May 10, 2024

Company name: Mitsubishi Gas Chemical Company, Inc.
Representative: Masashi Fujii, Representative Director & President
Securities code: 4182 (The Prime Market of the Tokyo Stock Exchange)
Contact: Satoshi Takizawa, General Manager, CSR&IR Division
TEL: +81-3-3283-5041

Notice regarding the Medium-Term Management Plan

The MGC Group announced that it has formulated a medium-term management plan covering the three years from fiscal 2024 (ending March 31, 2025) to fiscal 2026 (ending March 31, 2027), which was approved by a meeting of the Board of Directors held today.

The medium-term management plan is a sequel to the previous medium-term management plan and is to serve as a guideline for realizing the Vision for MGC in 2030. With the new objectives of strengthening the resiliency of its business portfolio and promoting sustainability management, the MGC Group will promote three strategies for each objective to realize them.

1. Review of Previous Medium-Term Management Plan

Of the management indicators targeted for the final fiscal year of the previous medium-term management plan, the MGC Group achieved its target for net sales, but missed its targets for operating profit, ordinary profit, ROIC, and ROE.

During the period of the previous medium-term management plan, the methanol business and energy resources and environment business were shifted to differentiating businesses, and the MGC Group achieved its target of reaching a percentage of net sales from differentiating businesses of over 40%. On the other hand, although the Group advanced its plan for large-scale investment in differentiating businesses (including new plants and plant expansion for electronic chemicals in Japan and overseas, expansion of its electronic materials plant in Thailand, and a new meta-xylenediamine plant in Europe), it saw a decrease in profitability and capital efficiency, mainly due to a general sales volume decrease following a semiconductor market slump and the economic slowdown in China, and also cost increases. In addition, new business creation was delayed despite aggressive investment of R&D resources. In reevaluating and rebuilding unprofitable businesses, the Group concentrated its formalin production sites, and decided to withdraw from the orthoxylene-phthalate-plasticizer chain, and others. However, there are still businesses facing challenges. As described above, the Group is currently mid-way through shifting

to a profit structure resilient to changes in the business environment. Under the new plan, it will work on strengthening the resiliency of its business portfolio.

Initiatives to balance social and economic value proceeded broadly in line with the previous medium-term management plan. Under the new medium-term management plan, the Group will continue to promote sustainability management.

	FY2021 result	FY2022 result	FY2023 result	FY2023 target
Net sales (billion JPY)	705.6	781.2	813.4	730.0
Operating profit(billion JPY)	55.3	49.0	47.3	70.0
Ordinary profit(billion JPY)	74.1	69.7	46.0	80.0
ROIC※1(%)	10.4	8.8	5.4	10 or higher
ROE(%)	8.8	8.3	6.1	9 or higher

*1. ROIC = Ordinary profit/invested capital

2. Overview of the Medium-Term Management Plan — “Growing,” “Winning,” and “Sustainable”



Under this plan, the differentiating businesses category has been renamed “Uniqueness & Presence (U&P) businesses,” and redefined as businesses that excel from the perspectives of being “growing,” “winning,” and “sustainable” (= business potential, economic value, and social value), with the potential to grow sustainably while delivering both social and economic value.

Objective 1 is to strengthen the resiliency of MGC’s business portfolio. As Strategy 1 to realize this objective, the MGC Group will focus on Uniqueness & Presence. The Group will prioritize allocation of management resources to U&P businesses, and reap the benefits of large-scale investments. Furthermore, the Group will work to maintain added value by passing on costs to prices and also to strengthen management based on capital efficiency using the ROIC tree.

Strategy 2 is to build new value through innovation. Here, the MGC Group will focus particularly on the three target areas of ICT, mobility, and medical/food, while promoting R&D that contributes to solutions for climate change issues.

For Strategy 3, which is to restructure businesses requiring intensive management, the MGC Group will position PC-related products and xylene separators/derivatives as businesses requiring intensive management and promote cost reduction, balance-sheet streamlining, and other measures.

Objective 2 is to promote sustainability management. As one of its strategies for this objective, the MGC Group is promoting initiatives for realizing carbon neutrality. Specifically, the Group will accelerate the circular carbon methanol concept leveraging our technology and initiatives to reduce GHG emissions. In addition, the MGC Group's environment-friendly products for reducing society's environmental impact have been newly designated as Sharebeing products, and the Group will further expand products that contribute to the environment. The Group will continue to focus on developing and utilizing human resources as its most important management resource and enhance its human capital management.

The MGC Group's shareholder return policy is to lift the medium-term guideline for total payout ratio from 40% under the previous medium-term management plan to 50%, and to adopt a progressive dividend policy that aims to progressively increase dividends while avoiding dividend decreases to the extent that it does not impair the Group's financial soundness.

3. Target management indicators (final fiscal year of the medium-term management plan)

	FY2026 target
Net sales (billion JPY)	850.0
Operating profit(billion JPY)	85.0
Operating profit margin(%)	10 or higher
Ordinary profit(billion JPY)	95.0
EBITDA※2(billion JPY)	150.0
ROE(%)	9 or higher
ROIC※3(%)	8 or higher

*2: EBITDA = Ordinary profit + interest paid + depreciation and amortization

*3: ROIC = (operating profit - income taxes + equity in earnings of affiliates)/invested capital
(Definitions have been revised for the new medium-term management plan)

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

Notes:

1. Please refer to the attachment for details about the medium-term management plan.
2. This document contains performance forecasts and other statements concerning the future. These forward-looking statements are based on information available at the time. These materials were prepared and on certain premises judged to be reasonable. None of these forward-looking statements are intended to be guarantees of future performance. Various factors may cause actual performance to differ significantly from forecasts.



Medium-Term Management Plan
Grow UP 2026

Uniqueness & Presence — Becoming an excellent company with uniqueness and presence

MITSUBISHI GAS CHEMICAL COMPANY, INC.

May 10, 2024

TSE Prime Market
4182

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Review of Grow UP 2023

FY2021-FY2023



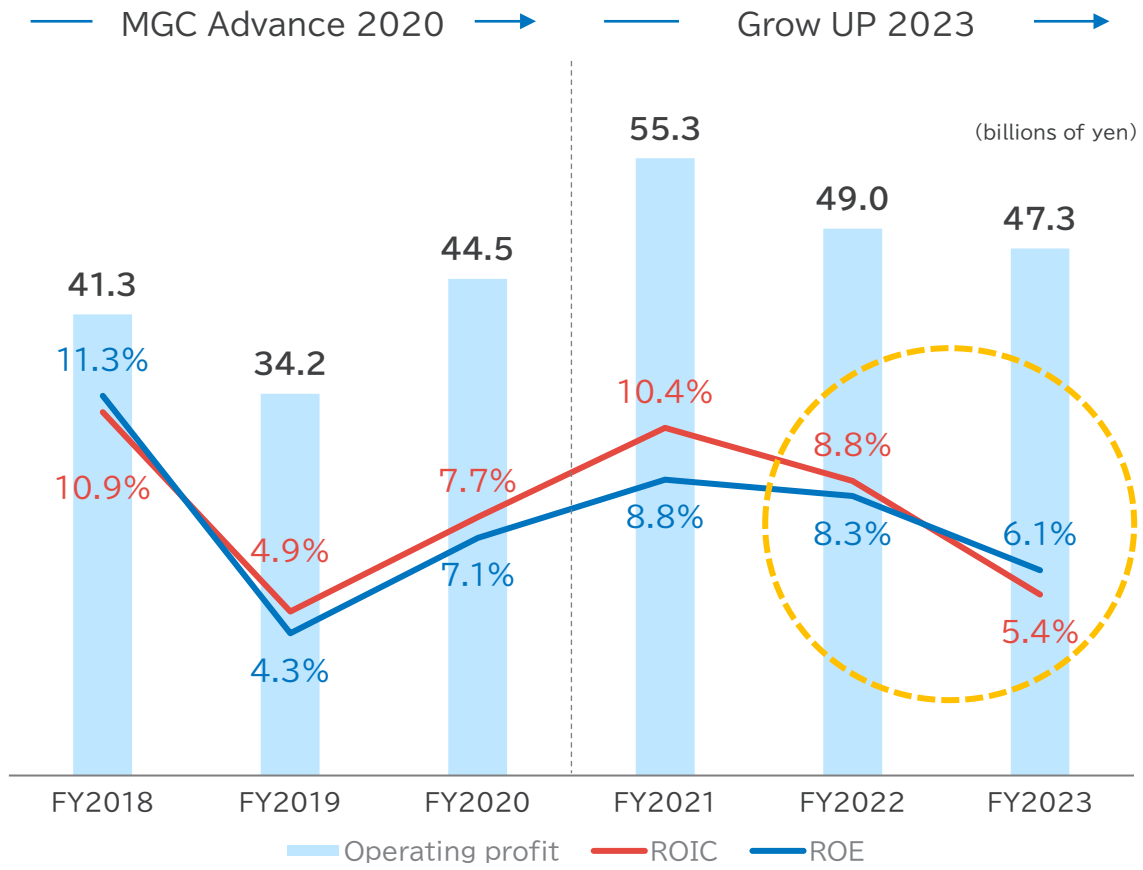
Review of Previous Medium-Term Management Plan (Grow UP 2023) (1)
Operating Performance

- Although the net sales target was achieved, operating profit, ordinary profit, ROIC, and ROE were all below target
- Decrease in profit margins and increase in investment contributed to lower ROIC
  → We recognize our priority is to improve profit margins and capital efficiency

	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*	7.7%	5.4%	10% or higher
ROE	7.1%	6.1%	9% or higher

*ROIC = Ordinary profit / Invested capital

■ Operating profit, ROIC, and ROE for the past two medium-term management plan periods



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Review of Previous Medium-Term Management Plan (Grow UP 2023) (2)
Operating Performance by Business Sector

– Basic Chemicals* and Specialty Chemicals both missed operating profit and ordinary profit targets, mainly due to lower sales volumes and higher fuel and raw material costs

*Currently, Green Energy & Chemicals (GEC)

	FY2023 result	FY2023 target
Net sales		
Basic Chemicals (GEC)	¥412.8 billion	¥410.0 billion
Specialty Chemicals	¥409.2 billion	¥330.0 billion
Operating profit		
Basic Chemicals (GEC)	¥17.7 billion	¥25.0 billion
Specialty Chemicals	¥33.0 billion	¥49.0 billion
Ordinary profit		
Basic Chemicals (GEC)	¥10.1 billion	¥31.0 billion
Specialty Chemicals	¥38.6 billion	¥53.0 billion

* This slide does not include businesses outside these segments and adjustments

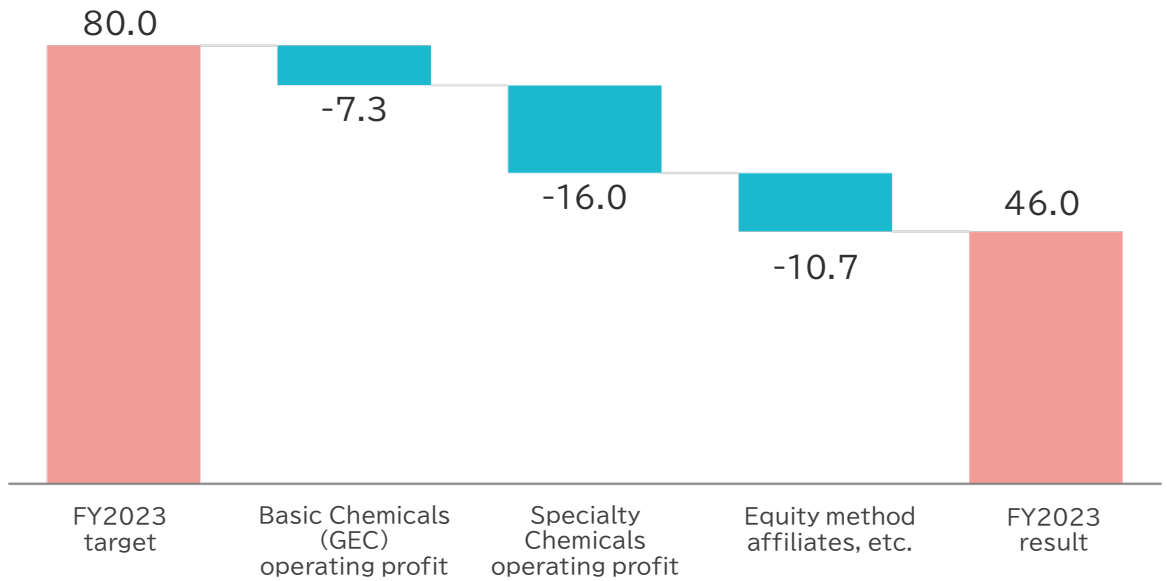
Difference analysis (ordinary profit)

Basic (GEC): Missed the target despite achieving targets in “energy resources and environment”, mainly due to generally lower sales volume and higher fuel and raw material costs in other products

Specialty: Missed the target due to optical materials demand falling below expectations, lower sales volumes for EL chemicals*, and sluggish performance in PC products, despite achieving targets for polyacetal (POM) and electronic materials

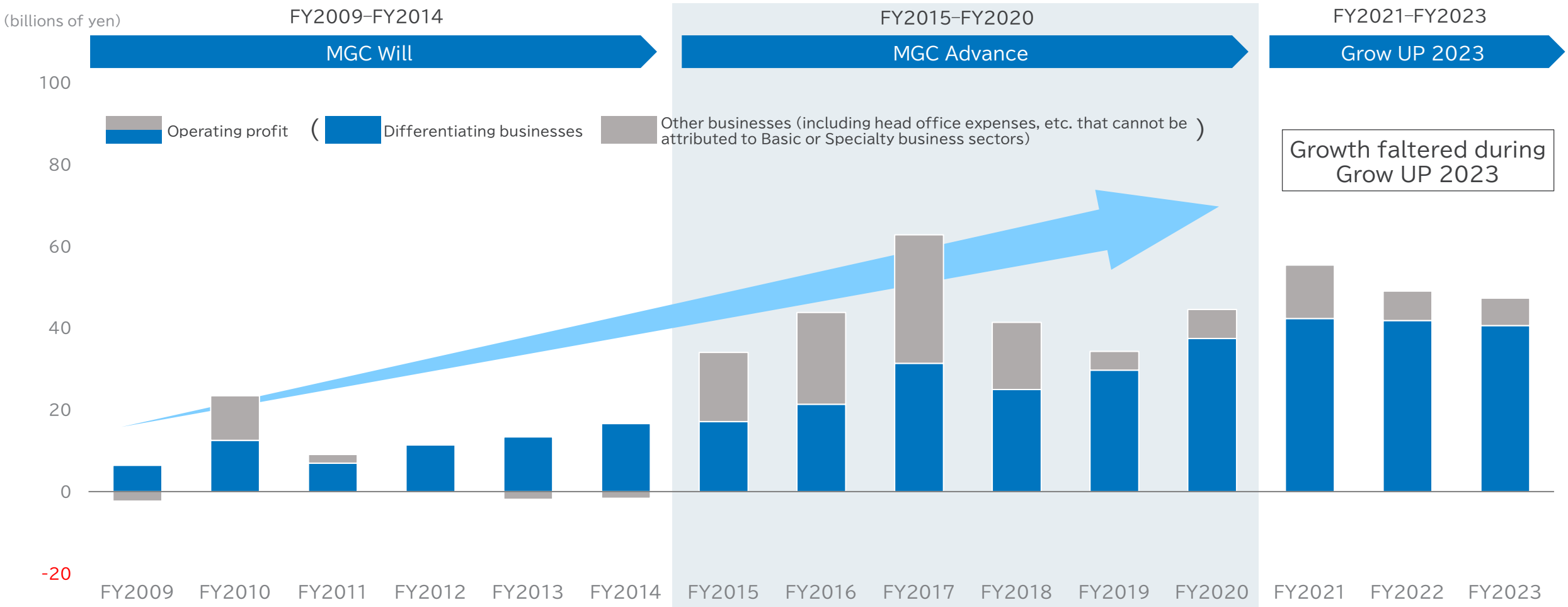
*Electronic chemicals

Equity method affiliates, etc.: Equity in earnings of affiliates missed the target mainly due to impairment losses recorded at methanol associates



Review of Previous Medium-Term Management Plan (Grow UP 2023) (3)
Operating profit of Differentiating Businesses

– Operating profit of differentiating businesses* has been growing steadily over the long term; however, growth faltered during Grow UP 2023



*Electronic materials, Electronic chemicals (EL chemicals), Optical materials, Polyacetal (POM), Meta-xylenediamine (MXDA)/Aromatic aldehydes, Polymer materials, Methanol, Energy resources and environment (Methanol and Energy resources and environment shifted to differentiating businesses in FY2023)

Review of Previous Medium-Term Management Plan (Grow UP 2023) (4)
Trends by Business

Status of KPI achievement	
	• "Methanol" and "Energy resources and environment" shifted to differentiating businesses, and the **"percentage of net sales from differentiating businesses of over 40%" was achieved** (FY2023 result 47.6%) • "Xylene separators and derivatives" continued to be unprofitable. **"Percentage of net sales from unprofitable businesses or those needing rebuilding of less than 3%" was not achieved** (FY2023 result 4.3%)

Differentiating businesses	Electronic 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*1 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 high performance and customer response capability, etc. Grew into a core business earning stable revenue
	Polyacetal (POM)	Achieved the target due to increase in market prices, etc. Established GPAC*2, creating a structure for integrating production, sales, and development operations
	MXDA*3/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
Foundation businesses	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 the circular carbon methanol concept. Operating profit generation capability increased, mainly due to supply chain streamlining, and shifted to differentiating 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
Unprofitable businesses or those needing rebuilding	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*5 continued to be unprofitable due to an adverse market environment. Positioned as a business requiring intensive management under the new medium-term management plan

*1 As super-pure hydrogen peroxide
*2 Global Polyacetal Co., Ltd.
*3 Meta-xylenediamine
*4 Mitsubishi Engineering-Plastics Corporation
*5 Purified isophthalic acid

Review of Previous Medium-Term Management Plan (Grow UP 2023) (5)
Objective 1 — Shift to a Profit Structure Resilient to Environmental Changes

	Measures taken and results	Issues to be addressed in the new medium-term management plan
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.	• Continue to promote investment and financing in differentiating businesses and steadily reap the benefits of large-scale investments conducted during the previous medium-term management plan • Respond to increased costs and pressure on management resources by strengthening ability to pass on costs to prices • Rigorous ROIC management
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	• Strengthen “selection and concentration”. Zero in on themes and focus R&D resources • Utilize MI*1 and IP landscape*2, accelerate R&D *1 Materials informatics: Initiatives to enhance development efficiency of various materials using informatics, such as machine learning *2 Utilizing intellectual property information analysis to make strategic recommendations that contribute to intellectual property management
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	• Position PC-related products and “xylene separators/derivatives” as “businesses set for intensive management” since they have low capital efficiency and profitability. Promote cost reduction and balance sheet streamlining, etc.

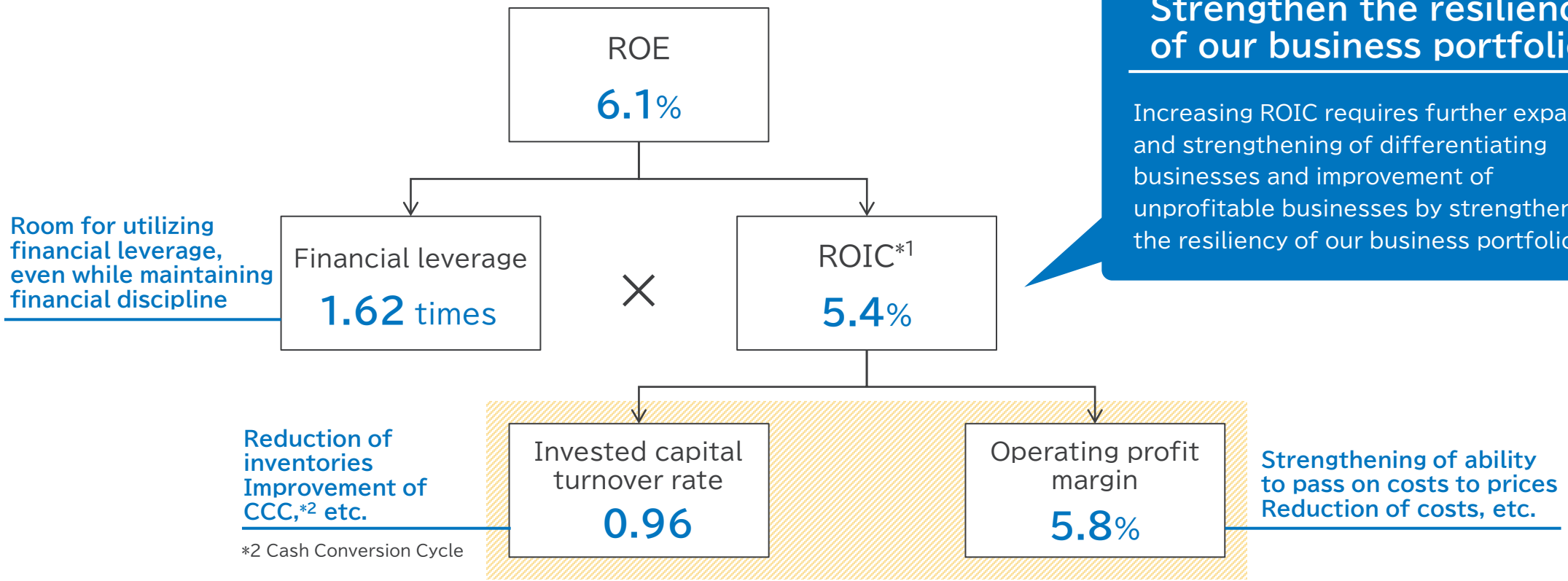
We are currently mid-way through “shift to a profit structure resilient to environmental changes”.
Under the new plan, we will “strengthen the resiliency of our business portfolio”.

Review of Previous Medium-Term Management Plan (Grow UP 2023) (6)
Identified Priorities — Improving Profit Margins and Capital Efficiency

– Our priority is to strengthen earning power, which decreased during the previous medium-term management plan (increase in profitability × improvement in efficiency)

Priorities for increasing profitability shown on an ROE tree

(*Figures are actual results for FY2023, the final year of the previous medium-term management plan (Grow UP 2023)



*1 ROIC = Ordinary profit / invested capital

Review of Previous Medium-Term Management Plan (Grow UP 2023) (7)
Objective 2 — Balance Social and Economic Value

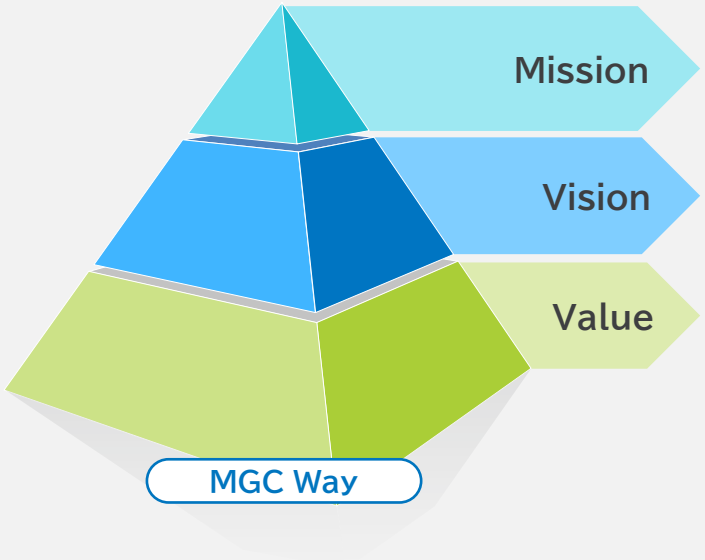
	Measures taken and results	Issues to be addressed in the new medium-term management plan
Strategy 2-1 Solve social issues through business	Progressed as planned on circular carbon methanol development and CO_2-derived PC development, etc. Achieved net sales targets for applications that contribute to development of ICT/mobility society or solving medical and food problems	• Continue to focus on circular carbon methanol development and CO_2-derived PC development • Visualization of contributions to the environment and society as net sales of MGC Group eco-friendly products “Sharebeing”
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	• Increase the reduction target for GHG emissions and contribute to solving climate change issues
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 MGC Commons as an institution aiming to develop human resources who will create innovation)	• Promote further strengthening of a safety foundation • Enhance human capital management

Initiatives to “balance social and economic value” proceeded broadly as planned.
Under the new medium-term management plan, we will promote sustainability management further.

New Medium-Term Management Plan
Grow UP 2026

FY2024-FY2026

Approach under Medium-Term Management Plan Grow UP 2026



Creating value to share with society

An excellent company with uniqueness and presence built on chemistry

Conduct Philosophy

As a professional group:

1. Courage that does not shy away from change
2. Aim for lofty goals
3. Perseverance in achieving goals
4. Build team spirit with communication

MGC Corporate Behavior Principles
Sustainability Promotion Principle

Vision for MGC in 2030

An excellent company centered on Uniqueness & Presence

Vision for MGC in 2030 → Planning with a backcasting approach → New Medium-Term Management Plan

The new medium-term management plan is positioned as the successor to Grow UP 2023 and our guide for realizing the vision for MGC in 2030

Vision for MGC in 2030

- Sharpen businesses defined by “Uniqueness & Presence,” and contribute to solving social issues through business
- For 2030, we aim to achieve net sales 1.2 trillion yen, operating profit of 120 billion yen, operating profit margin of 10% or higher, ROE of 12% or higher, and ROIC of 10% or higher

Management resources supporting sustainability

Technological Foundation

Diverse in-house development technology

Corporate Culture

Enterprising spirit based on entrepreneurialism

Partnerships

Value co-creation with a variety of partners

A Culture of Safety

Cornerstone of business activity

Promote sustainability management = Balance social and economic value

Strengthen the resiliency of our business portfolio

Uniqueness & Presence

Promote sustainability management

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 by 39% or more (compared to FY2013)

Sales of “Sharebeing” (MGC Group eco-friendly products)
500 billion yen or higher

Solve social issues through business



* ROIC = (Operating profit - Income taxes + Equity in earnings of affiliates) / Invested capital (Definitions have been revised for Grow UP 2026)

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New Medium-Term Management Plan: Grow UP 2026 — “Growing,” “Winning,” and “Sustainable”

Plan Duration: Three years from FY2024 to FY2026

Positioning: Successor to Grow UP 2023; period that contributes to the realization of the vision for MGC in 2030
Retackling previous plan targets and aiming for even higher goals as “an excellent company with uniqueness and presence built on chemistry.”

Keywords: Uniqueness & Presence

Objective 1 Strengthen the resiliency of our business portfolio

Strategy 1

Focus on “Uniqueness & Presence”

Strategy 2

Build new value through innovation

Strategy 3

Restructure businesses requiring intensive management

Objective 2 Promote sustainability management

Strategy 1

Accelerate initiatives for realizing carbon neutrality

Strategy 2

Enhance human capital management

Strategy 3

Promote materiality management

Promotion of strategies to increase corporate value for realizing management with an awareness of cost of capital and stock price

Grow UP 2026 Numerical Targets (FY2026)

– Taking on the challenge again with final-year targets that exceed those of the previous medium-term management plan. Promoting management with an awareness of the cost of capital and aiming for increase in ROE and ROIC

	FY2023 result (A)	Grow UP 2026 FY2024 forecast	Grow UP 2026 FY2026 target (B)	Difference (B) - (A)
Net sales	¥813.4 billion	¥780.0 billion	¥850.0 billion	+¥36.6 billion
Operating profit	¥47.3 billion	¥52.0 billion	¥85.0 billion	+¥37.7 billion
Operating profit margin	5.8%	6.7%	10% or higher	+4.2pp
Ordinary profit	¥46.0 billion	¥59.0 billion	¥95.0 billion	+¥49.0 billion
EBITDA *1	¥84.9 billion	¥97.0 billion	¥150.0 billion	+¥65.1 billion
ROE	6.1%	6.9%	9% or higher	+2.9pp
ROIC *2	3.3%	6.4%	8% or higher	+4.7pp

*1 EBITDA = Ordinary profit + Interest paid + Depreciation and amortization
*2 ROIC = (Operating profit - Income taxes + Equity in earnings of affiliates) / Invested capital
(Definitions have been revised for Grow UP 2026)

Grow UP 2026 Numerical Targets (FY2026) By Business Sector

– Targeting a significant increase in profits due mainly to increase in sales volume of the three ICT businesses (electronic materials, EL chemicals, optical materials)

	FY2023 result	FY2026 target
Net sales		
Green Energy & Chemicals	¥412.8 billion	**¥350.0 billion**
Specialty Chemicals	¥409.2 billion	**¥490.0 billion**
Operating profit		
Green Energy & Chemicals	¥17.7 billion	**¥22.0 billion**
Specialty Chemicals	¥33.0 billion	**¥65.0 billion**
Ordinary profit		
Green Energy & Chemicals	¥10.1 billion	**¥32.0 billion**
Specialty Chemicals	¥38.6 billion	**¥65.0 billion**
EBITDA		
Green Energy & Chemicals	¥28.0 billion	**¥52.0 billion**
Specialty Chemicals	¥57.9 billion	**¥100.0 billion**

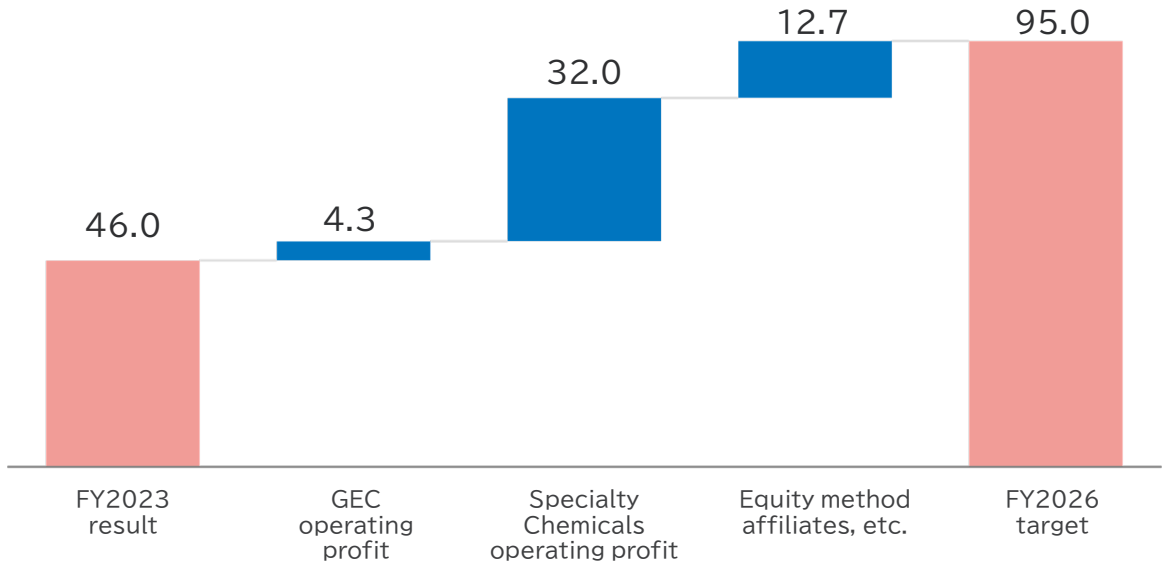
* This slide does not include businesses outside these segments and adjustments

Difference analysis (ordinary profit)

GEC: Planning increased profit as factors increasing profit, such as overall sales volume increase, outweigh the impacts of deconsolidation of JSP (-¥6.4 billion in operating profit) and increase in depreciation expenses at MXDA Europe, etc.

Specialty: Planning increased profit due mainly to increase in sales volume centered on the three ICT businesses and profitability improvement for PC-related businesses, despite an increase in depreciation expenses

Equity method affiliates, etc.: Planning an improvement by factoring in improvement in equity in earnings of affiliates due to increase in market price for methanol





New Medium-Term Management Plan

Objective 1
Strengthen the resiliency of our business portfolio

Specific Measures to “Strengthen the resiliency of our business portfolio”

Basic Policies

Thoroughly reform the business portfolio, being strongly mindful of capital efficiency

1. **Redefine highly profitable differentiating businesses as “Uniqueness & Presence”**
   Select those that are “growing, winning, and sustainable”
2. **Build new value through innovation**
3. **Restructure businesses requiring intensive management**

Strategy 1 **Focus on “Uniqueness & Presence”**

- Further concentration and focus of management resources in “Uniqueness & Presence” 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 differentiating businesses under the new medium-term management plan, staying mindful of capital efficiency

Strategy 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 theme for resolving problems related to climate change (circular carbon methanol, PC from CO_2, CCS, etc.)

Strategy 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.

\+ **Initiatives for improving capital efficiency**

- Strengthen shareholder returns (adopt a progressive dividend policy and raise the total payout ratio), reduce strategic shareholdings



Strategy 1

Focus on “Uniqueness & Presence”



“Uniqueness & Presence” = Differentiating Businesses Selection based on Three Dimensions

- We have renamed our differentiating businesses as “Uniqueness & Presence” (U&P) businesses
- These have been redefined as businesses that excel in growing, winning, and being sustainable, with the ability to grow continuously by achieving a balance between social and economic value

Social value

(Evaluated through non-financial indicators such as GHG emissions)

Sustainable

- Creation of social value that contributes to solving social issues (climate change countermeasures and reduction of environmental impact)

Economic value

(Set standards for ROIC and EBITDA)

Winning

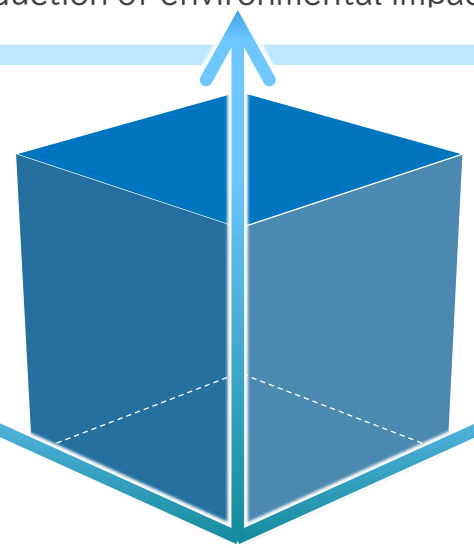
- Product development capabilities that provide strong price negotiation power
- Establishment of unrivaled competitive advantage

Business potential

(Evaluated through market share and market growth rate, etc.)

Growing

- Existence of large potential markets
- New market development via creation of new applications and products, through M&A, etc.



Focusing and strengthening businesses that satisfy the three dimensions = Strengthening the resiliency of our business portfolio

Business Portfolio Classification

– Comprehensively evaluated each business from three perspectives: economic value, business potential, and social value

Economic value evaluation

Set standards for ROIC and EBITDA and evaluate business advantage

Business potential evaluation

Evaluate business potential through market share and market growth rate, etc.

Social value evaluation

Evaluate the medium- to long-term sustainability of the business from the status of its GHG emissions and sustainability initiatives, etc.

Comprehensive evaluation

Comprehensively evaluate each business from the above three perspectives

Identify businesses that should receive priority allocation of management resources and those that should be considered for rebuilding

Business portfolio classification at the start of Grow UP 2026

Uniqueness & Presence = differentiating

- Electronic materials
- Inorganic chemicals (EL chemicals, etc.)
- Optical materials
- Methanol
- Energy resources and environment
- POM
- MXDA/ABAL
- Polymer materials

Foundation

- Methylamine and ammonia-related
- MMA-related
- Formalin and polyol-related
- Oxygen absorbers

New/next-generation

- Life science-related
- New/next-generation

Requiring intensive management

- PC-related
- Xylene separators and derivatives

Strategic Focus on Uniqueness & Presence (U&P) Businesses

Uniqueness & Presence (U&P) = differentiating

Three ICT businesses = Growth drivers

- Electronic materials
- Inorganic chemicals (EL chemicals, etc.)
- Optical materials

- Methanol
- Energy resources and environment
- POM
- MXDA/Aromatic aldehydes
- Polymer materials









Targets in Grow UP 2026

U&P business operating profit

FY2023		Target
¥40.6 billion	→	¥70.0 billion or higher +1.7 times

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 by passing on costs to prices
4. Strengthen management based on capital efficiency using the ROIC tree

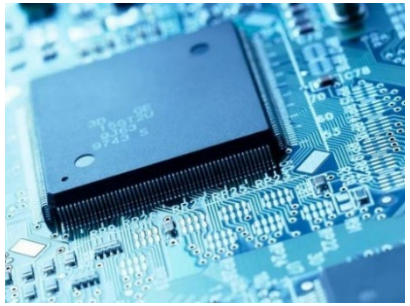
System for using a tree that breaks down “operating profit margin x invested capital turnover rate” to formulate ROIC improvement action plans for each business and steadily execute them

*Strategy examples for individual businesses are presented on the following pages

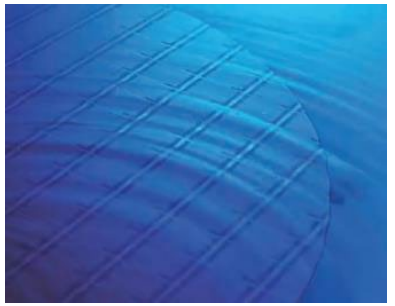
Strategic Focus on Uniqueness & Presence Businesses (1)
Promoting the Three ICT Businesses



Electronic materials



EL chemicals



Optical materials



The three ICT businesses are growth drivers

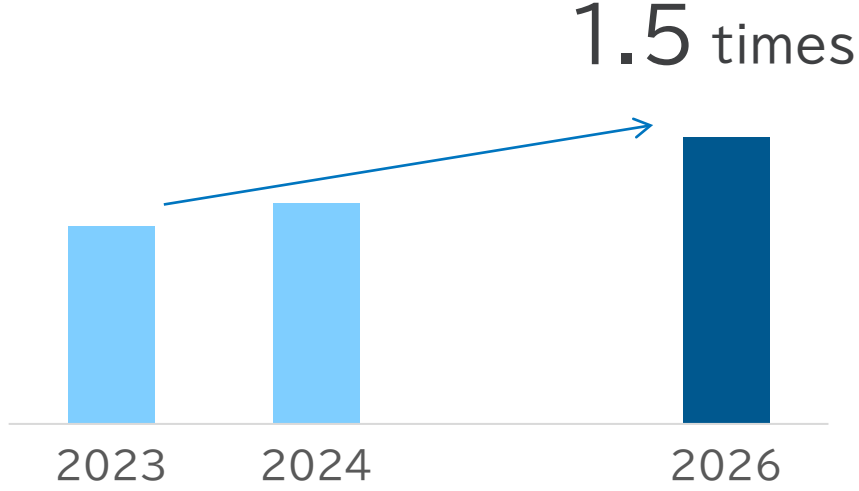
Plan for FY2026: Net sales to be 1.5 times higher than FY2023

Three ICT businesses:

- Electronic materials (BT products, OPE, etc.)
- Electronic chemicals (EL chemicals*)
- Optical materials

*EL chemicals: super-pure hydrogen peroxide and super-pure ammonium hydroxide, which is used for washing and etching silicon wafers for semiconductors, and hybrid chemicals, which are custom products for specific processes such as residue removal, etc.

Net sales of the three ICT businesses



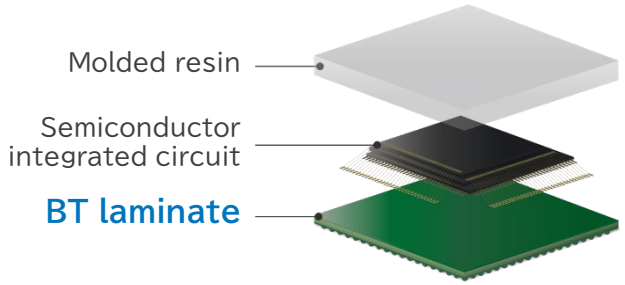
Strategic Focus on Uniqueness & Presence Businesses (2)
Promoting the Three ICT Businesses — Electronic Materials

Electronic Materials

- BT materials: Currently expanding our Thailand plant in preparation for growth in demand in the semiconductor market. Contribution to sales increase during the new medium-term management plan
- OPE: Demand is growing for use as a substrate material for generative AI servers. Sales expansion forecast during the new medium-term management plan

Expansion of Thailand plant

- Increase production capacity by approx. 2 times
- Planned start of operations in Oct. 2025

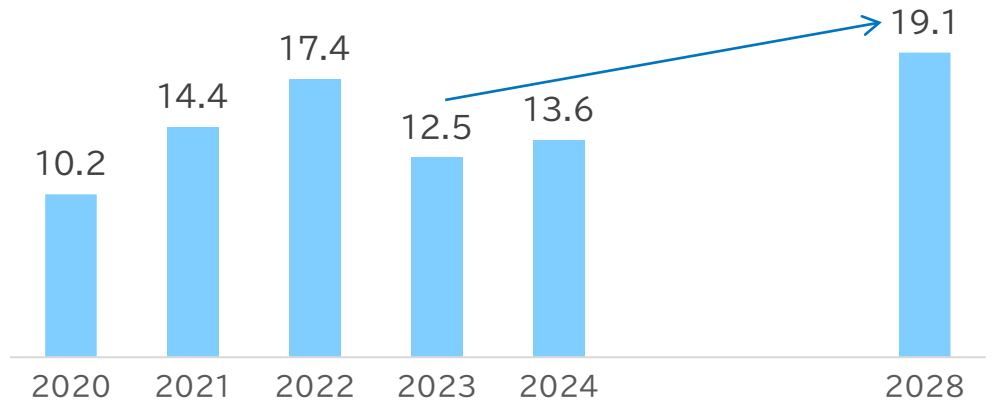




Outlook for semiconductor packaging substrate market (US$ billion)

- Further expansion expected for FY2024 onward

CAGR 9%
(2023-2028)



Source: 2024 Prismark Partners LLC

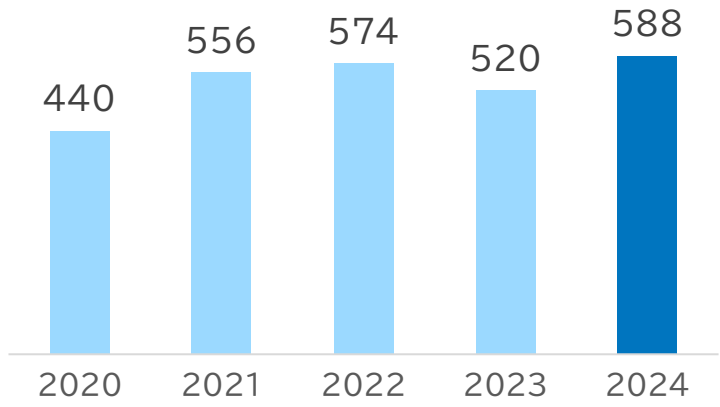
Strategic Focus on Uniqueness & Presence Businesses (3)
Promoting the Three ICT Businesses — EL Chemicals

Electronic Chemicals
(EL chemicals)

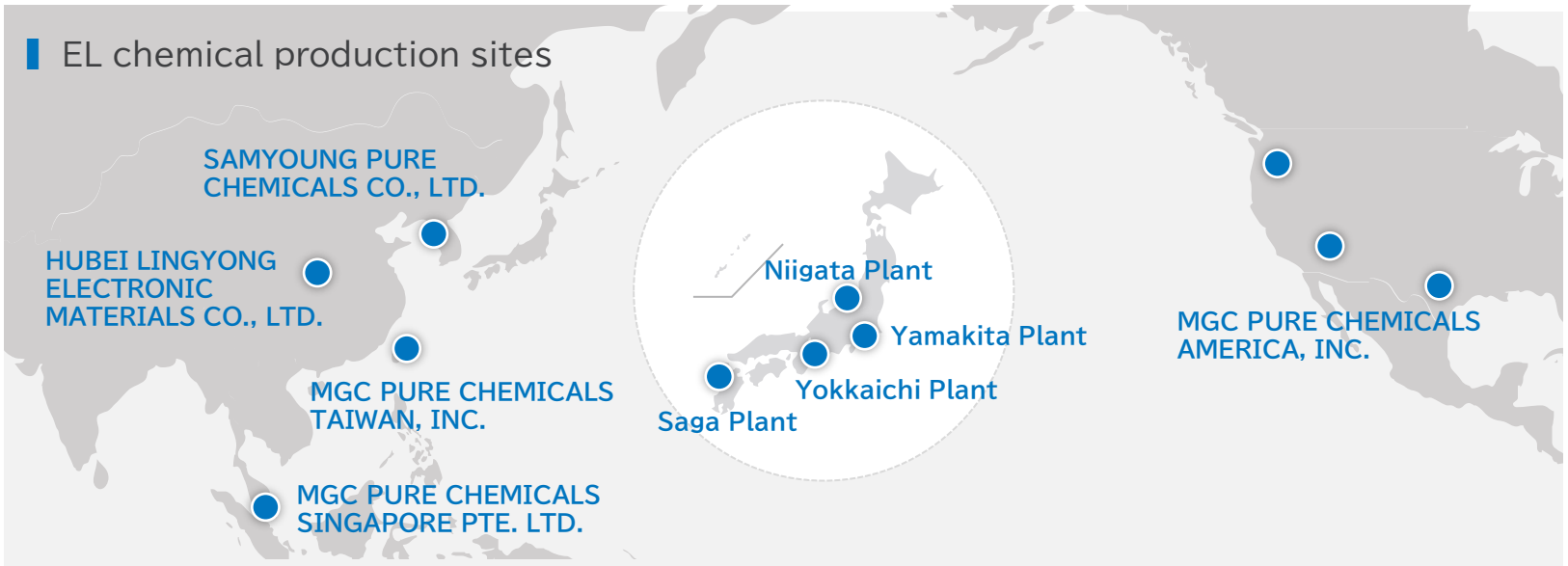
- Supply high-quality products to global semiconductor manufacturers
- Increase in usage of MGC's chemicals due to increase in the number of process steps with semiconductor miniaturization
- Production capacity increasing worldwide as semiconductor manufacturers build and augment production sites

Global semiconductor market forecast (US$ billion)

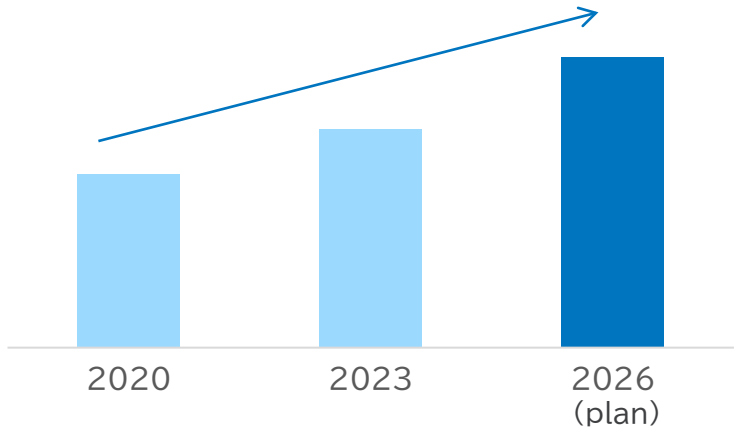
Source: WSTS 2023 Autumn Announcement



EL chemical production sites



Total production capacity of EL chemicals 1.7 times



Strategic Focus on Uniqueness & Presence Businesses (4)
Promoting the Three ICT Businesses — Optical Materials

Optical Materials

Optical resin/polymer:

- Increase in smartphone camera resolution through increase in AI smart phones 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

Expand applications beyond smartphone lenses


Automotive cameras


AR/VR headsets


Security cameras

Biomass lens monomer

Episleaf™

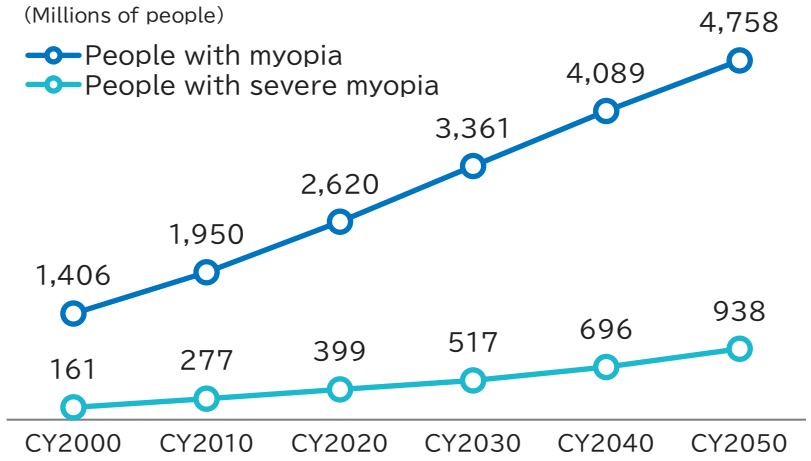
Smartphone camera resolution increase trend forecast (ratio of 50 MP+)

Source: Materials by Techno Systems Research Co., Ltd. published in June 2023

	2023	2026
Rear main camera	47%	64%
Front main camera	2%	13%

Global population of people with myopia and severe myopia forecast

Source: American Academy of Ophthalmology, Vol. 123, May 2016





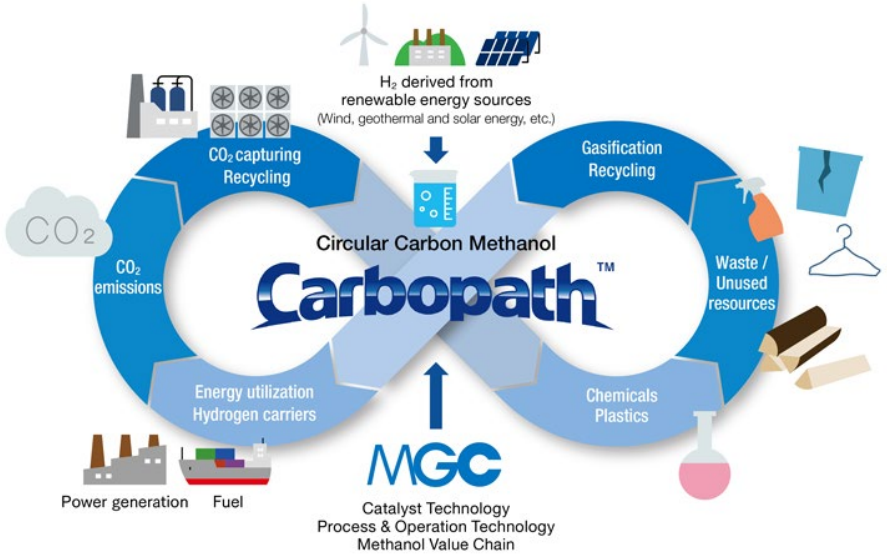


Strategic Focus on Uniqueness & Presence Businesses (5)
Methanol

Overview of circular carbon methanol concept Carbopath™

- Aim to commercialize several 10,000 tonnes of circular carbon methanol by FY2024, 100,000 tonnes by FY2030, and up to 1 million tonnes from FY2030 onward

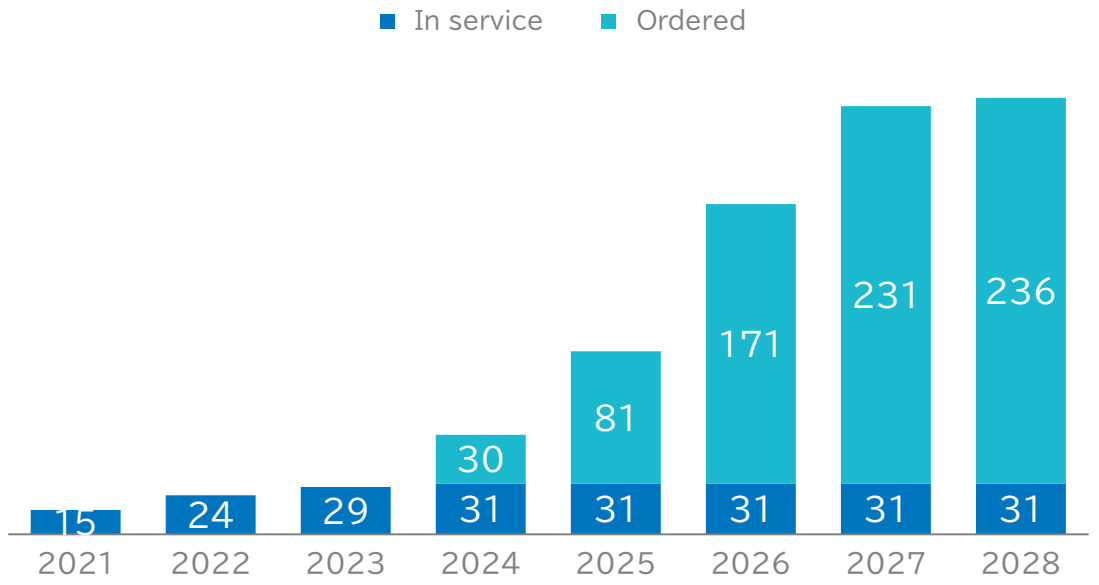
FY2021 onward	FY2025 onward	FY2030 onward
Utilization of by-product hydrogen and recycled CO_2 Demonstration of circular carbon methanol	Commercialization of circular carbon methanol, using renewable hydrogen	Larger scale for circular carbon methanol Full introduction to primary materials industry
Up to several 10,000 tonnes	Up to 100,000 tonnes	Up to 1 million tonnes



Dual-fuel methanol carrier

- Methanol fuel can significantly reduce SOx, NOx, and PM emissions when combusted compared to conventional shipping fuel
- Circular carbon methanol made from biomass CO_2, etc. can significantly reduce GHG emissions as a carbon neutral fuel
- The number of orders for methanol-fuel ships is expected to increase, and methanol for fuel use is also expected to increase

Methanol-fueled ships (no. of vessels)



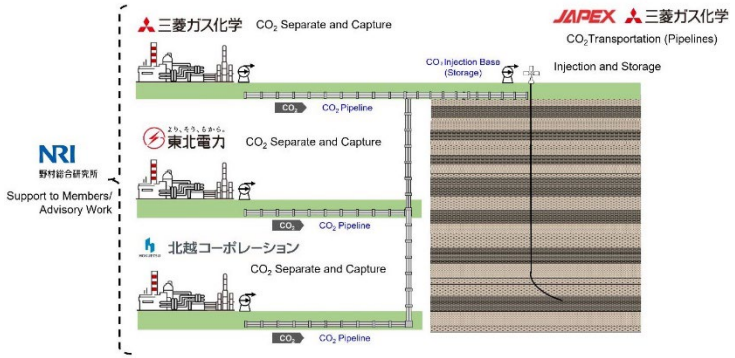
Source: DNV

Strategic Focus on Uniqueness & Presence Businesses (6)
Energy Resources and Environment Business

- Creation of **CCS* business** using existing oil and gas fields *Carbon dioxide Capture & Storage
- Promotion of initiatives for renewable energy business centered on **geothermal power generation**
- Expansion of **water-dissolved natural gas and iodine business** in MGC Group

CCS business

- Aim to start operation of an advanced CCS business sequestering 1.5 million tonnes of CO_2/year in the Higashi-Niigata area by 2030
- Consider converting existing wells to CO_2 injection wells for enhanced natural gas recovery
- Promote CCS at water-dissolved gas fields and blue hydrogen production initiatives



Geothermal power generation business

- In March 2024, started operation of Appi Geothermal Power Plant, using promising geothermal resources in the Hachimantai area of Iwate Prefecture
- Also considering commercialization of and investment in geothermal power generation businesses in other areas



Appi Geothermal Power Plant
Source: Appi Geothermal Energy Corporation

Water-dissolved natural gas and iodine business

- In April 2024, TOHO EARTHTECH, INC. started operation of a newly expanded facility in the Nishikawa district of Niigata City to increase production of water-dissolved natural gas and iodine
- To promote further production increases, additional facilities are under construction, aiming for full operation in FY2026




(Left) Natural gas production facility, (Right) Iodine concentration plant
Source: TOHO EARTHTECH, INC.

Strategic Focus on Uniqueness & Presence Businesses (7)
MXDA/Aromatic Aldehydes

- **MXDA**: Solid demand expected, mainly for infrastructure. Steady start for new plant in Europe and reaping benefits of investment
- **Aromatic aldehydes**: Boosted production capacity under previous medium-term management plan. Demand growth expected with expansion in applications

MXDA



Infrastructure applications: anti-corrosion coatings

- Europe plant: Planned for completion at the end of 2024 in Europe (Rotterdam industrial area in the Netherlands), our largest market



Infrastructure applications: anti-corrosion coatings

- Demand for epoxy resin curing agents is expected to grow stably, mainly for coatings used in infrastructure



Repair material for wind power generator blades

- Expanding adoption for application as repair material for environment-friendly wind power generator blades

Aromatic aldehydes

- At our Mizushima Plant, boosted production volume with construction to eliminate bottlenecks and increased production capacity with new equipment (commercial operation started Nov. 2023)
- Develop applications as resin transparency nucleating agent to prevent clouding of polypropylene and for aromatic uses, etc.
- Pursue market-oriented product development for enhancing the high-value-added product lineup

Resin additive applications



Aromatic applications

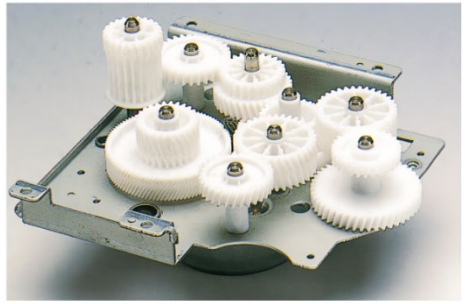


Strategic Focus on Uniqueness & Presence Businesses (8)
POM and Polymer Materials Businesses

- **POM**: Capture demand in the China market by increasing production capacity. Promote development of environment-friendly products
- **Polymer materials (MX Nylon, etc.)**: Expand sales for food packaging material applications. Promote response to environmental issues through business

POM

- Proceed with development of environment-friendly POM products and construction of their supply system, and contribute to the removal of carbon from customers' products
- Expand sales to the medical field, etc., which is expected to grow
- Through GPAC, invest in business management company for China POM manufacturing companies. Expected to capture demand in the China market by increasing production capacity
- Promote construction of R&D system through GPAC Group (Japan, Thailand, South Korea)





Polymer materials

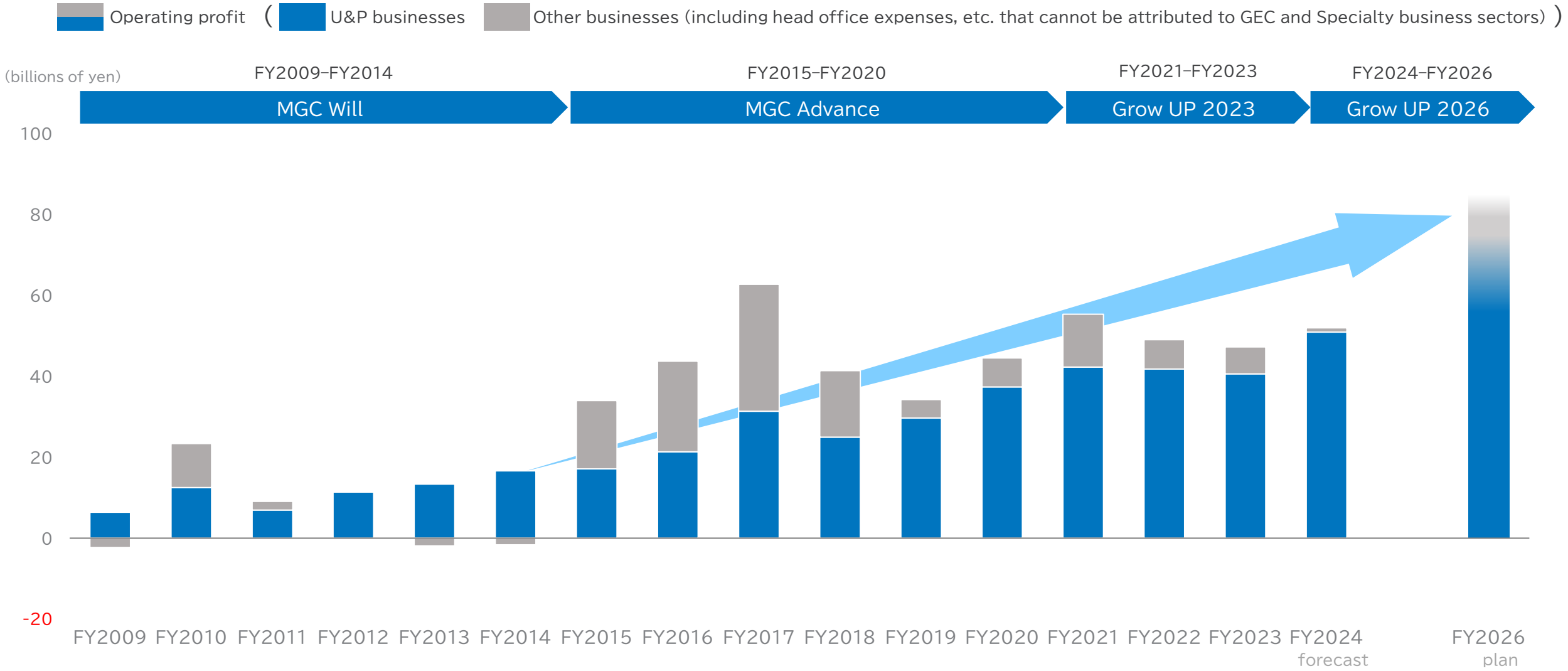
- Expand sales for food packaging material applications by expanding regions of use and capturing new demand in the growing barrier packaging materials market
- Create sales opportunities by responding appropriately to environmental regulations such as recycling and by promoting the appeal of environment-friendly MX Nylon to the market
- Rapidly commercialize products through research on new development products and promotion of market development





Operating Profit Trend of Uniqueness & Presence Businesses

– Re-expand during the new medium-term management plan, mainly by promoting the three ICT businesses as growth drivers





Strategy 2

Build new value through innovation



Basic Policies for R&D

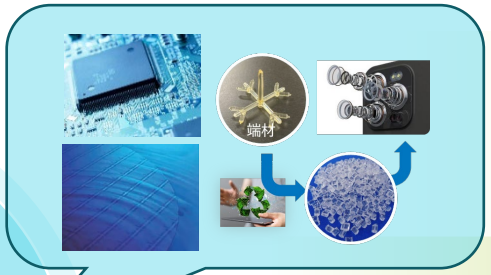
- Focus particularly on ICT, mobility, and medical/food as three target areas, and promote R&D that contributes to solutions for climate change problems
- Promote utilization of MI and IP landscape to accelerate R&D

Materiality Promotion of innovative R&D



ICT

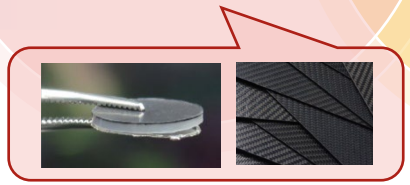
- New BT laminate materials
- New semiconductor cleaning solutions
- Recycled EP, etc.



Target areas and product groups for R&D

Mobility

- Solid electrolytes
- Continuous carbon fiber composite materials, etc.



Medical/ Food

- OXYCAPT™
- Antibody drugs
- Allergy test chips, etc.



Solving climate change problems

R&D themes that help to solve climate change problems

- Circular carbon methanol
- Polycarbonate from CO_2
- Biomass lens monomer
- CCS*3
- DAC*4, etc.

*3 Carbon Capture and Storage
*4 Direct Air Capture

Materiality KPIs

Ratio of DX personnel among research personnel: 67% (FY2023 estimate) → 75% (FY2026 target) → 80% (FY2030 target)

Materiality KPIs

Ratio of research personnel helping to solve climate change problems: 25% or higher

*1 Materials informatics: Initiatives to enhance development efficiency of various materials using informatics, such as machine learning
*2 Utilizing intellectual property information analysis to make strategic recommendations that contribute to intellectual property management

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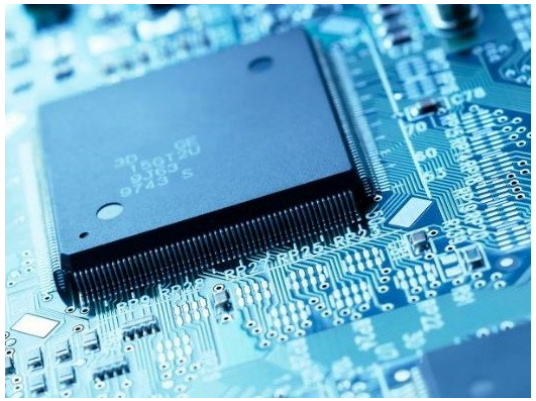
New Product Development Topics (1)

ICT

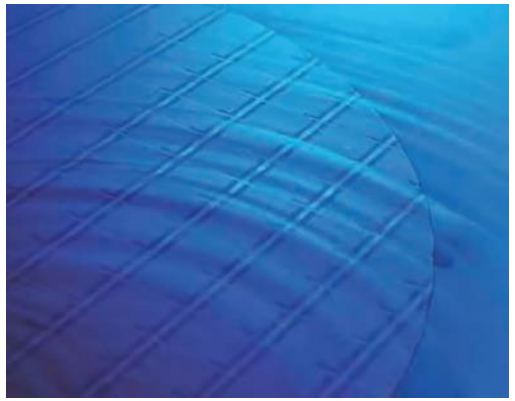
New BT laminate materials



Through further advances in BT resin modification and blending technology, achieve both low warping and high machinability of laminate materials. Application of this technology realizes ultra-thin insulation properties and microcircuit formation ability for built-up materials.

We will continue to propose and seek feedback on materials for fields such as high-performance semiconductor packages, high-frequency characteristics applications, and edge devices.

New semiconductor cleaning solutions



The development of cleaning solutions promotes evolution of semiconductors by increasing processing speed, reducing power consumption, etc.

We are proposing semiconductor cleaning solutions for new materials and structures.

Recycled EP



There are some prospects for establishing a sorting technology using Raman spectroscopy for commercialization of pre-consumer recycling of Iupizeta® EP optical resin/polymer offcuts.

We will promote further demonstration studies going forward.

Mobility

Continuous carbon fiber composite materials



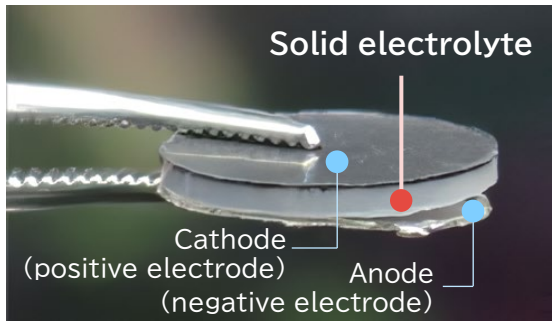
With distinctive resin and intermediate manufacturing technologies, we are developing composite intermediates with characteristics such as room-temperature storage, autoclave-free, and gas barrier properties, and proposing various applications for them.

We are strengthening application development, mainly in the United States, for thermoset resin and fabric prepreg (product name: ENDUREDGE®), and building a system for manufacturing and sales.

New Product Development Topics (2)

Mobility

Solid electrolytes



We engaged in joint industry-academia research into solid electrolytes for all-solid-state lithium ion batteries and developed carborane-based solid electrolytes.

We aim to promote characteristic evaluation and application development, while advancing process development with an eye to mass production, aiming to expand application development into various fields.

Medical/Food

Contract manufacturing of antibody drugs



Using 2,000-liter, single-use cultivation tanks, we are undertaking contracted manufacturing of biopharmaceuticals, in particular antibody drugs, at Cultivecs Inc.

We have obtained a pharmaceutical manufacturing license, and are accumulating manufacturing experience under the GMP system.

OXYCAPT™

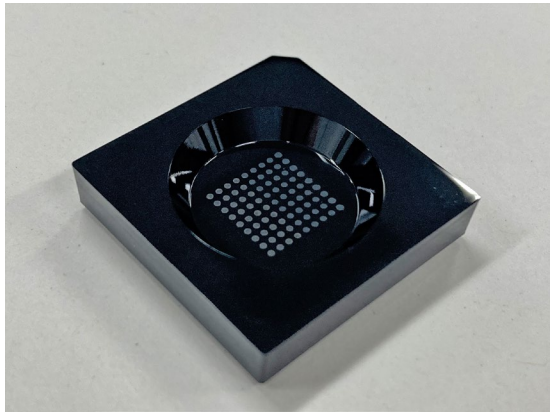


We started producing OXYCAPT™ plastic syringes to replace glass syringes for injection drugs in 2019.

Currently, we are engaged in developing the multilayer resin vial market for biopharmaceuticals and regenerative medicine.

Full-scale adoption for use with oxygen- and carbon dioxide-sensitive drugs is currently under consideration.

Allergy test chips



We are currently developing allergy test chips capable of predicting the severity of food allergies.

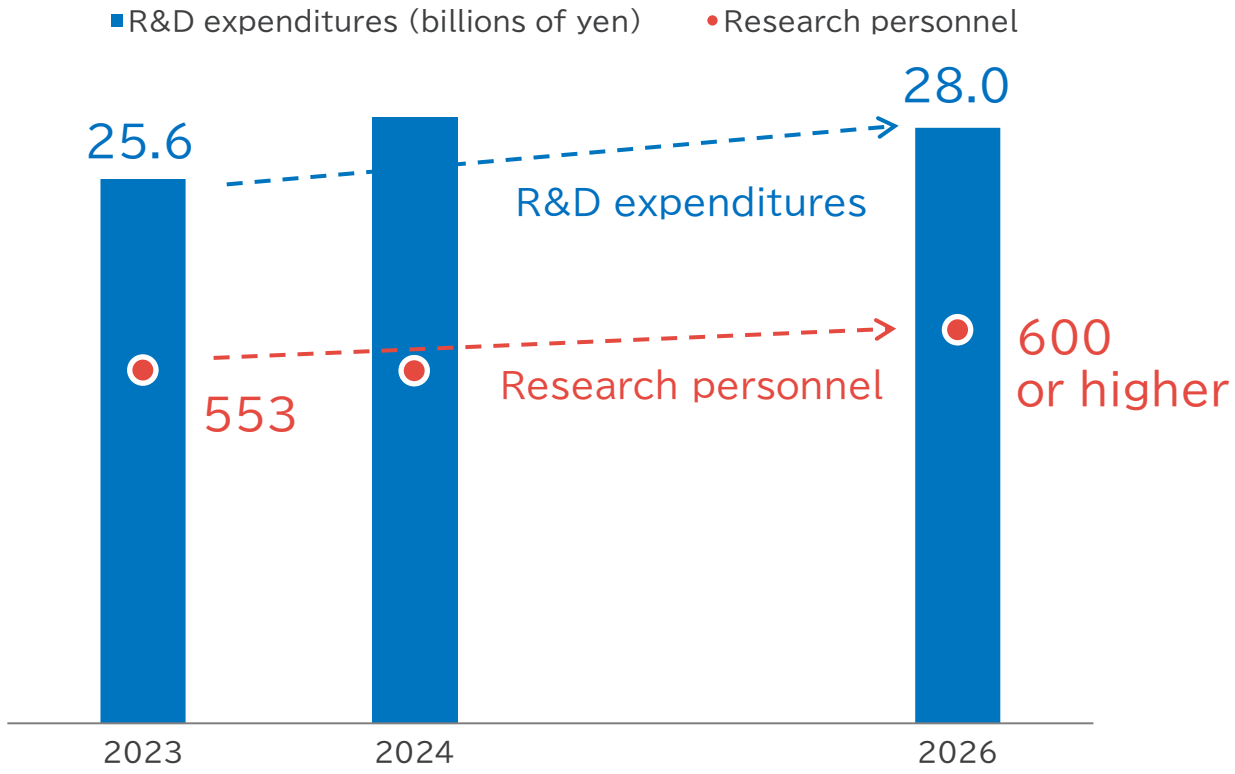
At present, we are building a severity prediction model and manufacturing system for supplying clinical research kits. In the future, we aim to sell the chips as in vitro diagnostic pharmaceuticals.

New Product Development and Nurturing

- Continue to invest aggressively in R&D (R&D expenditures and personnel)
- Continuously launch new products and promote nurturing of newly launched products

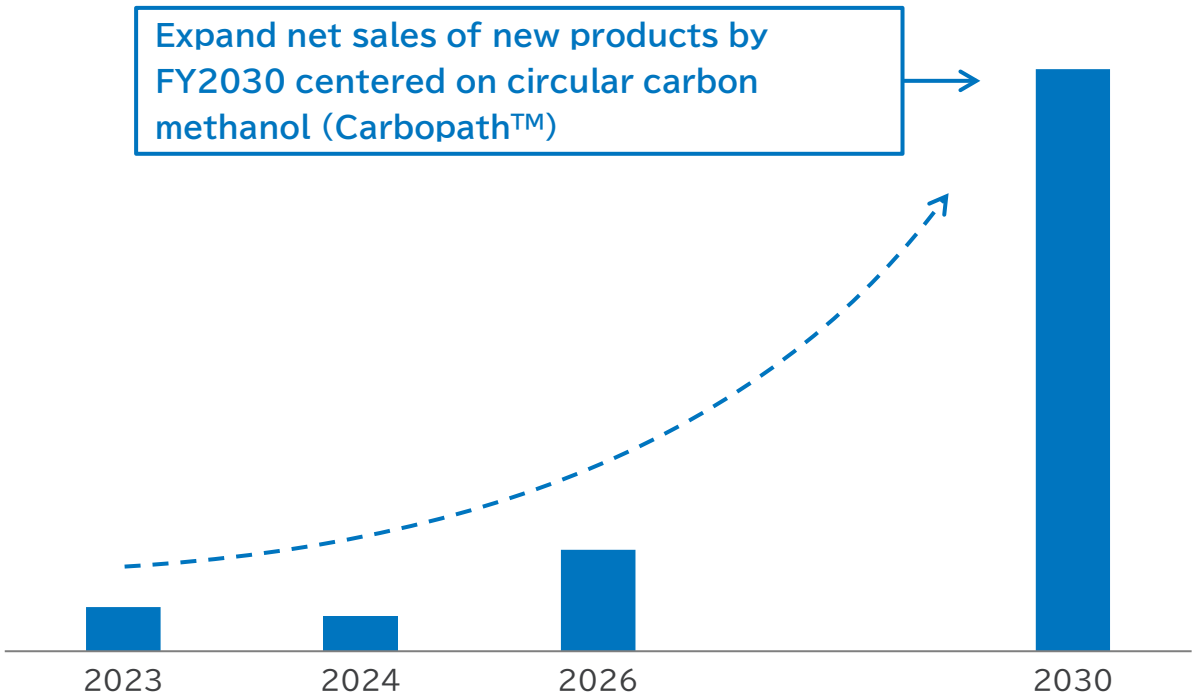
R&D expenditures and R&D personnel*1

(Units: billions of yen, number of people) *1 Excluding Group companies



New product net sales*2

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



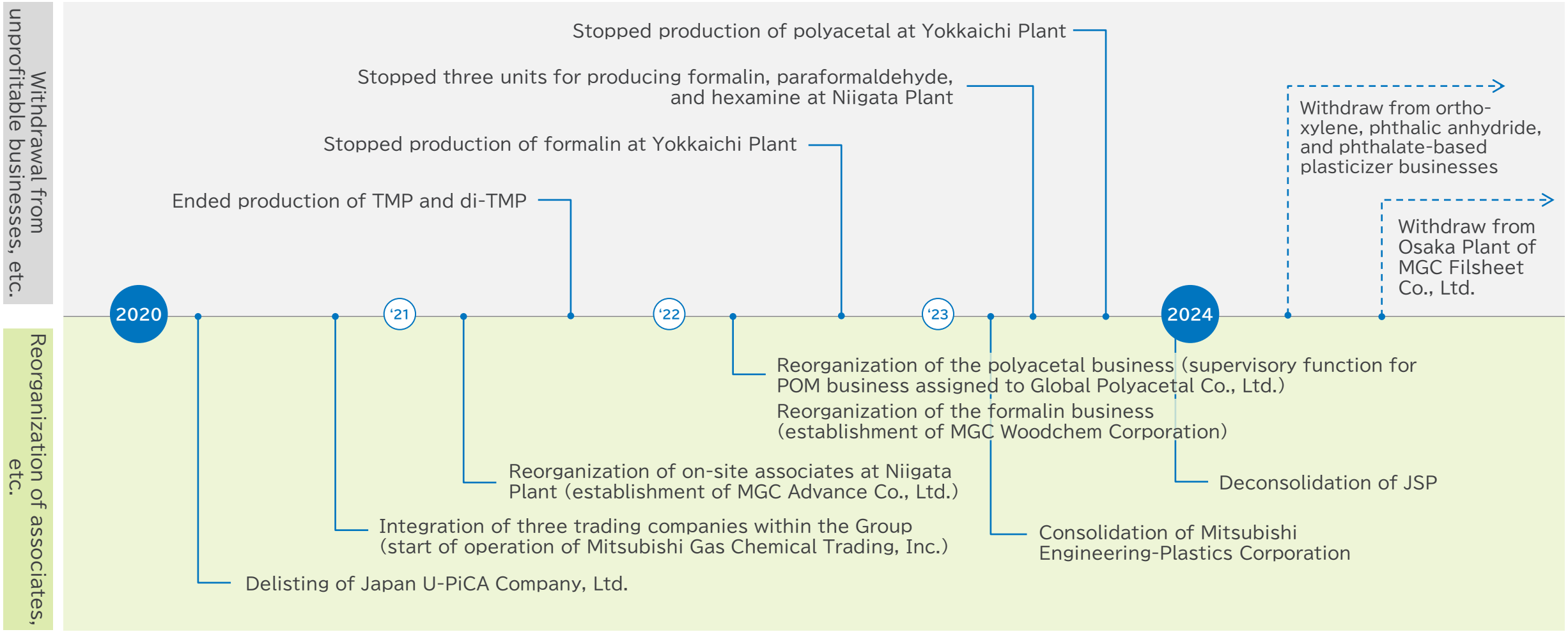


Strategy 3

Restructure businesses requiring intensive management

Status of Withdrawal from Unprofitable Businesses and Reorganization of Associates

– Despite progress on withdrawal from unprofitable businesses and reorganization of associates, businesses facing challenges remain



Strategy for Businesses Requiring intensive management (1)
PC-Related (Polycarbonate, Sheet Film)

– Aim to improve profitability and capital efficiency through adoption of high-value-added strategy and rationalization of production, sales, and R&D systems

Assessment of the current situation

- Continued adverse demand and supply environment due to excess supply
- Conversion of MEP to a consolidated subsidiary in FY2023. Reorganization effect is yet to fully materialize, and earning contribution is limited. Issues with profitability and capital efficiency
- For China production sites, focusing on high-added-value fields and profitability is improving
- Sheet film business results are deteriorating due to sales downturn. Decided to withdraw from Osaka Plant of MGC Filsheet Co., Ltd.
- "CO_2 to PC" has been selected by the GI Fund. Project in progress

Strategy under the new medium-term management plan

- Deliver maximum effect from MEP reorganization. Reconsider production capacity in line with business environment and reduce costs. Rebuild sales and R&D systems
- Shift further into high-added-value fields that enable differentiation (aim for percentage of high-value-added products of 45% in FY2026)
- Concentrate sheet film production sites from three down to two sites (withdraw from Osaka Plant of MGC Filsheet Co., Ltd.). Bolster development and promote sales for new applications
- Promote "CO_2 to PC" project (verify at pilot plant)

Outlook for PC

- Diverse PC applications include automobiles, electronic equipment, and construction materials. The market is expected to expand steadily
- General purpose PC has a large number of suppliers, including Chinese companies, and the environment will remain highly competitive
- Expansion of high-value-added applications for highly transparent products, etc.
  →Target these fields where MGC can utilize its development capabilities, technical support, and sales networks
  (Example: Adoption of MGC's PC growing in light guides for headlights used in Chinese EVs)
- Increase in needs for eco-friendly products
  →Obtained ISCC certification across the entire PC chain for manufacturing and sale of bio-PC. "CO_2 to PC" selected by the GI Fund, and the project is ongoing. Continue to focus on this as a target field where MGC can leverage its strengths.

- **Reconsider production capacity in line with business environment and reduce costs**
- **Narrow down the target to applications that enable differentiation to increase profitability**

Strategy for Businesses Requiring intensive management (2)
Xylene Separators and Derivatives

– Positioned as infrastructure to support downstream MXDA, etc. Continued production to be determined in line with growth of downstream products

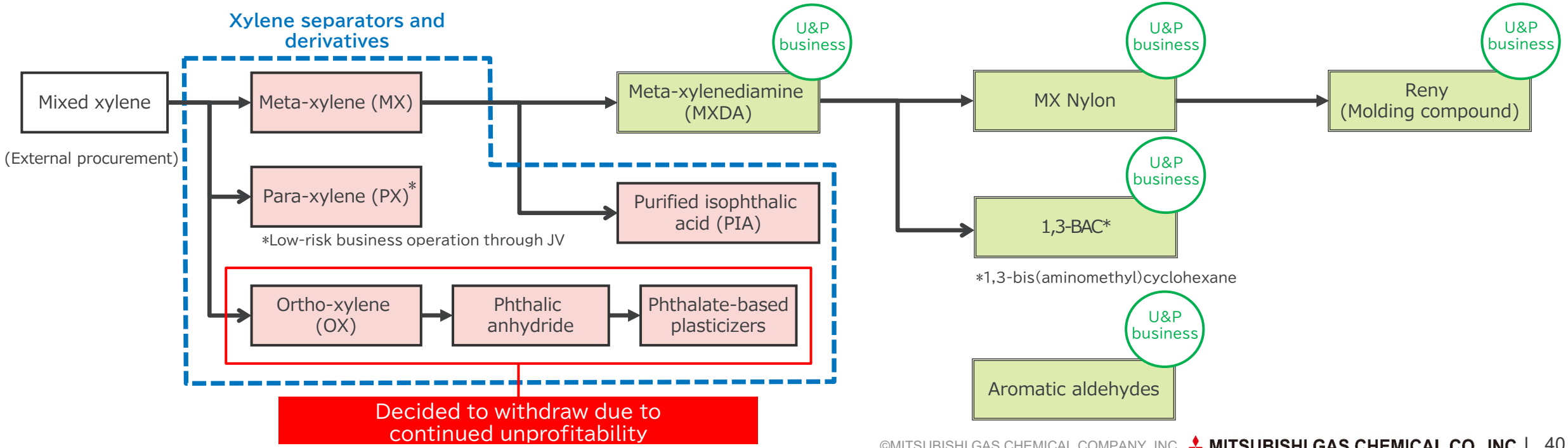
Assessment of the current situation

- PIA business environment remains challenging due to excess supply
- Decision to withdraw from unprofitable OX-related chain (OX-PA-plasticizer)

Strategy under the new medium-term management plan

- MX-PIA: Positioned as infrastructure to support downstream MXDA, etc.
- Continue further cost reduction
- Continued production to be determined in line with growth of downstream products

Product chain for xylene separators and derivatives



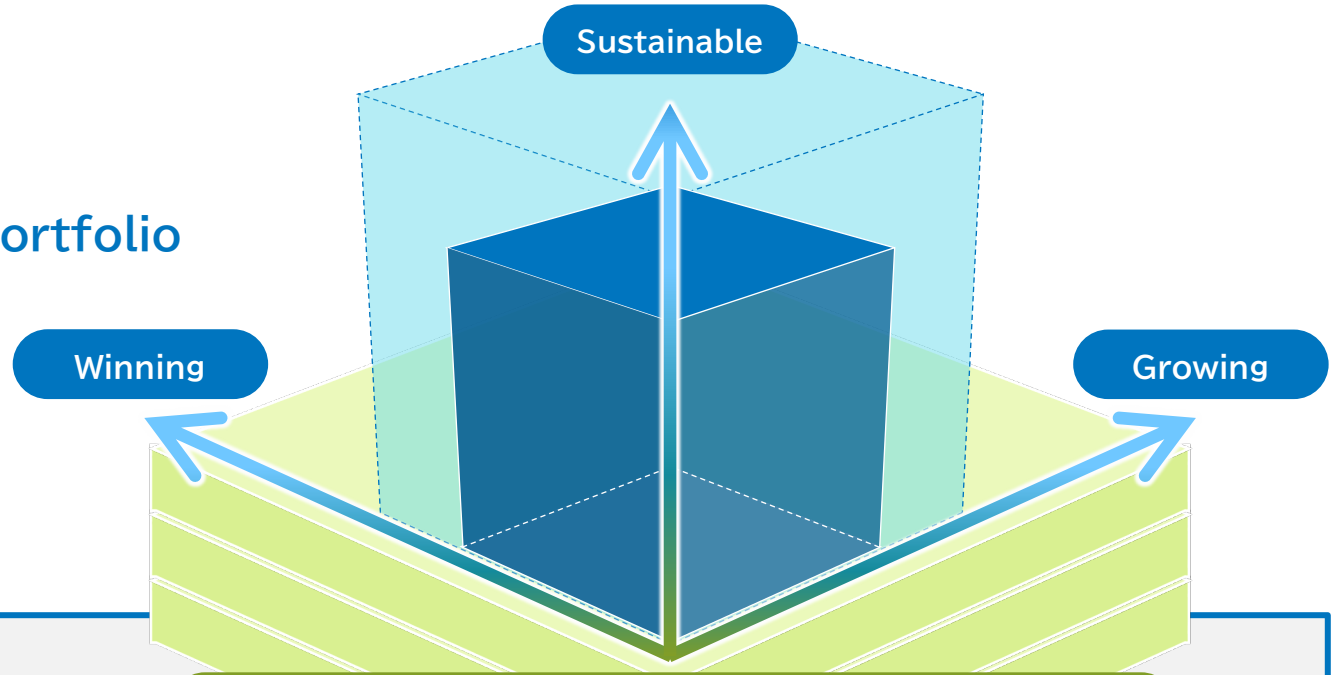
New Medium-Term Management Plan

Objective 2
Promote sustainability management

Our Sustainability Management Foundation
The Group's Platform for Corporate Value

Objective 1

Strengthen the resiliency of our business portfolio



Objective 2

Promote sustainability management

Strategy 1 Accelerate initiatives for realizing carbon neutrality

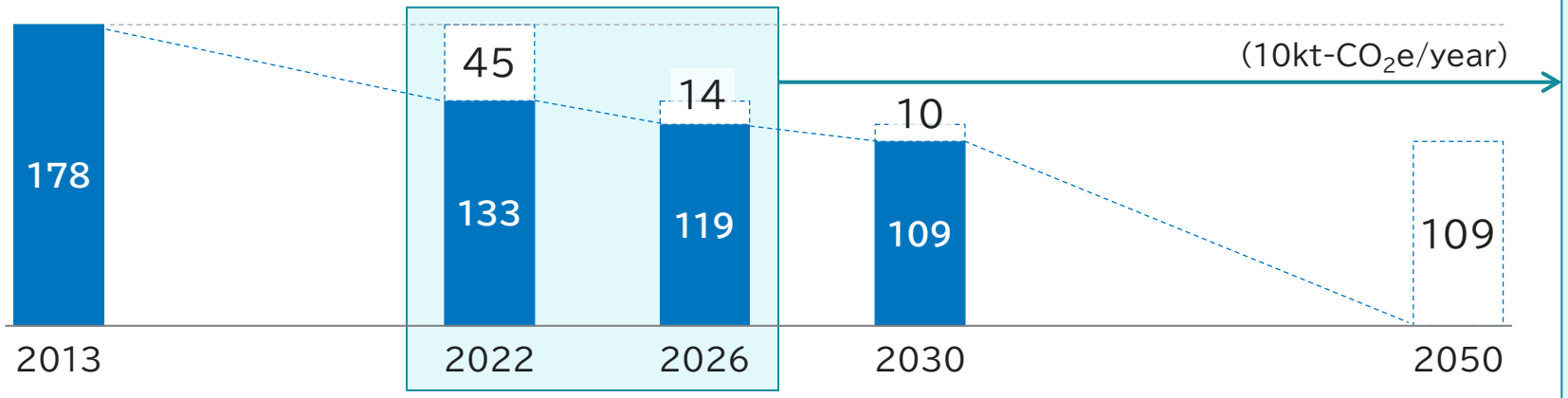
Strategy 2 Enhance human capital management

Strategy 3 Promote materiality management

Strengthen foundations for sustainability management

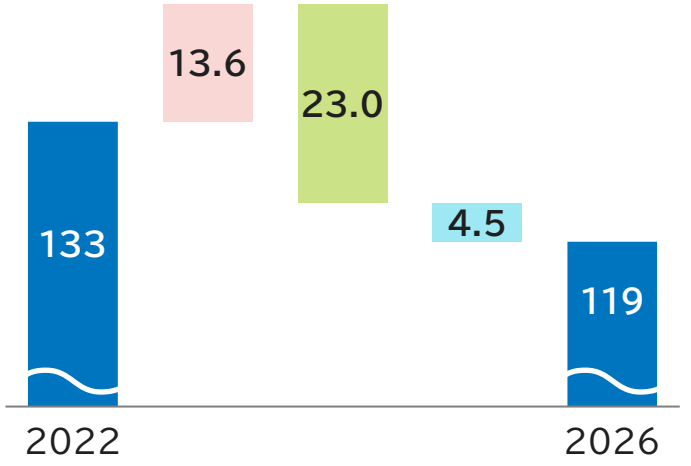
Strategy 1: Accelerate Initiatives for Realizing Carbon Neutrality
MGC's Roadmap to Carbon Neutrality

GHG emissions and factors behind increases and decreases



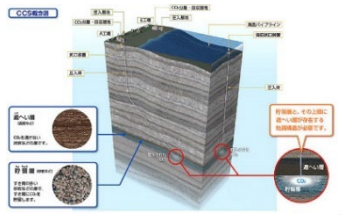
Period		2013-2022	2023-2026	2027-2030	2031-2050
Increase due to new manufacturing base construction and expansion		45.0	(13.6)	2.6	46.9
Decrease due to consolidation and elimination of manufacturing bases and suspension of facilities, etc.			23.0		
Reduction in emissions due to R&D collaboration*1		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

Changes in emissions due to business portfolio reforms from 2022 to 2026



Businesses and technologies contributing to emissions reduction

CCS*2*3



Appi Geothermal Power Plant*4



Circular carbon methanol



Eco-friendly products

Sharebeing

*1 Deploy new energy systems/CCUS, etc.
*2 Carbon Capture and Storage
*3 Source: Japan CCS Co., Ltd.
*4 Provided by Appi Geothermal Energy Corporation

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Strategy 1: Accelerate Initiatives for Realizing Carbon Neutrality
MGC Group Eco-friendly Product “Sharebeing”

- “Solve social issues through business” as a materiality issue of the new medium-term management plan
- Sharebeing established as an MGC Group eco-friendly product, working to further expand products that contribute to the environment

Establishment of Sharebeing and setting of materiality KPIs

(MGC Group eco-friendly product*)

Sharebeing

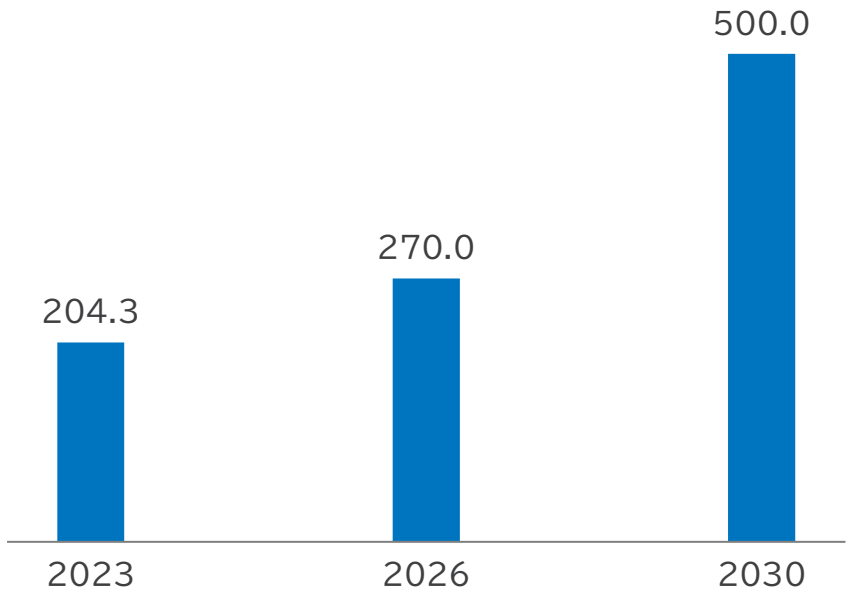
“Sharebeing” is derived from the words “share” and “being.”

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.

https://www.mgc.co.jp/eng/sustainability/eco-friendly/

Materiality/KPI	Sharebeing product sales		
Solve social issues through business	204.3 billion yen FY2023 result	→ 270.0 billion yen FY2026 target	→ 500.0 billion yen FY2030 target

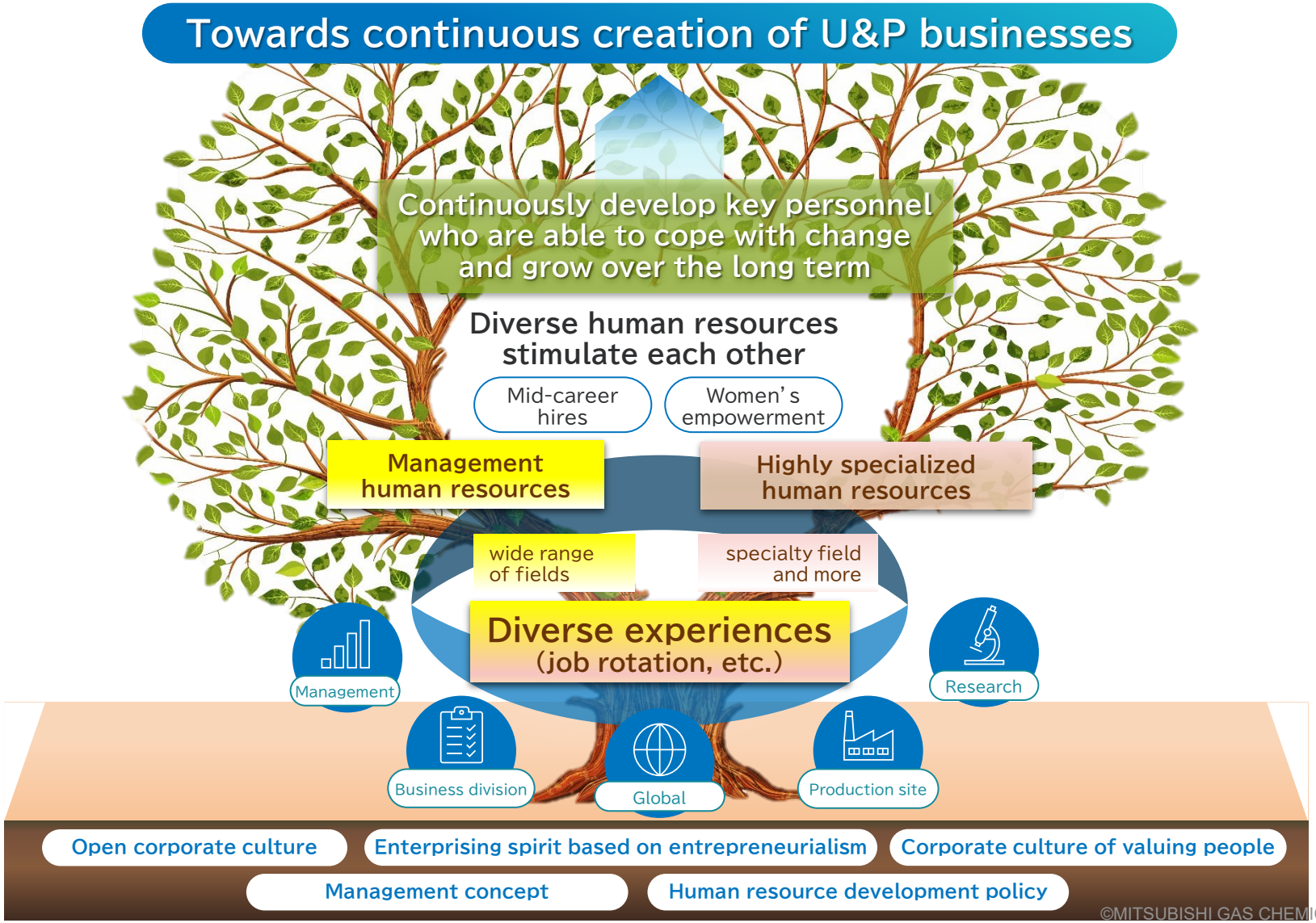
Sharebeing product sales (billions of yen)



*Eco-friendly products: A group of valuable products that meet society’s demands while reducing its environmental impact, created by leveraging our unique and distinctive technologies and guided by our mission of “creating value to share with society.”

Strategy 2: Enhance Human Capital Management

- Promote management focused on human resources as the most important capital for value creation for some time
- Under the new medium-term management plan, continue ongoing development of key personnel and focus on nurturing and utilizing human resources to create U&P businesses



In an open corporate culture, diverse human resources can have diverse experiences, stimulating each other, sparking chemical reactions and growth, and ultimately creating innovation.

Materiality/KPIs

Cultivating a corporate culture of job satisfaction

Ratio of employees experiencing job satisfaction

FY2021 result	→	FY2026 target	→	FY2030 target
65%		70%		75%

D&I promotion Number of female managerial personnel

FY2023 result	→	FY2026 target	→	FY2030 target
40		60		90

Strategy 2: Enhance Human Capital Management
Topics





MGC Commons

- A training center for “personal development” that goes beyond the conventional scope of training and respects human capital
- Provides a space for connecting diverse internal and external people and organizations to create innovation
- Opened on December 1, 2023. Full utilization planned under new medium-term management plan Grow UP 2026

Examples of utilizing MGC Commons

Use for internal-external exchanges





R&D Division theme presentations



- Through presentations, research personnel present the attraction and progress of their themes
- Promotion of exchanges among research personnel beyond their themes

Initiatives to utilize researchers’ sense of playfulness

10% rule of R&D



- Research personnel can devote 10% of their working hours to their own personal-interest projects
- Presentations and exchange events for the above projects are held at each research site

Strategy 3: Promote Materiality Management

- In the new medium-term management plan, continue to promote materiality management based on materiality
- Ensure execution of sustainability management by setting KPIs based on materiality as non-financial indicators (see page 63-65)



New Medium-Term Management Plan

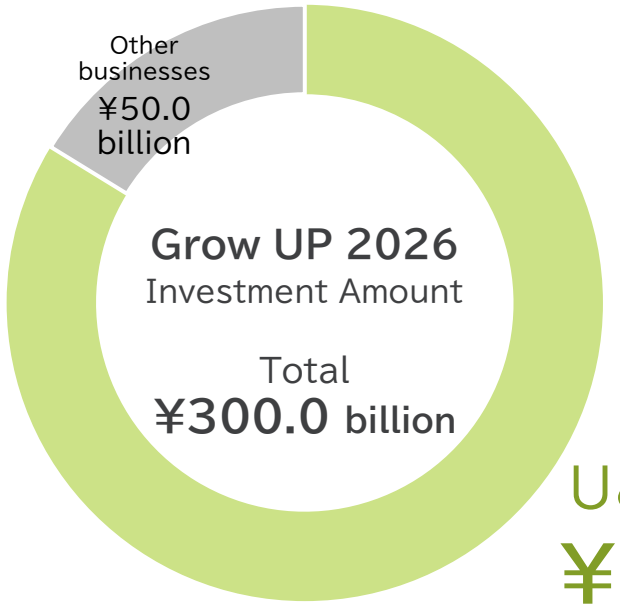
Investment and financing plan, capital policy, and shareholder return policy

Progress for Major Investment Projects and Investment Plan for Grow UP 2026

- Made investments of approx. ¥210 billion compared to planned ¥240 billion under the previous medium-term management plan
- Continue a high level of investment under the new medium-term management plan. Planned investment totaling approx. ¥300 billion, with a focus on U&P businesses

Major investments in U&P businesses

Grow UP 2023			Grow UP 2026
FY2021	FY2022	FY2023	FY2024 Onward



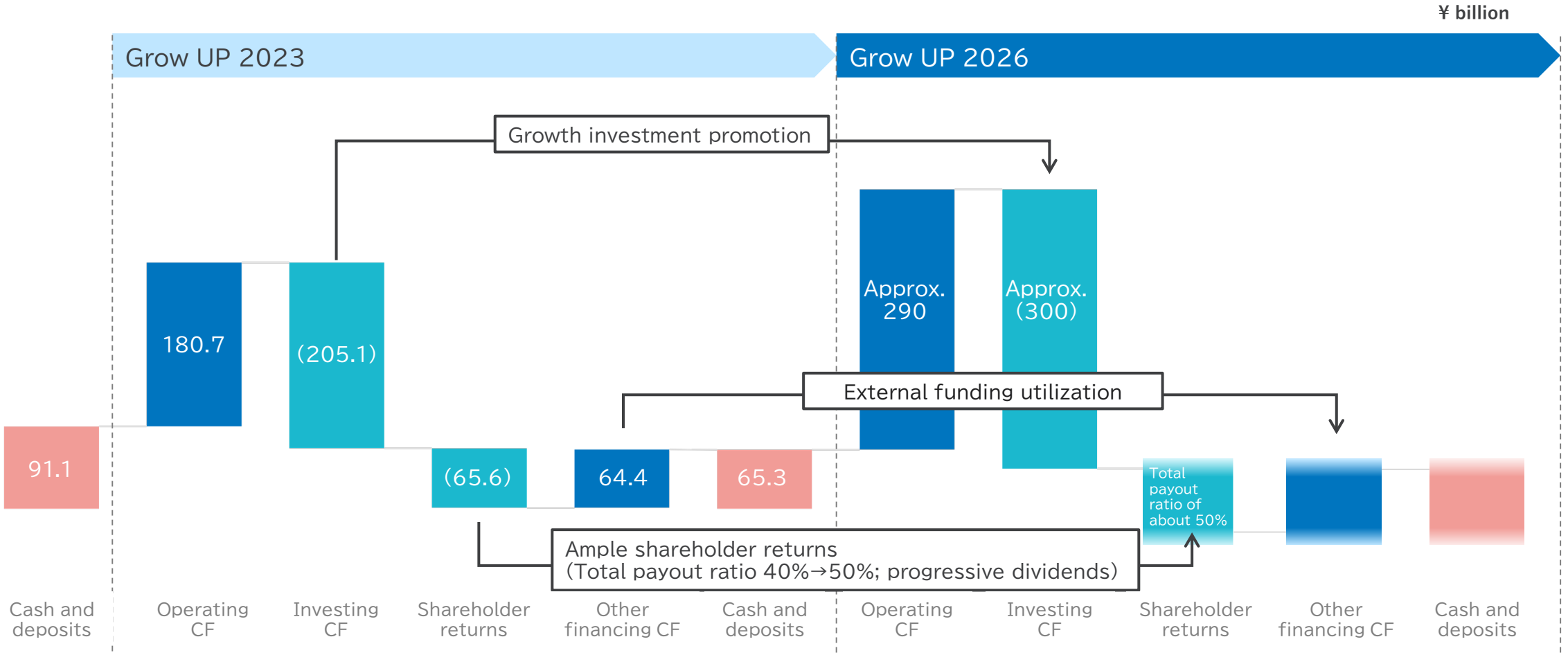
U&P businesses
¥250.0 billion

IC plastic packaging BT materials: Boosting production capacity (Thailand)	Three ICT businesses
Optical resin/polymer plant expansion (Kashima)	Three ICT businesses
EL: Establishing new raw material hydrogen peroxide plant (China)	Three ICT businesses
EL: Establishing new super-pure hydrogen peroxide plant (China)	Three ICT businesses
Aromatic aldehyde plant expansion (Mizushima)	
Super-pure hydrogen peroxide: Boosting production capacity (Cheonan, South Korea)	Three ICT businesses
New development of water-dissolved natural gas and iodine (Nishikanbara, Niigata)	
Super-pure hydrogen peroxide: Boosting production capacity (Oregon, U.S.A.)	Three ICT businesses
Super-pure ammonium hydroxide: Boosting production capacity (Singapore)	Three ICT businesses
Establishing new optical resin raw material monomer plant (Niigata)	Three ICT businesses
EL: Establishing new raw material hydrogen peroxide plant (Taiwan)	Three ICT businesses
MXDA: Establishing new production facility (Netherlands)	
Super-pure hydrogen peroxide: Boosting production capacity (Texas, U.S.A.)	Three ICT businesses
Super-pure ammonium hydroxide: Boosting production capacity (Texas, U.S.A.)	Three ICT businesses
IC plastic packaging BT materials: Boosting production capacity (Thailand)	Three ICT businesses
Establishing new lens monomer manufacturing plant (Yokkaichi)	Three ICT businesses
New development of water-dissolved natural gas and iodine (Higashi-Niigata, Niigata)	
Super-pure hydrogen peroxide: Boosting production capacity (Arizona, U.S.A.)	Three ICT businesses
Establishing new production facility for circular carbon methanol (Japan)	
Super-pure ammonium hydroxide: Boosting production capacity (Niigata)	Three ICT businesses
Super-pure hydrogen peroxide: Boosting production capacity (Saga)	Three ICT businesses

©MITSUBISHI GAS CHEMICAL COMPANY, INC.

Capital Allocation and Finance/Capital Policy

- Estimated total investment (investing cash flows) of approx. ¥300 billion during the new medium-term management plan
- Aggressive utilization of external capital, focused on strategic investment tied to growth (including R&D, ESG)
- More robust shareholder returns: Adopt a progressive dividend policy; raise the total payout ratio (50% target)
  (See next page)



Shareholder Return Policy under the New Medium-Term Management Plan

- Enhance shareholder returns through the new medium-term management plan. Introduce progressive dividends* and raise the total payout ratio

*Covers the three-year period of the new medium-term management plan. Annual dividends will be maintained or increased from a minimum of 90 yen per share.

(1) Adopt a progressive dividend policy (in principle, no reduction – either increase or maintain)

Since FY2009, we have steadily raised dividends without reducing them. In the new medium-term management plan, we will adopt progressive dividends to make our dividend policy clearer.

(2) Raise the total payout ratio from about 40% under the previous medium-term management plan to roughly 50%

Flexibly purchase treasury stock and seek to boost capital efficiency

Shareholder return policy to date (through FY2023)

- Continuation of stable dividends
- Aim for a total payout ratio of 40%
- Conducted flexible purchasing of treasury stock

Shareholder return policy under the new medium-term management plan (from FY2024)

- **Adopt "progressive dividend policy"**
  (In principle, no reduction – either increase or maintain)
- **Raise the total payout ratio to roughly 50%**
  (Strengthen flexible purchasing of treasury stock and fluidly implement as an additional shareholder return measure)



New Medium-Term Management Plan

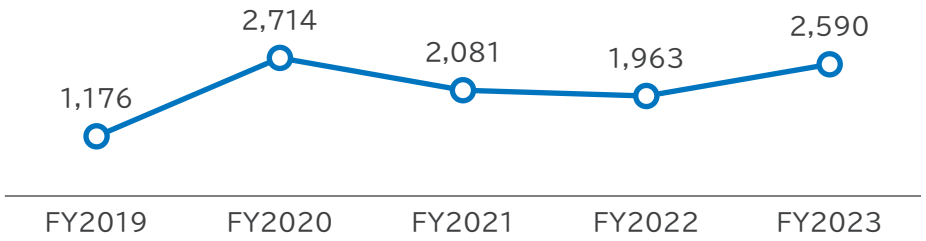
Action to Implement Management that is Conscious of Cost of Capital and Stock Price

Analysis of Current Status for Improving Corporate Value (1)

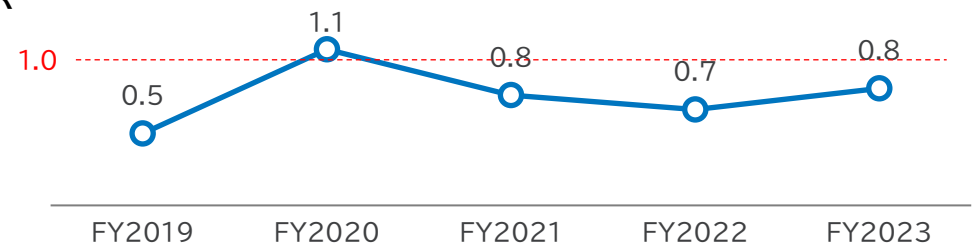
Market valuation

- The Company's PBR started to climb toward the end of FY2023, mainly from business portfolio reform centered on U&P businesses and more robust shareholder returns. However, since the multiplier remains below 1.0, we recognize this as a relatively soft level in terms of share price indicators

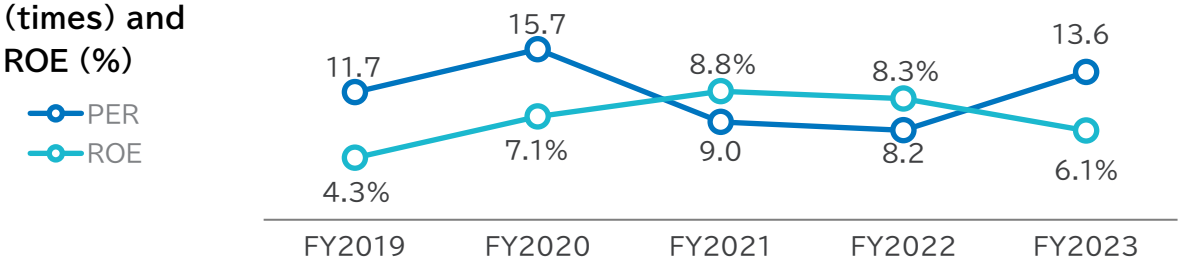
Term-end share price (¥/share)



Term-end PBR (times)



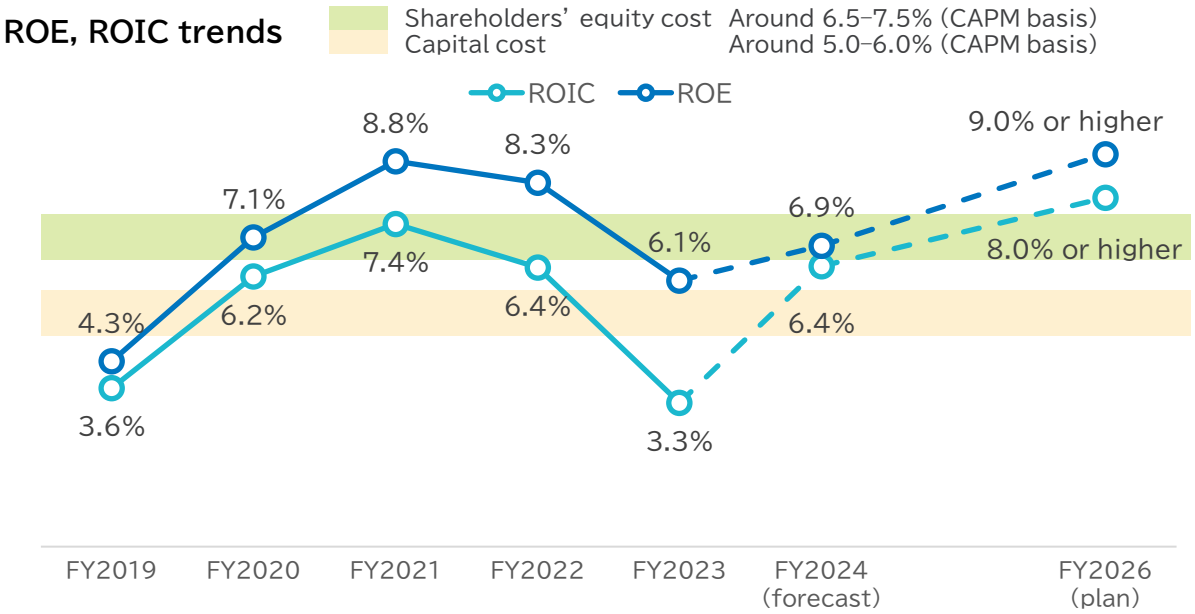
Term-end PER (times) and ROE (%)



Capital profitability

- Capital profitability trended lower in FY2023, reflecting factors that mainly included slumping demand for semiconductor-related products, along with poor product sales across the board in line with softer global economic activity.
  We recognize ROIC was below capital cost, while ROE was below shareholders' equity cost
- FY2024 is also expected to see ROE and ROIC at low levels, largely from accumulated investment
- We recognize divergence from expected market returns in both ROE and ROIC.
  We seek to improve ROE and ROIC mainly through strengthening the resiliency of our business portfolio and a focus on management emphasizing quality
- Regarding capital cost, we also recognize the importance of actions to control risk premiums, notably by using earnings stability to reduce volatility, taking advantage of financial leverage, and raising market presence through ongoing and proactive dialogue with market participants

ROE, ROIC trends



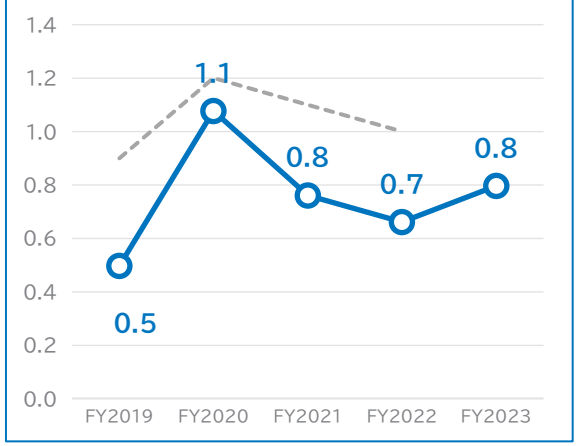
Analysis of Current Status for Improving Corporate Value (2)

Breakdown and analysis of PBR and ROE components

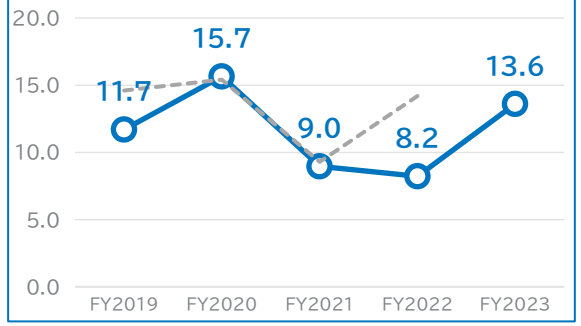
MGC

Industry peers (15 companies, chosen by MGC)

PBR (times)

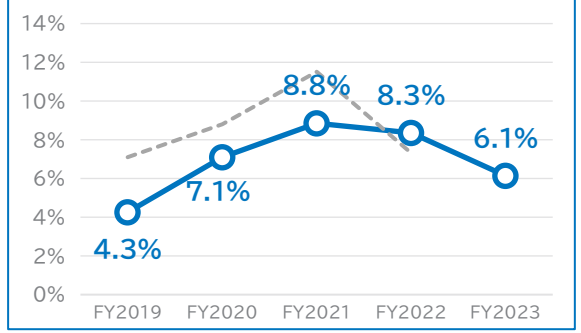


PER (times)



MGC has a relatively low PER. In addition to further boosting growth expectations among investors by raising market presence through proactive and ongoing communication with market participants, initiatives will also be needed to control risk premiums by using earnings stability to reduce volatility among other steps.

ROE

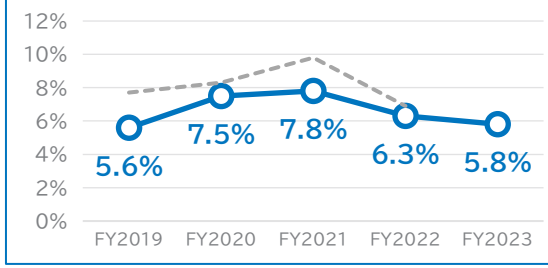


ROE is declining at the moment. Various improvement measures will be taken to lift it to 9% or higher under the new medium-term management plan.

Expected growth rate

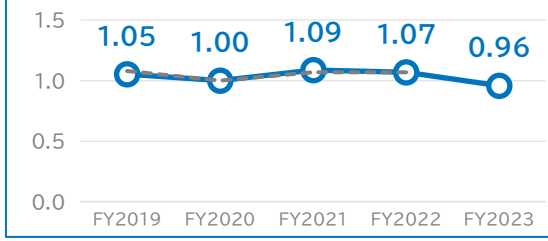
Shareholders' equity cost

Operating profit margin



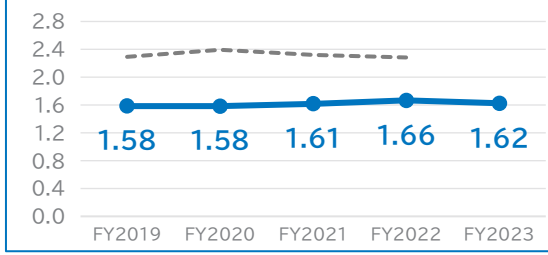
MGC has a relatively low operating profit margin. Under the new medium-term management plan, we seek to boost profitability by raising it to 10% or higher through measures to enhance business portfolio resilience.

Invested capital turnover rate



Invested capital turnover rate is currently at an average level.

Financial leverage



Financial leverage is somewhat below average levels. There is still room to utilize financial leverage while maintaining financial discipline.

Specific Initiatives for Improving Corporate Value (1)

Improved profitability through capital cost awareness

- Improve the equity spread and ROIC-WACC spread, and make best effort to achieve medium-term management plan targets by strengthening the resiliency of our business portfolio and zeroing in on management emphasizing quality
- Commit to ROIC management. Continue calculating ROIC at the business-unit level and strengthen analysis and management of capital profitability and other measures in each business. Also continue to build understanding internally through study sessions on the ROIC tree and other topics
- Using the D/E ratio as a KPI, establish in-house target values from the perspective of capital efficiency as a floor, and financial soundness as a ceiling; be cognizant to utilize financial leverage

	FY2021 result	FY2022 result	FY2023 result	FY2024 forecast	FY2026 target
ROE	8.8%	8.3%	6.1%	6.9%	9% or more
ROIC*	7.4%	6.4%	3.3%	6.4%	8% or more
D/E ratio	0.21	0.27	0.26	-	-

*ROIC = (Operating profit − income taxes + equity in earnings of affiliates)/Invested capital

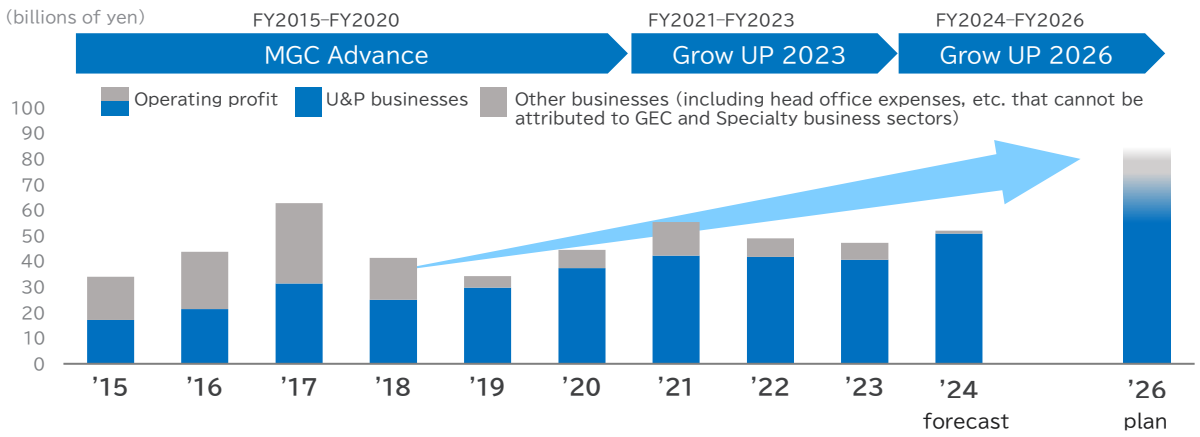
More resilient business portfolio

- Through measures outlined in the medium-term management plan: 1. Focus on “Uniqueness & Presence,” 2. Build new value through innovation, and 3. Restructure businesses requiring intensive management, we will accelerate efforts to build a more resilient business portfolio and home in on further improvement in capital profitability

Focus on “Uniqueness & Presence”: Action plan

- Continue aggressive investment focused on U&P businesses, staying mindful of capital efficiency
- Reap the benefits of major investments carried out since the previous medium-term management plan at an early stage
- Maintain added value from shifting various costs to prices

Focus on “Uniqueness & Presence” (U&P) = Operating profit in U&P businesses



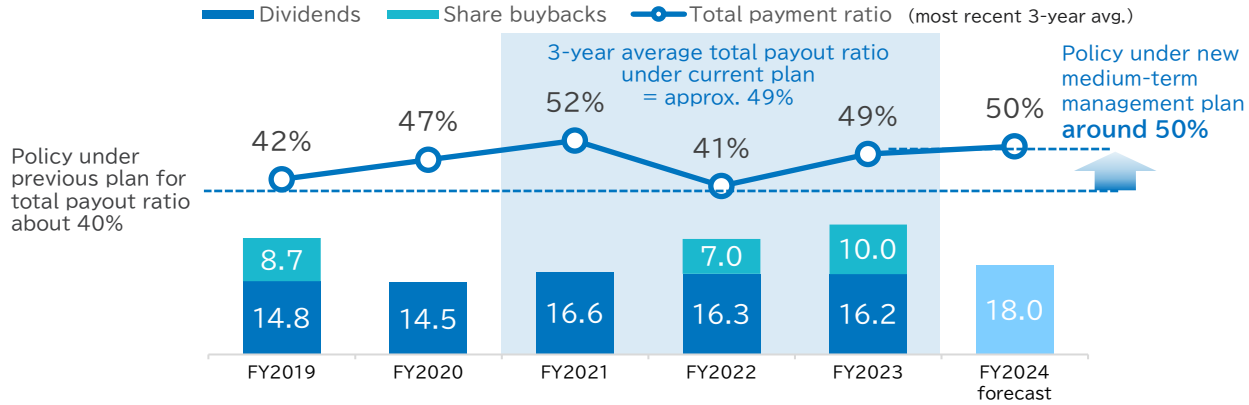
Aim for further improvement in capital profitability through greater business portfolio resilience and continuing/reaping the benefits of growth investments focused on U&P businesses

Specific Initiatives for Improving Corporate Value (2)

Continued enactment of proactive shareholder returns

- Raise the total payout ratio from the previous medium-term management plan (40%) to roughly 50% over the medium term
- Assuming financial soundness is not compromised, adopt a progressive dividend policy dedicated to building up the dividend while avoiding any decrease

Change in shareholder returns (¥ bn/%)



	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024 forecast
Net profit (¥bn.)	21.1	36.0	48.2	49.0	38.8	46.0
Full-year dividend (¥/share)	70	70	80*	80	80	90

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

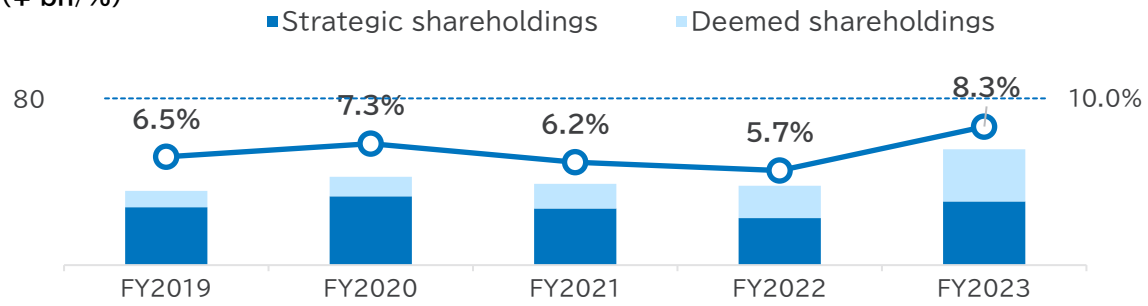
Promote various initiatives to reduce capital cost

- Shift to U&P businesses, use growing earnings stability to reduce volatility
- Strengthen B/S 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

- Despite progress in reducing strategic shareholdings, these occupy a proportion of consolidated net assets that, at the moment, is rising due to increasing market value of publicly traded shares. However, this remains at a level below the voting rights exercise standard of major proxy advisory firms overseas.
- Going forward, our policy is to promote the appropriate sale of shares deemed to exceed reasonable levels of shareholding, following annual examination of the purpose and meaning of holding individual stocks by the Board of Directors.

Proportion of strategic shareholdings in consolidated net assets (¥ bn/%)



23 stocks 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

Continue proactive dialogue with investors; further boost market presence

- Further increase opportunities for dialogue between management, investors and analysts (incl. overseas IR)
- Enhance business briefings, facility tours and other IR events
- Improve and enhance various information disclosures (incl. English-language disclosures)
- Promote dialogue through ESG/stewardship code interviews, interviews with outside directors, etc.
- Hold IR for individual investors, etc.



Reference materials

[Reference Materials] Indicators (1)

	FY2021 result	FY2022 result	FY2023 result	Grow UP 2026	
				FY2024 assumption	FY2026 assumption
Exchange rate (JPY/USD)	112	135	145	145	135
Exchange rate (JPY/EUR)	131	141	157	155	145
Crude oil price (Dubai) (US$/BBL)	78	93	82	80	80
Methanol (USD/MT) Asia spot average price	399	363	310	345	365

[Reference Materials] Indicators (2) (Consolidated Basis)

	FY2019 result	FY2020 result	FY2021 result	FY2022 result	FY2023 result	Grow UP 2026 FY2024 forecast	Grow UP 2026 FY2026 plan
Depreciation expense (billions of yen)	29.5	30.6	31.9	33.5	36.3	35.0	54.0
R&D expenditures (billions of yen)	19.6	19.9	21.0	23.5	25.6	28.5	28.0
Employees at fiscal year-end	8,954	8,998	9,888	10,050	7,918	8,166	8,500

[Reference Materials] Achievement Status of Materiality KPIs in Grow UP 2023 (1)

- Net sales of relevant applications set as a KPI for the development of an ICT and mobility society.
  Meeting the FY2023 targets with a contribution from increases in net sales by application, etc., due to consolidation of Mitsubishi Engineering-Plastics Corporation
- Three-year cumulative investment amount set as a KPI for solving energy and climate change problems.
  With some investments being delayed, the FY2023 target has not been met, but we plan to execute these investments under Grow UP 2026
- Net sales of relevant applications set as a KPI for solutions to medical and food problems.
  Net sales for FY2023 met the target as a result of creating new products, developing markets, and expanding business, etc.

Solve social issues through business

Materiality	Qualitative targets	Action plan	KPI		
			FY2020 result	FY2023 target	FY2023 result/estimate
Contribute to development of ICT/mobility society	Contribute through business to ICT, AI, robotics, blockchain, CASE and other digital innovations, and work to enhance corporate value	Turn out new products that contribute to digital innovation and lighter weight mobility	Consolidated net sales from ICT/mobility applications		
			¥234.2 billion	¥320.0 billion	**¥339.5 billion (result)**
Solve energy and climate change problems	Contribute to solving energy and climate change problems by participating in geothermal and LNG power generation, by developing products using CO_2 and biomass as raw materials, and through products that contribute to the environment, and work to enhance corporate value	Development of manufacturing technology using CO_2 as a raw material (Ex.: CO_2-derived methanol, intermediate for polycarbonate production)	Investments aimed at solving problems (consolidated, three-year cumulative)		
			¥8.6 billion	¥12.0 billion	**¥10.0 billion (estimate)**
Solve medical and food problems	Contribute through business to QOL improvements, extended healthy life expectancy, anti-aging and reduction of food and beverage waste loss, and work to enhance corporate value	Expansion of sales of products that contribute to QOL, further development of markets in pharmaceutical and medical fields, etc.	Consolidated net sales from medical and food applications		
			¥39.4 billion	¥50.0 billion	**¥57.4 billion (result)**

[Reference Materials] Achievement Status of Materiality KPIs in Grow UP 2023 (2)

- KPIs for MGC's GHG emissions (non-consolidated) and renewable energy as a percentage of electric power purchased set as KPIs for air quality control.
  Expecting to meet FY2023 targets by promoting GHG emissions reduction and renewable energy introduction, including purchase of non-fossil certificates
- MGC's zero waste emission rate (non-consolidated) set as a KPI for promoting reduction of industrial waste.
  Expecting to achieve FY2023 target by promoting zero emissions

Harmonize value creation with environmental protection

Materiality	Qualitative targets	Action plan	KPI		
			FY2019 result	FY2023 target	FY2023 estimate
Air quality control	Under the principles of sustainable development, corporations have a responsibility to take care that their business activities are in harmony with protection of the global environment	Phased reduction of GHG emissions and introduction of renewable energy, etc. aimed at achieving carbon neutrality by 2050	GHG emissions vs. FY2013		
			23% reduction	28% reduction	**37% reduction**
			Renewable energy as a percentage of electric power purchased		
			0%	10%	**23%**
Reduction of industrial waste	Consider waste as useful material and energy resources, moving forward with efforts to make cyclical use of resources and reduce environmental impact, while promoting resource recycling	Promote zero emissions, etc.	Zero waste emission rate		
			0.8%	0.3% or less	**0.12%**

*The above are on a non-consolidated basis

[Reference Materials] Achievement Status of Materiality KPIs in Grow UP 2023 (3)

- Steadily conducted initiatives led to meet targets for taking annual leave
- Meeting zero serious occupational accidents and zero serious accidents
- Expecting to fall short of target for GHG emissions intensity reduction due to the impact of capacity utilization, despite promoting various improvement activities
- Progressed as planned on R&D for resolving climate change issues, including circular carbon methanol and CO_2 derived PC development

Strengthen discipline and foundation supporting business activities

Materiality	Qualitative targets	Action plan	KPI		
			FY2019 result	FY2023 target	FY2023 result/estimate
Cultivating a corporate culture of job satisfaction	Create a highly productive organization by providing opportunities and an environment in which each employee can adapt to diverse, flexible styles of working while refining their own characters and abilities and developing their strengths	Promotion of work-life balance, etc.	Percentage taking fewer than 10 days of annual paid leave*1		
			8%	0%	**0%** (result)
Occupational safety and health / Process safety and disaster prevention	Safety is the foundation of business activities. Companies have a societal duty to ensure safety.	Share and utilize examples of accidents and disasters, promote process risk assessments, etc.	Serious occupational accidents*2		
			0	0	**0** (result)
			Serious accidents*3		
			1	0	**0** (result)
Highly energy- and resource-efficient production	Harmonize business activity with environmental protection by reducing emissions intensity through ultra-stable operation of production equipment, utility production using high-efficiency equipment, and process development and improvements	DX advancements (SMART-MGC Project), etc.	GHG emissions intensity vs. FY2013		
			14.6% reduction	19.9% reduction	12.5% reduction (estimate)
Promotion of innovative R&D	Engage in R&D aimed at the long-term goal of solving climate change problems through proprietary technology and collaboration via open innovation	Construction of a site for human resource development and creation of innovation	R&D investments devoted to solving climate change problems*4		
			3.8% of R&D expenditures	5% or more of R&D expenditures	**14% of R&D expenditures (estimate)**

*1 Excluding employees given less than 20 days of annual leave and those on other types of leave
*2 Accidents resulting in lost workdays eligible for disability compensation, including death and permanent disability, or potential disability, and those with four or more lost workdays
*3 Accidents that threaten third parties, including those resulting in environmental pollution involving community or that cause damage to local residents, and other accidents involving serious damage
*4 R&D investments including basic research, pilot plants, technical testing, etc.

*The above are on a non-consolidated basis

[Reference Materials] Setting of New Materiality KPIs in Grow UP 2026 (1)

- Set materiality KPIs for revised materiality
- FY2030 targets and interim FY2026 plans have been determined for KPIs
- Reporting boundaries have been set with awareness of the Group, particularly consolidated companies

Materiality	Materiality KPIs	Reporting boundary	Result/ Estimate	FY2026 plan	FY2030 target
Contribution to solving social issues through business	Sales of “Sharebeing” (MGC Group eco-friendly products)	MGC + consolidated companies	¥204.3 billion (FY2023 result)	¥270.0 billion	¥500.0 billion
Proactive response to environmental problems	Reduction in GHG emissions (compared to FY2013)	MGC + consolidated companies	25% reduction (FY2022 result)	33% reduction	39% reduction
	Zero waste emission rate*1	MGC + consolidated companies (domestic)	1.4% (FY2022 result)	1.2%	1.0%
Highly energy- and resource-efficient production	Energy usage reduction rate*2 (compared to FY2023)	MGC + consolidated companies	— *3	-3.0%	-7.0%

*1 Amount of final disposal/total amount of industrial waste generated
*2 Reduction in energy usage resulting from energy-saving improvements (based on 100% capacity utilization)/average annual energy usage for FY2021 to FY2023
*3 FY2022 result was -0.4% compared to FY2021

[Reference Materials] Setting of New Materiality KPIs in Grow UP 2026 (2)

– Expand KPIs for promotion of innovative R&D and enhancement of human capital management

Materiality	Materiality KPIs	Reporting boundary	Result/ Estimate	FY2026 plan	FY2030 target
Promotion of innovative R&D	Percentage of R&D contributing to increased resilience of business portfolio	MGC + consolidated companies	64% (FY2023 estimate)	60% or higher	60% or higher
	Percentage of research personnel contributing to solving climate change issues	MGC + consolidated companies	28% (FY2023 estimate)	25% or higher	25% or higher
	Percentage of DX human resources among research personnel	MGC + consolidated companies	67% (FY2023 estimate)	75%	80%
Cultivating a corporate culture of job satisfaction	Percentage of employees that feels satisfied at work	Non-consolidated	65% (FY2021 estimate)	70%	75%
Promotion of diversity and inclusion	Number of female managerial personnel	Non-consolidated	40 (FY2023 estimate)	60	90

[Reference Materials] Setting of New Materiality KPIs in Grow UP 2026 (3)

– The following KPIs have been set for safety, governance, human rights, etc.

Materiality	Materiality KPIs	Reporting boundary	Result/Estimate	FY2026 plan	FY2030 target
Ensuring occupational safety and health / Process safety and disaster prevention	Serious occupational accidents*1/serious accidents*2	MGC + consolidated companies	4*3 / 0 (FY2023 Q1-3)	0	0
Chemical/product quality and safety assurance	Product liability incidents, serious*4 legal and regulatory violations, serious*4 quality issues	MGC + consolidated companies	0 (FY2023 Q1-3)	0 MGC + domestic consolidated companies	0 MGC + domestic and overseas consolidated companies
Promotion of socially responsible sourcing	Percentage of suppliers in agreement with Company's basic approach to raw material procurement activities and its CSR procurement guidelines	Non-consolidated	- (Not implemented)	80%	100%
	Percentage of consolidated companies required to conduct CSR procurement activities	MGC + consolidated companies	- (Not implemented)	60% (Domestic consolidated companies)	100% (Domestic and overseas consolidated companies)
Strengthening governance and internal control/risk management/compliance	Number of serious compliance violations	MGC + consolidated companies	0 (FY2023 Q1-3)	0	0
Respect for human rights	FY2026: Human rights due diligence conducted at 100% of MGC + consolidated companies FY2030: Establish human rights management and ensure support for human rights policy by all stakeholders				

*1 Accidents resulting in lost workdays eligible for disability compensation, including death and permanent disability, or potential disability, and those with four or more lost workdays
*2 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
*3 At consolidated companies
*4 Losses of over ¥1.0 billion or more

[Reference Materials]
Carbon Neutrality as a Business Opportunity for the Company (1)
Target Areas

– Use the Company's distinctive technologies to promote the development of products and technologies conducive to decarbonization

Development of products and technologies conducive to decarbonization



Technology for methanol manufacturing using CO_2 as raw material



Technology for hydrogen manufacturing using methanol as raw material (catalyst)



Geothermal power generation



Polycarbonate from CO_2



Clean ammonia procurement (fuel, green hydrogen raw material)



All-solid-state batteries (for EVs)
Fuel cells (for FCVs)



LNG power generation+ CCUS*



Energy control systems: Semiconductor materials



Biodegradable polymers



Chemical recycling



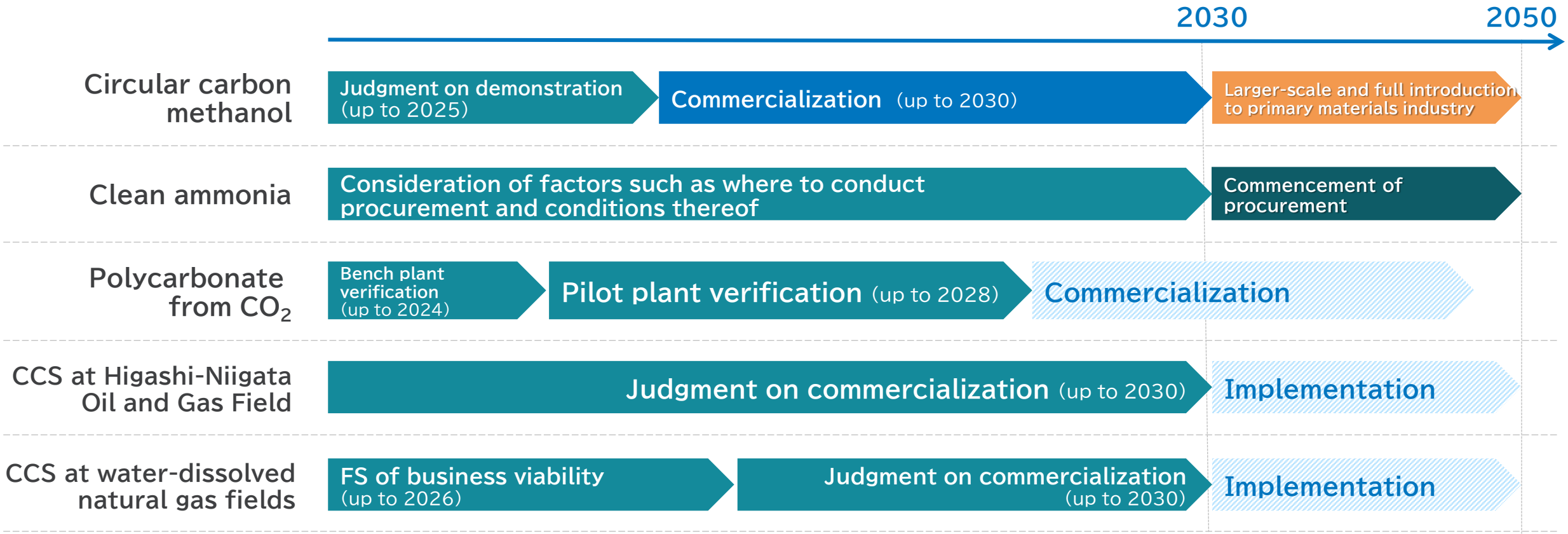
Direct Air Capture (DAC): Special amines

Methanol: Hydrogen carriers

More efficient driving: Optical polymers used in automotive sensing cameras

*Carbon dioxide Capture, Utilization, and Storage

[Reference Materials]
Carbon Neutrality as a Business Opportunity for the Company (2)
Pipeline



Forward-looking Statements

These materials contain performance forecasts and other statements concerning the future. These forward-looking statements are based on information available at the time. These materials were prepared and on certain premises judged to be reasonable. None of these forward-looking statements are intended to be guarantees of future performance. Various factors may cause actual performance to differ significantly from forecasts.

MITSUBISHI GAS CHEMICAL COMPANY, INC.

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