made during the formulation process, their assessment of VISION 2030, and the challenges the Company will face as it works to realize this vision.



**MABUCHI Akira**

Mr. Mabuchi was appointed to Mitsui Chemicals' Board of Directors in June 2021 after previously holding the positions of Director of the Board and Executive Vice President, as well as Corporate Auditor, at SUBARU CORPORATION. He has a wealth of experience in corporate management and corporate auditing, as well as deep insight into the mobility field—one of the Company's main areas of focus. Member of Nomination Committee and Executive Compensation Committee.

**Ensuring that planned changes are implemented effectively by promoting awareness throughout the Group and conducting ongoing monitoring**

**Yoshimaru:** One of the things that stood out to me about the creation of VISION 2030 was that workshops were held with the young and mid-career employees who are likely to form the core of the Mitsui Chemicals Group in 2030. Due to this initiative, the study of the new vision began with management and employees sharing a mutual awareness of the key challenges the Group faced and the type of corporate culture they wanted to build.

Having the employees who will shape the Group's future participate in the formulation process from the early stages will serve not only to broaden the perspective of the vision, but will also provide a driving force during the implementation phase. To prevent the vision from ending up as just wishful thinking, in order to increase effectiveness I recommended that the Company set KPIs for non-financial elements and have the Board of Directors continuously monitor them.

**Mabuchi:** I focused particularly on transformation of the business portfolio. When I took up the position of outside director, the blueprint for VISION 2030 had already been drawn up. My initial impression was that the newly-established business segments would grow independently, and it was difficult to identify the direction of the Group as a whole. As the year 2030 is just one milestone along the road to the future, I recommended that the Group should clearly articulate its overall direction from a long-term perspective, including its purpose in society and how it intends to use its strengths to contribute to solving social challenges by transforming its business portfolio.

**Mimura:** Since I only took up my position in fiscal 2022, I will discuss this matter in terms of societal trends. In the past, society only expected companies to deliver strong financial performance. Nowadays, however, companies are expected to show how they will contribute to the resolution of social challenges through their business activities from a medium- to long-term perspective. VISION 2030 communicates how the Mitsui Chemicals Group intends to transform itself to deliver even greater value to society, and it is highly

commendable that it has established clear quantitative targets, including non-financial metrics. With regard to the business portfolio transformation mentioned earlier, it is important for the Group to explain its intentions and rationale to its stakeholders while working to promote a common awareness and understanding of the vision within the Group and ensuring that the progress made toward its goals is properly shared and disclosed. If it can successfully do this, VISION 2030 will not be just an abstract vision, but will come to life as a real, solid roadmap for the future.



**YOSHIMARU Yukiko**

Ms. Yoshimaru brings a high level of insight to Mitsui Chemicals' Board of Directors gained through her experience as an officer of other companies, particularly in the area of diversity promotion, as well as her extensive international experience. She was appointed as an outside director in June 2019, and serves on the Nomination Committee and the Executive Compensation Committee, where she provides expert advice and guidance on ensuring transparency and suitability in the nomination of management candidates and executive compensation systems.



**Yoshimaru:** In VISION 2030, I sense a very strong will to tackle the challenge of transformation through a concerted effort spanning the entire Group, from its officers to its employees. The Mitsui Chemicals Group has a proud history of achievements and an organizational culture developed over many years. Changing the longstanding business and culture is perhaps an even more daunting challenge than building them from scratch. I understand that when VISION 2030 was announced, the Company's president took the time to discuss the vision with employees on dozens of occasions, utilizing online technology due to the COVID-19 pandemic. I believe that starting by creating a shared understanding with employees in all worksites in this way is a very important step.

**Mabuchi:** Due to the strong performance in fiscal 2021 and record profits, it is very easy to fall into a subconscious mindset of believing that the Group can simply continue on the same path and that there is no need to change. This is why it is so important to ensure that the momentum for change reaches all worksites.

**Mimura:** For a corporate group that operates globally, ensuring that employees in each country and region have a firm understanding of the Group's vision is a particularly challenging task. Rather than presenting one vision and leaving it at that, I believe that a step-by-step process toward the vision will make it easier for people to embrace it.

**Mabuchi:** As outside directors, we hope to contribute to steady progress toward VISION 2030 by conducting ongoing monitoring of the Group's progress from an objective standpoint and suggesting any areas where a change of course may be required.

### Enhancing evaluation of M&A activities and incorporating a long-term perspective in discussions at Board of Directors meetings

**Yoshimaru:** To expand into new business areas under VISION 2030, the Mitsui Chemicals Group is actively considering mergers and acquisitions (M&A) and alliances with other companies. However, as the number of potential deals we explore grows, it will become increasingly difficult to make decisions regarding where to allocate resources and which projects to prioritize. I believe that as outside directors, it is our role to monitor the status of the Group as a whole and continue to ask questions regarding risks and the progress of post merger integration.

**Mimura:** The purpose of M&A activity is to acquire something that the company does not currently possess, typically technology, speed, or access to new markets. No matter how many M&As a company undertakes, acquisitions that do not fit into any of these three categories cannot be expected to deliver any significant benefits.

**Mabuchi:** I believe that the most important criterion for evaluating an M&A opportunity is whether it is consistent with the direction that the Group aims to take. We need to be careful not to view M&A activities



#### MIMURA Takayoshi

Mr. Mimura was appointed as an outside director of Mitsui Chemicals in June 2022 after previously serving as Chairman of the Board of Terumo Corporation. He has extensive experience in corporate management, including as the head of an industry organization, as well as deep insight into the health care field—a key area of focus for the Company. As such, he is expected to provide an objective evaluation of the Company's overall management and identify essential issues and risks, provide useful advice on the Company's overall management, and contribute to improving the effectiveness of the Company's management supervision.

as simply a means of achieving numeric targets.

**Yoshimaru:** To help the Group evaluate potential opportunities, our role is to thoroughly question and discuss what kind of growth scenarios the Group envisions and what opportunities it sees in prospective M&A projects.

**Mabuchi:** To increase the effectiveness of the Board of Directors, I believe that the Board should create more opportunities to discuss not only immediate issues such as prospective M&As, but also long-term issues such as the direction the

Group should take. For example, one way to do this would be to create opportunities separate from board meetings where internal and external officers can exchange their opinions on topics such as the environment and human resources.

**Mimura:** It would be beneficial to set aside a certain amount of time separate from items for resolution in order to discuss topics such as human resource strategies and ESG. As was the case with the VISION 2030 formulation process, I hope that the views of outside directors will be actively incorporated from an early stage in a variety of matters.

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### Leveraging the diverse talent pool to develop the next generation of leadership

**Yoshimaru:** Under the Group's VISION 2030 strategy, Mitsui Chemicals will actively pursue M&As, alliances, and open innovation with startups to further expand its business areas. As the ratio of sales revenue generated outside Japan

rises to approximately 50%, the number of non-Japanese employees working at the Group will also increase, and we will see a rapid growth in diversity of talents who possess different cultural backgrounds. In fiscal 2022, one locally-hired employee was appointed as an executive officer of the Company. I hope that the diverse values of these types of talents will come together and enhance one another to foster a climate where innovation can flourish.

**Mimura:** I believe that being respected and trusted is an important attribute for senior management. No matter how talented you may be, you cannot implement a management strategy if people are not willing to follow you. Of course, leaders must also possess the intellect to paint a future vision, and the boldness, resolve, and mental toughness required for a management role.

**Mabuchi:** As the external environment changes rapidly, a company cannot achieve significant growth unless it can move forward with the right sense of direction. For a chemical manufacturer like the Mitsui

Chemicals Group, which makes significant capital investments, it is also important to have a solid long-term outlook.

**Yoshimaru:** The Group is currently pushing forward with a plan to create a diverse talent pool and train candidates for the next generation of management. In addition, the Company's existing committees for executive human resources and compensation have been revised and renamed the Nomination Committee and Executive Compensation Committee. This move aims to improve the effectiveness of the respective committees by clarifying the issues to be discussed by each, such as criteria for the election, dismissal, and evaluation of the Company's officers. We also hold executive sessions consisting entirely of outside directors as a sub-committee of the Nomination Committee, where we discuss current issues and the medium- to long-term approach to the Group's talent pool. We will continue to monitor the progress of these issues closely, as they are key to the Group's medium- to long-term growth.





## Contributing to the growth of the Mitsui Chemicals Group from an objective standpoint

**Yoshimaru:** Mitsui Chemicals owns naphtha crackers, which can be considered the foundation of the chemical industry. It is due to this fact that the green chemicals initiative it is currently pursuing is creating opportunities for the Group to make a significant contribution to solving social challenges, such as through bio-based products. I believe that the Group can further expand the areas with growth potential by contributing to society through solutions that leverage the strengths of its materials. I hope to contribute to the Group's sustainable growth in the future by incorporating opinions and sentiments from the perspective of general shareholders and other stakeholders in the discussions.

**Mabuchi:** In my opinion, the most important deliverables for a company are solid performance in its core business and to be a so-called "good company," meaning well governed in the broad sense of the term. I believe that a company that can achieve both of these functions in tandem will be able to realize sustainable growth.

Although VISION 2030 calls for a variety of changes, as mentioned earlier, changing the corporate culture of the company is no easy task. I believe that the ideal way for a company to grow is to try to change itself by incorporating diverse and objective viewpoints from outside, and in my mind, this is a key part of my mission as an outside director.

**Mimura:** The Mitsui Chemicals Group is indispensable to our social infrastructure and possesses many remarkable technologies. This is why I believe that the Group can become even more responsive to society's needs and expectations by looking a step beyond its traditional domain as a business-to-business supplier of materials, and focusing attention to the end consumer. As an outside director, I personally hope to contribute to significant future growth for the Group by identifying key issues and offering advice from an objective standpoint.

## Improving the effectiveness of board committees on executive human resources and compensation

During fiscal 2021, Mitsui Chemicals worked to further improve the operation of its Human Resource Advisory Committee and Executive Compensation Advisory Committee in light of changes in both the internal and external environments, including the establishment of VISION 2030 and the revision of Japan's Corporate Governance Code. In particular, the items to be discussed at the committee meetings, such as the position profile (role, behavioral traits, personal attributes, and experience), criteria for election/dismissal and evaluation, and the monitoring process for succession planning for the president/CEO position, were clarified in order to promote more effective discussions at the committee meetings. In addition, the names of the committees were revised from Human Resource Advisory Committee and Executive Compensation Advisory Committee to Nomination Committee and Executive Compensation Committee, respectively.

In the first half of fiscal 2022, the Company held executive sessions as a subcommittee of the Nomination Committee, composed of only the outside directors on the Committee, during which the members discussed

topics such as current challenges and the medium- to long-term approach to the Group's talent pool. The executive sessions featured lively discussions on succession planning, with opinions such as "Putting too much focus on the year 2030 when setting position-specific requirements may reduce their long-term applicability," and "When looking at the competencies required for the CEO position, the CEO themselves must take a lead role in personnel development in addition to building the top management team." The Executive Compensation Committee is also reviewing the optimal structure of the Company's executive compensation system and discussing possible revisions, including incorporating the non-financial metrics set forth in the VISION 2030 into executive compensation.

FY2021 Board committee meetings	FY2022 (first half) Board committee meetings
<ul style="list-style-type: none"> <li>Human Resource Advisory Committee: 2 times</li> <li>Executive Compensation Advisory Committee: 3 times</li> </ul>	<ul style="list-style-type: none"> <li>Nomination Committee: 2 times —Executive session: 4 times</li> <li>Executive Compensation Committee: 3 times</li> </ul>

# Corporate Governance

Corporate Governance

<https://jp.mitsuichemicals.com/en/corporate/governance.htm>

Corporate Governance Guidelines

[https://jp.mitsuichemicals.com/pdf/en/corporate/governance/governance\\_guide\\_e.pdf](https://jp.mitsuichemicals.com/pdf/en/corporate/governance/governance_guide_e.pdf)

## Basic policy

The Mitsui Chemicals Group is constantly engaged in business activities to realize its Corporate Vision, which comprises a Corporate Mission and a Corporate Target. We recognize that efforts to achieve effective corporate governance as part of that process will allow us to:

- (1) maintain and strengthen trusting relationships with shareholders and various other stakeholders of the Group, and
- (2) create a framework that can execute transparent, fair, timely, and decisive decision making.

Through these means, the Group can achieve sustainable growth and increased corporate value over the medium- to long-term.

## Board of Directors (Chair: TANNOWA Tsutomu)

**Total eight members** (including three outside directors)

**Number of meetings held in FY2021: 16 times**

(48 agenda items, 6 discussion items, 41 report items, and 34 advance briefings)

**Attendance rate of all Members of the Board: 100.0%**

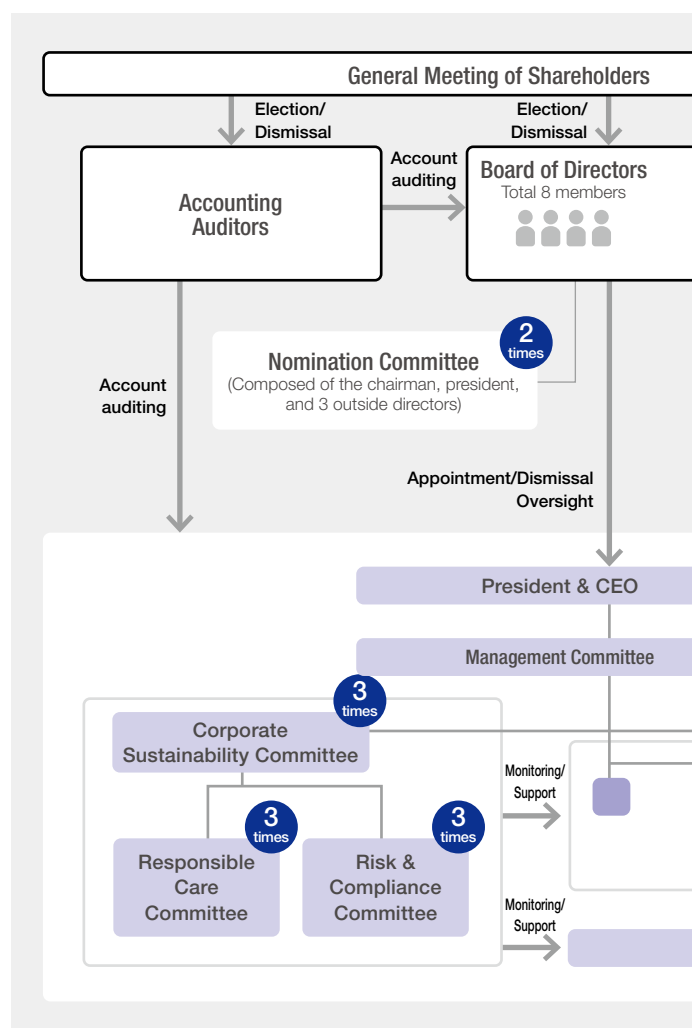
(93.75% for Mr. Bada only, with one absence)

The Board of Directors decides business strategies, business plans, and all other important matters related to the management of Mitsui Chemicals pursuant to law, ordinance, the Company's Articles of Incorporation, and Rules for Meetings of the Board of Directors. The Board also oversees the overall management of the Group through reporting on matters such as the performance of duties of individual directors, important operations of subsidiaries and affiliates, the implementation status of compliance and risk management systems by the Company and its subsidiaries and affiliates. In addition, the Board of Directors works to strengthen its management oversight role by discussing the important policies related to the running of the Company from an intermediate stage while providing advice to the persons executing business.

### Main content of discussion covered by the Board of Directors in fiscal 2021

- Review of Long-Term Business Plan looking ahead to 2030
- Non-financial metrics toward 2030
- Carbon neutral roadmap
- Strengthening of digital transformation infrastructure
- Revised Corporate Governance Code

Various other projects, reports on the operation of an internal control system, reports on the results of evaluation of effectiveness of the Board of Directors, matters related to key talent management, verification of cross-shareholdings (ownership and sale), etc.



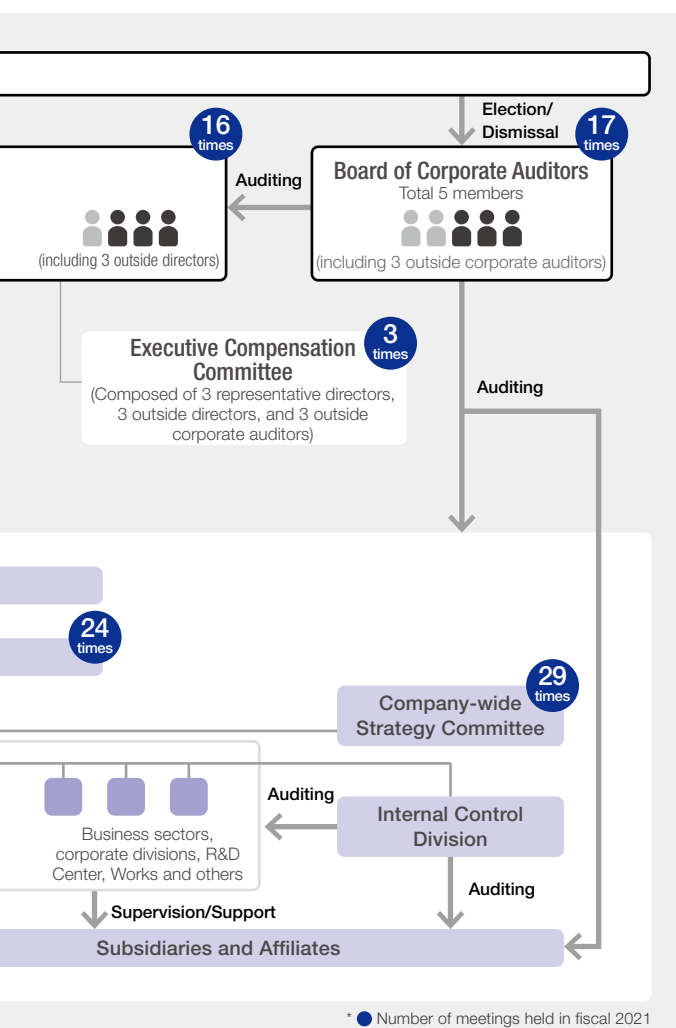
## Management Committee

**Number of meetings held in FY2021: 24 times**

To ensure appropriate and efficient decision making, the Company has established the Management Committee to review items that need to be discussed in advance of being put on the agenda of Board of Directors meetings and to deliberate on important matters related to business execution. Furthermore, the Management Committee is composed of the president, executive officers with specific titles, and persons appointed by the president, and corporate auditors may attend these meetings and express their opinions when necessary.

## Corporate governance framework

The Board of Directors of the Company, which is presided over by the chairman who is independent of the business execution, makes key management decisions and oversees the operations of each individual director. As a company with a Board of Corporate Auditors, the status of each director's performance of his or her duties is audited by the corporate auditors and the Board of Corporate Auditors independently from the Board of Directors. In accordance with such organizational design, the Company aims to realize smooth and efficient management through initiatives such as to clarify official authority and decision-making rules based on company rules, clarify the division of responsibilities between management oversight and business execution by introducing an executive officer system, deliberate on important matters at the Management Committee, and deliberate on strategies from a company-wide perspective at the Company-wide Strategy Committee. In addition, the Company strives to ensure soundness and appropriateness through an internal control system based on serious regard for the roles of corporate auditors, auditing of appropriateness of business operations and sound risk management by the Internal Control Division.



### Company-wide Strategy Committee

Number of meetings held in FY2021: 29 times

The Company has established the Company-wide Strategy Committee to deliberate on strategy from a company-wide perspective related to management and operational issues. Furthermore, the Company-wide Strategy Committee is composed of the president, executive officers with specific titles, and persons appointed by the president.

### Board of Corporate Auditors (Chair: KUBO Masaharu)

Total five members (including three outside corporate auditors)  
Number of meetings held in FY2021: 17 times

The Board of Corporate Auditors prepares the audit report, selects and dismisses full-time corporate auditors, and determines audit policies, etc., in accordance with laws, ordinance, the Company's Articles of Incorporation, and Rules for Meetings of the Board of Corporate Auditors.

### Nomination Committee (Chair: HASHIMOTO Osamu)

Total five members (including three outside directors)  
Number of meetings held in FY2021: 2 times  
Attendance rate of all Members of the Board: 100.0%

To ensure the suitability and transparency in the election of directors and corporate auditors, the Company has established the Nomination Committee as an advisory body to the Board of Directors, and introduced a mechanism to decide on the list of candidates for directors and corporate auditors.

The committee deliberates the proposed list of candidates for directors and corporate auditors based on their election standards and reports the results to the Board of Directors. The Board of Directors decides upon the final list of candidates for directors and corporate auditors by giving the fullest possible consideration to the results report from the Nomination Committee. In addition, the president formulates a proposal on candidates for corporate auditors in consultation with the full-time corporate auditors in advance, and following the above deliberations, the Board of Directors resolves the proposal with the consent of the Board of Corporate Auditors.

\* The Nomination Committee was renamed from the Human Resource Advisory Committee in fiscal 2022.

### Executive Compensation Committee (Chair: TANNOWA Tsutomu)

Total nine members (including three outside directors)  
Number of meetings held in FY2021: 3 times  
Attendance rate of all Members of the Board: 100.0%

To ensure the fairness of compensation levels and the transparency of performance evaluations, the Company has established the Executive Compensation Committee as an advisory body to the Board of Directors, and introduced a mechanism to evaluate the performance of directors and determine the executive compensation system.

\* The Executive Compensation Committee was renamed from the Executive Compensation Advisory Committee in fiscal 2022.

## Capabilities of the Board of Directors as a whole and views on diversity

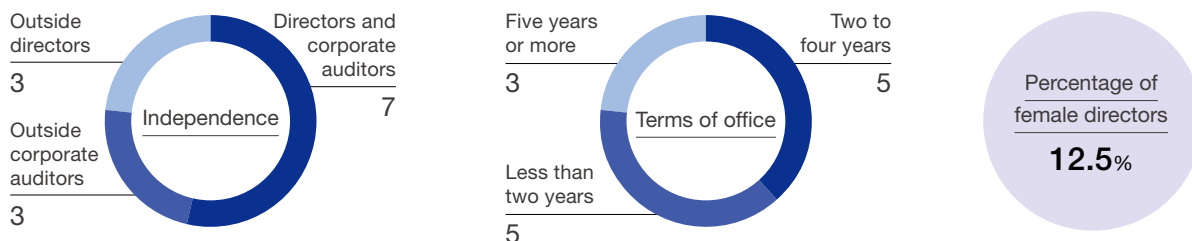
As stipulated in the Articles of Incorporation, the Company shall have no more than 12 directors. The appropriate number within that range is decided at each opportunity in consideration of the status of authorities delegated to executive officers and the need to streamline decision making in response to business expansion. In principle, the Company appoints one third or more as independent outside directors in order to reflect in our management policies the opinions of individuals from outside the Company that hold extensive experience and insight, such as corporate managers, academics, and legal professionals. This also increases the effectiveness of

overseeing director operations. The Company appoints its directors in consideration of the specific characteristics of our businesses irrespective of gender, race, nationality, or other factors so that the directors as a whole possess balanced business experience in areas such as corporate planning, business operations, production and technology, research and development, accounting and finance, and general, personnel, and legal affairs. In addition to the above, persons with corporate management experience at other companies shall also be appointed as independent outside directors.

### Main specialties and fields of experience of directors and corporate auditors

	Terms of office	Business execution	Independence * Outside	Gender ○ Male ● Female	Specialties and experience							
					Corporate management and planning	Production and technology/R&D	Global business	Sales/marketing	HR/labor management	Finance/accounting	Risk management	
Representative Director, Member of the Board, Chairman <b>TANOWA Tsutomu</b>	10 years			○	●		●	●	●			●
Representative Director, Member of the Board, President & CEO <b>HASHIMOTO Osamu</b>	4 years	●		○	●		●	●	●			●
Representative Director, Member of the Board, Senior Managing Executive Officer <b>YOSHINO Tadashi</b>	1 year	●		○	●	●	●	●				
Member of the Board, Senior Managing Executive Officer <b>NAKAJIMA Hajime</b>	2 years	●		○	●						●	
Member of the Board, Senior Managing Executive Officer <b>ANDOU Yoshinori</b>	—	●		○			●	●	●			
Member of the Board <b>YOSHIMARU Yukiko</b>	3 years		●	●	●		●		●			
Member of the Board <b>MABUCHI Akira</b>	1 year		●	○	●	●	●					●
Member of the Board <b>MIMURA Takayoshi</b>	—		●	○	●		●	●				●
Full-time Corporate Auditor <b>KUBO Masaharu</b>	2 years			○	●						●	●
Full-time Corporate Auditor <b>NISHIO Hiroshi</b>	—			○							●	●
Corporate auditor <b>SHINBO Katsuyoshi</b>	5 years		●	○			●					●
Corporate auditor <b>TOKUDA Shozo</b>	5 years		●	○			●				●	●
Corporate auditor <b>FUJITSUKA Mikio</b>	3 years		●	○	●		●				●	●

Composition of directors and corporate auditors



Overview of expected role, status of statements, and duties performed with respect to the expected role

Member of the Board	<b>YOSHIMARU Yukiko</b>	Ms. YOSHIMARU Yukiko primarily speaks about sound and efficient corporate management from the point of view of one concerned with the validity of business execution, globalization, and diversity perspectives based on her experience as an officer at other companies in areas such as diversity promotion and her extensive international experience. As a member of the Human Resource Advisory Committee and Executive Compensation Advisory Committee, she attended all committee meetings held in fiscal 2021 (two Human Resource Advisory Committee meetings and three Executive Compensation Advisory Committee meetings), and supervises the decision making process regarding selection of candidates for the Company's Board of Directors and executive compensation and other matters from an objective and neutral standpoint.
Member of the Board	<b>MABUCHI Akira</b>	Based on his extensive experience as a corporate manager and his deep insight in the mobility field, Mr. MABUCHI Akira objectively evaluates the Company's overall management, proactively identifies issues and risks, and makes comments as appropriate for sound and efficient corporate management. As a member of the Human Resource Advisory Committee and Executive Compensation Advisory Committee, he attended all committee meetings since becoming a Member of the Board of the Company (two Human Resource Advisory Committee meetings and one Executive Compensation Advisory Committee meeting), and supervises the decision making process regarding selection of candidates for the Company's Board of Directors and executive compensation and other matters from an objective and neutral standpoint.
Member of the Board	<b>MIMURA Takayoshi</b>	Mr. MIMURA Takayoshi has extensive experience as a corporate manager and chairman of the industry association, as well as in-depth knowledge of the health care field, on which the Company is focusing. He is expected to objectively evaluate the Company's overall management and identify essential issues and risks, provide useful advice on the Company's overall management, and contribute to improving the effectiveness of the Company's management supervision.
Corporate auditor	<b>SHINBO Katsuyoshi</b>	Mr. SHINBO Katsuyoshi primarily speaks about sound and efficient corporate management from the perspectives of ensuring appropriate business execution of the Company and reinforcing management oversight functions of the Board of Directors based on his specialist knowledge and extensive experience not only as a longstanding lawyer but also as an outside officer of other companies. As a member of the Executive Compensation Advisory Committee, he attended all committee meetings held in fiscal 2021 (three times), and he supervises the decision making process regarding executive compensation and other matters from an objective and neutral standpoint.
Corporate auditor	<b>TOKUDA Shozo</b>	Mr. TOKUDA Shozo primarily speaks about sound and efficient corporate management from the perspectives of ensuring appropriate business execution of the Company and reinforcing management oversight functions of the Board of Directors based on his specialist knowledge and extensive experience not only as a long-standing certified public accountant but also as an outside officer of other companies. As a member of the Executive Compensation Advisory Committee, he attended all committee meetings held in fiscal 2021 (three times), and he supervises the decision making process regarding executive compensation and other matters from an objective and neutral standpoint.
Corporate auditor	<b>FUJITSUKA Mikio</b>	Mr. FUJITSUKA Mikio primarily speaks about sound and efficient corporate management from the perspectives of ensuring appropriate business execution of the Company and reinforcing management oversight functions of the Board of Directors based on his extensive experience not only as a corporate manager and CFO of a listed company but also as an outside officer of other companies. As a member of the Executive Compensation Advisory Committee, he attended all committee meetings held in fiscal 2021 (three times), and he supervises the decision making process regarding executive compensation and other matters from an objective and neutral standpoint.



## Support systems for outside directors and outside corporate auditors

### 1. Support provided to outside directors

The secretariat provides the outside directors in advance explanations of the content of agenda items to be discussed at the meeting of the Board of Directors.

They are also provided with opportunities to inspect domestic and overseas sites and meet with the Accounting Auditors (twice a year).

Through such initiatives, the outside directors deepen their understanding of the Company's business and identify the issues and risks, thereby enabling them to better furnish commentary at meetings of the Board of Directors.

### 2. Support provided to outside corporate auditors

At meetings of the Board of Corporate Auditors, the full-time corporate auditors provide and share with the outside corporate auditors information they have obtained through their routine audits, including details from important internal meetings such as those of the Management

Committee, and the results of external visiting audits. In addition, when meetings of the Board of Directors are held, the outside corporate auditors are provided with reference materials in advance, and full-time corporate auditors provide explanations of the content of agenda items to be discussed by the Board of Directors ahead of time. They also take part in audits of domestic and overseas sites conducted by the corporate auditors as necessary. Quarterly meetings are held with both the Accounting Auditors and the Internal Control Division at which the outside corporate auditors receive reports on audit plan progress and results.

Through such initiatives, the outside corporate auditors contribute to proper audits.

On top of this, an annual meeting of only the outside directors and outside corporate auditors is held at which they exchange information and share observations from an independent and objective perspective.

## Election and dismissal of senior management and nomination of candidates for directors and corporate auditors

The Company has a Nomination Committee that functions as an advisory body to the Board of Directors in order to ensure suitability and transparency in the election of directors and corporate auditors. The Committee deliberates the proposed list of candidates for directors and corporate auditors based on their election standards and reports the results to the Board of Directors. The Board of Directors decides upon the final list of candidates for directors and

corporate auditors by giving the fullest possible consideration to the results report from the Nomination Committee. The president formulates a proposal on candidates for corporate auditors in consultation with the full-time corporate auditors in advance, and following the above deliberations, the Board of Directors resolves the proposal with the consent of the Board of Corporate Auditors.

## Dismissal of the CEO or others in key positions

The Nomination Committee deliberates on the dismissal of the CEO or others in key positions in cases where it is deemed that the individual has not adequately carried out his or her role in light of business performance or other factors, or where there has been a serious compliance

violation. If the Board of Directors receives findings from the Nomination Committee constituting grounds for dismissal of a representative director, CEO, or others in key positions, the Board of Directors shall make a decision on dismissal after examining the results report.

## Succession planning for the CEO and others in key positions

The Board of Directors continually and systematically oversees succession planning for the CEO and others in key positions in light of the Corporate Vision and long-term business plan and by consulting with the Nomination Committee. We have positioned our Key Talent Management system as a framework for succession planning encompassing the senior management ranks. It clearly specifies the attributes required of management executives, fast tracks candidates for filling future senior management roles,

and strategically trains candidates.

Every year sector and corporate committees select candidates and contribute to their development by establishing customized training plans for each candidate, performing assessments, and implementing training. In addition, every year the Board of Directors receives reports on the status of such initiatives and provides appropriate oversight.

▶▶ Human Resources Strategy, p. 72

## Strengthening of the Group's governance

The Company sets a division in charge of each of its subsidiaries regarding their operational management. In order to maintain appropriate management of the subsidiary, the division in charge ensures thorough awareness of the Company's management policies and strategies and monitors the status of management at the subsidiary. In addition, the division in charge provides guidance so that the subsidiary can properly implement decision-making

procedures, including for those matters requiring prior approval of the Company, based on the Regulations on Management of Subsidiaries and Affiliates and other Company regulations.

The Mitsui Chemicals – Global Risk Management & Business Support Improvement Platform (M-GRIP) was established and put into operation in fiscal 2020.

▶▶ M-GRIP, p. 105

## Evaluation of the effectiveness of the Board of Directors

The Company's Board of Directors strives to improve its meetings by analyzing and evaluating the effectiveness of the Board as a whole every year using such methods as self-evaluations performed by directors and corporate auditors, and discussions only among outside directors and outside corporate auditors.



### \* Discussion items

Initiatives implemented since fiscal 2016 with the aim of strengthening management oversight functions by discussing medium- to long-term business strategies and large-scale M&As from an intermediate stage and providing advice to executive directors.

### Measures taken in fiscal 2021

#### (1) Board of Directors' discussions

We increased the number of discussions on important matters such as VISION 2030 and large-scale M&As from an intermediate stage, and deepened discussions at the Board of Directors meetings. In order to make VISION 2030 a long-term plan with more refined content, several exchanges of opinions with outside directors were held outside of the Board of Directors' meetings.

#### (2) Operation of the Board of Directors

We utilized opportunities for advance briefings of agenda items to outside officers to promote early understanding of agenda items and to omit duplicative explanations on the day of the Board of Directors meetings, thereby ensuring efficient deliberation of many agenda items and deepening discussions.

#### (3) Review of the number of meetings

Several extraordinary meetings of the Board of Directors were also held as necessary to deepen discussions on important matters and improve the management oversight function of the Board of Directors.

### Fiscal 2021 activity status

Interim discussions at Board of Directors meetings <b>6 times</b> (7 times in FY2020)	Discussion on the medium- to long-term plan <b>7 times</b> (3 times in FY2020)
Advance briefings before the meeting of the Board of Directors <b>18 times</b> (14 times in FY2020)	Execution of duties status report <b>11 times</b> (9 times in FY2020)
Number of meetings of the Board of Directors <b>16 times</b> (13 times in FY2020)	

### Evaluation results and future initiatives

The results of directors' and corporate auditors' self evaluations in fiscal 2021 were generally in line with last year. The Company has also confirmed that the Board of Directors has been improved and invigorated by implementing measures to enhance its oversight functions and concludes that its effectiveness is fully sufficient, as was the case in the previous fiscal year.

#### Future challenges

- (1) Enhance monitoring of VISION 2030 progress
- (2) Further enhance risk management to respond to new risks
- (3) Deepen and enhance discussions at Board of Directors meetings by reviewing matters such as the operation of advance briefings for outside directors and the deliberation time of the Board of Directors meetings

The Company strives to review and implement necessary measures as appropriate to enhance the oversight functions of the Board of Directors in light of the results of the annual effectiveness evaluations.

### Initiatives for further improvement Opinions of outside directors and outside corporate auditors

- It would be beneficial to devise a better balance between questions in the advance briefing and discussion at the meeting of the Board of Directors.
- It would be beneficial to ensure sufficient time to examine materials in advance to accommodate the increase in the number and complexity of matters for deliberation.
- Although sufficient time was spent on the discussion regarding VISION 2030, it would be beneficial to enhance the monitoring of progress, including non-financial KPIs that will contribute to future growth.
- Governance (details of the report on the operation of the internal control system and risk management) must be further enhanced to accommodate the Group's growth and expansion.
- Perhaps a system of periodic reporting on important topics (carbon neutrality, business portfolio transformation, etc.) could be established.
- It would be preferable to have a little more explanation about the discussions at internal meetings regarding M&A cases.

## Executive compensation system

### Basic policy

The Company's executive compensation system is designed and implemented based on the following basic policy: (1) to be commensurate with management delegation and conducive to the Group's growth and earnings improvement; (2) to reflect both corporate performance and the performance of the individual officer; (3) for officers in higher

positions, to more strongly reflect their contributions to medium- to long-term corporate growth and deepen shared value with shareholders; and (4) to fully ensure accountability to shareholders and other related parties and guarantee transparency.

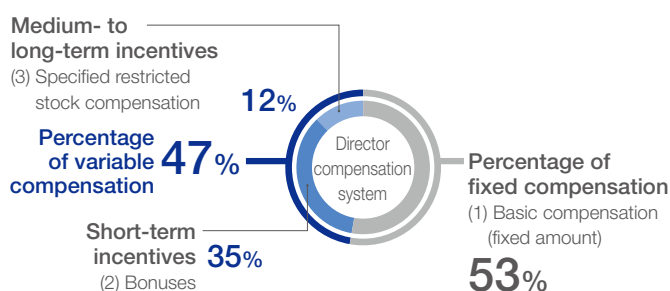
### Process for determining executive compensation

Executive compensation is determined each business year by resolution of the Board of Directors following deliberations and reports by the Executive Compensation Committee, which is a voluntary advisory body to the Board

of Directors established to ensure the fairness of compensation levels and the transparency of performance evaluations.

### Composition and overview of executive compensation

Compensation for the Company's directors (excluding outside directors) comprises (1) basic compensation (fixed amount), (2) bonuses, and (3) stock compensation. The Company increases the proportion of (2) bonuses and (3) stock compensation in accordance with improvement in business performance.



\* Composition of compensation for directors (excluding outside directors) in FY2021

	Fixed compensation	Variable compensation	
	(1) Basic compensation (fixed amount)	(2) Bonuses	(3) Specified restricted stock compensation
<b>Position</b>	Fixed compensation	Short-term incentive compensation	Medium- to long-term incentive compensation
<b>Recipient</b>	Directors Corporate auditors	Directors (excluding outside directors)	Directors (excluding outside directors)
<b>Payment format</b>	Cash	Cash	Stock (stock with transfer restrictions)
<b>Payment details</b>	Monthly fixed compensation	<ul style="list-style-type: none"> <li>• Paid out in line with business performance for the current fiscal year</li> <li>• Benchmarked mainly to operating income</li> </ul>	<ul style="list-style-type: none"> <li>• To contribute to sustained improvement in medium- to long-term corporate value</li> <li>• To promote greater shared value with shareholders</li> <li>• Transfer restriction period of three to five years</li> </ul>
<b>Calculation formula, etc.</b>	—	a) Formula for base bonus amount Operating income before special items × Coefficient × Director-title-specific index  b) Determination of bonus amount for each individual The amount of bonus depends on the extent to which earnings targets were achieved based on the amount calculated with the above formula.  c) Target and performance of main benchmark for performance-based compensation Target: Operating income before special items ¥115bn Performance: Operating income before special items ¥161.8bn	The total level of compensation including (1) basic compensation (fixed amount) and (2) bonuses is set to be equivalent to that at other companies (particularly manufacturers of similar type and size).  * Stock compensation will be reduced or otherwise unpaid in the event of a serious compliance violation, major accident, or other such incident that would adversely affect the Company and its operations.

### Total compensation for directors and corporate auditors in fiscal 2021

Classification	Number of recipients	Total compensation (millions of yen)	Basic compensation	Bonuses	Stock compensation
Directors (excluding outside directors)	6	491	259	171	61
TANNOWA Tsutomu	—	(127)	(64)	(46)	(17)
HASHIMOTO Osamu	—	(141)	(71)	(51)	(18)
Corporate auditors (excluding outside corporate auditors)	2	64	64	—	—
Outside directors and outside corporate auditors	7	79	79	—	—
Total	15	634	401	171	61

\*1 The figures in the table above include amounts paid to two directors who retired as of the close of the Annual General Meeting of Shareholders for the Company's 24th Business Term held on June 25, 2021, covering the period from April 1, 2021 through to the date of retirement.

\*2 Numbers in parentheses are included in the total above.

# Sustainability Governance TCFD

The Mitsui Chemicals Group has established the Corporate Sustainability Committee as a platform for cross-group discussion on ESG-related policy, strategy, and planning. The results of the Committee's discussions and activities conducted are reported to the Management Committee. Furthermore, particularly important matters are approved by the Management Committee and the Board of Directors. The Committee held sessions twice a year in principle initially after its launch, but the number of themes to be discussed increased on a yearly basis, and three sessions were held in fiscal 2021. Four sessions a year are planned for fiscal 2022 onwards.



## Corporate Sustainability Committee (August 2021–May 2022) main discussion items and opinions (excerpt)

### Setting VISION 2030 non-financial metrics, formulating annual budgeting policy for non-financial matters

- ✓ It is important to clarify the basis for KPIs and target-setting and explain it to stakeholders.
- ✓ It is important to monitor whether we are progressing toward our ideal vision for 2030 from both financial and non-financial perspectives.
- ✓ As with financial metrics, it is necessary to stipulate the responsible departments and for each department to incorporate it into their annual budget as a matter of relevance and steadily implement it.

### Measures to reduce GHG emissions

- ✓ For each facility, we should not only set drastic reduction targets, but also consider step-by-step switchover measures.
- ✓ When considering measures to reduce GHG emissions, we must also take into account not only the cost aspect, but also marketing strategy to promote how reductions improve the added value of products.
- ✓ Regarding the utilization of bio-based raw materials, it is necessary to grasp the supply chain data and prepare for procurement risks.

### Developing a foundation for life cycle assessment (LCA), including product carbon footprint (PCF)

- ✓ When accentuating the expansion of Blue Value™ products, we want to be able to externally communicate environmental impact (contribution level).
- ✓ We should respond with a sense of speed, with a stance of first moving to execution even if it is not 100% complete and making revisions and improvements in the implementation process.

### Revision of Human Rights Policy

- ✓ There are limitations on how much corporate divisions alone can manage the supply chain. They should collaborate with plants, business divisions, and others.
- ✓ Our attitude should be clearly communicated. At the same time, there are also difficulties in situations such as screening business partners in countries with high human rights risks.

### Review of corporate sustainability system

- ✓ We have currently established a steering committee to respond to climate change and problems with plastic waste, but one of the opening points of discussion is whether this system will continue to be suitable.
- ✓ Discussions are necessary on what kind of system we should take concerning Group-wide risk management. Support for TCFD recommendations is also part of this.

## Topics

### Establishing an ESG coordinator in each division: Cross-group promotion of support for TCFD recommendations and human rights due diligence

The Mitsui Chemicals Group has established ESG coordinators in each division in order to deepen cross-group response to address growing social demand related to ESG, such as integration of financial and non-financial information, more sophisticated information disclosure, and diversification of customer demands. With ESG coordinators acting as core personnel in the ESG field, the Corporate Sustainability Division and each division will collect and share ESG information while taking consistent responses to Group-wide strategies and external requests.

#### Divisions with ESG coordinators

Four business sectors, Production & Technology Center, R&D Center, Digital Transformation Sector

#### Example of joint tasks (between Corporate Sustainability Division and ESG coordinators)

- Expanding Blue Value™ and Rose Value™ products, and visualizing their contributions
- Support for TCFD recommendations
- Human rights due diligence

### Opening “Mitsui Chemicals ESG Link Café”: Aiming for ESG for all

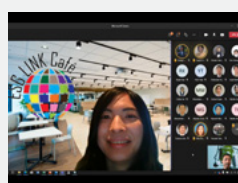
In order to practice ESG management, the Mitsui Chemicals Group believes that it is essential for each and every employee to understand ESG and to incorporate it into their work. To that end, we have been holding ESG Link Café one-point lessons since fiscal 2020, which are dialogue-based online lessons for all employees to freely participate in, with the concept of “anyone can join as they please.” These lessons deal with and provide simple introductions of a wide variety of ESG-related topics with high social interest in addition to the Group’s ESG-related initiatives. With time set aside for free discussion after the lesson, the events are also utilized as a place for ESG-themed internal communication.

In addition to these lessons, we also work to instill understanding in the Group in a variety of ways, including a series of posts on our internal website explaining ESG-related terminology and workshops for workplaces and departments. Through a multi-layered approach, we will continue to support each and every employee in incorporating ESG into their own work, thereby facilitating the practice of ESG management.

#### Main themes of ESG Link Café

- Mitsui Chemicals Group corporate sustainability initiatives
- Mitsui Chemicals Group carbon neutral strategy
- Global trends in plastic waste

\* FY2021: Held 10 times with cumulative participation of 1,118 people



# Board of Directors and Board of Corporate Auditors

(As of June 24, 2022)

## Board of Directors



### 1 TANNOWA Tsutomu

Representative Director,  
Member of the Board, Chairman

Board of Directors Meetings  
Attended/Held

**16/16**

Term of office **10 years**

Apr. 1976 Joined Mitsui Toatsu Chemicals, Inc.  
Apr. 2007 Executive Officer of the Company,  
General Manager, Human Resources &  
Employee Relations Div.  
Apr. 2010 Managing Executive Officer of the  
Company, Business Sector President,  
Basic Chemicals Business Sector  
Jun. 2012 Member of the Board, Managing  
Executive Officer of the Company  
Apr. 2013 Member of the Board, Senior Managing  
Executive Officer of the Company  
Apr. 2014 Representative Director, Member of the  
Board, President & CEO of the  
Company  
Apr. 2020 Representative Director, Member of the  
Board, Chairman of the Company (to  
present)  
Jun. 2022 Outside Director of KDDI  
CORPORATION (to present)

### 4 NAKAJIMA Hajime

Member of the Board, Senior  
Managing Executive Officer & CFO

Board of Directors Meetings  
Attended/Held

**16/16**

Term of office **2 years**

Apr. 1984 Joined Mitsui Toatsu Chemicals, Inc.  
Apr. 2013 General Manager, Performance  
Management Div. of the Company  
Apr. 2015 Senior Director of the Company,  
General Manager, Finance &  
Accounting Div.  
Apr. 2017 Executive Officer of the Company,  
General Manager, Finance &  
Accounting Div.  
Apr. 2020 Managing Executive Officer of the  
Company  
Jun. 2020 Member of the Board, Managing  
Executive Officer of the Company  
Apr. 2022 Member of the Board, Senior  
Managing Executive Officer of the  
Company (to present)



### 2 HASHIMOTO Osamu

Representative Director, Member of  
the Board, President & CEO

Board of Directors Meetings  
Attended/Held

**16/16**

Term of office **4 years**

Apr. 1987 Joined the Company  
Apr. 2015 Executive Officer of the Company,  
General Manager, Corporate Planning  
Div.  
Apr. 2017 Managing Executive Officer of the  
Company, Business Sector President,  
Health Care Business Sector, and  
General Manager, New Health Care  
Business Development Div.  
Sep. 2017 Managing Executive Officer of the  
Company, Business Sector President,  
Health Care Business Sector  
Jun. 2018 Member of the Board, Managing  
Executive Officer of the Company,  
Business Sector President, Health  
Care Business Sector  
Apr. 2019 Member of the Board, Senior  
Managing Executive Officer of the  
Company, Business Sector President,  
Health Care Business Sector  
Apr. 2020 Representative Director, Member of the  
Board, President & CEO of the  
Company (to present)

### 5 ANDOU Yoshinori

Member of the Board, Senior  
Managing Executive Officer & CHRO

**Newly appointed**

Apr. 1986 Joined the Company  
Apr. 2014 Senior Director of the Company,  
Deputy General Manager, Human  
Resources Div.  
Apr. 2015 Senior Director of the Company,  
General Manager, Human Resources  
Div.  
Apr. 2016 Executive Officer of the Company,  
General Manager, Human Resources  
Div.  
Apr. 2019 Managing Executive Officer of the  
Company  
Apr. 2021 Senior Managing Executive Officer of  
the Company  
Jun. 2022 Member of the Board, Senior  
Managing Executive Officer of the  
Company (to present)



### 3 YOSHINO Tadashi

Representative Director, Member of the Board, Senior  
Managing Executive Officer & Chief Technology Officer

Board of Directors Meetings  
Attended/Held

**13/13**

Term of office **1 year**

Apr. 1987 Joined Mitsui Toatsu Chemicals, Inc.  
Apr. 2016 Executive Officer of the Company,  
Business Sector Vice President, Basic  
Materials Business Sector  
Apr. 2018 Managing Executive Officer of the  
Company, Business Sector President,  
Basic Materials Business Sector  
Jul. 2018 Managing Executive Officer of the  
Company, Business Sector President,  
Basic Materials Business Sector,  
Chairman of Shanghai Sinopec Mitsui  
Chemicals, Co., Ltd.  
Apr. 2020 Senior Managing Executive Officer of  
the Company, Business Sector  
President, Basic Materials Business  
Sector, Chairman of Shanghai Sinopec  
Mitsui Chemicals, Co., Ltd.  
Jun. 2021 Member of the Board, Senior  
Managing Executive Officer of the  
Company, Business Sector President,  
Basic Materials Business Sector,  
Chairman of Shanghai Sinopec Mitsui  
Chemicals, Co., Ltd.  
Apr. 2022 Representative Director, Member of the  
Board, Senior Managing Executive  
Officer of the Company (to present)

## Board of Directors (Independent Outside Directors)



### 6 YOSHIMARU Yukiko

Member of the Board,  
Outside Director

Board of Directors Meetings  
Attended/Held

**16/16**

Term of office **3 years**

Apr. 1982 Joined Oki Electric Industry Co., Ltd.  
Apr. 1998 Director of Oki America Inc., and Head  
of New York Office of Oki Electric  
Industry Co., Ltd.  
Oct. 2004 General Manager of Diversity  
Development Office of NISSAN  
MOTOR CO., LTD.  
Apr. 2008 Joined Nifco Inc.  
Jun. 2011 Executive Officer of Nifco Inc.  
Apr. 2018 Outside Director of Sekisui House, Ltd.  
(to present)  
Jun. 2019 Member of the Board of the Company  
(to present)  
Jun. 2021 Outside Director of Daiwabo Holdings  
Co., Ltd. (to present)

### 8 MIMURA Takayoshi

Member of the Board,  
Outside Director

**Newly appointed**

Apr. 1977 Joined Terumo Corporation  
Jun. 2002 Executive Officer of Terumo  
Corporation  
Jun. 2003 Director and Executive Officer of  
Terumo Corporation  
Jun. 2007 Director and Managing Executive  
Officer of Terumo Corporation  
Jun. 2010 Director and Senior Managing  
Executive Officer of Terumo  
Corporation  
Apr. 2017 Chairman of the Board of Terumo  
Corporation  
Jun. 2021 Chairman of The Japan Federation of  
Medical Devices Associations (to  
present)  
Apr. 2022 Director and Corporate Advisor of  
Terumo Corporation  
Jun. 2022 Corporate Advisor of Terumo  
Corporation (to present)  
Outside Director of AUTOBACS  
SEVEN CO., LTD. (to present)  
Member of the Board of the Company  
(to present)



**Board of Corporate Auditors**



**7 MABUCHI Akira**

Member of the Board,  
Outside Director  
Board of Directors Meetings  
Attended/Held  
**13/13**  
Term of office **1 year**

Apr. 1979 Joined Fuji Heavy Industries Ltd. (currently SUBARU CORPORATION)  
Apr. 2005 Executive Officer of Fuji Heavy Industries Ltd.  
Jun. 2007 Senior Vice President of Fuji Heavy Industries Ltd.  
Jun. 2010 Director of the Board, Executive Vice President of Fuji Heavy Industries Ltd.  
Jun. 2015 Corporate Auditor of Fuji Heavy Industries Ltd.  
Jun. 2021 Member of the Board of the Company (to present)



**9 KUBO Masaharu**

Full-time Corporate Auditor  
Board of Directors Meetings  
Attended/Held  
**16/16**  
Board of Corporate Auditors Meetings  
Attended/Held  
**17/17**  
Term of office **2 years**

Apr. 1980 Joined the Company  
Apr. 2010 Executive Officer of the Company, General Manager, Corporate Administration Div.  
Apr. 2013 Managing Executive Officer of the Company  
Jun. 2013 Member of the Board, Managing Executive Officer of the Company  
Apr. 2014 Member of the Board, Senior Managing Executive Officer of the Company  
Apr. 2016 Representative Director, Member of the Board, Senior Managing Executive Officer of the Company  
Apr. 2017 Representative Director, Member of the Board, Executive Vice President of the Company  
Apr. 2020 Member of the Board of the Company  
Jun. 2020 Full-time Corporate Auditor of the Company (to present)

**10 NISHIO Hiroshi**

Full-time Corporate Auditor  
**Newly appointed**

Apr. 1984 Joined the Company  
Apr. 2013 Senior Director of the Company, General Manager, Finance & Accounting Div.  
Apr. 2015 Senior Director of the Company, General Manager, Internal Control Div.  
Apr. 2017 Executive Officer of the Company, General Manager, Internal Control Div.  
Apr. 2022 Assistant to the President of the Company  
Jun. 2022 Full-time Corporate Auditor of the Company (to present)

**Board of Corporate Auditors (Independent Outside Corporate Auditors)**



**11 SHINBO Katsuyoshi**

Outside Corporate Auditor  
Board of Directors Meetings  
Attended/Held  
**16/16**  
Board of Corporate Auditors Meetings  
Attended/Held  
**17/17**  
Term of office **5 years**

Apr. 1984 Registered as an attorney  
Nov. 1999 Attorney at Shinbo Law Office (to present)  
Jun. 2015 Outside Corporate Auditor of Sumitomo Mitsui Banking Corporation  
Corporate Auditor of the Company (to present)  
Jun. 2017 Outside Director of Sumitomo Mitsui Financial Group, Inc. (to present)  
Jun. 2021 Outside Director of Yakult Honsha Co., Ltd. (to present)



**12 TOKUDA Shozo**

Outside Corporate Auditor  
Board of Directors Meetings  
Attended/Held  
**16/16**  
Board of Corporate Auditors Meetings  
Attended/Held  
**17/17**  
Term of office **5 years**

Nov. 1981 Joined Asahi Accounting Company (currently KPMG AZSA LLC)  
Aug. 1985 Registered as a certified public accountant  
Jul. 2002 Representative Partner of Asahi & Co. (currently KPMG AZSA LLC)  
Jun. 2006 Board Member of KPMG AZSA & Co. (currently KPMG AZSA LLC)  
Jun. 2010 Senior Board Member of KPMG AZSA & Co. (currently KPMG AZSA LLC)  
Jul. 2015 Senior Partner of KPMG AZSA LLC  
Jun. 2017 Outside Audit & Supervisory Board Member of ITOCHU ENEX CO., LTD. (to present)  
Corporate Auditor of the Company (to present)

**13 FUJITSUKA Mikio**

Outside Corporate Auditor  
Board of Directors Meetings  
Attended/Held  
**16/16**  
Board of Corporate Auditors  
Meetings Attended/Held  
**17/17**

Term of office **3 years**

Apr. 1977 Joined Komatsu Ltd.  
Apr. 2005 Executive Officer of Komatsu Ltd.  
Apr. 2010 Senior Executive Officer (Jomu) of Komatsu Ltd.  
Apr. 2011 Senior Executive Officer (Jomu) and CFO of Komatsu Ltd.  
Jun. 2011 Director, Senior Executive Officer (Jomu) and CFO of Komatsu Ltd.  
Apr. 2013 Director, Senior Executive Officer (Senmu) and CFO of Komatsu Ltd.

Apr. 2016 Representative Director, Executive Vice President and CFO of Komatsu Ltd.  
Apr. 2018 Representative Director and Executive Vice President of Komatsu Ltd.  
Apr. 2019 Director of Komatsu Ltd.  
Jun. 2019 Advisor of Komatsu Ltd. (to present)  
Outside Director of Yamaha Corporation (to present)  
Corporate Auditor of the Company (to present)

**Executive Officers**

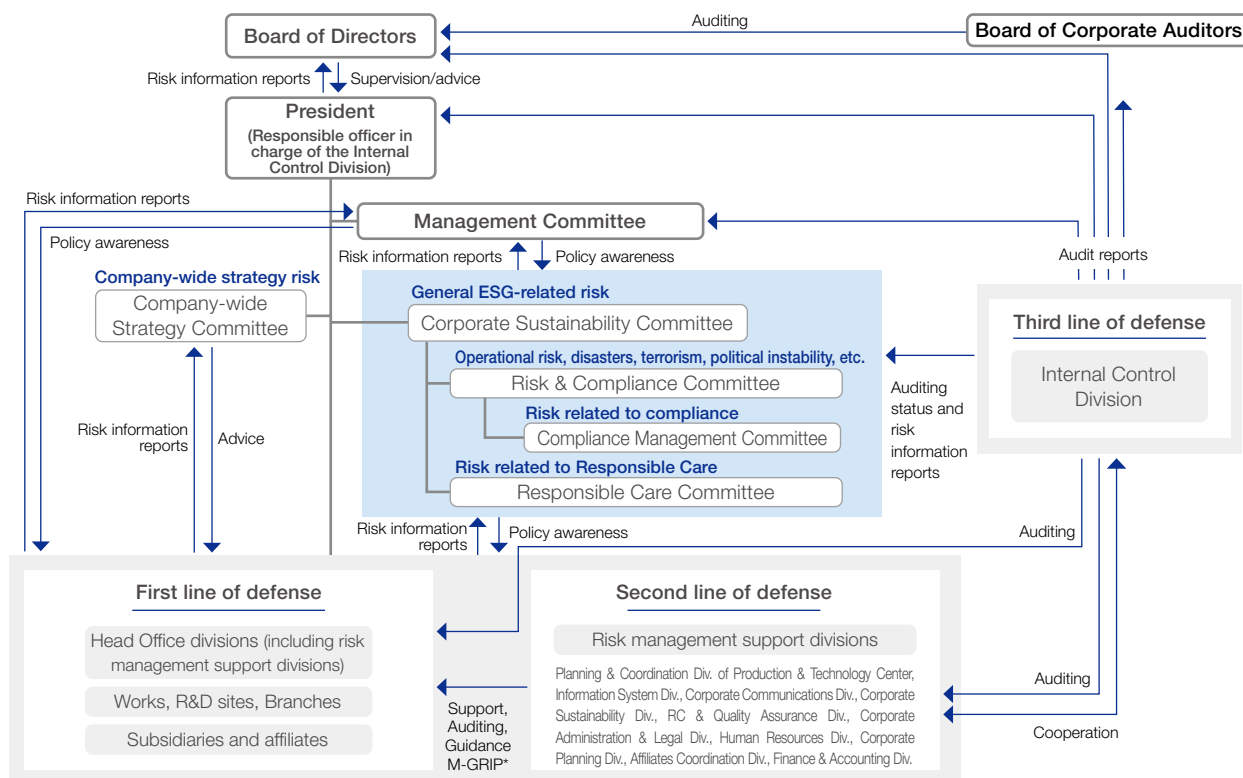
President	HASHIMOTO Osamu	
Senior Managing Executive Officers	YOSHINO Tadashi ANDOU Yoshinori	HIRAHARA Akio NAKAJIMA Hajime
Managing Executive Officers	SHIBATA Shingo KOMORIYA Atsushi TANAKA Hisayoshi HOSOMI Yasuhiro	YOSHIZUMI Fumio IZAWA Kazumasa SAMBE Masao

Executive Officers	OZAWA Satoshi KINOSHITA Masayuki FUJIMOTO Kensuke MATSUZAKA Shigeharu SUEMATSU Kenji MATSUZAKI Hiroshi HAYASHIDA Hiromi OKADA Kazunari	FUNAKOSHI Hiromitsu TSURUDA Satoshi MIGITA Ken ZENKOH Hirofumi YOSHIDA Osamu ABE Shinji MATSUE Kaori Antonios GRIGORIOU
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## Risk and compliance management structure

The Mitsui Chemicals Group strives to identify and prevent the emergence of risks for all events that may threaten management activities, including new risks arising from business portfolio transformation and global business expansion, and the Board of Directors is responsible for all risk management.

### Risk Management Structure



\* See p. 105 for details of M-GRIP.

### Committees related to risk and compliance management

We have established the Risk & Compliance Committee to formulate individual policies, strategy, and plans related to managing risk and ensuring compliance. The committee works to detect risks early and prevent their manifestation by steadily implementing a risk-related PDCA cycle.

Social demand related to compliance has been growing, and compliance risks have become more numerous and complex with the Group's global business expansion. In 2022, to swiftly respond to these circumstances, we made the president the chair of the Risk & Compliance Committee and established a Compliance Management Committee within it. This management committee builds and rolls out a PDCA cycle on a Group and global basis to systematically and methodically execute measures to ensure compliance (violation prevention, detection, initial response, ongoing response, etc.), based on the policies, strategy, and plans decided by the Risk & Compliance Committee.

### First and second lines of defense

Each division conducts risk assessments, and designs and implements organizational controls to address the identified risks. The officer in charge of each division is responsible for identifying and managing risks (first line of defense).

To ensure risk management in each division, risk management support divisions with expert knowledge provide them with support, and, where necessary, auditing and guidance (second line of defense).

In accordance with risk type and importance level, each division reports risk information to the Company-wide Strategy Committee, Corporate Sustainability Committee, Risk & Compliance Committee,

Compliance Management Committee, and Responsible Care Committee. The Management Committee receives risk information from across the company as input for making management decisions, and discusses and decides on action policies.

### Third line of defense

The Internal Control Division audits the operations of both the first and second lines of defense from an independent standpoint and provides assurance to top management and the Board of Directors. Along with operational audits and audits related to responsible care, it continuously checks and evaluates the design and operation of internal control over financial reporting required by the Financial Instruments and Exchange Act in J-SOX assessments. Audit results are regularly reported directly to the Board of Directors and Board of Corporate Auditors.

### Target and Results

KPI	Scope	FY2021			FY2022	FY2030 (medium- to long-term)
		Target	Result	Achievement	Target	Target
Incidence of major legal and regulatory violations	Mitsui Chemicals Group	0 instances	1 instance	×	0 instances	0 instances

One of the KPIs of VISION 2030 is the incidence of major legal and regulatory violations that have a significant impact on the Group's social credibility, business operations, earnings, and other aspects. In fiscal 2021, there was one instance of major legal and regulatory violation at a subsidiary of the Company. We take this incident very seriously and will strengthen compliance throughout the Group, implement improvement plans related to our internal management systems, and work thoroughly to prevent recurrence.

## M-GRIP, a platform for globally strengthening governance of affiliates and sharing best practices

With the goals of reducing the risks that have grown as globalization accelerates and of further transforming and expanding the business of the Mitsui Chemicals Group, in fiscal 2020 we began deploying the Mitsui Chemicals Global Policy Platform (M-GRIP\*), which is a shared indirect operations platform for the Group.

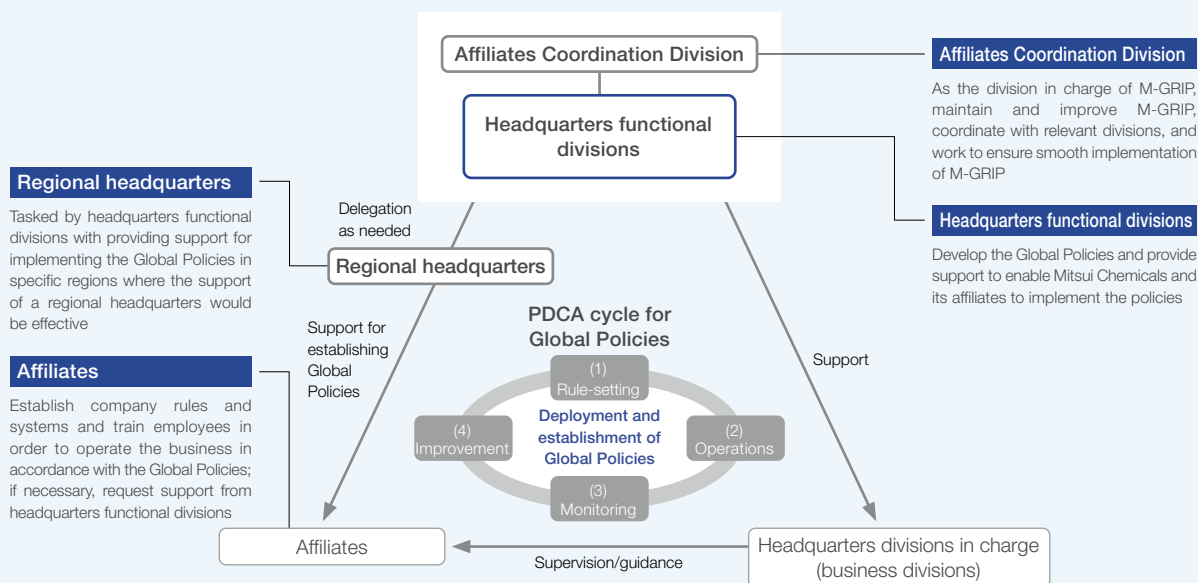
M-GRIP is the mechanism that lays out Global Policies (G/Ps) comprising measures that are common to the entire Group regarding indirect operations such as human resources, accounting, and logistics. By ensuring that each company within the Group implements those measures, it allows the execution of proper business operations and ongoing improvements. It is also intended to support the activities of affiliates through the effective use of the Group's economies of scale. In fiscal 2021, amid the ongoing COVID-19 pandemic, we explained the details of this mechanism to all Group

companies via individual online meetings. Through dialogue, we sought to promote understanding of M-GRIP and firmly establish it within the Group. In addition, five new G/Ps, including the protection of personal information, have been established and have begun to be implemented on a global basis. Over the next several years, we plan to develop and roll out the necessary G/Ps. By fostering a common awareness throughout the Group and promoting sustainability management and thorough crisis management, which helps improve corporate value, we are working to reduce and avoid risk and improve business efficiency, thereby supporting the realization of a corporate group that enjoys sustainable growth.

\* M-GRIP: Mitsui Chemicals – Global Risk Management & Business Support Improvement Platform

### M-GRIP Deployment Chart

The headquarters functional divisions, the regional headquarters, the affiliates, and the Affiliates Coordination Division are working together, each playing its respective role.



#### Message from an overseas affiliate Realizing "One Team" through Global Policies

We often hear the rule of law mentioned by leaders of countries. It is a governing principle. Merriam-Webster defines rule of law as: "a situation in which the laws of a country are obeyed by everyone."

The Mitsui Chemicals Group too has a set of governance and compliance rules, namely M-GRIP, which was officially launched two years ago.

It is significant that the Global Policies (G/Ps) were used to standardize the risk response standards that had been independently established by each Group company. G/Ps help employees to keep their actions within those standards. Such G/Ps are indispensable in holding employees accountable for any conduct that is unreasonable. In addition, G/Ps help to identify non-compliance and ultimately help an organization to build a stronger culture by creating "One Team"! The launching of M-GRIP by the Affiliates Coordination Division was very well organized, especially with effective communication prior to the implementation. The challenge now is how to ensure each entity's compliance with the G/Ps.



**Fred YAU**  
General Manager, Corporate Planning Office & Purchasing Div. Mitsui Chemicals Asia Pacific, Ltd.

## 11-Year Overview of Major Financial and Non-Financial Indicators

For the Fiscal Year	J-GAAP							
	2011	2012	2013	2014	2015	2016	2017	
<b>Financial Data</b>								
<b>Operating Results (for the year)</b>								
Net Sales	¥1,454,024	¥1,406,220	¥1,566,046	¥1,550,076	¥1,343,898	¥1,212,282	¥1,328,526	
Operating income (loss)	21,564	4,290	24,899	42,040	70,926	102,149	103,491	
Profit (loss) before income taxes	16,353	(796)	(10,538)	35,840	41,302	85,772	94,208	
Profit (loss) attributable to owners of parent	(1,007)	(8,149)	(25,138)	17,261	22,963	64,839	71,585	
Net cash provided by operating activities	43,302	18,512	43,476	58,287	145,913	100,440	82,660	
Net cash used in investing activities	(42,452)	(58,136)	(89,781)	(35,036)	(36,365)	(47,395)	(75,041)	
Free cash flows	850	(39,624)	(46,305)	23,251	109,548	53,045	7,619	
<b>Financial Position (at year-end)</b>								
Total current assets	¥ 661,311	¥ 715,396	¥ 777,015	¥ 731,708	¥ 628,210	¥ 678,938	¥ 731,326	
Property, plant and equipment, net	430,629	446,637	425,840	433,629	413,402	409,429	432,908	
Total intangible assets, investments and other assets	164,363	175,962	229,307	246,453	217,336	237,158	267,075	
Total assets	1,256,303	1,337,995	1,432,162	1,411,790	1,258,948	1,325,525	1,431,309	
Total current liabilities	451,507	493,908	507,056	448,499	364,259	392,783	443,105	
Total non-current liabilities	389,025	415,173	515,459	491,992	451,452	418,107	400,982	
Total shareholder's equity & Total accumulated other comprehensive income (loss)	367,436	376,779	352,843	406,235	381,971	449,692	511,586	
Interest-bearing debt	464,773	507,183	581,260	548,713	472,986	439,868	463,658	
<b>Other</b>								
Depreciation and amortization	¥ 62,749	¥ 43,864	¥ 48,143	¥ 48,251	¥ 48,640	¥ 44,057	¥ 45,654	
Capital expenditures	44,814	56,649	113,200	47,531	43,405	45,383	81,248	
R&D expenses	33,176	31,997	33,569	32,473	31,493	30,777	33,377	
<b>Per Share Data*2</b>								
Net income (loss) per share (basic)	¥ (5.05)	¥ (40.70)	¥ (125.50)	¥ 86.20	¥ 114.75	¥ 324.05	¥ 358.38	
Cash dividends per share	30.00	30.00	15.00	25.00	40.00	70.00	90.00	
<b>Ratios</b>								
Return on sales	1.48	0.31	1.59	2.71	5.28	8.43	7.79	
Return on equity	—	—	—	4.55	5.83	15.59	14.89	
Return (Operating income (loss)) on assets	1.69	0.33	1.80	2.96	5.31	7.90	7.51	
Net D/E Ratio	1.12	1.22	1.44	1.22	1.03	0.79	0.75	
<b>Non-Financial Data</b>								
<b>Social and Environmental*3 Data</b>								
Employees	Consolidated	12,868	12,846	14,271	14,363	13,447	13,423	17,277
	Mitsui Chemicals, Inc.	7,633	7,266	7,129	6,931	6,733	6,516	6,541
Percentage of women	Mitsui Chemicals, Inc.	11	12	12	12	12	12	13
SOI*4 frequency*5	Consolidated	0.22	0.49	0.24	0.18	0.30	0.23	0.24
GHG emissions (Scope 1, 2)*6	Consolidated*7	561	546	520	501	5,780	5,730	5,580
Energy consumption	Consolidated	99	94	89	86	95	97	95
Industrial waste	Landfill disposal volume (Consolidated)	1.1	1.2	0.6	0.7	1.0	0.9	0.7
	Landfill rate (Consolidated)*8	0.4	0.4	0.2	0.2	0.4	0.4	0.3

\*1 The Mitsui Chemicals Group adopted IFRS in the fiscal year ended March 31, 2021. Comparisons with the fiscal year ended March 31, 2020 have been made using data adjusted to IFRS.

\*2 On October 1, 2017, Mitsui Chemicals conducted a 5-to-1 share consolidation. Net income (loss) per share is calculated as if the consolidation had been conducted at the start of fiscal 2016. The figures listed for cash dividends per share have also been retroactively adjusted to account for the impact of the consolidation.

\*3 Due to changes in aggregation methods and legal revisions, only data that complies with such methods and laws is presented.

\*4 "Significant Occupational Injuries (SOIs)" refer to occupational injuries that resulted in absence from work or death. SOIs also include lighter occupational injuries that, due to the potential danger in the cause of the injury, could have led to absence from work or death. SOIs do not include those injuries that are not directly related to operations.

2018		2019		IFRS*1				
				For the Fiscal Year		2019	2020	2021
				Financial Data				
				<b>Operating Results (for the year)</b>				(Millions of yen)
¥1,482,909	¥1,338,987			Sales revenue	¥1,349,522	¥1,211,725	¥1,612,688	
93,427	71,636			Operating income before special items	72,330	85,140	161,815	
105,297	68,460			Income before income taxes	60,824	74,243	141,274	
76,115	37,944			Net income attributable to owners of the parent	33,970	57,873	109,990	
109,492	114,974			Net cash provided by operating activities	142,232	174,323	92,584	
(64,255)	(85,168)			Net cash used in investing activities	(109,112)	(77,555)	(205,234)	
45,237	29,806			Free cash flows	33,120	96,768	(112,650)	
				<b>Financial Position (at year-end)</b>				(Millions of yen)
¥ 786,677	¥ 781,347			Total current assets	¥ 781,834	¥ 787,572	¥1,033,445	
443,063	485,531			Property, plant and equipment and Right-of-use assets, net	499,650	501,960	553,584	
271,334	213,189			Total investments and other non-current assets	249,031	268,593	347,936	
1,501,074	1,480,067			Total assets	1,530,515	1,558,125	1,934,965	
458,758	478,498			Total current liabilities	485,674	466,305	706,569	
410,577	393,548			Total non-current liabilities	435,134	409,663	421,274	
551,915	527,589			Total equity attributable to owners of the parent	529,220	607,921	712,654	
485,043	554,243			Interest-bearing debt	599,388	563,791	715,059	
				<b>Other</b>				(Millions of yen)
¥ 49,504	¥ 52,106			Depreciation and amortization	¥ 76,009	¥ 76,621	¥ 84,222	
61,924	76,294			Capital expenditures	106,539	93,170	207,132	
35,796	36,368			R&D expenses	36,081	33,802	38,124	
				<b>Per Share Data</b>				(Yen)
¥ 385.60	¥ 194.94			Net income (loss) per share (basic)	¥ 174.52	¥ 298.00	¥ 565.45	
100.00	100.00			Cash dividends per share	100.00	100.00	120.00	
				<b>Ratios</b>				
6.30	5.35			Return on sales	5.36	7.03	10.03 %	
14.31	7.03			Return on equity	6.28	10.18	16.66 %	
6.37	4.81			Return (Operating income (loss) before special items) on assets	4.63	5.51	9.26 %	
0.68	0.76			Net D/E Ratio	0.81	0.60	0.75 Times	
				Return on invested capital	—	5.0	8.7 %	
2018	2019	2020	2021					
17,743	17,979	18,051	18,780	Persons				
6,670	6,770	6,809	6,899	Persons				
13	13	13	13	%				
0.33	0.31	0.22	0.23					
5,220	5,065	4,933	4,873	Thousand tons				
93	89.3	87.1	88.0	PJ				
0.7	0.8	0.7	0.8	Thousand tons				
0.3	0.4	0.3	0.4	%				

\*5 SOI frequency: The number of deaths or SOIs per million hours worked.

\*6 We had disclosed our GHG emissions as a combination of both Scope 1 and Scope 2 less the amount of electricity and steam sold up to 2014, but after 2015 we have been disclosing the sum of Scope 1 and Scope 2.

\*7 GHG emissions for overseas consolidated subsidiaries are calculated in accordance with Japan's Law Concerning the Promotion of Measures to Cope with Global Warming based on energy consumption figures. (CO<sub>2</sub> emission factors from electricity generation were retroactively changed to the International Energy Agency (IEA) emission factors for each country.) Data reflect the total of domestic and overseas consolidated subsidiaries.

\*8 Figures are calculated based on global data. However, figures before the fiscal year ended March 31, 2018 are calculated based on consolidated data in Japan.



# Management's Discussion and Analysis

## Overview

In the fiscal period under review (the twelve-month period from April 1, 2021 to March 31, 2022, hereinafter "fiscal 2021"), although the effect of the coronavirus has eased and there have been signs of the economic recovery due to wide availability of vaccines, the Ukrainian crisis has broken out in Europe and the future is far more uncertain.

In Japan as well, the economy continued to be affected by the spread of the coronavirus but signs of recovery were visible mainly in the manufacturing sector. On the other hand, the economy suffered deceleration of automotive production, in addition to a further increase of crude oil prices caused by the Ukrainian crisis and progress of weakening of the yen, which must be carefully monitored.

In the domestic chemical industry, utilization of naphtha crackers operated at a consistently high capacity as the economy recovers.

Under these circumstances, the Mitsui Chemicals Group (hereafter "the Group") worked for business expansion and growth in three business domains—Mobility, Health Care, and Food & Packaging—while also creating and developing Next Generation Business and further enhancing competitiveness in the area of Basic Materials.

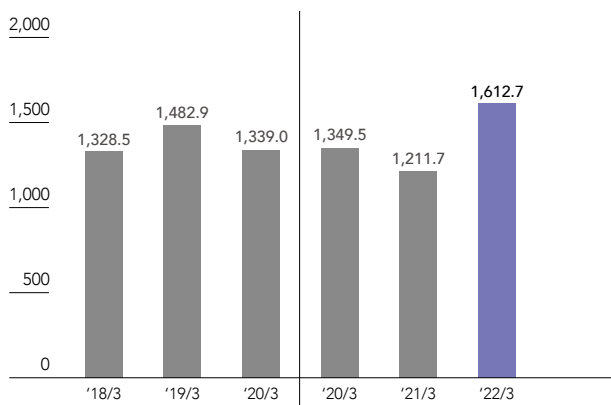
In Mobility, there has been diversified needs for lighter, more comfortable vehicles in the automotive industry in addition to a shift toward electric cars and needs for improved fuel economy. Regarding polypropylene compounds, which contribute to lighter vehicles, we own nine main production bases and seven research bases around the world and have constructed a system that can quickly respond to the global strategies of automotive manufacturers. As for our gear oil additive LUCANT™, which helps improve the fuel economy and longevity of lubricants, we began commercial operation of a new plant in Ichihara Works to meet expanding global demand. In the information communication technology (ICT) industry, we installed new production facilities for EUV pellicles, which contributes to the further miniaturization of semiconductors, at Iwakuni-Ohtake Works and began commercial production.

In Health Care, in addition to declining birthrates and aging populations in advanced countries and growing economies in emerging markets, health consciousness is rising due in part to current measures to address the pandemic. In nonwoven fabric, we stably supplied parts and materials for producing masks in Japan, just as we did in the previous fiscal year. In addition, to meet growing demand for industrial materials, we decided to expand production facilities for melt-blown nonwoven fabric at our subsidiary Sunrex Industry Co., Ltd. Regarding our ophthalmic lens materials boasting the world-leading market share, we decided to expand our production facilities for ophthalmic lens materials with high refractive indices at Omuta Works to meet expanding demand in Asia and North America. In addition, we concluded a capital and business alliance agreement with Japan Medical Dynamic Marketing, Inc., which manufactures and sells medical devices for plastic surgery, acquiring 30% of its issued shares from NGK Spark Plug Co., LTD.

In Food & Packaging, food security and reducing food loss and waste are becoming major social issues amid global population growth and climate change. With standards of living in Asia rising, the packaging field is seeing growing needs for more highly functional products with a smaller environmental footprint. In agrochemicals, our subsidiary Mitsui Chemicals Agro, Inc. acquired the agrochemicals business of Meiji Seika Pharma Co., Ltd., which possesses high R&D capabilities and develops unique agrochemicals. In performance films and sheets, we decided to expand production facilities at our subsidiary Taiwan Tohcello Functional Sheet, Inc. for ICROS™ Tape, which commands the largest share of the global market for protective tape used in semiconductor manufacturing processes.

In Basic Materials, which is centered on petrochemicals and basic chemicals, we have moved forward to enhance, expand, optimize and reconstruct downstream products in order to strengthen competitiveness. As a part of these efforts, we acquired common stock of Honshu Chemical Industry Co., Ltd. through a joint tender offer with Mitsui & Co., resulting in a 51% ownership ratio. In addition, we

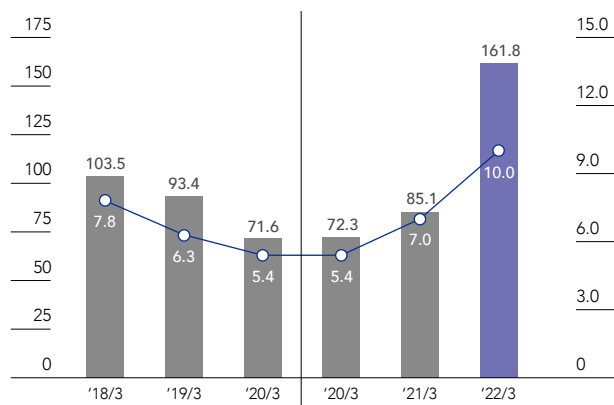
Sales revenue (Net sales) (Billions of yen)



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Operating income before special items (Operating income)/ Ratio to sales revenue (Net sales) (Billions of yen, %)



■ Operating income before special items (Operating income) (left scale)  
 ○ Ratio to sales revenue (Net sales) (right scale)

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began work on constructing a new high-performance polypropylene plant in Japan and we began to bolster methylene diphenyl diisocyanate (MDI) production capacity in Korea. Furthermore, we decided to shut down purified terephthalic acid (PTA) production at its Iwakuni-Ohtake Works in August 2023 (plan) and proceeded with restructuring. Global environmental problems, such as climate change and plastic waste, have become more prominent. As a part of its initiatives to reduce environmental burden and meet needs for a circular economy, Mitsui Chemical was the first in Japan to begin production of biomass derivatives from biomass naphtha and was the first in Asia to ship biomass phenol.

## Concept for Selection of Accounting Standards

Based on the Group's development of global business activities, the Group voluntarily adopted IFRS from the first quarter of fiscal 2020 for the purpose of improving international comparability of financial information in capital markets and enhancing its business management by unifying accounting standards across the Group.

In addition, the Group uses operating income before special items as a management indicator, which is operating income excluding non-recurring item.

## Operating Results

### Sales revenue

Sales revenue increased 401.0 billion yen, or 33.1%, compared with the previous fiscal year to 1,612.7 billion yen. This was mainly attributable to increase in sales prices due to higher naphtha and other raw materials and fuel prices, in addition to higher sales volume in each segment as economic activities have resumed. Net sales overseas were 770.9 billion yen, an increase of 0.5% compared with the previous fiscal year to 47.8% of total net sales.

### Operating income before special items

Operating income before special items was 161.8 billion yen, an increase of 76.7 billion yen or 90.1% year on year. This result was due to favorable terms of trade as a result of higher overseas market prices of Bisphenol A, in addition to higher sales volume in each segment and increased share of profit of investments accounted for using equity method.

### Operating income

Operating income was 147.3 billion yen, an increase of 69.2 billion yen or 88.7% year on year. This result was mainly due to the increase in operating income before special items.

### Financial income/expenses

Financial income/expenses worsened 2.1 billion yen year on year to a 6.0 billion yen loss, due to increased provision of allowance for doubtful accounts, although foreign exchange gains and losses were improved.

### Income before income taxes

As a result of the aforementioned factors, income before income taxes amounted to 141.3 billion yen, an increase of 67.1 billion yen or 90.3% year on year.

### Net income attributable to owners of the parent

Net income attributable to owners of the parent after accounting for income taxes and non-controlling interests was 110.0 billion yen, an increase of 52.1 billion yen or 90.1% compared with the previous fiscal year. Basic earnings per share for the period were 565.45 yen.

## Segment information

### Results by Business Segment

The status of each segment during fiscal 2021 is as follows.

### Mobility

Sales revenue increased 96.1 billion yen compared with the previous fiscal year to 411.6 billion yen and comprised 25% of total sales. Operating income before special items increased 18.8 billion yen to 49.0 billion yen year on year. The increase in income was mainly due to steady sales of elastomers and overseas polypropylene compounds.

In elastomers, performance compounds and overseas polypropylene compound, the Group captured demand and sales remained healthy.

In performance polymers, the Group captured demand and sales remained healthy for ICT-related products.

In solution business, sales remained same level as the same period of the previous fiscal year due to prolonged delay of the development of prototyping.

Millions of yen

Mobility	2022/3	2021/3	Change (%)
Sales revenue	¥411,622	¥315,480	30.5
Operating income before special items	49,015	30,177	62.4
Total assets	433,732	346,837	25.1
Depreciation and amortization	21,184	17,463	21.3
Capital expenditures	33,229	21,136	57.2

### Health Care

Sales revenue increased 20.7 billion yen year on year to 164.6 billion yen and comprised 10% of total sales. On the other hand, operating income before special items decreased 0.1 billion yen to 19.8 billion yen, mainly due to worsening terms of trade, which was resulting from the higher raw material prices in nonwoven fabrics despite of healthy sales in vision care materials.

In vision care materials, the Group captured demand and sales remained healthy for ophthalmic lens materials.

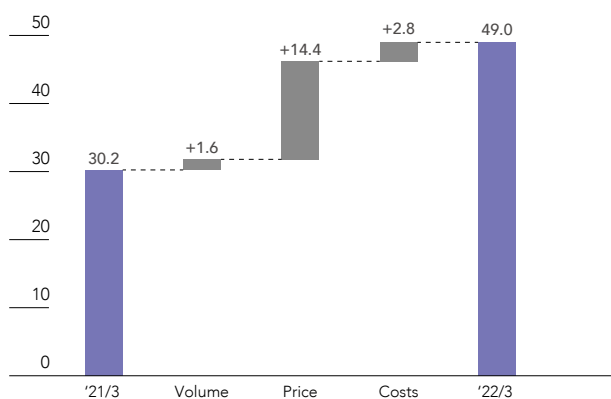
In nonwoven fabrics, sales of masks stayed healthy but sales of medical gowns have declined.

In dental materials, the Group captured demand and sales remained healthy mainly in Europe.

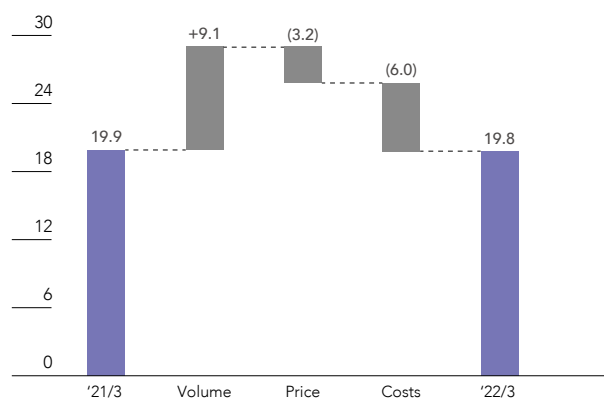
Millions of yen

Health Care	2022/3	2021/3	Change (%)
Sales revenue	¥164,544	¥143,933	14.3
Operating income before special items	19,789	19,852	(0.3)
Total assets	183,636	199,251	(7.8)
Depreciation and amortization	10,709	10,991	(2.6)
Capital expenditures	16,043	9,582	67.4

Mobility (Change in operating income before special items)  
(Billions of yen)



Health Care (Change in operating income before special items)  
(Billions of yen)



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### Food & Packaging

Sales revenue increased 37.5 billion yen compared with the previous fiscal year to 235.2 billion yen and comprised 15% of total sales. Operating income before special items increased 4.6 billion yen to 26.6 billion yen year on year, due to healthy sales in coatings & engineering materials and performance films and sheets.

In coatings & engineering materials, the Group captured demand and sales remained healthy.

In performance films and sheets, sales were mainly firm in ICT-related industrial films and sheets.

In agrochemicals, overseas sales were healthy.

Millions of yen

Food & Packaging	2022/3	2021/3	Change (%)
Sales revenue	¥235,167	¥197,700	19.0
Operating income before special items	26,557	21,989	20.8
Total assets	326,861	253,218	29.1
Depreciation and amortization	11,395	10,419	9.4
Capital expenditures	62,173	13,485	361.1

### Basic Materials

Sales revenue increased 244.9 billion yen compared with the previous fiscal year to 786.3 billion yen and accounted for 49% of total sales. Operating income before special items increased 55.5 billion yen to 75.1 billion yen, due to higher overseas market of prices of Bisphenol A and inventory revaluation gain, which was resulting from the higher naphtha and raw material prices.

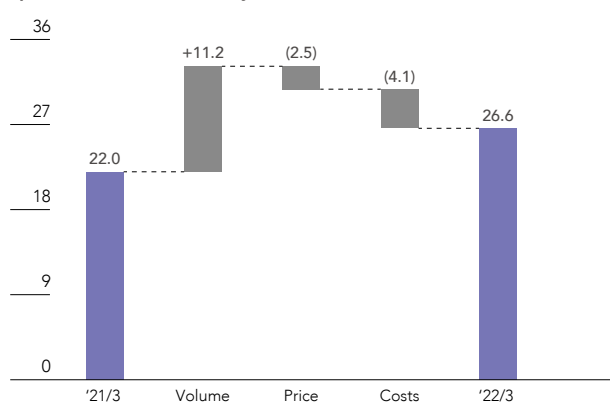
Naphtha cracker operating rates were higher than the previous fiscal year due to increased demand of downstream products.

Sales of polyethylene and polypropylene were affected by higher demand in the domestic economy.

Millions of yen

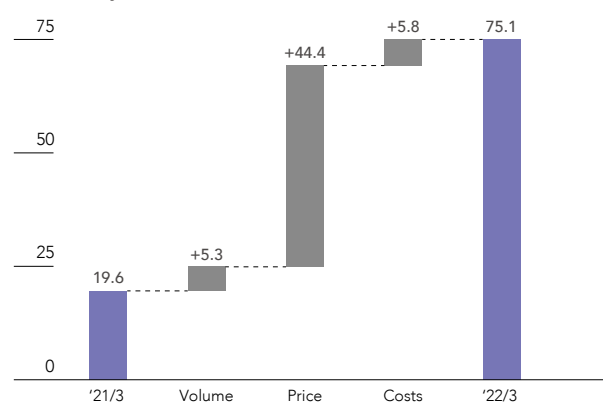
Basic Materials	2022/3	2021/3	Change (%)
Sales revenue	¥786,330	¥541,382	45.2
Operating income before special items	75,153	19,642	282.6
Total assets	823,347	606,146	35.8
Depreciation and amortization	34,643	32,245	7.4
Capital expenditures	89,552	39,376	127.4

Food & Packaging (Change in operating income before special items) (Billions of yen)



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Basic Materials (Change in operating income before special items) (Billions of yen)



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**Others**

Sales revenue increased 1.8 billion yen to 15.0 billion yen, comprising 1% of total sales. Operating loss before special items was 1.2 billion yen, an increase of 0.1 billion yen compared with the previous year.

Millions of yen

Others	2022/3	2021/3	Change (%)
Sales revenue	¥ 15,025	¥13,230	13.6
Operating loss before special items	(1,157)	(1,045)	10.7
Total assets	106,763	80,790	32.1
Depreciation and amortization	5,675	4,862	16.7
Capital expenditures	5,518	9,156	(39.7)

**Sales revenue**

Billions of yen

	2022/3	2021/3	Increase (Decrease)		
			Total	Volume contribution	Price contribution
Mobility	¥ 411.6	¥ 315.5	¥ 96.1	¥21.0	¥ 75.1
Health Care	164.6	143.9	20.7	20.7	0.0
Food & Packaging	235.2	197.7	37.5	30.5	7.0
Basic Materials	786.3	541.4	244.9	23.3	221.6
Others	15.0	13.2	1.8	—	1.8
<b>Total</b>	<b>¥1,612.7</b>	<b>¥1,211.7</b>	<b>¥401.0</b>	<b>¥95.5</b>	<b>¥305.5</b>

**Operating income before special items**

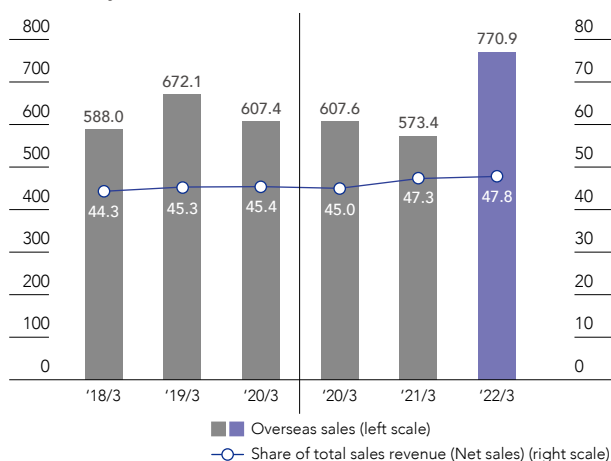
Billions of yen

	2022/3	2021/3	Increase (Decrease)			
			Total	Volume contribution	Price*	Fixed and other cost differential
Mobility	¥ 49.0	¥30.2	¥18.8	¥ 1.6	¥14.4	¥ 2.8
Health Care	19.8	19.9	(0.1)	9.1	(3.2)	(6.0)
Food & Packaging	26.6	22.0	4.6	11.2	(2.5)	(4.1)
Basic Materials	75.1	19.6	55.5	5.3	44.4	5.8
Others	(1.2)	(1.1)	(0.1)	—	—	(0.1)
Adjustments	(7.5)	(5.5)	(2.0)	—	—	(2.0)
<b>Total</b>	<b>¥161.8</b>	<b>¥85.1</b>	<b>¥76.7</b>	<b>¥27.2</b>	<b>¥53.1</b>	<b>¥(3.6)</b>

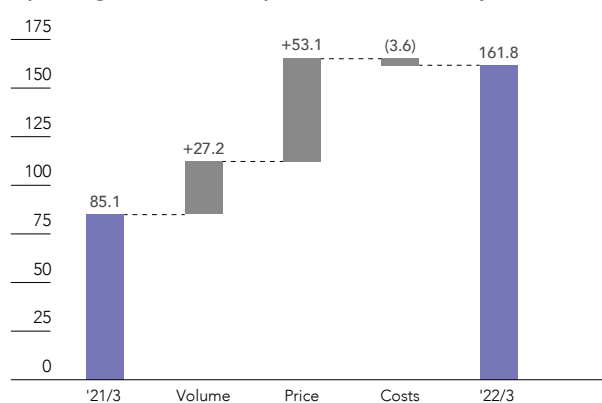
\*Price = Price contribution + Variable cost differential

**Overseas sales/Share of total sales revenue (Net sales)**

(Billions of yen, %)



**Operating income before special items (Billions of yen)**



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## Financial Position

### Assets

Total assets at the end of fiscal year stood at 1,935.0 billion yen, an increase of 376.9 billion yen compared with the end of the previous fiscal year.

### Liabilities

Total liabilities at the end of fiscal year increased 251.9 billion yen compared with the previous fiscal year-end to 1,127.9 billion yen. Interest-bearing debt amounted to 715.1 billion yen, an increase of 151.3 billion yen compared with the previous fiscal year-end. As a result, the interest-bearing debt ratio was 37.0%, an increase of 0.8 percentage point.

### Net Assets

Total equity was 807.1 billion yen, an increase of 125.0 billion yen compared with the previous fiscal year-end. The ratio of equity attributable to owners of the parent was 36.8%, a decrease of 2.2 percentage points.

Accounting for the aforementioned factors, the net debt-equity ratio stood at 0.75 at the end of the fiscal year, a 0.15 point increase from the previous fiscal year-end.

## Capital Resources and Liquidity

### Cash Flow

Cash and cash equivalents (hereafter called "net cash") at the end of the fiscal year decreased 14.8 billion yen to 181.2 billion yen compared with the previous fiscal year-end.

### Cash Flows from Operating Activities

Net cash provided by operating activities decreased 81.7 billion yen to 92.6 billion yen due to an increase in working capital, despite higher income before income taxes. As a result, the ratio of interest-bearing debt to operating cash flow increased from 3.2 in the previous fiscal year to 7.7, while the interest coverage ratio decreased from 37.1 times to 23.3 times.

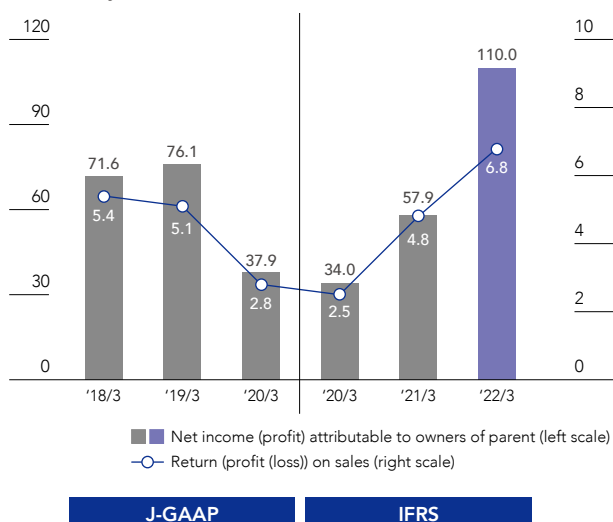
### Cash Flows from Investing Activities

Net cash used in investing activities increased 127.7 billion yen compared with the previous fiscal year to 205.2 billion yen, mainly due to an increase of cash outflows from capital expenditure, purchase of investments accounted for using equity method and purchase of subsidiaries.

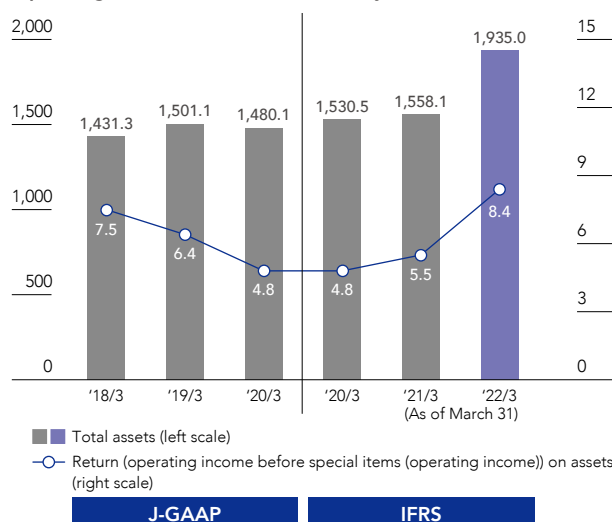
### Cash Flows from Financing Activities

Net cash provided by financing activities was 89.2 billion yen due primarily to an increase in borrowings of interest-bearing debt.

**Net income (profit) attributable to owners of parent**  
(Billions of yen, %)



**Total assets/Return (operating income before special items (operating income)) on assets**  
(operating income) on assets (Billions of yen, %)



Cash Flows-Related Performance Indicators

	2022/3 (As of March 31, 2022)	2021/3 (As of March 31, 2021)	2020/3 (As of March 31, 2020)	2019/3 (As of March 31, 2019)	2018/3 (As of March 31, 2018)
Shareholders' Equity Ratio (%)	36.8	39.0	34.6	36.8	35.7
Shareholders' Equity Ratio on a Market Value Basis (%)	30.9	44.0	25.6	34.7	46.6
Ratio of Interest-bearing Debt to Cash Flows	7.7	3.2	4.2	4.4	5.6
Interest Coverage Ratio (Times)	23.3	37.1	25.5	19.9	14.8

Notes: - Shareholders' Equity Ratio: Shareholders' equity to total assets.  
 - Shareholders' Equity Ratio on a Market Value Basis: Market capitalization to total assets.  
 - Ratio of Interest-bearing Debt to Cash Flows: Interest-bearing debt to cash flows.  
 - Interest Coverage Ratio: Cash flows to interest paid.  
 - Each of the indicators was calculated using consolidated financial figures.  
 - The market capitalization was calculated by multiplying the closing share price as of the end of the period with the number of shares outstanding (excluding treasury stock).  
 - Operating cash flow figures have been used for cash flow calculations.  
 - Interest-bearing debt is the portion of total debt booked on the consolidated balance sheet on which interest is being paid. Interest paid is the amount of interest paid as reported in the consolidated statements of cash flows.  
 - Figures before FY2018 are based on Japanese GAAP.

Fund Procurement

In connection with its fund procurement activities, the Group adopts the following basic policies.

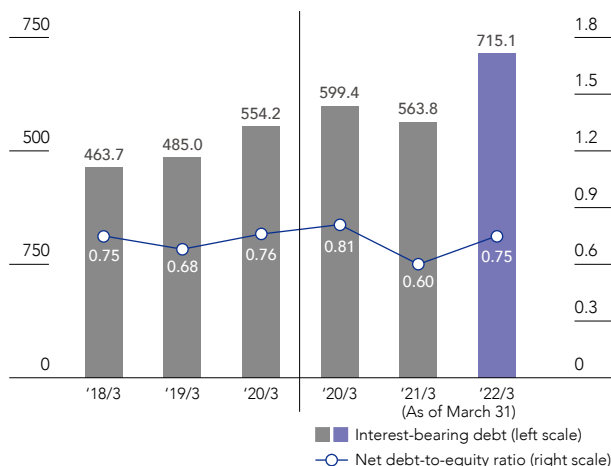
1. Maintain a high credit rating so that low-cost funds can be procured, mainly through bonds, loans, and commercial paper whenever necessary.
2. Utilize a certain level of indirect financing to preserve the stability of fund procurement activities.
3. Employ securitization and other schemes to liquidate assets in an effort to diversify fund procurement means.

In addition, with regard to financing for subsidiaries (in Japan, the United States, Europe, China, and Singapore), in principle, the Group will carry out group financing through the Company and regional headquarters. In this way, the Group will work to reduce interest-bearing debt and enhance capital efficiency throughout the Group.

Financial Liquidity

With regard to asset efficiency, the Group will ensure sufficient levels of liquidity in hand while at the same time securing alternative sources of fund procurement, including credit and overdraft facilities.

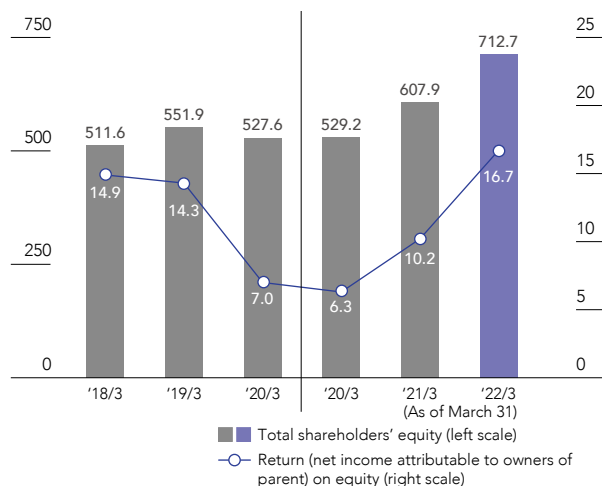
Interest-bearing debt/Net debt-to-equity ratio (Billions of yen, %)



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Total shareholders' equity/Return (net income attributable to owners of parent) on equity (Billions of yen, %)



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## Capital Expenditures (Summary)

The Company and its consolidated subsidiaries undertook capital expenditures totaling 207.1 billion yen in fiscal 2021.

Expenditures by business segment were as follows.

### Mobility

The total amount of capital expenditures in the Mobility segment was 33.2 billion yen.

### Health Care

The Company carried out construction to increase production capacity for MR™ high refractive-index ophthalmic lens materials at its Omuta Plant.

Including this, the total amount of capital expenditures in the Health Care segment was 16.0 billion yen.

### Food & Packaging

The total amount of capital expenditures in the Food & Packaging segment was 62.2 billion yen.

### Basic Materials

The Company carried out construction to install new production facilities for polypropylene at the Ichihara Plant of Prime Polymer Co., Ltd.

The total amount of capital expenditures in the Basic Materials segment was 89.6 billion yen.

### Others

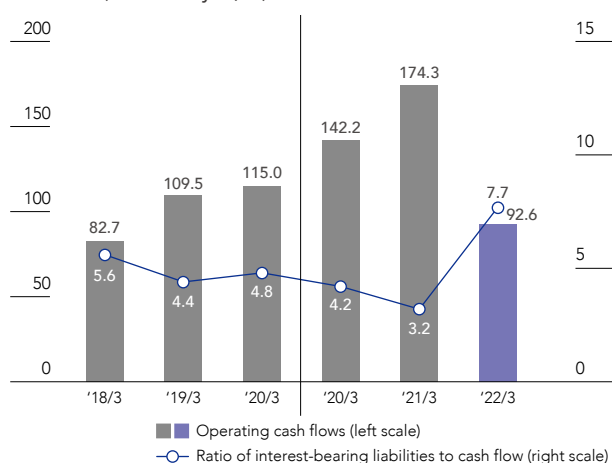
The total amount of capital expenditures in the Others segment was 5.5 billion yen.

### Corporate Expenses

The total amount of capital expenditures recorded under corporate expenses was 0.6 billion yen and was related to the development of new businesses.

This amount includes expenditures on intangible fixed assets as well as long-term prepaid expenses.

Operating cash flows/Ratio of interest-bearing liabilities to cash flow (Billions of yen, %)

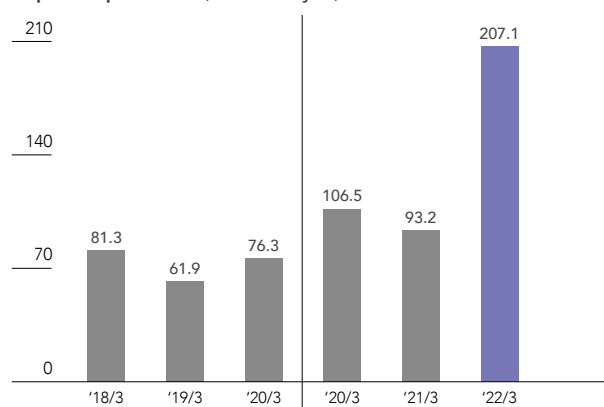


■ Operating cash flows (left scale)  
 ○ Ratio of interest-bearing liabilities to cash flow (right scale)

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Capital expenditure (Billions of yen)



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## Research and Development

Research and development in the Group is conducted by their research and development divisions. The research and development expenses in fiscal 2021 amounted to 38.1 billion yen. The Group's research and development organizations are as listed as below:

- R&D Planning & Coordination Division
- Mitsui Chemicals Singapore R&D Center Pte. Ltd.
- Synthetic Chemicals Laboratory
- Polymeric Materials Laboratory
- Functional Materials Laboratory
- Process Technology Center
- Mobility Development Center

Major research and development issues confronting corporate research, development for new businesses and each business sector, and their research and development expenses for fiscal 2021 are briefly stated as follows.

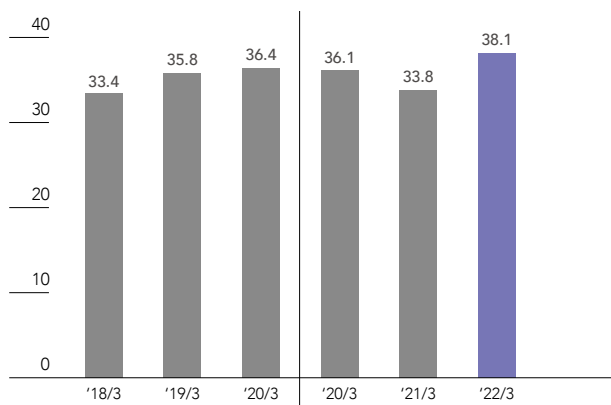
### Mobility

The Company engages in the development of elastomers, performance compounds, performance polymer resins, automotive parts, and other materials in the Mobility domain. In fiscal 2021, the Company placed considerable weight on development activities encompassing new elastomers and performance compounds for automotive materials, and new performance polymer resins for ICT and optical materials. Research and development expenses related to this segment were 8.9 billion yen for the fiscal year.

### Health Care

The Company engages in development in the Health Care domain in such areas as vision-care materials, personal-care materials, and highly functional non-woven fabrics. Kulzer GmbH and Sun Medical Co., Ltd. engage in the product development of oral-care materials, both in conjunction with the Company and separately. In fiscal 2021, efforts were mainly directed toward dental materials, non-woven fabrics for hygiene applications, and biocatalysts. Research and development expenses related to this segment were 4.6 billion yen for the fiscal year.

R&D expenses (Billions of yen)



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### Food & Packaging

The Company engages in the development of packaging materials and of coatings and adhesives for ICT applications in the Food & Packaging domain. Mitsui Chemicals Tohcello, Inc. develops films and sheets for packaging, while also working with the Company on developing functional products for ICT fields. In addition, Mitsui Chemicals Agro, Inc. develops products for agriculture and disease prevention applications. In fiscal 2021, priority was placed on recycling technology for packaging materials, new products in the ICT field, and development of new bulk agrochemicals. Research and development expenses related to this segment were 9.7 billion yen.

### Basic Materials

The Company continues to develop streamlined processes for phenol and its derivative products, industrial chemicals such as hydroquinone, polyurethane raw materials, and PET resin for strengthening its business in the Basic Materials domain. In addition, the Company is developing high-performance polymerization catalysts that strengthen the competitiveness of its polyolefin resin, and together with Prime Polymer Co., Ltd. is developing new brands and products for polyolefin resins and polypropylene compounds. Research and development expenses related to this segment were 5.7 billion yen.

### Development for New Businesses

The Company is engaged in research and development activities that will lead to the creation of solutions to social issues. Having chosen to focus on the areas of ICT and robot materials and energy solutions businesses, the Company is pursuing innovation based not only on its own development but also by drawing on outside technologies and resources. In the healthcare-related area, the Company is moving forward with research and development aimed at creating new businesses in the field of orthopedic materials and other medical products. Moreover, in fiscal 2021, the Company worked on fiber-reinforced composite materials and composite materials using metal and resin injection assembly technology.

Research and development expenses related to new businesses creation amounted to 3.0 billion yen. These are presented in corporate expenses and other segments.

### Corporate Research

The Company plays a central role in the development of fundamental technology and innovative new technology needed to maintain, strengthen, and expand the products and services of each business segment. In recent years, it has particularly worked on cutting-edge fundamental technologies in the fields of materials informatics and sensitivity evaluation technology, and actively acquired new technology through open innovation. In addition, Mitsui Chemicals Singapore R&D Centre Pte Ltd. is conducting research and development with a view to creating new businesses originating in the Asia Pacific region. In terms of initiatives to address recent environmental issues and calls for carbon neutrality, the Company is also focusing on research and development related to chemical and materials recycling, the switch to biomass raw materials, and carbon capture usage (CCU).

Research and development expenses relating to corporate research amounted to 6.2 billion yen and were allocated among all reportable segments.



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## Business Risks

The Group recognizes as risks a wide range of events (predictors) that may threaten management activities. For this reason, the Group is dedicated to crafting initiatives to prevent or mitigate the escalation of these risks.

The items detailed below represent some of the risks that could potentially and adversely impact the Group's future operating performance and financial position. Readers are cautioned that this partial list does not constitute all of the risks faced by the Group.

Please note that the risks discussed below were those deemed relevant as of March 31, 2022.

### (1) External operating environment

The Group's business may be influenced by certain elements of the operating environment outside of the Group, including customer, market, alliance partner trends and the business operations of rival firms as well as changes in legal systems. In the event that actual circumstances upon which the Group's business strategies basis are changed as a result of these environmental influences, the Group's ability to implement these strategies on schedule could be impaired, and anticipated results may not materialize. The Group takes into consideration risks posed by such unavoidable environmental changes. With respect to products, a variety of risks could conceivably result in a decline in profitability. These include, but are not limited to, an erosion of market demand, loss of customers, a decline in sales volume significantly exceeding forecasts or a deterioration in market conditions caused by oversupply due to increased production capacity at rival firms or the market entry of low-priced products, and the emergence of alternative products. Profitability may also decline due to drastic changes in the cost of raw materials, as well as the impact of supply stoppages due to accidents or bankruptcies at raw material manufacturers. In readiness for such changes due to the external environment, constant vigilance is maintained within each business division, while the most important issues are discussed by the Company-wide Strategy Committee and the conclusions are reflected in the yearly strategy review for each business. The occurrence of any or all of these risks could adversely impact the Group's business development as well as operating performance and financial position. However, it is not possible to efficiently estimate the probability of these risks materializing or their concrete impacts, etc.

The possibility of a resurgence in COVID-19 cases remains, and there is a possibility of further reductions in sales demand and production or stoppages at the Group's production facilities due to the enactment of public health restrictions on activity, or other negative impacts on the Group. The Company responds energetically to these risks with measures that emphasize cash flow, including strict control of inventories and related items, restriction of non-essential and non-urgent expenditures, increased borrowing limits and securing of cash reserves, while at the same time keeping a close watch on demand trends and taking action to secure the supply chain as needed. Meanwhile, on March 4, 2020, the Company set up a COVID-19 Infection Response Division, presided over by the officer responsible for the Risk Compliance Committee. The new division is gathering information on the impact on each of the Group's domestic and overseas bases and related matters and formulating the necessary measures to reduce personnel infection risk (teleworking, staggered work hours, etc.). The division reports to the Board of Directors on the information gathered from the Company's bases and the response measures taken. At the same time, the Company continues to explore sustainable new ways of working based on the themes of infection prevention, operational efficiencies, and effective communication.

### (2) Overseas activities (Country risk)

The Group is involved in a wide range of activities outside of Japan, from the export of products to production at overseas bases. These activities overseas are subject to various risks, including difficulties in securing personnel, deterioration in political and economic conditions, regulations regarding imports and foreign capital, deterioration in public safety and security, labor unrest, and the outbreak of terrorism or warfare. Through the regional headquarters located in each of its main overseas regions (Asia Pacific, China, Americas, and Europe), the Company's constantly gathers information from its affiliates in the regions and countries where they operate, and additionally appoints a Regional Safety Officer in the main countries where they are located who works to ensure stable business continuity in the event of changes in public safety or health. In the event of a risk materializing, the safety officer liaises with Tokyo Head Office and responds accordingly. It is not possible to efficiently estimate the probability of such risks materializing or their concrete impacts, etc. The occurrence of such risks could impair the Group's business activities overseas, which may adversely impact operating performance.

### (3) Causes of changes in segment operating performance

The Group engages in the manufacture and sale of a wide array of products led by mobility, health care, food & packaging, and basic materials. The assumed risks for each key business are as set out below.

The Company carries out an annual strategy review for each business following discussion at the Company-wide Strategy Committee to take account of changes in the internal and external environment, business risks, and other factors. In this way, the Group does its utmost to prevent risk from materializing and to minimize its impact if it does.

**i. Mobility**

Mobility segment products are primarily produced from ethylene, propylene, and other naphtha derivatives. Segment product earnings could be adversely impacted by temporary delays in passing higher raw material prices on to product prices in the event of a sharp increase in naphtha supply prices caused by circumstances in the Middle East or global economic conditions. Specific risks and opportunities recognized in this business division are as follows:

- Delayed recovery in automotive demand and manufacturing operations due to the resurgence of COVID-19 and shortages in supplies of semiconductors and other products.
- Shifts in development cycles of automotive products and the emergence of new key players.
- Growing demand for materials development to address weight reduction, improved comfort, and electrification of automobiles.
- Expanded use of recycled materials and biomaterials in light of accelerating efforts to reduce environmental burden.

**ii. Health Care**

Health care segment product earnings could be adversely impacted by price competition caused by the business expansion of rivals. Specific risks and opportunities recognized in this business division are as follows:

Vision care materials

- Global market expansion.

Nonwovens

- Slowing domestic demand for children's disposable diapers and steady growth of adult disposable diapers and sanitary products.
- Intensified competition in East and Southeast Asia.
- Soaring costs of raw materials, etc.

Dental materials

- Rapidly changing trends in the digital technology market and market expansion.

**iii. Food & Packaging**

Coating/functional materials and performance films and sheets are primarily produced from polyurethane, polyolefin, and other naphtha derivatives handled by the Basic Materials segment. Earnings from these products could be adversely impacted by delays in passing higher raw material prices on to product prices in the event of a sharp swing in naphtha supply prices caused by circumstances in the Middle East or global economic conditions.

Agrochemicals earnings could be adversely affected by such factors as changing global weather patterns, the appearance of harmful insects, and fluctuations in the cost of tests required for the development and registration of new products.

Specific risks and opportunities recognized in this business division are as follows:

- Impact on existing businesses from changes in environmental laws and regulations.
- Calls to reduce food loss and waste plastic.
- Agrochemicals: market expansion in Asia and South America, expansion of agrochemical peripherals market (epidemic prevention).
- Packaging materials: market expansion in Asia, market stagnation in Japan.
- ICT: market expansion in 5G, high-function displays, CASE demand, etc.
- China and emerging economies: future development uncertain.
- Impact of a resurgence in COVID-19 cases on development and procurement.

**iv. Basic Materials**

Petrochemicals products are primarily produced from naphtha. Naphtha supply volume and prices could fluctuate sharply due to circumstances in the Middle East or global economic conditions. In the event of a sharp increase or decrease in naphtha prices, segment product earnings could be adversely impacted by delays in passing such fluctuations on to product prices, the emergence of inventory valuation losses, or other factors.

Basic chemicals products could be adversely impacted by a rapid deterioration in market conditions caused by an oversupply, as these products are vulnerable to fluctuations in this overcrowded market.

More specific risks and opportunities recognized in this business division are as follows:

- Shift to high-performance packaging.
- Influx of US shale-derived polyolefin naphtha.
- Economic slowdowns and turbulence due to US-China trade friction and infectious disease.
- Turbulence in Asian markets for crude oil and big-market products.
- Aggressive imports and worsening export conditions due to a strong yen.
- Shrinking domestic demand, changes in Asian economies.
- Expansion of demand in areas of environmental response, such as climate change and plastic waste.
- Advances in digital technology and biotechnology.

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## Business Risks

### (4) Financial risks

Major financial risks faced by the Group are increased concerns about customer confidence due to deteriorating economic conditions, currency exchange losses due to dramatic fluctuations in exchange rates, and rising interest rates and a reluctance to lend by financial institutions with respect to fund procurement. The occurrence of any one of these risks could adversely impact the Group's financial position.

### (5) Accidents and disasters

As part of its committed efforts to "Safety is our top priority," the Group pursues a policy of safety as the top priority and vigorously promotes OHSAS 18001 certification of the occupational health and safety management systems used in its production activities at works. Business continuity plans have also been formulated to quickly reestablish the business chain of command in the event that head office functions are affected by a major earthquake in the Tokyo metropolitan area. These include the establishment of a Company-wide Response Headquarters at the Osaka Works. Nevertheless, the Group faces risks from a variety of unforeseen events, including damage to production facilities caused by natural disasters such as major earthquakes and typhoons, plant accidents, and accidents during the course of product transport or storage at warehousing facilities outside the Group. It is not possible to efficiently estimate the probability of such risks materializing or their impacts, etc., but their occurrence might not only impede plant operations or the supply of products to customers, thereby adversely impacting the Group's operating performance and financial position, but could also potentially undermine the social standing of the Group.

### (6) Quality

To uphold its quality assurance system, the Group vigorously promotes efforts to obtain ISO 9001 certification of the quality management systems at each of its plants. Nevertheless, the Group faces risks from the discovery of unforeseen quality defects in its products and product liability lawsuits. Because many of the Group's products are used as raw materials in finished consumer goods, the appearance of large-scale customer recalls due to product defects could potentially result in massive damages. It is not possible to efficiently estimate the probability of such risks materializing or their impacts, etc., but their occurrence might not only adversely impact the Group's operating performance and financial position, but could also potentially undermine the social standing of the Group.

### (7) Intellectual property

Possessing a significant array of proprietary technologies and expertise, the Group manages information in accordance with strict rules. Nevertheless, information leaks could potentially occur due to unforeseen circumstances. In addition, the Group could potentially be subject to unfavorable court judgement in the event of a future legal dispute concerning intellectual property. To date, the Company has not experienced a serious leak of intellectual property or a serious dispute involving intellectual property, and it is difficult to efficiently estimate the probability of such eventualities or their impacts, but their occurrence could adversely impact the Group's operating performance and financial position.

### (8) Climate change

Physical risks arising from climate change include the possibility that the Group's business activities, ranging from production to sales, could be significantly affected if natural disasters such as typhoons and floods become more serious. In addition, if the long-term rise in ocean levels or droughts become serious, these could trigger the suspension of operations at the Group's manufacturing bases or cause a decline in production activities.

As for risks pertaining to the transition to a low-carbon society, if carbon pricing or other GHG emission restrictions are introduced, this could drive up the Group's energy costs and dent profitability. In addition, a rapid shift to a low-carbon society could cause the Group to spend more on R&D of GHG emission reductions and make capital outlays associated with the implementation of new technologies, leading to a decline in Group earnings. The Group has also declared its commitment to achieving carbon neutrality by 2050. Consequently, if the Group's response to the transition to a low-carbon society is inadequate, the damage to its reputation and accompanying loss of social credibility could lead to business opportunities being missed. The Group considers climate change impact on business activities to be a key risk, and is analyzing the impact on its business activities in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), seeking to disclose results of this analysis and progress of its efforts appropriately through the corporate website.

To address these risks, the Company has formulated a climate change policy and is working from the angles of both mitigation and adaptation, aiming to make contributions through its business activities. Mitigation measures are not limited to initiatives to achieve low-carbon manufacturing (reduction of Scope 1 and 2 emissions). The Company also offers Blue Value® products that help reduce GHG emissions throughout the product life cycle. In terms of adaptation measures, the Company offers Rose Value® products that help to prevent and mitigate disasters, extend the service life of infrastructure, and stabilize food production.

**(9) Plastic pollution**

As a material used for a vast array of purposes, plastic helps improve the convenience of life and solve social issues. Conversely, waste plastic that flows into the ocean due to improper disposal after use is a cause of environmental pollution. Measures taken in response to this issue could include regulations on waste plastics, the promotion of recycling, and calls to replace plastic with other materials. Because the Group manufactures and sells plastics made from petrochemical raw materials, progress in such trends could negatively affect the Group's business results and financial position.

Faced with these risks, the Group is working together with other corporations and industry bodies involved in the manufacture and use of plastics to help address the issues involved, including being a member of groups such as the Alliance to End Plastic Waste, the Clean Ocean Material Alliance, and the Japan Initiative for Marine Environment (JaIME), as well as taking an active role in, for example, waste management infrastructure development, the promotion of innovation, education and awareness activities, and clean-up campaigns.

The Group also views calls to address issues related to plastic as presenting new business opportunities. It is exploring a wide range of approaches to link contributions to solving the various issues with Group businesses. Focus areas include developing material and chemical recycling and other technologies to convert plastic waste to usable plastic, proposing recycling-friendly product designs such as the use of single-material packaging, and constructing traceability systems for plastic materials using blockchain technology.

# Consolidated Statements of Financial Position

As of March 31, 2022 and 2021

	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents	¥ 181,152	¥ 195,987	\$ 1,480,121
Trade receivables	370,426	285,846	3,026,603
Inventories	369,009	258,814	3,015,026
Other financial assets	43,496	27,176	355,389
Other current assets	27,258	15,230	222,714
Subtotal	991,341	783,053	8,099,853
Assets held for sale	42,104	4,519	344,015
Total current assets	1,033,445	787,572	8,443,868
<b>Non-current assets</b>			
Property, plant and equipment	513,950	455,749	4,199,281
Right-of-use assets	39,634	46,211	323,834
Goodwill	17,981	1,123	146,916
Intangible assets	45,341	19,678	370,463
Investment property	21,546	23,222	176,044
Investments accounted for using equity method	133,157	97,509	1,087,973
Other financial assets	55,757	57,463	455,568
Retirement benefit assets	60,750	55,059	496,364
Deferred tax assets	8,579	9,333	70,096
Other non-current assets	4,825	5,206	39,422
Total non-current assets	901,520	770,553	7,365,961
Total assets	¥1,934,965	¥1,558,125	\$15,809,829



	Millions of yen		Thousands of U.S. dollars
	As of March 31, 2022	As of March 31, 2021	As of March 31, 2022
<b>LIABILITIES AND EQUITY</b>			
<b>Liabilities</b>			
<b>Current liabilities</b>			
Trade payables	¥174,844	¥ 119,712	\$1,428,581
Bonds and borrowings	346,615	216,721	2,832,053
Income taxes payable	12,903	6,195	105,425
Other financial liabilities	127,608	84,242	1,042,634
Provisions	2,474	1,157	20,214
Other current liabilities	42,125	37,736	344,187
Subtotal	706,569	465,763	5,773,094
Liabilities directly associated with assets held for sale	—	542	—
Total current liabilities	706,569	466,305	5,773,094
<b>Non-current liabilities</b>			
Bonds and borrowings	319,471	293,495	2,610,270
Other financial liabilities	49,297	67,722	402,786
Retirement benefit liabilities	18,857	16,384	154,073
Provisions	5,051	3,698	41,270
Deferred tax liabilities	28,133	27,834	229,864
Other non-current liabilities	465	530	3,799
Total non-current liabilities	421,274	409,663	3,442,062
Total liabilities	1,127,843	875,968	9,215,156
<b>Equity</b>			
Share capital	125,414	125,331	1,024,708
Capital surplus	69,866	74,009	570,847
Treasury stock	(34,932)	(24,900)	(285,415)
Retained earnings	516,098	424,084	4,216,831
Other components of equity	36,208	9,397	295,841
Total equity attributable to owners of the parent	712,654	607,921	5,822,812
Non-controlling interests	94,468	74,236	771,861
Total equity	807,122	682,157	6,594,673
Total liabilities and equity	¥1,934,965	¥1,558,125	\$15,809,829



## Consolidated Statements of Comprehensive Income

For the years ended March 31, 2022 and 2021

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Net income	¥118,551	¥64,219	\$ 968,633
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Financial assets measured at fair value through other comprehensive income	3,074	670	25,116
Remeasurements of defined benefit plans	2,149	24,605	17,559
Share of other comprehensive income of investments accounted for using equity method	210	263	1,716
Total of items that will not be reclassified to profit or loss	5,433	25,538	44,391
Items that may be reclassified to profit or loss			
Exchange differences on translation of foreign operations	22,496	5,816	183,806
Effective portion of net change in fair value of cash flow hedges	494	579	4,036
Share of other comprehensive income of investments accounted for using equity method	3,726	(280)	30,444
Total of items that may be reclassified to profit or loss	26,716	6,115	218,286
Total other comprehensive income, net of tax	32,149	31,653	262,677
Comprehensive income	¥150,700	¥95,872	\$1,231,310
Comprehensive income attributable to:			
Owners of the parent	139,352	88,974	1,138,590
Non-controlling interests	11,348	6,898	92,720
Comprehensive income	¥150,700	¥95,872	\$1,231,310

# Consolidated Statements of Changes in Equity

For the year ended March 31, 2022

	Millions of yen											
	Equity attributable to owners of the parent										Non-controlling interests	Total equity
	Share capital	Capital surplus	Treasury stock	Retained earnings	Other components of equity				Total	Total equity attributable to owners of the parent		
Financial assets measured at fair value through other comprehensive income					Remeasurements of defined benefit plans	Exchange differences on translation of foreign operations	Effective portion of net change in fair value of cash flow hedges					
Balance as of April 1, 2021	¥125,331	¥74,009	¥(24,900)	¥424,084	¥11,606	¥ —	¥ (1,497)	¥(712)	¥ 9,397	¥607,921	¥74,236	¥682,157
Net income	—	—	—	109,990	—	—	—	—	—	109,990	8,561	118,551
Other comprehensive income	—	—	—	—	3,341	2,162	23,408	451	29,362	29,362	2,787	32,149
Total comprehensive income	—	—	—	109,990	3,341	2,162	23,408	451	29,362	139,352	11,348	150,700
Purchase of treasury stock	—	—	(10,037)	—	—	—	—	—	—	(10,037)	—	(10,037)
Disposal of treasury stock	—	0	5	—	—	—	—	—	—	5	—	5
Dividends	—	—	—	(20,527)	—	—	—	—	—	(20,527)	(5,695)	(26,222)
Share-based payment transactions	83	83	—	—	—	—	—	—	—	166	—	166
Change in scope of consolidation	—	—	—	—	—	—	—	—	—	—	19,860	19,860
Transactions with non-controlling interests	—	(4,226)	—	—	—	—	—	—	—	(4,226)	(5,281)	(9,507)
Transfer from other components of equity to retained earnings	—	—	—	2,551	(389)	(2,162)	—	—	(2,551)	—	—	—
Total transactions with owners, etc.	83	(4,143)	(10,032)	(17,976)	(389)	(2,162)	—	—	(2,551)	(34,619)	8,884	(25,735)
Balance as of March 31, 2022	¥125,414	¥69,866	¥(34,932)	¥516,098	¥14,558	¥ —	¥21,911	¥(261)	¥36,208	¥712,654	¥94,468	¥807,122

	Thousands of U.S. dollars											
	Equity attributable to owners of the parent										Non-controlling interests	Total equity
	Share capital	Capital surplus	Treasury stock	Retained earnings	Other components of equity				Total	Total equity attributable to owners of the parent		
Financial assets measured at fair value through other comprehensive income					Remeasurements of defined benefit plans	Exchange differences on translation of foreign operations	Effective portion of net change in fair value of cash flow hedges					
Balance as of April 1, 2021	\$1,024,030	\$604,698	\$(203,448)	\$3,465,022	\$94,828	\$ —	\$(12,231)	\$(5,818)	\$ 76,779	\$4,967,081	\$606,552	\$5,573,633
Net income	—	—	—	898,685	—	—	—	—	—	898,685	69,948	968,633
Other comprehensive income	—	—	—	—	27,298	17,665	191,257	3,685	239,905	239,905	22,772	262,677
Total comprehensive income	—	—	—	898,685	27,298	17,665	191,257	3,685	239,905	1,138,590	92,720	1,231,310
Purchase of treasury stock	—	—	(82,008)	—	—	—	—	—	—	(82,008)	—	(82,008)
Disposal of treasury stock	—	0	41	—	—	—	—	—	—	41	—	41
Dividends	—	—	—	(167,718)	—	—	—	—	—	(167,718)	(46,532)	(214,250)
Share-based payment transactions	678	678	—	—	—	—	—	—	—	1,356	—	1,356
Change in scope of consolidation	—	—	—	—	—	—	—	—	—	—	162,268	162,268
Transactions with non-controlling interests	—	(34,530)	—	—	—	—	—	—	—	(34,530)	(43,147)	(77,677)
Transfer from other components of equity to retained earnings	—	—	—	20,843	(3,178)	(17,665)	—	—	(20,843)	—	—	—
Total transactions with owners, etc.	678	(33,852)	(81,967)	(146,875)	(3,178)	(17,665)	—	—	(20,843)	(282,859)	72,589	(210,270)
Balance as of March 31, 2022	\$1,024,708	\$570,847	\$(285,415)	\$4,216,831	\$118,948	\$ —	\$179,026	\$(2,133)	\$295,841	\$5,822,812	\$771,861	\$6,594,673

For the year ended March 31, 2021

	Millions of yen											
	Equity attributable to owners of the parent										Non-controlling interests	Total equity
	Share capital	Capital surplus	Treasury stock	Retained earnings	Other components of equity				Total	Total equity attributable to owners of the parent		
Financial assets measured at fair value through other comprehensive income					Remeasurements of defined benefit plans	Exchange differences on translation of foreign operations	Effective portion of net change in fair value of cash flow hedges					
Balance as of April 1, 2020	¥125,298	¥79,320	¥(39,254)	¥359,794	¥11,894	¥ —	¥(6,591)	¥(1,241)	¥ 4,062	¥529,220	¥80,487	¥609,707
Net income	—	—	—	57,873	—	—	—	—	—	57,873	6,346	64,219
Other comprehensive income	—	—	—	—	814	24,664	5,094	529	31,101	31,101	552	31,653
Total comprehensive income	—	—	—	57,873	814	24,664	5,094	529	31,101	88,974	6,898	95,872
Purchase of treasury stock	—	—	(691)	—	—	—	—	—	—	(691)	—	(691)
Disposal of treasury stock	—	—	3	—	—	—	—	—	—	3	—	3
Dividends	—	—	—	(19,349)	—	—	—	—	—	(19,349)	(6,266)	(25,615)
Share-based payment transactions	33	33	—	—	—	—	—	—	—	66	—	66
Change in scope of consolidation	—	—	—	—	—	—	—	—	—	—	—	—
Transactions with non-controlling interests	—	(5,344)	15,042	—	—	—	—	—	—	9,698	(6,883)	2,815
Transfer from other components of equity to retained earnings	—	—	—	25,766	(1,102)	(24,664)	—	—	(25,766)	—	—	—
Total transactions with owners, etc.	33	(5,311)	14,354	6,417	(1,102)	(24,664)	—	—	(25,766)	(10,273)	(13,149)	(23,422)
Balance as of March 31, 2021	¥125,331	¥74,009	¥(24,900)	¥424,084	¥11,606	¥ —	¥(1,497)	¥ (712)	¥ 9,397	¥607,921	¥74,236	¥682,157

## Consolidated Statements of Cash Flows

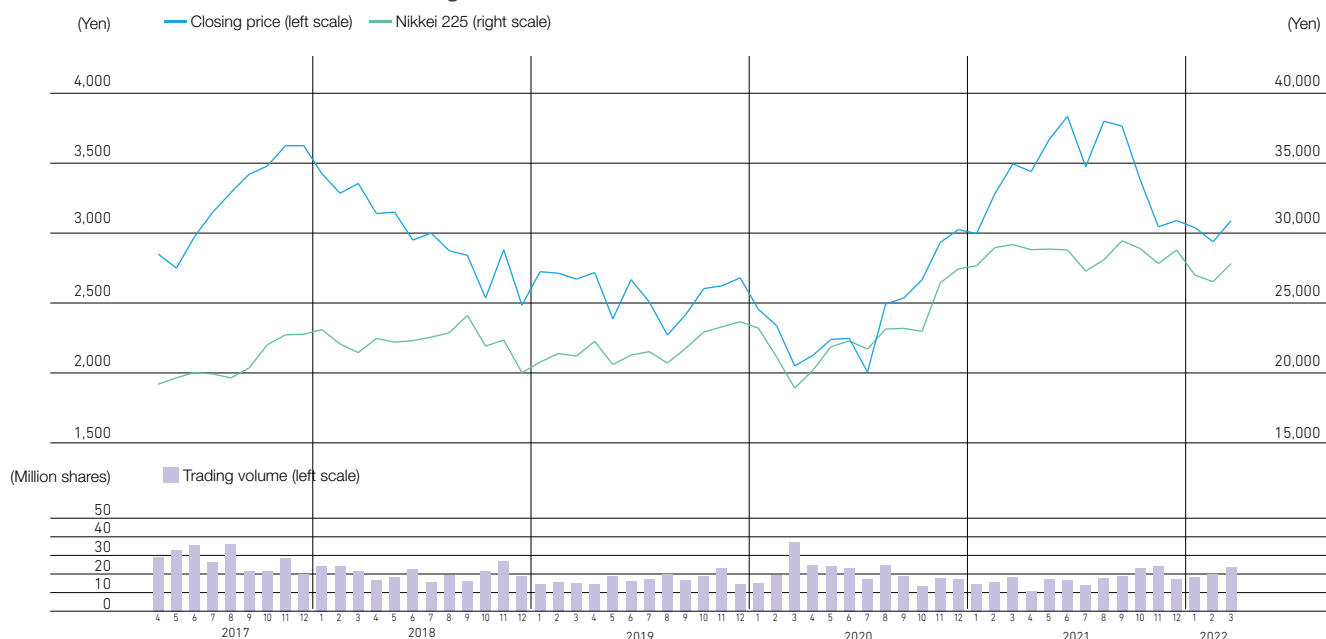
For the years ended March 31, 2022 and 2021

	Millions of yen		Thousands of U.S. dollars
	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2022
Cash flows from operating activities			
Income before income taxes	¥ 141,274	¥ 74,243	\$ 1,154,294
Depreciation and amortization	84,222	76,621	688,144
Impairment loss	16,183	8,050	132,225
Gain on bargain purchase	(7,246)	—	(59,204)
Insurance income	(1,226)	(1,761)	(10,017)
Interest and dividend income	(2,458)	(2,152)	(20,083)
Interest expenses	3,932	4,634	32,127
Share of loss (profit) of investments accounted for using equity method	(25,819)	(5,989)	(210,957)
Decrease (increase) in trade receivables	(62,942)	(7,113)	(514,274)
Decrease (increase) in inventories	(81,582)	27,360	(666,574)
Increase (decrease) in trade payables	39,968	(5,420)	326,563
Others	(3,098)	10,312	(25,314)
Subtotal	101,208	178,785	826,930
Interest and dividends received	11,158	6,246	91,168
Proceeds from insurance income	1,226	1,761	10,017
Interest paid	(3,972)	(4,705)	(32,454)
Income taxes paid	(17,036)	(7,764)	(139,194)
Net cash provided by (used in) operating activities	92,584	174,323	756,467
Cash flows from investing activities			
Proceeds from sale and redemption of marketable securities	—	5,000	—
Purchase of property, plant and equipment	(107,067)	(74,904)	(874,802)
Proceeds from sale of property, plant and equipment	1,588	591	12,975
Purchase of intangible assets	(9,149)	(1,677)	(74,753)
Proceeds from sale of intangible assets	4	84	33
Purchase of investment securities	(2,510)	(877)	(20,508)
Proceeds from sale and redemption of investment securities	2,939	161	24,013
Payments for acquisition of subsidiaries	(41,510)	(1,722)	(339,162)
Proceeds from acquisition of subsidiaries	12,430	—	101,561
Payments for sale of subsidiaries	(1,749)	—	(14,290)
Proceeds from sale of subsidiaries	5,547	—	45,322
Payments for acquisition of businesses	(10,694)	—	(87,376)
Purchase of equity accounted investments	(58,826)	(4,460)	(480,644)
Proceeds from equity accounted investments	—	99	—
Others	3,763	150	30,746
Net cash provided by (used in) investing activities	(205,234)	(77,555)	(1,676,885)
Cash flows from financing activities			
Increase (decrease) in short-term borrowings	54,999	(8,498)	449,375
Increase (decrease) in commercial papers	70,000	(10,000)	571,942
Proceeds from long-term borrowings	40,289	19,542	329,185
Repayments of long-term borrowings	(45,566)	(42,963)	(372,302)
Proceeds from issuance of bonds	35,000	15,000	285,971
Redemption of bonds	(10,432)	(10,426)	(85,236)
Repayments of lease liabilities	(9,637)	(8,108)	(78,740)
Proceeds from sale of treasury stock	6	3	49
Purchase of treasury stock	(10,037)	(691)	(82,008)
Dividends paid	(20,527)	(19,349)	(167,718)
Capital contribution from non-controlling interests	1	—	8
Dividends paid to non-controlling interests	(5,617)	(6,266)	(45,894)
Proceeds from sale of interests in subsidiaries to non-controlling interests	—	2,800	—
Payments for acquisition of interests in subsidiaries from non-controlling interests	(9,257)	—	(75,635)
Net cash provided by (used in) financing activities	89,222	(68,956)	728,997
Effect of exchange rate changes on cash and cash equivalents	8,593	3,604	70,210
Net increase (decrease) in cash and cash equivalents	(14,835)	31,416	(121,211)
Cash and cash equivalents at the beginning of period	195,987	164,571	1,601,332
Cash and cash equivalents at end of period	¥ 181,152	¥195,987	\$ 1,480,121



## Stock Information

### Common Stock Price and Trading Volume



\* On October 1, 2017, Mitsui Chemicals conducted a 5-to-1 share consolidation. Stock prices have been recalculated based on this share consolidation.

### Total Shareholder Return (TSR)

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Year-end stock price (yen)	2,750	3,355	2,671	2,051	3,495	3,090
Dividend per share (yen)		90	100	100	100	120
Cumulative dividends per share (yen)		90	190	290	390	510
TSR		125.3%	104.0%	85.1%	141.3%	130.9%
TOPIX Total Return		115.9%	110.0%	99.6%	141.5%	144.3%

\* Total shareholder return is the value as of the end of the year in fiscal 2017 and thereafter assuming investment at the closing price at the end of fiscal 2016.

### Credit Ratings (As of March 31, 2022)

Rating Agencies	Rating
Japan Credit Rating Agency, Ltd. (JCR)	A+
Rating and Investment Information, Inc. (R&I)	A

## Corporate Information (As of March 31, 2022)

<b>Date of Establishment</b>	October 1, 1997
<b>Paid-in Capital</b>	125,414 million yen
<b>Employees</b>	18,780 (Consolidated)
<b>Subsidiaries and Affiliates</b>	161 (Domestic 54, Overseas 107)
<b>Shares of Common Stock Issued</b>	204,653,315
<b>Number of Shareholders</b>	73,870
<b>Stock Exchange Listing</b>	Prime Market, Tokyo Stock Exchange (Code: 4183)
<b>Transfer Agent</b>	Sumitomo Mitsui Trust Bank, Limited

<b>Head Office</b>	Shiodome City Center, 1-5-2 Higashi-Shimbashi, Minato-ku, Tokyo 105-7122, Japan Phone: +81-3-6253-2100 Facsimile: +81-3-6253-4245
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<b>China</b>	Mitsui Chemicals (China) Co., Ltd. 21F, Capital Square, 268 Hengtong Road, Jing'an District, Shanghai, 200070, P. R. China Phone: +86-21-5888-6336 Facsimile: +86-21-5888-6337



We're reshaping the world  
from a material level.

Achieving carbon neutrality with biomass

**Be▶PLAYER**

Creating a circular economy through recycling

**RePLAYER**



## We explore the materials of materials

Convenience stores have started charging for plastic bags, while coffee shops have abandoned plastic straws for paper ones. The world is transitioning away from plastic amid growing consciousness of waste and other environmental problems.

But plastic offers so much convenience and user-friendliness that it is now an integral part of our daily life. Used in every single industry, plastic cannot be eliminated entirely. Simply renouncing plastic use will inevitably reach a limit at some point. We need a new way of thinking to ensure we are ready for that day.

We explore the materials of materials.

Under the banner of Green Theory 2030, the Mitsui Chemicals Group will push ahead with reforming plastic rather than renouncing plastic. We have launched BePLAYER™ and RePLAYER™ initiatives to realize our goals of carbon neutrality and a circular economy. These initiatives are aimed at achieving social progress by involving everyone as a player.

Under BePLAYER™, we will help the transition to bio-based society to solve the problem of climate change.

For example, we will use bio-based hydrocarbons generated from used cooking oil to produce plastic materials.

This enables us to create bio-based versions of materials once seen as too difficult to produce from biomass, and will help to substantially reduce GHG emissions across society.

Under RePLAYER™, we will rethink the way we handle plastic waste and other waste products and reuse them as resources.

By developing new materials, recycling systems and value chains, we will create a robust circular economy loop that encompasses a broader part of society.

Our approach of exploring the materials of materials is an important challenge for us, one that is focused on the huge goals of achieving carbon neutrality and a circular economy.

BePLAYER™ may have a higher price than ordinary plastic. But our ambitions are just as high. RePLAYER™ will have to overcome great hurdles to achieve widespread use across society. But the contribution we make to the future will be just as great.

Working with our business partners and consumers, we will steadily reshape the world, one step at a time, starting with the materials of materials.

<https://jp.mitsuichemicals.com/en/sustainability/beplayer-replayer/>

BePLAYER™, RePLAYER™ and these marks are trademarks or registered trademarks of Mitsui Chemicals, inc. in Japan and other countries and regions.



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