



**MGC REPORT 2024**  
Integrated Report

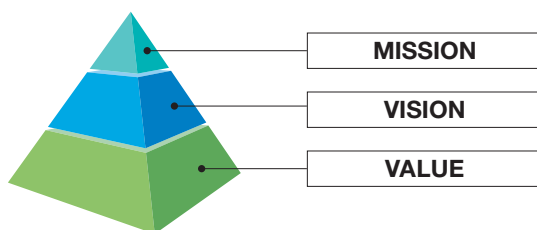


# Uniqueness & Presence

# Toward the Realization of Our Vision

The Mitsubishi Gas Chemical (MGC) Group is an R&D-oriented chemical manufacturer that contributes to positive social change with highly original materials and advanced technologies. Under our Mission of “creating value to share with society,” we strive to create value that will contribute to solving issues on a global scale, leveraging our unique format as a chemical company.

## The MGC Way



Employee satisfaction\*<sup>1</sup>

**75%**

Our open corporate culture of respecting the entrepreneurial spirit of each individual, rich in originality and pioneering spirit, is the foundation and source of the Group's value creation.

\*<sup>1</sup> From employee awareness survey results. The subjects were all employees of MGC (non-consolidated), excluding those seconded to subsidiaries (effective replies: 71.9%).

## MISSION

### Creating value to share with society

Advanced electronic devices, communication systems, fossil-alternative energy, advanced medicine, and food management. To these industries, which hold the keys to achieving the Sustainable Development Goals (SDGs), the evolution of materials and technologies to process ingredients is essential. Through chemical ingredients and materials, MGC Group products are deeply involved in both industrial and social innovation. We will pursue new materials, ingredients, and technologies that can help to transform society while always bearing in mind our Mission.



Number of Group companies

**115**

Alliances and collaborations with various partners reinforce the management foundation of the MGC Group, which enjoys a strong industrial presence globally.







Products based on technologies developed in-house (by product category)

**90% or more**

Inquiring minds in tireless search of cutting-edge technologies are part of the MGC Group DNA. Diverse original technologies represent the primary source of our competitive advantage.

## VISION

### An excellent company with uniqueness and presence built on chemistry

Often called the staple of all industries, chemistry has limitless potential for application to human life, environmental preservation and social infrastructure. In our modern world of accelerating social change, the MGC Group offers a large number of global niche-leading product lines while honing its unique strengths. The Group rises to the challenges of society and our customers, applying unrivaled technologies. Our Vision of “an excellent company with uniqueness and presence built on chemistry” describes what we aim to be in the future.



Percentage of MGC products that hold the largest share of their respective global markets

About **40%**

The Group's products have competitive advantages in terms of quality and characteristics and have secured the top share of global markets in a wide range of fields.



Consolidated net sales

**¥813.4 billion**

Through a differentiation strategy predicated on creating both social and economic value, we will work to shift to a profit structure resilient to changes in the business environment.





We aim to be an excellent corporate group that continues to be a preferred choice around the world by sustainably creating businesses that embody uniqueness and presence in the global market.

Our Uniqueness & Presence refers to a distinctive business model of carrying out our Mission while achieving both social and economic value. By planning for a better future and merging needs and seeds together, we will refine our Uniqueness & Presence businesses, so that they will remain the preferred choice of the markets and society.

The active contributions of human resources who practice our Value (conduct philosophy) are an essential element for maintaining and developing this business model. With a corporate culture that brings our Value to life as the foundation of value creation, we will pursue new value propositions that are rich in originality and pioneering spirit.

\*Management Resources: Fiscal 2023 / As of March 31, 2024



## VALUE

### Conduct Philosophy

As a professional group:

A professional is someone who has a high level of trustworthy knowledge and ability, and a strong sense of responsibility. Our aim is to assemble a group in which each member is a reliable professional.

#### 1. Courage that does not shy away from change

Do not be content with the status quo, try new things, and have the courage to break with convention. When the situation changes, don't merely adapt yourself to it – have the courage to try to change your environment toward creating a better state of affairs.

#### 2. Aim for lofty goals

Always set goals that are above where you are now, and be motivated to tackle these goals.

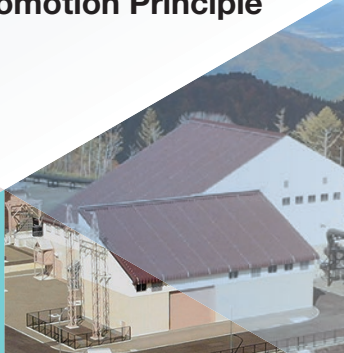
#### 3. Perseverance in achieving goals

Overcome anything that confronts you with strong perseverance until you have reached your goal and gotten results.

#### 4. Build team spirit with communication

Expand your circle of communication in order to cooperate, build mutual trust and share goals.

### MGC Corporate Behavior Principles Sustainability Promotion Principle



Lost-time injury frequency rate\*2

**0.00**

Under the philosophy that ensuring safety is the top priority of our business activities, we are enhancing our responsible care (RC) activities.

\*2 Total number of deaths and injuries caused by labor accidents per one million actual hours worked





# Contents

<b>Value Creation Section</b> p.1	1	Toward the Realization of Our Vision
	4	Contents
	5	Value Creation Process
	7	Message from the President
	11	MGC Group's History
	13	Value Creation Story: Uniqueness & Presence
<hr/>		
<b>Management Strategy Section</b> p.22	23	Overview of Management Strategy
	29	Objective 1: Strengthen the Resiliency of Our Business Portfolio
	31	Objective 2: Promote Sustainability Management
	33	Materiality
	35	Financial Strategy
	39	Risk Management
	43	Research and Development Strategy
	45	DX Promotion
	47	Promoting Human Capital Management
	53	Business Operations and Main Products
	55	Specialty Chemicals Business Strategy
59	Green Energy & Chemicals Business Strategy	
<hr/>		
<b>Governance Section</b> p.63	64	Members of the Board of Directors and Audit & Supervisory Board
	67	Outside Directors Roundtable Talk
	71	Corporate Governance
	76	Compliance
<hr/>		
<b>Data Section</b> p.77	77	Performance Data
	81	Consolidated Financial Statements
	85	Corporate Data

## Editorial Policy

MGC Report 2024 was compiled as an integrated report with a focus on our medium- and long-term growth strategies as well as stories of how we have been creating value. We established a company-wide system under the leadership of the CSR & IR Division to compile and share information, and worked to provide a broad variety of quality content that we hope will help our diverse stakeholders deepen their understanding of the MGC Group.

## Disclaimer

Plans, goals, and other forward-looking statements included in this report are determined based on information available to MGC as of the end of the consolidated fiscal year under review, as well as on certain assumptions MGC has judged to be reasonable, and may include uncertainties. Actual results may differ significantly from these forward-looking statements due to a variety of factors.

## Guidelines Referenced

- International Integrated Reporting Council (IIRC) "Integrated Reporting <IR>"
- Ministry of Economy, Trade and Industry "Guidance for Integrated Corporate Disclosure and Company-Investor Dialogue for Collaborative Value Creation"
- Global Reporting Initiative (GRI) "Sustainability Reporting Standards"
- Task Force on Climate-related Financial Disclosures (TCFD) recommendations
- Sustainability Accounting Standards Board (SASB) standards

## Reporting Period

April 1, 2023–March 31, 2024 (fiscal 2023)  
Note: Some activities taking place before or immediately after the fiscal year are also noted.

## Report Scope

Mitsubishi Gas Chemical Company, Inc. and the MGC Group  
Note: Where the scope of reporting differs, it is noted in the data.

## In Charge of Publishing

Motoyasu Kitagawa  
Director, Managing Executive Officer  
In charge of CSR & IR Division

## Published

October 2024



Please refer to our website for details.

### Investor Information



Contains the latest financial information, various releases, and stock and shareholder information.

<https://www.mgc.co.jp/eng/ir/>

### Sustainability Information

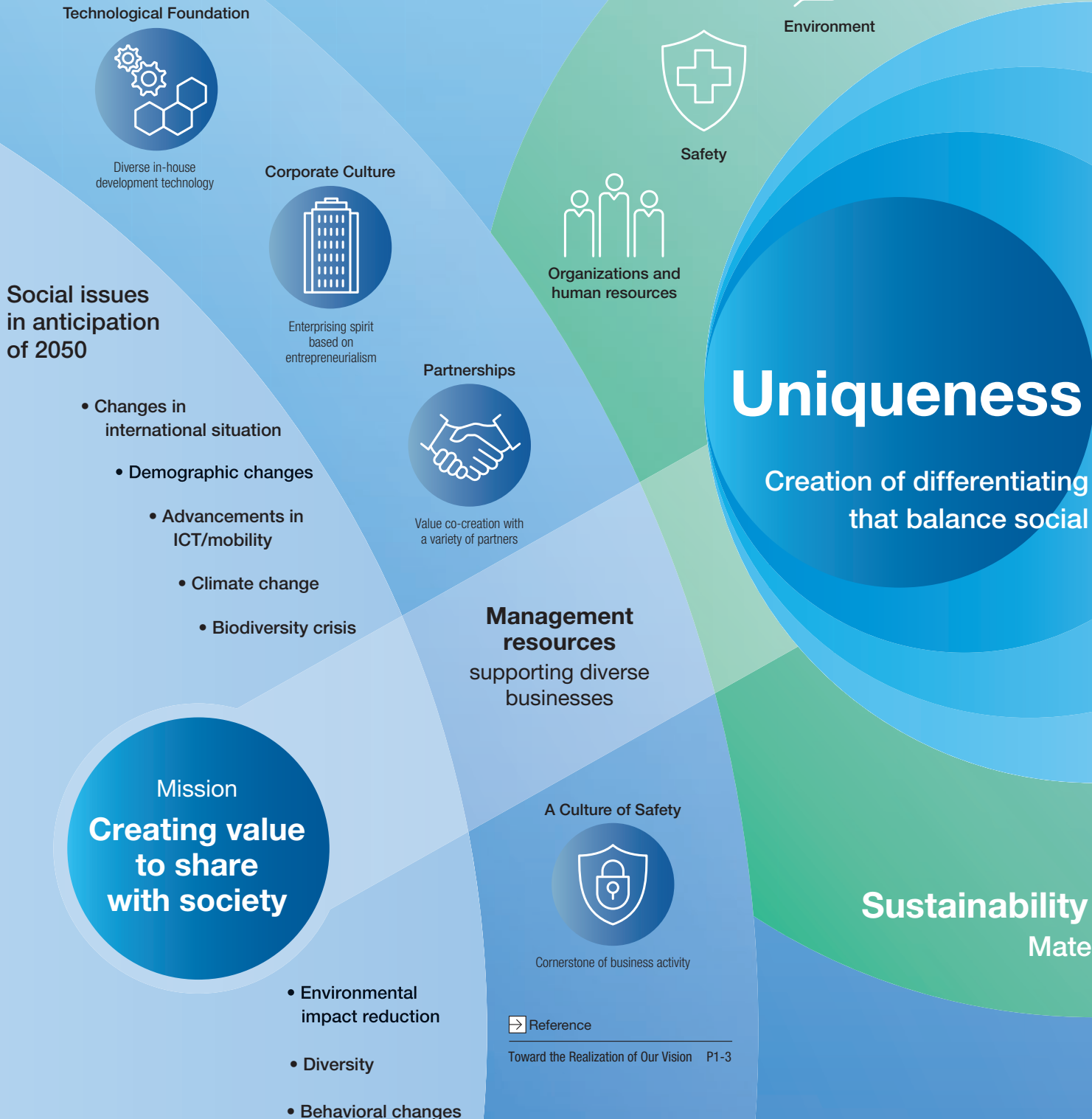


Introduces the MGC Group's thinking, initiatives, and detailed data relating to its sustainability.

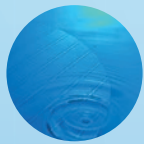
<https://www.mgc.co.jp/eng/sustainability/>

# Value Creation Process

Taking social challenges in anticipation of 2050 as a starting point, we have integrated diverse management resources and accelerated their selection and concentration into Uniqueness & Presence (U&P) businesses. Under this strategy, we aim to strengthen our sustainability management and realize our Vision of “an excellent company with uniqueness and presence built on chemistry.” In fiscal 2024, we formulated a new vision for MGC in 2030, and embarked on the current Medium-Term Management Plan, to promote a strategy of differentiation targeting three social issues that the Group should address.







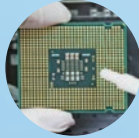
Electronic chemicals (EL chemicals)



Engineering plastics



Optical polymer



BT materials

Contribute to development of ICT/mobility society



Vision

An excellent company with uniqueness and presence built on chemistry

Outcomes addressing social issues through business

Output leading to a new era

Management strategies for accelerating selection and concentration

Solve energy and climate change problems



Solve medical and food problems



# & Presence

products and businesses and economic value



Methanol



Energy resources and environmental businesses



MXDA



Oxygen absorbers



MX-Nylon (MXD6)



Antibody drugs



Aromatic aldehydes



Research and development



Human rights

management reality

## Vision for MGC in 2030

### Financial targets

Net sales	1.2 trillion yen
Operating profit	120 billion yen
Operating profit margin	10% or higher
ROE	12% or higher
ROIC*	10% or higher

### Non-financial targets

GHG emissions reduction of **39%** or higher (compared to FY2013)

Sales of "Sharebeing" (Sales of eco-friendly products) **500 billion yen** or more

\*ROIC = (operating profit - income taxes + equity in earnings of affiliates)/invested capital (Definition revised from the current Medium-Term Management Plan)

### Reference

Message from the President P7-10  
Management Strategy Section P22-62

### Reference

MGC Group's History P11-12  
Business Operations and Main Products P53-54  
Specialty Chemicals Business Strategy P55-58  
Green Energy & Chemicals Business Strategy P59-62

### Reference

Value Creation Story: Uniqueness & Presence P13-21



**While building corporate value by expanding the businesses that represent our uniqueness and presence (U&P businesses), I am managing the Company with a greater focus on capital efficiency.**

**Masashi Fujii**

President and Representative Director



## Review of our previous Medium-Term Management Plan

### Active investment in differentiating businesses despite an increasingly uncertain world economy

A series of major changes, including the pandemic, related economic slowing worldwide, rising prices for raw materials and components, stalling of the Chinese and European economies, and the rise and fall of semiconductor demand, have characterized the past three years. On top of those factors, the Russian invasion of Ukraine and resurgence of geopolitical risk in the Middle East have made the trajectory of the world economy harder to read.

Despite the challenging environment, the MGC Group has been actively investing in equipment, mainly for differentiating businesses. At the same time, we have discontinued production of low-margin formalin and polyol products, reorganized our engineering plastics business, and removed JSP from our consolidated accounting. We have substantially increased efficiency by moving from an internal company system to division-based operations and unifying research and development into a single organization. These initiatives have increased profits from our differentiating businesses. Our initiatives to raise efficiency and add value to the products of our foundation businesses, mainly methanol, have made them more resilient amid market fluctuations.

We owe these positive results to the creativity and diligence of our individual employees built over time. In the new normal under pandemic

conditions, each employee got their job done by making the most of digital tools, maintaining smooth management of plant construction abroad and bringing in new customers. In July 2024, we completed the expansion of an ultra-pure hydrogen peroxide production plant in Oregon, and the Rotterdam Plant we started building in 2021 will be ready for production of meta-xylenediamine (MXDA) in the latter half of fiscal 2024. Our investment in these production facilities helps us accelerate our priority shift toward differentiating businesses and increase resilience in our earnings structure. Our construction costs rose by roughly 20% from our initial plan due to rising prices for raw materials and components, and work fell behind schedule somewhat. We followed through on our projects with the strong conviction that these are growth opportunities we must not miss.

So most of the initiatives to help reform our business portfolio advanced in the previous Medium-Term Management Plan are showing progress. We ended the plan's third and final year with ¥813.4 billion in net sales, ¥47.3 billion in operating profit and 6.1% ROE. The heavy impact of the semiconductor market entering a down cycle, however, kept our profit goals out of reach. Further enhancement of our U&P businesses and pass-through pricing will present challenges going forward.

## Understanding the issues and our new Medium-Term Management Plan

### We continue improving our portfolio, paving the way to our next growth phase

With world conditions less certain than ever, I think it's important to carefully watch the trends in world politics, economies and energy, apply what we see in making our own projections and analyses of changes in social structures over the long term, and do our business in that context. Since 2000, real GDP in the developing world has been growing faster than that of developed nations. We can therefore project that

population growth and economic development in developing countries will likely increase world energy consumption. As the nations of Asia and Africa build reputations as drivers of the world economy, it's essential that we chemical manufacturers consider and envision how to meet rapidly growing energy demand and how to shift to renewable energy in creating strategies and action plans.

Taking a fresh look at the Group, it's clear that over the past three years we have improved our skills in linking issues that have arisen with action in business. Nevertheless, we can still do more to creatively imagine our big-picture future in the breadth of world currents and shape new products. As a corporate group, we have been growing with a proud challenger spirit that makes it possible to dig in and build businesses that are firsts in Japan and firsts in the world. But I'm concerned that our identity as challengers and entrepreneurs has been waning a bit recently.

Our people involved in electronic chemicals, BT materials and other semiconductor-related businesses have the skills to produce high value within strict parameters. With great pride, I call the MGC Group one of the world's best in terms of organizational power and the sense with which we wisely invest in technologies around semiconductors while developing high-performance products, making the most of our strong customer relationships. Going forward, we will need more imaginative power to ride the coming waves and explore the growth markets of the near future.

With the world changing every second, continually emerging social issues require changes in industries and markets. For us, business portfolio reform is a never-ending theme, so we've designated the new Medium-Term Management Plan, which started in April 2024, as the second half of our reform program, and set two major objectives: strengthen the resiliency of our business portfolio and promote sustainability management.

Our top priority is reaping the results from major investments made during the previous Medium-Term Management Plan, and accelerating where we need more speed to reach our goals, such as reinforcing our ability to pass on rising costs to prices, creating and developing new businesses, and restructuring businesses requiring intensive management to shift to more resilient earnings structures. We are also putting more effort than ever into initiatives to realize carbon neutrality. We are working to remain a corporate group that wins the trust and compassion of our stakeholders on our strengths of key basic technologies, expertise and specialized personnel.

Over the three-year period of the new Medium-Term Management Plan, we will pave the way to our next growth phase through research to explore new fields and collaboration with other companies, while expanding in fields offering high growth and earnings, such as semiconductors and optical materials. Part of my mission as an executive is to personally approach all employees and encourage them to once again infuse the challenger spirit into their work in every business field. I believe we can ensure our footing on this journey to grow as a group by setting high goals every three years, and as individuals by imagining ourselves a few years from now and stretching our personal goals.

As part of this plan, we created the vision for MGC in 2030, which sets both financial and non-financial goals for six years out and a path for balancing social and economic values as we work to achieve them.

### In pursuit of sustainability

## Deep involvement in the shift to a more sustainable society as a chemical manufacturer

Under the current Medium-Term Management Plan, we are building corporate value by expanding U&P businesses and managing our operations with priority on capital efficiency, through optimal pricing and rebuilding, downsizing or withdrawing from unprofitable businesses. We are also highly conscious of capital costs in managing each

business. In December 2023, we converted former consolidated subsidiary JSP Corporation, where a governance issue drew our attention, into an affiliated company using equity accounting, and ended our parent-subsidary listing.

For the medium and longer terms, it's important for us to be deeply involved in the social movement





toward sustainability as a chemical manufacturer. Imagining the rise of new energy sources like hydrogen, we must orient our businesses toward low energy consumption in production processes and high added value. We will raise Group sustainability by continuing to embrace the challenge of leadership in new markets for biopharmaceuticals, the next generations of semiconductors, quantum computers, robotics and the like.

In our focus on carbon neutrality, we are pursuing innovative collaborations with companies in Japan and abroad, universities and national and local governments. To ensure that society can afford to implement these ideas, it's important to expand overseas operations and refine our technologies through joint efforts with local partners.

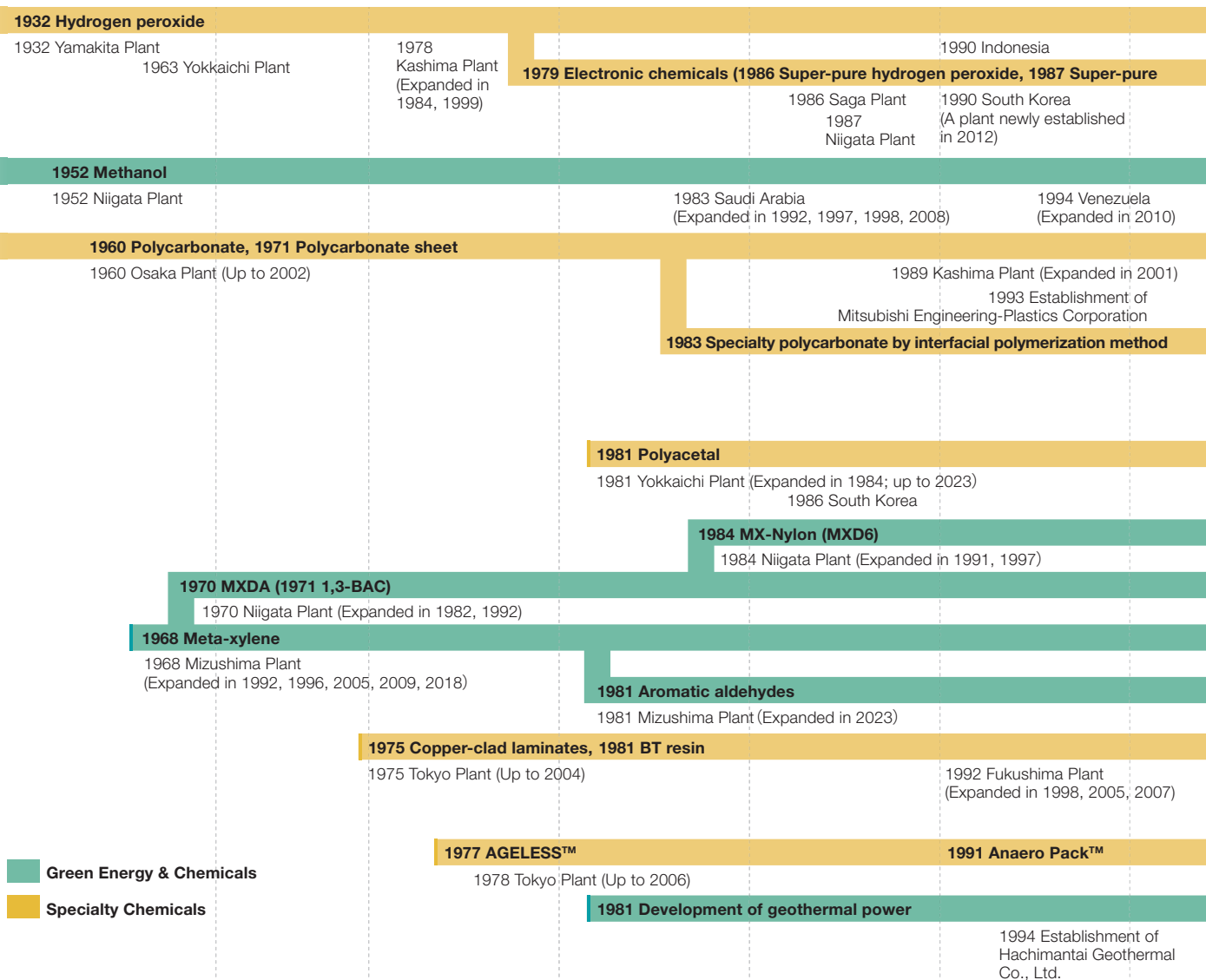
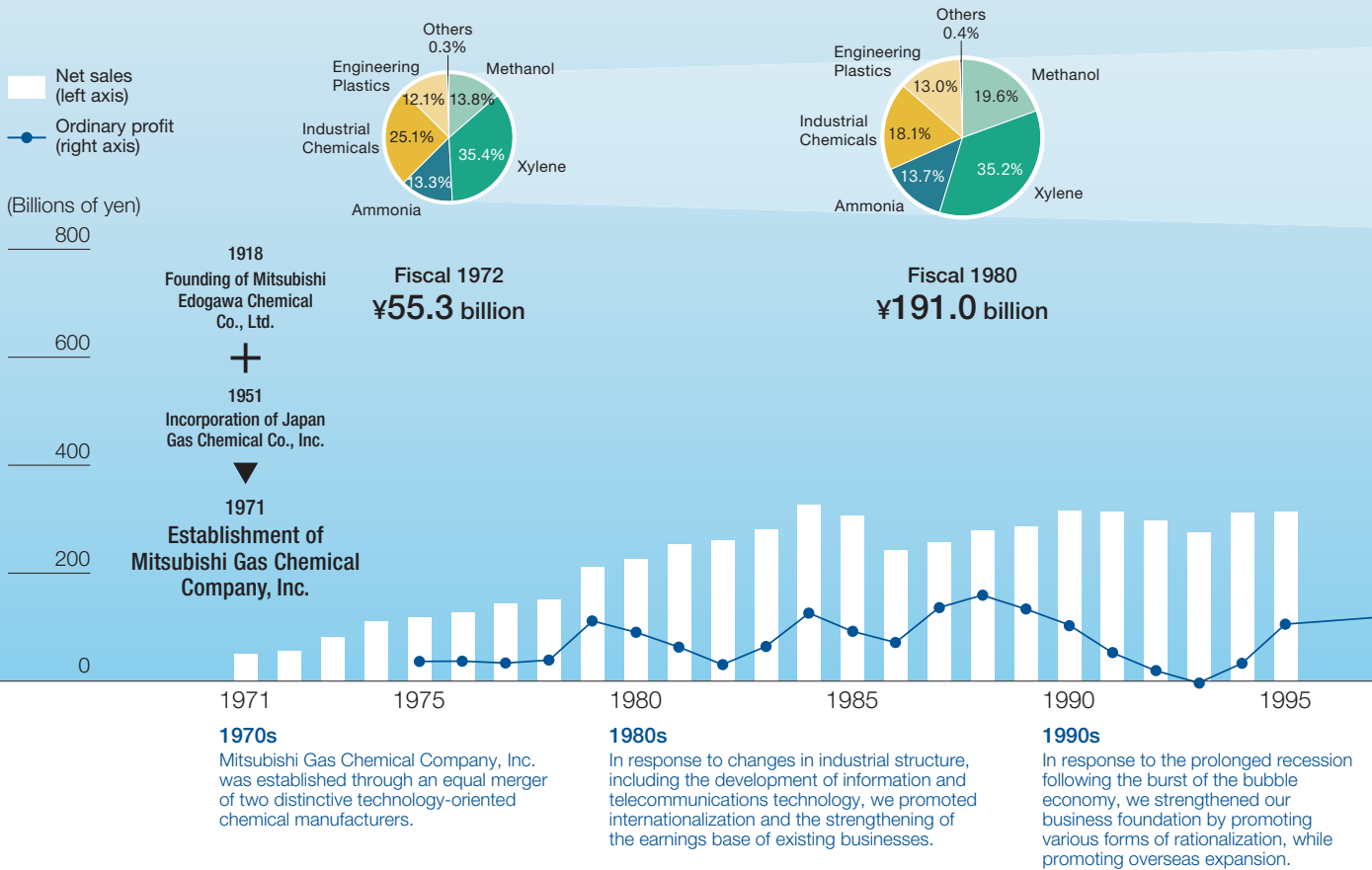
MGC is continuing to investigate CO<sub>2</sub> capture-and-storage (CCS) technologies, a hopeful key to decarbonization. We have experience in developing natural gas fields and the specialists, technologies and expertise needed for CCS. By optimizing these unique advantages, we are making progress with R&D related to capturing, storing and utilizing CO<sub>2</sub>. To delineate our management direction — further expanding U&P businesses and creating value chains by greening operations from upstream on down — we redesignated our Basic Chemicals Business Sector as our Green Energy & Chemicals Business Sector in April 2024.

The current Medium-Term Management Plan puts priority on value creation in the ICT, mobility and food/medical fields, and on R&D to resolve challenges in the environment and energy fields. For

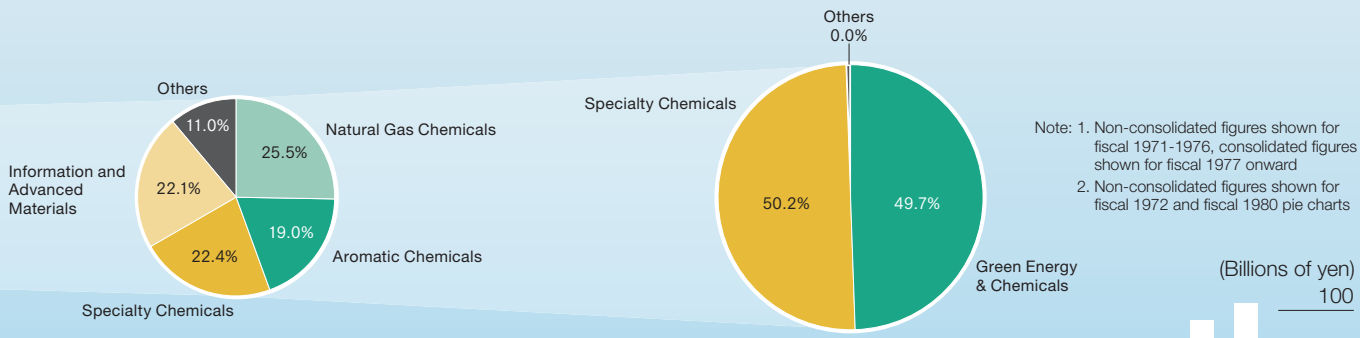
a chemical manufacturer, progressing from planting the seeds to harvesting the results ordinarily requires R&D over very long time spans. Our current focus on the food/medicine field comes from our conviction that we have to start preparing 10 to 20 years in advance of our goals. The Research & Development Division takes note of any technologies the Group is lacking that could fast track R&D, while considering possible partnerships with startups possessing technologies we need. We can expedite steady product development over spans of decades by creatively visualizing the future and the products it will demand. So I think we have to actively talk with people both in and outside the Company about how we can best pursue sustainability and foresee our future with a broader view, expanding beyond the chemical field into the wider world of science. As a base for promoting creative product development, we established the MGC Commons, a new innovation center, in December 2023. In the MGC Group, the challenger spirit of our people leads directly to corporate growth. I see leading our over 7,000 employees to the creation of new value as one of my most important missions. This is why I publish a monthly column on the Group portal site.

It's often said that it takes the power of each employee, a strong corporate culture and good strategy to build corporate value, and I firmly agree. As the helmsman of the good ship MGC, I'm setting our sails broadly to catch the best winds on our journey to realizing long-lasting, sustainable corporate value.

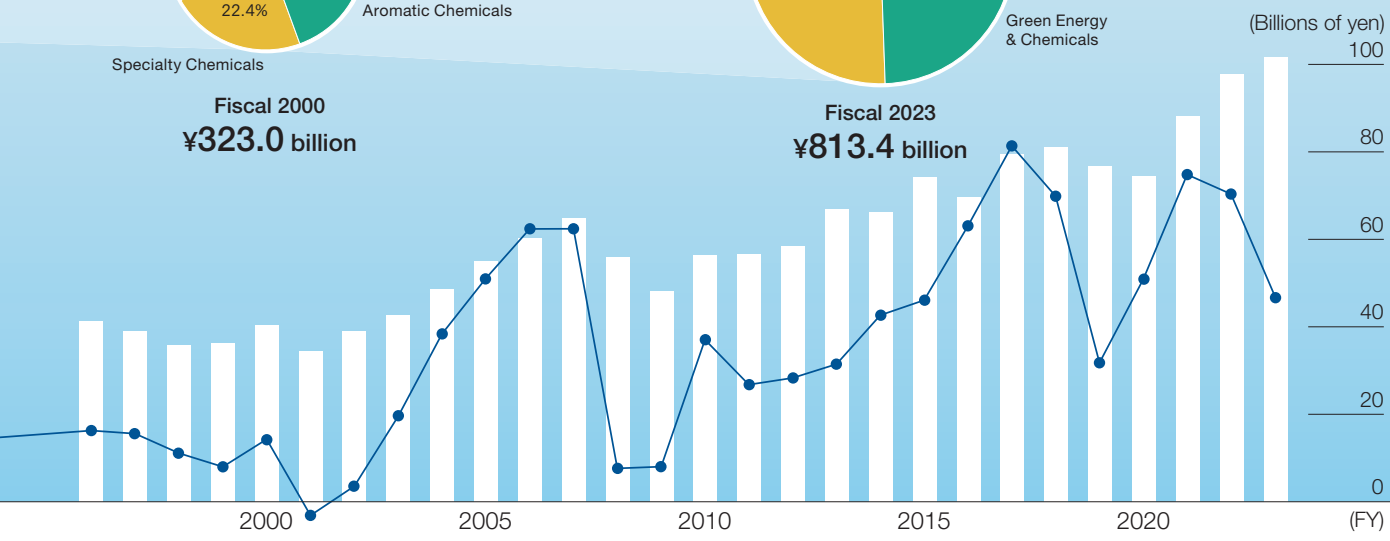
# MGC Group's History







Note: 1. Non-consolidated figures shown for fiscal 1971-1976, consolidated figures shown for fiscal 1977 onward  
 2. Non-consolidated figures shown for fiscal 1972 and fiscal 1980 pie charts



**2000s**

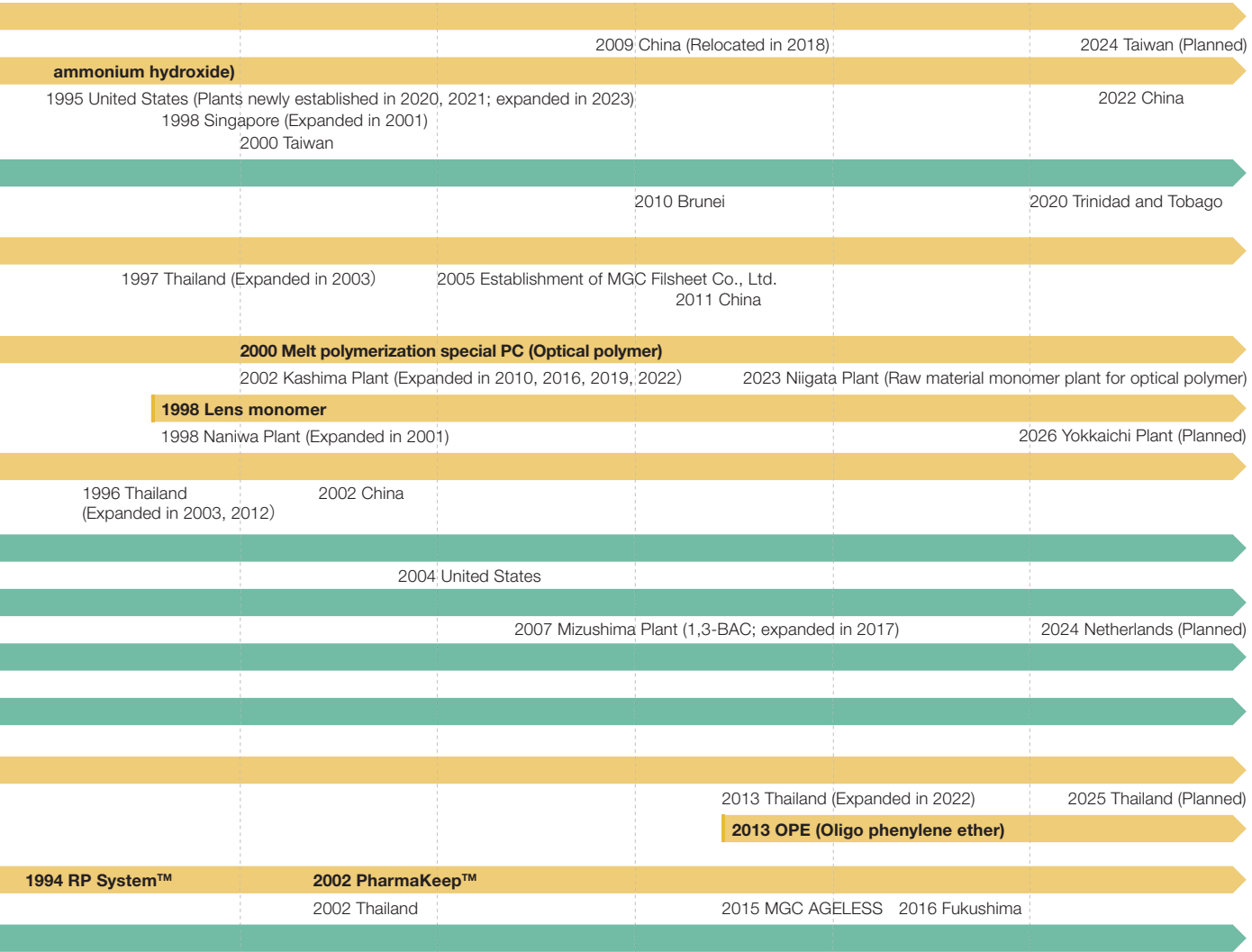
In light of intensifying global competition, we introduced a company system to improve financial soundness and speed up business expansion.

**2010s**

In addition to promoting a shift in business structure to businesses with higher added value, we accelerated efforts to create new businesses.

**Fiscal 2020–Fiscal 2023**

We abolished the company system and revised the organization for overall optimization, with the MGC Group working as one to promote various measures.



(now Hachimantai Green Energy Co., Ltd.)  
 (Started operations in 1994 to supply steam to Sumikawa Geothermal Power Plant)

2010 Establishment of Yuzawa Geothermal Power Corporation  
 (Started operations in 2019 at Wasabizawa Geothermal Power Station)

2015 Establishment of Appi Geothermal Energy Corporation  
 (Started operations in 2023 at Appi Geothermal Power Station)

# Uniqueness



**BT products**

Proprietary materials with superior low-warpage and electrical properties, able to keep pace with the evolution of the semiconductor market

Primary applications: IC plastic package substrates (smartphones, computers, IT appliances, etc.)



**Optical polymer**

Balances high refractive index with low birefringence, contributing to enhanced camera functionality

Primary applications: Materials for smartphones and other compact camera lenses

\*1 As a highly refractive resin (concave lens)



**MX-Nylon (MXD6)**

High gas barrier properties contribute to weight reduction of PET bottles

Primary applications: Food packaging materials, PET bottles, engineering plastics



**Aromatic aldehydes**

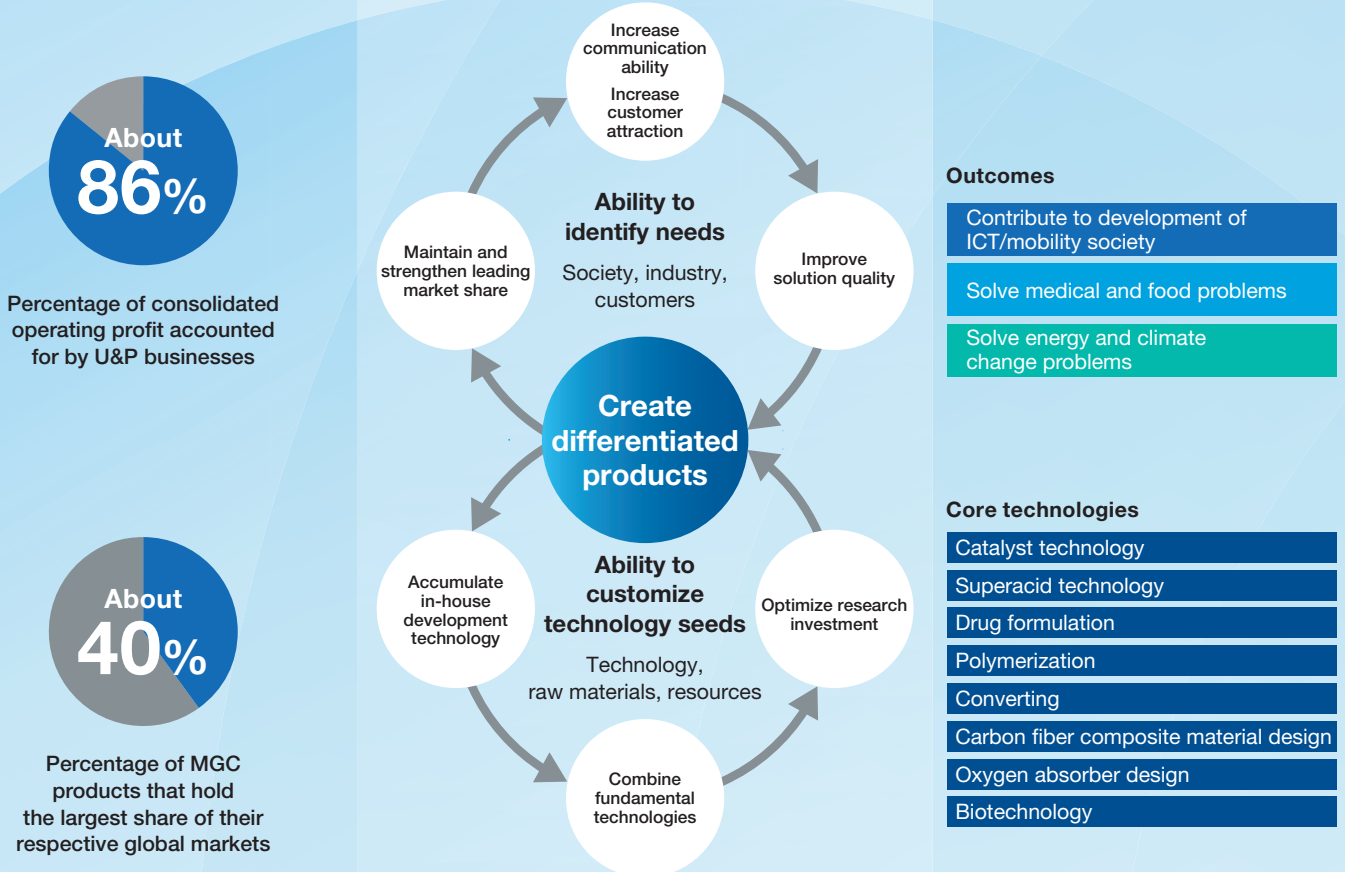
Customized to customers' requirements using proprietary production methods that are efficient and have low environmental impact

Primary applications: Resin additive (agent that renders polypropylene transparent), fragrances

## Creating U&P Businesses through a Beneficial Cycle of Needs and Seeds

The MGC Group is pursuing Uniqueness & Presence (U&P), a business model for creating products that combine unique characteristics that are difficult for other companies to imitate and a presence in the global markets. At the same time, it is also a value creation strategy based on a corporate culture rich in entrepreneurial spirit and originality. It is driven by dialogue with the market conducted by the Company's research personnel using distinctive technologies and resources (seeds). In addition, having grasped customers' needs and information through dialogue, we match these with our seeds to develop products offering higher functionality and qualitatively improve our solutions. Through this beneficial cycle of needs and seeds, the ratio of our products that have captured the top share in their global markets has reached approximately 40%. Moreover, U&P businesses\*3 now account for approximately 86% of our consolidated operating profit.

\*3 The Group has defined businesses that can grow sustainably while achieving both economic and social value using KPIs as Uniqueness & Presence businesses. We aim to create product lines that excel from the perspectives of "Growing," "Winning," and "Sustainable."






# & Presence

■ Green Energy & Chemicals Business  
■ Specialty Chemicals Business  
 (Global market share, etc. are estimates made by the Company)

**Global market share #1**




**Super-pure hydrogen peroxide**

Global production capability ensures a stable supply of high-quality products to meet the needs of the most technologically advanced customers

Primary applications: Cleaning agents and etching agents for semiconductor wafers

**Global market share #1**




**Meta-xylenediamine (MXDA)**

Superior rapid curing, anticorrosion and chemical resistance

Primary applications: Epoxy resin curing agent (paint for bridges, ships and industrial pipes and ducts), raw material for MX-Nylon

**Production capacity #3\*2**




**Methanol**

World's only comprehensive manufacturer with proprietary catalyst technology and a complete methanol value chain, from natural gas development to manufacture and sales of derivatives

Primary applications: Raw and intermediate materials for formalin, acetic acid, etc.

**Global market share #3**



**Polyacetal resin (POM)**

Engineering plastics offering superior wear resistance, low friction and chemical resistance

Primary applications: Automotive components, electrical and electronic components, office automation equipment, fasteners

\*2 Total for all affiliates using MGC technology

## Location Strategy Based on Customer and Market Characteristics

The ability to maintain and develop U&P businesses is backed by a location strategy that maximizes product value. For example, in super-pure hydrogen peroxide, which is vital for the semiconductor manufacturing process, we have adopted a consumption location strategy, establishing production in the area of consumption in order to meet the different demands of each customer. On the other hand, methanol is well known as a raw material location product. By investing in areas that offer secure access to cheap natural gas, we are expanding production by local companies together with our partners. We have secured our competitive advantage, even in a business environment of increasing uncertainty, by reducing risk and maintaining a diverse market portfolio through geographical distribution. Through such strategies, we aim to increase our market presence and continue being a preferred partner for various cooperating partners.



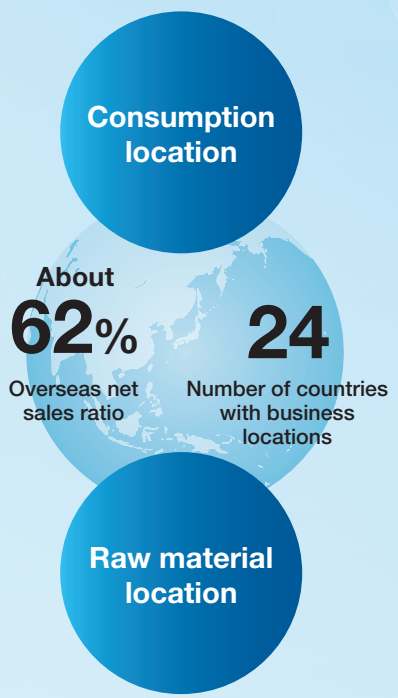
The Netherlands (MXDA/Under construction)



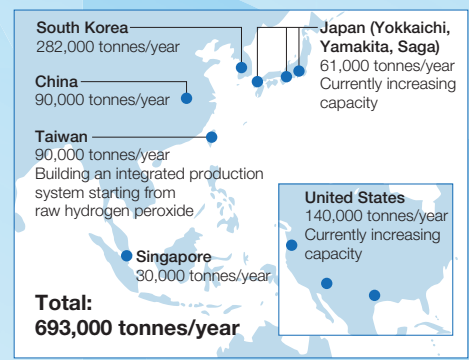
Circular carbon methanol pilot facility (Niigata Plant)



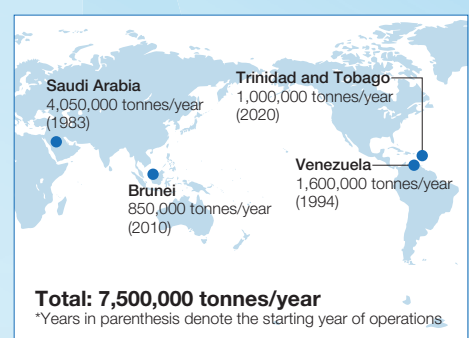
Trinidad and Tobago (methanol)



### Super-Pure Hydrogen Peroxide Production Sites



### Methanol Production Sites



## Examples of U&P Creation by Outcome

**Contribute to development of ICT/mobility society**

In the ICT area, which is one of our target areas, DX is expected to advance in the future through the utilization of AI, IoT, and other technologies. The importance of materials such as chemicals used in manufacturing high-performance semiconductors that form the foundation for these is also continuing to increase. Meanwhile, in the area of mobility, new ingredients and materials that match the needs of computerization and low environmental impact are required. The MGC Group is strengthening proposals for material development and solutions with a view to such next-generation needs.

### Value We Aim to Create



### Foundation of Value

**Function** BT resin is a chemical material developed using our proprietary technology, mainly comprising two types of monomer. It offers thermal resistance and electric insulation properties, with a level of thinness comparable to ceramic. BT materials made from this resin are used as a substrate material for semiconductor components, helping to drive higher performance in electronic devices while making them thinner and more compact.

**Technology** Using BT resin as a starting point, MGC is able to design substrate materials that resolve customer issues and meet needs at the cutting edge of technology. We have various fundamental technologies and advanced R&D expertise that enable us to maintain compatibility with customers' manufacturing processes while also achieving high-level demands for characteristics such as low warpage and low transmission loss.



## BT Materials

Uniqueness

Presence

### Primary applications

- IC plastic package substrates (smartphones, computers, IT appliances, etc.)

### Maximization of Value

- Since inventing BT resin in 1976, we have maintained the top share of the global market for half a century as a pioneer in organic IC plastic package substrate materials. Our extensive product lineup ranges from high-end to middle-tier products. Recently, we have been focusing on materials development and proposal activities to meet the demands of the digital infrastructure market.
- We manufacture through Group companies in Japan and Thailand to enable a stable supply globally. At our plant in Thailand, we plan to increase production capacity of mass-produced items in fiscal 2025. We will maintain the efficiency gains of our dual-base structure, and strengthen it even further to ensure a timely response to customer needs.



**Tomoyuki Azuma**  
Executive Officer  
Division Director,  
Electronics Materials Division,  
Specialty Chemicals  
Business Sector

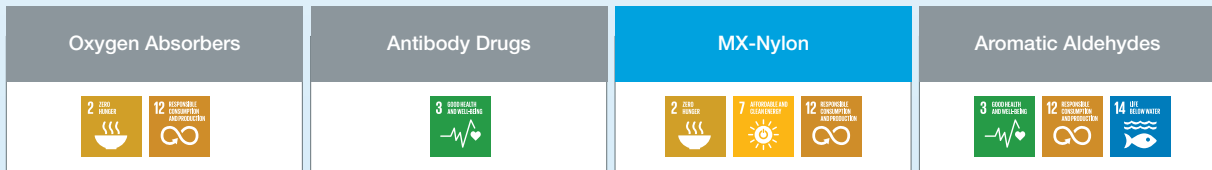
## Rapid Development of Materials That Offer Unprecedented Performance to the Market

In the information and communications field, the market for automotive and other communication devices that require fault avoidance is set to expand in the future. For this reason, I am confident that demand for BT materials will continue to grow, since we have faithfully maintained our commitment to high quality. To rapidly achieve the characteristics required by our customers, we work with our suppliers to obtain high-performance raw materials and strive to build an ecosystem that will enable practical application. In addition, we are working to quickly develop materials that offer unprecedented performance to the market, and to commercialize them as distinctive and unique substrate materials. While pursuing productivity in our R&D activities through the introduction of DX, we will expand our research themes into multiple areas, taking a wider and longer-term perspective, and contribute to the evolution of diverse electronic components.

## Solve medical and food problems

In light of accelerating global population growth and aging, the MGC Group is expediting development of product groups that will lead directly to the enhancement of preventive and predictive medicine and the improvement of medical productivity. As for addressing food-related challenges, in 1977 we began marketing an oxygen absorber that extends the storage life of foods, and have been improving it for over 40 years. Taking full advantage of the management resources of the Group, we will continue to develop advanced technologies to help extend healthy life expectancy and support sustainable food management.

### Value We Aim to Create



### Foundation of Value

**Supply chain** MX-Nylon is a polyamide resin made primarily from MXDA, a xylene-chain derivative. Using our product, MXDA, as a raw material, we conduct integrated manufacturing using proprietary methods that we have developed to maintain a stable supply and high quality that is recognized worldwide.

**Function** MX-Nylon is used for food packaging films and PET bottles due to its excellent gas barrier properties and chemical resistance. It contributes to reducing food loss by extending shelf life and helps to reduce container thickness. With its high strength and rigidity, it enables weight reduction in automotive parts, and is recognized as a material that helps to reduce GHG emissions.

## MX-Nylon

### Uniqueness

### Presence

#### Primary applications

- Food packaging materials
- PET bottles
- Engineering plastics

### Maximization of Value

- In 2022, we began manufacturing and selling ISCC PLUS-certified\*<sup>4</sup> MX-Nylon with sustainable raw materials, including plant-derived raw materials, allocated using a mass balance approach. We are currently appealing to the food and beverage markets with MX-Nylon as a product that can contribute to further GHG emissions reductions while maintaining product performance.

\*<sup>4</sup> An international certification system for companies and organizations that manufacture products using sustainable raw materials such as biomass and recycled materials.

- Personnel responsible for R&D, manufacturing, and sales come together to exchange opinions and share information in our regular collaboration meetings. Through these meetings, we share our awareness of market changes, legal and regulatory trends, potential risks, and future forecasts in each country and region, aiming to develop new applications and new markets.



**Kenichi Nakaura**

Division Director,  
High-performance  
Products Division,  
Green Energy &  
Chemicals Business Sector

## Promptly Communicating Product Value to Maintain and Strengthen Competitive Advantage

To make full use of the value of MX-Nylon, it is essential to grasp trends related to the active response to environmental issues in the food packaging and automotive industries, which are our main customers. Going forward, we must respond to the revision of GHG emissions reduction targets and laws in each country by properly addressing product design and other aspects, while promptly communicating the value of our products to the relevant customers in order to maintain and strengthen our competitive advantage. One effective means of doing this is to proactively set up opportunities where our engineers can talk directly with customers and to provide technical support for product design and prototype inspections. In this way, we are promoting initiatives to quickly stimulate actual demand. We are currently focusing on expanding sales and applied research of products that respond to social demand, such as products that use plant-based materials.



## Examples of U&P Creation by Outcome

Solve energy and climate change problems

Taking advantage of our many years of experience developing natural gas and producing methanol, we are working to commercialize our carbon-neutral technology. We are concentrating our efforts on R&D related to methanol synthesis from CO<sub>2</sub> as well as on CO<sub>2</sub> capture, utilization and storage. We also endeavor to contribute to addressing issues related to energy and climate change in a way that is unique to the MGC Group as a chemical company, such as the use of methanol and ammonia as hydrogen carriers, geothermal power generation, which no other company in the chemical industry is doing, and materials development to help extend the life of wind power generation equipment.

### Value We Aim to Create



### Foundation of Value

**Technology** As Japan's first manufacturer of methanol using natural gas as a raw material, we have accumulated experience and know-how in our own catalyst technologies and plant operation and manufacturing over many years since our foundation in 1951. In 2021, we tested the production of methanol from CO<sub>2</sub> and hydrogen as circular carbon methanol (CCM). In 2024, we started a biomethanol manufacturing business.

**Supply chain** We have led the world in expanding our production sites overseas, and we currently achieve stable production with a structure comprising four locations in the Middle East, South America, and Southeast Asia. We are a unique, comprehensive methanol manufacturer with a global value chain that spans from raw materials upstream to derivative products made using our proprietary technologies downstream, giving us a world-leading competitive advantage.

### Maximization of Value

- For over 70 years, we have built a seamless value chain, from resource development to proprietary catalysts, synthesis processes, manufacturing, transport, sales, and derivatives. It is our status as a unique global presence that enables us to maximize the value of methanol.
- The CCM concept Carbopath™ is a powerful platform that can contribute to the realization of a circular carbon society by manufacturing methanol from materials such as atmospheric CO<sub>2</sub> emissions, waste plastic, and biomass, and producing energy and materials.

## Methanol

Uniqueness

Presence

### Primary applications

- Raw materials and intermediate materials for formalin, acetic acid, etc.



**Masahiko Naito**

Division Director,  
C1 Chemicals Division,  
Green Energy & Chemicals  
Business Sector

## Aiming to Create a Circular Carbon Platform with Participation from All Entities that Make Up Society

Carbopath™ is a circular carbon platform that aims to create energy and materials through CCM produced from CO<sub>2</sub> and waste products. It is a new business model that utilizes the technologies and intellectual property accumulated by the Group over its long history, as well as the Company's entire methanol value chain. To realize Carbopath™, we are promoting alliances with diverse collaboration partners in Japan and overseas, including shipping companies, energy companies, customers who require GX materials, and firms and governments aiming to realize GHG reduction, recycling, renewable energy and hydrogen usage, and a sustainable society. In the future, we aim to contribute to the realization of a carbon-neutral society by growing into a platform with participation from all stakeholders that make up society.

# Circular Carbon Methanol Carbopath™



The Group is working to promote the construction of Carbopath™<sup>5</sup>, a circular carbon platform that aims to generate energy and materials through CCM produced using CO<sub>2</sub> and waste, and to build cross-industry alliances. The name Carbopath™ expresses MGC's commitment to being a pioneer in promoting the CCM concept and playing a key role in realizing carbon neutrality and a circular carbon society by promoting its environmentally advanced methanol business.

Under this concept, MGC will invest in the CCM production business; issue technology licenses; provide automated operation, remote monitoring, and maintenance services; and conduct product transportation and sales.

In 2024, we are aiming to achieve social implementation of CCM, while working to accelerate cross-industry collaboration between companies and local governments that have essential sources of renewable energy-based hydrogen, biomass, waste, and CO<sub>2</sub> emissions which are needed for methanol production, as well as talks and consultations with methanol users.

Looking ahead, we will build up demonstrations of small-scale plants aiming for fiscal 2025, with a target of starting commercial production at a 100,000-tonne capacity plant by fiscal 2030. From fiscal 2030, we will increase the manufacturing scale up to the 1 million-tonne level.

<sup>5</sup> Carbopath™ is derived from "carbon" and "pathfinder."

## Roadmap to Large-Scale Commercialization



## Turning Environmental Value Creation into a Strategy

Under the current Medium-Term Management Plan, which started in April 2024, MGC has revised its definition of differentiating businesses, renaming them as U&P businesses, which excel at being sustainable, while also delivering both social and economic value. We have identified the businesses that should receive priority allocation of management resources by evaluating them economically with ROIC\*7 and EBITDA\*8 as indicators, evaluating aspects such as their market share and market growth potential, and evaluating their potential as a sustainable business over the medium to long term. Using this new business classification, we aim to build a resilient business portfolio that can cope with changes in the business environment.

Over the three years of the Medium-Term Management Plan, with the objective of promoting sustainability management, MGC will accelerate its initiatives for realizing carbon neutrality, while demonstrating resilience in its ability to adapt to various changes in the social environment. As one approach to this, we have set a target of ¥500.0 billion in net sales of eco-friendly products in the non-financial

targets of our vision for MGC in 2030. We have backcasted from this target value to reflect it in our plans for each business under the Medium-Term Management Plan. The Group's eco-friendly products have been newly designated as "Sharebeing," which are defined as products that have a reduced environmental impact over the product life cycle and help to create a healthy environment. In February 2024, we redesignated our products, including products designated already, under certain internal standards. The designations were deliberated by the Environment Safety & Quality Assurance Division, the Production Technology Division, and the Corporate Planning Division, before being approved by the Sustainability Promotion Committee. Growing net sales of eco-friendly products is expected to contribute to resolving energy and climate change issues, and also to lead to the creation of U&P products and technologies that have competitive advantages in the market.

\*7 ROIC = (operating profit - income taxes + equity in earnings of affiliates)/invested capital

\*8 EBITDA = ordinary profit + interest paid + depreciation and amortization

### Establishment of "Sharebeing" Eco-Friendly Products and Setting of Materiality KPIs

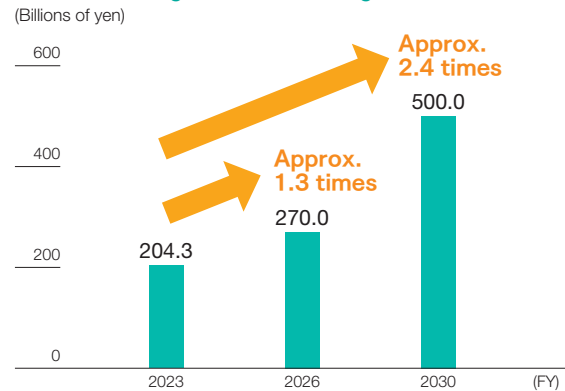


"Sharebeing" is derived from the words "share" and "being."

Under our Mission of "creating value to share with society," we are dedicated to providing "Sharebeing: products that can be shared with society" to reduce the environmental impact of society by leveraging our unique and distinctive technologies to create valuable products that meet society's demands.

We will accelerate our efforts to realize carbon neutrality, having set "Sharebeing" (eco-friendly product) sales as a KPI for our materiality issue: "Contribution to solving social issues through business."

#### Quantitative Targets for "Sharebeing" Sales



### MGC Group Eco-Friendly Product Certification Criteria

#### Certification Criteria

Products and technologies demonstrating any of the effects below on some aspect of the product life cycle (raw material production, manufacture, distribution, usage, disposal and recycling)

#### 1. Renewable energy

- Renewable energy development
- Products or technologies that contribute to renewable energy production
- Products or technologies that encourage renewable energy use

#### 2. Energy conservation

- Products or technologies able to reduce consumption of energy (fuel, heat, electricity)
- Products or technologies that significantly reduce energy use during manufacturing

#### 3. Resource conservation

- Products or technologies able to reduce consumption of resources (raw materials)
- Products or technologies using recycled raw materials

#### 4. Resource recycling

- Products or technologies able to reduce waste
- Products or technologies able to enhance post-use material recycling rates

#### 5. Air quality control

- Products or technologies able to reduce the amount or hazard of hazardous substances released into the atmosphere

#### 6. Water quality control

- Products or technologies able to reduce the amount or hazard of hazardous substances released into bodies of water, soil or groundwater
- Products or technologies able to reduce water usage or wastewater

#### 7. Global warming prevention and adaptation

- Products or technologies able to reduce GHG emissions
- Products or technologies able to promote GHG fixation
- Products or technologies that adapt to global warming

#### 8. Biodiversity conservation and sustainability

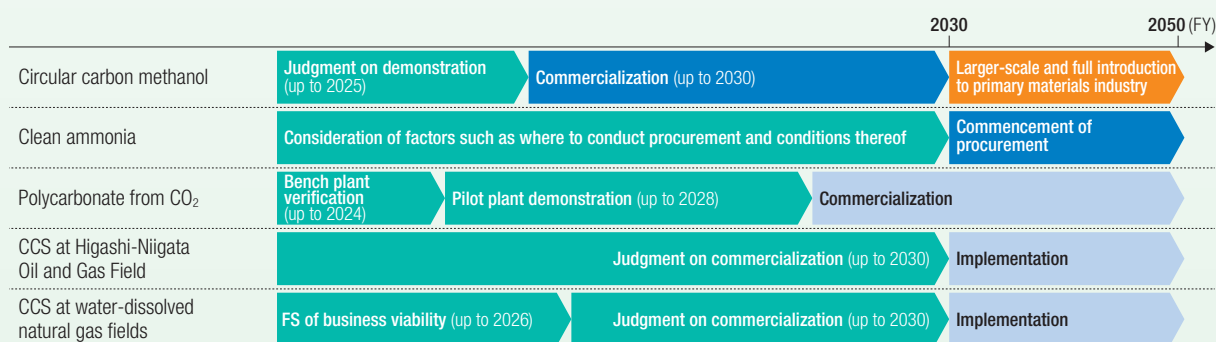
- Products or technologies that contribute to maintaining a favorable ecosystem balance
- Products or technologies that reduce negative impacts on the ecosystem balance
- Products or technologies that purify the environment or create and maintain a favorable environment
- Products or technologies that contribute to sustainable use of resources and the environment

#### 9. Certification

- Products that received an environmental label or other certification



## Development of Eco-Friendly Products and Technologies



The MGC Group is the only chemical manufacturer that is carrying out natural gas exploration and development, operating businesses that are generating energy from geothermal, biomass, and LNG resources, all of which are highly compatible with our proprietary mining technologies. In March 2024, we started operation of the Appi Geothermal Power Plant, a joint venture with Electric Power Development Co., Ltd. (J-POWER) and Mitsubishi Materials Corporation. This is the first time in 28 years that a geothermal power plant with an output of over 10,000 kW has operated in Iwate Prefecture. All the electricity generated is being supplied to society under the feed-in tariff (FIT) system for renewable energy.

Furthermore, using methanol manufacturing technologies cultivated over many years, we have started work with multiple cooperating partners towards commercialization and social implementation of our circular carbon platform Carbopath™, which converts CO<sub>2</sub>, waste plastic, and other materials into methanol as a way of recycling them as chemicals and for fuel or electricity generation.

Furthermore, we have been discussing the CO<sub>2</sub> capture-and-storage (CCS) projects in the Group's natural gas fields. The required geological formations for CCS are a highly porous storage reservoir with a sealing of caprock to prevent CO<sub>2</sub> from escaping. Since these requirements match the geological characteristics that form natural gas reservoirs, there are rising expectations that the fields may form an infrastructure for carbon neutrality.

MGC participated in a large-scale CCS demonstration test by NEDO\*<sup>9</sup> in Tomakomai City, Hokkaido Prefecture. We started high-pressure underground injection of CO<sub>2</sub> in 2016, and in 2019 the cumulative amount of CO<sub>2</sub> injected reached 300,000 tonnes. In other areas, we are also participating in advanced CCS projects led by the government, and we are also examining the option of injecting CO<sub>2</sub> emitted from the Group's plants, such as the Niigata Plant injecting its CO<sub>2</sub> into the Higashi-Niigata Oil and Gas Field.

Currently we have about 30 research projects for realizing carbon neutrality in progress domestically. Two of those have been selected as Green Innovation Fund Projects by NEDO. One of these is a project to develop technologies for manufacturing polycarbonates from CO<sub>2</sub>. Having successfully developed a process that reduces CO<sub>2</sub> emissions compared with the conventional manufacturing process, in fiscal 2023 we started verifying it at a bench plant. Subsequently, we aim to complete pilot plant demonstrations at a 2,000-tonne diphenyl carbonate (DPC) plant\*<sup>10</sup> and a 400-tonne polycarbonate plant in 2029. Leveraging our strengths in terms of basic technologies holding the key to achieving a decarbonized society and specialists in chemical industrial processes, we will continue to elevate these research results to a level with potential for social implementation.

\*<sup>9</sup> New Energy and Industrial Technology Development Organization

\*<sup>10</sup> A raw material for polycarbonate resin, manufactured through the reaction of dialkyl carbonate with phenol

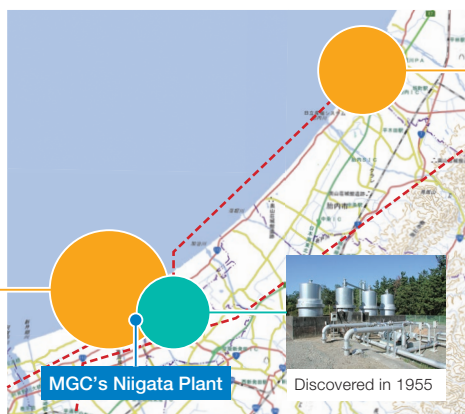
### The MGC Group's Strengths in CCS

- Ownership of natural gas and water-dissolved natural gas fields (Higashi-Niigata Oil and Gas Field and Iwafune-Oki Oil and Gas Field)
- Existing natural gas fields as carbon-neutral infrastructure enabling development for CO<sub>2</sub> storage and usage

- Non-associated natural gas
- Water-dissolved natural gas
- Natural gas pipeline



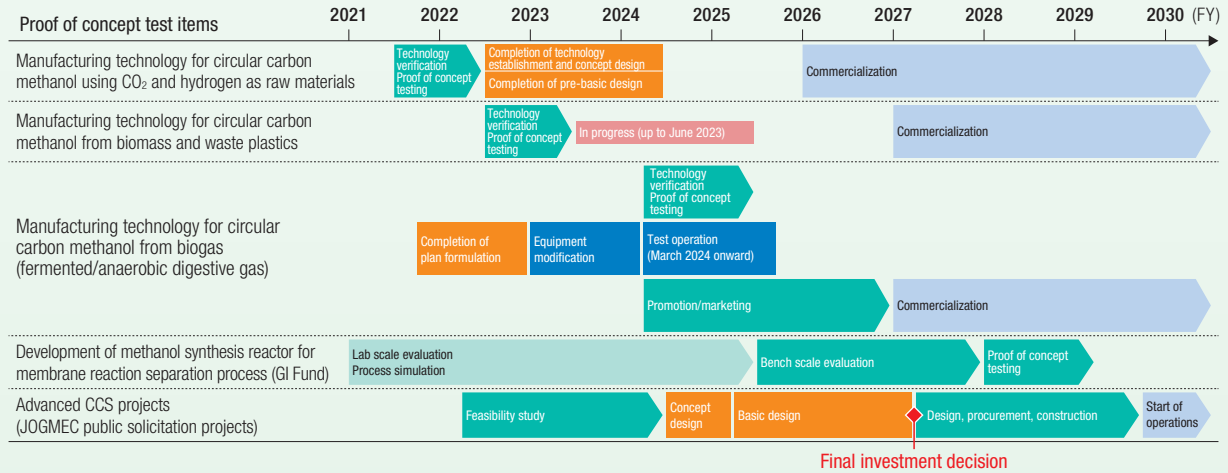
**Higashi-Niigata Oil and Gas Field**  
Discovered in 1959



**Iwafune-Oki Oil and Gas Field**  
Discovered in 1983

Source: Geospatial Information Authority of Japan  
(<https://maps.gsi.go.jp/development/ichiran.html>)

### Status of Technology Demonstration in the Niigata Area



MGC is currently discussing the potential for CCS at the reservoir of its Higashi-Niigata Oil and Gas Field.

In fiscal 2022, together with Tohoku Electric Power Co., Inc. and Nomura Research Institute, Ltd., MGC was entrusted with the “Study on CO<sub>2</sub> Capture and Transport in Specified Areas in Japan,” a public solicitation project by Japan Organization for Metals and Energy Security (JOGMEC). The following year, in fiscal 2023, the Company and Japan Petroleum Exploration Co., Ltd., Tohoku Electric Power, Hokuetsu Corporation, and Nomura Research Institute were jointly entrusted with the “Business Feasibility Study on Japanese Advanced CCS Project,” and conducted a feasibility study in the Higashi-Niigata area. This business concept envisages multiple CO<sub>2</sub> emission sources (the Company’s Niigata Plant and the plants of Tohoku Electric Power and Hokuetsu Corporation), transporting the CO<sub>2</sub> by pipeline to the Higashi-Niigata Oil and Gas Field, where it would be stored in deep non-associated gas reservoirs in which the Company holds a

joint interest with Japan Petroleum Exploration. We plan to continue exploring these possibilities with support from the government.

In shallow formations in which MGC is the sole interest holder, there are two types of reservoirs: water-dissolved gas and non-associated gas, and we are currently examining technologies for the water-dissolved gas type, having joined the Geological Carbon Dioxide Storage Technology Research Association. For the non-associated gas type, we are examining the potential for repurposing existing wells with an on-site operation support subsidy from JOGMEC. Furthermore, we are working together with JOGMEC and INPEX CORPORATION to acquire seismic survey<sup>\*11</sup> data to evaluate the future regional potential. We will evaluate the volume of underground CO<sub>2</sub> storage in oil and gas formations in Niigata Prefecture, looking at those that have a proven track record.

<sup>\*11</sup> A survey method for examining underground structures and physical characteristics using seismic waves generated on the surface.

#### Progress of Green Innovation Fund Projects

##### Synthesis of Methanol from CO<sub>2</sub>

We are jointly developing a methanol synthesis process utilizing a separation membrane with Mitsubishi Chemical Corporation, and MGC is handling catalyst optimization (independently) and the development of a reactor and process (jointly with Mitsubishi Chemical). In fiscal 2023, we conducted acquisition of basic data using compact testing equipment, process evaluation and cost estimation based on simulations, and designed equipment for bench testing planned for fiscal 2025.

##### Manufacturing of Polycarbonates from CO<sub>2</sub>

We are researching an innovative polycarbonate manufacturing process using a melt polymerization method that has high environmental compatibility and is highly effective for reducing carbon by using cerium

oxide as a catalyst and 2-cyanopyridine (2-CP) as a dehydrating agent to synthesize dialkyl carbonate (DRC) from carbon dioxide and alcohol, and using this as an intermediate for DPC synthesis. In fiscal 2023, we conducted a component study to examine the reduction of energy consumption in the DRC synthesis process and the dehydrating agent recycling process, and found the potential to significantly reduce energy consumption through a technological breakthrough, achieving the GHG emissions reduction target in the Green Innovation Fund Project in the laboratory research phase. We proceeded with work to install bench plant equipment to verify laboratory test results on a larger scale. In early November 2023, we completed construction at MGC’s Tokyo Research Laboratory. We are currently carrying out test operations.

# Management Strategy Section

- 23 Overview of Management Strategy
- 29 Objective 1: Strengthen the Resiliency of Our Business Portfolio
- 31 Objective 2: Promote Sustainability Management
- 33 Materiality
- 35 Financial Strategy
- 39 Risk Management
- 43 Research and Development Strategy
- 45 DX Promotion
- 47 Promoting Human Capital Management
- 53 Business Operations and Main Products
- 55 Specialty Chemicals Business Strategy
- 59 Green Energy & Chemicals Business Strategy





# Overview of Management Strategy



Message from the  
Executive Officer in Charge

**We make our business portfolio more resilient by concentrating our management resources on sustainable businesses with both competitive edge and growth potential**

## Motoyasu Kitagawa

Director, Managing Executive Officer  
In charge of Compliance, responsible for Corporate Planning,  
in charge of Internal Audit Division and CSR & IR Division

### Priority on selection and concentration with management resources focused on U&P businesses

Our previous Medium-Term Management Plan was started in April 2021 to evolve the MGC Group's earnings structure for greater resilience amid environmental change as we secure sustainable growth, working to achieve our objective of balancing social and economic values. Those three years brought a series of serious, difficult events, including a pandemic, the Russia-Ukraine War, and the energy crisis that followed. Demand for our products stalled in the slowing world economy, and we were unable to achieve our targeted operating profit, ROE, and other profit targets and percentage indices. I'm completely confident that we set our general direction correctly three years ago, but the period brought to light underlying challenges in our earnings structure and environmental resilience.

Understanding these challenges, our current Medium-Term Management Plan puts priority on selection and concentration. Rising prices and the labor shortage are growing concerns, so we are working to raise the efficiency of our businesses overall by concentrating our limited resources on U&P businesses. To operate smoothly and cleverly in an economic environment that's difficult to predict, we have set two objectives: strengthen the resiliency of our business portfolio and promote sustainability management. Progress in these areas will build strong corporate health with enhanced resilience.

⇒ Please see P27-28 for details of how we define and assess U&P businesses.

### Business-specific portfolio reform for profit growth above capital cost

To shift toward growth far ahead of capital cost in the three years of the current Medium-Term Management Plan, we must make our strong businesses even stronger. To this end, we must first ensure that we reap the results of the large investments we've undertaken. To win new markets and customer groups, it's important to shuffle the portfolios of businesses with competitive advantage, constantly exploring new applications for each product. In addition to companywide portfolio reform, we are making business-specific portfolio improvements to build the resilience of the entire Group portfolio.

Considering it a must for building capital efficiency, we are simultaneously reorganizing unprofitable businesses with a sense of urgency. We must also tighten up our balance sheet. In 2021, the MGC Group introduced return on invested capital (ROIC) as a new management index. Since then, each business segment has written an action plan using the ROIC tree and, through discussions in investment and loan screening meetings and other

initiatives, it appears a stronger awareness of profitability and investment efficiency has developed throughout the Company. To make the plan-do-check-act cycle more effective, the Corporate Planning Division is leading on reinforcing our support structures.

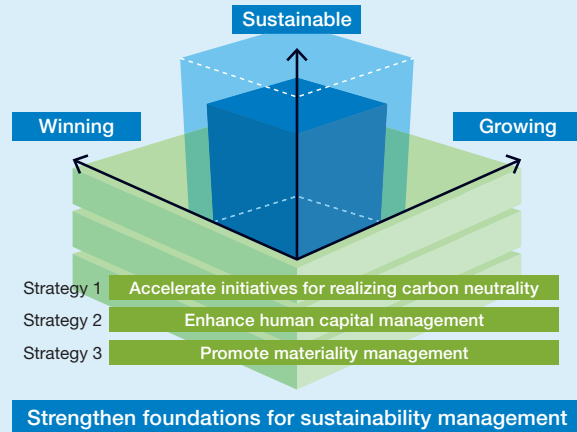
The current Medium-Term Management Plan is a result of active discussion among various councils. Our Management Council, for example, redefined the criteria for differentiating businesses that enjoy strong market reputations, designating them as U&P businesses. Specifically, we adjusted the classification standards for these businesses and introduced a sustainability criterion for assessing them on top of market advantage and growth potential. We put a lot of time into discussions regarding creating new businesses. As a result, our management team shares a refreshed sense of challenge, leading to our latest R&D strategies to make core technologies more visible and focus our target applications.

## Evolving sustainability management by refreshing KPIs and materiality identification processes

Following up on the previous three-year plan, we have been consistently advocating for balance between economic and social values. Talking about achieving a goal is easy, but action to make it happen is not. That said, today I'm feeling the wind at our back. The entire industry is now taking specific action, vectoring toward the values represented by carbon neutrality. The shipping industry, for example, is accelerating its shift to cleaner fuels, particularly circular carbon methanol. The world trend is about to begin syncing with the MGC Mission, "creating value to share with society," and we will work to wisely take up business opportunities in terms of chemical ingredients and raw materials.

To make that happen, it's important that corporate customers prefer us as a collaborator with shared values. In starting the current three-year plan, our Board of Directors reviewed our materiality and KPIs. I feel the recent atmosphere within the Company lifting employee morale as they create solutions to issues related to climate change and make our products more environment-friendly. With these factors as background, we gave our environment-friendly products a new name, "Sharebeing," for stronger branding during the current Medium-Term

Management Plan. We set their sales as a new KPI in the CSV field, and reorganized our internal third-party assessment and certification processes so we can better work to build environmental value.



### Screening Committee and Investment Budgeting System

The MGC Group has a screening committee to raise our effectiveness in choosing investment and loan targets, with a pre-board function. Under the Corporate Planning Division working as secretariat, representatives of the Environment Safety & Quality Assurance Division, Production Technology Division, Finance & Accounting Division, CSR & IR Division and the like meet to screen investment and loan prospects identified by each business segment. Division representatives furnish specialized opinions and advice to promote collaborative examination of proposals before making them official investment and loan targets, precisely define what they entail, and assess risks.

We also capped annual investment and loan amounts for each business segment under the investment budgeting system. As a general rule, we have each segment invest or lend within the operating cash flow it has earned. At the same time, we've built a system to identify financial leverage and allow for investment or lending of amounts beyond the segment's operating cash flow where the investment or loan prospect is related to strategy for the entire company, ESG, or the creation of new/next-generation businesses. While maintaining our financial discipline, we will be bold and courageous in allocating our resources for growth.

#### Investment Budgeting System

Investment budget	Budget for each segment	Green Energy & Chemicals Business Sector	We set operating cash flow less dividends as the investment budget for each segment.
		Specialty Chemicals Business Sector	
		Corporate Sectors (research labs, etc.)	
	Management budget	Following individual screenings, we allocate investment funds beyond each segment's investment budget (above the cap) to projects related to strategy for the entire company, ESG, or the creation of new/next-generation businesses.	

Progress with the Previous Medium-Term Management Plan

## Previous Medium-Term Management Plan

FY2021-FY2023

### Review of the Previous Medium-Term Management Plan

Although net sales increased and exceeded the target amount for fiscal 2023, the final year of the previous Medium-Term Management Plan, operating profit, ordinary profit, ROIC, and ROE did not meet their targets. Meanwhile, the plan to increase the percentage of sales of differentiating businesses to over 40% was achieved, partly because the methanol and energy resources and environmental businesses were shifted to differentiating businesses.

During the past three years, we have made major investments in differentiating businesses, including the expansion of production facilities for electronic chemicals in Japan and overseas. However, profitability and capital efficiency declined due to factors such as the sluggish semiconductor market and various costs rising. We have also actively injected management resources into research and development activities, but at present there are delays in the creation of new businesses. We have achieved certain results reevaluating and rebuilding unprofitable businesses, such as the concentration of formalin production sites and the decision to withdraw from the ortho-xylene chain, but there are still some businesses with profitability issues.

As described above, we are on the way to achieving the key goal of the previous medium-term plan, which was to “shift to a profit structure resilient to changes in the business environment.” Measures to achieve our other important goal, “balance social and economic value,” progressed generally as planned.

### Numerical Targets and Results of the Previous Medium-Term Management Plan

	FY2020 (result)	FY2023 (result)	FY2023 (target)
Net sales	¥595.7 billion	¥813.4 billion	¥730.0 billion
Operating profit	¥44.5 billion	¥47.3 billion	¥70.0 billion
Operating profit margin	7.5%	5.8%	—
Ordinary profit	¥50.2 billion	¥46.0 billion	¥80.0 billion
ROIC*1	7.7%	5.4%	10% or higher
ROE*2	7.1%	6.1%	9% or higher

< FY2023 Assumptions >  
 Exchange rate: ¥105/US\$; Crude oil price (Dubai): US\$60/bbl  
 \*1 ROIC = ordinary profit/invested capital  
 \*2 ROE = net profit/equity

### Measures taken and results

**Objective 1** Shift to a profit structure resilient to changes in the business environment

**Strategy 1-1 Further strengthen competitively advantageous businesses**

- Focused investment on differentiating businesses with a view to market expansion (EL chemicals plant expansion in Japan and overseas, BT materials plant expansion in Thailand, MXDA plant newly built in Europe, etc.)
- Decreased profitability and capital efficiency due to general sales volume decrease following semiconductor market slump and China slowdown, cost increases, balance sheet expansion, etc.

**Strategy 1-2 Accelerate creation and development of new businesses**

- New business creation delayed despite aggressive investment of R&D resources
  - Solid electrolytes: Adoption stage was not reached during the previous Medium-Term Management Plan despite research system expansion and technology seed development
  - OXYCAPT™: Promoted development of the multilayer plastic vial market for biopharmaceuticals and regenerative medicine. Advanced steadily, despite considerable time spent on customer evaluation

**Strategy 1-3 Reevaluate and rebuild unprofitable businesses**

- Stopped production of unprofitable products and withdrew from businesses (concentration of formalin production sites, withdrawal from ortho-xylene/phthalic-acid/plasticizer chain, etc.)
- PC-related and PIA, etc. have low capital efficiency and profitability, requiring intensive management

**Objective 2** Balance social and economic value

**Strategy 2-1 Solve social issues through business**

- Progressed as planned on circular carbon methanol development and CO<sub>2</sub>-derived PC development, etc.
- Achieved net sales targets for applications that contribute to development of ICT/mobility society or solving medical and food problems

**Strategy 2-2 Harmonize value creation with environmental protection**

- Achieved GHG emissions reduction target and renewable energy introduction rate target
- Achieved zero waste emission rate target towards reducing waste

**Strategy 2-3 Strengthen discipline and foundation supporting business activities**

- Promoted united MGC Group safety activities
- Promoted development of human resources, the most important management resource (opened the MGC Commons as an institution aiming to develop human resources who will create innovation)



# Current Medium-Term Management Plan

FY2024-FY2026

## New initiatives

### Objective 1 Strengthen the resiliency of our business portfolio

#### Strategy 1-1 Focus on U&P

- Further concentration and focus of management resources in U&P businesses (= differentiating businesses)
- Reap the benefits of large-scale investments (electronic chemicals, BT materials, MXDA, etc.) conducted under the previous Medium-Term Management Plan
- Continue aggressive investment focused on U&P businesses under the current Medium-Term Management Plan, staying mindful of capital efficiency

#### Strategy 1-2 Build new value through innovation

- Establishment of MGC strategic research areas (mobility, ICT, medical/food)
- Zero in on priority focus themes, concentrate investment of R&D resources (new BT laminate materials, new semiconductor cleaning solutions, OXYCAPT™, solid electrolytes, continuous carbon fiber composite materials, etc.)
- Initiatives targeting life science-related themes (antibody drugs, etc.) and businesses from a companywide perspective (including examination of organizational structure review)
- Promotion of themes for resolving problems related to climate change (circular carbon methanol, PC from CO<sub>2</sub>, CCS, etc.)

#### Strategy 1-3 Restructure businesses requiring intensive management

- Position PC-related products and xylene separators/derivatives as “businesses requiring intensive management” since they have low profitability and capital efficiency. Promote cost reduction and balance sheet streamlining, etc.

### Objective 2 Promote sustainability management

#### Strategy 2-1 Accelerate initiatives for realizing carbon neutrality

- Development of businesses and technologies contributing to GHG emissions reduction
- Achievement of GHG emissions reduction targets
- Expansion of MGC Group “Sharebeing” eco-friendly products (achievement of net sales targets)

#### Strategy 2-2 Enhance human capital management

- Promote management focused on human resources as the most important capital for value creation
- Promote human resources strategy to continuously develop key personnel who are able to cope with change and grow over the long term

#### Strategy 2-3 Promote materiality management

- Promote enhancement of non-financial value by setting and managing KPIs tied to materiality
- Ensure execution of sustainability management

## Medium-Term Management Plan and Vision for MGC in 2030

The current Medium-Term Management Plan is positioned as the successor to the previous Medium-Term Management Plan and our guide for realizing the vision for MGC in 2030. First, we have set “strengthening the resiliency of our business portfolio” and “promote sustainability management” as new goals, and will promote measures consisting of three items each to achieve these goals. We have redefined the differentiating businesses of the previous Medium-Term Management Plan as U&P businesses, which have the ability to grow continuously by achieving a balance between social and economic value, in order to strengthen the resiliency of our business portfolio. By concentrating management resources on U&P businesses, we will raise the capital efficiency of the MGC Group as a whole. In parallel, we will promote “sustainability management” that enables us to flexibly adapt to various changes in the social environment and demonstrate resilience.

### Numerical Targets for the Current Medium-Term Management Plan

	FY2023 (result)	FY2024 (forecast)	FY2026 (target)
Net sales	¥813.4 billion	¥780.0 billion	¥850.0 billion
Operating profit	¥47.3 billion	¥52.0 billion	¥85.0 billion
Operating profit margin	5.8%	6.7%	10% or higher
Ordinary profit	¥46.0 billion	¥59.0 billion	¥95.0 billion
EBITDA* <sup>3</sup>	¥84.9 billion	¥97.0 billion	¥150.0 billion
ROE	6.1%	6.9%	9% or higher
ROIC* <sup>4</sup>	3.3%	6.4%	8% or higher

< FY2024 Assumptions >

Exchange rate: ¥145/US\$; Crude oil price (Dubai): US\$80/bbl

< FY2026 Assumptions >

Exchange rate: ¥135/US\$; Crude oil price (Dubai): US\$80/bbl

\*<sup>3</sup> EBITDA = ordinary profit + interest paid + depreciation and amortization

\*<sup>4</sup> ROIC = (operating profit - income taxes + equity in earnings of affiliates) / invested capital (definitions have been revised for the current Medium-Term Management Plan)

### Vision for MGC in 2030

#### Financial targets

Net sales	¥1.2 trillion
Operating profit	¥120.0 billion
Operating profit margin	10% or higher
ROE	12% or higher
ROIC	10% or higher

#### Non-financial targets

GHG emissions	Reduction of 39% or higher (compared to FY2013)
“Sharebeing” sales (eco-friendly products)	¥500.0 billion or more

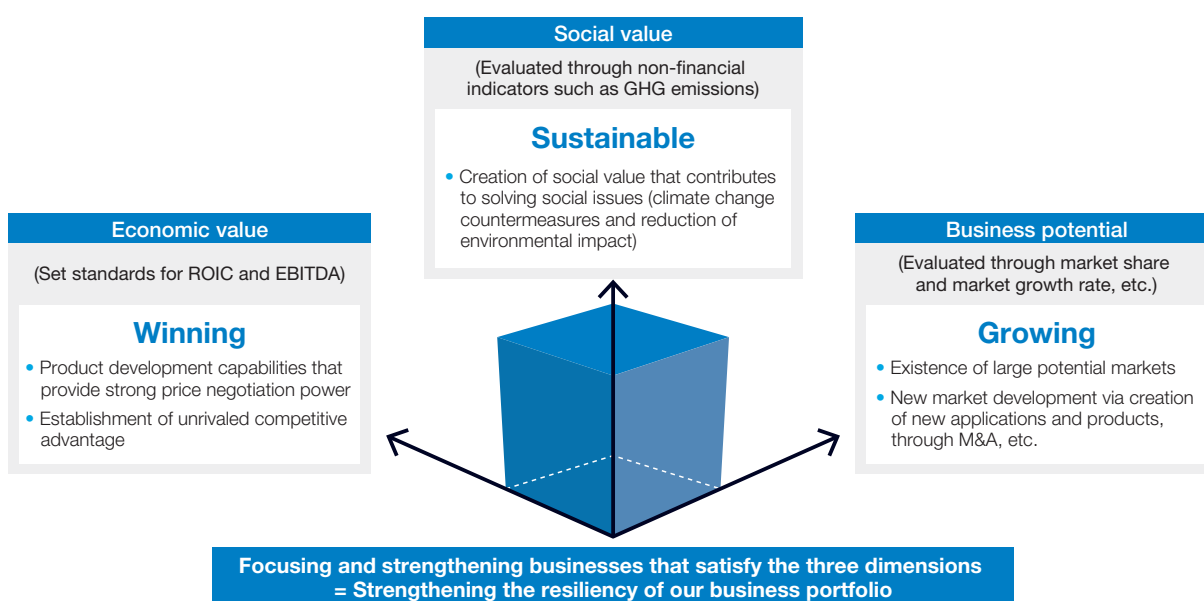
## Renaming Differentiating Businesses and Defining U&P Businesses

Under the current Medium-Term Management Plan, we have renamed our existing differentiating businesses to U&P businesses and redefined business segments from the perspective of “Growing,” “Winning,” and “Sustainable.”

“Growing” refers to the market having potential and being expected to create new demand through the creation of new applications and products, or in other words, “business potential.” “Winning” means having a competitive advantage in quality, functionality, technology, etc. that other companies cannot easily emulate, and being able to maintain high profit margins over the

medium to long term, or in other words, “economic value.” “Sustainable” refers to a high level of “social value” such as low GHG emissions in the production process, or a business model that incorporates mechanisms directly connected to climate change countermeasures and reduction of environmental impact.

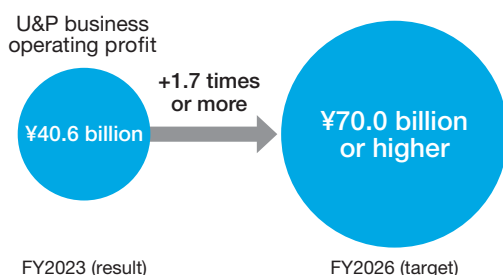
We will focus our management resources on businesses that satisfy the above three axes to realize the key goal of the current Medium-Term Management Plan, which is to strengthen the resiliency of our business portfolio.



### COLUMN Strategic Focus on U&P Businesses

We will focus on allocating management resources to U&P businesses, while striving for early recovery of large investments and maintaining added value by passing on various cost increases to prices, and strengthening management based on capital efficiency using the ROIC tree. Through these efforts, we aim to increase operating profit to a level of over ¥70 billion in fiscal 2026 (more than 1.7 times the level of fiscal 2023). We plan to expand sales of the three ICT businesses (electronics materials, electronic chemicals, and optical materials), which will serve as growth drivers, to 1.5 times the level of fiscal 2023. In electronics materials, we will expand our Thailand Plant in autumn of 2025 with a view to growth in demand in the semiconductor market. In electronic chemicals, we plan to expand production capacity in 2026 to 1.7 times the level of 2020 in order to accommodate new construction and expansion by semiconductor manufacturers. In optical materials, the markets for both optical polymer and lens monomers are expected to expand steadily.

#### Targets of the Current Medium-Term Management Plan



#### Action Plan

- 1 Priority allocation of management resources to U&P businesses
- 2 Reap benefits of large-scale investments (early return on investment)
- 3 Maintain added value from shifting various costs to prices
- 4 Strengthen management based on capital efficiency using the ROIC tree

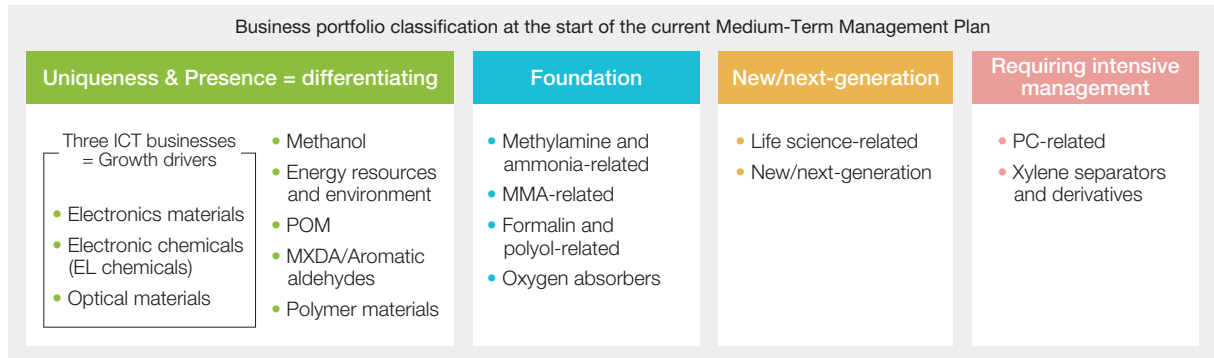
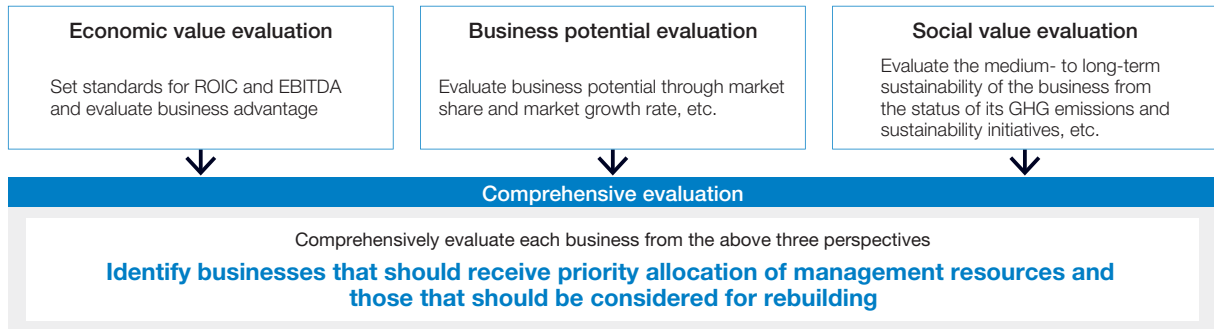
## Business Segments and Evaluation Processes

Business portfolio classification under the current Medium-Term Management Plan is divided into the four categories of “U&P businesses,” “foundation businesses,” “new/next-generation businesses,” and “businesses requiring intensive management,” based on the three perspectives of “economic value,” “business potential,” and “social value,” to identify businesses that should receive priority allocation of management resources and those that should be considered for rebuilding.

For “economic value,” we set the criteria of ROIC,

which indicates business efficiency, and EBITDA, which indicates real profitability, and evaluated the advantages of each BMU\*<sup>5</sup>. For “business potential,” we evaluate the market share and market growth rate of major products from a medium- to long-term perspective. For “social value,” we evaluate GHG emissions, progress in promoting sustainability-related measures, and the sustainability of the business.

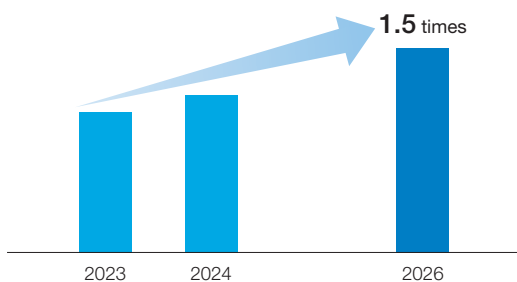
\*<sup>5</sup> Business management unit



### Growth Drivers of U&P Businesses



### Net Sales of the Three ICT Businesses



### Electronics materials

**BT materials:** Currently expanding our Thailand plant in preparation for growth in demand in the semiconductor market. Contribution to sales increase during the current Medium-Term Management Plan

**OPE:** Demand is growing for use as a substrate material for generative AI servers. Sales expansion forecast during the current Medium-Term Management Plan

### Electronic chemicals (EL chemicals)

- Supply high-quality products to global semiconductor manufacturers
- Increase in usage of MGC’s chemicals due to increase in the number of process steps with semiconductor miniaturization and increased complexity of wiring processes
- Production capacity increasing worldwide as semiconductor manufacturers build and augment production sites

### Optical materials

#### Optical polymer:

- Increase in camera resolution through increase in AI smartphones and periscope lenses, etc.
- Demand for use in automotive cameras and AR/VR headsets, etc. also expected to grow

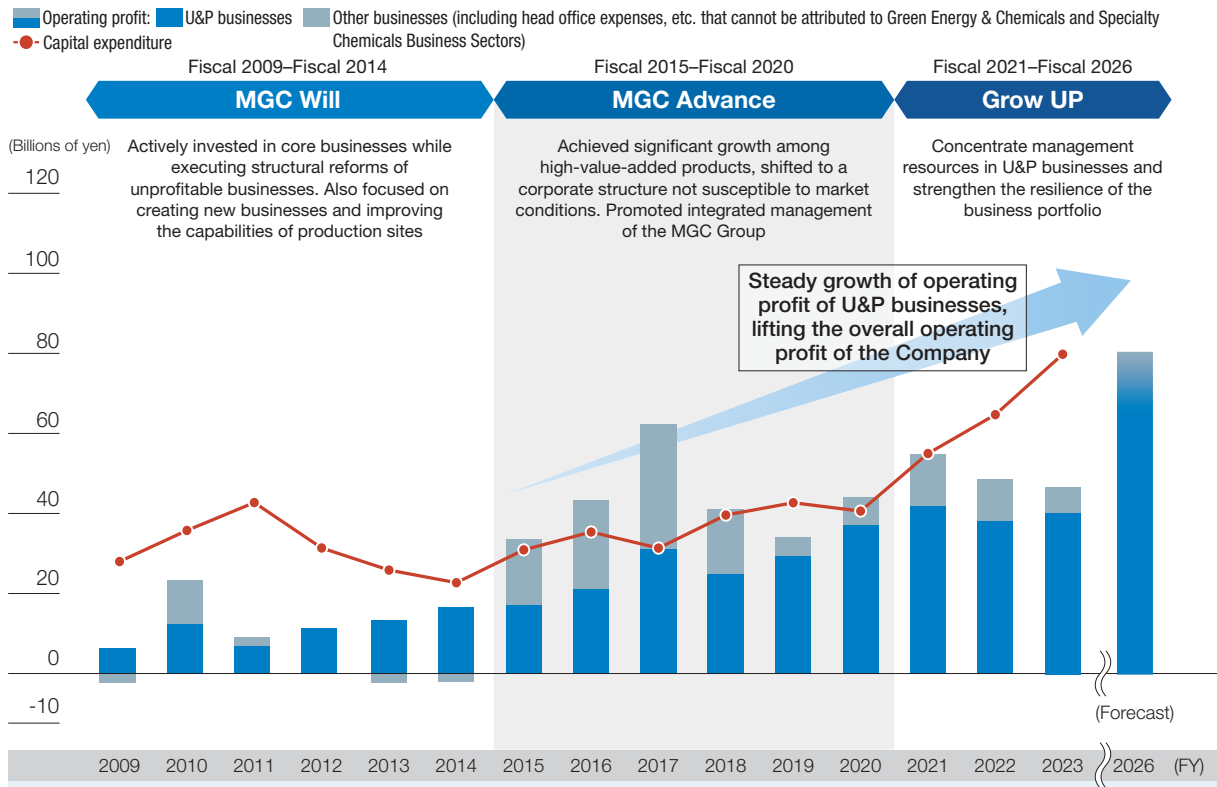
#### Lens monomers:

- Plan for new lens monomer production facility in 2026
- Development of Episleaf™ biomass lens monomer. Sales planned to start in 2024



# Objective 1: Strengthen the Resiliency of Our Business Portfolio

## Expansion of U&P Businesses and Investments and Loans



### Major Investments and Loans



①

① Establishment of prototype mass-production plant for optical polymer (Kashima)

Establishment of polycarbonate plant in Shanghai



②

② Establishment of electronics materials plant in Thailand

③ Strengthening of polyacetal production capacity in Thailand

Strengthening of polyacetal production capacity in Korea

Conversion of JSP into a consolidated subsidiary

④ Participation in Wasabizawa geothermal power generation project (commenced operation in FY2019)

Establishment of methanol production plant in Trinidad and Tobago

Establishment of full-scale mass-production plant for optical polymer (Kashima)

Expansion of second mass-production plant for optical polymer (Kashima)



③



④



⑤

Participation in Fukushima natural gas power generation project (Plants 1 and 2 commenced operation in FY2020)

Establishment of ammonia plant in Indonesia

⑤ Establishment of QOL Innovation Center Shirakawa

Establishment of super-pure hydrogen peroxide production plants in Oregon and Texas

Conversion of Japan U-PICA into a consolidated subsidiary

Establishment of raw material hydrogen peroxide production facilities in Taiwan

Integration of 3 trading companies within the Group, and establishment of Mitsubishi Gas Chemical Trading

Establishment of raw material monomer production facilities for optical polymer

Making J-CHEMICAL into a subsidiary

Participation in Abashiri Biomass Power Plant project (Generators 2 and 3 commenced operations in FY2022)

Exclusion of JSP from the scope of consolidation

Strengthening of aromatic aldehyde production capacity

Merger of J-CHEMICAL and Yutaka Chemicals to launch MGC Woodchem

Making Mitsubishi Engineering-Plastics into a subsidiary

Conversion of Japan U-PICA into a wholly owned subsidiary

Strengthening of electronics materials production capacity in Thailand

Expansion of third mass-production plant for optical polymer (Kashima)

Establishment of an MXDA production facility in the Netherlands (scheduled for completion in second half of FY2024)

Strengthening of super-pure hydrogen peroxide production capacity in Oregon

**U&P businesses**  
**Other businesses**

Note: The starting point is the fiscal year a decision or announcement was made, and the end point is the fiscal year of completion of construction or commencement of operation

## Strategies for Strengthening the Resiliency of Our Business Portfolio

The MGC Group has stated the Medium-Term Management Plan objective of “strengthen the resiliency of our business portfolio” to build a business portfolio that is more resilient to the environment. We are promoting three strategies to achieve this objective: focus on U&P, build new value through innovation, and restructure businesses requiring intensive management.

With regard to the strategy of focusing on U&P in

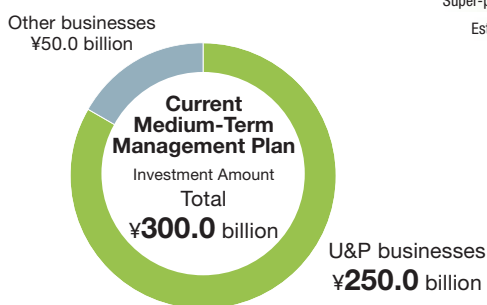
particular, we will promote further concentration and selection of management resources in U&P businesses, while steadily reaping the benefits of major investments carried out under the previous Medium-Term Management Plan.

Our investment plan is to invest a total of around ¥300.0 billion over the three-year period, with a focus on U&P businesses, centered on the three ICT businesses.

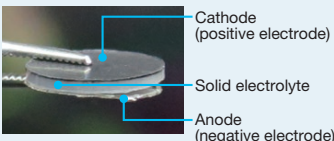
### Major investments in U&P businesses

★: Three ICT businesses

Previous Medium-Term Management Plan			Current Medium-Term Management Plan	
Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024 onward	
			IC plastic packaging BT materials: Boosting production capacity (Thailand) ★	
			Optical polymer plant expansion (Kashima) ★	
			EL: Establishing new raw material hydrogen peroxide plant (China) ★	
			EL: Establishing new super-pure hydrogen peroxide plant (China) ★	
			Aromatic aldehyde plant expansion (Mizushima)	
			Super-pure hydrogen peroxide: Boosting production capacity (Cheonan, South Korea) ★	
			New development of water-dissolved natural gas and iodine (Nishikanbara, Niigata)	
			Super-pure hydrogen peroxide: Boosting production capacity (Oregon, U.S.A.) ★	
			Super-pure ammonium hydroxide: Boosting production capacity (Singapore) ★	
			Establishing new raw material monomer plant for optical polymer (Niigata) ★	
			EL: Establishing new raw material hydrogen peroxide plant (Taiwan) ★	
			MXDA: Establishing new production facility (Netherlands)	
			Super-pure hydrogen peroxide: Boosting production capacity (Texas, U.S.A.) ★	
			Super-pure ammonium hydroxide: Boosting production capacity (Texas, U.S.A.) ★	
			IC plastic packaging BT materials: Boosting production capacity (Thailand) ★	
			Establishing new lens monomer manufacturing plant (Yokkaichi) ★	
			New development of water-dissolved natural gas and iodine (Higashi-Niigata, Niigata)	
			Super-pure hydrogen peroxide: Boosting production capacity (Arizona, U.S.A.) ★	
			Establishing new production facility for Circular Carbon Methanol (Japan)	
			Super-pure ammonium hydroxide: Boosting production capacity (Niigata) ★	
			Super-pure hydrogen peroxide: Boosting production capacity (Saga) ★	



### Main New Product Developments

ICT	Mobility	Medical/Food
<p><b>New BT laminate materials</b> Application of BT resin modification and blending technology to realize ultra-thin insulation properties and microcircuit formation ability for built-up materials</p> <p><b>New semiconductor cleaning solutions</b> Proposal of new semiconductor cleaning agents to respond to the evolution of semiconductors by increasing processing speed, reducing power consumption, etc.</p> <p><b>Recycled EP</b> Promotion of further demonstration studies for commercialization of pre-consumer recycling of lupizeta® EP optical polymer offcuts*</p>	<p><b>Continuous carbon fiber composite materials</b> With distinctive resin and intermediate manufacturing technologies, we are developing composite intermediates with characteristics such as room-temperature storage, autoclave-free, and gas barrier properties, and proposing various applications for them</p> <p><b>Solid electrolyte</b> Development of carborane-based solid electrolytes and promotion of characteristic evaluation and application development, while advancing process development with an eye to mass production</p> 	<p><b>Contract manufacturing of antibody drugs</b> Using 2,000-liter, single-use cultivation tanks, we are undertaking contracted manufacturing of biopharmaceuticals, in particular antibody drugs, at Cultivecs Inc.</p> <p><b>OXYCAPT™</b> Currently, engaged in developing the multilayer resin vial market for biopharmaceuticals and regenerative medicine, using plastic syringes to replace glass syringes for injection drugs</p> <p><b>Allergy test chips</b> We are currently developing allergy test chips capable of predicting the severity of food allergies</p>

\* This project was selected in FY2023 by the Ministry of the Environment as a program to promote establishment of a decarbonized and circular economy and shall receive a grant for operating expenses related to measures to curb carbon dioxide emissions, including a demonstration project aimed at creating a recycling system for resources such as plastic.

Ministry of the Environment website: [https://www.env.go.jp/press/press\\_01945.html](https://www.env.go.jp/press/press_01945.html)

# Objective 2: Promote Sustainability Management

## Promoting Sustainability Management

The MGC Group promotes management that responds flexibly and swiftly to changes in society’s structure and values as “sustainability management,” based on its Mission of “creating value to share with society.” We aim to grow sustainably while adapting to changes in the external environment that could potentially have an impact on the Group.

The MGC Group identified priority issues (materiality) to be addressed by management in April 2020 with the aim of conducting sustainability management. Under the Medium-Term Management Plan that started in April 2021, we aimed to balance our social and economic value, setting key performance indicators (KPIs) for each materiality issue and applying a plan-do-check-act (PDCA) cycle to strategically increase our non-financial value, aiming to achieve targets set for fiscal 2030.

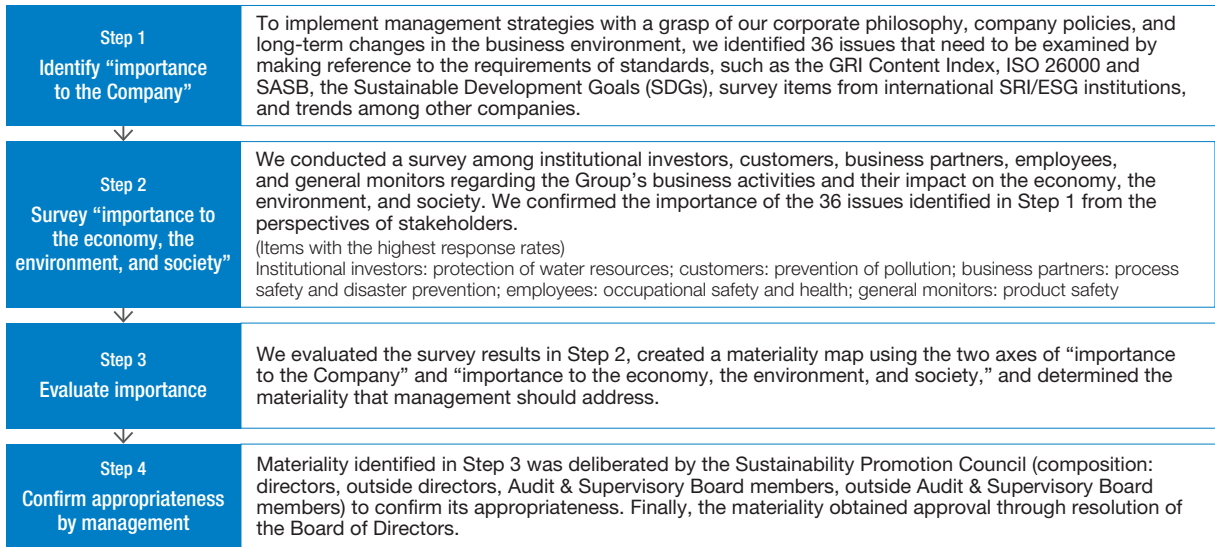
As trends related to sustainability accelerated worldwide, we conducted a revision of our materiality in May 2023 as a preparatory step to formulating our current Medium-Term Management Plan. The revision resulted

in the addition of respect for human rights as a new materiality issue.

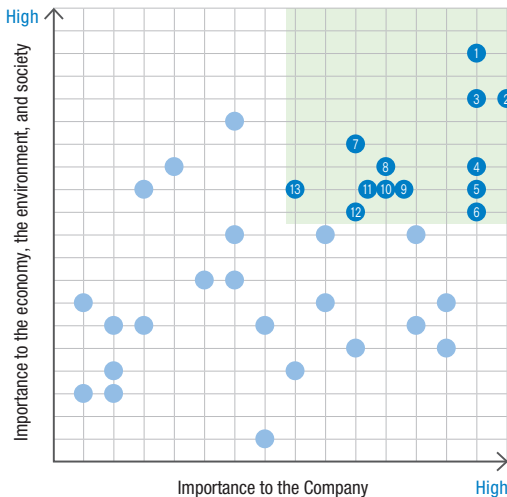
Under the current Medium-Term Management Plan, we have provided a second objective of “promote sustainability management,” with a view to making our business portfolio more environmentally robust and more resilient, and we will work to strengthen the MGC Group’s foundation for sustainable growth. In particular, we adopted sales of the MGC Group’s eco-friendly “Sharebeing” products as a KPI for the creating shared value (CSV) domain to present to the public a more quantitative indicator of the Group’s contribution to the environment.

Moreover, we are working to expand the reporting boundary for our materiality KPIs from a non-consolidated basis to a consolidated basis. Our KPIs for human capital remain on a non-consolidated basis in order to prioritize human resource strategies aligned to the individual business models of each individual Group company, since our approach to human resource management emphasizes their individual autonomy.

### Materiality Determination Process



### Materiality Map



- 13 Issues**
- 1 Reduction in GHG emissions
  - 2 Occupational safety and health
  - 3 Improving energy efficiency and reducing energy usage
  - 4 Process safety and disaster prevention
  - 5 Development of environmentally friendly products and technologies
  - 6 Development and retention of human resources
  - 7 Product safety and quality
  - 8 Respect for human rights
  - 9 Promotion of diversity and inclusion
  - 10 Increased efficiency in resource usage
  - 11 Reduction of industrial waste
  - 12 Governance and internal control/risk management/compliance
  - 13 Building sustainable supply chains

- 11 Materiality Issues**
- Contribution to solving social issues through business
  - Promotion of innovative R&D
  - Proactive response to environmental problems
  - Highly energy- and resource-efficient production
  - Cultivating a corporate culture of job satisfaction
  - Promotion of diversity and inclusion
  - Respect for human rights
  - Ensuring occupational safety and health/process safety and disaster prevention
  - Chemical/product quality and safety assurance
  - Promotion of socially responsible sourcing
  - Strengthening governance and internal control/risk management/compliance



## Sustainability Promotion System

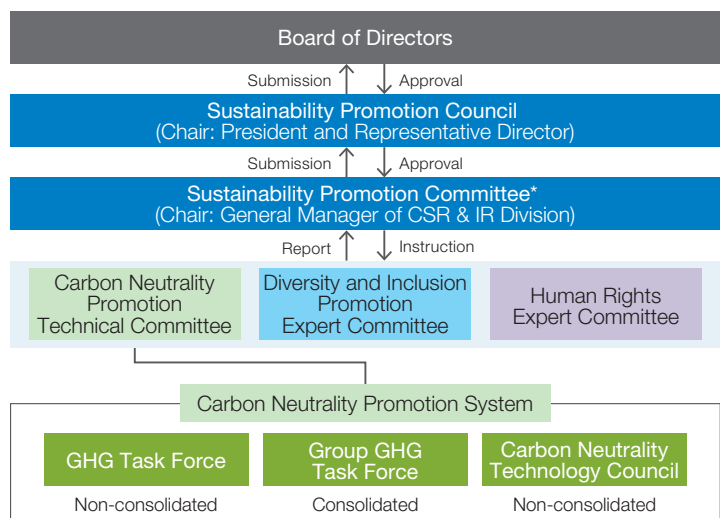
The Group has established the Sustainability Promotion Council as a body to deliberate and determine policies and measures that form the basis for sustainability management, such as identification and management of materiality, and receive reports on their implementation. The council is chaired by the President and primarily made up of all directors, including outside directors, as well as Audit & Supervisory Board members. Decisions on particularly important matters in council meetings are decided by the Board of Directors.

The Sustainability Promotion Committee is convened by the General Manager of the CSR & IR Division to serve as an advisory body to the Sustainability Promotion Council. Corporate sector heads sit on the committee to confirm the status of implementation of measures in each division and conduct periodic reviews. It also establishes

various expert committees as needed to consider specialized and important matters. The Sustainability Promotion Department within the CSR & IR Division has been established to serve as the secretariat for the council and the committee. The Sustainability Promotion Department is responsible for administrative tasks such as considering and implementing policies and strategies on sustainability management, overseeing non-financial information within the Company, and handling engagement within and outside the Company.

We aim to obtain the trust and support of a variety of stakeholders and achieve ever greater corporate value by contributing to the resolution of issues for the realization of a sustainable society through our business more than ever before.

### Sustainability Management System



\*Advisory body to the Sustainability Promotion Council

### Main Discussion Topics of the Sustainability Promotion Council (Fiscal 2023)

- Status report on achievement and progress of materiality KPIs in the previous Medium-Term Management Plan
- Setting of new materiality KPIs and targets for the current Medium-Term Management Plan
- Annual report on sustainability promotion, report on plan for next fiscal year
- External ESG evaluation report
- Sustainability engagement report
- MGC's roadmap for GHG emissions reduction toward carbon neutrality
- Formulation of human rights due diligence promotion system and human rights guidelines
- Annual report on diversity and inclusion (D&I) promotion, report on plan for next fiscal year

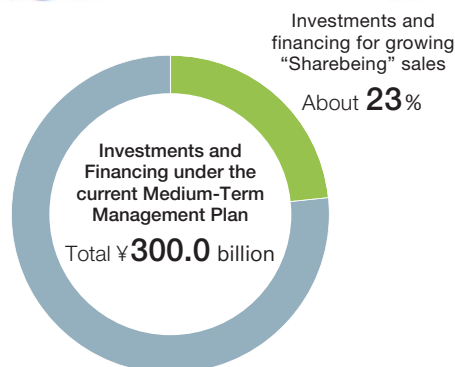
### Promoting Investment for Creation of "Sharebeing"

We have designated products that help to reduce the environmental impact of society toward achieving carbon neutrality as "Sharebeing" (eco-friendly products), and we are working to further expand our businesses and products that contribute to the environment.

Under the current Medium-Term Management Plan, the MGC Group is planning investments and financing totaling approximately ¥300.0 billion over three years. Approximately 23% of this amount is for growing our sales of "Sharebeing." This will lead to the creation of products and businesses that are eco-friendly while also having competitive advantages in the market.

#### Main "Sharebeing" eco-friendly products related to investments and financing

- Hydrogen peroxide
- OPE
- POM
- PC
- Reny™
- AGELESS™
- Methanol
- MXDA
- MX-Nylon



# Materiality

Category	Materiality	Why it is material	Risks	Opportunities
CSV	Contribution to solving social issues through business	Through business and products that balance economic and social value, we will realize our aim of "creating value to share with society."	<ul style="list-style-type: none"> <li>• Fall in share price due to decrease in future value</li> <li>• Decrease in demand for products due to changes in market needs</li> <li>• Shift in share of low-cost alternative materials</li> <li>• Existing product obsolescence</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of new markets through diversification of market needs</li> <li>• Customer credibility backed by multiple industry standards</li> <li>• Expansion of portfolio of distinctive, differentiated products</li> </ul>
	Promotion of innovative R&D	<ul style="list-style-type: none"> <li>• Achieve a more resilient business portfolio</li> <li>• Create new businesses for achieving carbon neutrality</li> <li>• Promote R&amp;D through use of DX technology</li> </ul>	<ul style="list-style-type: none"> <li>• Delay in achievement of a more resilient business portfolio</li> <li>• Failure to achieve carbon neutrality due to delay in business creation</li> <li>• Delay in creation of new products and businesses due to reduced competitiveness in R&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>• Promotion of a more resilient business portfolio</li> <li>• Creation of new markets through establishment of environmental solution businesses</li> <li>• Creation of new products and businesses through use of DX technology</li> </ul>
E	Proactive response to environmental problems	Addressing environmental problems is imperative for all of humanity. Companies must proactively do so as a prerequisite for their existence and activities.	<ul style="list-style-type: none"> <li>• Increase in risk of abnormal weather and natural disasters due to climate change</li> <li>• Reputational risks regarding environmental protection</li> </ul>	<ul style="list-style-type: none"> <li>• Development of CCUS (particularly CCS) and CO<sub>2</sub>-based methanol and polycarbonate businesses and development of chemicals that use CO<sub>2</sub></li> <li>• Commercial development of ammonia as a hydrogen carrier and CO<sub>2</sub>-free fuel</li> </ul>
	Highly energy- and resource-efficient production	Companies have a responsibility to take countermeasures for environmental issues, and must engage proactively in such activities as they also contribute to increasing the competitiveness of their products.	Decline in competitive advantage due to delays in technological response to resource and energy conservation needs	<ul style="list-style-type: none"> <li>• Acquisition and cross-company deployment of energy-saving technologies</li> <li>• Advancement in utilization of digital technologies</li> </ul>
S	Cultivating a corporate culture of job satisfaction	An organizational culture that enables all employees to confidently give full play to their abilities over the long term while finding individualized meaning in their jobs is the foundation of corporate value creation.	Declines in labor productivity and corporate value (economic and social value) due to outflow of personnel	<ul style="list-style-type: none"> <li>• Strengthened foundation for creating innovation</li> <li>• Improved employee engagement</li> </ul>
	Promotion of diversity and inclusion	Establishing a corporate culture through collaboration incorporating diverse values fosters a foundation for generating new ideas and technological innovation and creating corporate value.	Uniform thinking and loss of new business opportunities due to imbalance in personnel attributes and skills	Nurturing of a culture of collaboration incorporating diverse values that is conducive to new ideas and technological innovation
	Respect for human rights	As entities conducting business activities, companies have a responsibility to avoid infringing on the human rights of others and rectifying any negative impact they have on human rights.	<ul style="list-style-type: none"> <li>• Boycotts on purchasing products and services due to human rights infringement</li> <li>• Decline in evaluation as a recipient of investment</li> <li>• Potential for elimination as an investment candidate or withdrawal of investment</li> </ul>	<ul style="list-style-type: none"> <li>• Contribution to realization of a sustainable economy and society</li> <li>• Maintenance and securing of trust from society</li> <li>• Maintenance and increase in corporate value</li> <li>• Recruitment and retention of talented human resources</li> </ul>
	Ensuring occupational safety and health/process safety and disaster prevention	Safety is the foundation of business activities. Companies have a societal duty to ensure safety.	<ul style="list-style-type: none"> <li>• Recurrence of similar disasters and problems</li> <li>• Loss of societal trust due to accidents or scandals</li> </ul>	<ul style="list-style-type: none"> <li>• Nurturing of a culture of safety</li> <li>• Accumulation of expertise in preventive maintenance</li> </ul>
	Chemical/product quality and safety assurance	Chemical/product quality and safety assurance is required by stakeholders, and the Company is responsible for providing products and services with a high degree of safety and reliability.	<ul style="list-style-type: none"> <li>• Loss of business opportunities due to non-compliance with chemical regulations in each country</li> <li>• Loss of societal trust due to inaccurate data handling and shipping of inappropriate products</li> </ul>	<ul style="list-style-type: none"> <li>• Enhancement of business profitability through proper compliance with laws and regulations</li> <li>• Enhancement of customer satisfaction and societal trust in the entire Company and Group companies</li> </ul>
	Promotion of socially responsible sourcing	Companies have a societal responsibility to upgrade CSR compliance throughout their supply chains with respect to the environment, working conditions, human rights, etc.	Negative impacts on business activity due to illegal actions and compliance violations by suppliers	Improved sustainability of society and long-term competitiveness
G	Strengthening governance and internal control/risk management/compliance	It is a system for developing disciplined ways to steadily execute strategies in order to bring business models to fruition and sustainably grow corporate value.	Slumping business activity, loss of societal trust and damage to corporate value	<ul style="list-style-type: none"> <li>• Establishment of a stable management foundation by improving decision-making transparency and responding appropriately to change</li> <li>• Gaining of stakeholder trust</li> </ul>

\*1 Percentage of total value of R&D expenditure in the U&P businesses and new/next-generation businesses categories

\*2 Amount of final disposal/total amount of waste generated

\*3 Reduction in energy usage resulting from energy-saving improvements (based on 100% capacity utilization)/average annual energy usage for fiscal 2021 to fiscal 2023

Action plan	Current Medium-Term Management Plan KPIs	Reporting boundary			Fiscal 2023 results	Fiscal 2026 targets	Fiscal 2030 targets	Relevant SDGs targets
		Non-consolidated	Domestic consolidated	Overseas consolidated				
<ul style="list-style-type: none"> <li>Transform business portfolio</li> <li>Commercialize products that balance social and economic value</li> <li>Create new businesses that contribute to solving social issues</li> </ul>	Sales of MGC Group eco-friendly products	●	●	●	¥204.3 billion	¥270.0 billion	¥500.0 billion	3.9, 8.2, 9.4, 9.5, 12.3
<ul style="list-style-type: none"> <li>Allocate management resources to U&amp;P businesses and new/next-generation businesses</li> <li>Set solving climate change issues as a strategic research area</li> <li>Develop DX human resources into MGC Group research personnel</li> </ul>	Percentage of R&D cost contributing to increased resilience of business portfolio* <sup>1</sup>	●	●	●	67%	60% or higher	60% or higher	8.2, 9.4, 9.5
	Percentage of research personnel contributing to solving climate change issues	●	●	●	31%	25% or higher	25% or higher	
	Percentage of DX human resources among research personnel (those who have taken DX fundamentals courses)	●	●	●	66%	75%	80%	
<ul style="list-style-type: none"> <li>Reduce GHG emissions in the manufacturing process</li> <li>Develop and introduce new technologies to help reduce GHG emissions</li> <li>Reduce supply chain GHG emissions</li> </ul>	Reduction in GHG emissions (compared to fiscal 2013)	●	●	●	33% reduction (forecast)	33% reduction	39% reduction	3.9, 6.3, 7.2, 11.6, 12.5, 13.3, 14.1, 14.3
	Zero waste emission rate* <sup>2</sup>	●	●	●	0.8%	1.2%	1.0%	
<ul style="list-style-type: none"> <li>Stabilize equipment through improvement of control</li> <li>Prevent accidents and issues</li> </ul>	Energy usage reduction rate* <sup>3</sup> (compared to fiscal 2023)	●	●	●	—	-3.0%	-7.0%	7.3, 12.2
<ul style="list-style-type: none"> <li>Cultivate and visualize a culture in which the Company values the human resources that it has developed</li> <li>Examine various personnel systems (including welfare) and design systems suitable for an era of contributing to increased engagement</li> </ul>	Percentage of employees that feel satisfied at work	●	●	●	—	70%	75%	4.4, 5.4, 8.5
<ul style="list-style-type: none"> <li>Diversify hiring formats (methods, human resources)</li> <li>Conduct awareness-raising activities in group training</li> <li>Create opportunities for interaction between different departments and offices through internal events, training, etc. (including use of the MGC Commons)</li> </ul>	Number of female managerial personnel	●	●	●	40	60	90	4.4, 5.1, 5.5, 8.5
<ul style="list-style-type: none"> <li>Formulate human rights policy and fully accept responsibility for respecting human rights</li> <li>Establish a human rights consultation desk to conduct appropriate remedial measures</li> </ul>	Respect for human rights	●	●	●	—	Human rights due diligence conducted 100%	Establish human rights management and ensure support for human rights policy by all stakeholders	4.7, 8.7, 10.2, 10.3, 16.3, 16.10
<ul style="list-style-type: none"> <li>Share examples of accidents and disasters, and utilize this information for process risk assessment</li> <li>Eliminate dangers and hazards by conducting occupational health and safety risk assessments and build comfortable workplaces</li> </ul>	Serious occupational accidents, <sup>4</sup> serious accidents* <sup>5</sup>	●	●	●	5, <sup>6</sup> 0	0	0	3.9, 8.5, 11.6, 12.4, 13.3
<ul style="list-style-type: none"> <li>Share information through the activities of the Environment and Safety Council and provide education and support to associates from our company</li> <li>Promote Q-MGC conducted companywide and throughout the Group</li> </ul>	Product liability incidents, serious* <sup>7</sup> legal and regulatory violations, serious* <sup>7</sup> quality issues	●	●	●	0	0 (Non-consolidated + Domestic consolidated companies)	0 (Non-consolidated + Domestic and overseas consolidated companies)	3.9, 12.4
<ul style="list-style-type: none"> <li>Inform suppliers of the Company's basic approach to raw material procurement activities and its CSR procurement guidelines, and conduct regular questionnaires</li> <li>Conduct evaluations based on questionnaires and multiple dialogues</li> </ul>	Percentage of suppliers in agreement with Company's basic approach to raw material procurement activities and its CSR procurement guidelines	●	●	●	—	80%	100%	12.2, 16.2
	Percentage of consolidated subsidiaries required to conduct CSR procurement activities	●	●	●	—	60% (Domestic consolidated companies)	100% (Domestic and overseas consolidated companies)	
<ul style="list-style-type: none"> <li>Conduct compliance education and awareness-raising activities</li> <li>Identify risk of compliance infringement and conduct risk assessment</li> <li>Improve awareness compliance throughout the entire MGC Group</li> </ul>	Number of serious compliance violations	●	●	●	0	0	0	8.7, 10.2, 10.3, 16.2, 16.3, 16.5, 16.10

\*<sup>4</sup> Accidents resulting in lost work days eligible for disability compensation, including death and permanent disability, or potential disability, and those with four or more lost work days

\*<sup>5</sup> Accidents that threaten third parties, including those resulting in environmental pollution involving the community or that cause damage to local residents, and other accidents involving serious damage

\*<sup>6</sup> Five incidents occurred within the domestic consolidated subsidiaries

\*<sup>7</sup> Losses of ¥1.0 billion or more



# Financial Strategy

## FY2023 Operating Results

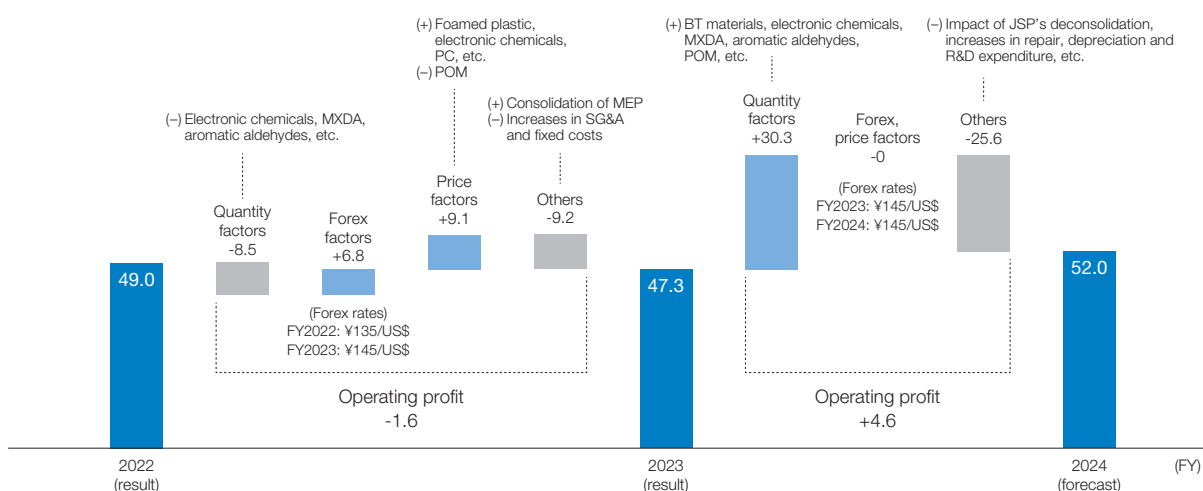
In fiscal 2023, the MGC Group's overall business environment remained adverse, mainly reflecting a significant impact from the lingering stagnation of the Chinese economy, economic deceleration in Europe, and sluggish demand for basic chemicals. On the other hand, the Group's operating results were positively affected by factors including the depreciation of the yen and an ongoing recovery in sales of semiconductor-related products.

Against this backdrop, the Group's net sales increased as the inclusion of Mitsubishi Engineering-Plastics into the scope of consolidation and the depreciation of the

yen outweighed negative factors such as the exclusion of JSP from the scope of consolidation and downturns in the market prices of methanol and ammonia. On the other hand, operating profit decreased, mainly reflecting stagnant polyacetal market prices in contrast with robust market prices seen in the previous fiscal year, as well as lower sales volumes of meta-xylenediamine and aromatic aldehydes, despite positive factors including the depreciation of the yen, improvement in the profitability of polycarbonates, and recovery in demand for electronics materials.

### Increase and Decrease Factors of Operating Profit

(Billions of yen)



## Investment for Sustainable Growth

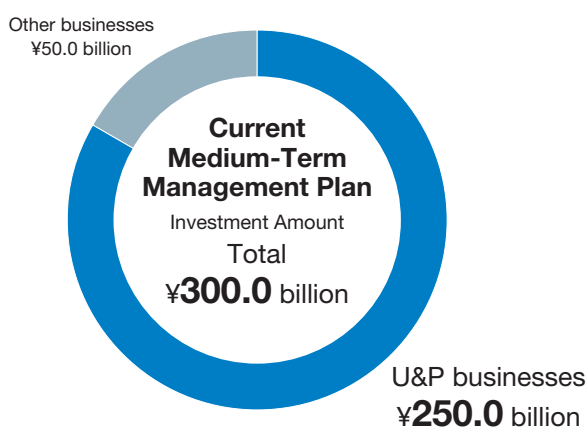
In the previous Medium-Term Management Plan, the Group set a target of "shift to a profit structure resilient to changes in the business environment," and executed investments of approximately ¥210.0 billion over the three-year period to achieve this. Approximately half of this amount was allocated to differentiating businesses,\*<sup>1</sup> where the Group has strong competitive advantages and abundant growth potential.

Under the current Medium-Term Management Plan, we will first steadily reap the benefits of large-scale investments under the previous plan. In parallel, we plan to make investments totaling approximately ¥300.0 billion over three years, centered on strategic investment for the Group's growth (including R&D and ESG-related investments). A little over 80% of this amount will be used for investments focused on U&P businesses that meet the criteria of being "Growing," "Winning," and "Sustainable."

To maintain this high level of investment, we will consciously utilize financial leverage through debt financing in order to capture growth opportunities. Accordingly, our policy is to set an upper limit (for safety) and a lower limit (for

efficiency) for the D/E ratio, which is one of our KPIs, and to control the balance between debt and equity within this range. By executing these investment strategies, we are continuously expanding our ROIC spread (ROIC-WACC).

\*<sup>1</sup> From fiscal 2024, the name of these businesses in the current Medium-Term Management Plan has been changed to U&P businesses.



## Shareholder Return Policy

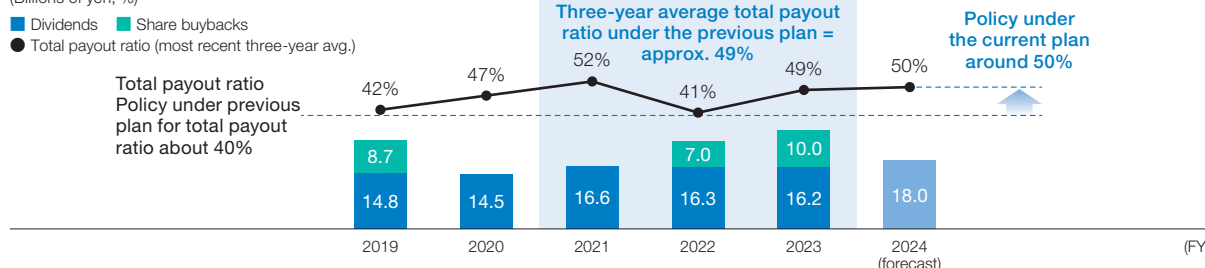
Under the current Medium-Term Management Plan, we have raised the total payout ratio from about 40% under the previous Medium-Term Management Plan to roughly 50%. We considered that a total payout ratio of 50% is an appropriate level for maintaining a certain degree of financial discipline while enabling us to proceed with growth investments in a timely manner. In addition, we have adopted a new progressive dividend policy, which is dedicated to building up the dividend while avoiding any decrease, assuming financial soundness is not compromised.\*2 We will determine the level of dividends while being mindful of shareholder's dividend on equity (DOE).

Keeping the levels of internal reserves and shareholder returns in mind as before, our basic policy is to continue to flexibly buy back our own shares for higher capital efficiency and better shareholder returns. When we deem the level of internal earnings to be high, due to higher earnings or lower investments than planned, we will strengthen shareholder returns through measures such as agile and flexible purchases of treasury stock, without being bound by the total return ratio of 50%.

\*2 Covers the three-year period of the current Medium-Term Management Plan

### Change in Shareholder Returns

(Billions of yen, %)



	2019	2020	2021	2022	2023	2024 (forecast)
Net profit (Billions of yen)	21.1	36.0	48.2	49.0	38.8	46.0
Annual dividend (Yen per share)	70	70	80*3	80	80	90

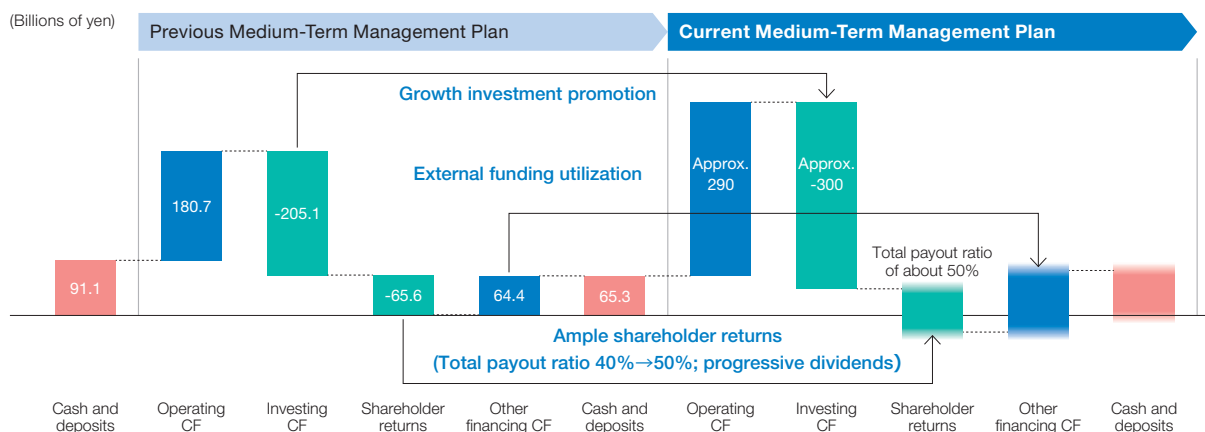
\*3 Interim dividend of ¥45 (incl. ¥10 commemorative dividend); term-end dividend of ¥35

## Capital Allocation

Capital allocation will place highest priority on investments to encourage organic growth of the U&P businesses, with a view to ensuring that ROIC is higher than the cost of capital. By prioritizing allocation of management resources to U&P businesses that can deliver both economic and social value, we intend to strengthen our corporate constitution.

As explained above, our basic approach to capital allocation is to realize a good balance between the three elements of growth investment, shareholder returns, and

financial soundness, and to maintain an optimal capital structure. During the period of the current Medium-Term Management Plan, we have planned investments totaling approximately ¥300.0 billion, and we will accelerate growth by making proactive use of external funds. Furthermore, by continuously paying progressive dividends, we aim to achieve stable dividend increases while conducting treasury share purchases in an agile way as appropriate to contribute to increasing capital efficiency.



## Action to Implement Management that is Conscious of Cost of Capital

The MGC Group introduced ROIC as a KPI in fiscal 2021, the first year of the previous Medium-Term Management Plan, in order to promote management that is conscious of the cost of capital. We calculate ROIC for each business management unit (BMU) for use in evaluating the business. By visualizing businesses that are not creating an adequate return on invested capital, we can make a decision on either restructuring or withdrawing from the business, which promotes optimal allocation of management resources.

Under the current Medium-Term Management Plan, we will continue to rigorously manage businesses using

ROIC. Currently, we have formulated an improved action plan for each BMU, using a tree that breaks down ROIC into operating profit margin and invested capital turnover rate. Over these three years, we will hold study sessions on the ROIC tree concept throughout the Company to enable individual employees to be aware of capital efficiency in their work. Moreover, for the Group overall, we will prioritize management resource allocation to U&P businesses, which have high profitability and capital efficiency, thereby further advancing management that is conscious of capital profitability and cost of capital.

## Analysis of Current Status for Improving Corporate Value

An important issue left unresolved under the previous Medium-Term Management Plan is how to strengthen waning earning capability and use this to increase corporate value. The Company's price-to-book ratio (PBR) started to climb toward the end of FY2023, mainly due to a series of business portfolio reforms and more robust shareholder returns. However, it currently\*4 remains below 1.0, and we recognize this as a relatively soft level in terms of share price indicators. Meanwhile, our price-to-earnings ratio (PER) is at

a relatively low level compared with our industry peers, and we aim to lift this by promoting our medium- to long-term growth strategy and measures to increase corporate value, as well as engaging in proactive investor relations activities. Furthermore, at the current time, our ROE is also at a low level, and we plan to address this through measures including increasing our operating profit margin and further use of financial leverage.

\*4 As of July 31, 2024

### Breakdown and Analysis of PBR and ROE Components

● MGC — Industry peers (15 companies, chosen by MGC)



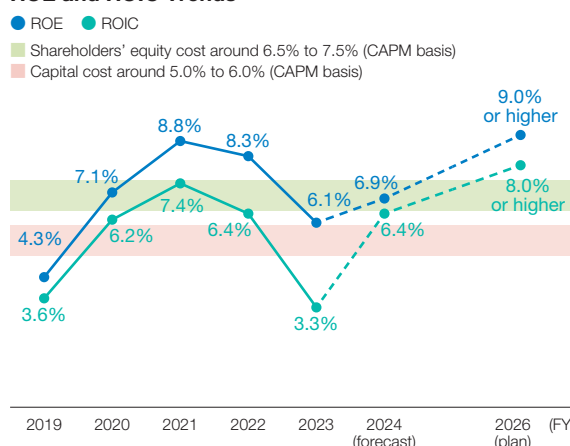


## Improvement of Capital Profitability

The Group envisages the shareholders' equity cost at around 6.5% to 7.5%\*<sup>5</sup> and the cost of capital at around 5.0% to 6.0%\*<sup>5</sup>, and is striving to maximize ROIC with the target of exceeding these. Moreover, the Group has promoted financial strategies and capital policy with ROE and ROIC as management indicators since the previous Medium-Term Management Plan. In fiscal 2023, capital profitability declined, mainly due to soft sales across all products. We recognize that as a result of this ROIC was temporarily below capital cost, while ROE was below shareholders' equity cost. In fiscal 2024, we expect ROE and ROIC to remain at low levels as we continue to invest aggressively in U&P businesses. We believe there is a divergence from expected market returns in both ROE and ROIC. We therefore intend to increase both ROE and ROIC by strengthening the resiliency of our business portfolio and undertaking the following initiatives to reduce the cost of capital. Regarding capital cost, we also recognize the importance of striving to control risk premiums through means such as using earnings stability to reduce volatility and raising market presence through proactive dialogue with market participants.

\*<sup>5</sup> CAPM basis

### ROE and ROIC Trends



### Initiatives to Reduce the Cost of Capital

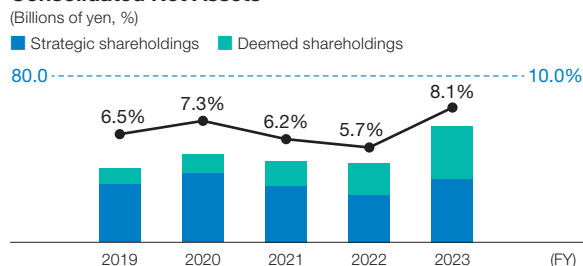
- Shift to U&P businesses, use growing earnings stability to reduce volatility
- Strengthening of balance sheet control (financial leverage utilization, etc.)
- Enhance cash-generating capabilities (CCC improvement, review and sale of redundant or low-performing assets, etc.)
- Promote sustainability management (shift to carbon-neutral businesses, improve ESG evaluation, etc.)
- Enhance appeals to individual investors, etc.

## Reduction of Strategic Shareholdings

MGC has been working to reduce its strategic shareholdings for many years, aiming to increase capital efficiency. Recently, the market price of listed shares has risen, increasing the proportion of strategic shareholdings in consolidated net assets. However, this remains at a level below the voting rights exercise standard of major proxy advisory firms overseas.

The purpose and meaning of strategic shareholdings will be regularly examined by the Board of Directors for each individual stock going forward. Our policy is to promote the appropriate sale of shares deemed to exceed reasonable levels of shareholding.

### Proportion of Strategic Shareholdings in Consolidated Net Assets



23 stocks sold over past six years (full sale of 15 stocks); cumulative sale of roughly ¥19 billion\*

\*Based on actual results. Includes partial sale of some shareholdings and sale of deemed shareholdings

## Continued Proactive Dialogue with Investors

MGC has made a focused effort to provide accurate and timely disclosure to shareholders and investors in Japan and overseas, and to engage more proactively and deeply in dialogue with them. Under the current Medium-Term Management Plan, we will enhance and increase the level of content in our quarterly financial results presentations, increase the frequency of IR events, such as business briefings, and aim to promote better understanding of the Company's businesses. In addition, to further promote dialogue between management and shareholders and

investors, we intend to increase various opportunities for them to meet in person. We will make a sincere effort to strengthen feedback of investors' opinions and requests inside the Company, including to management, and to contribute to the evolution and advancement of the Group's management and operations. We will continue to respond strongly to ESG and stewardship interviews, and create a structure that can meet the demand for new interviews, such as interviews with outside directors and institutional investors.

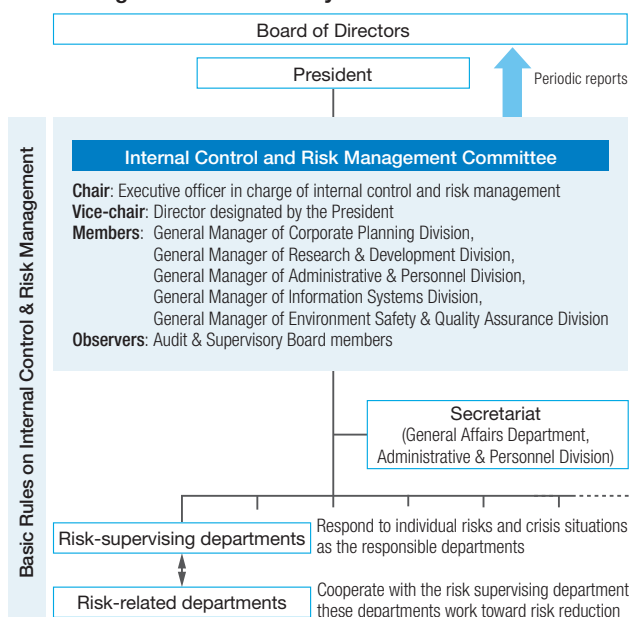
# Risk Management

## Risk Management System

At MGC, all business divisions actively assess and prioritize risk situations and devise risk reduction measures. The Internal Control and Risk Management Committee, chaired by the executive officer in charge of internal control and risk management, provides direction and supervision for each department and deliberates on problems that require a companywide response. It periodically reports to the Board of Directors on the state of risk management. While MGC's

business primarily centers on manufacturing, we identify and evaluate risks associated with business execution beyond just manufacturing inherent in our operations and internal control systems. We then take appropriate measures. In the event that a serious risk is identified, we set up a special group (Crisis Response Headquarters) to address it according to internal rules.

### Risk Management Promotion System



### Business and Other Risks

1. Endogenous business risk
2. Overseas business risk
3. Joint venture risk
4. Product quality risk
5. Natural disaster and accident risks
6. Information security risk
7. Compliance risk
8. Human rights risk
9. Climate change risk
10. Investment risk
11. Currency risk
12. Financing and interest rate risks
13. Litigation risk

### Specific Activities of the Internal Control and Risk Management Committee (Fiscal 2023)

#### Matters discussed

- Review of internal control and risk management activities in each department
- Details of disclosure related to business and other risks
- Response to proposals from the Internal Audit Division
- Overview of annual activities
- Policy of next fiscal year

#### Matters reported

- Final report on response to spread of COVID-19
- MGC Group Guidelines for Emergency Situations

Please refer to the Corporate website for details on business and other risks.  
<https://www.mgc.co.jp/eng/ir/policy/risk.html>

## Strengthening Response to Sustainability and Risk

The MGC Group manages risk by identifying materiality issues that should be addressed by management to achieve both social and economic value, and by identifying the risks and opportunities associated with these materiality issues.

The division supervising materiality identifies risks and opportunities. We set KPIs that are suitable for reducing risks, maximizing opportunities, and measuring

achievement of our vision. Since materiality is promoted in conjunction with the Medium-Term Management Plan, the Sustainability Promotion Committee and the Sustainability Promotion Council confirm the progress of materiality management.

Please refer to "Materiality" on page 33 for details on materiality, risks and opportunities.

### Main Meeting Bodies Related to Sustainability and Risk

Meeting body	Participating members	Main risks handled	Particularly relevant materiality	Meetings held in fiscal 2023
Environment and Safety Meeting	Chair: President Directors, Audit & Supervisory Board members, business site managers, other	<ul style="list-style-type: none"> <li>• Environmental and safety risks</li> <li>• Process safety and disaster prevention/occupational safety and health risks</li> <li>• Chemical and product safety risks</li> </ul>	<ul style="list-style-type: none"> <li>• Proactive response to environmental problems</li> <li>• Ensuring occupational safety and health/process safety and disaster prevention</li> </ul>	1
Quality Assurance Meeting	Chair: President Directors, Audit & Supervisory Board members, business site managers, other	Quality risks	Chemical/product quality and safety assurance	1
Human Rights Expert Committee	Chair: General Manager of Administrative & Personnel Division General Manager of Purchasing & Logistics Division, General Manager of Environment Safety & Quality Assurance Division, other	Human rights risks	Respect for human rights	2
Carbon Neutrality Promotion Technical Committee	Chair: General Manager of Production Technology Division General Manager of Corporate Planning Division, General Managers of business divisions, General Managers of business administrative divisions, other	Climate change risks	Proactive response to environmental problems	2

---

## Risk Assessment in the Supply Chain

---

MGC has positioned improvement of the CSR level in areas such as the environment, labor conditions, and human rights throughout the entire supply chain, from raw material procurement to manufacturing and sales, as one of our management materiality priorities.

With the understanding and cooperation of our business partners, MGC shares its requirements through the Basic Concepts Related to Raw Material Procurement Activities and Mitsubishi Gas Chemical CSR Procurement Guidelines to promote CSR procurement.

In order to build a supply chain that complies with laws and regulations while taking environmental and safety concerns into account, with regard to important raw materials, we conduct surveys of our suppliers using the CSR Procurement Self-Assessment Tool (SAQ) created by the Supply Chain Working Group of the Global Compact Network Japan. The survey began in fiscal 2020, and we have received responses from 191 companies as of fiscal 2022. We have started asking our suppliers to respond to the SAQ when beginning new transactions, and we will continue to further promote CSR activities in the supply chain in the future.

### Respect for Human Rights

At the MGC Group, we adhere to strict MGC Corporate Behavior Principles and the MGC Group Code of Conduct, which call for us to respect individual personality and human rights, while not discriminating on the basis of race, gender, nationality, age, religion, or place of origin, as well as not harming the dignity of others. Our Code of Conduct also stipulates that sexual harassment and power harassment are prohibited. These guidelines and

codes – along with the five fundamental principles\*<sup>1</sup> of the International Labor Organization (ILO) – have also been communicated to our Group companies overseas. With the signing of the United Nations Global Compact (UNGC), we indicated our will to promote responsible business practices by ensuring our strategy and execution conform with the 10 UNGC principles on “protection of human rights,” “elimination of unjust labor,” “support for the environment” and “anticorruption.”

We strive to reinforce these principles on a day-to-day basis through training sessions, internal communications, and Human Rights Week. Furthermore, we are engaged in the improvement of knowledge and the collection of information through membership in the Mitsubishi Human Rights Enlightenment Council and through participating in a variety of training and information exchange meetings on human rights. Furthermore, in fiscal 2023, we established the Mitsubishi Gas Chemical Group Human Rights Principle with the approval of our Board of Directors. In order to address respect for human rights throughout the Group, we have organized a companywide Human Rights Expert Committee as an advisory body to the Sustainability Promotion Committee. We have also established a Human Rights Hotline for all stakeholders, including Group officers, employees, temporary employees, and others. Starting in fiscal 2024, we have identified respect for human rights as a materiality issue and established promotion of human rights due diligence as a KPI to be systematically addressed.

\*1 (i) Freedom of association and the right to collective bargaining, (ii) elimination of forced labor, (iii) effective abolition of child labor, (iv) elimination of discrimination in respect of employment and occupation, and (v) safe and healthy working environment

---

## Environment, Safety and Quality Risk Management

---

The MGC Group uses responsible care (RC) for environment and safety and the Q-MGC\*<sup>2</sup> system for quality assurance to support all its production activities. In RC, we address individual issues by identifying business risks through audits, cross-site activities, and process risk assessments, and quantifying them by linking them to safety and disaster prevention assessment tools. We also utilize RC audits of each plant along with environment and safety audits of Group companies to assess the gap between the ideal level and the current state, leading to the resolution of issues in an effort to create a positive spiral in the safety management system.

Meanwhile, in quality assurance, we are implementing activities to ensure quality governance that does not harm corporate value, while covering any risks caused by deficiencies in contracts and communication with business partners. In order to quantitatively assess the state of governance and to ensure continuous improvements based on Q-MGC, checkpoints are codified and also applied to

Group companies. Going forward, we will actively proceed with the implementation of IT and automation in operations through the introduction of previously implemented LIMS\*<sup>3</sup>, the use of a product specification database and an automated SDS creation system, in addition to performing continuous risk evaluation and management of MGC products through support for domestic and overseas chemical management laws and the use of a regional information-gathering system.

In response to the strong social demand for carbon neutrality, we are encouraging the steady implementation of long-term targets based on realistic reduction measures from the perspective of confirming the state of responses to climate change issues.

\*2 A system for positioning quality assurance as an activity for all MGC Group companies and sectors and working toward continuous improvement

\*3 An acronym for Laboratory Information Management System, referring to the quality control system used throughout the plant



## Response to Climate-Related Risks (Disclosure Based on TCFD Recommendations)

Tackling climate change is a major challenge that calls for initiatives on a global scale if we are to achieve a sustainable society. MGC recognizes that solving energy and climate change problems is an important challenge, and is working to solve these issues from the perspective of both climate change mitigation and adaptation.

Specifically, MGC has formulated targets for reducing Scope 1 and 2<sup>\*4</sup> GHG emissions and is working toward their steady reduction. At the same time, MGC is proactively disclosing information on Scope 3<sup>\*5</sup> GHG emissions and is taking action to reduce them in collaboration with its suppliers. MGC is also working to improve energy efficiency and the carbon cycle of raw materials, and to promote energy transition toward the goal of achieving a zero-carbon society by 2050. MGC will also contribute to solving energy and climate change challenges through business operations by deploying innovative process technologies and factoring whole-life-cycle GHG emissions into its design and development processes.

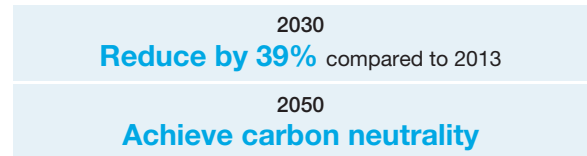
In May 2019, MGC also declared its support for the Task Force on Climate-related Financial Disclosures (TCFD). MGC has assessed the risks and opportunities climate change represents for the Group, and is now endeavoring to strengthen resilience through scenario analysis while

also engaging in sound dialogue with stakeholders. In fiscal 2023, we implemented new scenario analysis on the electronic chemicals and electronics materials businesses.

In March 2021, MGC announced a new objective for achieving carbon neutrality by 2050 with the goal of limiting the increase in average temperature to below 2°C, and expanded the scope to the entire Group in March 2022. MGC encourages the development of energy systems to achieve carbon neutrality, while aiming to expand the range of products conducive to carbon neutrality.

<sup>\*4</sup> Scope 1 emissions are GHG emissions directly generated by MGC; Scope 2 emissions are indirect GHG emissions associated with use of energy (mainly electric power) purchased from external suppliers  
<sup>\*5</sup> Scope 3 emissions are indirect GHG emissions generated in supply chains through organizational activities such as raw material sourcing, manufacturing, distribution, sales, and waste disposal

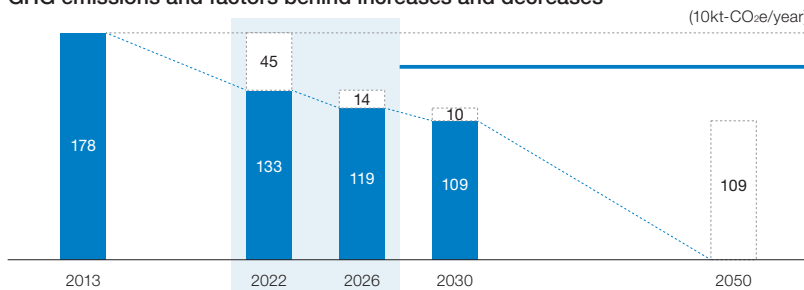
### Long-Term GHG Emissions Reduction Objectives of the MGC Group



Please refer to the Sustainability Data Book for environmental data. <https://www.mgc.co.jp/eng/sustainability/esg.html>

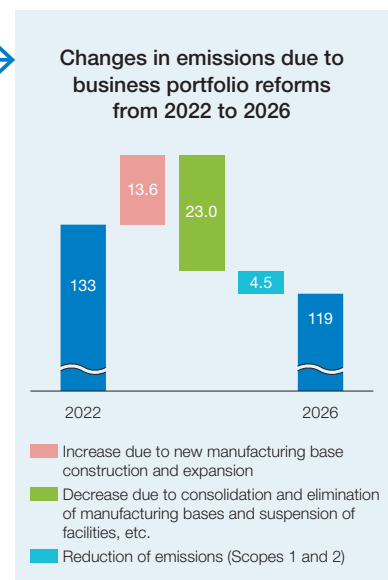
### MGC's Roadmap to Carbon Neutrality

#### GHG emissions and factors behind increases and decreases



Period	2013-2022	2023-2026	2027-2030	2031-2050
Increase due to new manufacturing base construction and expansion		-13.6		
Decrease due to consolidation and elimination of manufacturing bases and suspension of facilities, etc.		23.0	2.6	46.9
Reduction in emissions due to R&D collaboration <sup>*6</sup>				
Reduction of emissions (Scope 1)	45.0	1.9	2.6	10.0
Upgrade to highly efficient facilities, energy savings				
Fuel change		1.1	0.2	
Reduction of emissions (Scope 2)		1.5	2.3	30.5
Introduction of renewables and use of transitional energy				
Collaboration with energy supply companies			2.4	21.6

<sup>\*6</sup> Deploy new energy systems/CCUS, etc.



### Physical Risks: Impact on Business Sites Due to Increased Severity of Climate Damage (Flooding, Storm Surge, Drought)

#### Assumptions behind Scenario Analysis

- Evaluation points: Mid-century and end of century
- Scenario: Temperature rise (4°C: Continuation of current oil and coal-dependent economic activity; 2°C: Advance climate change countermeasures)
- Analysis subjects: 11 MGC sites; 34 domestic Group company sites; 20 overseas Group company sites
- Assessed flood, storm surge and drought hazards on five levels against current level (baseline), and confirmed number of sites where hazard level is highest at middle and end of century when applying 2°C and 4°C scenarios
- External reference information: Flood Hazard Map, WRI Aqueduct Floods, JRC Flood Hazard Map for World, WRI Water Risk Atlas, IPCC AR5, etc.

## Evaluation Results (Scope: 65 Locations in Japan and Overseas)

	Number of sites evaluated as highly hazardous				
	Baseline	2°C scenario		4°C scenario	
		Mid-century	End of century	Mid-century	End of century
Flood risk	2	2	2	2	3
Storm surge risk	0	1*7	1*7	1	1
Drought risk	0	1	1	1	2

\*7 Substituted with forecasts based on RCP 4.5 due to constraints on external information

### Policies and Initiatives Going Forward

Based on these results, we will conduct a more detailed analysis on the sites evaluated as highly hazardous, and also strengthen BCP, while proceeding with measures such as developing multiple manufacturing sites, buildup of inventory, and reduction of equipment stoppage risk.

### Newly Implemented Scenario Analysis (Fiscal 2023)

#### Transition Risks and Opportunities

##### Assumptions behind Scenario Analysis

- Evaluation points: 2030, 2050
- Scenario: Increased temperature
  - Main external information referred to in decarbonization scenario (below 2°C)
    - IEA WEO 2022 SDS (World gradually reducing emissions to keep global increase in average temperature to less than 2°C)
    - SSP1 (Rapid development progressing in low-income countries, global economic inequality being resolved, and technological development advancing rapidly)
  - Main external information referred to in baseline scenario (4°C)
    - IEA WEO 2022 STEPS (World in which average temperature increases by approximately 2.5°C in around 2100 due to course of emissions according to plans announced by each country at present)
    - SSP2 (Growth anticipated to between that of SSP3 – with little international cooperation, little investment in technological development, and slow economic growth – and that of SSP1 scenario of decarbonization)
- Analysis subjects: Electronic chemicals and electronics materials businesses
- Conduct quantitative assessment of financial impact of risks and opportunities in existing business portfolio and draft response strategy

### Evaluation Results

	Risks and opportunities (■ Risks ● Opportunities)	Main initiatives
Risks and opportunities in decarbonization scenario	<ul style="list-style-type: none"> <li>● Increased demand for high-value-added products due to high economic growth compared to the baseline scenario</li> <li>● Technological innovations in response to requests to improve power consumption efficiency</li> <li>● Increase in semiconductor installation volume due to expansion of battery electric vehicles</li> <li>● Expansion of semiconductor market due to enhancement of power transmission infrastructure facilities</li> <li>■ Strict regulations such as carbon tax</li> </ul>	<ul style="list-style-type: none"> <li>● Expansion of product grades supporting high-value-added products</li> <li>● Development of unique grades</li> <li>● Expansion of product grades leading to low power consumption</li> <li>● Development of grades that can be used in the high-frequency range</li> <li>● Increase in production capacity</li> <li>● Weight reduction</li> <li>● Promotion of reduction of GHG emissions in production processes (including logistics)</li> </ul>
Risks and opportunities in baseline scenario	<ul style="list-style-type: none"> <li>● Significant increase in population compared to the decarbonization scenario</li> <li>■ Low economic growth compared to the decarbonization scenario due to lack of international cooperation and inhibition of technological development</li> <li>■ Increased fossil fuel prices</li> </ul>	<ul style="list-style-type: none"> <li>● Promotion of activities in emerging countries</li> <li>● Expansion of research and development, and implementation of cross-value innovation</li> <li>● Further strengthening of internal and group collaboration across organizational boundaries</li> <li>● Development of product grades for killer apps</li> <li>● Expansion of product grades supporting high-value-added products</li> <li>● Reduction of size and weight of products, adoption of environmentally friendly materials</li> </ul>

Please refer to Corporate Report 2021 for details on scenario analysis of the hydrogen peroxide and MX-Nylon businesses implemented in fiscal 2020, MGC Report 2022 for details on scenario analysis of the polycarbonate and MXDA businesses implemented in fiscal 2021, and MGC Report 2023 for details on scenario analysis for the optical materials and oxygen absorbers businesses implemented in fiscal 2022.  
 Corporate Report 2021 [https://www.mgc.co.jp/eng/ir/files/MGC\\_eCorporateReport2021.pdf](https://www.mgc.co.jp/eng/ir/files/MGC_eCorporateReport2021.pdf)  
 MGC Report 2022 [https://www.mgc.co.jp/eng/ir/files/MGC\\_Report2022e.pdf](https://www.mgc.co.jp/eng/ir/files/MGC_Report2022e.pdf)  
 MGC Report 2023 [https://www.mgc.co.jp/eng/ir/eng/corporate/pdf/cr\\_2023/MGC\\_Report-2023E-A3.pdf](https://www.mgc.co.jp/eng/ir/eng/corporate/pdf/cr_2023/MGC_Report-2023E-A3.pdf)

## Climate Change Risk Governance and Risk Management

MGC deliberates and makes decisions on addressing climate change risk and other sustainability key issues in the Sustainability Promotion Council, chaired by the President and primarily made up of all directors, including outside directors, with Audit & Supervisory Board members also attending. Important matters deliberated upon in the Sustainability Promotion Council are decided by the Board of Directors. The participation of corporate sector heads in the Sustainability Promotion Committee, an advisory body to the Sustainability Promotion Council, ensures key sustainability issues are adequately considered.

Furthermore, to develop a response to climate change, MGC has established the Carbon Neutrality Promotion Technical Committee as one of the sustainability promotion expert committees to serve as an advisory body to the

Sustainability Promotion Committee.

Long-term objectives for reducing GHG emissions have been incorporated into the Medium-Term Management Plan and materiality, with management taking a leading role in their implementation.

To gain a quantitative understanding of climate change risks, in April 2021 MGC introduced an internal carbon pricing system. In capital investment plans involving an increase or decrease in CO<sub>2</sub> emissions, the cost or effect of applying and converting the internal carbon price (10,000 yen/Mt-CO<sub>2</sub> equivalent) will be used to help make investment decisions, and encourage the creation of technologies and products that promote CO<sub>2</sub> emissions reductions and contribute to building a low-carbon society.



Message from the  
Executive Officer in Charge

## Improving our R&D systems and speeding up the research-to-business process on new themes in response to accelerating, radical changes in our market environment

### Yoshinori Isahaya

Director, Managing Executive Officer  
Responsible for Research & Development,  
in charge of Intellectual Infrastructure,  
General Manager of Intellectual Infrastructure Center

### Research theme evaluation system and other applications raise organizational efficiency and expedite decision-making

In the chemical industry, the process of turning a research theme into a business has been described as the “work of a decade.” These days, however, if a given project isn’t planned over a three-year period, we will fall behind the accelerating pace of change in our market environment.

To speed up R&D processes, we established and implemented a scoring system for evaluating research themes in 2022. By applying the same evaluation criteria to all research themes, we’re now able to more objectively set their order of priority in distributing resources. This also raises consciousness among our researchers about investment effects and encourages consensus building in their respective labs in deciding what to do about themes showing slower progress. It effectively assesses research themes and increases the frequency of assessments. In addition to regular monthly briefings by each lab, research

progress meetings, in which executives of the Research & Development Division and general managers of research laboratories meet, are now held monthly rather than quarterly. This has smoothed the coordination of opinions and decision-making and is giving us a great sense of velocity. Researchers have more opportunities for direct talks with executives, and apparently recognize the advantages of a system that allows them to proceed with management’s blessing.

In line with this, the perceived efficiency and speed of laboratory processes rose steadily during the previous three-year management plan, and I think we will be able to demonstrate specific results toward our goal of “new business creation” over the coming three years of the new Medium-Term Management Plan.

### Three priority targets and a business field map to visualize R&D strategy

Under the current Medium-Term Management Plan, we will accelerate selection and focus in R&D efforts with results of the previous plan and development delays for new businesses in mind. First, the Research & Development Division sets the desired R&D direction for the medium to long term and projects how we can contribute to the society we desire for 2030 and 2050. Backcasting from these projections sparks in-depth discussions on the creation of new businesses. After this kind of review, the new Medium-Term Management Plan focuses on ICT and mobility for their substantial growth in recent years, and on the medical/food area for its market size in proportion to population with little volatility effect to secure diverse profit generators.

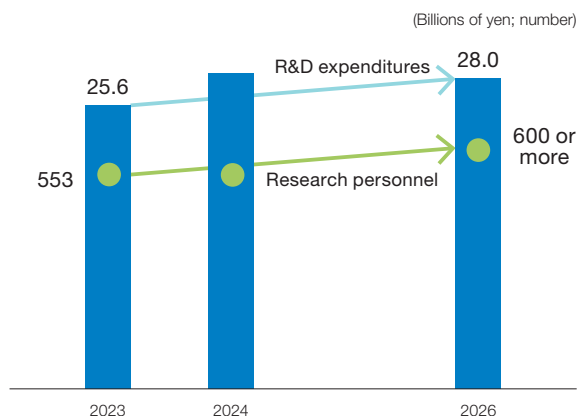
To assist in creating products that can differentiate MGC from competitors in our targeted areas, we built a business field map to visually represent the relationships among market trends, growth fields, proprietary basic technologies, and progress toward commercialization. To do this, we inventoried the technologies we have been

building as our foundation, our human capital, IP, and the like, and added views of inter-business synergies and collaborations with other companies and academia. Using this field map, we’ve made long and short lists of basic technologies to complement the organic development of technologies in-house.

With recent progress in generative AI, statistical science and computational chemistry, including MI, our R&D environment is substantially changing, and we project that change will continue to accelerate. MGC is promoting initiatives to ensure we incorporate such changes in our operations and expand that effort to the entire Group in the near future.

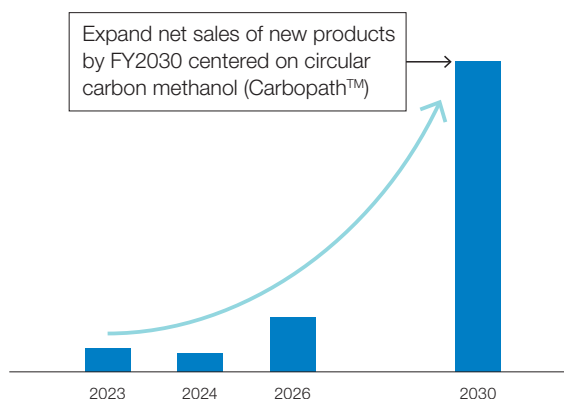
Now, in the first year of our new Medium-Term Management Plan, I understand that we are in a crucial phase that will significantly influence our future. With this understanding, we will generate new research themes in priority fields and work to develop them into new businesses, training DX personnel and applying and deepening our IP landscape.

### R&D Expenditures and Research Personnel\*1



\*1 Excluding Group companies

### Net New-Product Sales\*2



\*2 Net sales of products launched within the past five years as of FY2024 and products scheduled for launch in FY2024 onward

### Key Points for Setting Research Themes

	1. Business Portfolio Target Area	2. High Suitability to the Company	3. Future Growth Areas
<b>Type A: Theme in Growth Area of Existing Business</b> Priority injection of resources driving future growth	←————→		
<b>Type B: Theme in Growth Area Outside Existing Business</b> Development of new markets such as contributing to a sustainable society	←————→		←————→
<b>Type C: Theme with Commensurate Return on Investment in Existing Business</b> Expansion of existing business through detailed response for each product	←————→		

### New/Next-Generation Businesses OXYCAPT™

#### Inquiries up from US and European pharma firms for world's only multilayer plastic containers

Shota Arakawa — Research Manager, Hiratsuka Research Laboratory



Although we are a chemical company, we promote and sell final products such as plastic vials and syringes under the OXYCAPT™ brand globally. To commercialize these plastic containers, it was very important to acquire safety verification in accordance with the laws and regulations of each country and rigorous quality management systems for container production. To meet these requirements, we have established good relationships with pharmaceutical companies, certification bodies, testing organizations, etc. since the early stages of product development. When we heard from a pharmaceutical company that only OXYCAPT™ passed their drug stability testing, we were moved and realized we were the producer of unique products.

Although the glass-like gas barrier property is the biggest feature of OXYCAPT™, we feel its all-around performance is highly appreciated by pharmaceutical

companies thanks to other excellent properties. As we have also obtained excellent data related to drugs stored at deep-cold and cryogenic temperatures, we have received a lot of inquiries from pharmaceutical companies. As a future strategy, I think we should consider overseas production because our customers are mainly located in the US and Europe.





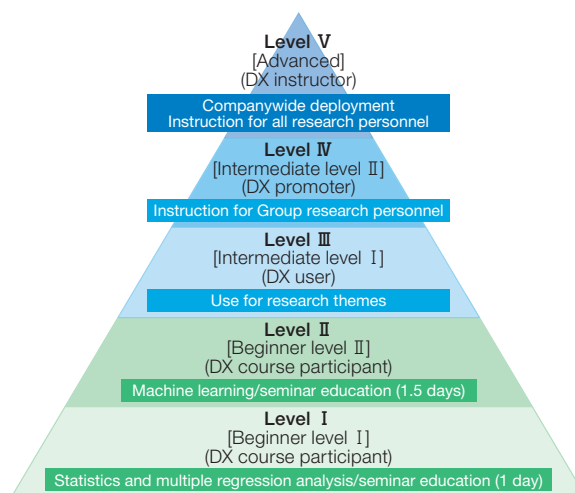
# DX Promotion

## DX Education Program in the Research Field

The launch of the DX team specializing in DX analysis and introduction of a supercomputer in 2021 made it possible to perform more advanced large-scale computation. This has produced remarkable results in predicting molecular structures with target properties and analyzing synthesis reactions using computational chemistry. In addition, using in-house developed data science software, we have been able to help speed up research and development by estimating optimal molecular structures, raw material compositions, and manufacturing conditions. We have also started work on automating and autonomizing experiments.

We are deploying these DX technologies not only for specialist teams, but for all research personnel. Specifically, we are conducting level-specific education, having classified five DX technology levels, I to V. By fiscal 2026, we are aiming to have all research personnel reach Level I DX personnel status. We are deploying DX technologies across the entire Group, aiming to achieve next-generation

research and development that is accelerated by applying DX technologies before experiments to narrow down the experiment conditions.



## Intellectual Property Strategy

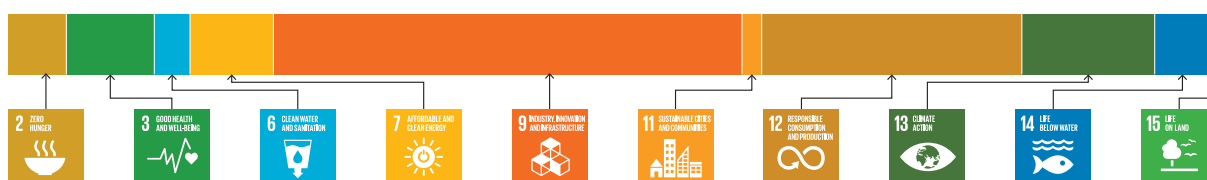
Intellectual property strategy is particularly important for chemical manufacturers pursuing sustainable growth. Acquiring patents and trademarks and the like for new compounds, materials, manufacturing processes, and applications and analyzing information are core functions supporting innovation and growth. With the aim of creating intellectual property based on ongoing research and development activities, the Intellectual Infrastructure Center works with research and development divisions to formulate intellectual property strategies aligned to the external environment surrounding research themes and their development stage. It also files patent applications and acquires patents based on the strategy, and conducts information analysis using an IP landscape. For example, over 75% of the patent applications were related to differentiating businesses and new/next-generation businesses, which received priority allocation of management resources under the previous Medium-Term Management Plan, showing that the Company's competitive advantage has been strengthened through numerous research and development results. In addition, an overview based on the perspective of SDGs clearly shows that we have a wide range of technology corresponding to the various SDGs. By further advancing

the use of an intellectual property management system that utilizes digital technology, we will work to transition to data-driven intellectual property operations.

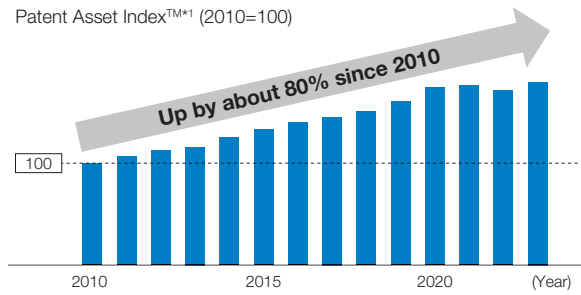
In our IP landscape, which combines external and internal information, we aim to propose research and development, business and management, and intellectual property strategies. One way we can utilize this is by taking an overview that combines external information on patents, documents and public releases, collected by AI, and accumulated internal information on intellectual property, research and development, and sales. This enables us to match social needs with the Company's unique technologies and resources (seeds). We are using this in analysis of technology trends in the field, analysis of potential competition, analysis of likely customers, and for discovering new applications for existing products. In this way, we are expanding the use of this system from research and development to business divisions.

In the near future, AI will quantitatively indicate the suitability of our research fields and themes including SDGs, and support the formulation of research strategies, thereby enhancing the value of the MGC Group's intellectual property and contributing to the Group's Mission of "creating value to share with society."

### Total Patent Value (Patent Asset Index<sup>TM\*</sup>) of the MGC Group Identified from the Perspective of SDGs (As of December 31, 2023)



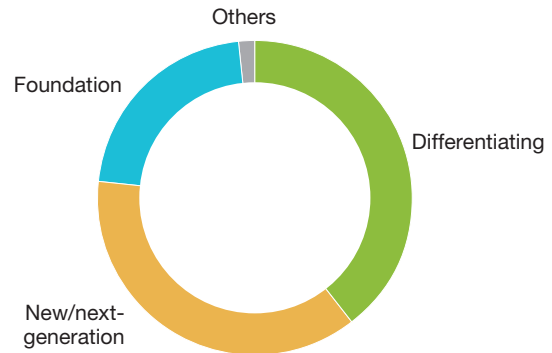
### Trend in Total Patent Value of the Group



\*1 An index that visualizes the technological strength and influence of an applied patent in global terms, obtained by objectively evaluating quality (value based on how often the subject patent is cited worldwide) and quantity (number of applications)  
Source: H. Ernst and N. Omland, World Patent Information, vol. 33, pp. 34-41 (2011)

### Ratio of Patent Applications

(Non-consolidated, fiscal 2023 results)



## Promotion of SMART-FACTORY

MGC aims to balance ensuring safety, the foundation of its production activities, with environmental protection and efficient production. We are constantly pursuing our targets for all of these by raising the level of technical capability of employees engaged in production activities, and by introducing and continually improving the latest facilities (hardware) and systems (software).

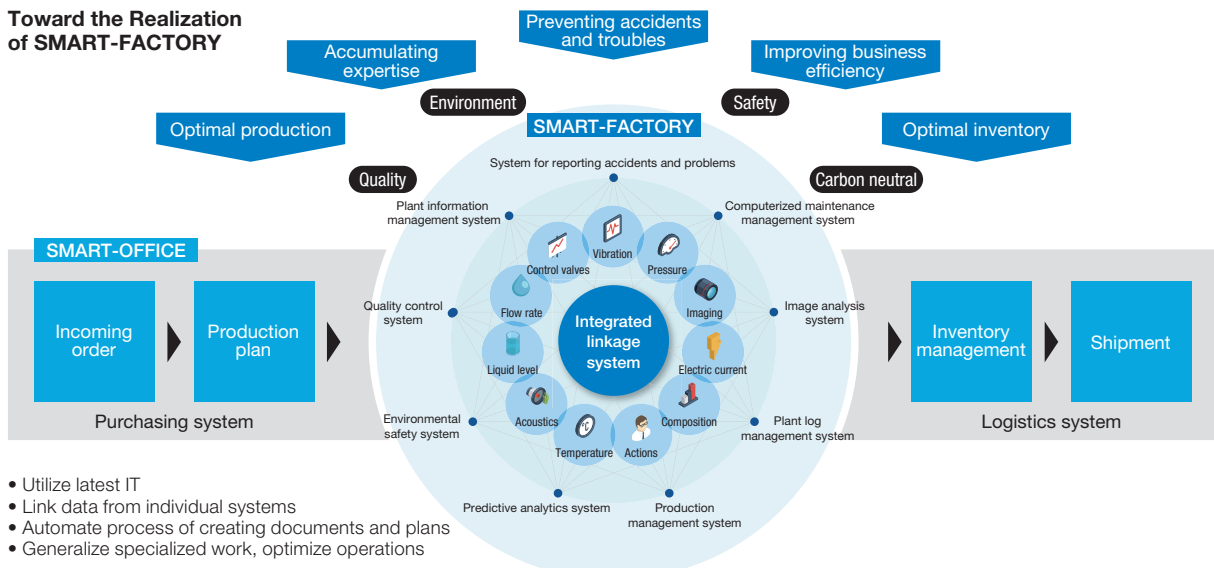
We will focus on initiatives aimed at the realization of the SMART-FACTORY, which ensures advanced stabilization, improved productivity, and safety by promoting the technical improvement of processes and facilities, as well as the use of digital technologies in the form of sensors, systems, and mobile devices.

In fiscal 2023, we engaged in highly efficient production saving resources and energy by utilizing digital data accumulated in our data management systems, and focused on developing human resources who are able to utilize data. Furthermore, we conducted trials of quality forecasting and predictive analytics systems and operational

support and work support systems using AI, and are gradually implementing them. In our visual inspection system for corrosion of pipes in plants by applying Human in the Loop Machine Learning, which is in operation in the Niigata Plant, we have introduced new knowledge acquired during operations and we are now expanding the scope of application. In addition, we have fitted predictive analytics systems based on data analysis to some of our equipment, which enables us to respond to anomalies that were not able to be predicted with the previous alarm management approach. Data on plant operation is being used to build a SMART-FACTORY database and connect systems with the aim of coordinating with SMART-OFFICE for optimizing supply chains.

Through the utilization of these new technologies, we are realizing a higher level of plant operations, including stable operations through prevention of accidents and other problems and improved efficiency in routine operations.

### Toward the Realization of SMART-FACTORY



# Promoting Human Capital Management

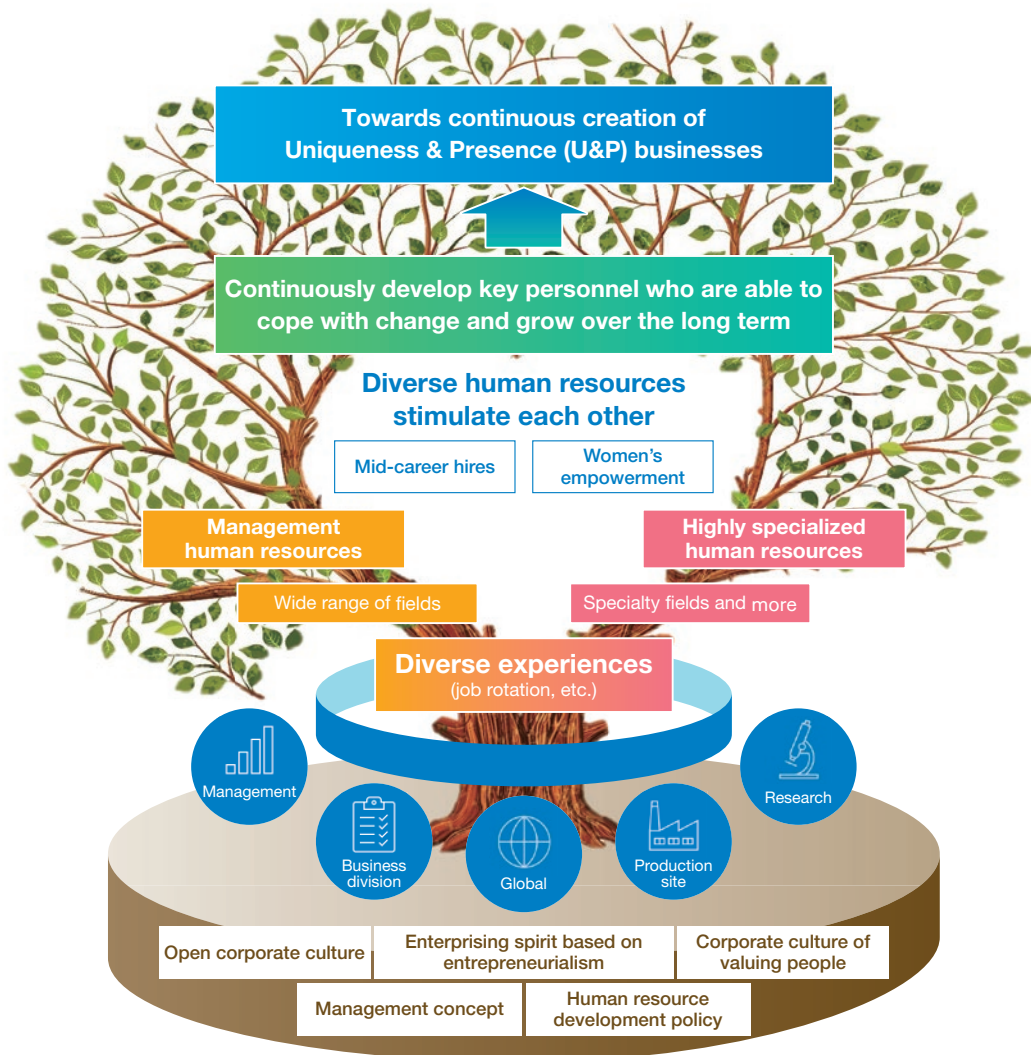
## MGC's Human Capital Management

MGC's defining philosophy begins with "striving to create a place where there is job satisfaction and a dynamic group in which motivations and abilities are respected," and our management approach considers people to be the most important capital for value creation. The human resource vision articulated in our basic human resource development policy is one of "autonomous and highly motivated employees," "warmhearted and sensitive employees," and "employees that think and learn through work."

Enhancing human capital management is one of our policies for promoting sustainability management cited in the current Medium-Term Management Plan, which started in April 2024. To enhance human capital in coordination with our management strategy, we are promoting a human resource strategy of conducting optimal career formation and skills development of employees, while enhancing key personnel who are able to cope with change and grow over the long term.

Our human resource strategy promotion is rooted in the principles that the Company has cultivated an open corporate culture, an enterprising spirit based on entrepreneurialism, and a corporate culture of valuing people, based on the belief that it is autonomous human resources and organizations that lead to a robust company able to respond to changes in the business environment. We have used the term "key personnel" to refer to management and highly specialized human resources who will lead each business division based on the Company's overall policy and individual business strategies amid accelerating changes in society. By allowing human resources to accumulate diverse experience and stimulate each other, we will draw out their full potential, continuously producing key personnel and creating U&P businesses with the aim of increasing corporate value over the medium to long term.

## Overall Image of Human Resource Strategy



## Human Resource Diversification and Career Formation for the Sustainable Development of Key Personnel

The defining characteristics of the MGC Group are the broad scope of its business domains and its business expansion in the global market. Since the previous Medium-Term Management Plan, we have been working to increase the number of researchers. Our policy is to conduct recruitment with an awareness of medium- to long-term business expansion, and we plan to continue increasing recruitment of new graduates and mid-career hires going forward.

We conduct career recruitment for securing diverse human resources through flexible year-round recruitment according to the experience of the candidates. We also use methods such as alumni recruitment.\*<sup>1</sup> Moreover, in initiatives aimed at promoting women's empowerment, we are continuously implementing proactive recruitment of women as new graduates and mid-career hires with an eye to forming a population that will become a group of future management candidates. In conjunction with this, we have created an environment where diverse human resources can thrive, including the revision of our personnel systems

in fiscal 2023 to ensure that promotion opportunities are not affected by life events and to enable early selection.

Career-track employees experience overseas assignments and projects while they are young to form careers based on an understanding of their individuality, while technical employees are also deliberately rotated through jobs in sales, corporate planning, and management divisions. This is to provide opportunities for them to accumulate diverse experiences by making use of the Group's characteristic of wide-ranging business domains. Furthermore, in addition to career formation through ordinary work, we also implement grade-specific and job-specific education and training curricula to promote skills development and stimulate ambition.

By forming careers through the abovementioned diverse experiences and training, we have created a system for continuously developing key personnel.

\*<sup>1</sup> A method of recruitment that involves approaching people who have retired from the Company and re-hiring them as a workforce ready for immediate deployment.

### MGC Education System

	Grade-specific education	Job-specific and specialist education	Self-development, other
Managerial level	<ul style="list-style-type: none"> <li>Organizational management training</li> <li>Mid-level manager training</li> <li>New manager training</li> </ul>	<ul style="list-style-type: none"> <li>Business skills (Logical communication, problem-solving skills, negotiation strategy, facilitation, coaching skills, design thinking)</li> <li>GLOBALIS Management School</li> <li>MGC Group cross-industry social events</li> <li>Mitsubishi Marketing Association</li> <li>Global human resource development</li> <li>DX education</li> <li>Marketing education</li> <li>Engineer development</li> <li>Patent study sessions</li> <li>Environmental management, quality management, and health and safety education</li> <li>HAZOP*<sup>2</sup></li> <li>Placements at research institutions, such as universities</li> <li>Other specialized education and seminars</li> </ul>	<p><b>Self-development</b></p> <ul style="list-style-type: none"> <li>Languages</li> <li>Business skills</li> <li>Management</li> <li>Technology and skills</li> <li>Other online training</li> </ul> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>Compliance and internal control education</li> <li>Education raising awareness for human rights</li> <li>Sustainability education</li> <li>diversity, equity, and inclusion (DE&amp;I) promotion education</li> <li>Others</li> </ul>
Mid-level employees	<ul style="list-style-type: none"> <li>Manager candidate training</li> <li>Mid-level employee training</li> </ul>		
Junior employees	<ul style="list-style-type: none"> <li>Junior employee training</li> <li>Follow-up training</li> <li>New employee basic training</li> <li>New employee training</li> </ul>		

\*<sup>2</sup> An acronym for Hazard and Operability Studies, a technique for identifying risks for complex processes and equipment

### Fiscal 2024 DE&I Promotion Activity Plan

Basic policies	Item promoted	Challenges and targets
Promoting awareness about respect for diverse values and ways of thinking	Fostering awareness	<ul style="list-style-type: none"> <li>Improvement of understanding of promotion of DE&amp;I within the Company</li> <li>Improvement of awareness of DE&amp;I throughout the entire MGC Group</li> </ul>
	Raising awareness for human rights* <sup>3</sup>	<ul style="list-style-type: none"> <li>Promotion of human rights awareness activities</li> <li>Strengthening of measures to prevent harassment</li> </ul>
Creating an environment that ensures diverse work styles	Work style reforms	<ul style="list-style-type: none"> <li>Reduction of total working hours and improvement of productivity</li> <li>Enhancement of systems enabling diverse and flexible work styles</li> <li>Improvement of safety net</li> </ul>
Diversifying human resources and creation of an organization that makes the most of each and every employee	Women's empowerment	<ul style="list-style-type: none"> <li>Promotion of career development support for female employees</li> <li>Promotion of support for balancing work and home life</li> </ul>
	Diversification of human resources	<ul style="list-style-type: none"> <li>Diversification of hiring formats (year-round hiring of experienced candidates for career-track positions)</li> <li>Promotion of more opportunities to people with disabilities</li> </ul>
Developing human resources able to demonstrate individual strengths	Development of organizations and human resources	<ul style="list-style-type: none"> <li>Improvement of organizational performance</li> <li>Promotion of development of human resources able to exhibit their individual strengths</li> </ul>
Promoting mental and physical health (health and productivity management)	Promotion of health (improvement of nutrition, exercise, and rest)	<ul style="list-style-type: none"> <li>Improvement of health awareness and knowledge</li> <li>Establishment of exercise habits</li> </ul>
	Disease prevention	<ul style="list-style-type: none"> <li>Enhancement of measures to address lifestyle diseases</li> <li>Promotion of measures to address mental health</li> <li>Reduction of the smoking rate among employees</li> </ul>

\*<sup>3</sup> For details on "Respect for Human Rights," please refer to "Risk Management" on page 40.



## Employee Well-Being

We aim to be a company where employees feel “a sense of well-being.” To achieve this goal, we strive to balance individual employees’ sense of achievement and growth in their work and the Company’s sustainable growth. By offering opportunities and an environment where people can refine their individuality and capabilities and build on their strengths, and allowing employees to engage in diverse work styles, we aim to become an organization with higher productivity over the medium to long term. In addition, we assign personnel according to individual skills and work to enhance our education and training programs to encourage autonomous career formation. In conjunction with these efforts, we also seek to promote co-creation with various partners while making use of the MGC Commons innovation center, which was established in 2023 as a space to provide opportunities for further internal and external human resource exchanges, with the end goal of creating new businesses and products.

In terms of work-life balance, MGC also endeavors to create systems and an environment in which each employee can maintain their motivation for work, taking an active role over the long term in ways befitting their individual circumstances. Until now, we have focused on the reduction of working hours by reviewing workflows and shortening meeting times to enable work styles that

are diverse, flexible, and do not rely on long work hours. Recently, we have been digitalizing our business processes and accelerating operational efficiency improvement through measures such as DX with regard to R&D activities. At the same time, we are checking to see how well established these measures are, while working to reduce total working hours and improve productivity. In addition, we have also built systems regarding working spaces and times in stages, through the introduction of flextime without core time and working from home, which became a permanent part of our systems in 2023. Another feature of the Company is its full-range of employee benefits, such as a housing allowance to relieve the economic burden on employees, creating an environment where they are able to work with a sense of security. In 2023 and again in 2024, we took steps to improve working conditions such as wages, with increases in base salaries, including for employees rehire after retirement. For young employees in particular, we focused on improving compensation to reward them for the roles expected of them.

We will promote the above measures for increasing employee well-being in conjunction with our DE&I initiatives designed to leverage the individuality and diverse approaches, experiences, and abilities of each employee.

### COLUMN

### Opening of the MGC Commons Innovation Center

On December 1, 2023, the MGC Commons innovation center opened in Koto Ward, Tokyo. Preparations for its opening started in 2020 as a project to commemorate the 50th anniversary of the Company’s founding. The MGC Commons is designed as a facility for connecting diverse internal and external people and organizations and developing human resources to create innovation. The center offers various spaces to promote spontaneous exchanges between users by inspiring their creativity and sense of playfulness, with meeting rooms of various sizes, an information dissemination space, and an activity-based, open working spaces. Through free collaboration across organizational boundaries, the Company aims to make it a place for developing people beyond the conventional scope of human resource development and nurturing the seeds of innovation. At the opening ceremony, astronaut Soichi Noguchi was invited to give a commemorative lecture on the theme of “Taking Bold Challenges with Free Ideas.” Approximately 800 people attended the ceremony on-site and online.



MGC Commons innovation center (Kiba, Koto Ward, Tokyo)



Opening ceremony: A lecture by Soichi Noguchi

**COLUMN****Promotion of Male Employees Taking Parental Leave**

MGC believes that male employees taking parental leave have a positive impact on themselves and their families, leading to higher job satisfaction. Accordingly, it has set a target of 40% or higher in fiscal 2023 to encourage them to use their leave. As a result, 74% took leave, achieving the target, with the average period of leave being around two months. Furthermore, to create a culture that supports the balance of work and family life throughout the entire workplace, we are engaged in providing a range of pamphlets, etc. introducing systems, as well as activities, to raise awareness of taking parental leave among all employees.

**57 days**

Average number of days of parental leave taken by male employees (non-consolidated) (fiscal 2023)

**COLUMN****Encouraging the Taking of Annual Paid Leave**

Previously, MGC's ratio of annual paid leave taken was around 80 to 85% every year. In order to increase employees' awareness of taking annual paid leave, we established a KPI in the previous Medium-Term Management Plan to measure the percentage of employees taking fewer than 10 days of annual paid leave, and aiming for 0% in fiscal 2023. As a result of measures to foster employee awareness and promote an accepting workplace environment, such as issuing internal company newsletters and putting up posters, we achieved this target, and the ratio of annual paid leave taken also rose to 90%.

**0%**

Percentage of employees taking fewer than 10 days of annual paid leave (fiscal 2023)

⇒ For details on the ratio of male employees taking parental leave and the ratio of annual paid leave taken, please refer to "Performance Data" on pages 79-80.

## Promoting Health and Productivity Management

MGC established the Basic Policy on Health & Productivity Management in October 2022 to further promote the creation of an environment in which employees can work in good physical and mental health. Based on this policy, we are further diversifying, expanding, and improving the effectiveness of measures to maintain and improve health.

The checkup compliance rate for regular health checkups of all officers and employees was over 99% in fiscal 2023. Industrial physicians and public health nurses actively provide guidance when the results of tests indicate the need for retesting or in the event that there are any specific findings. In addition, with a view to preventing illnesses while people are still young, we have reinforced the regular checkup for younger employees by adding relevant items to it.

A comprehensive Employee Assistance Program (EAP), including a stress check, is implemented to ensure mental well-being, providing employees with an environment in which they can freely consult outside specialists regarding their concerns. Furthermore, we endeavor to continuously improve our workplace environment and raise employee awareness by providing appropriate feedback of Group analysis results of the stress checks to each organization head and by implementing mental health training at the time

of entry into the Company and when a promotion is earned.

In recognition of the initiatives implemented to date, MGC was certified as a Health & Productivity Management Outstanding Organization 2024 (large enterprise category) by the Japan Health Council and the Ministry of Economy, Trade and Industry for the fifth successive year.

### Ensuring the Safety of and Providing Medical Support for Employees Traveling or Posted Overseas

By engaging an outside consultant for security and medical assistance, and receiving advice based on analysis of threats to safety by country, we are able to promptly acquire accurate information, and, when necessary, provide that information to employees posted or traveling on business overseas, as well as using it to determine whether it is advisable to travel or not, and on appropriate safety measures for travel.

In terms of medical care, we have established a comprehensive support system for employees posted or traveling on business overseas, including referrals to local hospitals, telephonic consultations with doctors in Japanese, preventive advice on local infectious diseases, and arrangement of medical transport in case of emergencies.

## Union and Labor-Management Relations

With a positive relationship of mutual trust and respect, labor and management at MGC work together to address a variety of issues. We hold regular management council meetings with the aim of sharing our understanding of management policies and the business environment, including such key topics as work styles, employee benefits, and treatment, and meetings of the Personnel System Review Committee for joint labor-management discussion of various programs throughout the year.

Together, we have revised the personnel system, the reemployment system, and our retirement plans. Other issues such as wages and bonuses are determined through yearly collective bargaining and administrative negotiations.

Note that there were 1,892 labor union members as of the end of March 2024. Average employee tenure was 18.5 years (19.0 years for men, 13.9 years for women).<sup>\*4</sup>

<sup>\*4</sup> Including employees seconded to subsidiaries

Focus

# Implementing Strategic Rotations

## Development Leveraging the Characteristics of All Employees

With the aim of realizing our Group Mission of “creating value to share with society,” we have established a basic human resource development policy to create vibrant workplaces where employees achieve self-fulfillment by refining their individuality, improving their knowledge and capabilities, consciously setting high goals, and achieving these goals.

Our basic human resource development policy includes the development policy “development leveraging the characteristics of all employees,” and we believe that we should leverage and utilize the strengths of all employees,

focusing on each person’s characteristics through the development process. However, for career-track employees in particular, one of the distinctive programs of MGC is job rotations for long-term career formation. The MGC Group is distinguished by the broad scope of its business domains. By accumulating diverse experiences in these domains and broadening their perspective, employees can grow to become key personnel—management or highly specialized human resources. Moreover, mutual stimulation between employees who have gained experience leads to increased long-term organizational capabilities.

### Employee Comments

## Strategic Job Rotations Provide an Excellent Opportunity to Understand the Many Facets of the Company’s Organization

**Sachiko Arie** — General Manager, Public Relations Department, Administrative & Personnel Division



When I joined the Company as a technical employee, my initial thought was only to contribute to the Company through research. However, as my work changed through job rotations, I became involved with other roles in the organization that I had not seen before. As a result, I gained an excellent opportunity to acquire new perspectives, business skills and human networks. In particular, when I was transferred to a division dealing with sustainability during my time working at the Niigata Plant, while there was a technology-related aspect to the position, I had more opportunities to discuss problem setting and solution methods with a strong social awareness, which gave me a new perspective.

My current assignment is in the Public Relations Department of the Administrative & Personnel Division, where we use diverse communication channels and strive to communicate the Company’s distinctive businesses and strengths in a clear way to stakeholders. Through these efforts, I hope to increase the circle of people who identify with the Company’s philosophy and value propositions, some of whom may wish to become business partners or employees of the Company, or support us in other ways, and cooperate with them to form a positive flow of interaction that “creates value to share with society.”

#### 1. Corporate Research Laboratory (Tsukuba), Niigata Research Laboratory (7.5 years)

Here I worked on development and research of a new catalyst for methylamine and special amino acids. From my supervisor and senior colleagues at this time, I learned about the importance of reliable test results, testing and reporting methods, and many other essential work skills for laboratory work.

#### 2. Planning & Development Division, former Natural Gas Chemicals Company (3.5 years)

In this position, I was responsible for each phase of commercialization from new needs exploration to prototyping, overseas legal compliance and other aspects, for various products under development. Collaboration with team members from in and outside the company was essential and I worked hard to build relationships of trust.

#### 3. R&D Department, Niigata Plant (8.5 years)

I worked for the first time in the area of chemical plant design. In construction projects, I worked on scheduling, budget management, and negotiation with engineering companies. During this time, I was promoted to manager, and I also took just over two years of leave following childbirth.

#### 4. SX Department, Niigata Plant (2 years)

In this newly established department, I worked on transforming the facility into a sustainable plant, through carbon neutrality and other initiatives. I was assigned as Carbon Neutral Group Leader, and then as General Manager of the SX Department.

#### 5. Head Office Public Relations Department (1 year)

I have worked to disseminate information about the Company’s activities, both internally and externally, through news releases, advertising, and company newsletters. In this department it is essential to be attuned to employee engagement while also taking a companywide perspective.

## Strategic Rotations Tailored to Each Person's Individuality

The Company consciously conducts job rotations that offer wide-ranging experience in multiple business locations and divisions to help employees form their careers over the medium to long term. For example, there are cases of young employees experiencing overseas assignments or projects and technical employees working not only in laboratories and plants, but also in sales, corporate planning, and management divisions. Few companies in the chemical industry conduct this kind of cross-divisional human resource transfer, and it is a distinctive characteristic of MGC. By conducting diverse rotations, human resources gather a wide range of experience without becoming set in one mold. This helps to draw out their individual qualities and potential, leading them to be active in various fields in the future while confirming their own career aspirations. The Company also provides one or more opportunities each year for employees to consider career formation through consultation with their supervisor, during which they set personal targets and check on

the status of achievement. In the setting of work targets, there is an emphasis on taking on new challenges, and on promoting personal growth while staying conscious of the long-term goals of the Company. Managers who conduct consultations as supervisors undergo training to make them aware of guiding their subordinates to growth and for acquiring management capabilities.

While conducting strategic personnel rotations, we also take steps to continuously develop more diverse human resources. We proactively recruit diverse human resources, including new graduates, people with experience at other companies, women, non-Japanese people and so forth, without concern for such attributes, seeking to further enhance our human capital. Looking ahead, we will take a more systematic approach to human resource development and advance management of key position successors and so forth, including visualization of human resource information.

### Employee Comments

## On Track to Become a Specialist in Design and Construction through Diverse Experience

**Hidemi Hirashima** — MGC PURE CHEMICALS AMERICA, INC. (Construction Manager)



My first assignment was at the Yokkaichi Plant, where I worked on process inspection. My life as a working professional was one where every day brought about a different experiment. In my third year, I was selected to work in the future on designing plant expansions. To acquire the necessary skills, I was transferred to an engineering team at the Tokyo Research Laboratory, where I spent one year learning about the work of plant design. That experience was an opportunity for me to develop further expertise in the field of construction and design.

My first overseas assignment was a polyacetal plant expansion project in Thailand. It made a deep impression on me, and when this plant whose design and construction I had been in charge of started operating without any problems, I shared a moment of joy with the local employees who had worked with me. Using these diverse experiences in Japan and overseas, and what I have learned from our excellent local partners, I am now managing overall construction for the expansion of a semiconductor chemical plant at the Texas Plant in the United States. It is quite a challenge to build a new facility adjacent to a facility that is operating, and I feel a tremendous responsibility and sense of mission every day. MGC has plans to make investments to expand various facilities going forward. I will use my own experience to contribute to the construction of competitive plants.

#### 1. Basic skills acquisition at Yokkaichi Plant and Tokyo Research Laboratory (7 years)

I learned about the basics of process inspection while working at the plant, and about plant design while working at the laboratory. After that I was responsible for design and construction of a hybrid chemical manufacturing plant at the plant, and experienced the whole process from creating specifications to commissioning.

#### 2. Challenge of overseas work, from Yokkaichi Plant to an overseas site (2.5 years)

I participated in a polyacetal plant construction project in Thailand. After approximately one year working in detailed design work with the project team for the Yokkaichi Plant, I was assigned to Thailand to take charge of construction management, on-site inspections, and commissioning.

#### 3. Accumulation of diverse experience, from Niigata Plant to an overseas site (4 years)

I participated in a methanol and DME plant construction project in Trinidad and Tobago. After familiarizing myself with the equipment at the Niigata Plant and Saudi Methanol Company (AR-RAZI) in Saudi Arabia, I was assigned to the area. I was responsible for overall project management and technical inspections by the government.

#### 4. Providing technical support from the Tokyo Research Laboratory (3 years)

We considered increasing production at the Thailand Plant, and have constructed a pilot plant in the laboratory to support the research themes it has undertaken.







#### 5. Promoting construction management at an overseas site (1.5 years)

I was assigned to MGC PURE CHEMICALS AMERICA, INC., where I work on a project to expand the Texas Plant. I cooperate with local employees to carry out the construction project with a team mainly comprising members on assignment from MGC. I am responsible for overall management of the project, including construction schedule and budget management.



# Business Operations and Main Products

## Specialty Chemicals

<p><b>Inorganic Chemicals</b></p> <p>Primarily focused on cleaning agents for semiconductors</p>	<p style="text-align: center;">Electronic Chemicals (EL Chemicals)</p> <p style="text-align: center;">Hydrogen peroxide — Super-pure hydrogen peroxide — Hybrid chemicals</p>
	<p>Global market share</p> <p><b>#1 Super-pure hydrogen peroxide</b></p> <p>Secures supply capacity matching the growth of customers in response to robust demand from overseas semiconductor manufacturers. Also globally builds development facilities adjacent to customers and continuously provides products contributing to the speedy resolution of problems.</p>
<p><b>Electronics Materials</b></p> <p>Top manufacturer of substrate materials for IC plastic packaging</p>	<p style="text-align: center;">BT Products</p> <p style="text-align: center;">Cyanate monomers — BT resin — Copper-clad laminates (CCL) — Prepreg</p> <p style="text-align: center;">OPE derivatives</p>
	<p>Global market share</p> <p><b>#1 BT products</b></p> <p>Steadily responds to robust demand in the semiconductor industry. Establishes and strengthens a marketing system conscious of end customers, and offers a wide range of high-performance products, primarily targeting the mid-range and high end of the market.</p>
	<p>Global market share*1</p> <p><b>#1 OPE derivatives</b></p> <p>Contributes to technology advancement and meets market needs for inter-wire embedding ability and high thermal resistance and reliability while suppressing electrical signal loss for multi-layered motherboards with advanced semiconductor package substrates and chips.</p>
<p>*1 As CCL material for AI servers</p>	
<p><b>Optical Materials</b></p> <p>Contributes to higher performance of smartphones with world-leading refractive index</p>	<p style="text-align: center;">Raw material monomer (In-house manufacture/external procurement) — Optical polymer</p>
	<p>Global market share*2</p> <p><b>#1 Optical polymer</b></p> <p>Continues timely development and market launch of new grades with the aim of further expanding share in the smartphone area, and also focuses on development of materials aimed at applications other than smartphones, such as IoT and sensing applications.</p>
<p>*2 As a highly refractive resin (concave lens)</p>	
<p><b>Engineering Plastics</b></p> <p>Develops engineering plastics</p>	<p style="text-align: center;">Methanol — Formalin — Iupital™ (Polyacetal resin) (POM)</p> <p style="text-align: center;">MX-Nylon (MXD6) — Reny™ (High-performance polyamide resin)</p> <p style="text-align: center;">Bisphenol A (External procurement) — Polycarbonate resin (PC) — PC sheet — PC film</p>
	<p>Global market share</p> <p><b>#3 Polyacetal resin (POM)</b></p> <p>Promotes efficient base operations and strengthening of sales capabilities through a globally integrated management system for production, sales, and development.</p>
	<p>Supply capacity</p> <p><b>#3 Polycarbonate resin (PC)</b></p> <p>Increases the percentage of high-value-added products such as highly transparent grades, and promotes shifting toward a structure less susceptible to market conditions. Promotes research of PC mass-production technology using CO<sub>2</sub> as a raw material.</p>
<p><b>Oxygen Absorbers</b></p> <p>Wide range of solutions in daily food, electronic component and pharmaceutical markets</p>	<p style="text-align: center;">AGELESS™ — RP System™ PharmaKeep™ Anaero Pack™</p> <p>Global market share</p> <p><b>#1 AGELESS™</b></p> <p>Aims to expand market share in the food area and also focus on the expansion of sales overseas. Also, provides total solutions for maintaining quality for non-food areas such as pharmaceuticals, medical parts, electronic components, and cultural property protection.</p>

# Green Energy & Chemicals

### Energy Resources and Environment

Applies domestic natural gas exploration and development technology, and develops it for other energy businesses

Natural Gas

Domestic gas field development

- Higashi-Niigata Oil and Gas Field
- Iwafune-Okii Oil and Gas Field

Methanol/Ammonia production\*<sup>3</sup>

Resource development technology

Energy Utilization

Geothermal power generation\*\*<sup>4</sup>

- Sumikawa Geothermal Power Station
- Wasabizawa Geothermal Power Station
- Appi Geothermal Power Station

Natural gas power generation\*\*<sup>4</sup>

- Fukushima Natural Gas Power Station

Chemical company

#1

### Geothermal power generation

Utilizing more than four decades of experience and accomplishments that distinguish us as a unique chemical company, contributes to the reduction of GHGs through the supply of clean energy.

\*<sup>3</sup> Only the Niigata Plant's methanol pilot is currently operational \*<sup>4</sup> Joint venture

### C1 Chemicals, Life Science

First in Japan to produce methanol using natural gas as raw material

Methanol production using overseas gas\*\*<sup>4</sup>

- Saudi Arabia
- Venezuela
- Brunei
- Trinidad and Tobago

Methanol

Methanol protein research

Formalin

Dimethyl ether (DME)

Methyl methacrylate (MMA)

Life science-related products

Iupital™ (Polyacetal)

Ammonia

Methylamines

Cyanate ester monomers

BT resin

Production capacity\*\*<sup>5</sup>

#3

### Methanol

Establishes a competitive position through active overseas expansion and a total business model encompassing the manufacturing process, catalyst technology, a global sales network and the manufacture of derivatives. Focuses on commercialization of circular carbon methanol as Carbopath™ using accumulated technologies and sales networks.

\*<sup>5</sup> Total for all affiliates using MGC technology

### High-Performance Products

Manufactures competitive products and derivatives using proprietary technology

Supercid HF-BF<sub>3</sub> technology

Meta-xylene

Purified isophthalic acid (PIA)

Aromatic aldehydes

Meta-xylenediamine (MXDA)

MX-Nylon (MXD6)

Global market share

#1

### Meta-xylenediamine (MXDA)

By building a new plant in Europe, where demand is greatest, establishes a more stable and competitive supply chain. In addition to stable growth of conventional infrastructure applications, accelerating expansion into environmentally friendly applications such as wind power blades.

Global market share

#1

### MX-Nylon (MXD6)

As momentum for extension of quality assurance and food waste reduction increases in the food packaging material field, aims to establish a position by providing recyclable barrier material friendly to the global environment. Also strengthens downstream deployment such as weight reduction of vehicles by replacing metal parts with resin.

Global market share

#1

### Aromatic aldehydes

Conducts continuous product development that reflects customer needs, aiming to diversify applications, add value, and further strengthen relationships with customers.



Message from the  
Executive Officer in Charge

**To meet the range of customer needs and win their trust, we refine our technologies and hone our skills to read ahead of change**

**Ryozo Yamaguchi**

Director, Managing Executive Officer  
In charge of Specialty Chemicals Business Sector

---

## Direction of portfolio improvement: Reinforce cutting-edge ICT and expand medical/food

---

As a result of expected conditions changing extensively from when the plan was written and despite necessary course corrections, we didn't achieve the numeric goals set for the Specialty Chemicals Business during the three-year term of the previous Medium-Term Management Plan. For example, semiconductor demand slowed, mainly due to reduced demand for smartphones and other products that use semiconductors, to a greater degree than the effect of supply chain confusion. We were also affected by the conflict between the US and China, which opened a rift in the world economy.

Learning from this experience, the new Medium-Term Management Plan recognizes that our businesses must be resilient enough to quickly respond to change. Therefore, we formulated an image of the vision for MGC in 2030, and decided to continue reinforcing our capabilities in

cutting-edge fields with strong growth potential, including semiconductors and telecom devices, where we can draw maximum value from our accumulated technologies and customer base. We also decided to expand into daily life fields such as pharmaceuticals and foods, where we project stable demand, as a way to reform our portfolio. In particular, the semiconductor market is the most important field for the Specialty Chemicals Business Sector. Over the coming three years, we will produce results from capacity expansion efforts we've made, including increasing production of BT materials in Thailand and building new plants or expanding existing ones in the US, Taiwan and elsewhere for EL chemical production. We firmly believe that we can fulfill societal needs by accurately reading world trends and deepening dialogue with our customers.

---

## Building a more collaborative environment across the organization to refine unique MGC Group technologies

---

It goes without saying that the markets for our final products are shaped not by us, but by our customers. So to make us their first choice, it's important that MGC Group products provide value that meets customer expectations. The knowledge and experience we've built over the years through customer contact and resulting basic technologies are assets that won't appear as line items in our financial statements, but because of them, we take pride in our Group's ability to remain current with the high pace of technological innovation and adapt to new markets.

Customer needs vary, so we have to secure the seeds to satisfy them. MGC Group employees have diverse personalities and advantages. The accumulation of their individual differences and experience, knowledge and expertise, in other words forming a whole greater than the sum of its parts, leading to the development of unique products informed by outside ideas and stimuli will most definitely become a driving force in our ability to read

ahead of future market changes.

Applying these ideas, we partially reorganized in April 2024. For example, the Engineering Plastics Division, along with Mitsubishi Engineering-Plastics, has unified its production, sales and technological operations into the Business Optimization Task Force, clarifying issues in the PC business and the like. We set up the Technology & Innovation Group to promote R&D across Group firms in a collaborative environment. In the Inorganic Chemicals Business, we gathered process technologies and quality- and safety-related information controlled by each Group company within the Technology Management Department, substantially increasing both the technical and safety powers of the entire Group and raising the level of quality control. By accelerating groupwide action to refine unique Group technologies, we are working for sustainable growth to achieve our Medium-Term Management Plan targets.

## Basic Information

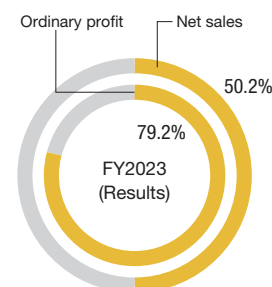
**Business lines:** Inorganic chemicals, engineering plastics, optical materials, electronics materials, oxygen absorbers

### Major Group companies:

TAIXING MGC LINGSU CO., LTD., SAMYOUNG PURE CHEMICALS CO., LTD., MGC PURE CHEMICALS AMERICA, INC., MGC PURE CHEMICALS SINGAPORE PTE. LTD., MGC PURE CHEMICALS TAIWAN, INC., MGC Filsheet Co., Ltd., Global Polyacetal Co., Ltd., THAI POLYACETAL CO., LTD., KOREA POLYACETAL CO., LTD., MITSUBISHI GAS CHEMICAL ENGINEERING-PLASTICS (SHANGHAI) CO., LTD., Mitsubishi Gas Chemical Trading, Inc., MITSUBISHI GAS CHEMICAL SINGAPORE PTE. LTD., MITSUBISHI GAS CHEMICAL AMERICA, INC., MGC Electrotechno Co., Ltd., MGC ELECTROTECHNO (THAILAND) CO., LTD., EIWA CHEMICAL IND. CO., LTD., Mitsubishi Engineering-Plastics Corporation, THAI POLYCARBONATE CO., LTD., KOREA ENGINEERING PLASTICS CO., LTD., Otsuka-MGC Chemical Company, Inc., RYODEN KASEI CO., LTD., TAI HONG CIRCUIT INDUSTRIAL CO., LTD., GRANOPT CO., LTD., Samyang Kasei Co., Ltd., MGC AGELESS Co., Ltd., AGELESS (THAILAND) CO., LTD.

**Number of employees:** 4,849

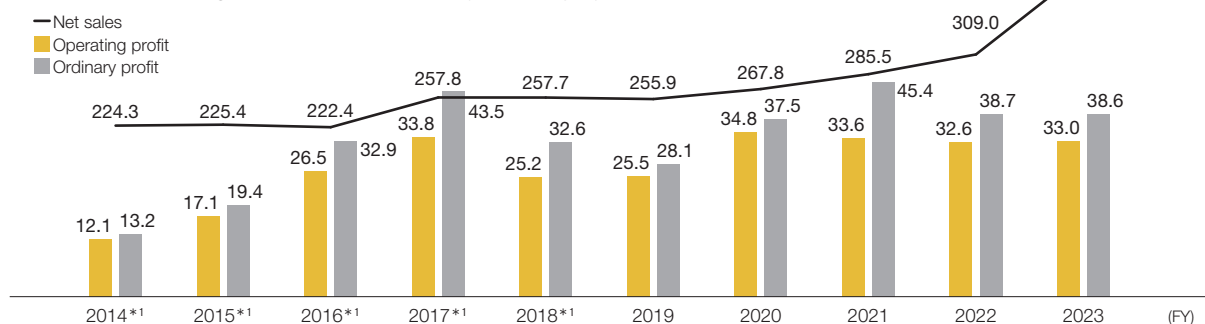
### Ratio of Net Sales and Ordinary Profit



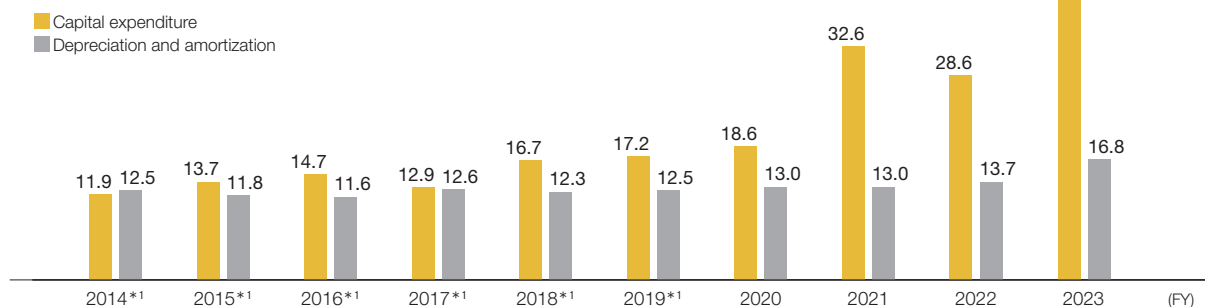
Note: The compositional ratios are calculated excluding "Other and Adjustment"

## Specialty Chemicals Business Performance

### Net Sales / Operating Profit / Ordinary Profit (Billions of yen)



### Capital Expenditure / Depreciation and Amortization (Billions of yen)



\*1 Aggregate of former segments (Specialty Chemicals/Information and Advanced Materials)

## Review of the Previous Medium-Term Management Plan

Differentiating businesses	Electronics materials	BT materials recovered after hitting bottom in FY2022 Q4 and returned to a growth trend. OPE also grew, meeting the target.
	Electronic chemicals (EL chemicals)	Maintained top share*2 of the global market despite the impact of semiconductor market slowdown. Currently strengthening production structure in Japan and overseas.
	Optical materials	Sales volume target missed, but maintained competitive advantage based on increased product performance and customer attraction capability, etc. Grew into a core business earning stable revenue.
	Polyacetal (POM)	Achieved the target due to increase in market prices, etc. Established GPAC*3, creating a structure for integrating production, sales, and development operations.
Foundation businesses	PC-related	Profits are improving at production sites in China, but adverse market environment with excess supply continued. Effect of MEP*4 conversion to a consolidated subsidiary still not fully manifested. Sheet film business in a downturn. Positioned as a business requiring intensive management under the new Medium-Term Management Plan with a view to rebuilding.

\*2 As super-pure hydrogen peroxide

\*3 Global Polyacetal Co., Ltd.

\*4 Mitsubishi Engineering-Plastics Corporation



### Specialty Chemicals Business—Overall Strategy

**Value Increase Scenario Looking ahead to 2030**

- Continue to strengthen our business in high-growth, cutting-edge fields (semiconductors, communication devices, etc.) while expanding our business in the highly stable lifestyle-related areas (medical/food, etc.).
- Increase the economic value of the PC-related business, which requires intensive management, aiming to transition it to a U&P business.
- Promote increase in business competitiveness by making eco-friendly businesses profitable.

---

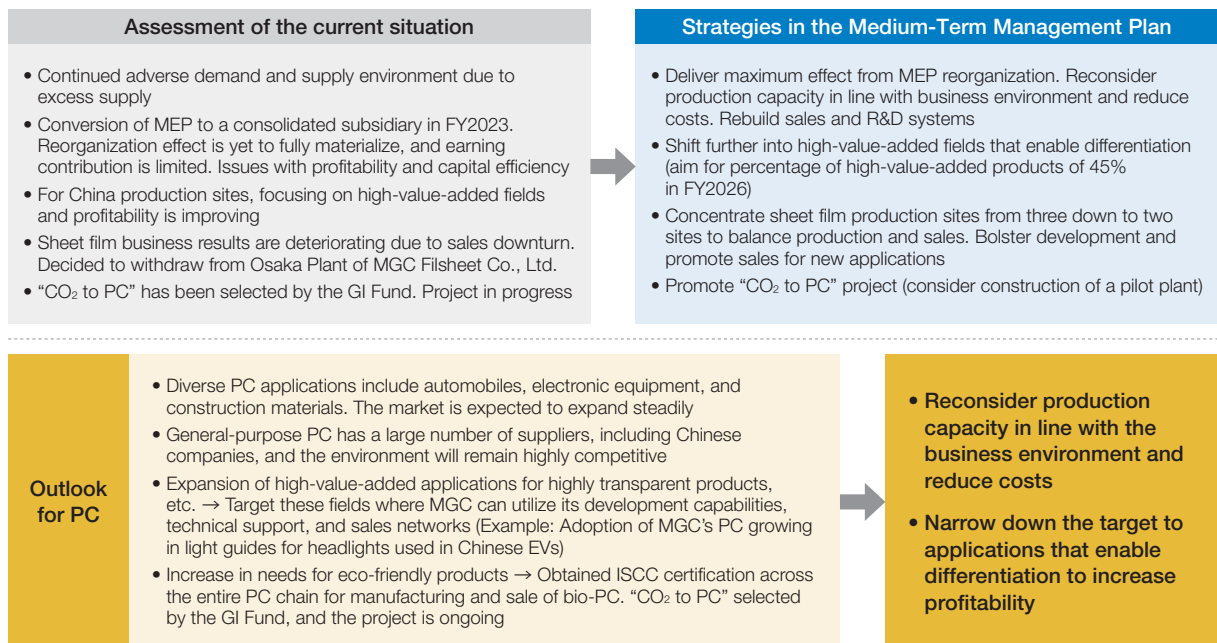
**Current Medium-Term Management Plan Numerical Targets (FY2026)**

Net sales	Operating profit	Ordinary profit	EBITDA
¥490.0 billion	¥65.0 billion	¥65.0 billion	¥100.0 billion

### Classification of Product Lines and Action Plan under the Medium-Term Management Plan

Business segment	Classification of product lines	Main action plan
U&P businesses	Inorganic chemicals	Increase production capacity worldwide as semiconductor manufacturers build and augment production sites, and supply high-quality products.
	Optical polymer	Aim for further expansion of applications beyond smartphones.
	BT materials for IC plastic package	Aim to expand share further by entering new fields.
	Polyacetal	Pursue global expansion through a double-brand strategy (Iupital™ and Kepital™).
	Ultra-high refractive lens monomers	Meet expanding demand by constructing new manufacturing facilities and develop biomass products.
Foundation businesses	Oxygen absorbers	Aim to increase profitability through a change in business structure, such as expanding sales into fields beyond food.
New/next-generation businesses (main development products)	Recycled EP	Reduce environmental impact while also securing profitability.
	New BT laminate materials	Lead the semiconductor substrate materials market by meeting customers' increasingly sophisticated demands.
	New semiconductor cleaning solutions	Contribute to the evolution of semiconductors through the development of products that respond to new materials and structures.
Businesses requiring intensive management	Polycarbonate/sheet film	Aim to improve profitability through thorough implementation of a high-value-added strategy and rationalization of production, sales, and R&D systems.

### Strategy for Businesses Requiring Intensive Management



## U&P Business Topics

### Electronic Chemicals

#### We will design even more highly productive plants while taking countermeasures for raw material procurement risk

**Satoshi Okabe** — General Manager, Technology Management Department, Inorganic Chemicals Division



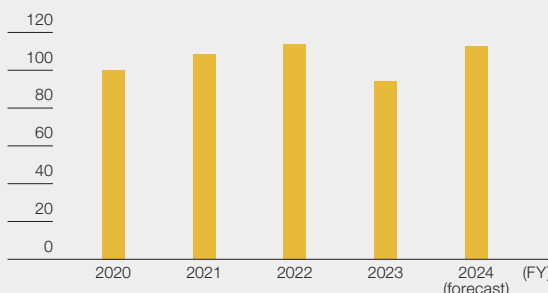
Among MGC's electronic chemicals, we have the top share in the global market for super-pure hydrogen peroxide, which is used in the cleaning and etching processes for semiconductor manufacturing. Collaborating with production sites in Japan and overseas, we provide a stable supply of high-quality products that meet the quality standards for advanced nodes required by customers. For hybrid chemicals, which are custom products, our strength is in our research and development capabilities, working closely with customer needs.

As demand continues to expand for super-pure hydrogen peroxide, our strategy for procuring raw materials will be important. Accordingly, we have proposed a strategy that enables stable procurement, such as by learning to use various raw materials and strengthening relationships with suppliers. In the area of hybrid chemicals, there is a risk of a slow-down in development opportunities in the wiring process as it is becoming difficult to miniaturize semiconductors further. On the other hand, we see a good opportunity for new development in advanced IC package applications that aim to improve performance through means other than miniaturization.

During the three years of the Medium-Term Management Plan, we will execute the abovementioned raw materials procurement strategy, while responding to persistently high costs for construction, transport, raw materials, and fuels by establishing a plant design that will achieve high productivity for super-pure hydrogen peroxide, and using it to create an optimal production system, including expansion of each production site. We will bring together the technologies for hybrid chemicals accumulated by our research groups in each country and tackle new fields, such as advanced IC package applications.

#### Net Sales of EL Chemicals

(FY2020 = 100)



### Optical Materials

#### We will expand our product portfolio by developing and diversifying new lens applications

**Noriyuki Kato** — General Manager, Business Development Department, Optical Materials Division



MGC's optical polymer has been widely used as a material for camera lenses in smartphones, VR devices, drones, and other devices. In addition to delivering performance that contributes to thinner lenses and clearer images, we aim to maximize customer satisfaction by providing detailed customer support. We continuously share the improved technologies and materials demanded by customers with our team members in research departments, as well as manufacturing, sales, and quality assurance, so that they can act quickly.

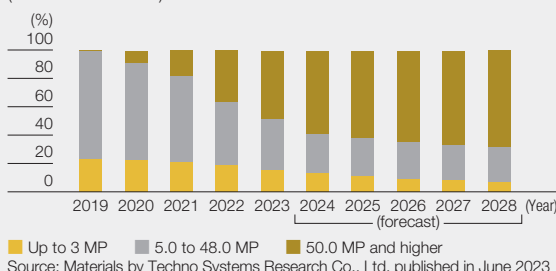
In recent years, our optical polymer has been used in increasingly diverse fields. The continued advance of technologies in fields where high-performance cameras play a critical role, such as automated driving and cross reality (XR), is also a tailwind for our company's growth.

Looking ahead, we aim to increase our ability to respond to customer demands and strengthen our ability to propose products that elicit latent needs. Under the Medium-Term Management Plan, we have established not only financial targets, but also targets for enhancing

our product portfolio through the development and diversification of applications. We are in an era of future uncertainty, but fields that require high-resolution image data captured with camera lenses will continue to expand. Over the next three years, we will support the information society and contribute to improved quality of life for people by developing and supplying high-performance materials.

#### Trend in Increasing Resolution of Smartphones

(Rear main camera)





Message from the  
Executive Officer in Charge

**To establish businesses that help us achieve carbon neutrality, we will boldly rise to the challenge of taking entirely new approaches and realize the resolution expressed in our new division name**

## Hideaki Akase

Director, Managing Executive Officer  
In charge of Green Energy & Chemicals Business Sector

### Three years to pave the road to growth; progress in rebuilding low-margin businesses

During the previous Medium-Term Management Plan, we focused on the changes in our earnings structure with long-term growth in mind. For differentiating businesses, we actively invested in enhancing the production capabilities of our aromatic aldehyde products and construction of a new plant for meta-xylenediamine (MXDA) in the Netherlands. Regarding our foundation business of methanol, we struggled, but the start up of a new production facility in Trinidad and Tobago to reinforce our reliable supply position, at four sites worldwide now, is an important achievement. We are seeing steady progress in the first phase of our Carbopath™, for commercialization in which public interest is growing as a new circular carbon platform.

We've made progress in restructuring unprofitable businesses or those needing rebuilding. In the formalin and polyol business, we suspended operation of two domestic formalin plants and production of paraformaldehyde and other co-products as well, while making the most of M&A

to build an integrated business structure from formalin to downstream adhesive products to raise profitability. In the xylene separation and derivatives business, we will suspend production of orthoxylene and its co-product phthalic anhydride by January 2025. Phthalic anhydride production generates reaction heat, which we have been collecting for reuse in the Mizushima Plant. We will instead work to adjust the plant's energy balance as an alternative solution. As shown by this example, partial suspension of the chemical production chain can affect the balance of our entire operation, requiring transition periods. We understand the need for smooth completion of the shift, with business reorganization always top of mind. The future of the unprofitable purified isophthalic acid (PIA) business will depend on growth in the MXDA business, which also uses meta-xylene as a raw material. As we become less dependent on PIA, I'm confident we can substantially raise the profitability of the entire xylene business.

### Reinforce production with DX and focus on commercialization of life science products

The current Medium-Term Management Plan focuses on ensuring we recoup investments made over the past three years and reinforcing production with DX. If we succeed in making production more flexible, we should be able to substantially improve our business portfolio, for instance by separating co-products. In the life science business, where we have been doing research and development, we are exploring new applications. Since our antibody drug CDMO business has been accumulating manufacturing experience, we'd like to schedule full-scale business entry within the next few years.

As of April 2024, we renamed the Basic Chemicals Business Sector, making it the Green Energy & Chemicals Business Sector. This change is designed to show people within and outside MGC the sector's new direction and commitment to green operations, and make us more attractive as a prospective collaborator.

For a chemical manufacturer, carbon neutrality is a challenging goal. Fortunately, the MGC Group, grown from natural gas development as its founding business, has tangible and intangible resources built up over many years, and is in a position to offer solid solutions related to CO<sub>2</sub> capture-and-storage (CCS) and carbon capture and utilization (CCU). However, businesses contributing to carbon neutrality need approaches that are different from those of the traditional businesses of production and marketing. Without slowing our progress, we have to create business plans that transcend industry boundaries and work with national and local governments. The process of drawing up a business plan as we address complex issues can feel like solving a puzzle. I'm working to build an organization in which employees approach that task with shared knowledge and a sense of adventure, promising greater business feasibility ahead.

## Basic Information

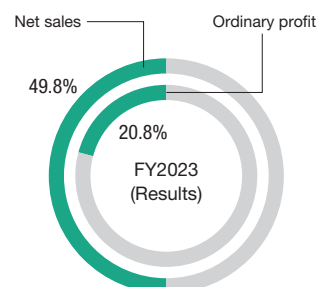
**Business lines:** Natural gas chemicals, xylene chemicals, energy resources and environment, life science

### Major Group companies:

MGC Specialty Chemicals Netherlands B.V., Mitsubishi Gas Chemical Trading, Inc., MITSUBISHI GAS CHEMICAL SINGAPORE PTE. LTD., MITSUBISHI GAS CHEMICAL AMERICA, INC., MGC ENERGY Company Limited, MGC Woodchem Corporation, KOKUKA SANGYO CO., LTD., Japan Saudi Arabia Methanol Company, Inc., METANOL DE ORIENTE, METOR, S.A., BRUNEI METHANOL COMPANY SDN. BHD., Japan Trinidad Methanol Company, Inc., Yuzawa Geothermal Power Corporation, JSP Corporation

**Number of employees:** 2,592

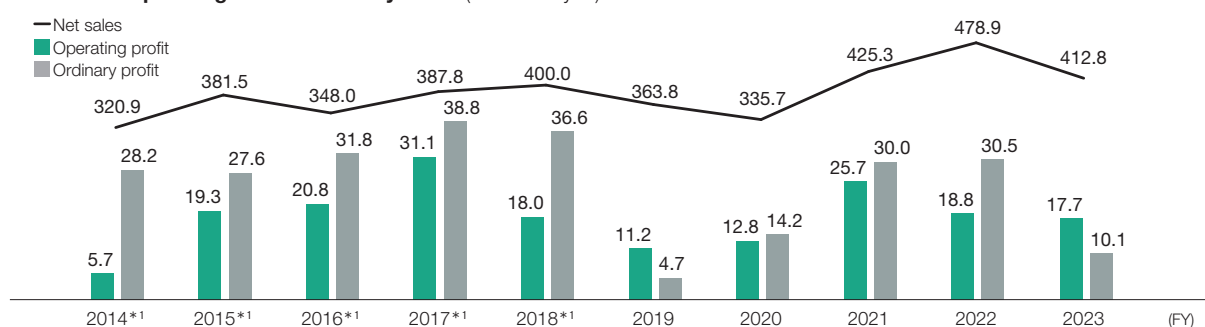
### Ratio of Net Sales and Ordinary Profit



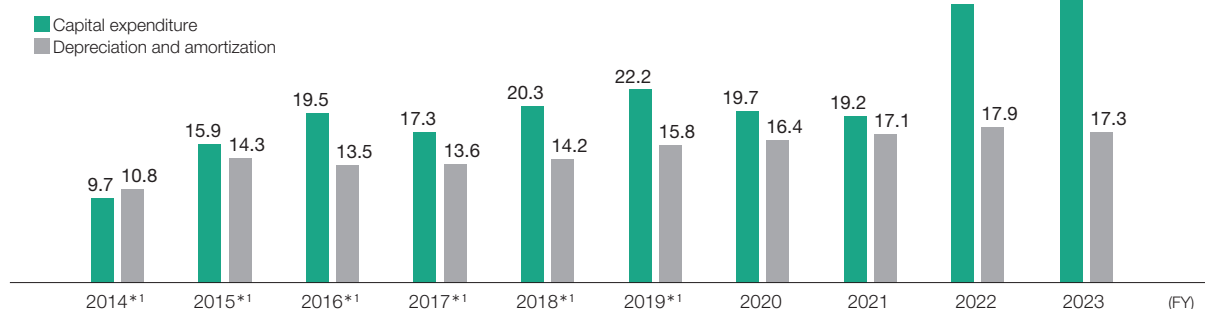
Note: The compositional ratios are calculated excluding "Other and Adjustment"

## Green Energy & Chemicals Business Performance

### Net Sales / Operating Profit / Ordinary Profit (Billions of yen)



### Capital Expenditure / Depreciation and Amortization (Billions of yen)



\*1 Aggregate of former segments (Natural Gas Chemicals/Aromatic Chemicals)

## Review of the Previous Medium-Term Management Plan

<b>Differentiating businesses</b>	MXDA/aromatic aldehydes	The final fiscal year saw demand slump due to a delayed economic recovery in Europe and the U.S. Promoted the MXDA Europe project and increased production capacity for aromatic aldehydes in preparation for demand recovery.
<b>Foundation businesses</b>	Energy resources and environment	Examined commercialization of CCS and renewable energy. Achieved target, mainly due to increase in market prices for iodine and high energy prices, shifted to differentiating businesses.
	Methanol	Promoted CarboPath™ as the circular carbon platform. The capability of earning profit increased mainly due to supply chain streamlining, and shifted to differentiating businesses.
<b>Unprofitable businesses or those needing rebuilding</b>	Formalin and polyol-related	Structural reforms such as concentration of production sites proved successful, shifted to foundation businesses.
	Xylene separators and derivatives	Decided to withdraw from the ortho-xylene chain. PIA*2 continued to be unprofitable due to an adverse market environment. Positioned as a business requiring intensive management under the new Medium-Term Management Plan.

\*2 Purified isophthalic acid



### Green Energy & Chemicals Business—Overall Strategy

**Value Increase Scenario Looking ahead to 2030**

- In the U&P businesses, expand sales of the MXDA and aromatic aldehydes businesses, where we have made large investments, and steadily recover the investments to maximize profits.
- In businesses requiring intensive management, promote measures such as various cost reductions and streamlining of the balance sheet to strengthen their resilience to changes in the business environment.
- Reduce carbon intensity in major raw materials such as methanol as a new initiative to realize carbon neutrality, and develop the businesses in a revalued form.

---

**Current Medium-Term Management Plan Numerical Targets (FY2026)**

Net sales	Operating profit	Ordinary profit	EBITDA
¥350.0 billion	¥22.0 billion	¥32.0 billion	¥52.0 billion

### Classification of Product Lines and Action Plan under the Medium-Term Management Plan

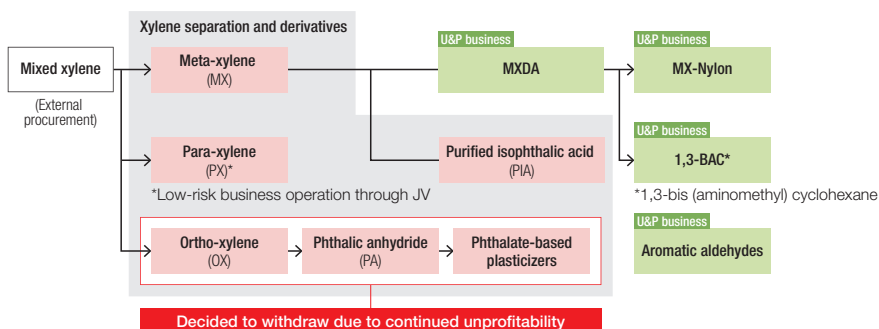
Business segment	Classification of product lines	Main action plan
U&P businesses	MXDA	Reap benefits of investment through steady start of new plant in Europe.
	Aromatic aldehydes	Aim for growth with expansion into new applications.
	MX-Nylon	Expand sales for food packaging material applications and promote response to environmental issues through business activities.
	Methanol	Start production and sales of blue/biomethanol and create a market for circular carbon methanol Carbopath™.
	Energy resources and environmental businesses	Promote creation of CCS business, increase in production of water-dissolved natural gas and iodine within the Group, and expansion of renewable energy.
Foundation businesses	Ammonia and methylamines	Expand the clean ammonia business.
	MMA products	Aim to maximize profit across the MMA chain, including downstream products.
	Formalin and polyol products	Examine appropriate business management methods and aim to increase profitability.
New/next-generation businesses (main development products)	Carbon fiber composite materials	Develop composite intermediates with characteristics such as gas barrier properties, and propose various applications.
	CDMO of antibody drugs	Obtain a license for manufacture of drugs and accumulate manufacturing experience under the GMP system.*3
Businesses requiring intensive management	Xylene separators and derivatives	Promote further cost reductions and form an infrastructure to support U&P businesses downstream.

\*3 Good manufacturing practice (GMP) is a system for ensuring the quality of pharmaceuticals by setting requirements that manufacturers and marketing authorization holders must meet.

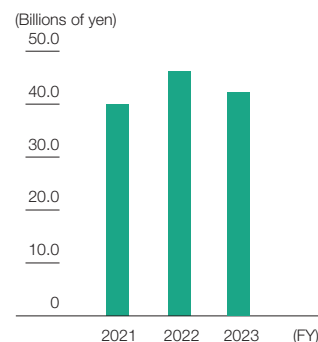
### Strategy for Businesses Requiring Intensive Management

Assessment of the current situation	Strategies in the Medium-Term Management Plan
<ul style="list-style-type: none"> <li>• PIA business environment remains challenging due to excess supply</li> <li>• Decision to withdraw from unprofitable OX-related chain (OX-PA-plasticizer)</li> </ul>	<ul style="list-style-type: none"> <li>• MX-PIA: Positioned as infrastructure to support downstream MXDA, etc.</li> <li>• Continue further cost reduction</li> <li>• Continued production to be determined in line with growth of downstream products</li> </ul>

### Product Chain for Xylene Separation and Derivatives



### Net Sales of U&P Businesses\*



**MXDA**

**The new plant in Europe is scheduled to begin operations in the second half of fiscal 2024. We will also focus on developing human resources to work in production and sales**



**Masatoshi Sato** — Managing Director, MGC Specialty Chemicals Netherlands B.V.

The new MXDA plant in Rotterdam, the Netherlands, is scheduled to start operations from the second half of fiscal 2024. There is great significance in operating in Europe, the biggest market of demand for MXDA. The construction period for this new plant has coincided with a period of rapid recovery of the European economy after COVID-19 and unprecedented price increases due to Russia's invasion of Ukraine. The project has faced numerous difficulties, such as shortages of human resources and construction materials, and the resulting bankruptcy of a construction-related firm. With the cooperation of local general contractors, however, the start of operations is now in sight.

The European market is forecast to provide stable orders from existing large customers, but we do not intend to become complacent with our advantageous position. Currently, we are actively pursuing applied research on chemical products that can make a positive impact on environmental sustainability, such as construction materials for wind power generators and

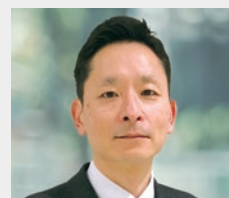
CO<sub>2</sub> absorbents. Constantly developing new applications and meeting customer needs are the conditions for our sustainable growth.

We will deepen technology cooperation with the main plant at Mizushima and the Niigata Plant regarding the new plant, while aiming first to establish stable operation. Going forward, we will focus on the education of human resources involved in the production and sales of MXDA. I believe it is one of my responsibilities to hand over to the next generation the knowledge and experience-based operations skills of MXDA that have been accumulated by our MGC Group.



**Aromatic Aldehydes**

**We will capture expanding demand while increasing the operation rate of our new manufacturing facility in order to achieve our quantitative targets**



**Haruya Kubo** — General Manager, HP Chemical Department, High-performance Products Division

The Company's involvement in aromatic aldehydes was triggered by its construction of a pilot plant for para-tolualdehyde at the Mizushima Plant to manufacture raw material for polyester in 1981. In 1985, the Company constructed a large-scale mass-production facility to manufacture raw materials for its in-house products. Over the years between 2000 and 2010, the business continued to grow, mainly in products for resin additives. In 1991, the Company established a second mass-production facility and added new types of products for use in fragrances and pharmaceuticals. In 2023, we started operation of a third mass-production facility to bolster our production capacity.

Demand for resin additives are finally showing signs of a recovery in demand, which had been in a slump due to high inflation over the past two years. On the other hand, demand for fragrance applications has been expanding due to heightened awareness of hygiene in the wake of the COVID-19 pandemic. During the

three years of the next Medium-Term Management Plan, we will increase the capacity utilization rate of the new manufacturing facility by promoting sales expansion based on quantitative targets, prioritizing the achievement of our targets.

Aromatic aldehyde products are currently mainly exported to areas such as Europe and the United States. To strengthen our business foundation in the future, we consider it essential to build partnerships with overseas companies. I consider it my role to build those relationships.

**Primary Applications and Use Cases**

Application	Use case
Fragrances	Perfumes, soaps, detergents, air fresheners, etc.
Resin additives	Agent to prevent clouding of polypropylene (PP)
Pharmaceuticals and agrochemicals	Herbicides, therapeutic drugs for diabetes, etc.
Pigments	Automotive paint, etc.

# Governance Section

- 64 Members of the Board of Directors and Audit & Supervisory Board
- 67 Outside Directors Roundtable Talk
- 71 Corporate Governance
- 76 Compliance





# Members of the Board of Directors and Audit & Supervisory Board

(As of June 30, 2024)

## Directors



**Toshikiyo Kurai**

Representative Director, Chairman

Attendance of Board of Directors Meetings: 13/13 (FY2023)

April 1975 Joined MGC  
 June 2009 Director, Managing Executive Officer, and President of Specialty Chemicals Company  
 June 2012 Representative Director, Senior Managing Executive Officer, Assistant to President, and President of Specialty Chemicals Company  
 June 2013 President and Representative Director  
 April 2019 Chairman and Representative Director (to present)

**Expertise and experience:** Following his service in important positions, mainly in the Specialty Chemicals Department, and his presiding over R&D, manufacturing and general business in the Inorganic Chemicals Division and the Engineering Plastics Division, he was appointed as Director in June 2009, and served from June 2013 to March 2019 as President and Representative Director, has served from April 2019 as Chairman and Representative Director, and has abundant experience and knowledge of MGC's business and management control as a whole.



**Masashi Fujii**

Representative Director, President

Attendance of Board of Directors Meetings: 13/13 (FY2023)

April 1981 Joined MGC  
 April 2015 Managing Executive Officer, Administrative Management of LNG Project Team, and President of Natural Gas Chemicals Company  
 June 2015 Director, Managing Executive Officer, Administrative Management of LNG Project Team, and President of Natural Gas Chemicals Company  
 April 2019 President and Representative Director (to present)

**Expertise and experience:** Following his service in important positions in the Administrative & Personnel and Natural Gas Chemicals Departments, he was appointed as Director in June 2015 and presided over the Natural Gas Chemicals Department, has served from April 2019 as President and Representative Director, and has abundant experience and knowledge of MGC's business and administration of management, etc.



**Nobuhisa Ariyoshi**

In charge of Internal Control & Risk Management, responsible for Administrative & Personnel Division, in charge of Finance & Accounting Division and Information Systems Division

Attendance of Board of Directors Meetings: 13/13 (FY2023)

April 1984 Joined MGC  
 April 2016 Executive Officer, General Manager, Electronics Materials Division, Information & Advanced Materials Company  
 June 2018 Director, Managing Executive Officer, in charge of Finance & Accounting Center, Information Systems Division, and Purchasing & Logistics Center  
 April 2019 Director, Managing Executive Officer, Chairman of Internal Control Promotion Committee, in charge of Compliance, Risk Management, Internal Audit Division, Corporate Planning Division, Administrative & Personnel Center and Corporate Communications Division, General Manager of Tokyo Techno Park  
 April 2020 Director, Managing Executive Officer, in charge of Internal Control & Risk Management and Corporate Management Sector  
 April 2022 Representative Director, Senior Managing Executive Officer (to present)

**Expertise and experience:** Following his engagement mainly in the Information & Advanced Materials and Specialty Chemicals Departments, he served in important positions in the Administrative & Personnel and Information & Advanced Materials Departments, was appointed as Director in June 2018, was in charge of the Corporate Management Sector and Compliance, and has abundant experience and knowledge of MGC's business and administration of management, etc.



**Motoyasu Kitagawa**

Director, Managing Executive Officer

In charge of Compliance, responsible for Corporate Planning, in charge of Internal Audit Division and CSR & IR Division

Attendance of Board of Directors Meetings: 13/13 (FY2023)

April 1986 Joined MGC  
 April 2019 Executive Officer, General Manager, Organic Chemicals Division, Natural Gas Chemicals Company  
 June 2019 Executive Officer, Manager, Corporate Planning Division  
 April 2021 Managing Executive Officer, in charge of Compliance, responsible for Corporate Planning, in charge of Internal Audit Division and CSR & IR Division (to present)  
 June 2021 Director (to present)

**Expertise and experience:** Following his engagement mainly in the Administrative & Personnel Department and Corporate Planning Division, he served in important positions in the Natural Gas Chemicals Department and Corporate Planning Division, was appointed as Director in June 2021, and has abundant experience and knowledge of MGC's business and administration of management, etc.



**Ryoza Yamaguchi**

Director, Managing Executive Officer

In charge of Specialty Chemicals Business Sector

Attendance of Board of Directors Meetings: 13/13 (FY2023)

April 1988 Joined MGC  
 April 2020 Executive Officer, Manager, Administrative & Personnel Division, Corporate Management Sector  
 April 2021 Executive Officer, in charge of Administrative & Personnel Division  
 April 2022 Managing Executive Officer, in charge of Specialty Chemicals Business Sector (to present)  
 June 2022 Director (to present)

**Expertise and experience:** Following his engagement mainly in the Specialty Chemicals and Administrative & Personnel Departments, he served in important positions in the Administrative & Personnel Department, was appointed as Director in June 2022, and has abundant experience and knowledge of MGC's business and administration of management, etc.



**Ko Kedo**

Director, Managing Executive Officer

Responsible for Production Technology, in charge of Environment Safety & Quality Assurance Division and Purchasing & Logistics Division

Attendance of Board of Directors Meetings: 10/10 (FY2023)

April 1988 Joined MGC  
 April 2015 Manager, Planning & Development Division, Natural Gas Chemicals Company  
 June 2018 Manager, Planning & Development Division, Natural Gas Chemicals Company, and Manager, Life Science Division, Natural Gas Chemicals Company  
 April 2019 Executive Officer, Plant Manager, Mizushima Plant, Aromatic Chemicals Company  
 April 2020 Executive Officer, Plant Manager, Mizushima Plant, Basic Chemicals Business Sector  
 April 2021 Executive Officer, in charge of Research & Development  
 April 2023 Managing Executive Officer, responsible for Production Technology, in charge of Environment Safety & Quality Assurance Division (to present)  
 June 2023 Director (to present)  
 April 2024 In charge of Purchasing & Logistics Division (to present)

**Expertise and experience:** Following his engagement mainly in R&D of Aromatic Chemicals, he served in important positions in the Natural Gas Chemicals and Aromatic Chemicals Departments, was appointed as director in June 2023 and has abundant experience and knowledge of MGC's R&D and business management, etc.





**Yoshinori Isahaya**

Director, Managing Executive Officer  
Responsible for Research & Development,  
in charge of Intellectual Infrastructure

Attendance of Board of Directors Meetings: 10/10 (FY2023)

- April 1991 Joined MGC
- April 2019 General Manager, Tokyo Research Laboratory, Specialty Chemicals Company
- April 2020 Executive Officer, Vice Manager, Corporate Planning Division
- April 2021 Executive Officer, in charge of Corporate Planning
- April 2023 Managing Executive Officer, responsible for Research & Development, in charge of Intellectual Infrastructure (to present)
- June 2023 Director (to present)

**Expertise and experience:** Following his engagement in R&D of Specialty Chemicals, he served in important positions in the Specialty Chemicals Department and Corporate Planning Division, was appointed as director in June 2023, and has abundant experience and knowledge of MGC's R&D and business management, etc.



**Hideaki Akase**

Director, Managing Executive Officer  
In charge of Green Energy & Chemicals Business Sector

- April 1989 Joined MGC
- October 2016 Manager, Administrative Division, Aromatic Chemicals Company
- April 2020 Manager, Business Administrative Division, Basic Chemicals Business Sector
- April 2021 Executive Officer, General Manager, Basic Chemicals Division II, Basic Chemicals Business Sector
- April 2024 Managing Executive Officer, in charge of Green Energy & Chemicals Business Sector (to present)
- June 2024 Director (to present)

**Expertise and experience:** Following his engagement mainly in the Aromatic Chemicals and Basic Chemicals Departments, he served in important positions in the Basic Chemicals Department, and has abundant experience and knowledge of MGC's business and administration of management, etc.



**Haruko Hirose**

Outside Director Independent

Attendance of Board of Directors Meetings: 13/13 (FY2023)

- December 1968 Appointed to the National Personnel Authority of Japan
- January 1992 Director, Bureau of Human Resources Management of Headquarters (Paris), United Nations Educational, Scientific and Cultural Organization (UNESCO)
- September 2002 Deputy to the Director General and Managing Director of Field Operations Division of Headquarters (Vienna), United Nations Industrial Development Organization (UNIDO)
- November 2006 Japanese Ambassador Extraordinary and Plenipotentiary to Kingdom of Morocco
- April 2013 Specially Appointed Professor, Academy for Global Leadership, Tokyo Institute of Technology
- May 2014 President, Japan Morocco Association (to present)
- June 2016 Outside Director, S&B Foods Inc.
- March 2018 Outside Director, Nikkiso Co., Ltd. (to present)
- June 2020 Outside Director, MGC (to present)

**Expertise and experience:** She has many years of experience overseas and insight as a director at international organizations on a global scale. She has served in important positions at international organizations, etc., and it is deemed that she would perform her duties as Outside Director appropriately.



**Toru Suzuki**

Outside Director Independent

Attendance of Board of Directors Meetings: 13/13 (FY2023)

- April 1979 Joined Mitsui & Co., Ltd.
- April 2011 Managing Officer, Performance Chemicals Business Unit, Mitsui & Co., Ltd.
- April 2014 Managing Officer, Mitsui & Co., Ltd. and President of Mitsui & Co. Vietnam Ltd.
- April 2015 Executive Managing Officer, Mitsui & Co., Ltd. and President of Mitsui & Co. Vietnam Ltd.
- June 2015 Executive Managing Officer, Chief Regional Representative of Southwest Asia, Mitsui & Co., Ltd., and President of Mitsui & Co. India Pvt Ltd.
- June 2017 Outside Audit & Supervisory Board Member, Mitsui Sugar Co., Ltd. (currently, Mitsui DM Sugar Holdings Co., Ltd.)
- December 2018 Audit & Supervisory Board Member, Nutri Co., Ltd.
- June 2020 Outside Director, MGC (to present)

**Expertise and experience:** He has many years of experience overseas and insight as a manager at a company operating on a global scale.



**Yasushi Manabe**

Outside Director Independent

Attendance of Board of Directors Meetings: 13/13 (FY2023)

- April 1979 Joined Hitachi, Ltd.
- April 2012 General Manager, Sales Division Infra System Group Infra System, Hitachi, Ltd.
- April 2013 Executive Officer, General Manager Kansai Area Operation, Hitachi, Ltd.
- June 2013 Outside Audit & Supervisory Board Member, ShinMaywa Industries, Ltd.
- April 2016 Executive General Manager, Deputy Director, General Corporate Sales & Marketing Group, CMO of Industry & Distribution, Water & Urban Business Unit, Hitachi, Ltd.
- April 2017 Vice President and Executive Officer, Deputy Director, General Corporate Sales & Marketing Group, CMO of Industry & Distribution Business, Water & Urban Business, Hitachi, Ltd.
- April 2021 Executive Advisor, Yashima Denki Co., Ltd.
- June 2021 Outside Director, MGC (to present)

**Expertise and experience:** He has many years of experience and insight as a manager at a company operating on a global scale.



**Kazue Kurihara**

Outside Director Independent

Attendance of Board of Directors Meetings: 10/10 (FY2023)

- October 1992 Associate Professor, Department of Applied Physics, Faculty of Engineering, Nagoya University
- April 1997 Professor, Institute for Chemical Reaction Science (currently, Institute of Multidisciplinary Research for Advanced Materials), Tohoku University
- April 2010 Professor, Advanced Institute for Materials Research and Institute of Multidisciplinary Research for Advanced Materials, Tohoku University
- April 2016 Professor Emeritus, Tohoku University (to present)
- April 2017 Professor, New Industry Creation Hatchery Center, Tohoku University (to present)
- December 2020 Outside Director, Hamamatsu Photonics K.K. (to present)
- April 2021 Research Professor, Tohoku University (to present)
- January 2022 Director, SMLEco Measurement Co., Ltd. (to present)
- June 2023 Outside Director, MGC (to present)

**Expertise and experience:** She has highly advanced expertise in wide fields of study in chemicals, and it is deemed that she would provide appropriate supervision and advice to MGC's management from such a perspective.

## Audit & Supervisory Board Members



### Masamichi Mizukami

Audit & Supervisory Board Member

Attendance of Audit & Supervisory Board Meetings: 14/14 (FY2023)

April 1983

Joined MGC

June 2016

Director, Managing Executive Officer, Chairman of Committee on Future R&D, in charge of Research & Development Division and Advanced Business Development Division

June 2019

Representative Director, Senior Managing Executive Officer, Chairperson of Internal Control Promotion Committee, in charge of Internal Audit Division, Research & Development Division, Advanced Business Development Division, Business Strategy Division, General Manager of QOL Innovation Center Shirakawa

June 2020

Audit & Supervisory Board Member (to present)

**Expertise and experience:** He has served in important positions in Specialty Chemicals, Research & Development, Internal Control, etc., and has abundant experience with MGC's business and corporate management.



### Masato Inari

Audit & Supervisory Board Member

Attendance of Audit & Supervisory Board Meetings: 9/9 (FY2023)

April 1985

Joined MGC

June 2017

Director, Managing Executive Officer, President of Aromatic Chemicals Company

April 2019

Director, Managing Executive Officer, in charge of Production Technology Division, Environment Safety & Quality Assurance Division

April 2020

Director, Managing Executive Officer, in charge of Internal Audit Division, Environment & Total Production Sector

April 2022

Representative Director, Senior Managing Executive Officer, responsible for Production Technology, in charge of Environment Safety & Quality Assurance Division, Purchasing & Logistics Division

June 2023

Audit & Supervisory Board Member (to present)

**Expertise and experience:** Following his appointment as Director in June 2017, he served in important positions in the Aromatic Chemicals, Production Technology, and Environment Safety & Quality Assurance Departments, among others, and possesses abundant experience in MGC's business and corporate management.



### Go Watanabe

Outside Audit & Supervisory Board Member

Independent

Attendance of Audit & Supervisory Board Meetings: 14/14 (FY2023)

April 1982

Joined The Mitsubishi Bank, Ltd.

June 2009

Executive Officer, Manager of Shanghai Branch, The Bank of Tokyo-Mitsubishi UFJ, Ltd. (BTMU)

May 2012

Managing Executive Officer, Group Head, Nagoya Corporate Banking Group, BTMU

June 2013

Managing Executive Officer, Chief Executive Officer for Asia and Oceania, BTMU

July 2016

First Senior Vice President, Nidec Corporation

August 2018

Senior Managing Executive Officer, Chief Administrative Office, Nidec Corporation

September 2020

Chairman and Representative Director, MST Insurance Service Co., Ltd.

June 2021

Outside Director, Mitsubishi HC Capital Inc.

June 2022

Outside Audit & Supervisory Board Member, MGC (to present)

**Expertise and experience:** He has abundant experience and insight as a manager at a financial institution and in the manufacturing industry, etc., both in Japan and overseas.



### Tsuneaki Teshima

Outside Audit & Supervisory Board Member, Part-time

Independent

April 1983

Joined Nippon Life Insurance Company (Nissay)

March 2010

Executive Officer, Nissay

July 2014

Director, Managing Executive Officer, Nissay

March 2018

Director, Nissay  
Director, NLI Research Institute

April 2018

Representative Director, NLI Research Institute (to present)

June 2018

Outside Audit & Supervisory Board Member, Nitta Corporation

June 2021

Outside Audit & Supervisory Board Member, Keisei Electric Railway Co., Ltd. (to present)

June 2024

Outside Audit & Supervisory Board Member, MGC (to present)

**Expertise and experience:** He has many years of experience and insight as a manager at a financial institute and possesses considerable knowledge of finance and accounting.

Independent: Independent officer as stipulated under Rule 436-2 of the Securities Listing Regulations of the Tokyo Stock Exchange

## Expertise and Experience Sought in Directors and Audit & Supervisory Board Members

	Corporate management Industry expertise	Production technology R&D Environment safety	Business strategy Sales Market development	Finance Accounting Management planning	Legal Compliance Risk management	HR Labor Talent development	Global Diversity Experience in other sectors
<b>Directors</b>							
Toshikiyo Kurai	●	●	●				●
Masashi Fujii	●		●		●	●	
Nobuhisa Ariyoshi	●			●	●	●	
Motoyasu Kitagawa	●			●		●	●
Ryozo Yamaguchi	●				●	●	●
Ko Kedo	●	●	●		●		
Yoshinori Isahaya	●	●	●	●			
Hideaki Akase	●		●	●			●
Haruko Hirose					●	●	●
Toru Suzuki	●		●				●
Yasushi Manabe	●		●				●
Kazue Kurihara	●	●					●
<b>Audit &amp; Supervisory Board Members</b>							
Masamichi Mizukami	●	●	●	●			
Masato Inari	●	●	●		●		
Go Watanabe	●			●	●		●
Tsuneaki Teshima	●			●			●

# We work to win higher evaluations from capital markets and help create medium- and long-term value while raising the effectiveness of the Board of Directors

The MGC Group is steadily improving its corporate governance with the aim of executing management practices focused on sustainable growth of corporate value. As part of that effort, we put high value on our outside directors as they interject the viewpoints of shareholders and other stakeholders while overseeing and advising. We asked our four outside directors to participate in a roundtable discussion and speak from their own perspectives on topics from Board of Directors meetings such as the process for formulating the new Medium-Term Management Plan, improving PBR and major points of sustainability management.

---

### Are Board Discussions Becoming More Lively?

---

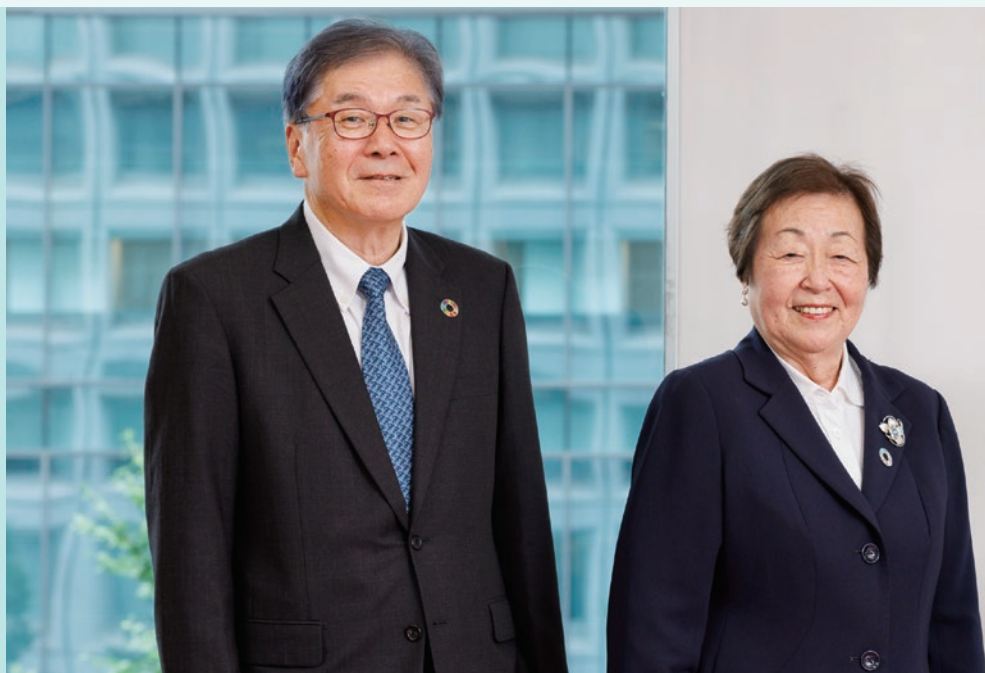
**MC:** First, let's look back on the board meetings of fiscal 2023 and hear your takes on how discussion evolved and the progress you made.

**Suzuki:** I feel that board discussions made steady qualitative progress in fiscal 2023 because we were talking more actively than ever. We outside directors speak pretty frankly, without holding back in front of the management team members.

**Hirose:** Certainly. Compared with 2020, when I joined the board, we outside directors have an easier time providing strong judgments, without hesitation. On the other hand, it appears to me that internal directors are speaking less

in board meetings because they've already given input in meetings of the Management Council and Operations Council, which are usually held in advance. This is a personal opinion, but I think all directors feel they can speak more frankly if given opportunities other than board meetings, when the agenda requires in-depth talks.

**Manabe:** We outside directors and Audit & Supervisory Board members ordinarily ask questions and make requests from a range of standpoints to fulfill our oversight roles and help maintain good managerial health. Internal directors are executive officers as well, so they put a lot of effort into answering our questions and requests, and preparing reference materials ahead of board meetings. I see their enthusiasm for making board meetings occasions for real and productive exchanges of views. I think the



awareness of internal directors has been changing for the better over the past couple of years in particular.

**Suzuki:** MGC assesses the effectiveness of the board annually, but in fiscal 2023, an outside organization was commissioned to prepare the questionnaire for directors and Audit & Supervisory Board members for the first time and the results were shared. The answers to such questionnaires tend to be guarded and overly conforming, but there were extremely apt responses in the free-form comments section, and some drew negative assessments. This illustrates that board members do not see the assessment method as a mere formality. That said, a simple announcement that MGC conducted a third-party board assessment alone is meaningless. We have to clearly broadcast that we are doing real work to raise the effectiveness of our Board of Directors.

**Kurihara:** I came in as an outside director in June 2023. My impression of the MGC board is that it's open to diverse opinions and serious about applying our outside comments in making change. I have specifically noticed the board members' approach to getting at the basics when stating opinions. To correctly judge, I think it's important to put ideas into objective language. We practice this in MGC board meetings, and through the presentation of questions and opinions by the members based on the essence of good management and business practice I felt a sense of empathy.

**Manabe:** I think that what you just said has a lot to do with the increasing opportunities for explanations to outside directors ahead of board meetings that have come about since fiscal 2023. We had plenty of time to read reference

materials and make preparations to discuss the new Medium-Term Management Plan and businesses requiring intensive management, for example, and divisions in charge also explained the important points of the agenda items in advance. At these briefings, specific items are checked and discussions are held, making it possible for us to attend board meetings.

**Hirose:** For the purpose of sharing information, twice a week we outside directors receive reference materials from the morning meetings\* of the internal directors. It's a lot of reading, but these materials keep me updated on the progress of each strategy and initiative and deepen my understanding of MGC.

**Suzuki:** Recently, there was an informal opportunity for communication among us outside directors and Audit & Supervisory Board members. We talked about our positions independent of the management team, and our resolve to fulfill our responsibility to say with greater candor that which the insiders might find difficult to express. I also felt our common desire to contribute to the Company's prosperity.

**Kurihara:** In fiscal 2024, I visited the production base in Shirakawa for direct talks with floor personnel. It was a good opportunity for me to talk with the manager of a new business, see the production process in person, and through that gain a better understanding of MGC's serious, hardworking corporate culture.

\* Meetings in which segment representatives explain to the management team current trends, management circumstances at Group firms, etc.



(From left)

**Toru Suzuki**, Outside Director

**Haruko Hirose**, Outside Director

**Kazue Kurihara**, Outside Director

**Yasushi Manabe**, Outside Director






---

### Responsibilities in the Process of Writing the New Medium-Term Management Plan

---

**MC:** In the process of writing the Medium-Term Management Plan, which themes were most important to you, and what advice did you give about taking appropriate risk and promoting internal reform?

**Manabe:** A basic purpose of the plan is to improve our understanding of the gaps between our numeric targets for fiscal 2026 and MGC now, and implement measures to bridge those gaps so we can achieve the resilient portfolio we foresee three years from now. I first looked into and questioned the grounds for each measure and investment plan expected to come to an intended result in three years. As for rebuilding businesses that need intensive management, I've spoken of specific products and made relatively tough remarks on the value of continuing their production. The new Medium-Term Management Plan puts awareness of capital cost on the top tier of our management principles. I also asked again that we break ROIC down into the operating profit margin and invested capital turnover rate, make KPIs specific to each business segment, reduce inventory assets, and ensure these measures are implemented down to the field level.

**Hirose:** The numeric targets are higher than actual results at the moment, and setting a clear course within the Company will promote risk-taking as well. Beyond working consistently and seriously, as MGC ordinarily does, achieving the goals requires that each employee embrace challenges with an understanding of the risks.

**Kurihara:** I've said that the key to success is sharing with employees the thought processes and aims behind the new plan's challenging principles and goals. This overlaps somewhat with Mr. Manabe's suggestion, but I think it's necessary to set goals that are easy for employees to understand and implement initiatives to define a detailed mission for each business segment. As with the focused strategy concerning U&P businesses, I have high hopes for Carbopath™, a circular carbon platform, where we are a forerunner in commercial application.

**Suzuki:** To help create future U&P businesses, we've been exchanging views regarding measures to precisely distribute budgets among our defined R&D themes and projects.

---

### What Do We Need to Improve PBR?

---

**MC:** Let's hear your thoughts about what MGC needs to improve capital efficiency, achieve a PBR above 1, and win positive evaluations in the capital markets.

**Suzuki:** We have to put new businesses capable of creating great value in the near future — something that would attract the attention of investors — on paths to growth. A starter example would be the CO<sub>2</sub> capture-and-storage (CCS) business, in which we should establish a pioneering position and achieve social implementation of the technology as quickly as possible. As Ms. Kurihara mentioned, we should accelerate our initiative to build business from the Carbopath™ concept to become an essential player in the shift to a more recycling-oriented society, and in that way, encourage investor confidence in MGC's growth potential and profitability. That's a desirable scenario.

**Manabe:** More robust shareholder returns is another important measure, and with the current Medium-Term Management Plan, we introduced a progressive dividend and raised our total payout ratio. From the standpoint of the Company's sustainability, we should not be extravagant about buying back our own shares in hopes of short-term value gains, but instead put our profits into growth-oriented investment or hold substantial surplus funds to maintain good financial health. The high road to achieving a PBR above 1 is increasing our operating profit margin and growth power, and winning positive evaluations in the capital markets that way. In our latest results, our operating profit margin hasn't reached a desirable level. There's no silver bullet for resolving all our issues at once. Doggedly following through on the six strategies of the current Medium-Term Management Plan, I think, is the

best way forward. To let people know that there is enough room for MGC to grow, we also need more ingenious PR and out-facing communication.

**Hirose:** MGC provides many products that contribute directly and indirectly to addressing social issues related to the SDGs, and we should be better able to communicate factors like these. The current plan takes a new initiative in naming three growth drivers — electronics materials, EL chemicals, and optical materials (collectively, the “three ICT businesses”) — highlighting our strategic focus. This kind of easy-to-understand language is also important. As a manufacturer that develops and sells products, we have to show clear direction based on consistent policy, which will help us discuss effectively the phases of our businesses — growth, maturity, and decline.

**Kurihara:** MGC holds leading shares of several markets worldwide and offers many high-quality products, but the Company is still not well known. As Ms. Hirose mentioned, I think there is a lot of room for PR. The business of producing chemical products from natural gas is consonant with the way society wants to go. We'll generate more appeal as an attractive chemical company by telling the stories only we can tell.

---

## Promoting Business Growth and Sustainability Management

---

**MC:** To promote sustainability management, what are the themes you focus on in your oversight, and what points do you think should be addressed to resolve related issues?

**Suzuki:** MGC is currently putting high priority on initiatives to achieve carbon neutrality. With numeric targets to meet by 2026 in mind, we will monitor progress in businesses and technologies that help us reduce greenhouse emissions. Another important factor is hiring and training people, especially helping women be more actively involved in business and management.

**Hirose:** Our progress in empowering women employees would be a lot faster if we set numeric targets. This is evident in the effects of the measures that European nations are taking, like the quota system introduced in Germany.

**Suzuki:** We have included the number of women managers in our materiality KPIs for fiscal 2030. Rather than insist on training our own employees, I think we'd do better with a parallel policy of increasing women managers by headhunting experienced people from outside.



**MC:** Finally, how would you like to contribute to the management of MGC?

**Kurihara:** I'd like to raise a range of questions as a researcher in the field of functional chemicals and high polymers. For example, I would ask if the “technical limits” our people in the R&D departments see are truly limits, or whether there is still room to stretch. If my questions result in more product applications and higher profitability, that would be a great pleasure to me.

**Manabe:** I'd like to keep an eye on R&D to help address climate change issues, and would like to see how it can develop into U&P businesses. I will continue supporting appropriate risk-taking and investment.

**Hirose:** Overseas operations will be more important than ever. AI translators and online conference tools have spread rapidly recently, but traveling abroad for in-person meetings and understanding the mentalities and emotional perceptions of people in other cultures is important, and I'd like to be able to communicate them from my own experience.

**Suzuki:** Despite our high percentage of overseas sales, I sometimes feel MGC lacks sophistication in doing business abroad. Going forward, we'll have to organize programs and systems for training local personnel to eventually assume management posts in overseas subsidiaries. I hope we outside directors will be of help in that.



## Activities of Meeting Bodies and Committees

### Board of Directors [Meetings held in fiscal 2023: 13 Chair: Toshikiyo Kurai]

The Board of Directors decides important matters pertaining to management policies, business, and management based on laws, regulations, the Company's Articles of Incorporation, and the regulations of the Board. It also receives reports from each director and others on the status of execution of duties, management performance, etc., and supervises the execution of duties by directors. Candidates for director are nominated by the Board of Directors following consultation with the Compensation and Nominating Committee, and directors are elected at the annual General Meeting of Shareholders.

#### Main Themes Deliberated in Fiscal 2023

Theme	Main Deliberation Items
Management strategy	<ul style="list-style-type: none"> <li>Formulation of the Medium-Term Management Plan and the vision for MGC in 2030</li> <li>Business portfolio reform (redefining differentiating businesses, withdrawal from unprofitable businesses, etc.)</li> <li>Sustainability management (measures related to carbon neutrality, review of materiality and KPIs, etc.)</li> </ul>
Governance	<ul style="list-style-type: none"> <li>Conversion of JSP into a non-consolidated subsidiary</li> <li>More robust shareholder returns: Adopt a progressive dividend policy, raise the total payout ratio</li> <li>Promotion of reduction of strategic shareholdings</li> </ul>

### Audit & Supervisory Board [Meetings held in fiscal 2023: 14 Chair: Masamichi Mizukami]

Audit & Supervisory Board members audit management decisions and the status of execution of business from an independent position, such as by attending meetings of the Board of Directors and other important meetings. The Audit & Supervisory Board's topics include formulation of auditing policies and audit plans, internal control systems' implementation/operation status and the reasonableness of the independent auditors' audit methods and findings. Furthermore, the Audit & Supervisory Board endeavors to work with the independent auditors and the Internal Audit Division, and also endeavors to increase the efficiency of audits through such measures as the assignment of dedicated audit staff.

### Compensation and Nominating Committee [Meetings held in fiscal 2023: 6 Chair: Toshikiyo Kurai]

The Compensation and Nominating Committee functions both to determine executive officer compensation and to nominate and appoint key members of senior management. The majority of the committee is comprised of independent outside directors. The Board of Directors is responsible for appointing and dismissing key members of management, including the Chairman and President, and for nominating directors and Audit & Supervisory Board members. In making decisions on policies regarding executive officer compensation and total annual amounts, and in determining allocation of those amounts, the Compensation and Nominating Committee is consulted prior to those matters being put before the Board of Directors for discussion. Note that the appointment, dismissal and nomination of said officers are judged in light of certain selection criteria that include whether they have the appropriate internal and external work experience and knowledge for the position; whether they have the dignity and ethical values appropriate to their responsibilities; and whether they have violated any laws, the Articles of Incorporation, or company rules.

### Internal Control and Risk Management Committee [Meetings held in fiscal 2023: 3 Chair: Nobuhisa Ariyoshi]

As an organization directly under the President, the Internal Control and Risk Management Committee is a committee chaired by the executive officer in charge of internal control and risk management. It provides direction and supervision for each department and deliberates on problems that require a companywide response. It makes decisions on matters related to risk management system policies, measures and plans; matters related to business and operational risk management, as well as matters related to guidance, direction and oversight incidental thereto; and matters related to guidance, direction and oversight related to business continuity planning.

➤ For details on risk management, please refer to page 39.

### Compliance Committee [Meetings held in fiscal 2023: 3 Chair: Motoyasu Kitagawa]

As an organization directly under the President, the committee investigates compliance violations pertaining to the Company and the Group, and formulates, deliberates and recommends corrective measures and preventative measures.

➤ For details on compliance, please refer to page 76.

### Management Council [Meetings held in fiscal 2023: 21 Chair: Masashi Fujii]

The Management Council deliberates and determines the Group's Medium-Term Management Plan, management policy, basic policies on key operations, and so forth. The Board of Directors makes the final decisions on any proposals requiring it to make a resolution.



**Operations Council** [Meetings held in fiscal 2023: 25 Chair: Masashi Fujii]

The Operations Council deliberates and determines the Group's specific action plans and so on concerning the execution of serious business matters. The Board of Directors makes the final decisions on any proposals requiring it to make a resolution.

**Sustainability Promotion Council** [Meetings held in fiscal 2023: 3 Chair: Masashi Fujii]

The Sustainability Promotion Council deliberates and determines policies and measures that form the basis for sustainability management such as identification and management of materiality, and receives reports on the implementation thereof from the Sustainability Promotion Committee.

**Sustainability Promotion Committee** [Meetings held in fiscal 2023: 4 Chair: Yuuichi Sugano]

The Sustainability Promotion Committee confirms the status of implementation of measures in each division, and consults with the Sustainability Promotion Council on the necessary measures through periodic reviews.

**Assessing the Effectiveness of the Board of Directors**

Every year, we conduct assessments on the effectiveness of the Board of Directors, and as a new approach starting from the assessment for fiscal 2023, we have appointed a third-party organization and utilized its expert knowledge in discussion and collating the survey items, and so forth.

The perspective for the survey were changed from the previous three aspects to five aspects: "Composition and operation of the Board of Directors," "Management strategy and business strategy," "Corporate ethics and risk and crisis management," "Performance monitoring and management team assessment," and "Dialogue with shareholders, etc." In April 2024, we conducted a survey of all directors and Audit & Supervisory Board members, which presented various kinds of questions using a five-point scale, which were revised based on the changed survey aspects, and requested opinions from a free perspective unrestricted by the parameters of the five-point scale. The Board of Directors then held discussions based on the aggregate results and opinions that were received.

In the results of that survey, the average score on the five-point scale for all items was above "4: More effective and appropriate than not." Moreover, the majority of the assessments were positive. As such, the Company recognizes that the Board of Directors has achieved a certain level of effectiveness. In particular, as the scores were relatively high for the items "Increasing corporate value through response to issues related to sustainability," "Free and open discussion," and "Composition of the members of the Board of Directors," and multiple comments offering a positive assessment of them were observed, these items can be considered to be strengths of the Company's Board of Directors.

Meanwhile, based on discussion of the assessment results in the Board of Directors, we will conduct a review primarily with respect to elements such as those for which it was indicated that there exists room for improvement, and aim to ensure a more effective Board of Directors and continue to go about strengthening and improving it as an organization.

**Issues and responses in fiscal 2023**

- In order to develop deeper discussion in the Board of Directors, we brought forward advance explanation sessions on important resolution items for outside directors and Audit & Supervisory Board members, and shared the content of discussions at the explanation sessions with all directors and Audit & Supervisory Board members.
- We brought up and discussed measures to improve the price-to-book ratio (PBR) as a topic for discussion at Board of Directors meetings.

**Issues and responses in fiscal 2024**

- Provision of information for the Board of Directors: In addition to our initiatives to date that have achieved a certain level of approval, we will consider measures to prevent the time lag between the recognition of risk on the front line and the reporting of it to the Board of Directors.
- Provision of information for directors and Audit & Supervisory Board members: In addition to continuing to enhance visits to business sites, which we have been promoting since the end of the COVID-19 pandemic, we will also consider holding briefings on the current status of important subsidiaries, etc.
- Strategy monitoring: To further accelerate discussion of strategy in Board of Directors meetings, we will encourage indication of discussion points in a clear and concise manner in reports to the Board of Directors.

**Status of Internal Auditing**

The Internal Audit Division conducts internal audits of the Company and its Group companies pursuant to fiscal-yearly plans to determine whether their business is being executed properly, ensure the effectiveness of internal controls and improve management efficiency. All internal

audit reports are reported to the representative director and president and the director in charge of the Internal Audit Division, and are also reported at the same time to the full-time Audit & Supervisory Board members. The Board of Directors receives one regular report per year as well as reports from the director in charge of the Internal Audit

Division as necessary. Moreover, the Internal Audit Division also assesses and reports on the effectiveness of internal

controls over financial reporting in accord with the Financial Instruments and Exchange Act.

---

## Introduction of Diverse Perspectives

---


MGC has developed a global business that ranges widely from basic chemicals to high-performance materials. Because our management decisions require a high degree of expertise, the Board of Directors as a whole strives to maintain a well-balanced diversity of knowledge, experience, and abilities including people from within the Company who are deeply familiar with our business and management, with the addition of multiple independent outside directors who have extensive international experience and management experience along with advanced specialized knowledge, and provide advice and supervision from the perspectives of shareholders and other stakeholders. When appointing outside directors, emphasis is placed on “Global / Diversity / Experience in other sectors,” which is essential for obtaining business opportunities.


MGC currently has 12 directors (of whom four are independent outside directors and half of those are women), which we believe to be generally appropriate in size and effectiveness.

In order to ensure the fair and objective oversight of management, particular attention is paid to the independence of outside directors and Audit & Supervisory Board members, in accordance with criteria set by the Tokyo Stock Exchange regarding independence. MGC appoints only candidates who have no conflict of interest with general shareholders.

The Board of Directors consults with the majority-independent Compensation and Nominating Committee before voting on senior management, director and Audit &

Supervisory Board member candidates.

 For details on the criteria regarding independence of outside directors and Audit & Supervisory Board members, please refer to the MGC website.  
<https://www.mgc.co.jp/eng/corporate/governance.html>

 For details on the expertise and experience sought in directors and Audit & Supervisory Board members, please refer to page 66.

### Support for Outside Directors and Audit & Supervisory Board Members

To give part-time outside directors a better understanding of Board of Directors meetings' agenda items, the Company briefs them beforehand. Outside directors also engage in discussions with Audit & Supervisory Board members to share information. Additionally, outside directors and outside Audit & Supervisory Board members hold regular discussions solely amongst themselves to share information.

The Secretarial Group and General Affairs Group, the latter of which functions as the Board of Directors' administrative staff, serve as liaisons between outside directors and the Company. Both have staff whose main role is to communicate and coordinate with outside directors and assist them with their duties. Additionally, one staff member is assigned exclusively to assist Audit & Supervisory Board members, including outside members, with their duties as directed by them. Audit & Supervisory Board members are authorized to engage the services of external experts at the Company's expense.

---

## Compensation of Directors and Audit & Supervisory Board Members

---

### Directors' Compensation

Compensation to directors of MGC (excluding outside directors) consists of annual compensation and restricted stock compensation.

Annual compensation consists of a fixed amount of basic compensation based on the individual's position and responsibilities, and performance-based compensation that takes into account various indicators of the Company's performance. Compensation is divided into monthly installments and paid monthly, and a certain percentage is accumulated annually as a reserved retirement benefit to be paid at the time of retirement. This amount may be subject to reduction based on the individual's performance and other factors. Performance-based compensation is intended to be an incentive for overall Company performance, and is determined using indicators such as ordinary income, based on actual results, level of achievement, and so on. In addition, given the nature of MGC's business, in which each

business reaches profitability through a variety of processes over many years — including research and development, manufacturing process development and market development — annual compensation consists primarily of basic compensation, with a general guideline of about 30% for performance-based compensation.

Restricted stock compensation, on the other hand, is compensation paid to directors once each fiscal year in the form of grants of MGC stock; directors are granted a certain number of shares based on their positions and responsibilities. The purpose of restricting transfers of these shares and having recipients hold them for a certain period of time is to share value with shareholders and provide an incentive for working toward sustained growth of corporate value.

In addition to these forms of compensation, an amount that is considered appropriate may be paid as a bonus upon resolution of the General Meeting of Shareholders.

Note that outside directors, whose position is independent of business execution, are paid only fixed basic compensation.

Annual director compensation is determined by the Board of Directors upon comprehensive consideration of Company performance, common standards, employee salary trends, and so forth, after consultation with the Compensation and Nominating Committee. In addition, allocation of individual compensation is entrusted to the President by the Board of Directors, based on the determination that the President is the most suitable person to evaluate each director while having a high-level view of MGC as a whole. The President makes these decisions based on discussions regarding the allocation

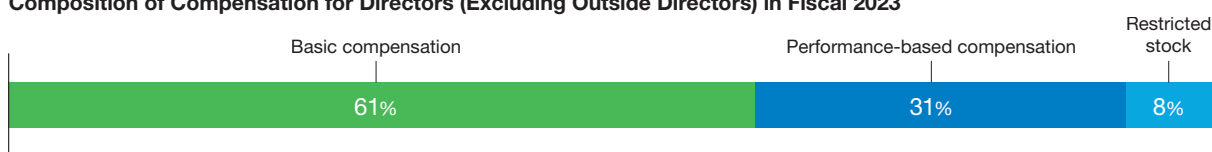
of compensation by the Compensation and Nominating Committee.

The above policies are decided upon by the Board of Directors after consultation with the Compensation and Nominating Committee, comprised of a majority of outside directors.

### Compensation to Audit & Supervisory Board Members

Compensation to Audit & Supervisory Board members consists only of a basic compensation amount within a range stipulated by the General Meeting of Shareholders, which is determined through deliberations by the Audit & Supervisory Board members.

### Composition of Compensation for Directors (Excluding Outside Directors) in Fiscal 2023



### Total Officer Compensation in Fiscal 2023

Position	Total amount of compensation (millions of yen)	Total amount of compensation by type (millions of yen)			Number of people receiving compensation
		Basic	Performance	Restricted stock	
Directors (excluding outside directors)	483	296	149	37	10
Audit & Supervisory Board members (excluding outside Audit & Supervisory Board members)	52	52	—	—	3
Outside directors and Audit & Supervisory Board members	75	75	—	—	7
<b>Total</b>	<b>612</b>	<b>425</b>	<b>149</b>	<b>37</b>	<b>20</b>

Note: The amount of restricted stock compensation to directors is that of the provision for restricted stock compensation recorded for the fiscal year under review.

### Strategic Shareholdings

MGC owns listed equity holdings that it deems beneficial to Group businesses in pursuit of medium/long-term growth in corporate value.

The Board of Directors annually reassesses the objectives and risks of owning each of these equity holdings, the state of transactions with the investee, and returns accruing from ownership, including returns from actual transactions with the investee, relative to earnings targets with cost of capital factored in. If the Board of Directors deems MGC's equity stake in any investee to be larger than appropriate, MGC opportunistically sells down its equity holdings in the investee.

In fiscal 2023, MGC sold three equity holdings in part and one in its entirety.

When voting its cross-held shares, MGC generally respects the investee's management decisions. Under certain circumstances, however, MGC gives extra scrutiny to management or shareholder proposals before

deciding whether to vote for or against the proposal. Such circumstances include an investee that has incurred losses for three consecutive years and has questionable prospects of a turnaround; an investee that has been involved in a major scandal, has engaged in antisocial conduct or has otherwise fallen into disrepute with questionable prospects of rehabilitating its reputation; and other cases in which MGC deems a vote in favor of a proposal to be adverse to its overall medium/long-term interests, including the objectives of its cross-shareholdings in the investee.

	Number of issues	Total value on balance sheet (millions of yen)
Unlisted shares	56	2,197
Shares other than unlisted shares	35	30,487

# Compliance

## Basic Approach

The MGC Group has put in place, and is working to strengthen, a system for practicing compliance with the aim of earning the trust and understanding of the community.

The MGC Group takes a broad view of compliance, one that involves not only abiding by laws and Company rules but also conducting fair, transparent, and free business activities in acknowledgment of its responsibilities to society. Based on this understanding, we have summarized the conduct expected of our executives and employees in the MGC Corporate Behavior Principles and the MGC Group Code of Conduct, the contents of which are reviewed and revised from time to time based on developments in society at large.

The MGC Group decides policies, measures, and plans relating to the compliance system in the Internal Control and Risk Management Committee. In addition, the Compliance Committee has been set up as an independent body reporting directly to the President to deal with individual cases of compliance violation. The Compliance Committee comprises the executive officer in charge of compliance (who serves as the chair), a director nominated by the President (vice-chair), and heads of compliance-related departments and others (members).

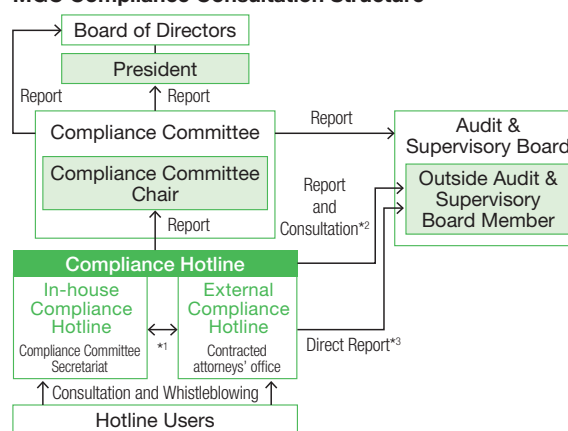
The results of the activities of this committee, which include the investigation and recognition of violations and the formulation, deliberation, and recommendation of corrective and preventive measures, are reported to the President, the Board of Directors, and the Audit & Supervisory Board, with compliance violations being dealt with according to prescribed internal procedures.

Furthermore, the Compliance Hotline has been set up to quickly ascertain and correct compliance violations, and can be used by all the people involved in the MGC Group's business activities, such as officers and employees of the MGC Group including those who have retired in the past year, their family members, or partner companies and customers. Our In-house Compliance Hotline is staffed

by the Compliance Committee Secretariat, while our External Compliance Hotline is available through an office with attorneys specializing in compliance, including female attorneys. These attorneys also provide advice to the Compliance Committee.

Consultations and whistleblowing brought to the attention of the Hotline and deemed to be potential compliance violations are investigated by the Compliance Committee, which takes any required corrective action or measures to prevent a recurrence. The results are also reported back to the party who submitted the original consultation or whistleblowing.

### MGC Compliance Consultation Structure



\*1 Coordinated response depending on the case

\*2 The Outside Audit & Supervisory Board Member is consulted for matters related to MGC officers

\*3 If a report received by External Compliance Hotline is deemed to be a serious problem related to MGC's management or management personnel, or if the response by the Compliance Committee, etc. is inadequate and an appropriate response cannot be expected, or if the Hotline user refuses to provide information to the Compliance Committee Secretariat, a direct report can be made to the Outside Audit & Supervisory Board Member.

## Compliance Education

MGC designates every October as "Corporate Ethics Month," during which we conduct compliance training for all employees using our intranet and the President sends out a notice to all business sites calling for the renewed promotion of compliance.

Compliance education is also included in grade-specific training, and training is provided using educational materials suited to each position.

Given an increasing need to respond to compliance issues, such as cartel involvement and providing improper benefits to foreign public officials, at MGC Group companies affiliated with our overseas businesses in emerging countries and elsewhere we are working to enhance the quality of compliance training for staff dispatched as officers to overseas affiliates.

## Security Export Control Initiatives

The MGC Group Code of Conduct stipulates that exacting export screening procedures are to be followed, in part to ensure adherence with laws and international treaties regarding exports, as well as to ensure appropriate control over the export of cargo and provision of technology that may relate to the development of weapons of mass destruction and conventional arms.

Export control subject to screening includes all products exported by MGC, regardless of whether the transaction involves direct, indirect, or brokered trade, as well as all technology related to the design, manufacturing, and use of those products.

Export screening involves multiple checks by business divisions in charge of products and an independent export control division, which screen all exports to determine if cargo and technology restrictions apply, as well as also checking the final customer, destination, and use.

In addition, we endeavor to maintain and enhance the export control setup by implementing internal audits and grade-specific education annually.



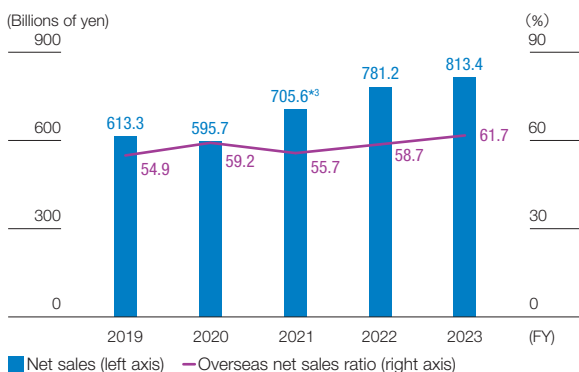
# Performance Data

	FY2013	FY2014	FY2015	FY2016
<b>Operating results</b> (Millions of yen)				
Net sales	¥ 534,443	529,570	593,502	556,480
Operating profit	11,488	14,996	34,018	43,762
Ordinary profit	30,804	42,000	45,432	62,430
Profit attributable to owners of parent	14,921	43,346	34,134	48,013
Share of profit of entities accounted for using equity method	20,466	27,895	16,683	21,125
EBITDA* <sup>1</sup>	57,327	68,211	74,631	89,407
<b>Financial position</b> (Millions of yen)				
Current assets	¥ 287,642	372,166	341,237	326,674
Total assets	657,838	790,784	739,582	738,188
Current liabilities	178,897	225,068	214,676	188,426
Net assets	323,858	422,851	423,135	473,370
Interest-bearing debt	204,489	215,614	181,427	118,713
<b>Cash flows</b> (Millions of yen)				
Operating activity cash flow	¥ 27,182	76,982	84,671	82,711
Investing activity cash flow	(29,883)	(23,531)	(31,922)	(31,119)
Financing activity cash flow	7,124	(25,005)	(47,335)	(60,217)
Cash and cash equivalents at end of year	37,310	72,678	75,828	67,177
<b>Per share data</b> (Yen)				
Earnings per share (EPS)* <sup>2</sup>	¥ 66.07	191.94	153.85	221.83
Net assets per share* <sup>2</sup>	1,382.52	1,672.25	1,707.01	1,967.94

\*1 EBITDA = ordinary profit + interest paid + depreciation and amortization

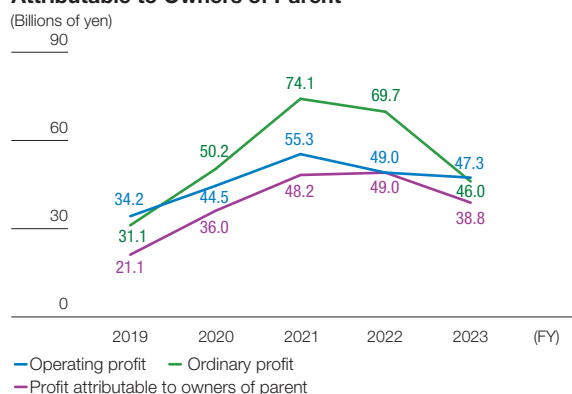
\*2 With an effective date of October 1, 2016, MGC conducted a reverse stock split for MGC's ordinary shares on a 2:1 basis. As a result, each amount per share in the above table is calculated by retroactive adjustment applying the above share consolidation to preceding periods as well.

## Net Sales, Overseas Net Sales Ratio

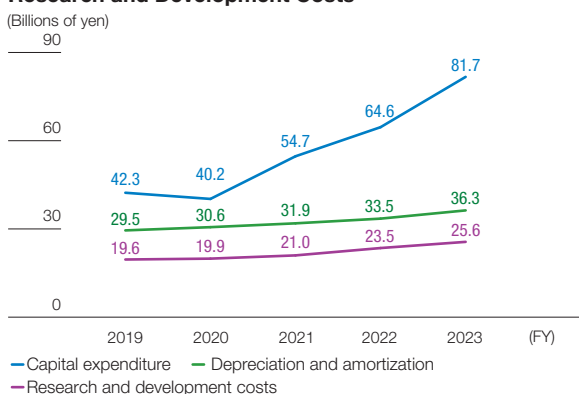


\*3 MGC has applied the Accounting Standard for Revenue Recognition, etc. since fiscal 2021. The impact of the application of said standard is a decrease in revenue by ¥34.8 billion.

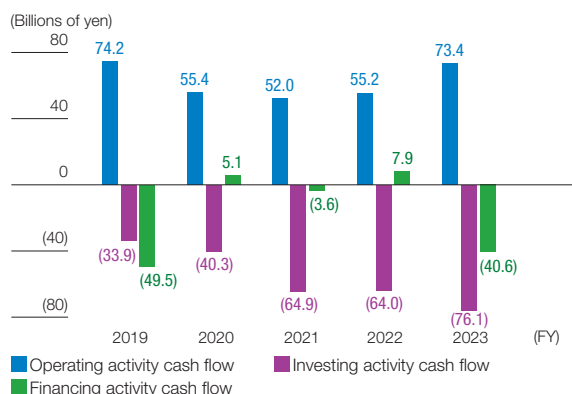
## Operating Profit, Ordinary Profit, Profit Attributable to Owners of Parent



## Capital Expenditure, Depreciation and Amortization, Research and Development Costs

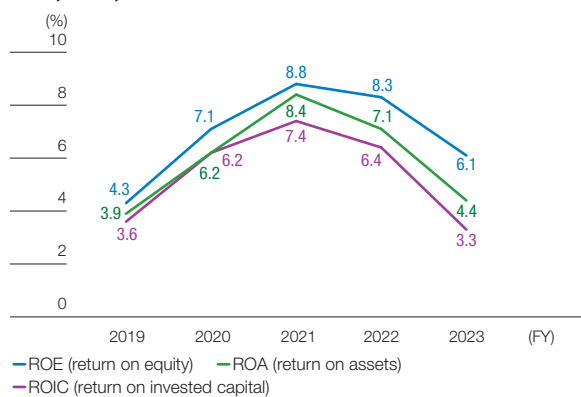


## Cash Flows



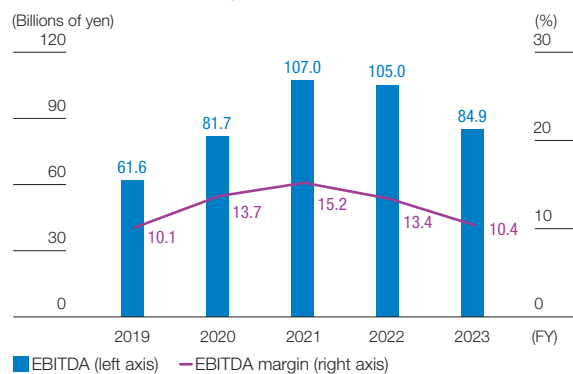
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
	635,909	648,986	613,344	595,718	705,656	781,211	<b>813,417</b>
	62,741	41,386	34,260	44,510	55,360	49,030	<b>47,337</b>
	80,711	69,199	31,116	50,240	74,152	69,764	<b>46,040</b>
	60,531	55,000	21,158	36,070	48,295	49,085	<b>38,818</b>
	18,277	28,408	(1,282)	5,162	14,883	17,546	<b>(5,696)</b>
	108,807	97,668	61,675	81,726	107,009	105,074	<b>84,908</b>
	384,249	378,845	358,669	402,141	452,210	483,249	<b>463,148</b>
	785,687	804,038	771,733	836,364	928,651	1,029,317	<b>1,068,010</b>
	206,835	188,420	163,574	167,947	198,969	220,442	<b>241,480</b>
	519,144	553,282	548,141	581,411	630,887	671,249	<b>684,832</b>
	106,964	95,751	74,713	98,476	117,650	166,944	<b>173,002</b>
	90,720	64,042	74,234	55,464	52,090	55,222	<b>73,473</b>
	(33,614)	(42,761)	(33,922)	(40,370)	(64,954)	(64,071)	<b>(76,172)</b>
	(33,038)	(31,396)	(49,563)	5,154	(3,666)	7,996	<b>(40,689)</b>
	90,304	80,379	70,043	91,075	92,257	101,185	<b>65,397</b>
	281.39	257.46	100.50	173.41	232.15	239.08	<b>190.97</b>
	2,187.99	2,354.25	2,368.11	2,520.34	2,733.86	2,970.07	<b>3,284.96</b>

### ROE, ROA, ROIC

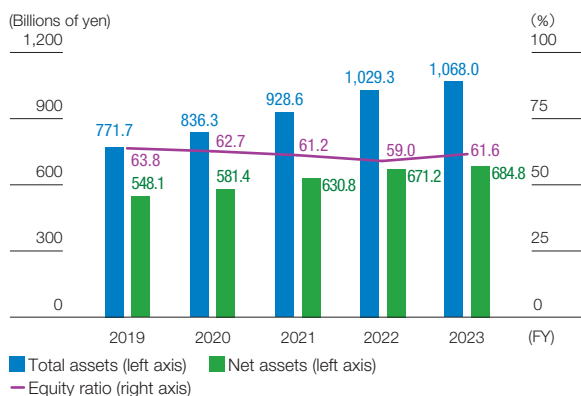


\*ROIC = (operating profit - income taxes + equity in earnings of affiliates)/invested capital (Definition revised from the current Medium-Term Management Plan)

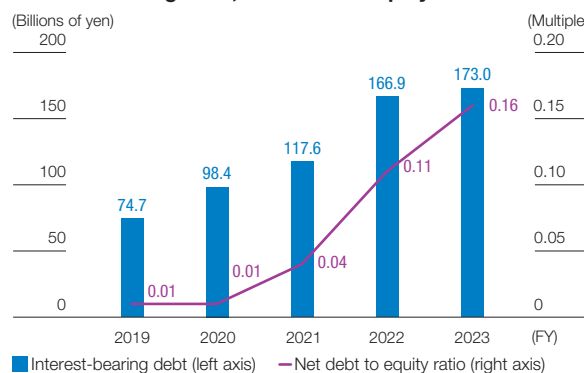
### EBITDA, EBITDA Margin



### Total Assets, Net Assets, Equity Ratio



### Interest-Bearing Debt, Net Debt to Equity Ratio

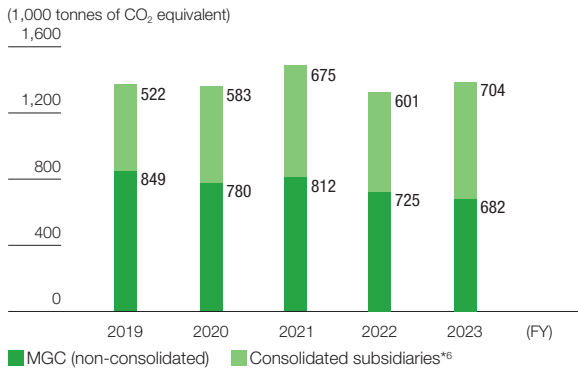


Performance Data

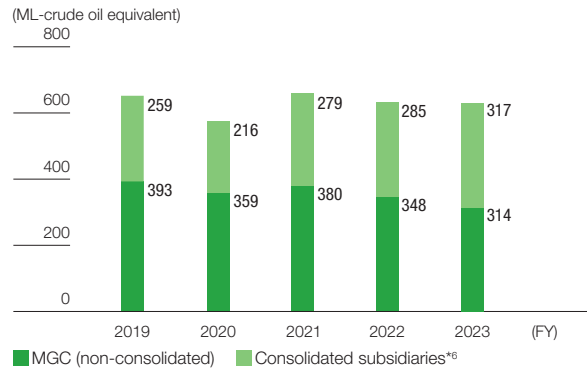
	FY2013	FY2014	FY2015	FY2016
<b>Ratios (%)</b>				
Operating profit margin	2.1	2.8	5.7	7.9
ROE (return on equity)	5.0	12.6	9.0	12.0
ROA (return on assets)	4.8	5.8	5.9	8.4
ROIC (return on invested capital) <sup>*4</sup>	5.7	7.1	7.0	9.6
Equity ratio	47.5	47.8	51.0	57.5
EBITDA margin	10.7	12.9	12.6	16.1
<b>Others</b>				
Capital expenditure (millions of yen)	¥ 25,409	22,226	30,512	35,010
Depreciation and amortization (millions of yen)	23,528	23,770	26,705	25,631
Research and development costs (millions of yen)	16,122	16,873	18,936	19,267
Number of employees	5,445	8,254	8,176	8,034
<b>Work-life balance (MGC alone)</b>				
Ratio of taking annual leave (%)	80.1	82.6	83.9	80.9
Average overtime and holidays worked per month (excluding management) (hours)	13.3	13.4	13.8	14.2
<b>Environmental management</b>				
GHG emissions <sup>*5,6</sup> (kt-CO <sub>2</sub> -e)	1,106	1,085	1,082	1,006
Energy use <sup>*5,6</sup> (ML-crude oil equivalent)	552	448	430	463

\*4 ROIC = (operating profit - income taxes + equity in earnings of affiliates)/invested capital (Definition revised from the current Medium-Term Management Plan)  
 \*5 Including domestic consolidated subsidiaries from fiscal 2015 and overseas consolidated subsidiaries from fiscal 2017. Others on a non-consolidated basis  
 \*6 Scope of consolidated subsidiaries changed in fiscal 2021 and fiscal 2023

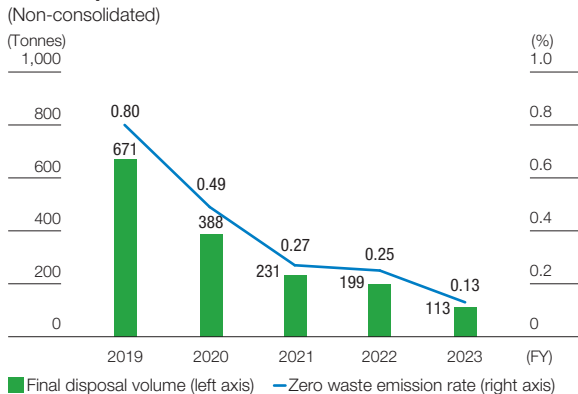
**GHG Emissions**



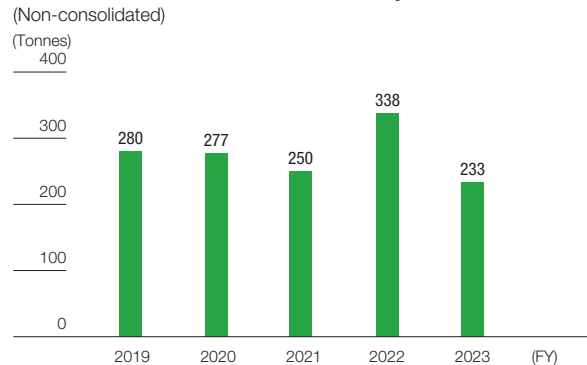
**Energy Use**



**Final Disposal Volume and Zero Waste Emission Rate**



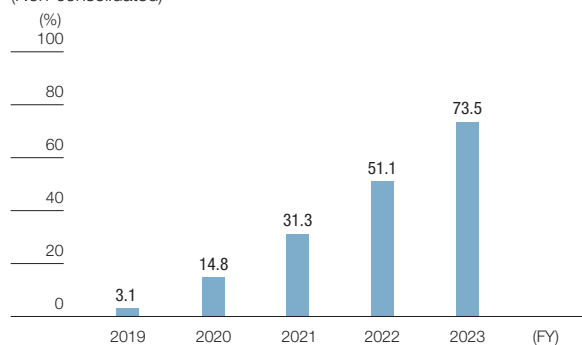
**Emissions Volume of Substances Subject to PRTR Law**



	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
	9.9	6.4	5.6	7.5	7.8	6.3	<b>5.8</b>
	13.6	11.3	4.3	7.1	8.8	8.3	<b>6.1</b>
	10.6	8.7	3.9	6.2	8.4	7.1	<b>4.4</b>
	12.1	9.5	3.6	6.2	7.4	6.4	<b>3.3</b>
	59.5	62.6	63.8	62.7	61.2	59.0	<b>61.6</b>
	17.1	15.0	10.1	13.7	15.2	13.4	<b>10.4</b>
	30,959	39,279	42,389	40,282	54,793	64,650	<b>81,753</b>
	27,027	27,451	29,591	30,686	31,999	33,565	<b>36,304</b>
	18,987	18,607	19,696	19,905	21,093	23,512	<b>25,629</b>
	8,009	8,276	8,954	8,998	9,888	10,050	<b>7,918</b>
	79.4	83.8	86.9	77.6	80.9	85.4	<b>89.6</b>
	14.4	14.2	13.6	12.9	14.6	14.8	<b>14.4</b>
	1,355	1,401	1,371	1,363	1,487	1,327	<b>1,386</b>
	628	614	652	576	660	633	<b>631</b>

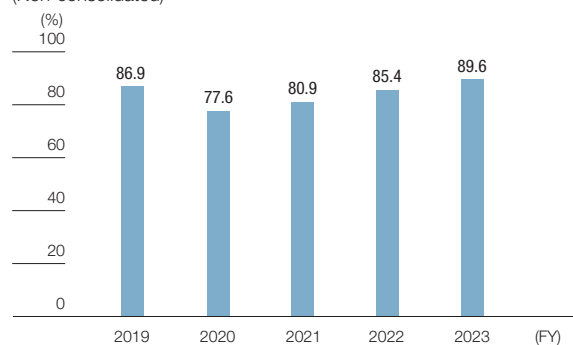
### Ratio of Male Employees Taking Parental Leave

(Non-consolidated)




### Ratio of Taking Annual Leave

(Non-consolidated)




### Evaluation from Society (As of July 31, 2024)


#### Inclusion in ESG Investment Indexes




**FTSE4Good**



**FTSE Blossom Japan Index**




**FTSE Blossom Japan Sector Relative Index**



**2024 Sompo Sustainability Index**

Morningstar Japan ex-REIT Gender Diversity Tilt (GENDi J)




**S&P/JPX Carbon Efficient Index**

**2024 CONSTITUENT MSCI NIHONKABU ESG SELECT LEADERS INDEX**

Mitsubishi Gas Chemical Company, Inc.'s inclusion in MSCI indexes and its use of the MSCI logo, trademarks, service marks, and index name is not an endorsement, advertisement or promotion of Mitsubishi Gas Chemical Company, Inc. by MSCI or its associates. The MSCI indexes are the exclusive property of MSCI. The names and logos of MSCI and the MSCI indexes are trademarks or service marks of MSCI or its associates.


**2024 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)**

#### External Evaluation



**CDP DISCLOSER 2023**

CDP Climate Change: A-  
CDP Water Security: B



**2024 健康経営優良法人**  
Health and productivity

Please refer to the Sustainability website for details.  
<https://www.mgc.co.jp/eng/sustainability/evaluation.html>



# Consolidated Financial Statements

## Consolidated Balance Sheet

	(Millions of yen)		(Millions of yen)	
	As of March 31, 2023	As of March 31, 2024	As of March 31, 2023	As of March 31, 2024
<b>Assets</b>				
<b>Current assets</b>				
Cash and deposits	108,378	<b>71,447</b>		
Notes and accounts receivable - trade, and contract assets	176,626	<b>165,648</b>		
Securities	93	—		
Merchandise and finished goods	89,367	<b>111,668</b>		
Work in process	22,331	<b>19,769</b>		
Raw materials and supplies	66,444	<b>69,092</b>		
Other	20,775	<b>26,175</b>		
Allowance for doubtful accounts	(767)	<b>(651)</b>		
<b>Total current assets</b>	<b>483,249</b>	<b>463,148</b>		
<b>Non-current assets</b>				
<b>Property, plant and equipment</b>				
Buildings and structures	265,074	<b>232,324</b>		
Accumulated depreciation	(162,931)	<b>(144,676)</b>		
Buildings and structures, net	102,143	<b>87,647</b>		
Machinery, equipment and vehicles	550,543	<b>535,257</b>		
Accumulated depreciation	(462,653)	<b>(448,906)</b>		
Machinery, equipment and vehicles, net	87,890	<b>86,350</b>		
Land	43,843	<b>34,023</b>		
Leased assets	6,603	<b>5,148</b>		
Accumulated depreciation	(2,224)	<b>(1,731)</b>		
Leased assets, net	4,379	<b>3,417</b>		
Construction in progress	66,467	<b>94,631</b>		
Other	57,618	<b>52,715</b>		
Accumulated depreciation	(48,576)	<b>(44,161)</b>		
Other, net	9,042	<b>8,553</b>		
<b>Total property, plant and equipment</b>	<b>313,767</b>	<b>314,624</b>		
<b>Intangible assets</b>				
Goodwill	4,425	<b>16,868</b>		
Leased assets	34	<b>54</b>		
Software	3,479	<b>4,921</b>		
Other	4,041	<b>3,026</b>		
<b>Total intangible assets</b>	<b>11,980</b>	<b>24,871</b>		
<b>Investments and other assets</b>				
Investment securities	200,101	<b>236,354</b>		
Long-term loans receivable	8,184	<b>8,488</b>		
Deferred tax assets	3,863	<b>3,180</b>		
Retirement benefit asset	1,387	<b>11,005</b>		
Other	8,706	<b>7,854</b>		
Allowance for doubtful accounts	(1,922)	<b>(1,518)</b>		
<b>Total investments and other assets</b>	<b>220,320</b>	<b>265,365</b>		
<b>Total non-current assets</b>	<b>546,068</b>	<b>604,861</b>		
<b>Total assets</b>	<b>1,029,317</b>	<b>1,068,010</b>		
<b>Liabilities</b>				
<b>Current liabilities</b>				
Notes and accounts payable - trade	88,342	<b>109,013</b>		
Short-term borrowings	47,913	<b>51,818</b>		
Accrued expenses	23,413	<b>19,781</b>		
Lease liabilities	1,074	<b>1,001</b>		
Income taxes payable	5,274	<b>6,134</b>		
Provision for bonuses	6,220	<b>5,116</b>		
Provision for bonuses for directors (and other officers)	32	<b>27</b>		
Provision for business restructuring	421	<b>683</b>		
Other provisions	40	<b>94</b>		
Asset retirement obligations	39	—		
Other	47,670	<b>47,809</b>		
<b>Total current liabilities</b>	<b>220,442</b>	<b>241,480</b>		
<b>Non-current liabilities</b>				
Bonds payable	20,000	<b>30,000</b>		
Long-term borrowings	74,680	<b>69,671</b>		
Lease liabilities	3,276	<b>2,511</b>		
Deferred tax liabilities	12,514	<b>16,334</b>		
Provision for retirement benefits for directors (and other officers)	279	<b>340</b>		
Provision for environmental measures	23	<b>23</b>		
Provision for business restructuring	2,499	<b>1,875</b>		
Provision for loss on business of subsidiaries and associates	59	<b>15</b>		
Other provisions	521	<b>364</b>		
Retirement benefit liability	4,453	<b>4,257</b>		
Asset retirement obligations	5,272	<b>5,707</b>		
Other	14,044	<b>10,593</b>		
<b>Total non-current liabilities</b>	<b>137,625</b>	<b>141,696</b>		
<b>Total liabilities</b>	<b>358,068</b>	<b>383,177</b>		
<b>Net assets</b>				
<b>Shareholders' equity</b>				
Share capital	41,970	<b>41,970</b>		
Capital surplus	34,293	<b>35,551</b>		
Retained earnings	521,426	<b>536,232</b>		
Treasury shares	(23,838)	<b>(26,127)</b>		
<b>Total shareholders' equity</b>	<b>573,852</b>	<b>587,627</b>		
<b>Accumulated other comprehensive income</b>				
Valuation difference on available-for-sale securities	8,950	<b>17,573</b>		
Deferred gains or losses on hedges	110	<b>171</b>		
Foreign currency translation adjustment	22,894	<b>40,143</b>		
Remeasurements of defined benefit plans	1,805	<b>12,229</b>		
<b>Total accumulated other comprehensive income</b>	<b>33,760</b>	<b>70,117</b>		
<b>Non-controlling interests</b>	<b>63,636</b>	<b>27,087</b>		
<b>Total net assets</b>	<b>671,249</b>	<b>684,832</b>		
<b>Total liabilities and net assets</b>	<b>1,029,317</b>	<b>1,068,010</b>		

## Consolidated Statement of Income

(Millions of yen)

	Fiscal year ended March 31, 2023	Fiscal year ended March 31, 2024
<b>Net sales</b>	781,211	<b>813,417</b>
<b>Cost of sales</b>	613,031	<b>640,227</b>
<b>Gross profit</b>	168,179	<b>173,189</b>
<b>Selling, general and administrative expenses</b>	119,149	<b>125,852</b>
<b>Operating profit</b>	49,030	<b>47,337</b>
<b>Non-operating income</b>		
Interest income	1,157	<b>1,775</b>
Dividend income	3,021	<b>3,205</b>
Share of profit of entities accounted for using equity method	17,546	—
Other	5,479	<b>6,436</b>
Total non-operating income	27,205	<b>11,417</b>
<b>Non-operating expenses</b>		
Interest expenses	1,745	<b>2,564</b>
Personnel expenses for seconded employees	1,852	<b>1,405</b>
Loss on disposal of non-current assets	858	<b>1,165</b>
Rental expenses	735	<b>660</b>
Share of loss of entities accounted for using equity method	—	<b>5,696</b>
Other	1,279	<b>1,221</b>
Total non-operating expenses	6,470	<b>12,714</b>
<b>Ordinary profit</b>	69,764	<b>46,040</b>
<b>Extraordinary income</b>		
Gain on step acquisitions	—	<b>15,085</b>
Gain on sale of investment securities	3,732	<b>2,830</b>
Insurance claim income	151	<b>1,434</b>
Subsidy income	—	<b>893</b>
Gain on liquidation of subsidiaries and associates	—	<b>325</b>
Compensation income	649	—
Gain on recovery of money transfer scam at subsidiary	215	—
Reversal of provision for loss on business of subsidiaries and associates	128	—
Total extraordinary income	4,876	<b>20,568</b>
<b>Extraordinary losses</b>		
Loss on sale of shares of subsidiaries and associates	—	<b>2,843</b>
Impairment losses	1,128	<b>1,488</b>
Loss on tax purpose reduction entry of non-current assets	—	<b>704</b>
Loss on disposal of non-current assets	872	<b>307</b>
Provision of allowance for doubtful accounts	410	<b>200</b>
Loss on disaster	—	<b>177</b>
Provision for business restructuring	870	—
Loss on valuation of shares of subsidiaries and associates	846	—
Expenses for land maintenance	275	—
Total extraordinary losses	4,402	<b>5,722</b>
<b>Profit before income taxes</b>	70,239	<b>60,887</b>
<b>Income taxes - current</b>	13,831	<b>14,528</b>
<b>Income taxes - deferred</b>	1,619	<b>(456)</b>
<b>Total income taxes</b>	15,450	<b>14,072</b>
<b>Profit</b>	54,788	<b>46,815</b>
<b>Profit attributable to non-controlling interests</b>	5,703	<b>7,996</b>
<b>Profit attributable to owners of parent</b>	49,085	<b>38,818</b>

## Consolidated Statement of Comprehensive Income

(Millions of yen)

	Fiscal year ended March 31, 2023	Fiscal year ended March 31, 2024
<b>Profit</b>	54,788	<b>46,815</b>
<b>Other comprehensive income</b>		
Valuation difference on available-for-sale securities	(2,430)	<b>8,789</b>
Deferred gains or losses on hedges	51	<b>(84)</b>
Foreign currency translation adjustment	9,408	<b>16,189</b>
Remeasurements of defined benefit plans, net of tax	901	<b>10,995</b>
Share of other comprehensive income of entities accounted for using equity method	7,033	<b>5,048</b>
Total other comprehensive income	14,963	<b>40,938</b>
<b>Comprehensive income</b>	69,751	<b>87,753</b>
<b>Comprehensive income attributable to</b>		
Comprehensive income attributable to owners of parent	61,319	<b>75,162</b>
Comprehensive income attributable to non-controlling interests	8,432	<b>12,591</b>

## Consolidated Statement of Changes in Net Assets

(Millions of yen)

## Fiscal year ended March 31, 2023

	Shareholders' equity					Accumulated other comprehensive income					Non-controlling interests	Total net assets
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
<b>Balance at beginning of period</b>	41,970	34,339	492,455	(21,525)	547,239	11,376	(326)	9,861	614	21,526	62,121	630,887
<b>Changes during period</b>												
Dividends of surplus			(15,464)		(15,464)							(15,464)
Profit attributable to owners of parent			49,085		49,085							49,085
Purchase of treasury shares				(7,083)	(7,083)							(7,083)
Disposal of treasury shares		23		47	70							70
Cancellation of treasury shares		(4,724)		4,724	(0)							(0)
Transfer from retained earnings to capital surplus		4,647	(4,647)		–							–
Change in scope of consolidation			(1)		(1)							(1)
Change in ownership interest of parent due to transactions with non-controlling interests		7			7							7
Net changes in items other than shareholders' equity					–	(2,426)	436	13,032	1,191	12,234	1,514	13,748
<b>Total changes during period</b>	–	(46)	28,971	(2,312)	26,612	(2,426)	436	13,032	1,191	12,234	1,514	40,361
<b>Balance at end of period</b>	41,970	34,293	521,426	(23,838)	573,852	8,950	110	22,894	1,805	33,760	63,636	671,249

(Millions of yen)

## Fiscal year ended March 31, 2024

	Shareholders' equity					Accumulated other comprehensive income					Non-controlling interests	Total net assets
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
<b>Balance at beginning of period</b>	41,970	34,293	521,426	(23,838)	573,852	8,950	110	22,894	1,805	33,760	63,636	671,249
<b>Changes during period</b>												
Dividends of surplus			(16,367)		(16,367)							(16,367)
Profit attributable to owners of parent			38,818		38,818							38,818
Purchase of treasury shares				(10,005)	(10,005)							(10,005)
Disposal of treasury shares		25		45	70							70
Cancellation of treasury shares		(7,670)		7,670	–							–
Transfer from retained earnings to capital surplus		7,645	(7,645)		–							–
Change in ownership interest of parent due to transactions with non-controlling interests		1,258			1,258							1,258
Net changes in items other than shareholders' equity					–	8,622	61	17,249	10,423	36,356	(36,549)	(192)
<b>Total changes during period</b>	–	1,258	14,805	(2,288)	13,775	8,622	61	17,249	10,423	36,356	(36,549)	13,582
<b>Balance at end of period</b>	41,970	35,551	536,232	(26,127)	587,627	17,573	171	40,143	12,229	70,117	27,087	684,832

## Consolidated Statement of Cash Flows

(Millions of yen)

	Fiscal year ended March 31, 2023	Fiscal year ended March 31, 2024
<b>Cash flows from operating activities</b>		
Profit before income taxes	70,239	<b>60,887</b>
Depreciation	33,565	<b>36,304</b>
Loss (gain) on disposal of non-current assets	1,653	<b>1,254</b>
Amortization of goodwill	405	<b>1,929</b>
Share of loss (profit) of entities accounted for using equity method	(17,546)	<b>5,696</b>
Impairment losses	1,128	<b>1,488</b>
Insurance claim income	(163)	<b>(1,493)</b>
Loss (gain) on sale of shares of subsidiaries and associates	—	<b>2,843</b>
Increase (decrease) in allowance for doubtful accounts	531	<b>172</b>
Increase (decrease) in retirement benefit liability	(851)	<b>(407)</b>
Interest and dividend income	(4,179)	<b>(4,980)</b>
Interest expenses	1,745	<b>2,564</b>
Loss (gain) on sale of short-term and long-term investment securities	(3,980)	<b>(2,866)</b>
Loss (gain) on valuation of short-term and long-term investment securities	4	<b>118</b>
Loss (gain) on step acquisitions	—	<b>(15,085)</b>
Decrease (increase) in trade receivables	2,412	<b>16,865</b>
Decrease (increase) in inventories	(19,711)	<b>(742)</b>
Increase (decrease) in trade payables	(6,868)	<b>(14,286)</b>
Increase (decrease) in accrued consumption taxes	(192)	<b>(772)</b>
Increase (decrease) in provision for retirement benefits for directors (and other officers)	(2)	<b>(63)</b>
Provision for business structure improvement	870	—
Other, net	(1,101)	<b>(15,755)</b>
Subtotal	57,957	<b>73,671</b>
Interest and dividends received	4,361	<b>4,986</b>
Dividends received from entities accounted for using equity method	15,082	<b>8,473</b>
Interest paid	(1,654)	<b>(2,565)</b>
Income taxes paid	(20,686)	<b>(12,588)</b>
Proceeds from insurance income	163	<b>1,496</b>
Net cash provided by (used in) operating activities	55,222	<b>73,473</b>
<b>Cash flows from investing activities</b>		
Purchase of non-current assets	(62,721)	<b>(80,815)</b>
Proceeds from sale of non-current assets	202	<b>404</b>
Purchase of investment securities	(1,795)	<b>(550)</b>
Proceeds from sale of investment securities	5,739	<b>5,372</b>
Loan advances	(2,354)	<b>(4,179)</b>
Proceeds from collection of loans receivable	469	<b>296</b>
Proceeds from purchase of shares of subsidiaries resulting in change in scope of consolidation	—	<b>11,894</b>
Payments for sale of shares of subsidiaries resulting in change in scope of consolidation	—	<b>(7,941)</b>
Other, net	(3,612)	<b>(653)</b>
Net cash provided by (used in) investing activities	(64,071)	<b>(76,172)</b>
<b>Cash flows from financing activities</b>		
Net increase (decrease) in short-term borrowings	(7,062)	<b>(1,528)</b>
Proceeds from long-term borrowings	50,289	<b>10,254</b>
Repayments of long-term borrowings	(7,965)	<b>(23,234)</b>
Proceeds from issuance of bonds	—	<b>9,952</b>
Purchase of treasury shares	(7,083)	<b>(10,005)</b>
Proceeds from sale of treasury shares	0	<b>0</b>
Dividends paid	(15,464)	<b>(16,367)</b>
Dividends paid to non-controlling interests	(4,695)	<b>(7,023)</b>
Purchase of shares of subsidiaries not resulting in change in scope of consolidation	(2,195)	—
Other, net	2,173	<b>(2,736)</b>
Net cash provided by (used in) financing activities	7,996	<b>(40,689)</b>
<b>Effect of exchange rate change on cash and cash equivalents</b>	7,737	<b>7,601</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	6,885	<b>(35,787)</b>
<b>Cash and cash equivalents at beginning of period</b>	92,257	<b>101,185</b>
<b>Increase in cash and cash equivalents resulting from inclusion of subsidiaries in consolidation</b>	2,041	—
<b>Cash and cash equivalents at end of period</b>	101,185	<b>65,397</b>



# Corporate Data

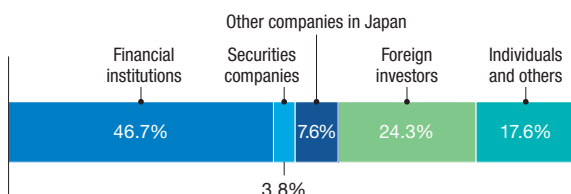
## Corporate Information (As of March 31, 2024)

<b>Company name</b>	MITSUBISHI GAS CHEMICAL COMPANY, INC.
<b>Address</b>	Mitsubishi Building, 5-2 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8324, Japan
<b>Originally founded</b>	January 15, 1918
<b>Incorporated</b>	April 21, 1951
<b>Capital</b>	41.97 billion yen
<b>Fiscal year</b>	Accounts closed in March
<b>Number of employees</b>	2,486 (non-consolidated) 7,918 (consolidated)

## Shareholder Information (As of March 31, 2024)

<b>Listing</b>	Tokyo Stock Exchange Prime Market
<b>Ticker symbol</b>	4182
<b>Total number of authorized shares</b>	492,428,000
<b>Number of outstanding shares</b>	217,239,199
<b>Stock transaction unit</b>	100
<b>Number of shareholders</b>	37,531

### Composition of shareholders

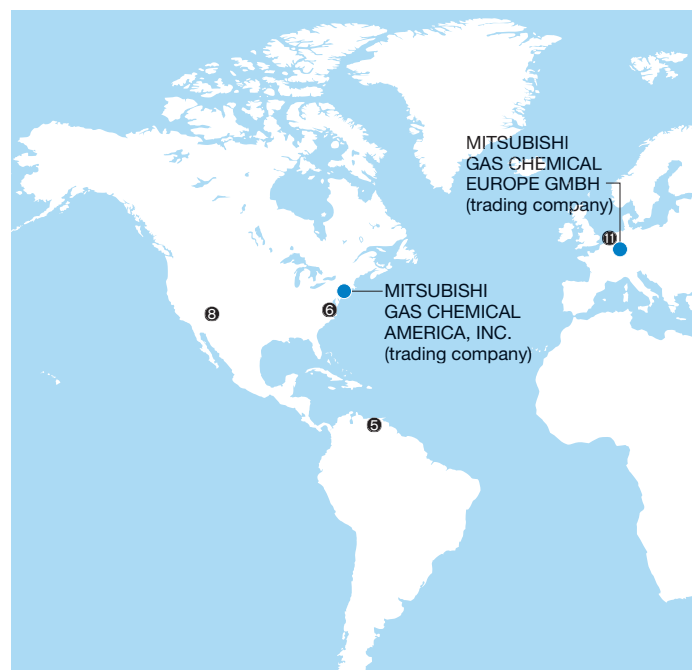


### Major Shareholders (Top 10)

Name of shareholder	Investment in MGC	
	Number of shares held (thousands)	Percentage of total outstanding shares
The Master Trust Bank of Japan, Ltd. (Trust Account)	28,460	14.2
Custody Bank of Japan, Ltd. (Trust Account)	18,483	9.2
Meiji Yasuda Life Insurance Company	8,797	4.3
Nippon Life Insurance Company	5,858	2.9
The Norinchukin Bank	5,026	2.5
SSBTC CLIENT OMNIBUS ACCOUNT	3,374	1.6
National Mutual Insurance Federation of Agricultural Cooperatives	3,235	1.6
The Bank of New York Mellon 140042	3,232	1.6
AGC Inc.	3,223	1.6
The Bank of Yokohama, Ltd.	3,085	1.5

Notes: 1. MGC holds 17,009 thousand shares of treasury stock, which is not included in the above list of major shareholders.  
2. Percentage of total outstanding shares does not include treasury stock.

## Business Locations

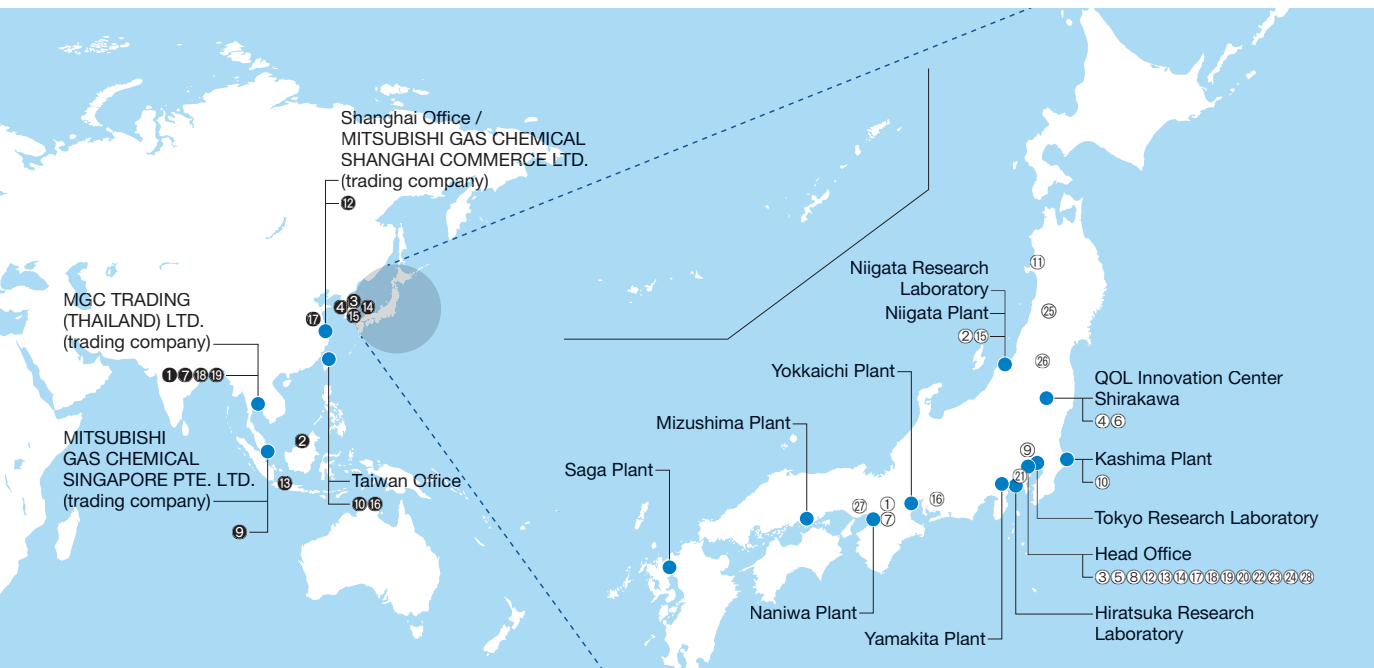


### Major Group Companies

■ Consolidated subsidiary  
■ Equity method affiliate

#### Overseas

- AGELESS (THAILAND) CO., LTD.** ■  
(Manufacturing of oxygen absorbers)
- BRUNEI METHANOL COMPANY SDN. BHD.** ■  
(Manufacturing and sale of methanol)
- KOREA ENGINEERING PLASTICS CO., LTD.** ■  
(Manufacturing and sale of polyacetal resins, etc.)
- KOREA POLYACETAL CO., LTD.** ■  
(Sale of polyacetal resins)
- METANOL DE ORIENTE, METOR, S.A.** ■  
(Manufacturing and sale of methanol)
- MGC ADVANCED POLYMERS, INC.** ■  
(Manufacturing and sale of nylons)
- MGC ELECTROTECHNO (THAILAND) CO., LTD.** ■  
(Manufacturing of copper-clad laminates)
- MGC PURE CHEMICALS AMERICA, INC.** ■  
(Manufacturing and sale of super-pure hydrogen peroxide/  
super-pure ammonium hydroxide/performance chemicals)
- MGC PURE CHEMICALS SINGAPORE PTE. LTD.** ■  
(Manufacturing and sale of super-pure hydrogen peroxide/  
super-pure ammonium hydroxide/performance chemicals)
- MGC PURE CHEMICALS TAIWAN, INC.** ■  
(Manufacturing and sale of super-pure hydrogen peroxide/  
performance chemicals)
- MGC SPECIALTY CHEMICALS NETHERLANDS B.V.** ■  
(Manufacturing and sale of meta-xylenediamine)
- MITSUBISHI GAS CHEMICAL ENGINEERING-PLASTICS (SHANGHAI) CO., LTD.** ■  
(Manufacturing of polycarbonate resin)
- PT PEROKSIDA INDONESIA PRATAMA** ■  
(Manufacturing and sale of hydrogen peroxide)
- SAMYANG KASEI CO., LTD.** ■  
(Manufacturing of polycarbonate resins)
- SAMYOUNG PURE CHEMICALS CO., LTD.** ■  
(Manufacturing and sale of super-pure hydrogen peroxide/  
performance chemicals)



16 TAI HONG CIRCUIT INDUSTRIAL CO., LTD. **E**  
(Manufacturing and sale of printed wiring board)

17 TAIXING MGC LINGSU CO., LTD. **C**  
(Manufacturing and sale of hydrogen peroxide/performance chemicals)

18 THAI POLYACETAL CO., LTD. **C**  
(Manufacturing of polyacetal)

19 THAI POLYCARBONATE CO., LTD. **C**  
(Manufacturing of polycarbonate resin)

#### Domestic

1 EIWA CHEMICAL IND. CO., LTD. **C**  
(Manufacturing and sale of blowing agents)

2 MGC Advance Co., Ltd. **C**  
(Transportation storage, manufacturing and sale of life science products, engineering maintenance)

3 MGC Woodchem Corporation **C**  
(Manufacturing and sale of wood adhesives and formalins)

4 MGC AGELESS Co., Ltd. **C**  
(Manufacturing and technical service for oxygen absorbers, etc.)

5 MGC ENERGY Company Limited **C**  
(Provision and sale of electricity)

6 MGC Electrotechno Co., Ltd. **C**  
(Manufacturing of copper-clad laminates)

7 Otsuka-MGC Chemical Company, Inc. **E**  
(Manufacturing and sale of hydrazine hydrate)

8 MGC Terminal Company, Inc. **C**  
(Storage terminal for methanol and chemicals)

9 MGC Filsheet Co., Ltd. **C**  
(Manufacturing of polycarbonate sheets and films)

10 KYOUDOU KASANKASUISO CORP. **C**  
(Manufacturing of hydrogen peroxide)

11 GRANOPT CO., LTD. **E**  
(Manufacturing and sale of magneto-optic crystals)

12 Global Polyacetal Co., Ltd. **C**  
(Manufacturing and sale of engineering plastics)

13 KOKUKA SANGYO CO., LTD. **E**  
(Shipping)

14 JSP CORPORATION **E**  
(Manufacturing and sale of foamed plastic)

15 TOHO EARTHTECH, INC. **C**  
(Manufacturing and sale of natural gas and iodine, seismic reinforcement work)

16 Toyo Kagaku Co., Ltd. **C**  
(Manufacturing and sale of plastic injection molding)

17 Japan Saudi Arabia Methanol Company, Inc. **E**  
(Business administration for AR-RAZI)

18 Japan Trinidad Methanol Company, Inc. **E**  
(Investing in Trinidad and Tobago)

19 JAPAN FINECHEM COMPANY, INC. **C**  
(Manufacturing and sale of fine chemicals and electronic products)

20 Japan U-PICA Company, Ltd. **C**  
(Manufacturing and sale of unsaturated polyester resins)

21 FUDOW COMPANY LTD. **C**  
(Manufacturing and sale of thermoset resin molding compounds, thermoplastic resin molding and various plastics)

22 Polyols Asia Company, Inc. **C**  
(Sale of polyhydric alcohols)

23 Mitsubishi Engineering-Plastics Corporation **C**  
(Manufacturing and sale of polycarbonate resin)

24 Mitsubishi Gas Chemical Trading, Inc. **C**  
(Sale of chemicals, electronics materials and polymers)

25 Yuzawa Geothermal Power Corporation **E**  
(Development and provision of geothermal energy resources)

26 Yonezawa Dia Electronics Co., Inc. **C**  
(Manufacturing of mass molding laminates, process development)

27 RYODEN KASEI CO., LTD. **E**  
(Manufacturing and sale of insulating materials)

28 Ryowa Enterprise Co., Ltd. **C**  
(Property management/business support)

## **MITSUBISHI GAS CHEMICAL COMPANY, INC.**

Mitsubishi Building, 5-2 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8324

Investor Relations Department, CSR & IR Division

Tel: +81-3-3283-5041 Fax: +81-3-3287-0833

<https://www.mgc.co.jp/eng/>