

Forging the future



Mitsubishi Chemical Holdings Corporation
has been reborn as
the **Mitsubishi Chemical Group Corporation**,
effective July 2022.

Under the new management policy, “Forging the future,”
the Mitsubishi Chemical Group shifted to an integrated
management structure, operating with greater efficiency
as “One Company, One Team.”

Everyone in the Group will unite and work together to leverage
our strengths and seize opportunities to expand our business.

We will continue to strongly promote innovation to forge the future.

Mission

We create innovative solutions globally based
on our core values of Sustainability, Health,
and Comfort, striving for the well-being of people,
society and our planet Earth.

Vision

Realizing KAITEKI

Value

Sustainability, Health, Comfort

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Editorial policy

Editorial policy

Mitsubishi Chemical Group Corporation (MCG) publishes the KAITEKI Report as a value creation story that covers the progress and outlook of corporate activities aimed at realizing the MCG Group's KAITEKI vision. This report summarizes financial and non-financial information from the past, present, and future projections based on what we have determined to be highly pertinent to our decision-making criteria and material issues identified for corporate activities. In preparation of this report, we referred to the International Integrated Reporting Framework created by the International Integrated Reporting Council.

Further information on the topics of this report is available on the MCG website. For detailed financial information, please refer to our securities reports filed with the Financial Services Agency. For detailed governance information, please refer to our corporate governance report submitted to the Tokyo Stock Exchange.

Organization of information disclosed



Reporting period

Fiscal 2021 (April 2021–March 2022), including some information from fiscal 2022

Reporting boundary

This report covers information relating to MCG and the MCG Group. For matters with a different reporting scope, we clearly specify the reporting boundary covered.

Accounting standards

MCG has adopted International Financial Reporting Standards (IFRS), effective from the first quarter of fiscal 2016, the fiscal year ended March 31, 2017. In this report, data in and after fiscal 2016 are based on IFRS, while other figures are based on J-GAAP unless otherwise noted.

About the Company name

In this report, we use the new Company name in line with the following rules.

When referring to the parent company Mitsubishi Chemical Group Corporation

First mention in a section is Mitsubishi Chemical Group Corporation, thereafter abbreviated as MCG

When referring in general to Mitsubishi Chemical Group Corporation and the companies within the Group

First mention in a section is the Mitsubishi Chemical Group, thereafter abbreviated as the MCG Group

How to use the interactive PDF



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Progress in Value Creation

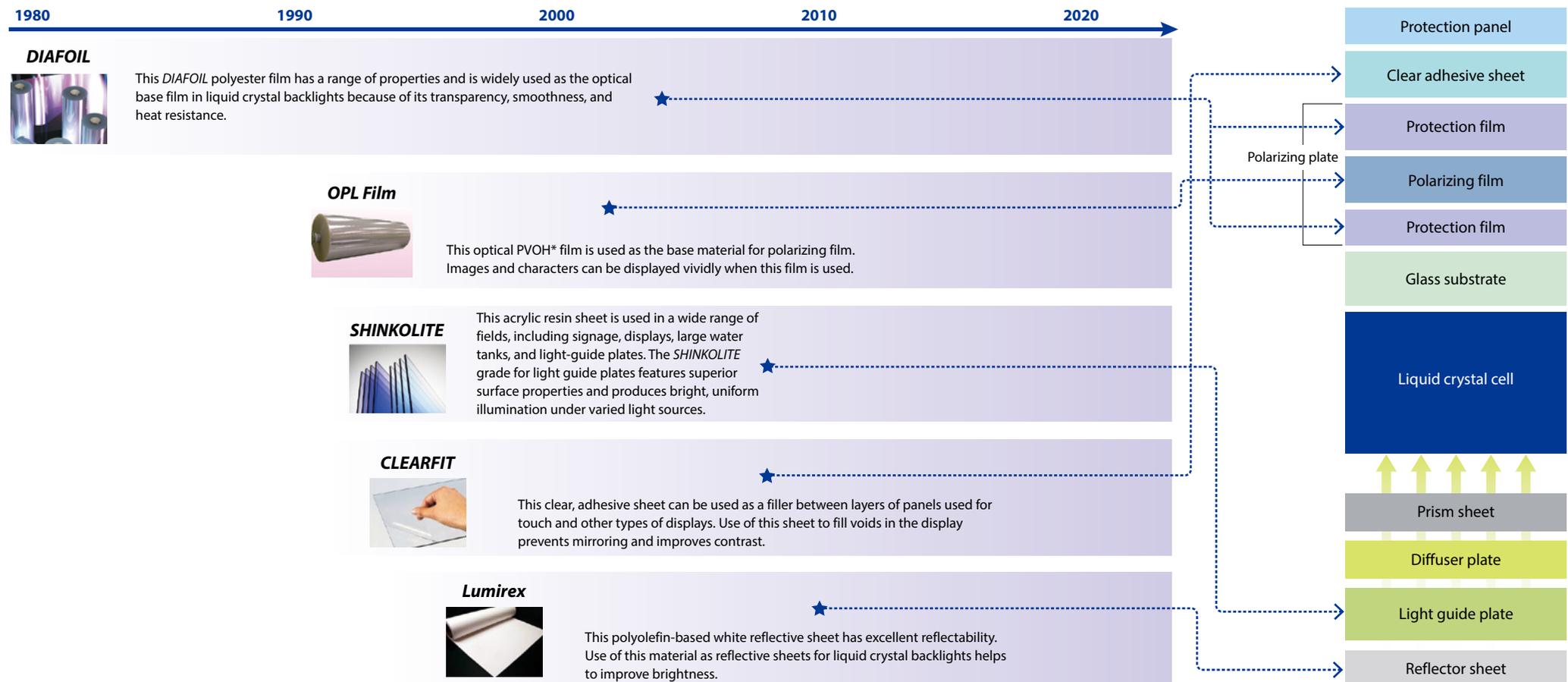
- 5 | History of Technologies That Give Us Our Competitive Edge
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History of Technologies That Give Us Our Competitive Edge

Across the Mitsubishi Chemical Group, we have developed proprietary and basic technologies in a wide range of business domains. These technologies are important intellectual capital for the MCG Group and a source of our competitive edge. Here we describe the history of our technologies in three typical businesses and our Group strengths.

Performance Products Domain

Display components We have captured a 20% share of the global market for optical polyester film and are leveraging our technological capabilities to develop high-performance components designed for displays.



* Polyvinyl alcohol

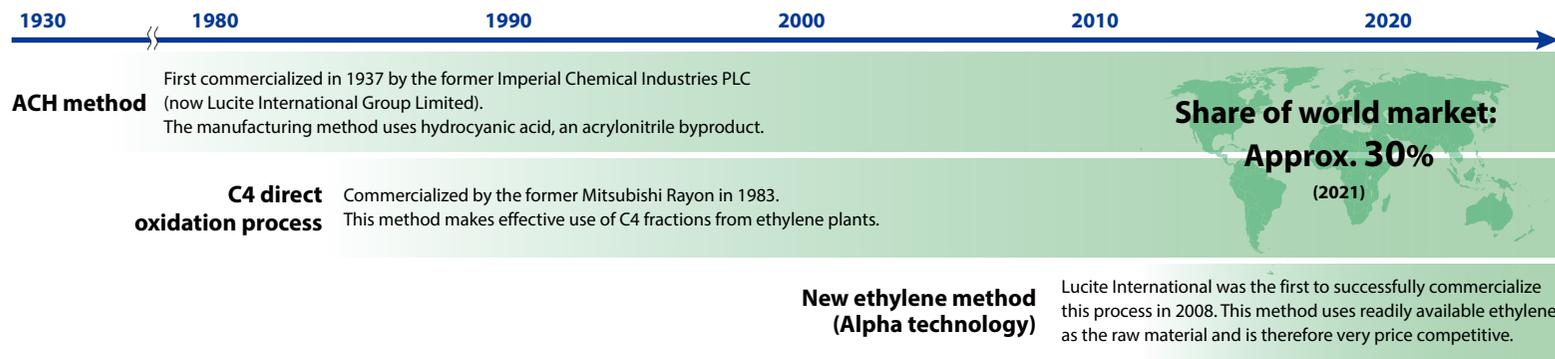
★ Denotes when first used in displays

History of Technologies That Give Us Our Competitive Edge

Industrial Materials Domain

MMA The only manufacturer worldwide with three manufacturing methods with different raw materials.

We select the manufacturing method best suited to the location and environment of the manufacturing site to develop our business efficiently.

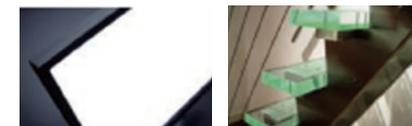


Main applications of MMA



Signage

Automotive

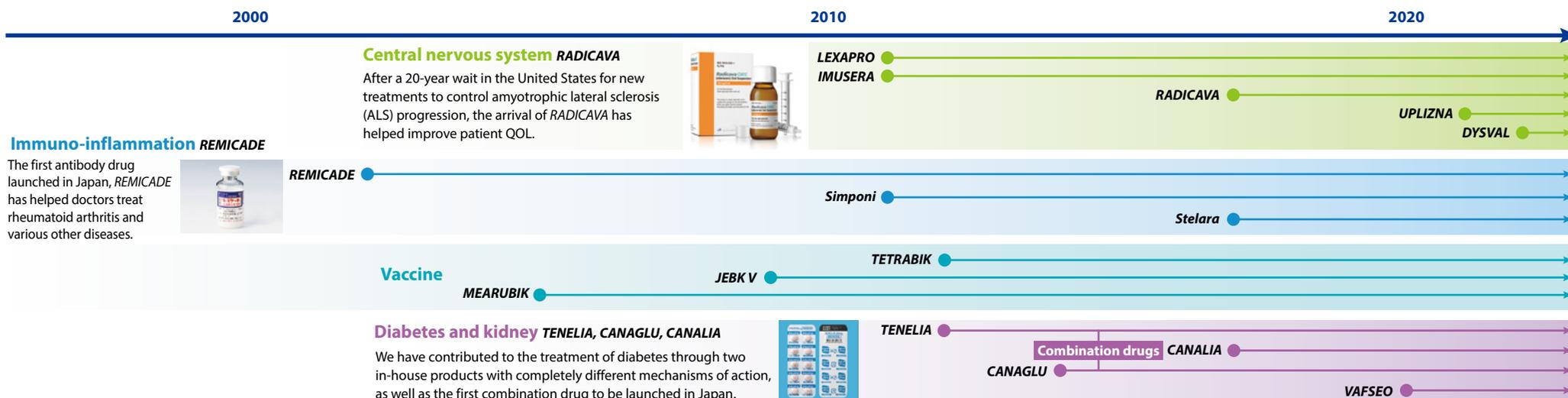


IT (e.g., optical fiber)

Interior design and displays

Health Care Domain

Pharma Creating hope for all facing illness through specialty pharmaceuticals, particularly in the fields of central nervous system, immuno-inflammation, vaccines, and diabetes and kidney diseases.

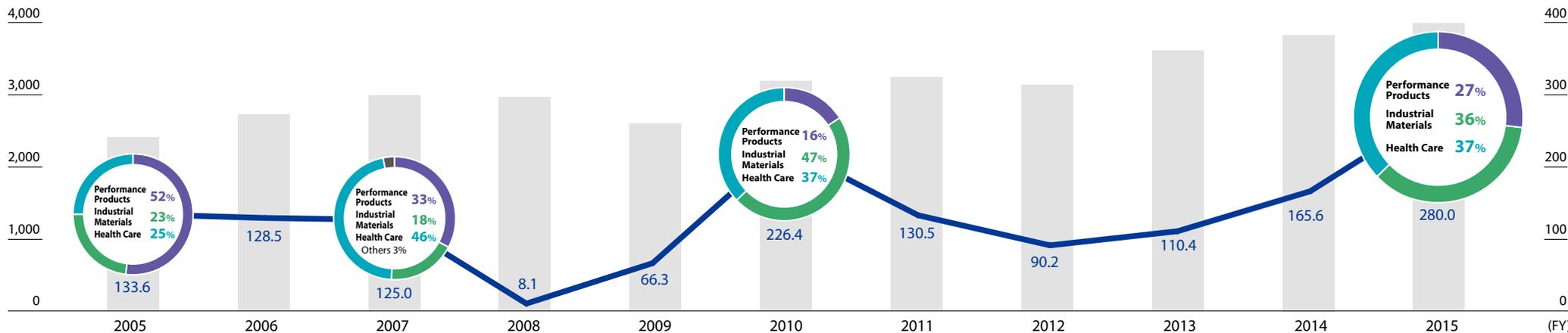


Progress of Portfolio Reforms

Net sales (Sales revenue)

(Billions of yen)

■ Net sales (Sales revenue) (left axis)
 — (Core) operating income (right axis)
 ● (Core) operating income by segment (pie chart)



J-GAAP until FY2015 IFRS from FY2016

Figures for past fiscal periods (up to and including FY2020) are the business results figures announced at the time.

Core operating income is calculated as operating income (loss) excluding certain gains and expenses attributable to non-recurring factors (gains and losses incurred by business withdrawal and contraction, etc.).

We disclose core operating income as unique gains/losses incurred by staged gains/losses, while considering the comparability with operating income under J-GAAP.

Pursuit of business scale through M&A and integrations, and restructuring of unprofitable businesses

Medium-term management plans and portfolio reforms ● Growth measures ▲ Restructuring

KAKUSHIN Plan—Phase 2 FY2005–FY2007

Operating income: Target ¥140 billion or more Result ¥125.0 billion

Review

Raised the ratio of the pharmaceutical business and strengthened earnings less susceptible to the economy

- 2005 Establishment of MCHC

Strengthened the pharmaceutical business

- 2007 Establishment of MTPC

Challenges for the next management plan

Creation of growth drivers in the Performance Products domain and structural reform of unprofitable businesses**APTSIS 10** FY2008–FY2010

Operating income: Target ¥190 billion Result ¥226.4 billion

Review

Expanded the Performance Products domain

- 2008 Integrated MPI, MCC's functional products business, and three affiliate companies
- 2009 Conversion of Quadrant AG, the world's largest manufacturer of engineering plastic products, into a consolidated subsidiary

Shifted to a higher value-added business portfolio

- 2010 Conversion of MRC into a consolidated subsidiary
- ▲ 2010 Withdrawal from the nylon chain business
- ▲ 2011 Withdrawal from the PVC chain business
- Withdrawal from the SM chain business

Challenges for the next management plan

Structural reforms and profit stabilization in the Industrial Materials domain**A shift to higher performance and added value****APTSIS 15** FY2011–FY2015

Operating income: Target ¥280 billion Result ¥280.0 billion

Review

Stabilized profitability through structural reform in the Industrial Materials domain and the conversion of an industrial gas company into a subsidiary

- 2014–2015 Production optimization of polyolefin
- ▲ 2014 Retained a single naphtha cracker at the Kashima Plant (now Ibaraki Plant)
- 2014 Conversion of TNSC into a consolidated subsidiary
- ▲ 2016 Formed a joint venture to operate the naphtha cracker at the Mizushima Plant (now Okayama Plant)
- ▲ 2016 Decided on the equity interest transfer of the terephthalic acid business in India and China

Challenges for the next management plan

Driving growth through synergies, development of a global management system, and measures for low-profit businesses**Shifted to high performance and added value**

- 2013 Conversion of Qualicaps Co., Ltd.'s capsules and pharmaceutical processing equipment businesses based in Japan, the United States and Europe into a consolidated subsidiary
- 2014 Established LSII

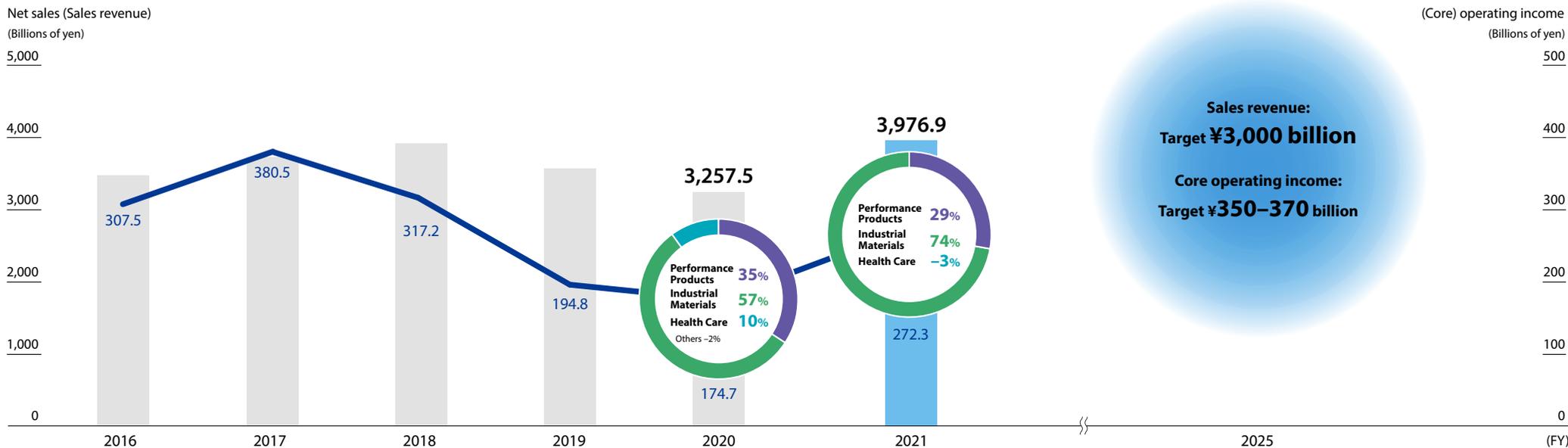
Strengthened corporate governance

- 2015 Transitioned to a company with a nominating committee, etc.

MCHC: Mitsubishi Chemical Holdings Corporation
 MCC: Mitsubishi Chemical Corporation
 MPI: Mitsubishi Plastics, Inc.
 MRC: Mitsubishi Rayon Co., Ltd.
 MTPC: Mitsubishi Tanabe Pharma Corporation
 LSII: Life Science Institute, Inc.

TNSC: Taiyo Nippon Sanso Corporation
 New-MCC: Mitsubishi Chemical Corporation (Apr. 2017–)
 PVC: Polyvinyl chloride
 SM: Styrene monomer

Progress of Portfolio Reforms



Become a corporate group with high growth and a profitable business through Performance Products, Industrial Materials, and Health Care

Aim to maximize value for all stakeholders through clear strategies for efficient business operations and business growth

Medium-term management plans and portfolio reforms ● Growth measures ▲ Restructuring

APTIS 20 FY2016–FY2020

Core operating income: Target ¥410 billion Result ¥174.7 billion

New Management Policy FY2021–FY2025 EBITDA margin: Target 18–20%
“Forging the future” Core operating margin: Target 11–13%

Review

Accelerated growth of the Performance Products domain through integrations

- 2016 Converted The Nippon Synthetic Chemical Industry Co., Ltd. into a wholly owned subsidiary
- 2017 Establishment of the New-MCC Integration of the three chemical operating companies (MCC, MPI, and MRC)

Strengthened management through continuous business restructuring and investment in growth areas

- 2018 Started commercial operations of the new MMA plants with The Saudi Methacrylates Company, in the Middle East
- 2018 and 2019 Expanded the global market share of the industrial gases through M&A activities
- ▲ 2019 Strategic capital alliance with PHC Holdings Corporation through share exchange with LSI Medience Corporation
- ▲ 2019 Withdrew from the storage media business
- 2020 Converted MTPC into a wholly owned subsidiary

Strengthened global management capabilities

- 2017 MCC established regional headquarters
- 2020 Established Nippon Sanso Holdings Corporation in the industrial gases business through a shift to a holding company structure

Accelerated digital transformation (DX)

- 2017 Establishment of the Emerging Technology and Business Development Office

Challenges for the next management plan

Strengthen the business foundation, strengthen operations in growth business domains, and strengthen financial position

Strategic priorities

More Focused Approach to Maximize Our Value

1. Growth, Performance, and Sustainability
2. Business to Exit
3. Strategic Cost Transformation
4. Leaner Structure to Execute Strategy
5. Strategic Capital Allocation

Three Domains Supporting Value Creation

Performance Products Domain

Performance Products Domain ▶ Page 87

Polymers & Compounds

Develops greater added value for various materials and delivers high-performance materials to the world



Coating material
ACRYKING

FY2021

Sales revenue **¥308.1 billion**
Core operating income **¥18.5 billion**

- Performance polymers
- Polycarbonate
- Coating materials, etc.

Films & Molding Materials

Utilizes a range of molding technologies to provide products designed for different applications



Food packaging film
DIAMIRON

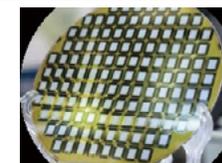
FY2021

Sales revenue **¥479.9 billion**
Core operating income **¥43.9 billion**

- Packaging (food packaging) and industrial films
- Polyester films
- High-performance engineering plastics
- Carbon fiber and composite materials, etc.

Advanced Solutions

Offers new solutions to society's search for value, through advanced products and technologies, business models, and ideas



Semiconductor-related materials

FY2021

Sales revenue **¥348.3 billion**
Core operating income **¥16.3 billion**

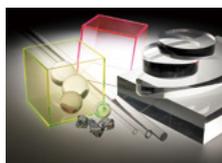
- Aqua solutions
- Life solutions
- Semiconductors & electronics
- Battery materials, etc.

Industrial Materials Domain

Industrial Materials Domain ▶ Page 90

MMA

Manufactures MMA using all three of the main manufacturing methods and delivers global supplies of MMA and MMA derivative acrylic resin



PMMA acrylic resin block

FY2021

Sales revenue **¥298.1 billion**
Core operating income **¥31.8 billion**

- MMA
- PMMA

Carbon Products

Uses superior coking coal formulation and QC technologies to deliver stable supplies in Japan and overseas



Coke

FY2021

Sales revenue **¥267.6 billion**
Core operating income **¥25.8 billion**

- Coke
- Carbon materials
- Carbon black
- Synthetic rubbers

Industrial Gases

Commands a top share of the domestic market and has built a global supply system with sites in Japan, the United States, Europe, and Asia



Industrial Gases business

FY2021

Sales revenue **¥950.1 billion**
Core operating income **¥98.9 billion**

- Industrial gases
- Related equipment and facilities

Petrochemicals

Operates ethylene plants in Japan and delivers stable supplies of petrochemical materials as well as high-performance polyolefins



Ethylene plant

FY2021

Sales revenue **¥722.2 billion**
Core operating income **¥44.6 billion**

- Basic petrochemicals and basic chemical derivatives
- Polyolefins

Health Care Domain

Health Care Domain ▶ Page 92

FY2021

Sales revenue **¥403.6 billion**
Core operating loss **¥-7.0 billion**

Pharma

Develops precision medicine and around the pill solutions in fields where there are unmet medical needs



Biopharmaceuticals

- Central nervous system
- Immuno-inflammation
- Vaccines
- Diabetes and kidney

Regenerative medicine

We utilize the properties of Muse cells and aim for approvals for indications with high unmet medical needs.



Muse cell-derived cluster

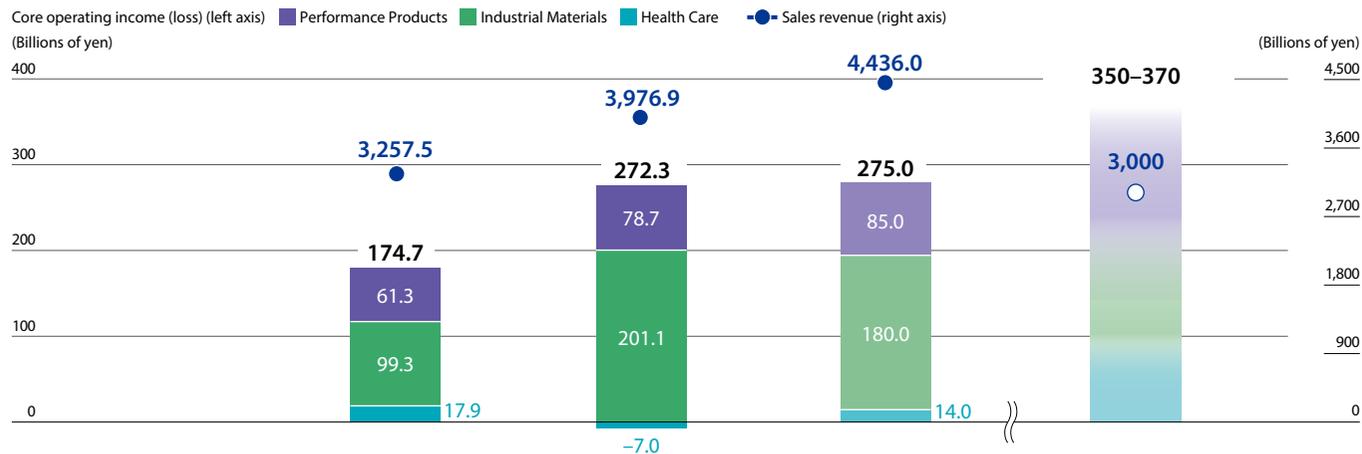
- Research and development of Muse cell-based products

Activity Report for Fiscal 2021

Figures for past fiscal periods (up to and including FY2020) are the business results figures announced at the time.

Financial Results (MOE: Management of Economics)

Sales revenue and core operating income (loss)



(FY)	2020 results	2021 results	2022 initial forecasts	2025 targets
Core operating margin (%)	5.4	6.8	6.2	11-13
EBITDA (billions of yen)	405.6	502.4	518.0	540-560
ROE (%)	-0.6	13.2	10.4	≥10
Net debt-to-equity (D/E) ratio	1.73	1.40	1.29	0.50-1.00

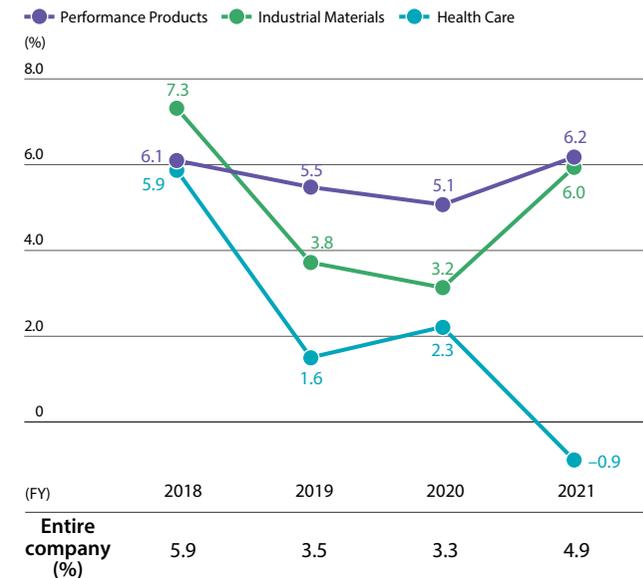
Achieved sales and profit growth through demand recovery and passing on of costs

In fiscal 2021, economic activity started to resume around the world after the impacts from the COVID-19 pandemic, driving a recovery in domestic and overseas demand and record-high sales revenue.

Core operating income was affected by increased R&D

spending on a COVID-19 vaccine, plus rising raw material and fuel prices and supply chain disruptions. However, market prices rose for some products and sales volumes increased as demand rose steadily for automotive and electronics products in our priority strategic markets, mostly in the Performance Products domain. Core operating income rose significantly, up 156% year on year, as all Group businesses worked to maintain profitability

ROIC trends by domain



by passing on higher costs in response to raw material and fuel cost trends.

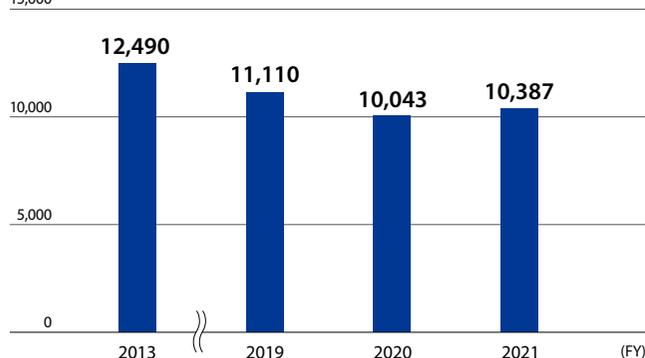
The net D/E ratio improved 0.33 points to 1.40 in fiscal 2021, due to ongoing efforts to restructure the portfolio, including transfer of the alumina fiber business.

Activity Report for Fiscal 2021

Sustainability Results (MOS: Management of Sustainability)

GHG emissions in Japan

(1,000 t-CO₂e)
15,000

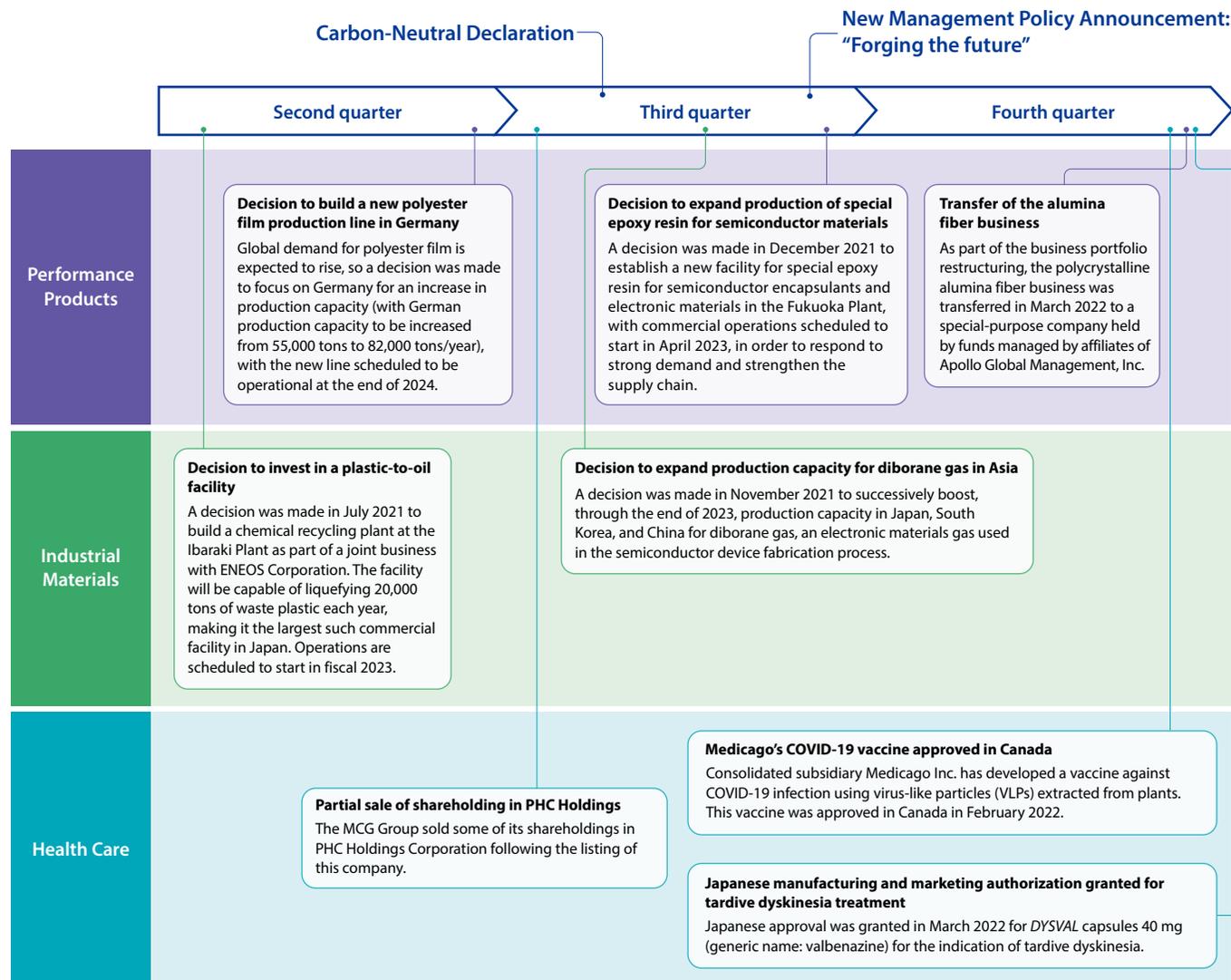


Toward further reduction of GHG emissions

The Mitsubishi Chemical Group released targets in fiscal 2021 for the reduction of greenhouse gas (GHG) emissions by fiscal 2030 and to achieve carbon neutrality by 2050. For Japan, we set a target of a 42% reduction in GHG emissions (compared with fiscal 2013 levels) by fiscal 2030, and the results show that we reduced emissions by 16.8% in fiscal 2021. Looking ahead, we will move along the roadmap to carbon neutrality, implementing fuel conversion and other measures.

We have also laid the foundations for the life-cycle assessment (LCA) needed to evaluate how we are reducing the environmental impact of our activities (e.g., GHG emissions) across the value chain. In addition to performing these LCA calculations for products and services, we are now working to expand the scope of calculations to our businesses and other areas (▶ Page 76).

Fiscal 2021 highlights and main business activities



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Toward Sustainable Growth

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Message from the President



One Company, One Team for Global Market Focus That Grows Corporate Value

Jean-Marc Gilson

President & CEO

I took this office just over a year ago in April 2021, but the changes we have made are earthshaking. In December, I announced our new management policy, “Forging the future,” and in April we began transforming the Company. The most impactful reform is our shift from a holding company structure to the lean and flat organization and structure we call “One Company, One Team.” It’s about removing all kinds of barriers and intermediate layers so we can work as one to unlock the growth potential of our businesses, capture growth opportunities, and lead innovation.

Symbolizing this transformation is our new name, Mitsubishi Chemical Group Corporation, effective July 1, 2022.

Under this new policy, we will dynamically manage our portfolio to focus on attractive markets where the Mitsubishi Chemical Group is positioned to win. This is the realistic and effective way to deliver on our potential, build competitiveness, and reach our sustainability targets, with the overarching aim of maximizing value for all stakeholders.

Message from the President

A good first year showing a strong rebound from fiscal 2020

I am happy to report that, while making progress in our transformation, we have fully met the financial targets set at the start of the fiscal year. We showed a strong rebound from fiscal 2020 with good year-on-year growth of 22%, a core operating income of about 56%, which is 19% over our initial target. EPS and ROE also showed significant improvement. To cap a good year, we deleveraged to improve our net D/E ratio, and restored the full-year dividend to ¥30 per share.

The performance products segment forecast in our “Forging the future” strategy—semiconductors, displays, EV components, sustainable polymers, and food

ingredients—all demonstrated solid growth that I see continuing along with firm performance in the Industrial Gases segment.

On the pharma front, we spent heavily on R&D, which helped deliver positive outcomes for two strategic products. In February 2022, our COVID-19 vaccine *COVIFENZ* gained approval in Canada. In June 2022, we began marketing our *RADICAVA ORS* oral treatment for amyotrophic lateral sclerosis (ALS) in the U.S. These successes indicate our return to solid and sustained profitability going forward.

Formulating a new management policy and laying the groundwork for transformation

After joining the Company, I worked with the team for nearly eight months, examining every piece of the puzzle

to gain on-the-ground insight into what’s happening. This revealed the kind of portfolio streamlining and management changes we would need to make.

We asked three questions of each business: Is there growth and profit in its future? Does it have a key skill that gives competitive advantage? And third, does the business fit with our environmental vision of a carbon-neutral future? Regarding carbon neutrality, the equation is extremely complicated, and we need to solve it outside the context of what we’re trying to build in the Company.

The picture of ourselves that emerged is a collection of diverse, generalist businesses operating in a mostly uncoordinated fashion, although the global MMA business and domestic petrochemicals business have high shares of the market. Compared to their sectors globally, they could be more profitable. So, regarding the critical question of future growth, we knew what had to be done.

That’s what’s behind the “Forging the future” management policy that was rolled out in December 2021 (▶ Page 23). Since then, we have been eliminating internal barriers and reshaping the organization to be truly One Company, One Team. We have been putting into place all the business processes a new organization needs to get up and running.

Our fiscal 2022 forecast includes all the initiatives described in “Forging the future.” We will pursue increased profits by strengthening our effort in our selected markets. We expect the coming year to validate the soundness and enhanced resilience of our new strategies, despite challenges impacting us across the globe.

Financial targets for fiscal 2025

	FY2020 Results	FY2021 Results	FY2022 Initial Forecasts	FY2025 Targets
Sales revenue	¥3,257.5 billion	¥3,976.9 billion	¥4,436 billion	¥3,000 billion
Core operating income	¥174.7 billion	¥272.3 billion	¥ 275 billion	¥350–370 billion
EPS	¥-5.3	¥124.7	¥107.7	¥125–145
ROE	-0.6%	13.2%	10.4%	≥10%
Net D/E ratio	1.73	1.40	1.29	0.50–1.00

Message from the President

Our new name, Mitsubishi Chemical Group Corporation, symbolizes a fresh start as One Company, One Team

This company was structured like a holding company managed on the legal-entity basis, giving subsidiaries considerable autonomy. Inter-business cross-sharing had room to improve. The Company was, after all, built through acquisitions. But these diverse entities were not truly integrated into One Company, One Team.

At the employee level, people tend to refer to themselves, to their particular subsidiary. They didn't feel they were all employees of one and the same group

working toward shared goals.

Now is the time for us to prioritize Group-wide alignment and coordinate our marketing efforts. This is why our name change has such great symbolism. It represents a key shift in strategy, that we're One Company, One Team. I've been advocating this since last December and we've been implementing it ever since.

One Company, One Team means we do things together. We attack markets together. It's not as if the epoxy business attacks the electronics market, and then the film business follows. No, we take on market challenges together. Everything, we do together. We are One Company, One Team, united, sharing direction, purpose, strategy, and action.

Our new name sends a resounding signal. Not only are we one team with a transformed structure and management that eliminates all intermediate layers, but every single one of us is behind one company. It's the Mitsubishi Chemical Group. That's who we are.

I cannot say this change has been frictionless, but the ease of implementation has amazed me. Communication, open and forthright, is essential for our future and it is this kind of communication and teamwork that has made our transformation possible.

Branding is another dimension of communication. We are repositioning the brand to express the attributes of being one company. To bring us together as one team, we need a distinct brand identity that people can believe in. Repositioning will also benefit corporate value, market

strength, and potential profit margins.

There's more work to be done at a deeper level of selecting key businesses and global markets for the future but our direction is now crystal clear and hard as diamond.

Long-term focus on market growth, competitive advantage, and sustainability

The best way we can grow and thrive is by shifting to a high-margin model. We must refocus on selected markets where we can multiply our impact through teamwork. Thus, instead of medium-margin, high-cost petrochemical products, or low-margin goods sold through multiple channels in the electronics market, we will concentrate on products where our quality, brand, and IP will demand a premium.

This plays to our strengths and Japan's strengths in education, knowledge, and IP. We have remarkable engineering talent. If we leverage this strength in the key markets that matter, we can have an outsized impact. We can reorganize to create value through a circular economy that enhances the well-being of people, society, and our planet Earth while boosting corporate value. In short, we must work together to win.



Message from the President

Carbon neutrality comes with an obligation to lead industry consolidation

In order to achieve carbon neutrality, in the future we will need to make a large environmental-focused investment in our Petrochemicals business, which currently emits a large amount of CO₂, but it is difficult for one company alone to cover this investment. On the other hand, it is also true that the petrochemicals business is an indispensable industry for Japan from the perspective of social infrastructure and economic security. That is why I believe that we must restructure and consolidate this industry, and we are proceeding with the carve-out process based on this premise.

Selecting markets where our strengths can shine

As mentioned, we are now in a deeper phase of specifying the five or six markets where we want to be globally. Initially, I was looking at our strengths and opportunities in electronics, healthcare, and life science. Looking further, the EV industry will increasingly welcome our capabilities in technologies from displays and semiconductors to batteries. EV is a model case for our exceptional engineers and scientists to serve a circular economy that enables sustainable well-being for people, society, and our planet Earth.

We will continue to shift out of commodity or generic products and really restructure the Company to be the best organized, the most successful specialty chemical company focusing on electronics, healthcare, and life science. We are now defining more management details and looking forward to announcing these in the next management plan.

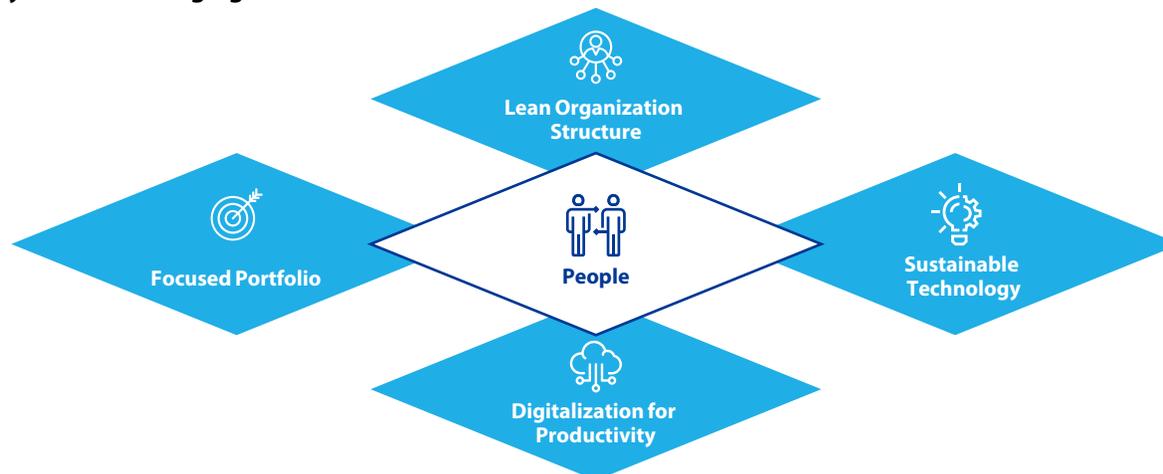
Healthcare has a thrust. In life sciences, I want a sharper focus on the most suitable opportunities from among the multitude on the horizon. This includes the food industry, where my previous job experience was in specialized food ingredients. High-quality food ingredients are critical for feeding the world's nearly 10 billion people.

Strategic capital allocation for global growth

As our businesses mature, they generate cash to be reinvested into R&D areas where we have real potential. Cutting costs is part of this, but the effective way is not the comfortable way. Asking everyone to cut back 5% is superficial. In truth, some businesses need to invest to grow and others need to take a 20% cut.

Outside Japan our business is growing rapidly, ready to reach 50% within just a couple of years. But our R&D presence is still restricted to Japan despite the domestic market's shrinking contribution. To keep pace, we will be building R&D centers in North America, Europe, and the Asia-Pacific regions. To complement R&D we have already launched a venture fund that invests in emerging technologies (▶ Page 43).

Our Keywords for "Forging the future"



Message from the President

Making ourselves fantastic is my passion. Showing the world what Japanese companies can do is my dream.

Global growth that leverages our Japanese identity is my aim and our team's challenge. My dream is to show the rest of the world what Japanese companies can do when you give people the freedom to achieve extraordinary things; when you optimize management practices; when you put people first; and when you implement DX as a differentiator. Making ourselves fantastic is my passion. It drives everything we are doing.

Reshaping for agility and execution in markets matched to capabilities

We are reorganizing our businesses in terms of markets rather than our five categories: Polymers & Compounds, MMA, Advanced Solutions, Pharma, and Industrial Gasses. On the one hand we are leaving the Petrochemicals and Carbon Products business. On the other, we will be looking for synergies to fit actual markets and future opportunities.

We will continue to hire the best people we can find for every job in the organization. As a result of this policy of unbiased assessment we now have women in leadership positions including CFO and CHRO. After interviewing as many women as men we simply picked the most qualified candidates, who happened to be Japanese women.

Another key position, one I have created, is that of CSO. I wanted a person with whom I share experience, someone with a critical eye for business, someone whom I trust and

who is not afraid to contradict me in front of everyone. The CSO has a long history in M&A, with a focus on integration, portfolio management, and restructuring. As we expand in U.S. markets, where we see the most growth potential, the CSO will be the bridge we need between market needs and headquarters.

A year ago, I was cautiously optimistic about transforming the Company. Now, with a shared vision at the top, backed by proven expertise and experience, I am definitely optimistic and confident about our ability to execute for success.

Diversity—of gender, race, ethnicity, everything—is an equation that results in diversity of thoughts

When you give people permission, they will exceed your expectations. If you provide freedom and the right environment, people will repay your trust by showing their true creativity. That is what I have witnessed and will put into practice.

Freedom requires a shift toward performance-based management where people are permitted to make autonomous decisions in the service of shared goals. Only by letting go of the heritage seniority-based system will people freely give their opinions and build new things heading in the same direction. This calls for a change in mindset.



As an employee, you do not belong to a company. You want to know what you are contributing, not feel like a pawn being moved around a chessboard. That said, a sense of belonging is a valuable strength of Japanese companies that brings commitment. But it must be a balanced relationship, on more equal footing.

To bring out the full potential of our employees, we will set up an internal curriculum, provide training opportunities, and pay for outside business courses. A training budget is an investment that delivers high returns in terms of corporate value.

I'm a firm believer in giving diverse people the freedom to express their diverse thoughts. Greater diversity brings a

Message from the President

broader range of ideas that translate into captured opportunities and inventive solutions. If you limit diversity, you limit potential.

DX strategy: One company, One team, One operating system

In today's world, DX is how a business survives as a going concern. Business and DX are now one and the same thing. They are inseparable.

DX drives business transformation by automating and continuously optimizing all business processes and workflows, but it is meaningless unless the software, hardware, and interfaces that make up each are not integrated into a single system. Many Japanese companies tend to fall into the trap of thinking that by adopting DX they can get a technological solution. However, simply adding computers and applications without integrating the systems and upgrading them will only proliferate flawed systems and will not bring about change.

To ensure DX execution, it is critical to build an integrated core system running on a single operating system. This will ensure seamless efficiency and lean functionality in a variety of operations, from supply chain to human resources.

Our long-term DX strategy is to automate all processes that can be automated. However, I believe that the most value-added activities are best left to the human element.

I am confident that our employees will be free to let their creative juices flow and reach their full potential in the DX environment we are currently promoting.

Enhanced governance as One Company, One Team

Our Board of Directors is well run and continues to improve. Outside directors will be in the majority as of June 24, 2022, accounting for five of the nine Board members.

Governance will benefit as shareholders play an increasing role in keeping management accountable and on track.

Our Compensation and Nominating committees are also on solid ground with these elements of governance firmly in place.



Internal management is the other half of governance. Here, we need a flat organization that removes barriers between businesses and identifies authority at each level so we can maximize our capabilities as One Company, One Team.

This will sharpen and strengthen our focus on safety and compliance, including internal audit control and transparency. We are also inaugurating enterprise risk management (ERM) (▶ Page 67).

Having approximately 600 legal entities makes Group-wide compliance a formidable task. By continuing to pare the number of entities, we will reshape the Group to a manageable scale that supports hands-on compliance everywhere we operate.

Sustainable management for a carbon-neutral future

Our sustainable management strategy appeals to people worldwide. With Company-wide alignment and understanding of this commitment, we can work as One Company, One Team toward our sustainability goals.

There is a time to think and there is a time to execute. The sustainability clock is ticking. In fiscal 2022, we will take concrete steps: Investing billions of yen to build a pilot plastic recycling facility; investing in renewable energy; and dedicating capital expenditures to still other areas that support sustainable growth. We will set up a green transformation (GX) team and committee instead of the

Message from the President

Circular Economy Promotion Committee with the single-minded mission of executing the strategy, not rethinking it (▶ Page 75).

For us to make progress toward carbon neutrality by 2050, I want to see quantitative results in CO₂ reduction. We must do better. We can and will do better.

Looking toward 2025, I think we will be well on our way to becoming a high-end specialty chemical manufacturer where most products are designed to be sustainable. It will be a remarkable transformation from our past as a major CO₂ emitter, plastic manufacturer, and commodity producer.

Dedicating our business to the well-being of people, society, and our planet Earth does not detract from profitability or growth. Rather, it's how we will gain profitability and sustain growth. We are selecting the markets where we can invest in technology to have it all—profitability, growth, and well-being. It's one and the same package.

When we look back in 2025, I believe it will be clear that stakeholders have advanced to a better position.

For our employees, the Company will become even more attractive. We will create the right environment where people have a sense of purpose, a feeling that they are contributing to something they can believe in.

Our customers will have the best products available around the globe: Japanese quality, Japanese service, complemented by a renewed touch and focus on innovation in our key markets.

Government agencies will see that they can continue to rely on us to be a faithful partner. Around the world we will demonstrate compliance with the law, cooperation with regulatory bodies, and contribution to social and environmental goals that governments have set for themselves.

And for our shareholders our commitment is firm—that we will significantly increase the value of the Company by repositioning it in more attractive sectors with higher multiples created by a combination of growth and performance. In other words, growth and performance combined with the right market segments is a formula for delivering real shareholder value.

We have just begun our journey for “Forging the future.” As we move forward in this endeavor, I look forward to your support and advice in this new journey.

Jean-Marc Gilson
President & CEO

Value Creation Model

How we create value at MCG

The Mitsubishi Chemical Group creates value by providing timely materials and solutions valued by our customers that make a positive difference in society.

We do this through extensive knowledge of what our customers value and are willing to reward.

In everything we do, we continuously aim to increase our positive social impact, reduce adverse environmental effects, and maximize shareholder value creation.

In 2021, we began our journey of “Forging the future” to accelerate the power of our business model, improve return on invested capital and focus our portfolio on value-adding businesses aligned with global customer and sustainability trends.

Management foundation and source of competitiveness

-  **Financial capital**
Robust financial position

-  **Manufactured capital**
Global network to achieve diverse solutions

-  **Intellectual capital**
Knowledge and technology driving business model reform

-  **Human capital**
Diverse human resources to support value creation

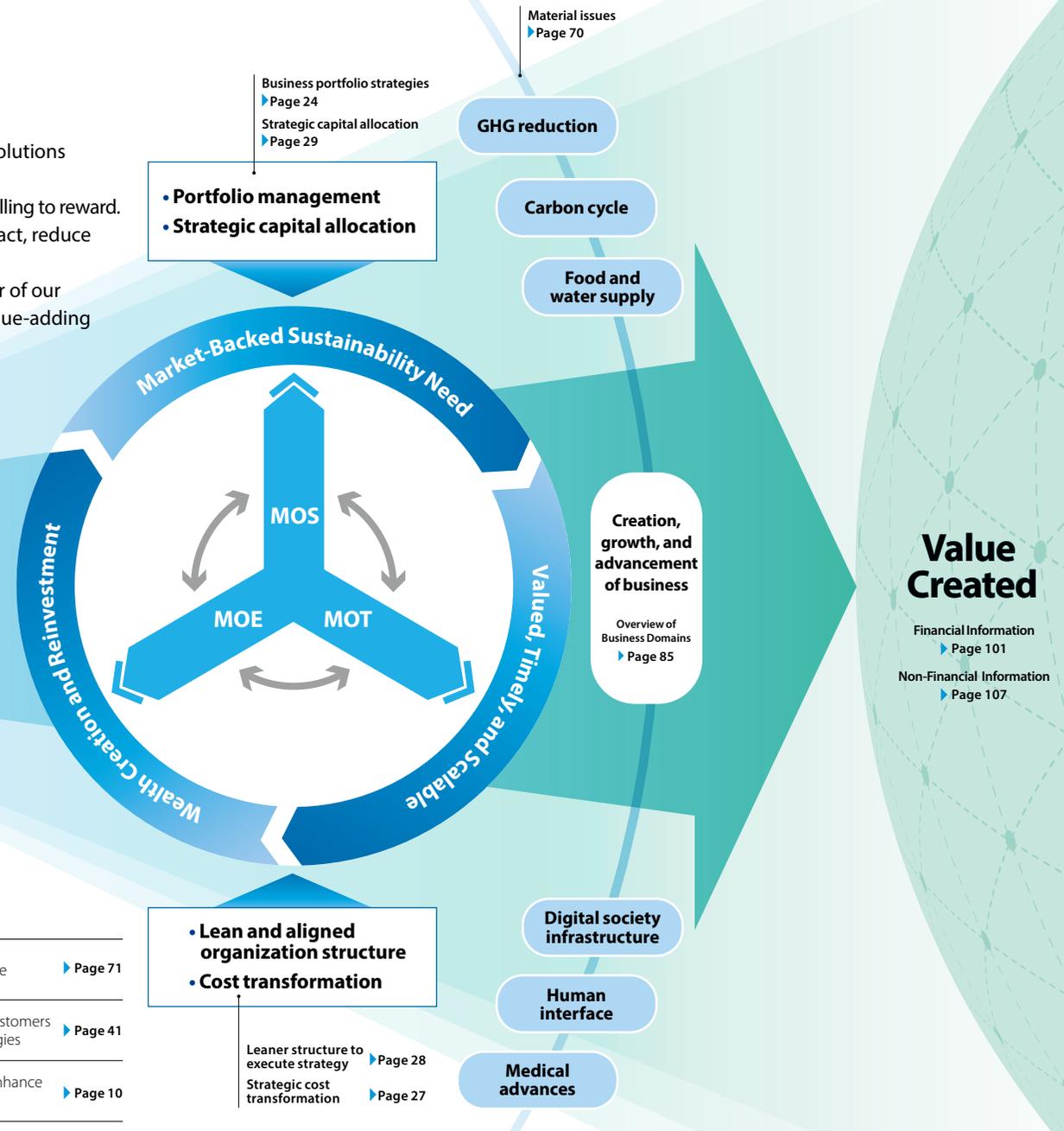
-  **Social and relationship capital**
Engagement with stakeholders

-  **Natural capital**
Sustainability management to reduce environmental impact

History of Technologies That Give Us Our Competitive Edge ▶ Page 5
 Management resources to support value creation ▶ Page 21

The three axes of KAITEKI Management

	MOS Management of Sustainability	Contributing to the creation of a better sustainability of future	▶ Page 71
	MOT Management of Technology	Creating innovations that are valued and rewarded by our customers through the development of timely differentiation technologies	▶ Page 41
	MOE Management of Economics	Utilizing all our capital and human resources efficiently to enhance economic value added and total shareholder return	▶ Page 10



Value Created

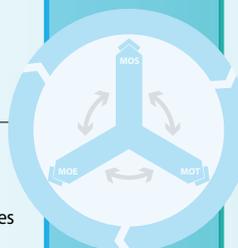
Financial Information ▶ Page 101
 Non-Financial Information ▶ Page 107

Value Creation Model

Strengthen the Driving Force behind Value Creation

Figures on this page are as of March 31, 2022.

Management resources to support value creation (INPUT)	Approach
 Financial capital Robust financial position Total assets ¥5,573.9 billion	A robust financial position provides the foundation for sustainable growth. We work to increase corporate value by balancing shareholder distributions, improving our financial position and investing in growth businesses.
 Manufactured capital Global network to achieve diverse solutions Capital expenditures ¥254.6 billion Group sites (number of countries & regions) 45	Our global network allows us to rapidly provide solutions to regional needs or social issues. We are stepping up the use of digital technologies in our product development and optimizing our plants in order to strengthen our value creation platform.
 Intellectual capital Knowledge and technology driving business model reform R&D expenditures ¥156.6 billion	Our core technologies and the knowledge we have built up across a wide range of business domains are intangible assets that underpin business model reformation. We leverage our capabilities across the entire Group to respond to changing social needs in a fast and flexible way, and are creating new businesses to help optimize entire social systems.
 Human capital Diverse human resources to support value creation Number of employees (consolidated) 69,784	Human resources are the key management resource for value creation. HR programs allow us to foster creativity and productivity, boost job satisfaction, and create workplaces where employees with diverse values and high-level expertise can flourish, united in our mission. We are also stepping up the development of human resources with digital skills to accelerate innovation through our digital technology platforms.
 Social and relationship capital Engagement with stakeholders Dialogue with stakeholders ▶ Pages 71, 100 More CVC programs ▶ Page 43 Participation in initiatives ▶ Page 75	We are building strong relationships of trust by engaging in active and constructive dialogue with stakeholders and by understanding and responding to expectations and demands. We are also working to build sustainable supply chains, help communities create a better society, and increase brand value.
 Natural capital Sustainability management to reduce environmental impact Energy consumption 48.4TWh Non-Financial Highlights ▶ Page 97	Rigorous sustainability management is essential to solve climate change and water shortages/pollution, achieve a recycling-oriented society, and preserve biodiversity. We aim to lower our environmental impact by reducing and making more effective use of GHGs and by promoting a circular economy.



Metrics to manage progress

- MOS ▶ Page 71
- MOT ▶ Page 41
- MOE ▶ Page 10

Value created (OUTCOME)
Improvement in economic value Financial Highlights ▶ Page 95 Sales revenue ¥3,976.9 billion Core operating income ¥272.3 billion
Business expansion Ratio of overseas revenue 47% Acceleration of overseas businesses Innovation output indices 78% ▶ Page 41 Advancement of innovation
Improvement in creativity and productivity Employee engagement 68% ▶ Page 72 Wellness awareness 75% ▶ Page 72 Level of customer satisfaction 77 points ▶ Page 71
Contributing to the reduction of environmental impact Percentage of sales revenue from products that contribute to the circular economy or mitigate and adapt to climate change 12% ▶ Page 71 Promote a circular economy Respond to climate change

Achieve sustainable well-being and maximize value for all stakeholders

3

New Management Policy: "Forging the future"

23	New Management Policy: "Forging the future"	Innovation
30	Message from the CFO	39 Message from the CTO
	Message from Business Group Management	40 Our Research & Development
33	Polymers & Compounds/MMA	43 Corporate Venture Activity
34	Advanced Solutions	44 Message from the CDO
35	Petrochemical/Coal	45 Progress with DX
36	Pharma	48 Message from Our New Chief Strategy Officer
37	Industrial Gases	
38	Message from the Chief Supply Chain Officer	

New Management Policy: "Forging the future"

In February 2021, Mitsubishi Chemical Group Corporation released the medium-term management plan *APTSIS 25 Step 1*, which runs for a two-year period from fiscal 2021. Then in December 2021, the Company formulated the new management policy, "Forging the future," covering the period up to the end of fiscal 2025. The policy takes into consideration the assumptions made at the time the medium-term management plan was formulated, after a review of the measures needed, to maximize corporate value.

The new management policy aims for MCG to become a specialty chemical company by fiscal 2025. It includes five management strategies (strategic priorities) to achieve this goal and a three-phase roadmap to maximize shareholder value.

Under Phase 1, Simplify & Streamline, MCG aims to develop a lean organization structure, revamp the business portfolio, and reduce costs. In Phase 2, Build a Foundation for Growth, the Company will take steps to carve out and exit from Petrochemicals and Coal Chemicals businesses and also accelerate investment in growth businesses. In Phase 3, Accelerate Growth, the Company aims to accelerate growth through dynamic capital allocation, leveraging our reorganized business platform.

We aim to sustainably increase value for all our stakeholders, with a clearer strategy to increase efficiency and unlock the growth potential of our businesses.

Strategic priorities

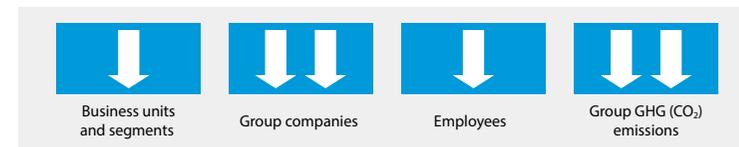
More Focused Approach to Maximize Our Value

1. Growth, Performance, and Sustainability
2. Business to Exit
3. Strategic Cost Transformation
4. Leaner Structure to Execute Strategy
5. Strategic Capital Allocation

MCG today and tomorrow

With a Clearer Strategy to Drive Operational Excellence and Unlock Business Potential, We Can Deliver More Value to Our Stakeholders

Our Future Operations

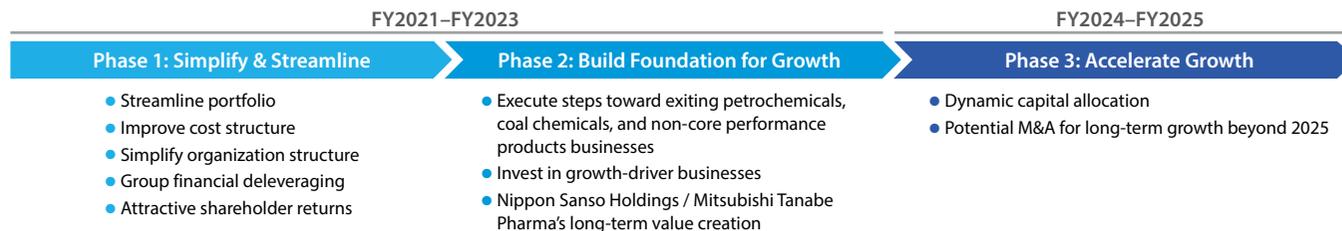


Financial Performance Targets for FY2025

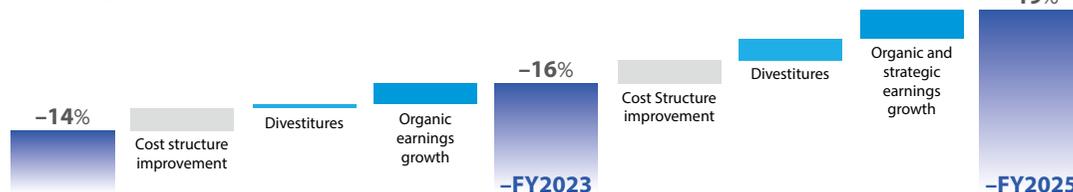
18–20%	11–13%	¥125–145	>7%	0.5–1.0X
EBITDA margin	Core operating margin	Organic EPS	ROIC	Net Debt / Equity

Strategy execution roadmap

Committed Strategy for Increased Shareholder Value



EBITDA Margin Improvement



New Management Policy: "Forging the future"



1. Growth, Performance, and Sustainability

Focus on growth markets where MCG has a competitive advantage

MCG has applied the evaluation criteria of market growth potential, a competitive advantage, and carbon neutrality to rework our portfolio as a specialty chemical company.

Electronics and Healthcare & Life Science will be positioned as our strategic focus as we move forward. MCG aims to further increase corporate value by concentrating business resources in these priority markets.

Our portfolio assessment criteria

Market Attractiveness

- Market growth
- Potential risk factors
- ROS / ROIC / EBITDA margin

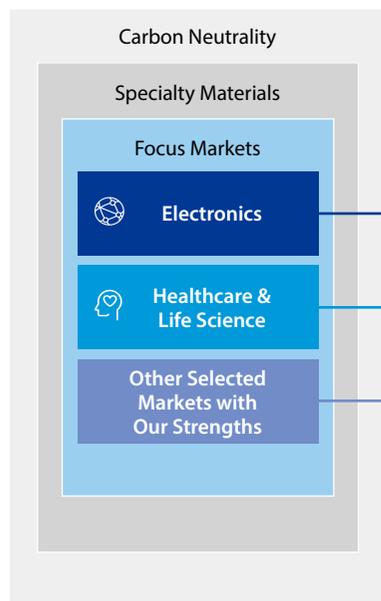
Strength

- No. 1 / 2 market position potential
- Technology innovation
- Competitive advantage

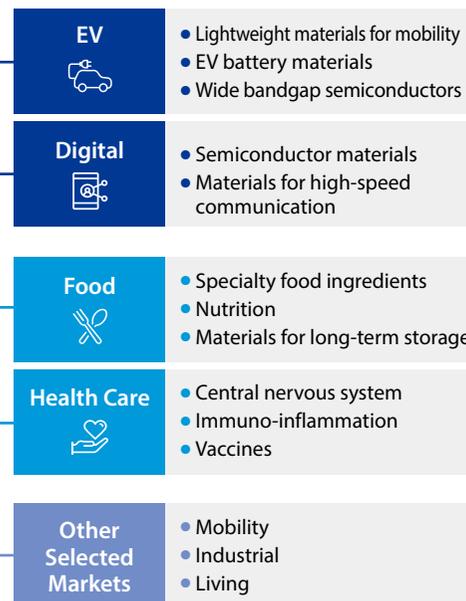
Carbon Neutrality

- CO₂ emissions level
- CO₂ reduction potential
- Values to customers/society

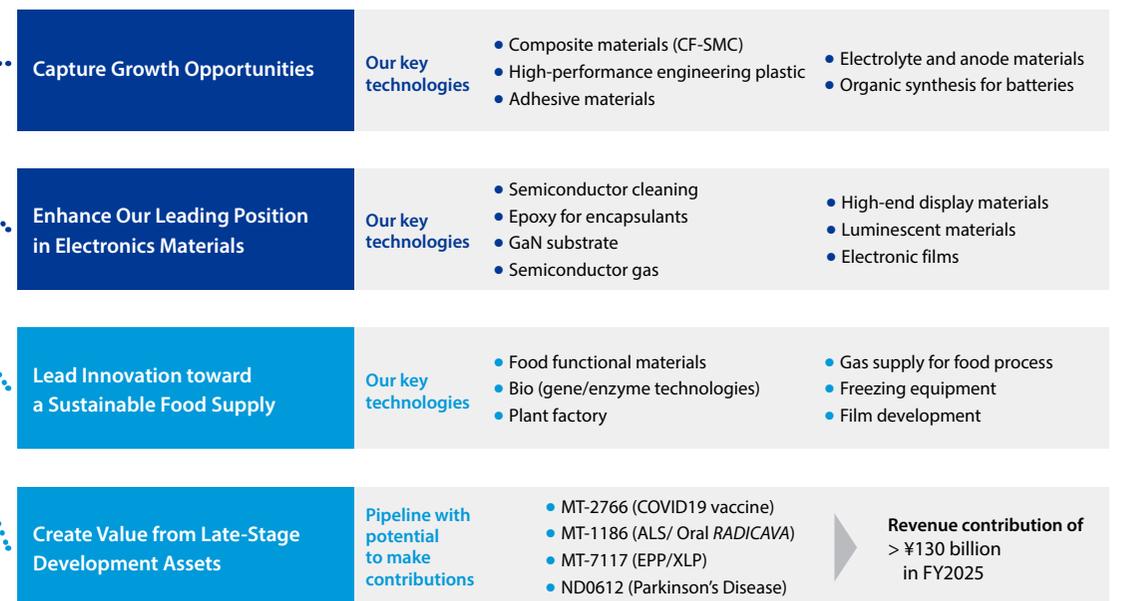
Our strategic focus



Target segments



Targets



New Management Policy: "Forging the future"

Investment in solid performance materials businesses, based on the revamped portfolio

MCG will invest in sustained growth in the chemicals, polymers, films, and molding materials businesses, where we have multiple core technology platforms in key strategic priority markets. We will work to enhance our competitive edge and expand our platform as a specialty chemical company.

Core technology strengths

Chemicals	
MMA	<ul style="list-style-type: none"> No. 1 supplier of MMA monomer with approximately 30% global market share Proprietary new ethylene method leading to cost competitiveness
Functional Monomer	<ul style="list-style-type: none"> Molecular design technology fully tailored to customer needs
Films	
Optical Film	<ul style="list-style-type: none"> Top manufacturer of optical polyester film with approximately 20% global market share
Barrier Film	<ul style="list-style-type: none"> Key supplier of barrier films primarily for food packaging and medical products
Industrial Film	<ul style="list-style-type: none"> Value-adding offerings for a wide variety of industrial applications Low environmental-load technologies

Polymers	
Bioplastics	<ul style="list-style-type: none"> Cutting-edge bioplastics for sustainable food packaging and glass alternatives
EVOH*	<ul style="list-style-type: none"> Proprietary high performance polymer for food packaging
Functional Resin	<ul style="list-style-type: none"> Comprehensive and environment-friendly resin offerings
Molding Materials	
Carbon Fiber Composite Materials	<ul style="list-style-type: none"> World-leading integrated product chain of carbon fiber
Super Engineering Plastic Components	<ul style="list-style-type: none"> Chemical partner for global OEMs, industrial machinery, and aircraft manufacturers

* Ethylene vinyl alcohol copolymer

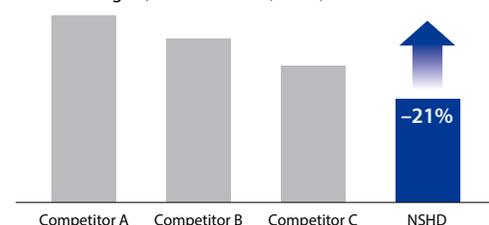
Take strategic initiatives to capture growth, reduce costs, and improve profitability in industrial gases

Nippon Sanso Holdings (NSHD) is the fourth largest industrial gas company in the world. NSHD is pursuing strategic initiatives to increase profitability with a view to moving into the global top three, through new opportunities for growth investment and cost-cutting programs.

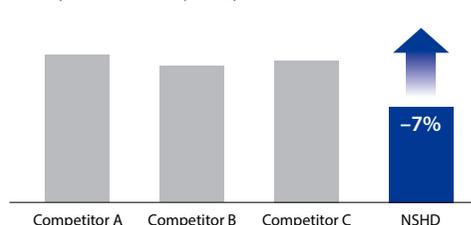
Comparison of profitability among global gas majors

Source: Capital IQ, IR materials

EBITDA margin (As of March 31, 2022)



ROIC (As of March 31, 2022)



Strategic initiatives

Cost Reduction

- Apply cost reduction measures taken in Europe and the United States into other regions
- Improve profitability in Japan

Financial Discipline

- Improve financial stability
- Balance growth investment, deleveraging, and shareholder returns

Capture Global Market Growth

- Especially in the United States and Europe

New Business Development / Realize Synergies with the Group

- Semiconductor materials
- Hydrogen
- Medical gases

Carbon Neutrality

- Formulate a roadmap to 2030 and 2050 carbon neutrality

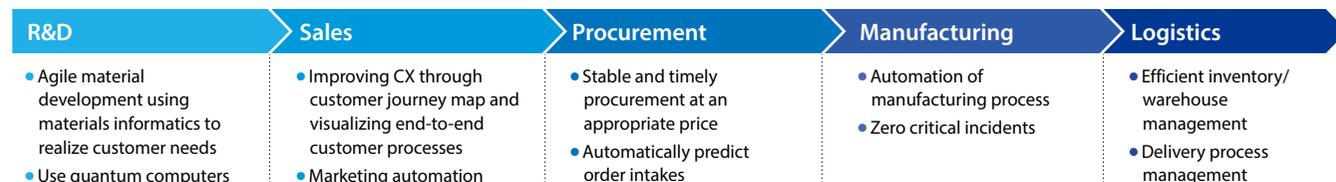
New Management Policy: "Forging the future"

Success in digitalization and sustainability will separate winners from losers in the chemicals sector

Enhanced digital strategy enabling CX and business process transformations

We think that installing and applying digital technologies means more than just improving business efficiency. MCG has positioned digitalization as a strategic priority in our business model reforms to enable customer experience (CX) and business process transformations.

Key DX themes of supply chain



Key DX themes

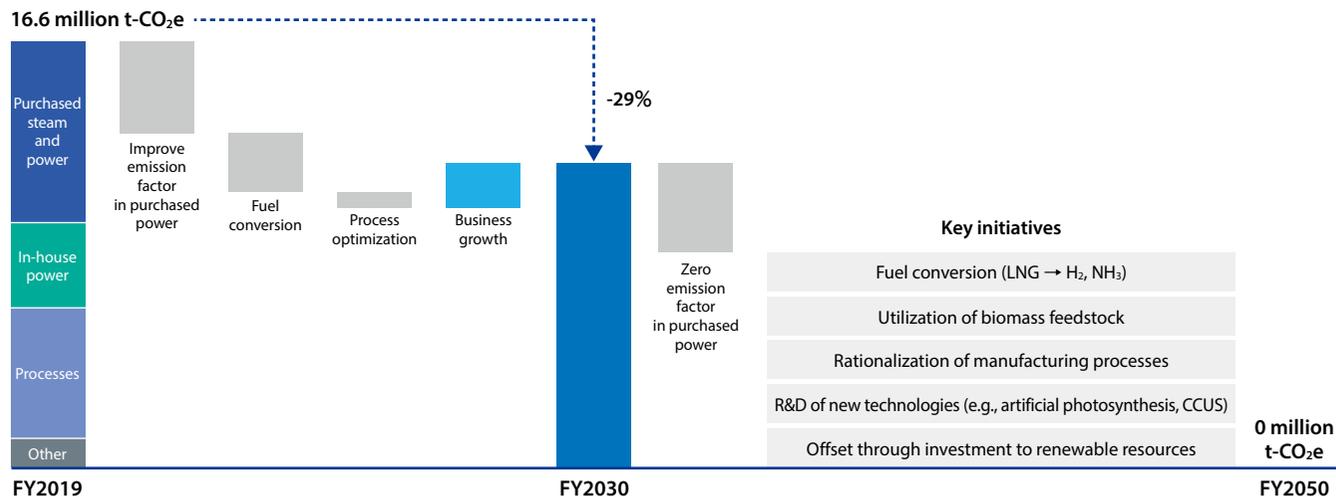


Path toward carbon neutrality while achieving sustainable growth

In our medium- to long-term basic management strategy, KAITEKI Vision 30, unveiled in February 2020, MCG defined achieving GHG impact neutrality as one of its social visions in 2050. To achieve this, MCG is implementing measures across the value chain to reduce GHGs and ensure effective use, as well as formulating global emissions reduction targets and policies appropriate for each country and region. By 2030, we aim to reduce GHG emissions by 29% versus fiscal 2019 levels, and by 2050 we plan to reach carbon neutrality while achieving sustainable growth.

Carbon neutrality by 2050

Our GHG emissions (Scope 1 + Scope 2)



New Management Policy: "Forging the future"



2. Business to Exit

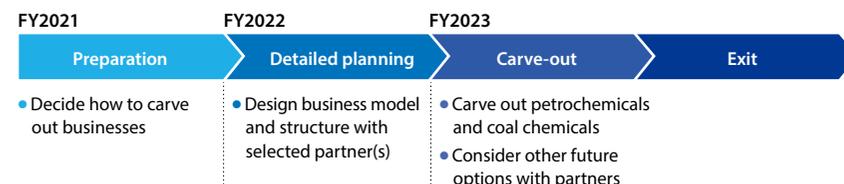
Exit from petrochemicals and coal chemicals

MCG will pursue a phased carving out, restructuring, and future exit from petrochemicals and coal chemicals. By carving out these businesses, MCG will act as a leader in the chemicals industry, driving restructuring of the basic chemicals industry in Japan.

We will...

- Lead consolidation of the domestic basic chemical industry for transition toward carbon neutrality by 2050
- Restructure through carve-out and future exit

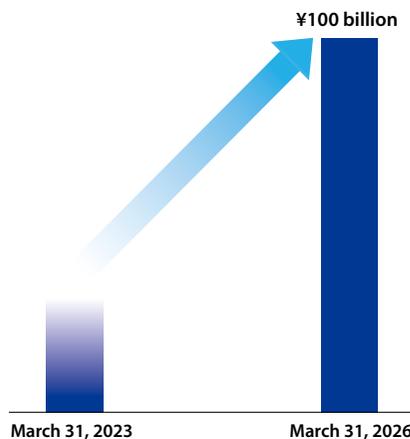
Indicative timeframe for carve-out and exit



3. Strategic Cost Transformation

Pursuing operational excellence and business efficiency

MCG will reduce costs by more than ¥100 billion across the Group by fiscal 2025 and steadily grow profits by pursuing operational excellence through more efficient and effective business activities and an increased competitive advantage. We are working to reduce costs at all levels of the supply chain by developing a simpler, optimized organization. For R&D, we will pursue greater efficiencies while monitoring investment returns.



Major item	Margin impact	Value levers
Logistics / Supply chain management	++	<ul style="list-style-type: none"> • Pursuit of efficiency through digitalization across entire process from manufacturing to sales
Procurement and engineering repairs	++	<ul style="list-style-type: none"> • Optimization of investment through digital preventative maintenance • Procurement process reformation and digitalization
General and administrative	+	<ul style="list-style-type: none"> • Business reorganization <ul style="list-style-type: none"> – Integration of subsidiaries and offices – Introduction of new personnel system • Process excellence and digitalization
R&D	++	<ul style="list-style-type: none"> • Clear prioritization • Value impact <ul style="list-style-type: none"> – More selective R&D at Mitsubishi Tanabe Pharma • Open innovation and Materials Informatics
Price Structure Improvement	++	<ul style="list-style-type: none"> • Price structure improvement for low-profit businesses

Significantly increasing our bottom line through >¥100 billion of cost reductions and improvements

New Management Policy: "Forging the future"



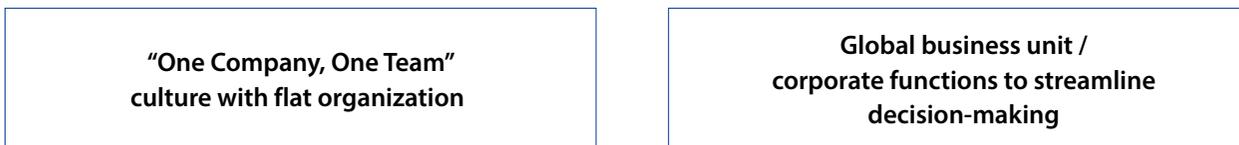
4. Leaner Structure to Execute Strategy

Enabling fast, efficient decision-making

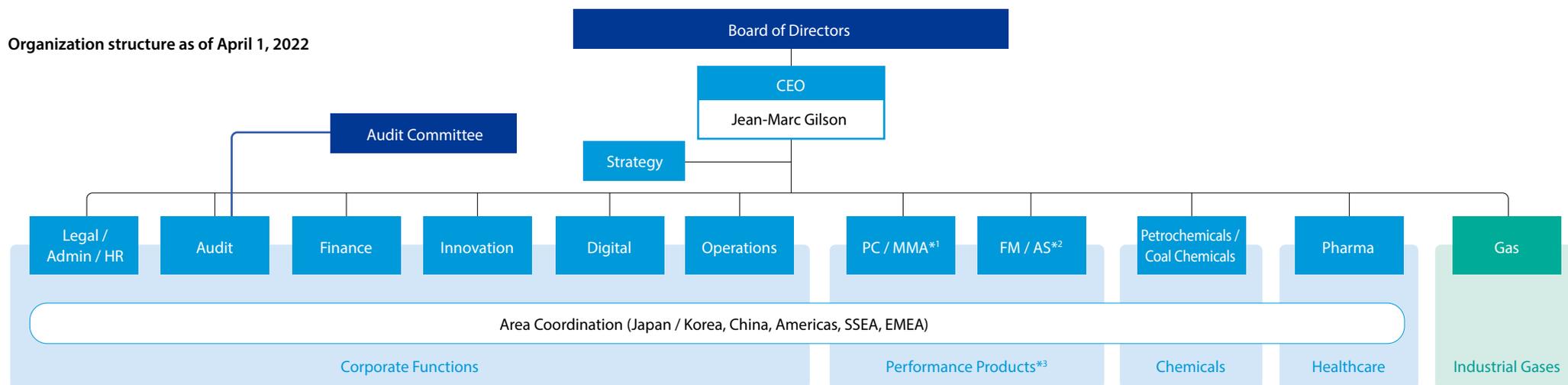
MCG will reform management structures to create a flat organization with a "One Company, One Team" culture as a key step in the execution of business strategy.

In addition, the Company will shift from a legal entity-based to a business unit- and corporate function-based operation to clarify where responsibility lies.

Key characteristics of new structure



Organization structure as of April 1, 2022



*1 Polymers & Compounds / MMA

*2 Films & Molding Materials / Advanced Solutions

*3 Performance Products might be divided into three businesses.

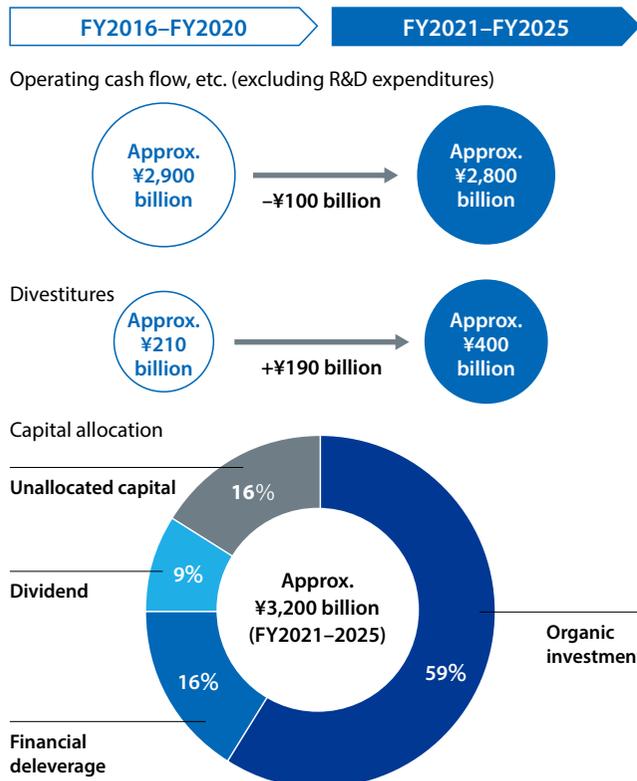
New Management Policy: "Forging the future"

5. Strategic Capital Allocation

Strategically reallocate additional capital from improved operational discipline and non-core asset/business disposals

MCG expects to generate operating cash flow of ¥3.2 trillion, including ¥400 billion in gain on transfer of businesses and excluding R&D expenditures, between fiscal 2021 and fiscal 2025.

With strict financial discipline, the Company will make strategic capital allocations that lead to improved shareholder returns.



Organic investment (Approx. ¥1,900 billion)	<ul style="list-style-type: none"> Invest for more sustainable growth for the future Keep capex < Depreciation and Amortization Strong discipline with target ROIC and IRR R&D with clear prioritization 	<ul style="list-style-type: none"> Maintenance capex ¥580 billion Growth capex ¥750 billion R&D ¥570 billion
Financial deleverage (Approx. ¥500 billion)	<ul style="list-style-type: none"> Accelerate deleveraging by increased cash flows through cost discipline, earnings growth, and proceeds from divestitures Target leverage range Net debt / EBITDA: 2.0-3.0x Net D/E ratio: 0.5-1.0 	
Dividend (Approx. ¥300 billion)	<ul style="list-style-type: none"> Dividend Policy Reviewing current dividend policy (stable, 30% payout ratio) with a view to increasing shareholder returns 	
Improved earnings, cash generation, and balance sheet will create additional scope for:		
Unallocated capital (Approx. ¥500 billion)	<ul style="list-style-type: none"> M&A to accelerate growth <ul style="list-style-type: none"> Clearly defined investment target areas Best-owner mindset, ROIC over WACC, and EPS accretive Excess capital to be returned to shareholders (Buyback, etc.) 	

Message from the CFO

A portrait of Yuko Nakahira, the CFO, with dark hair, wearing a white blazer over a black top and a pink necklace. She is looking directly at the camera against a light green background.

By reliably achieving our financial targets, we can boost our corporate value and flourish in pursuit of excellence.

Yuko Nakahira

Executive Vice President
Chief Financial Officer

Ambitions for my new role

I was appointed CFO in April 2022. Having taken up this position, I identify strongly with the vision of the Mitsubishi Chemical Group, a leading chemicals manufacturer in Japan, to increase corporate value in pursuit of excellence under Jean-Marc Gilson.

I majored in chemistry at university and began my career in R&D before moving into management consultancy and then taking on management roles at the global chemicals manufacturer 3M Group, in both Japan and Singapore. In 2019, I was appointed vice president of 3M Company in charge of their Asian consumer goods business. As a business leader, I have focused on steadily increasing earnings and improving shareholder value. To achieve this, I have had to make tough decisions in business management, such as selling or withdrawing from businesses with high market shares but where profitability was unlikely to improve.

The MCG Group has excellent technological capabilities. We need to steadily execute the five management strategies outlined in the new management policy "Forging the future" (▶ Page 23) in order to make the most of these technological capabilities and evolve into a Group capable of sustained growth.

As the new CFO, my mission is to leverage my experience to date and ensure that we reliably achieve our financial targets in order to increase corporate value.

Message from the CFO

Fiscal 2021 earnings and pinpointing challenges to address

The biggest challenge facing the MCG Group is our low profitability. In fiscal 2021, EPS and ROE both improved significantly due to a recovery in domestic and overseas demand and higher sales volumes after the impact of the COVID-19 pandemic in previous fiscal years, and transfer of the alumina fiber business as we restructured our business portfolio. However, operating income and operating margin are not yet at satisfactory levels.

We still have a long way to go to reach our ROIC target, and it seems that our capital costs are too high for the returns we generate. We have built up high levels of debt from previous M&A. While net interest-bearing debt is steadily decreasing, our net D/E ratio in fiscal 2021 was 1.40, which is still above our target of one.

Strategic capital allocation to meet our fiscal 2025 financial targets

To overcome these challenges, our new management policy sets out a three-phase road map through fiscal 2025. We have already begun to tackle the urgent challenge of simplifying and streamlining our business in Phase 1, and we are working on our exit from the Petrochemicals and Coal Chemicals businesses in Phase 2 while looking for the right strategic investments in Phase 3.

Reducing costs by more than ¥100 billion across the Group

Of all the cost restructuring underway, the logistics and supply chain reforms will probably have the greatest impact. We are integrating into Group-wide functions the logistics and supply chain processes that were previously carried out separately at

individual operating companies, and we are also using digital transformation (DX) to boost efficiency (▶ Page 38 "Message from the Chief Supply Chain Officer"). We are also moving to a "One Company" setup and eliminating duplicate operations by consolidating functions, such as finance and human resources, that were previously in place at each operating company and the holding company. These organizational changes will be rolled out globally, not just in Japan, so we expect further cost reductions at overseas affiliates as well from fiscal 2023.

Carving out businesses in petrochemicals, coal chemicals, and non-core performance products

To carve out the Petrochemicals business, we are currently investigating a range of possibilities. Japan needs to maintain its petrochemical industry for the sake of economic stability, but this is not something for which a single company can take sole responsibility, in terms of ensuring reliable operations and making the required environmental investment. To fulfill our responsibilities to our customers and maintain stable employment for workers, we are working to supply quality products, generate cash through economies of scale, and select the right partners to achieve our carbon-neutral pledge.

In the Performance Products business, we will accelerate our portfolio restructuring and carve out non-core businesses as part of our drive to raise profit margins.

Increasing ROIC at the business unit level

To boost ROIC, we need higher operating income for the numerator and lower working capital for the denominator. We are seeking to manage each business unit more rigorously than before, including rapid collection of accounts receivable and reduced inventories. Inventory management has been worked



on before, but I have concerns about the impact that recent forex trends and surging materials costs are having on our inventory assessments. We need to ensure much tighter control of inventory volumes. Capital expenditures are needed for investment in growth and repairs and maintenance, but we will be rigorous in our selection processes for overall capital expenditures, carefully selecting investment for ROIC or other indicators, within a spending range that does not hamper growth. We monitor relevant indicators each month and aim to achieve our minimum commitment of 7% ROIC by fiscal 2025 without fall.

We are sharing these strategies with the top management in each business unit, so that they can be reflected in the budgets which are set, and we are running town-hall meetings and various other interactive sessions for our employees. We will pursue reforms from within by helping every individual in the Group understand how their actions translate into figures and to adjust behavior accordingly.

Message from the CFO

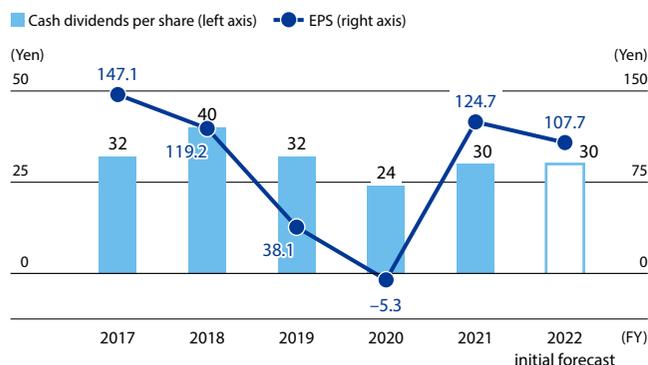
Sustained earnings growth and expanded dividends over the medium and long term

We paid dividends of ¥30 per share over the full year in fiscal 2021, ¥6 more than in fiscal 2020. In fiscal 2022, we plan to keep dividends at the same level as in fiscal 2021, at ¥30 per share over the full year.

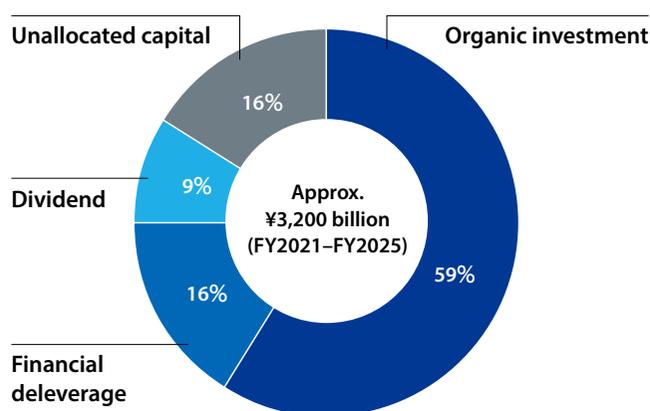
Looking ahead, we will monitor our financial position while considering how to expand our current dividend policy (a medium- to long-term dividend payout ratio of 30%) in order to provide our shareholders with the best returns. Furthermore, we will achieve key indicators through the reliable execution of business fundamentals, by generating business earnings and steadily improving our financial position to enable growth, and thereby increase TSR.

Between fiscal 2021 and fiscal 2025, the MCG Group expects to generate operating cash flow of approximately ¥3,200 billion, including around ¥400 billion from business disposals but excluding R&D expenditures. With stricter financial discipline, we will make strategic capital allocations and steadily reduce debt, which will lead to improved shareholder returns.

Shareholder returns



Capital allocation



Aiming to work together as a Group in pursuit of excellence

We have defined three portfolio assessment criteria in the new management policy, "Forging the future"—Is the market attractive? Do we have the strengths to be successful? Can this business thrive in a carbon-neutral economy? As we work to become carbon neutral by 2050, we will invest in growth while prioritizing ESG aspects such as initiatives for our human capital and environmental issues.

The MCG Group enjoys a wide-ranging technological base and takes a diverse approach to business because of our track record in aggressively pursuing M&A. By integrating these business resources in line with the "One Company, One Team" concept, we will use our fiscal 2025 financial targets as a checkpoint as we work together as a Group in pursuit of excellence.

Financial targets for fiscal 2025

Group targets	(FY)	2020 results	2021 results	2022 initial forecasts	2025 targets
Sales revenue		¥3,257.5 billion	¥3,976.9 billion	¥4,436 billion	¥3,000 billion
Core operating income		¥174.7 billion	¥272.3 billion	¥275 billion	¥350–370 billion
EBITDA		¥405.6 billion	¥502.4 billion	¥518 billion	¥540–560 billion
EBITDA margin		12.5%	12.6%	11.7%	18–20%
EPS		¥-5.3	¥124.7	¥107.7	¥125–145
Financial leverage (net debt / EBITDA)		5.3	4.1	3.9	2.0–3.0
ROE		-0.6%	13.2%	10.4%	≥10%
ROIC		3.3%	4.9%	4.9%	>7%

Mainstay segment targets

	Performance Products	MMA	Health care	Industrial Gases*
EBITDA	Approx. ¥180 billion	Approx. ¥70 billion	Approx. ¥70 billion	Approx. ¥220 billion
EBITDA margin	Approx. 15%	Approx. 26%	Approx. 15%	Approx. 25%

* Request based

Message from Business Group Management

Polymers & Compounds / MMA

Making our MMA offerings even more competitive and expanding the scale of our P&C business to contribute to the Group's growth

Hitoshi Sasaki

Executive Vice President
Head of Polymers & Compounds / MMA



Leveraging our rapid decision-making to manifest a competitive edge in the market

Since the Mitsubishi Chemical Group announced the new management policy, "Forging the future," in December 2021, our new management team, myself included, has held numerous discussions on our vision for the Group's organization, functions, and roles. As the business environment in which we operate undergoes dramatic change, we have shifted to a leaner management system and a "One Company, One Team" culture with a flat organizational structure in order to better respond to the expectations of all our stakeholders around the world. I believe that this has not only accelerated decision-making but also helped us to make steady progress toward global standards in terms of improved process objectivity and transparency.

From a business perspective, the current surge in energy prices is driving a similar rise in global resource prices. Given that our business environment features such risks that directly impact the entire supply chain, I think our absolute priority is to ensure that our competitive edge of the P&C/MMA business is demonstrated, so that we can contribute to sustained growth.

Constant optimization of manufacturing processes

Our MMA business is unique worldwide in its capability in all three main MMA manufacturing methods, and we have a 30% or higher share of the world's production capacity. This makes us a core business for the MCG Group. We must constantly optimize our manufacturing processes to maintain this competitive edge and ensure earnings stability. Over the near term, we will improve the efficiency of our production systems at all 11 manufacturing sites worldwide in response to the procurement environment for key raw materials. We are considering the construction of a new MMA monomer plant in the United States that uses the cost-competitive ethylene method (Alpha technology), as we believe this will cement our position as a leading company in this field. Over the medium to long term, we will maintain our competitive edge by switching to a more energy-efficient process mix, while developing new catalysts to improve profitability and grow our business.

As we work toward becoming carbon neutral, we will proceed with verification testing on our PMMA chemical recycling plant. We have finished verification testing on pilot

facilities and are now preparing to construct the plant itself, with operations scheduled to start during fiscal 2024.

Scaling up our business offering of distinctive products

The P&C business handles a range of distinctive products that contribute to the building of a circular economy, such as lighter-weight and higher-performance materials, materials that render coating processes unnecessary, biodegradable materials, and materials that dramatically extend the shelf life of food products. We aim to effectively expand our business scale through globally centralized management of the wide-ranging technology platforms and technology applications that our Group has built up, and business development of these applications in growth markets and fields. As part of moves to implement this growth model, we made the decision in July 2022 to increase production capacity for the ethylene vinyl alcohol copolymer resin *SoarnoL* at our U.K. plant, targeting operations from July 2025. Global demand is rising for *SoarnoL* as a food packaging material, as it exhibits excellent gas-barrier properties. When used in food packaging, *SoarnoL* helps preserve food flavor and quality and reduces food waste. We expect solid growth for *SoarnoL* in the future.

The MCG Group will continue to develop solutions that contribute to market and customer sustainability and products with irreplaceable properties. We will scale up our business in growth markets around the world by utilizing our global production and marketing systems.

Message from Business Group Management

Advanced Solutions

Delivering new value and building a strong position to drive the Group

Johei Takimoto

Executive Vice President
Head of Advanced Solutions



Delivering new value, accelerating growth

Advanced Solutions aims to deliver new value in the fields positioned as strategic focus markets in the Mitsubishi Chemical Group's new management policy, "Forging the future." Our goal is to create performance product lineups that satisfy the needs of all stakeholders and grow the business.

To achieve this, we are transforming into a market-oriented organization capable of rapidly developing a deep understanding of changes in cutting-edge markets and the diverse value demanded by customers. We will also upgrade our technology platforms further to deliver innovation, a key strength of the MCG Group, and will be disciplined in our portfolio management to build a strong, unique position in the market.

Globally leveraging our technological capabilities and market understanding

We are developing products and services in a number of different growth markets, including mobility, life science, and electronics.

In the mobility field, we are developing materials for internal and external fittings to support the ongoing social evolution of Connected, Autonomous, Shared, and Electronic (CASE) and higher-performance products such as EV battery materials.

In the life science field, we are working globally on products and system businesses to support more advanced medical care and more sustainable eating habits.

In the electronics field, we are delivering products and services to meet the varied needs of customers who are looking to upgrade information processing technologies, including display parts and materials and precision cleaning services for semiconductor makers. The semiconductor industry is expected to expand further, so we are working to create synergies with the semiconductor businesses and technologies owned by Gelest,

Inc., a U.S. manufacturer of organic and inorganic hybrid chemicals that we acquired in October 2020. By combining Gelest's technologies with our business resources and customer networks, we expect to contribute more than ever to future social challenges and market needs as healthcare evolves and advances are made in the infrastructure of the digital society.

We aim to develop highly profitable business structures by leveraging the technological capabilities and market understanding we have built up in various businesses thus far, and by actively pursuing R&D and business development and allocating business resources for use in flexible strategic partnerships in growth markets.

Leading the way in strategy execution for sustained growth

To continue to grow our Group's performance products over the medium to long term, we will take a leading role in strategy execution and management that brings together the strengths from across our entire organization, under the "One Company, One Team" culture with a flat organization. We will also maximize the individual skills that our employees bring to the table and develop a strong culture where we all work together toward a common goal.

Note: From July 2022, Films & Molding Materials have been included as part of Advanced Solutions

Message from Business Group Management

Petrochemicals / Coal Chemicals

Accepting the significant decision made in the new management policy and shaping the future of this business

Yoshihiro Ikegawa

Executive Vice President
Head of Petrochemicals & Coal Chemicals business



In the Petrochemicals business, we will focus increasingly on markets that utilize general-purpose petrochemical product functions and accelerate our strategy to boost profitability. While we anticipate some short-lived pain, including drawing the line at unprofitable areas, those businesses that survive this difficult selection process will be targeted for aggressive business expansion. We will also focus our efforts on the development of unique products by synergizing with bio-based technologies. We plan to launch on the domestic market first and tackle the development of overseas projects over the longer term, using green hydrogen as a raw material for chemical products.

Global development of SAKAIDE COKE

In the Coal Chemicals business, we have products such as carbon black and needle coke that are produced from the tar that forms during the manufacturing process for coal, a key material used in the steel industry. The coke supplied under the SAKAIDE COKE brand is known for its highly uniform and stable quality and enjoys a correspondingly strong reputation with steel manufacturers, not just in Japan but also worldwide. To generate solid earnings from these strengths, we are restructuring to

optimize our sales portfolio and production systems to meet the changing structures of the domestic steel industry. In fiscal 2021, we changed our business model to export-oriented operations. Based on our assumption that companies will restrict new investment in CO₂-generating businesses and withdraw from their coke businesses where they also utilize the material themselves, we expect demand for the MCG Group's coke to rise further in the future. We also expect increasing demand for needle coke that is used as electrode material for electric furnaces, in light of plans to construct many more such furnaces in the drive to achieve carbon neutrality.

We will make the most of the strengths of our product offerings and also develop a full understanding of what society needs and what our Petrochemicals and Coal Chemicals businesses can offer, so that we can better shape our businesses for the future.

Strategic rationale

Challenges

- Domestic market has limited growth potential
- National energy policy is transitioning toward carbon neutrality and the basic chemical industry must embrace decarbonization
- High probability of increasing energy costs in Japan driven by CO₂ reduction efforts
- Cyclical businesses

Required solutions

- Consolidated domestic basic chemical value chain brings sustainability benefits to society
 - ▶ Integrate resources to develop sustainable businesses and technologies (i.e., CO₂ recycling, chemical recycling, and bio-chemicals)
 - ▶ Basic chemical products are indispensable from a national economic security perspective
 - ▶ Increase efficiency

Executing the carve-out in fiscal 2023

The new management policy, "Forging the future," announced by the Mitsubishi Chemical Group in December 2021, put forward a plan to carve out the Petrochemicals and Coal Chemicals businesses in fiscal 2023.

As the world begins the huge undertaking of becoming carbon neutral by 2050, the MCG Group has already worked hard across its global business operations to respond to climate change and reduce GHG emissions. I accept this monumental decision that forms part of our goal to achieve a further increase in corporate value and sustained growth. As a major player in the chemical industry, we will lead the consolidation of the basic chemical industry in Japan, and will resolutely implement this decision by restructuring through a carve-out and future exit from these businesses.

Leveraging product performance and uniqueness to achieve growth in domestic and overseas markets

For all our current businesses, we see the changing business environment as an opportunity for growth.

Message from Business Group Management

Pharma

As a core business in the Group, we will build a pharmaceutical business with a strong presence.

Hiroaki Ueno

Executive Vice President
Head of Pharma



Executing management plans with a sense of determination and speed

In the Pharma business, we are enhancing our drug discovery capabilities cultivated over many years and are developing a stronger presence as a core business in the Mitsubishi Chemical Group and as a pharmaceutical company that supports the health of people around the world.

We are restructuring for growth in order to achieve the goals set out in the new management policy, "Forging the future." By building up our management foundations and reallocating management resources, we aim to achieve a recovery in earnings and further growth.

Concentrated investment in focus fields and focus markets

Japan and the United States are positioned as our focus markets, and we are developing our business with a focus on these two countries. In Japan, we are working in the focus fields of immuno-inflammation, diabetes and kidney diseases, the

central nervous system, and vaccines. In June 2022, we launched *DYSVAL* for tardive dyskinesia. Previously, there were no treatment options available for this disease. We are working to promote the appropriate use of *DYSVAL* and provide healthcare professionals and patients with this long-awaited treatment option. We also aim to expand our presence in the diabetes field, building on our experience with *TENELIA*, *CANAGLU*, and *CANALIA* and adding Eli Lilly Japan K.K.'s *MOUNJARO* to our diabetes lineup following approval in September 2022. In the United States, we have positioned the central nervous system as a focus field and aim to expand sales following the addition of *RADICAVA ORS* to our amyotrophic lateral sclerosis (ALS) franchise in June 2022. We also have a number of global late-stage trials underway for multiple development programs, and we aim to advance these through to commercialization. We are working to contribute to the health of people around the world by providing "Creating hope for all facing illness."

Strengthening all value chains for future growth

In all value chains in the Pharma business, we are working to deliver precision medicine*¹ and develop around-the-pill solutions*² for those diseases where there are still unmet medical needs. We have started a number of initiatives to maximize the value of our pharmaceutical products.

In our research divisions, we have started to investigate how to increase the speed and accuracy of our drug discovery efforts and are exploring new compounds using our existing drug discovery technologies combined with AI-driven drug discovery methods. In our development divisions, we have initiated application development programs to deliver around-the-pill solutions for early diagnosis or the management of drug compliance, and we have also initiated programs to make drug development more efficient through the use of real-world data. In our manufacturing divisions, we are looking at issues such as new materials for drug packaging, in order to reduce our environmental impact and energy use as we move toward a low-carbon economy. In our sales divisions, we have started using DX tools to provide information in a more efficient way. Finally, by integrating our corporate divisions, we have brought together a broad range of knowledge and are looking into how to apply this to staff development and improved digital literacy. Our goal is to move our business forward as an integrated Group, including generating synergies through greater collaboration between the Group companies.

*1 Providing the appropriate healthcare to the appropriate patient at the appropriate time, taking account of the differences in people's genes, environment, and lifestyles

*2 An approach that takes drug therapies as the starting point to offer solutions ranging from prevention to prognosis, to contribute to improving the QOL of patients and their families

Message from Business Group Management

Industrial Gases

Strengthening business resources while working toward carbon neutrality

Toshihiko Hamada

Representative Director, President, CEO
Nippon Sanso Holdings Corporation



Moving forward with five key strategies

The Nippon Sanso Holdings Group operates the Mitsubishi Chemical Group's Industrial Gases segment, and our philosophy is "Proactive. Innovative. Collaborative. Making life better through gas technology." Based on this, we aim to create social value through innovative gas solutions that increase industrial productivity, enhance human well-being, and contribute to a more sustainable future.

To put this philosophy into practice while growing our business further, we are currently implementing the NS Vision 2026 medium-term management plan, which runs from fiscal 2022 to fiscal 2025. When drawing up this plan, we took into consideration changes in the external environment that are happening now, in terms of (1) climate impact, (2) economic uncertainty, (3) geopolitical instability, (4) development of a digital society, and (5) diversification of thinking and lifestyles. We then defined five strategies aimed at sustained growth from a medium- to long-term perspective.

Five key strategies in the NS Vision 2026 medium-term management plan

- Sustainability management
- Exploring new business to achieve carbon neutrality
- Total electronics
- Operational excellence
- DX initiatives

[Nippon Sanso Holdings' medium-term management plan](#)

Collaborating to create value in decarbonized domains

I think that in order to fully execute these key strategies, we must create value by collaborating with a range of stakeholders inside and outside our organization, and going beyond the four regions (Japan, the United States, Europe, and Asia and Oceania) and the thermos business in the Nippon Sanso Holdings Group. This is consistent with our philosophy, Proactive. Innovative.

Collaborative. The technology development capabilities, know-how, expertise, and experience that we have in gas solutions—and that the MCG Group has in the chemical and pharmaceutical domains—are highly compatible with initiatives to achieve carbon neutrality. Starting with the key strategy of exploring new business to achieve carbon neutrality, I believe that we can generate huge synergies from the programs positioned as a priority in fiscal 2022, such as providing more environmental solutions and exploring global HyCO* projects for a hydrogen society.

* Hydrogen (H₂) and carbon monoxide (CO) are separated from natural gas using steam methane reforming (SMR) equipment. The HyCO business provides large-scale supply of H₂ and CO to customers in oil refining and petrochemical industries by way of a pipeline.

Helping as "The Gas Professionals" to increase the MCG Group's corporate value

This process of collaborating as "One Company, One Team" to create new value provides the perfect opportunity for every single employee in the Nippon Sanso Holdings Group to demonstrate their fighting spirit as "The Gas Professionals." This is also a great chance to adopt a broader perspective and tackle new challenges. The MCG Group is currently implementing a bold restructuring of its business portfolio to achieve sustained growth, and we consider this an opportunity for dramatic progress. We will pull together to boost corporate value across the entire MCG Group, while strengthening the Nippon Sanso Holdings Group's unique business resources, including our industrial gas and thermos technologies, our global and diverse human capital, and our business sites.

Message from the Chief Supply Chain Officer



Nobuo Fukuda

Representative Corporate Executive Officer,
Executive Vice President
Chief Supply Chain Officer

Leading the development of sustainable and effective supply chains across the Group

Optimizing Group manufacturing

The Mitsubishi Chemical Group was previously run with each Group company as an independent operation. Now, we have a strategy in place to remove barriers and strengthen cooperation between the companies to achieve better performance under the "One Company, One Team" concept.

Within the new Operations Division established to supervise supply chains at all Group companies, my mission is to support Group manufacturing activities within a two-axis matrix structure covering each geographical area and each business group where the Group companies belong. To achieve this, we will utilize the

2022 Instructions for Global Safety Standard and other guides across our global operations, and will work to ensure that all employees have a shared understanding of the values and standards reflected in the "One Company, One Team" concept.

The new management policy sets out a program of cost restructuring to rationalize and reduce costs by ¥100 billion across the Group by fiscal 2025. Our goal is to achieve around ¥25 billion of these cost reductions through the supply chain.

Pursuing GX alongside our partners

The MCG Group has set targets, and announced them to internal and external audiences, of net zero GHG emissions (i.e., becoming carbon neutral) in business activities in Japan and overseas by 2050 and a 29% reduction in emissions versus fiscal 2019 levels by 2030 (▶ Page 26).

To reach the 2050 target, the MCG Group is investigating the development of artificial photosynthesis and other carbon capture, utilization, and storage (CCUS) technologies, a switch to next-generation clean energy, including hydrogen, and other measures such as the use of biochemical technology and more in-depth life-cycle assessment (LCA). We are looking beyond simply reducing Group GHG emissions, and are engaging in initiatives to use biomaterials or commercialize the recycling of chemicals from plastic waste (mixed plastics into oil, PET or PMMA monomerization, etc.). To become carbon neutral and achieve a recycling-oriented society, we will work with customers, materials manufacturers, and all other partners to drive the transition to sustainable products and businesses.

Cost restructuring measures in the supply chain

Equipment repairs

- (1) Revise risk assessment methods for repair plans and establish systems to avoid over-maintenance
- (2) Improve utilization of workers in repair projects through the use of digital technologies

Logistics, supply chain reforms

Eliminate duplication of logistics operations with subsidiaries that have logistics functions; improve business earnings for non-Group customers; reduce inventories; increase transport efficiency, including through use of digital technologies and collaborations with other companies; and make order processes and packaging operations more efficient

Purchasing function consolidation, upgrade

- (1) Consolidate purchasing operations for indirect materials and services previously scattered across sites, and implement rigorous competitive purchasing
- (2) Formulate purchasing guidelines at the Procurement & Logistics Division, maintain outcomes from purchasing activities in (1), and support further reductions in purchasing costs at all departments

Innovation

Message from the CTO

**Larry Meixner**Senior Vice President
Chief Technology Officer

We will deliver sustainable business value and growth to our stakeholders, while opening new horizons for our employees.

Setting a new course for innovation

The Mitsubishi Chemical Group, through our new Corporate Innovation function, has launched a Group-wide effort to improve the quality, speed, and impact of our innovation.

First, we will strongly link the direction of our innovation activities to the Group's new management policy, "Forging the future." This new policy provides an excellent opportunity to realign our innovation activities, clarify our future directions, and accelerate our progress.

Second, we recognize that innovation is not limited to internal R&D. We will effectively combine a wide range of innovation "tools," including joint development with startups and strategic partnerships with universities, corporations, and external organizations. We will formulate integrated innovation strategies, optimally using each innovation tool according to the specific characteristics of our target markets.

Third, to increase the value and efficiency of our innovation operations, we opened a new research facility in April 2022 at our Science & Innovation Center in Yokohama, Japan. This new facility is designed to facilitate a modern, global style of interaction and will allow us to consolidate and integrate activities by market and technology. We will concentrate our core R&D efforts in Yokohama, while developing specific market-facing missions for our other R&D Centers to optimize the contribution of each to the innovation strategy of the overall Group.

Fourth, we will aggressively promote communication and diversity. Innovation emerges from the interaction between different perspectives, which provides the stimulus to challenge conventional thinking. In addition, all our key future markets should be viewed as global, as we cannot achieve sufficient growth from the Japanese market alone. Our Group's overseas innovation presence has been limited to date. However, to achieve our goals we will combine the technology strength we have built in Japan with a global innovation perspective.

Innovation paves the way to our future

It is often said that with change comes opportunity. Today, our Group is undergoing a period of significant change, including new management policies, business strategies, management teams, and operating structures. While M&A and other approaches remain important in taking advantage of growth opportunities, innovation is, and always has been, the primary driving force in creating new value. By focusing on innovation to fuel our Group's new management policy, and by shifting to a modern and global approach to innovation, we can seize the opportunities for growth presented by this period of dramatic change.

Innovation

Our Research & Development

R&D as a future growth engine

A world-class R&D organization is the centerpiece of our innovation efforts. The accumulated expertise and resulting IP are among our company's most valuable assets.

To maintain our competitive edge as a leading global chemical company, we conduct R&D for near-term business impact, while at the same time creating new pillars to support our long-term growth. In addition to in-house R&D, we fully leverage open innovation to increase our speed to market through collaboration with government, academia, startups, and corporate partners.

Driving near-term business impact

Ultra-low dielectric loss film—Contributing to the realization of "Beyond 5G"

For next-generation telecom systems, it is critical to reduce transmission loss, particularly in high-frequency applications. We have developed a new class of films with high dielectric properties that leverage our unique material design and synthesis technology to reduce the loss tangent*¹ to less than 0.001. This film reduces transmission loss in the 5G millimeter wave band (28 GHz) by about 50% compared to conventional products, while also providing high transparency, heat resistance, and excellent copper adhesion.

*1 A numeric value that expresses the degree of electrical energy loss in a dielectric

Green KTF and BioPTMG*²—Targeting carbon neutrality through bio-based high-performance products

To meet increasing demand for KTF, our moisture transmission film product, but at the same time to reduce CO₂ emissions during production by 30%, we have launched Green KTF. Green KTF is derived from natural products such as calcium carbonate and plant-derived polyethylene, yet it maintains the same performance as conventional KTF. Main applications include back sheets of disposable diapers and high-performance protective clothing. We have taken a similar approach to our PTMG product, which is used as a raw material for polyurethane and polyester resins. We have developed BioPTMG, which boasts the same performance as petroleum-derived PTMG, while dramatically reducing associated CO₂ emissions.

Low-temperature nitridation technology

Hydrazine is attractive to the semiconductor industry as a potential low-temperature nitrogen source precursor in atomic layer deposition (ALD) of metal nitride thin films. However, because of its high reactivity, safe handling of hydrazine is challenging. We are developing low-temperature nitridation technology for high-purity hydrazine and the associated bulk delivery system, which will improve the ALD process throughput and the quality of nitride thin films.

*2 Poly tetramethylene ether glycol

Creating the next pillars of growth

Focus on precision medicines

We aim to realize precision medicine that takes into account the causes and phenotypes of diseases in the central nervous system and immuno-inflammation. Our precision medicine approach provides appropriate healthcare to patients at appropriate times, considering the differences in people's genes, environment, and lifestyles. MT-7117, currently under development for erythropoietic protoporphyria and systemic sclerosis, is our leading precision medicine program.

We are promoting digital technologies to realize precision medicine. For example, we are collaborating with academia and AI venture companies to develop AI technology for drug screening. This technology enables accelerated drug evaluation using large-scale image data, instead of time-consuming data review by highly skilled researchers. We anticipate applying this technology in the future to drug screening based on genetic polymorphism and drug screening using human induced pluripotent stem (iPS) cells from patients.

Plant-based growth factors for regenerative medicine

Cell culture materials are critical in regenerative medicines for cultivating stem cells from patients or donors, enabling cell proliferation and differentiation into target organs and tissues. We are conducting research in collaboration with Myoridge Co., Ltd. (▶ Page 43) on production of growth factors using plants. This partnership leverages the process we used to create the world's first plant-based COVID vaccine, which is under development by our Canadian subsidiary Medicago, Inc. We aim to address long-standing challenges in conventional cell culture resulting from the widespread use of bovine fetal serum, including unstable supply, contamination risk, and animal welfare.

Innovation

Our Research & Development

Growth of 4-inch GaN crystal for manufacturing GaN substrates

We are collaborating with Japan Steel Works, Ltd. to improve the manufacturability of large-diameter bulk gallium nitride (GaN) substrates for power electronics with support from the New Energy and Industrial Technology Development Organization (NEDO). We have conducted crystal growth experiments for the mass production of high-quality 4-inch GaN substrates using a low-cost manufacturing technology, and have confirmed that the crystals are growing as anticipated.

External partnerships with government and academia

ARPCHEM and Mitsubishi Gas Chemical—Photocatalysts for artificial photosynthesis

Artificial photosynthesis is a groundbreaking technology that aims to enable a carbon-neutral society by using CO₂ as a raw material. In a major Green Innovation project funded by NEDO, we are collaborating with ARPCHEM and Mitsubishi Gas Chemical to develop photocatalysts with high conversion efficiency and reduced hydrogen production costs. We are also developing complementary technologies to produce high yields of basic chemical derivatives such as ethylene and propylene from hydrogen and CO₂ via alcohols.

University of California, Santa Barbara—The Mitsubishi Chemical Center for Advanced Materials

The Mitsubishi Chemical Center for Advanced Materials (MC-CAM) is an interdisciplinary materials research center at the University of California, Santa Barbara (UCSB). This partnership, started in 2001, specifically targets functional soft materials and has resulted in over 180 peer-reviewed

publications to date. For example, MC-CAM has produced key advances in solid polymer electrolytes (SPE) for solid-state batteries and organic photodetector (OPD) materials. Current MC-CAM research focuses on high-value-added advanced functional materials supporting the long-term vision of the Mitsubishi Chemical Group.

What are the MOT indices?

The MOT indices are one of the three axes of KAITEKI Management (MOE, MOT, and MOS) and serve as a metric for our technological and innovative capabilities. The MOT indices consist of the following three index groups, which classify the innovation process into input (I), process (P), and output (O). MOT indices are designed to focus on objectively measurable quantities, which can be compared meaningfully to competitors and to our own historical performance.

Index name	Example of measurement object
I index group	Investment in innovation activities
P index group	Progress of key R&D themes and DX
O index group	Sales of new products, number of patent applications, and quality of patents

Fiscal 2021 MOT result

The 2021 MOT indices indicate that all three groups achieved results of approximately 80%. Detailed results from the P index group suggest that we should accelerate progress in our digital capability. The O index group results reflect a need to emphasize the quality of our patents in addition to quantity. The insights derived from MOT drive us to further improve our innovative capabilities in line with our new business strategy.

Fiscal 2021 MOT results



Innovation

Our Research & Development



Finding solutions for a sustainable future

The KAITEKI Institute

The KAITEKI Institute, Inc. (TKI) was established in 2009 to act as a think tank to focus on long-term trends and opportunities. TKI does this by envisioning future market needs and prototyping conceptual products to meet those needs in collaboration with our global network of academic and scientific experts.

For example, TKI led development of a highly engineered prosthetic blade that has been used in Paralympic competition.

Another conceptual product is the "ICT Medical logistics box," an Internet of Things (IoT)-enabled box for transporting and tracking sensitive items. Mitsubishi Chemical Logistics Corporation (MCLC) is developing a portable version of the TKI concept to explore a new business model in the ethical pharmaceuticals distribution market.

TKI is now focused on efforts that align with the Group's need for an objective long-term perspective on global future scenarios and the resulting impact on new business opportunities.



Highly engineered prosthetic blade prototypes developed by TKI support Paralympic athletes in training and worldwide competitions.

Development of regenerative medicine using Muse cells

Muse cells (Multi-lineage differentiating stress enduring cells) are endogenous pluripotent stem cells naturally present in the bone marrow, peripheral blood, and connective tissues of all body organs. Muse cells can be injected intravenously and there is evidence they can migrate to injured organs, spontaneously differentiating into cells that correspond to the injured tissues.

We are developing a regenerative medicine product that exploits the special properties of Muse cells. We have been conducting clinical trials for six indications following successful non-clinical research results. We are focusing our current efforts on one principal indication, cerebral infarction (CI). In fiscal 2021, our exploratory study showed good safety properties and suggested possible efficacy. After discussions with the Pharmaceutical and Medical Devices Agency (PMDA), we are pursuing steps to secure full approval. Large-scale confirmatory clinical trials will be started in fiscal 2022 for regulatory submission.

Innovation

Corporate Venture Activity

Strategic partnerships with startups around the world to accelerate innovation

Our corporate venture activity has entered its fourth year since the founding of Silicon Valley-based Diamond Edge Ventures in fiscal 2018. Our global team, located in Tokyo, Silicon Valley and Germany, catalyzes engagements between startups and our company's business units to create mutual opportunities for innovation. As of March 2022, we have created over 270 such engagements and invested in nine startups, including four new investments in fiscal 2021.

Accelerator programs

In fiscal 2021, we rolled out our first partnership program "KAITEKI Challenge," focused on "Re-imagining Proteins, Plastics, and Packaging." We selected six startups as finalists, and we are working with them to validate several innovative concepts. In fiscal 2022, we will launch our next partnership program "TANAMIN Digital Health Challenge," aiming to create novel digital healthcare solutions.

Portfolio



DAIZ Inc.

DAIZ Inc. is a Japanese plant-based meat company delivering safe, sustainable, and high-quality alternative protein based on proprietary germination and extrusion technologies. The company's product MIRACLE MEAT has been already adopted by many food suppliers and restaurant chains. We are co-developing food ingredients for plant-based meat, supporting the DAIZ mission, and expanding our own food-related technological capabilities and market access.



Eridan Communications, Inc.

Eridan Communications, Inc. aims to reduce the power consumption for wireless communications by enabling the world's most efficient radios for 4G/5G. Eridan's MIRACLE RF front-end module is based on a digital switching architecture with GaN power devices that realizes ultra-clean signals and significant size reduction. Our collaboration opens new opportunities for expansion into the RF module market.



Lingrove Inc.

Lingrove Inc. is a provider of low-carbon-intensity composites made from plant-based fiber in a wide variety of resins. The company's signature product Ekoa® is made of flax fiber and resin, enabling "wood without trees" by creating appearances similar to stained and finished wood. Leveraging our diverse materials portfolio, this partnership aims to create low CO₂ footprint products in many applications including architecture and automotive interiors.



Myoridge Co., Ltd.

Myoridge Co., Ltd. provides cells and custom-designed serum-free media for cell culture applications, serving pharma, regenerative medicine, and food industries. Myoridge has the unique ability to address cost, reliability, and cell quality challenges by creating bespoke media recipes for each cell type and development stage. We are partnering with Myoridge to develop plant-based growth factors for various cell culture markets.

Message from the CDO



Unlocking tremendous business value by adopting best practices that utilize advanced digital technologies

Yuji Ichimura

Senior Vice President
Chief Digital Officer

Our new Company-wide organizational concept of "One Company, One Team" is the key to enabling DX at the Mitsubishi Chemical Group. In our previous organizational structure, business operations of each legal entity and business group were conducted with a high degree of independence. In this situation, business practices were adopted on a local scale, yielding uneven results in terms of quality and standardization, and data sharing was challenging for both technical and organizational reasons.

However, the core of our new management approach is to apply global best practices and break down communication barriers between different organizations. One aspect of these reforms is a stronger Corporate Digital function with the authority to drive change across the entirety of MCG.

Defining our vision and pursuing best practices

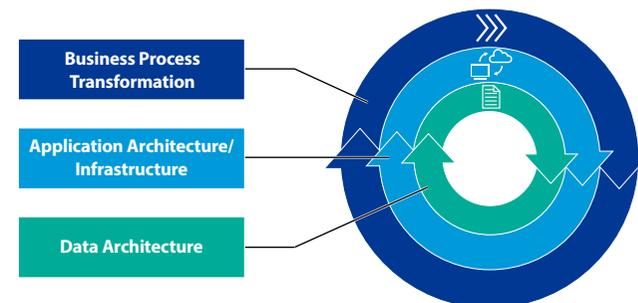
As reflected in this section, our starting point is the business processes themselves. We do not turn our attention to the supporting IT infrastructure until the desired "to-be" business processes are defined.

We prioritize the critical evaluation of each major business process, adopting global best practices and standardizing wherever possible. In roughly 10% of cases, we pursue customized solutions for direct business advantage, but these are exceptions rather than the rule. Based on the desired business processes, we then design and implement the application architecture and establish data infrastructure and policies. In tandem, we are aggressively modernizing our approaches to maximize the benefits of cloud computing, mobile devices, and next-generation network technology. The benefits to the business are enormous in terms of cost efficiency, as well as opportunities for synergy never before realized across business operations within MCG.

Realizing our corporate vision through DX

Finally, advanced digital technologies continue to offer the chance for revolutionary impact on our businesses. For example, we already derive substantial business value from materials informatics applied to formulation chemistries and AI enhancement of quality inspection. We also participate actively in the development of rapidly emerging technologies such as quantum computing. By combining rapid application of advanced technology with strategic deployment of optimal and standardized business solutions across MCG, DX will play a critical role in achieving our new management policy, "Forging the future."

Digitalization cycle



Progress with DX

Business process transformation

The first step in DX must be a clear understanding of the desired "to-be" business processes that the new digital systems are designed to serve. Our approach is to rigorously standardize 90% of our processes globally to enable efficiencies, cost reduction, and seamless end-to-end value chains. To build this necessary "digital backbone", we have started the design and deployment of our future state capabilities, encompassing our operating processes, data models, systems, and people competencies.

We have initiated several specific programs spanning commercial excellence, operations, customer experience, human resources, and finance in order to support our transition to a market-oriented organization. Initial focus areas include pricing, customer engagement, opportunity management, indirect procurement, and agile management reporting. In executing each initiative, we maintain focus on change management to ensure support and commitment from all relevant members.

Example: Making price-setting processes more efficient through digitalization



Our pricing process progression will adopt globally accepted norms to achieve value differentiation, including margin guidelines, a pricing office, defined performance cadence, and aligned incentives.

Example: Bringing together the lead to closed sale process

See below for MCG's sales funnel (the process from sales lead to closed sale)



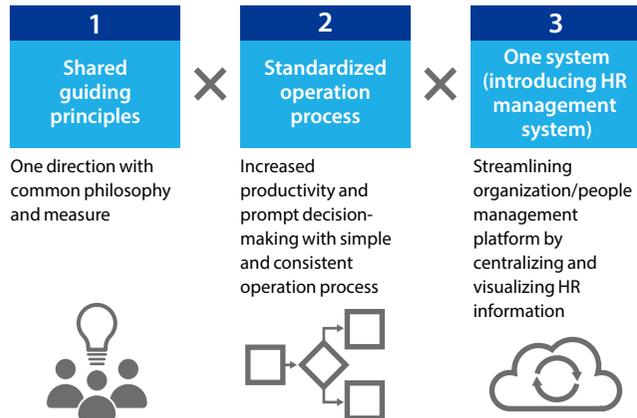
Progress with DX

Application architecture

Only after identifying the future ("to-be") ideal business processes can we standardize the relevant applications and systems. Actions will be reduced in number, simplified, rebuilt, and optimized to fit the newly designed processes. One key example is our implementation of a single human resources system across the entire Group, enabling both better business results and a more dynamic and positive career environment for all employees.

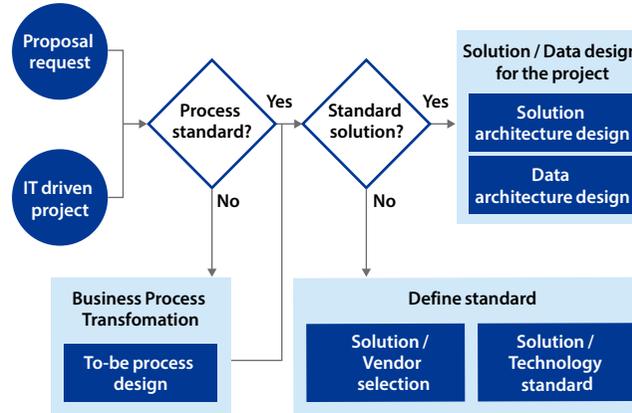
Developing global-standard HR processes/ organizations and information systems

For "One Platform" across the Group/globe



The technology used in each application or system will reflect industry and global standards. Master data standardization is also required for decision makers to have access to current and accurate data. Our flexible solution-adoption approach will allow rapid integration of industry-standard solutions when it is available, and will allow rapid definition of new processes and standard solutions when it is not available. This approach will enable us to improve and simplify our technology environment, from which we expect abundant cost optimization opportunities.

Process for introducing new solutions



Data standardization and utilization

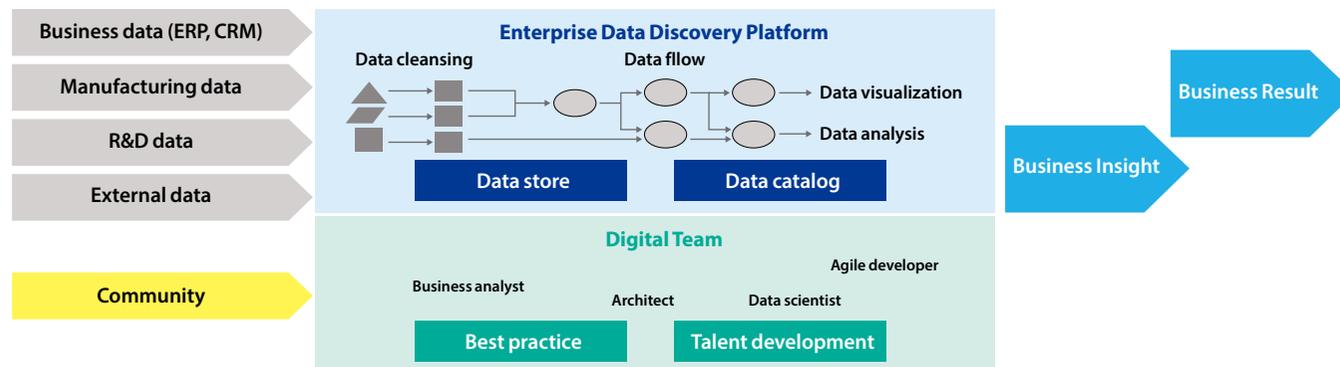
Data is a critical element in the Company's "Forging the future" strategy. We believe that successful data management is more than just storing and protecting data; it must define the most effective use of data as a critical business asset. Enterprise business insights can be derived by collectively visualizing data collected from multiple business operations. These insights fuel the agility needed to make rapid and effective decisions in quickly changing business environments. However, none of this is possible without a fundamental shift in the way we treat data.

We created the Enterprise Data Discovery Platform, a Company-wide data integration initiative supporting end-to-end data life cycle. Data from diverse sources is assimilated onto the platform through automated tools. The data is cleansed, harmonized, and then integrated across organizations to meet specific business intelligence needs. Finally, business intelligence tools facilitate visualization of the data from multiple perspectives. For instance, manufacturing data and sales results are automatically gathered from a production management system and an enterprise resource planning (ERP) system, respectively. The platform then enables business users to make rapid scheduling decisions.

Deep data analysis is provided using state-of-the-art AI tools. The data catalog within the platform provides search capability, a key feature of the platform. Overall, the data platform enables easy visibility to global business applications and business processes. We enhance the platform through an agile data strategy and continuous upskilling of our internal digital team.

Progress with DX

Data platform: From data to business value



Infrastructure migration

Times have changed. Our entire infrastructure will be migrated to an environment that can support end-users working in the office, at home, or elsewhere. Three initiatives are critical to enable this transition, as shown on the right. In addition to creating new options for workers, these initiatives have significant potential for cost optimization.

Initiatives for infrastructure transition

Cloud lifting: Moving applications and systems to cloud environments, reducing current operations and maintenance and shifting resources to more value-added tasks

Multi-device access: Enabling work not only from stationary PCs but also mobile devices, empowering employees with more flexible work options and higher productivity

Network modernization: Preparing for pervasive utilization of 5G and eventually 6G networks, reducing reliance on internal LAN infrastructure

Emerging technologies

DX must also include an aggressive and active posture toward emerging technologies. For example, we participate actively in the IBM Q Network Hub at Keio University. In joint research with IBM Japan, Ltd., JSR Corporation, and Keio University, we calculated the excited states of thermally activated delayed fluorescence (TADF) emitters which are applied to the fabrication of efficient OLEDs. We developed a new scheme to mitigate the error from current noisy quantum computers and succeeded in improving the calculation accuracy. This application of quantum computers to excited state calculations of commercial materials was a world first, and should lead to more accurate quantum chemistry calculation results for designing OLED emitters with high quantum efficiency.

Message from Our New Chief Strategy Officer



Joseph Rinaldi

Vice President
Chief Strategy Officer

I am pleased and honored to be the new Chief Strategy Officer (CSO) for Mitsubishi Chemical Group Corporation. Throughout my 36-year career, I have tackled a variety of challenges in various functions across litigation, finance, technology, transformation, and the workforce. I believe this diverse experience will help me develop a practical and actionable strategy.

Our strategy team will have several important mandates

First, we are working to build out the overall strategic planning process. The strategic plan must show how and where we will compete and why we will successfully create value, both short and long term. We will introduce the plan at the beginning of 2023.

Developing a plan is just the beginning. Ultimately, we must move our strategic plan from paper to actions to transform the Company to unleash MCG's capabilities and global reach across attractive customer industries. We will launch decisive strategic and transformative efforts to build and enhance our capabilities to make the plan succeed. We will ensure that every business unit, function, and employee clearly understands our overall corporate strategic plan and why we are doing it, and we will monitor execution and adjust as necessary.

Managing our business portfolio is another essential responsibility. I will act as one of the gatekeepers and approvers of capital transactions or acquisitions. Key evaluation criteria include strategic fit, risk, affordability, and opportunity cost versus other alternatives.

Our strategy will continue to build on several ongoing efforts from the "Forging the future" initiatives. Notable is the project to split our Petrochemicals business and several other transformations that will not only lead to better processes but will also result in the promised cost savings. In addition, we

continue to work on several previously started divestitures and adjustments to our portfolio.

We will also drive strategic value by optimizing our portfolio's Economics, Innovation, and Sustainability elements. Within my department, I am pleased that we have the Sustainability Management Department. Having these experts in the CSO's office will help us ensure that we build sustainability in everything we do and better monitor our progress.

Our strategy team serves an essential role as an agent of change, bringing ideas we might not otherwise consider. We will sometimes be provocative, pushing the organization to question why we are doing something a certain way, challenging the existing paradigms. We also provide strategic counsel and support on various issues of critical importance. In addition, our team is leading a select set of special projects, such as the current cost transformation initiative. Finally, we also provide acquisition, alliance, and divestiture merger expertise, responsible for all aspects of the process.

Since my first involvement with the Company in September 2022, I have been impressed by the people working at the MCG Group companies worldwide. They are dedicated, passionate, team-oriented, and customer-focused. I believe in the quote "you win with people." Our people are the ultimate competitive edge that will provide superior value for our customers, shareholders, and ultimately to society.

4

Strengthening ESG Activities

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Governance

Message from the Officer Supervising Governance and Legal Affairs

**Ken Fujiwara**

Director
Executive Vice President
Chief Compliance Officer
General Counsel

Fostering a “One Company, One Team” culture to deepen governance globally

Accelerating the integration of corporate functions

Mitsubishi Chemical Group Corporation has been working for some time to integrate its corporate functions, including promotion of its legal functions, internal control, and compliance, in order to achieve a highly transparent governance system that works efficiently across the Mitsubishi Chemical Group. MCG is now working to accelerate these efforts under the “One Company, One Team” concept in the new management policy “Forging the future” announced in December 2021.

To integrate these functions, we have moved away from vertical decision-making processes siloed in each business and have implemented a flat organization structure that operates across borders separating Group companies in order to build a governance system that is fast, efficient, and transparent across the entire Group.

We are now focused on reinforcing corporate governance further in this flat organizational structure, introducing enterprise risk management (ERM) processes to better manage risk across the Company, while setting up global compliance programs and fostering better awareness of compliance matters among all employees to further compliance at the MCG Group.

Our key focus is on getting these systems to function fully to make our compliance systems more effective. It is extremely difficult to change behavior or mindsets on how to execute familiar work processes, but these new initiatives are aimed at fostering the “One Company, One Team” culture that everyone can take in and act on, and furthering our governance beyond the borders of country, region, and business entity.

Making the Board of Directors even more effective

As a corporate executive officer, my mission is to strengthen corporate governance as described above. At the same time, as the chairperson of the Board and as a member of the Nominating Committee, I am working to promote a common understanding of the role and the ideal state of the Board of Directors as a monitoring board and make the Board even more effective.

In fiscal 2021, the Board of Directors discussed a range of matters, including new management policy formulation, organizational structure, selection of the candidate for the lead independent outside director role, and hiring executive officers from outside. We are now operating under the new organization from fiscal 2022 and outside directors form a majority on the Board of Directors. Rather than getting bogged down in fine details and exchanges of opinion on agenda items, I look for the Board to take a broader perspective in the debates on medium- to long-term strategy, the business portfolio, corporate governance, and branding.

I have been working to confirm the awareness of this role with the directors, as well as focusing the key agenda and discussion points for debate at Board of Directors’ meetings and steadily deepening the monitoring function, in order to increase corporate value and respond to the commitment of the shareholders and other stakeholders.

Governance

Corporate Governance

Roles of the Board of Directors

The Board of Directors determines basic management policies, such as medium-term business strategies and annual budgets. As a general rule, corporate executive officers are entrusted with the responsibility of executing operations in accordance with these basic policies, excluding matters that must be legally resolved by the Board of Directors. The Board of Directors primarily supervises the execution of duties by the corporate executive officers.

Framework and roles of the committees (As of June 24, 2022)

	Nominating Committee	Audit Committee	Compensation Committee
Chairperson	Outside director	Outside director	Outside director
Composition (including chairperson)	Outside directors—4 Internal director—1	Outside directors—3 Internal director (full-time)—1	Outside directors—3
Purpose	The Nominating Committee nominates candidates for directors and corporate executive officers.	The Audit Committee audits the execution of duties by corporate executive officers and directors and reviews the Group's internal control systems, etc.	The Compensation Committee determines the design of the remuneration system and the amount of remuneration to be paid to individuals.
Fiscal 2021	The committee met a total of eight times and held active discussions on the building of a new management structure for the transition to a "One Company" system and on the allocation of corporate executive officers, based on which it selected the successor candidates for the post of corporate executive officer.	The committee met a total of 14 times and undertook key point audits of the status of development and operation of governance and the internal control system, and the status of progress of the medium-term management plan, <i>APTSIS 25</i> . In the above audits, emphasis was placed on responding in line with the new management structure to take account of COVID-19 and other changes in the business environment.	The committee met a total of seven times and, in accordance with the basic policy on director remuneration, engaged in discussions whose main subject was an examination of the appropriate composition and level for the remuneration of corporate executive officers. On this basis, the committee determined the amount of remuneration to be paid to individuals.

Main agenda items discussed at the Board of Directors' meeting during fiscal 2021

- New management policy
- Investment planning, budgeting
- Report from each of the committees and the executives
- Effectiveness of internal control system
- Review of the meaningfulness of cross-shareholdings
- Outcomes of engagement activities with institutional investors
- Introduction of enterprise risk management (ERM)
- Assessment of the effectiveness of the Board of Directors
- Selection of new market segments on the Tokyo Stock Exchange
- Response to revision of Japan's Corporate Governance Code
- Abolition of the advisor system
- Issues relating to management strategy

Governance

Corporate Governance

Corporate executive officers

The corporate executive officers decide on the operational execution and are in charge of its implementation based on basic management policies developed by the Board. Regarding important matters in the management of the MCG Group, deliberations are made at the Corporate Executive Officers Committee, which is a council formed of corporate executive officers. In addition to determining the division of duties of each corporate executive officer for other matters, appropriate and efficient decision-making is made possible by clarifying the decision-making authority of the corporate executive officer in charge.

Corporate Executive Officers Committee

The Corporate Executive Officers Committee is composed of all corporate executive officers. It deliberates and decides on important matters concerning the management of MCG and the MCG Group, and also monitors the Group's business based on the medium-term management plan, the annual budget, and other relevant factors.

Assessment of the CEO

The Nominating Committee assesses the performance of the CEO from multiple perspectives using indices (▶ Page 59) based on the three axes of KAITEKI Management (MOS, MOT, and MOE), and also discusses the appropriateness of the continuation of duties by the CEO, using metrics such as 360-degree feedback. The Nominating Committee provides feedback on the results of discussions to the individuals involved to improve the quality of management.

Audit system (trilateral audits)

The Audit Committee cooperates with the Internal Auditing Division and the accounting auditor to enhance the trilateral audits (conducted by the Audit Committee, accounting auditor, and the internal audit departments).

The committee holds discussions in advance with the Internal Auditing Division on the internal audit plans made by the office and has regular meetings with the office to exchange opinions and receive information on the results of internal audits and other issues. The committee also cooperates closely with the accounting auditor. It receives reports on the audit process, plans, progress status on audit work and the results of audits, and exchanges information and opinions with the auditor.

Lead independent outside director

With the aim of enhancing the independence of the Board of Directors and strengthening cooperation between corporate executive officers and outside directors, the outside directors elect a lead independent outside director from among themselves. The lead independent outside director gathers opinions from the outside directors and holds discussions with the chairman of the Board of Directors and the president, and presides as chairperson over a meeting body composed solely of the outside directors.

Director Liaison Committee and related meetings

As a forum for sharing of important management-related information and for the frank exchange of opinions on management issues, the Director Liaison Committee has been established that includes all directors as members.

Separate from this committee, regular meetings are held exclusively for outside directors, at which they can exchange information and establish a common understanding based on an independent and objective viewpoint.

Main agenda items of the Director Liaison Committee in fiscal 2021

- New management policy
- Issues relating to management strategy
- Introduction of ERM
- Optimal information provision from corporate executive officers to the Board of Directors
- Decision-making authority under the new organizational structure
- Report on assessment results of corporate value including ESG

Cross-shareholdings

MCG and major subsidiaries acquire and hold shares of client companies, etc., if the shareholding contributes to medium- to long-term improvement in corporate value. The Board of Directors reviews the grounds for such cross-shareholdings on a regular basis. Taking account of the effect on the market, we make efforts to sell such cross-shareholdings as assessed to be insufficiently justified.

On September 16, 2021, the Board of Directors reviewed all Group cross-shareholdings as of the end of March 2021 in terms of the economic rationale as measured by ROIC, their necessity for business, and other considerations. As a result of the review, we found some cross-shareholdings to be insufficiently justified and will proceed with their sale, taking account of the effect on the market.

Governance

Corporate Governance

Diversity of directors

Our policy is for the Board of Directors to have a diverse composition ensuring a sufficiently high level of expertise to formulate basic Group management policies and provide appropriate oversight and valuable advice on management issues. We use a skills matrix to set out the areas where particular expertise is expected.

	Management experience	Finance and accounting	Science, technology, IT, and production	Risk management	Business strategy and marketing	Laws and regulations, etc.	Globality and diversity
Jean-Marc Gilson ◆	●				●		●
Ken Fujiwara ◆				●		●	●
Glenn H. Fredrickson			●		●		●
Hiroshi Katayama				●		●	●
Takayuki Hashimoto	●				●		●
Chikatomo Hodo	●		●				●
Kiyomi Kikuchi				●		●	●
Tatsumi Yamada		●		●			●
Takako Masai		●		●			●

Notes: 1. For each director, up to three areas where MCG expects particular expertise are indicated.

2. Directors indicated with the symbol (◆) act in an executive function.

Policies on the nomination of director candidates

For the nomination of outside and internal director candidates, the specified appointment process is implemented following interview of the candidates by the Nominating Committee, on which outside directors form a majority. The Nominating Committee nominates as director candidates persons who fulfill the following criteria:

- Possess deep insight, as well as objective and fair judgment, which are necessary to fulfill the responsibilities of a director of a company with a nominating committee, etc.;
- Possess high ethical standards and a law-abiding spirit;
- Are healthy enough to fulfill the responsibilities of a director.
- For outside directors: Fulfill the standards for independence of outside directors (▶ Page 55), are able to secure enough time to execute business, and, additionally, are able to contribute to diversity among the outside directors.

Training for directors

Outside directors are constantly briefed on the MCG Group's business and organizations and are regularly given the opportunity to visit the Group's business locations in Japan and abroad and to discuss with the management team. Internal directors are also given opportunities to develop the qualities required of directors through training sessions on compliance and internal control and a range of seminars held by external organizations.

Governance

Corporate Governance

Standards for independence of outside directors

The Company appoints as outside directors persons who do not fall under any of the items listed below and are capable of overseeing the Company's management from a fair and neutral standpoint free of conflict of interest with general shareholders.

1. Related party of the Company

- (1) A person engaged in the execution of MCG Group operations (executive director, corporate executive officer, executive officer, manager, employee, partner, etc. The same shall apply hereafter.)
- (2) A person who has been engaged in the execution of MCG Group operations in the last 10 years

2. Major shareholder

A person who directly or indirectly holds 10% or more of MCG's total voting rights or a person engaged in the execution of operations of a company that directly or indirectly holds 10% or more of MCG's total voting rights

3. Major business partner

- (1) A person engaged in the execution of operations of a company*¹ whose major business partners include MCG or any of its Group operating companies (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Life Science Institute, Inc., and Taiyo Nippon Sanso Corporation. The same shall apply hereafter.)
- (2) A person engaged in the execution of operations of a major business partner*² of MCG or any of its Group operating companies

4. Accounting auditor

An accounting auditor of the MCG Group or an employee thereof

5. Transaction as an individual

A person who receives money or other financial benefits of ¥10 million or more per year from MCG or any of its Group operating companies

6. Donation

A person who receives a donation or financial assistance of ¥10 million or more per year from MCG or any of its Group operating companies or a person engaged in the execution of operations of a company that receives a donation or financial assistance of ¥10 million or more per year from MCG or any of its Group operating companies

7. Reciprocal assumption of the position of director

A person engaged in the execution of operations of a company that has appointed as director any MCG Group director or employee

8. Close relative, etc.

- (1) A close relative, etc., of a person engaged in the execution of important MCG Group operations (spouse, relative within the second degree of relationship, or any person who shares the same livelihood. The same shall apply hereafter.)
- (2) A close relative, etc., of any person who meets the definition of any of items 3 to 7 above

*1 If the said business partner received from MCG or any of its Group operating companies an amount equivalent to 2% or more of its annual consolidated net sales in the latest fiscal year, it shall be considered as one whose major business partners include MCG.

*2 If MCG or any of its Group operating companies received from the said business partner an amount equivalent to 2% or more of MCG's annual consolidated net sales revenue in the latest fiscal year or the said business partner has lent to the MCG Group an amount equivalent to 2% or more of MCG's total consolidated assets, the business partner shall be considered as a major business partner of MCG.

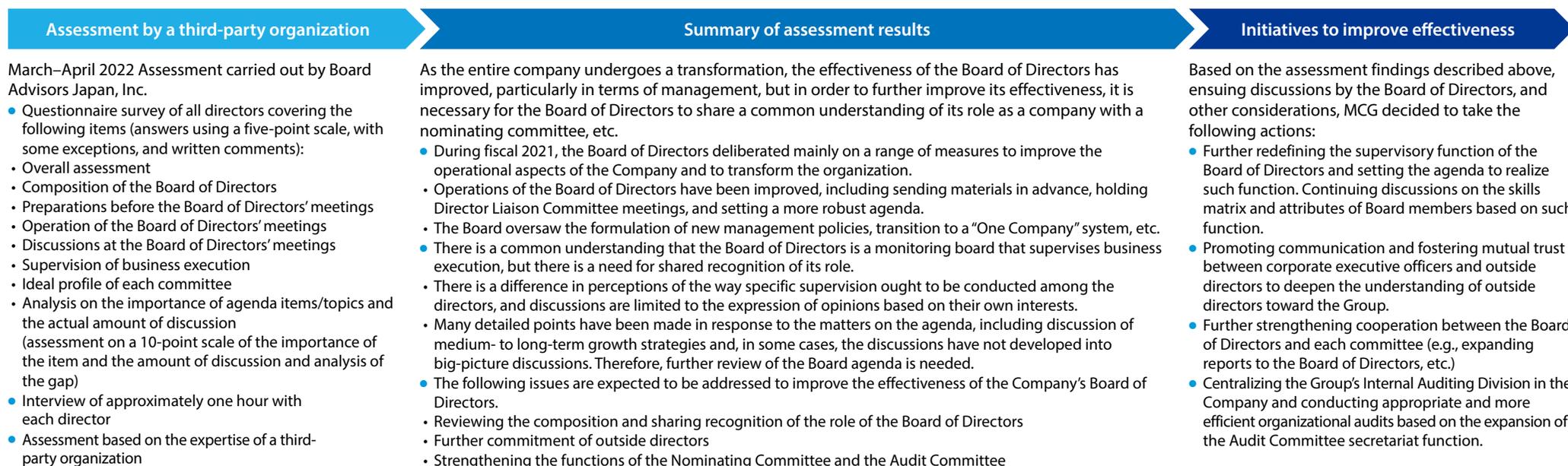
Note: The party is deemed to fall under one of items 3 to 7 above if the relevant condition has been met at any time in the past three years.

Governance

Corporate Governance

Fiscal 2021 assessment of the Board's effectiveness

From March to April 2022, an assessment of the effectiveness of the Board of Directors was carried out by a third-party organization. Based on the assessment results, the Board discussed and decided on initiatives to improve effectiveness going forward. MCG will continue working to improve the effectiveness of the Board of Directors, taking due account of the assessment results and the various proposals made by the directors.



Efforts promoted based on the previous effectiveness assessment

Based on the findings from the effectiveness assessment conducted and directors' suggestions provided in fiscal 2020, MCG implemented the following measures:

- Redefining the roles of the Board of Directors and reviewing the setting of the agenda
 - In addition to enhancing the provision of information to outside directors through Director Liaison Committee and individual meetings, part of the agenda was reviewed in the light of the roles of the Board of Directors.
 - Outside directors selected a lead independent outside director by mutual vote, and the lead independent outside director organized meetings attended only by outside directors and set an effective agenda for the Board of Directors through close cooperation with the chairperson and secretariat.
 - In light of the transition to a "One Company" system, outside directors discussed the role and the ideal state of the Board of Directors at meetings attended only by outside directors and sought a common understanding.
- Reviewing the composition of the Board of Directors
 - From the point of view of strengthening the supervisory function of the Board of Directors, the ratio of internal and outside directors was reviewed, and outside directors became the majority.
- Further strengthening of Nominating Committee functions
 - Lively discussions were held on the establishment of a new management system in conjunction with the transition to a "One Company" system, as well as the allocation of corporate executive officers.

Governance

Corporate Governance

Outside officers' main activities and attendance at Board of Directors' meetings and committee meetings

Name	Status of activities and summary of duties executed in relation to expected roles	Attendance		
Takayuki Hashimoto	At Board of Directors' meetings, Mr. Hashimoto provided input mainly on global management, business portfolio strategy, and risk management, drawing on his extensive experience in company management and profound insights into digital business. As chairperson of the Nominating Committee, where the main agenda items during the fiscal year under review were the composition of the Board of Directors, succession plans, and the nomination of candidates for the positions of director and corporate executive officer, he fulfilled his duties by playing a leading role in highly impartial and transparent decision-making. As a member of the Compensation Committee, he executed his duties by providing appropriate input on the major agenda items of the fiscal year under review, such as the consideration of an appropriate remuneration structure and levels of remuneration for corporate executive officers.	Board of Directors' meetings	9/9	100%
		Nominating Committee meetings	8/8	100%
		Compensation Committee meetings	7/7	100%
Chikatomo Hodo	At Board of Directors' meetings, Mr. Hodo provided input on such matters as global management, portfolio management, and corporate value enhancement from the perspective of ESG, drawing on his extensive experience in company management and profound insight in management knowhow. Furthermore, as chairperson of the Compensation Committee, where the main agenda items of the fiscal year under review were the consideration of an appropriate remuneration structure and levels of remuneration for corporate executive officers, he fulfilled his duties by playing a leading role in highly impartial and transparent decision-making. As a member of the Nominating Committee, he executed his duties by providing appropriate input on the major agenda items of the fiscal year under review, such as the composition of the Board of Directors, succession plans, and the nomination of candidates for the positions of director and corporate executive officer.	Board of Directors' meetings	9/9	100%
		Nominating Committee meetings	8/8	100%
		Compensation Committee meetings	7/7	100%
Kiyomi Kikuchi	At Board of Directors' meetings, Ms. Kikuchi provided input on such matters as the functions and responsibilities of the Board of Directors, assessment of legal risk, and global governance, drawing on her experience and profound insight as a lawyer. As a member of the Nominating Committee, she executed her duties by providing appropriate input on the major agenda items of the fiscal year under review, such as the composition of the Board of Directors, succession plans, and the nomination of candidates for the positions of director and corporate executive officer. On the Audit Committee, she appropriately fulfilled her assigned duties as an outside member in the conduct of audits based on audit plans, which focused in the fiscal year under review on matters such as the development and operation of the internal control system and intensive auditing of progress in the first year of the <i>APTSIS 25 Step 1</i> medium-term management plan.	Board of Directors' meetings	9/9	100%
		Nominating Committee meetings	8/8	100%
		Audit Committee meetings	14/14	100%
Tatsumi Yamada	At Board of Directors' meetings, Mr. Yamada provided input on such matters as finance and accounting, disclosure, and market valuation, drawing on his experience and profound insight as a certified public accountant and an international accounting expert. Furthermore, as a member of the Compensation Committee, he executed his duties by providing appropriate input on the major agenda items of the fiscal year under review, such as the consideration of an appropriate remuneration structure and levels of remuneration for corporate executive officers. On the Audit Committee, he appropriately fulfilled his assigned duties as an outside member in the conduct of audits based on audit plans, which focused in the fiscal year under review on matters such as the development and operation of the internal control system and intensive auditing of progress in the first year of the <i>APTSIS 25 Step 1</i> medium-term management plan. Since April 1, 2022, Mr. Yamada has served as chairperson of the Audit Committee.	Board of Directors' meetings	9/9	100%
		Audit Committee meetings	14/14	100%
		Compensation Committee meetings	7/7	100%
Takako Masai	At Board of Directors' meetings, Ms. Masai provided input on such matters as finance and market risk management, drawing on her experience and profound insight in the areas of analysis of financial and economic conditions and the administration of monetary policy. Furthermore, as a member of the Nominating Committee, she executed her duties by providing appropriate input on the major agenda items of the fiscal year under review, such as the composition of the Board of Directors, succession plans, and the nomination of candidates for the positions of director and corporate executive officer. On the Audit Committee, she appropriately fulfilled her assigned duties as an outside member in the conduct of audits based on audit plans, which focused in the fiscal year under review on matters such as the development and operation of the internal control system and intensive auditing of progress in the first year of the <i>APTSIS 25 Step 1</i> medium-term management plan.	Board of Directors' meetings	6/6	100%
		Nominating Committee meetings	5/5	100%
		Audit Committee meetings	10/10	100%

Note: After her appointment as director in July 2021, Takako Masai recorded attendance at Board of Directors' and other meetings held during fiscal 2021.

Governance

Corporate Governance

Director remuneration

Policy for deciding the remuneration of directors and corporate executive officers for fiscal 2022

Principle of remuneration

The systems for directors and for corporate executive officers are separate, and remuneration is determined by the Compensation Committee based on the concepts outlined below.

Basic policy for deciding remuneration, etc., for directors

- Given their role of overseeing and auditing the management of the Company from an independent and objective standpoint, remuneration for directors shall be basic remuneration (fixed remuneration) only.
- In order to secure personnel suitable for executing the responsibilities of a director of a company with a nominating committee, etc., the level of remuneration shall be determined by considering the levels set by other companies, the expected role and function, the hours required to complete the duties, and other factors.

Basic policy for deciding the remuneration, etc., of corporate executive officers

- The remuneration plan shall be such as to make officers conscious of the integrated practice of the three axes of KAITEKI Management toward the MCG Group's vision, "Realizing KAITEKI" (MOS, MOT, and MOE).
- The remuneration plan shall be designed to function effectively as an incentive to enhancing short-term and medium- and long-term performance and improving sustainable corporate value and shareholder value.
- Remuneration shall be set at a level competitive enough to attract and retain high-quality management personnel to lead the sustainable growth of the MCG Group.

- Remuneration shall be determined through a fair and reasonable decision-making process that fulfills the duty of accountability to all stakeholders including shareholders, customers and, employees.

Basic policy for deciding the remuneration, etc., of officers recruited from outside

- The remuneration, etc., of officers recruited from outside shall be determined in accordance with the basic policies outlined above, but with consideration given on a case-by-case basis to the remuneration levels and practices thought to prevail in the place or country of origin or residence of the officer recruited and other relevant factors.

Remuneration system

Directors

The remuneration of directors shall be basic remuneration (fixed remuneration) only. When a director serves concurrently as a corporate executive officer, the remuneration system for corporate executive officers shall apply.

Corporate executive officers

The composition of the remuneration of corporate executive officers shall be as set out below.

Type of remuneration		Description	
Fixed	Short-term / Cash	Basic remuneration	<ul style="list-style-type: none"> • Basic remuneration paid for the execution of responsibilities and duties • Determined by the role and degree of responsibility of each corporate executive officer
		Annual bonus	<ul style="list-style-type: none"> • Monetary remuneration paid in proportion to KAITEKI value assessment and individual appraisal (achievement of initiative targets under the medium-term management plan, leadership quality, etc.) for each fiscal year
Variable	Long-term / Stock	Performance share unit (PSU)	<ul style="list-style-type: none"> • Stock allocation based on Company share price growth* over a three-year period * Relative to JPX-Nikkei Index 400 and peer group (domestic and overseas chemical/healthcare companies with global operational presence)
		Restricted transfer stock (RS)	<ul style="list-style-type: none"> • Restricted transfer stock is allocated each fiscal year in an amount depending on the office title. The transfer restriction is removed on the officer's retirement.

Note: For corporate executive officers of non-Japanese nationality, fringe benefits and severance pay may be paid in addition to the above, to the extent appropriate, based on consideration of the remuneration levels and practices believed to prevail in the place or country of origin or residence of the officer recruited.

Governance

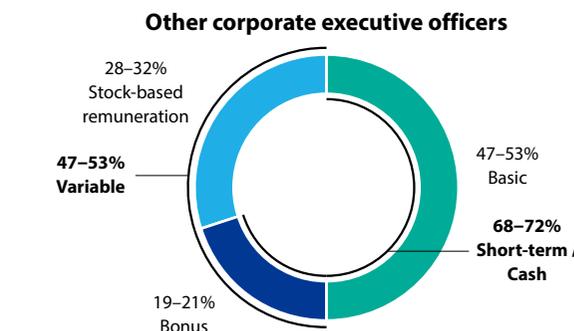
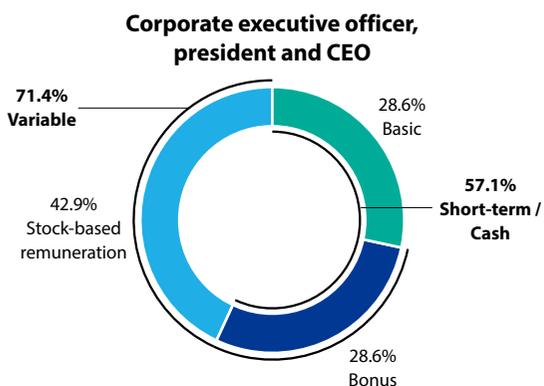
Corporate Governance

Method of setting the levels/percentage of remuneration
Directors

The basic remuneration level for directors shall be determined by considering the remuneration level for non-executive directors and outside directors at other companies of similar size in terms of domestic sales, market capitalization and other indicators, the role and functions of the director (e.g., member/chairperson of Nominating/Compensation/Audit Committee), and the hours required to complete the duties (full-time/part-time distinction).

Corporate executive officers

The remuneration, etc., of corporate executive officers shall be of a level that is competitive, in terms of the amount of remuneration and the degree of performance linkage, based on comparison with the remuneration level and degree of performance linkage set by other companies of similar size in terms of market capitalization and domestic sales (for officers of non-Japanese nationality, however, of similar size in terms of market capitalization and sales in the officer's place or country of origin or residence or in another region relevant when considering recruitment of talent).



*The ratio of basic remuneration to bonus to stock-based remuneration is set at 1:1:1.5 for the corporate executive officer, president and CEO, and at 1:0.35-0.45:0.53-0.68 for other corporate executive officers, with the ratio of variable remuneration increasing with seniority of position.

Composition of stock-based remuneration*1

PSU*2 50% RS*3 50%

*1 The composition of stock-based remuneration shown is for the corporate executive officer, president and CEO. For other corporate executive officers, the composition is determined separately for each office title.
*2 PSU: Performance share unit
*3 RS: Restricted transfer stock

Annual bonus

The amount of individual bonus for corporate executive officers is determined in proportion to the KAITEKI value assessment (achievement of annual targets under the MCG Group's three axes of KAITEKI Management: MOS, MOT, and MOE) and individual appraisal (achievement of initiative targets set individually under the medium-term management plan, leadership quality, etc.).

$$\text{Individual bonus amount} = \text{Base amount for office title} \times \left(\frac{\text{KAITEKI value assessment} + \text{Individual appraisal}}{0-200\%} \right) \times \text{Final adjusting assessment } (\pm 20\%)$$

Basis for assessment

KAITEKI value assessment

To make officers conscious of the practice of KAITEKI Management to achieve the Company's vision, "Realizing KAITEKI," the Company directly applies indicators for the three axes of KAITEKI Management (MOS, MOT, and MOE) as indicators for assessing bonuses.

Specific indicators for KAITEKI value assessment are selected every fiscal year, primarily from those listed below.

KAITEKI Management axis	Management indicator for axis = Indicator for determining bonus	% weight in assessment
MOS	Indicator associated with reduction of GHG and other environmental impacts, contribution to health/medical treatment and social issues, compliance, accident/fire prevention, etc.	20%
MOT	Indicator associated with R&D efficiency, technological superiority, and alignment with social needs	10%
MOE	Indicator associated with core operating income, ROE, ROIC, operating cash flow, etc.	70%

Individual appraisal

For the corporate executive officer, president and CEO, targets declared by the corporate executive officer, president and CEO at the beginning of the fiscal year are reviewed and assessed by the Compensation Committee and Nominating Committee. For assessment, a self-assessment is reviewed and assessed at the end of the fiscal year by the Compensation Committee and the Nominating Committee.

Governance

Corporate Governance

Regarding targets and assessment for other corporate executive officers, these are determined through an interview between the individual officer and the corporate executive officer, president and CEO, then reviewed and approved by the Compensation Committee. In cooperation with the Nominating Committee, the Compensation Committee verifies the fairness and reasonableness of the targets and assessments for each corporate executive officer.

Final adjusting assessment

Where a notable success has been achieved or a serious loss incurred that were not foreseeable at the beginning of the fiscal year, and only in such cases, the Compensation Committee and the Nominating Committee examine the details, assess the need to take account thereof, and adjust the final assessment accordingly.

Performance share unit (PSU)

In fiscal 2021, the Company discontinued the stock-based remuneration plan using the Board Incentive Plan (BIP) trust and introduced a PSU-based system. Under this system, which is intended to promote awareness of sustainable improvement in corporate value and shareholder value, common stock of the Company is allocated, in principle annually, in an amount calculated in proportion to the Company's share price growth (total shareholder return [TSR]) over a three-year period. The method of calculating the number of individual shares allocated is as follows:

TSR assessment period

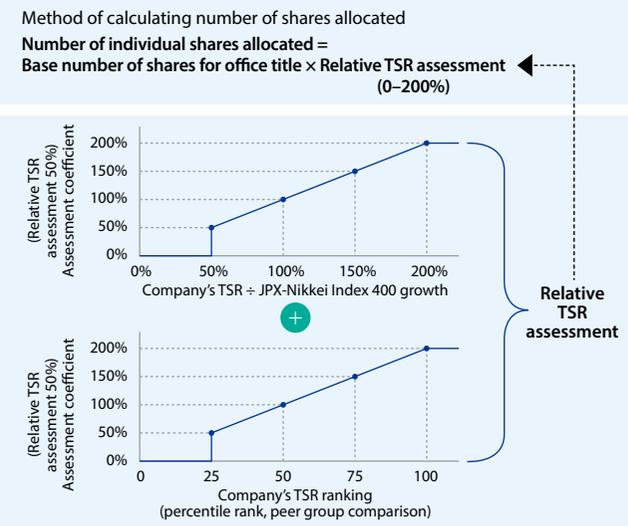
The amount for fiscal 2022 will be based on assessment of the period from fiscal 2022 to fiscal 2024.

	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
FY2022 PSU	TSR assessment period			Stock allocation		
FY2023 PSU		TSR assessment period			Stock allocation	
FY2024 PSU			TSR assessment period			Stock allocation

TSR assessment category

The Company's TSR is assessed by comparison with the index growth rate and the peer group TSR.

Assessment category	% weight in assessment	Assessment method
Comparison of index growth	50%	Determination of assessment coefficient reflecting performance of the Company's TSR relative to growth of the JPY-Nikkei Index 400 (incl. dividends)
Comparison with peer group TSR	50%	Determination of assessment coefficient based on ranking of the Company's TSR relative to the peer group (other domestic and overseas chemical/healthcare companies of similar size in terms of sales revenue, market capitalization, etc.)



Stock-based remuneration with restricted transfer stock (RS)

Based on a yearly agreement between the Company and the corporate executive officers on the allocation of restricted transfer stock, an allocation of the Company's common stock is made in line with the base value for the office title. In order to share shareholder value and achieve growth in share price in the medium to long term, the period of transfer restriction shall be from the date of allocation to the date of retirement as a corporate executive officer of the Company.

Remuneration clawback and other important matters

The Company may apply other special remuneration and benefits, where necessary, after a case-by-case review by the Compensation Committee. In addition, if a director or corporate executive officer is found to have committed misconduct or other infringement, the Company may, subject to a review by the Compensation Committee, make a claim against the director or corporate executive officer to withdraw the right to receive remuneration ("malus clause") or to reclaim the remuneration ("clawback clause").

Governance

Corporate Governance

Aggregate amount of remuneration of company officers

Aggregate amount of remuneration of officers for fiscal 2021

Category of officer	Aggregate amount of consolidated remuneration, etc. (millions of yen)					Number of officers
	Basic remuneration, etc.	Performance-linked remuneration		Restricted transfer stock	Total	
		Cash bonus	Stock-based remuneration			
Directors (internal)	169 (169)	—	—	—	169 (169)	5
Directors (outside)	86	—	—	—	86	6
Corporate executive officers	366 (355)	67 (67)	80 (80)	267 (267)	780 (769)	8
Total	621 (610)	67 (67)	80 (80)	267 (267)	1,034 (1,023)	19

- Notes: 1. The aggregate amount of remuneration, etc., above is stated as consolidated remuneration, etc. (the sum of remuneration paid or to be paid, or expenses, etc., borne by the Company and its subsidiaries). For directors (internal) and corporate executive officers, the amounts in brackets are the sum of remuneration, etc., paid by the Company. For outside directors, the aggregate amount of consolidated remuneration, etc., is paid fully by the Company.
2. MCG directors who serve concurrently as corporate executive officers are remunerated as corporate executive officers.
3. The amounts of basic remuneration, etc., and cash bonus are the sum of remuneration, etc., paid during the fiscal year under review (all monetary remuneration).
4. The amount shown for basic remuneration, etc., includes fringe benefits for corporate executive officers of overseas nationality (covering costs for short home country visits, children's education, increase in gross fringe benefits, etc.). Furthermore, in the case of such officers, MCHC bears expenses of ¥33 million for housing, medical insurance, etc., as fringe benefits, i.e., non-monetary remuneration, in addition to the above remuneration.
5. The performance-linked remuneration of corporate executive officers includes amounts paid during the fiscal year under review to corporate executive officers who retired in the previous fiscal year. Moreover, corporate executive officers who retired in the previous fiscal year while remaining in post as directors are classified as directors (internal) for basic remuneration, etc., and as corporate executive officers for performance-linked remuneration.
6. The amount stated above for stock-based remuneration is the sum of relevant expenses recorded for fiscal 2021 (expenses for the performance share units (PSU); ▶ Page 60) introduced in fiscal 2021 and expenses for the BIP trust-based stock-based remuneration that was applied up to fiscal 2020).
7. The amount stated above for restricted transfer stock is the sum of relevant expenses recorded for fiscal 2021 (sum of expenses for allocation of restricted transfer stock at the base value for the office title whose transfer restriction is removed on the officer's retirement and expenses for a restricted transfer stock allocation to the corporate executive officer, president and CEO as a sign-on bonus).

Method of calculating performance-linked remuneration paid during fiscal 2021

The Company's performance-linked remuneration is decided mainly on the basis of the assessment of KAITEKI value (the achievement of annual targets under the MCG Group's three axes of KAITEKI Management: MOS, MOT, and MOE).

Cash bonus

Individual remuneration amount =
Base amount for office title × KAITEKI value assessment (0–200%)

Stock-based remuneration

Number of Individual points awarded for stock allocation =
Base points for office title × KAITEKI value assessment (0–200%)

Results of KAITEKI value assessment

The result of the assessment of KAITEKI value for fiscal 2020 was B (50%).

The major indicators used in the assessment of KAITEKI value and their weight in the assessment are indicated below.

Major indicators		% weight in assessment
MOS	Reduction of GHG and other environmental impacts	10%
	Contribution index for pharmaceutical provision	
	Employee wellness index	
MOT	New product creation rate	10%
	Patent examination request/claims rate	
	Core technology evolution rate	
MOE	Core operating income	80%
	ROE	
	Free cash flow	

- Notes: 1. KAITEKI value assessment: Performance is rated on a five-level scale with "A" (100%) as the base value, "SS" (200%) when the target is surpassed by a significant margin, "S" (150%) when the target is surpassed, "B" (50%) when the target is missed, and "C" (0%) when the target is missed by a significant margin (figures in brackets: percentage payout).
2. Stock-based remuneration: Points are awarded each year in proportion to the KAITEKI value assessment. An amount of the Company's common stock, etc., equivalent to the accumulated points together with the dividends accrued on such stocks is paid on the officer's retirement. Under the fiscal 2021 plan for the PSU system introduced in fiscal 2021 (▶ Page 60), a number of shares, calculated based on the Company's share price growth in the three-year period to fiscal 2023 and other factors, is due to be allocated in 2024. The result of the assessment and the number of shares to be allocated are thus yet to be decided.

Governance

Message from an Outside Director of the Board

**Tatsumi Yamada**

Outside Director
Chairperson of the Audit Committee
Certified Public Accountant

Monitoring the operational status of the organization from an outside perspective and supervising decision-making to maximize corporate value

Oversight of management policy formulation and business execution to increase shareholder value

Mitsubishi Chemical Group Corporation has worked to formulate a new management policy in the short time since Jean-Marc Gilson was appointed president in April 2021. Such rapid and decisive progress was achieved through dedicated efforts by the executive officers and the leadership of the president, plus lively discussions at Board of Directors' meetings.

All five strategic priorities hammered out in the "Forging the future" management policy, announced in December 2021, reflect our goal of streamlining businesses to maximize corporate value. MCG has long focused on finding business opportunities that address social issues to develop a sustainable business, but using "carbon neutrality" as an assessment criteria for selecting markets will make this sustainability focus even more tangible.

From April 2022, MCG has moved to a globally integrated structure for the Group's businesses and corporate functions. This new organization is expected to make MCG more efficient, enabling faster decision-making and lower cost structures, but it will only function if all employees fully understand the "One Company, One Team" concept and communicate with each other effectively to achieve it. In the new structure, we seek to oversee all aspects of operational execution by the executive officers. From a business perspective, we will be closely monitoring whether we have the right processes and investment decisions in place to achieve key financial targets and how we are progressing. As for corporate management, we will be

monitoring operational matters including workplace safety and corporate governance, compliance, internal controls, and human resources development. There will also be rigorous debate by the Board of Directors on the approach to risks taken by the executive team, including the president, and whether the business portfolio transformation is sustainable.

Expressing views based on external perspectives, and enhancing the auditing structure

My appointment as chairperson of the Audit Committee in April 2022 marks the first time an outside director has taken on this role at MCG. The Audit Committee members are responsible for auditing the execution of duties by the executive officers, preparing audit reports, and evaluating the execution of duties by the accounting auditors. To fulfill these duties, we need to gather information from diverse sources and investigate matters from wide-ranging perspectives, while making appropriate decisions on important matters in a timely manner. The Audit Committee secretariat supports us in the execution of our duties. I am heartened by MCG's decision to increase the number of secretariat staff from three to six people (as of October 2022) in order to enhance our ability to gather information. With this new organizational structure, I expect to utilize my position as an outside director in the chairperson role by bringing external perspectives not confined by standard business practice in the industry, and also by drawing on my expertise in accounting and auditing. I look forward to discharging our Audit Committee duties in a fair and transparent manner through active debate.

Governance

Directors As of July 1, 2022

Director
President & CEO

Jean-Marc Gilson

- Aug. 1989 Joined Dow Corning Corp.
- Jun. 2005 Corporate Vice President & General Manager of Specialty Chemicals Business, President Asian Area of Dow Corning Corp. (until Jun. 2009)
Shareholder Representative Director of Dow Corning Toray Co., Ltd. (until Jun. 2009)
- Jun. 2009 Executive Vice President & General Manager of Specialty Chemicals Business of Dow Corning Toray Co., Ltd. (until Dec. 2010)
- Feb. 2011 Chief Executive Officer of Avant Performance Materials, Inc. (until Dec. 2011)
- Feb. 2012 Vice Chairman & Chief Operating Officer of NuSil Technology LLC (until Jun. 2014)
- Sep. 2014 Chief Executive Officer of Roquette Frères S.A. (until Dec. 2020)
- Feb. 2021 Executive Advisor of MCHC
- Apr. 2021 Corporate Executive Officer, President and CEO of MCHC
- Jun. 2021 Director of the Board, Corporate Executive Officer, President and CEO of MCHC (to present)



Director
Executive Vice President

Ken Fujiwara Member of
the Nominating Committee

- Apr. 1984 Joined Mitsubishi Chemical Industries Limited
- Apr. 2015 Executive Officer of MCHC
- Apr. 2017 Executive Officer of MCC (until Mar. 2018)
- Apr. 2018 Managing Corporate Executive Officer of MCHC
- Jun. 2018 Director of the Board, Managing Corporate Executive Officer of MCHC
- Jun. 2020 Director of the Board of MTPC (to present)
- Apr. 2022 Director of the Board, Executive Vice President of MCHC (to present)
Director of the Board of MCC (to present)
Director of the Board of LSII (until Jun. 2022)



Director

Glenn H. Fredrickson

- Jan. 1990 Associate Professor, Departments of Chemical Engineering and Materials, University of California, Santa Barbara (UCSB)
- Jul. 1991 Distinguished Professor, Departments of Chemical Engineering and Materials, UCSB (to present)
- May 1998 Chairperson, Department of Chemical Engineering, UCSB (until Jul. 2001)
- Mar. 2001 Director of Mitsubishi Chemical Center for Advanced Materials at UCSB (to present)
- Apr. 2014 Managing Executive Officer of MCHC
- Jun. 2014 Director of the Board, Managing Executive Officer of MCHC
- Jun. 2015 Director of the Board, Managing Corporate Executive Officer of MCHC
- Apr. 2017 Director of the Board of MCHC (to present)



Director

Hiroshi Katayama Member of
the Audit Committee

- Apr. 1983 Joined Mitsubishi Chemical Industries Limited
- Apr. 2014 Executive Officer of MCC
- Apr. 2017 Executive Officer of MCC
- Apr. 2018 Managing Executive Officer of MCC (until Mar. 2020)
- Jun. 2020 Director of the Board of MCHC (to present)
Corporate Auditor of LSII (until Jun. 2022)

MCG: Mitsubishi Chemical Group Corporation
MCHC: Mitsubishi Chemical Holdings Corporation*
MCC: Mitsubishi Chemical Corporation
MTPC: Mitsubishi Tanabe Pharma Corporation
LSII: Life Science Institute, Inc.
NSHD: Nippon Sanso Holdings Corporation

* Effective July 1, 2022, Mitsubishi Chemical Holdings Corporation (MCHC) changed its company name to Mitsubishi Chemical Group Corporation (MCG).

Governance

Directors



Outside Director

Lead Independent
Outside Director

Chairperson of
the Nominating Committee

Member of
the Compensation Committee

**Takayuki
Hashimoto**

Apr. 1978 Joined IBM Japan, Ltd.
Apr. 2000 Director of the Board of IBM Japan, Ltd.
Apr. 2003 Managing Executive Officer of IBM Japan, Ltd.
Jan. 2007 Senior Managing Executive Officer of IBM Japan, Ltd.
Apr. 2008 Director of the Board, Senior Managing Officer of IBM Japan, Ltd.
Jan. 2009 Director of the Board, President of IBM Japan, Ltd.
May 2012 Director of the Board, Chairperson of IBM Japan, Ltd.
Apr. 2014 Chairperson of IBM Japan, Ltd.
Jan. 2015 Vice Chairperson of IBM Japan, Ltd.
Jun. 2016 Outside Director of MCHC (to present)
May 2017 Honorary Executive Advisor of IBM Japan, Ltd. (to present)



Outside Director

Independent Director

Chairperson of
the Compensation Committee

Member of
the Nominating Committee

**Chikatomo
Hodo**

Sep. 1982 Joined Accenture Japan Ltd
Sep. 2005 Representative Director of Accenture Japan Ltd
Apr. 2006 Representative Director and President of Accenture Japan Ltd
Sep. 2015 Director and Chairperson of Accenture Japan Ltd
Sep. 2017 Director and Senior Corporate Advisor of Accenture Japan Ltd
Jul. 2018 Senior Corporate Advisor of Accenture Japan, Ltd. (until Aug. 2021)
Jun. 2019 Outside Director of the Board of MCHC (to present)



Outside Director

Independent Director

Member of
the Nominating Committee

Member of
the Audit Committee

**Kiyomi
Kikuchi**

Apr. 1986 Joined The Dai-Ichi Kangyo Bank, Ltd. (until Dec. 1990)
Apr. 1999 Registered as a lawyer at Asahi Law Offices
Sep. 2002 Allen & Overy LLP (London)
May 2003 Admitted to the bar of the State of New York
Oct. 2003 Asahi Law Offices
Sep. 2004 Taiyo Law Office
Sep. 2006 JPMorgan Securities Japan Co., Ltd.
Apr. 2008 TMI Associates (to present)
Jun. 2019 Outside Director of MCHC (to present)



Director

Independent Director

Chairperson of
the Audit Committee

Member of
the Compensation Committee

**Tatsumi
Yamada**

Apr. 1976 Joined Sumitomo Corporation (until Jun. 1993)
Mar. 1980 Registered as a Certified Public Accountant
Jul. 1993 Chuo Audit Corporation (until Mar. 2001)
Apr. 2001 Board Member of the International Accounting Standards Board (until Jun. 2011)
Sep. 2011 KPMG AZSA LLC (until Jun. 2018)
Jan. 2012 Board Member of KPMG AZSA LLC (until Jun. 2015)
Feb. 2014 Founding member of International Integrated Reporting Council (currently the Value Reporting Foundation) (to present)
Oct. 2014 Trustee of International Valuation Standards Council (until Oct. 2020)
Sep. 2015 Specially Appointed Professor of Faculty of Commerce, Chuo University (to present)
Apr. 2016 Member of the Certified Public Accountants and Auditing Oversight Board for the Financial Services Agency (until Mar. 2022)
Jun. 2020 Outside Director of MCHC (to present)



Outside Director

Independent Director

Member of
the Nominating Committee

Member of
the Audit Committee

**Takako
Masai**

Nov. 1988 Joined Tokyo Branch, The Bank of Nova Scotia
May 2007 Head of Capital Markets Division, Shinsei Bank, Limited
Oct. 2011 Head of Markets Sub-Group, Shinsei Bank, Limited
Apr. 2013 Executive Officer, Head of Markets Research Department, Markets Sub-Group, Shinsei Bank, Limited
Jul. 2015 Executive Officer, General Manager of Markets Research Division, Shinsei Bank, Limited
Apr. 2016 Executive Officer, General Manager of Financial Research Division, Shinsei Bank, Limited
Jun. 2016 Member of the Policy Board, Bank of Japan (until Jun. 2021)
Jul. 2021 Outside Director of the Board of MCHC (to present)

Governance

Risk Management

Risk management system

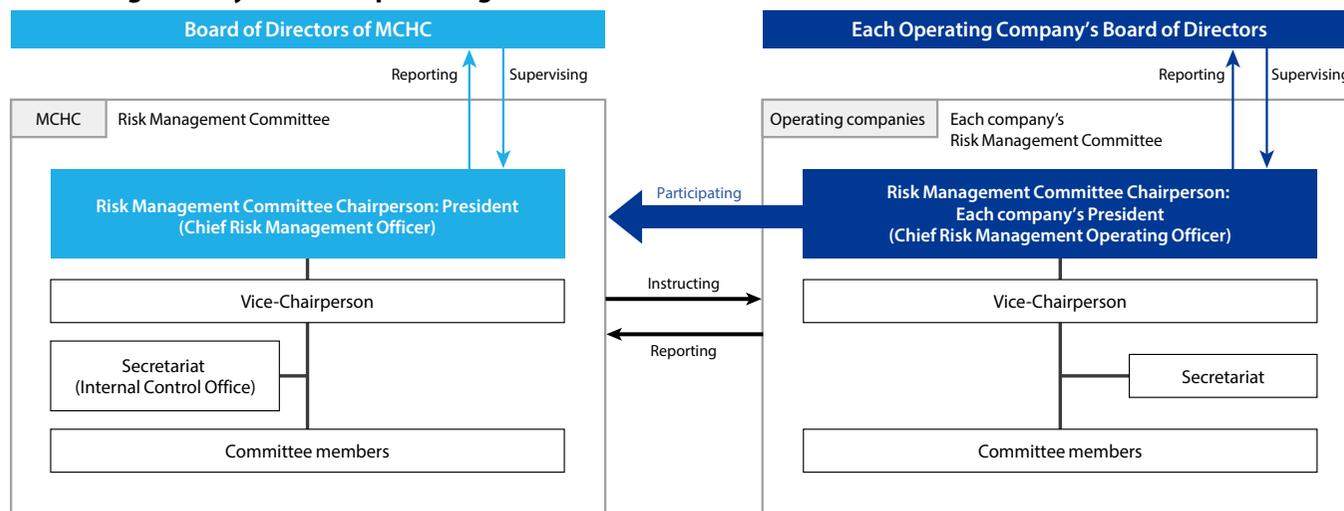
The Mitsubishi Chemical Group is engaged in corporate activities with the objective of improving corporate value. These activities are related to social conditions, the global environment, and various other externalities, and they involve potential risks.

Until fiscal 2021, we operated a risk management system in which the president of the former Mitsubishi Chemical Holdings Corporation (MCHC) acted as Chief Risk Management Officer for the entire Group in accordance with risk-related regulations. The status of the management of significant risks and risk management policies that affect the entire Group were deliberated on and

decided by the Group's Risk Management Committee and reported as appropriate to the Board of Directors.

The presidents of operating companies established their company group's risk management system as Chief Risk Management Operating Officers for their group and conducted management through each company's Risk Management Committee. In our risk management system, all of our executives, managers, and employees in general were involved in risk management from their own standpoints, as we see the importance of fostering an awareness of risk management among them.

Risk management system conceptual diagram (As of March 2022)



Risk management process (As of March 2022)

- 1 Identification of risks**
 All operating companies of the Group regularly identify both internal risks associated with business types and models, and external risks such as country specific risks and economic risks.
- 2 Risk assessment and measures**
 Each operating company assesses the impact and frequency of each of the risks identified and establishes an order of priority using a uniform framework. Senior managers specify risks with significant impacts on the Group management as major risks. The relevant departments then implement appropriate risk mitigation measures as instructed.
- 3 Detailed examination of risk measures**
 Risk measures are periodically scrutinized. Countermeasures against the major risks, in particular, are reported to each Chief Risk Management Officer at operating companies.
- 4 Auditing**
 To ensure the proper administration of these risk management systems, the Internal Audit Office periodically conducts audits and reports to the Chief Risk Management Officers.

Governance

Risk Management

Measures against major risks

The MCG Group has categorized the following risks as high priority. In recognition of these risks, we strive to avoid the occurrence of such risks and minimize damage when they do occur.

Accidents, work injuries, and large-scale natural disasters

As a safety measure to prevent any accidents at each operating site, we enhance the quality of training for operators for maintaining appropriate operations and safe facilities. In the event of accidents, we analyze the cause, plan countermeasures, and verify the effectiveness of these countermeasures. We also strive toward advance prevention and recurrence prevention of accidents by sharing technical and operational measures among Group companies.

In preparation for large-scale natural disasters, we conduct special training customized based on the conditions for the head offices, branches, and offices of each operating company to minimize damages and to secure business continuity under such an event.

Compliance

To foster a culture of compliance within the Group, we have taken comprehensive necessary actions such as preparing the Group Charter of Corporate Behavior and rules and standards, distributing a compliance guidebook, providing training and seminars, implementing regular audits, and operating and maintaining a compliance hotline. We also strengthen compliance at overseas operations, by adjusting codes of conduct and implementation rules in accordance with the rules, regulations, and social norms of the country.

Human rights issues

In line with the commitments set out in our Global Policy on Respecting Human Rights, Employment and Labor, we work through dialogue with stakeholders and other activities based on the approach of human rights due diligence to monitor the value chain for human rights violations and high-risk situations. Where a high-risk workplace or other situation of concern is identified, we seek improvement to prevent adverse human rights outcomes. In the rare event of a human rights violation occurring, we take steps to resolve the issue at an early stage.

Group governance

MCG clarifies the responsibilities of corporate organizations and improves systematic approaches to minimize overall Group risks in Group governance in Japan and overseas. For example, to mitigate risks arising from laws and systems specific to the countries in which we operate, we have collected and disseminated cases of significant accidents and violation of laws in each country to raise awareness of those risks across the Group. Furthermore, in preparation for political or other changes in such countries, we have established a system of communication between the local area, the operating companies, and the Company to ensure awareness of governance issues.

Information security

To protect information assets, we have established information security-related regulations and are working to strengthen the maintenance and management of information security at business sites in Japan and overseas. We are also promoting awareness of strict compliance with the Group Information Security Policy among all employees by providing special training, including practical drills in response to targeted attack emails or other training via an e-learning system.

ACTION

MCG Group Policy with COVID-19

In January 2022, the MCG Group announced the COVID-19-related guidelines set out below. These were rolled out Group-wide, with flexible adjustment to changing conditions.

MCG Group Policy with COVID-19

1. We will give foremost priority to employee safety and health.
2. Each Group company will make provisions to allow diverse work styles in line with the characteristics of its operations.
3. Each workplace, meeting venue, etc., will pay close attention to infection prevention, for example, through social distancing, ventilation, mask wearing, hand hygiene, and monitoring of physical condition.
4. We will strongly encourage COVID-19 vaccination.

However, where this policy differs from practice under local law or regulation, the latter takes precedence.

Governance

Risk Management

Measures against future risks

The MCG Group is also addressing future risks by planning a medium- to long-term strategy.

Climate change

While the chemical industry is an industry with high GHG emissions, it can also contribute to the reduction of GHGs through its products. There is a risk that future earnings may be affected if we are unable to comply with customer requests regarding such products as automobiles and lighting fixtures, for which environmental standards and energy efficiency are important. The MCG Group has identified GHG reduction as a material issue under *APT/ST/25*. As well as promoting products that contribute to improving energy efficiency, we are working on further adaptation and development.

Digital technologies

The digital technologies represented by artificial intelligence (AI) and the Internet of Things (IoT) are bringing dramatic change to business models and supply chains across the whole of industry. If the MCG Group fails to adapt appropriately to this change, it risks a decline in competitiveness. To maintain and reinforce competitiveness, we are applying AI and the IoT to digitize the customer interface for an enhanced customer experience, and using these technologies to optimize the supply chain, to automate process control and product analysis and quality inspection, and to promote new material and pharmaceutical development.

ERM initiatives

Introduction of ERM for more advanced risk management

To move toward more advanced risk management in line with the new system introduced in April 2022, we have decided to introduce enterprise risk management (ERM).* Currently, preparations for its introduction are in progress.

* Risk management based on the entire organization

ERM at the MCG Group

Unlike the previous system, where each Group operating company took charge of its own risk management, this system will achieve optimization across the Group. It works to manage and visualize the wide-ranging risks and opportunities in a company's environment, enabling management to take on healthy risk in order to maximize corporate value.

Key points of introduction

ERM will visualize uncertain factors with an impact on the strategic and financial targets of the MCG Group as a whole, allowing a Group-wide response.

- By expanding the scope of risk management, it will not only identify risk in the form of potential loss but also opportunities.
- Based on identification of risk connected with the Group's material issues, we will be able to select risks to be addressed as a priority.

Expected effects

More accurate planning based on risks and opportunities	<ul style="list-style-type: none"> • Taking account of risk in the external and internal environment will lead to more accurate business planning. • A more clearly defined policy in response to risks and opportunities will contribute to fulfillment of business plans.
Strengthened response to risks and opportunities	<ul style="list-style-type: none"> • The process of selecting risks and opportunities to be addressed as a priority will become more clearly defined, as will responsibility for individual risks and opportunities.
Stronger accountability	<ul style="list-style-type: none"> • ERM will bring greater clarity and improvement in information disclosure to stakeholders (disclosure on the status of response to risks and opportunities).

Governance

Compliance

For the Mitsubishi Chemical Group, the word compliance has a broad meaning encompassing not just basic adherence to the law but also observance of corporate ethics and general social norms. We regard compliance as one of the most important management issues and engage in a range of initiatives to instill a culture of compliance throughout the Group.

Charter of Corporate Behavior

The MCG Group Charter of Corporate Behavior declares explicitly our commitment to applying sound ethics and good common sense to every aspect of our corporate activities.

Among other things, the Charter sets out fundamental principles of conduct for achieving sustainable development in harmony with society and explains our approach to the main issues affecting our contribution to the realization of KAITEKI.

[Charter of Corporate Behavior](#)

Compliance promotion structure

The Group Chief Compliance Officer (CCO), who is appointed by the MCG Board of Directors, is responsible for implementing compliance. Internal control departments support the Group CCO, acting as secretariats for compliance-related matters.

The secretariats work through the overseas administrative headquarters established in the United States, Europe, the Asia-Pacific region, and China to ensure compliance in line with local information and conditions. In addition to developing shared educational tools, we provide training to overseas Group companies and help them to set up compliance hotlines. As secretariats, the internal control departments operate hotline systems and implement training courses and seminars, business

audits, compliance awareness surveys, and other activities in line with compliance promotion regulations.

In the case of an actual or potential compliance violation, the department affected reports to and consults with the Group CCO, receives guidance and directions, and takes appropriate preventive or corrective actions and measures to guard against recurrence.

Hotline systems

Hotline systems are managed and operated with the MCG internal control departments and external lawyers serving as contact points. In fiscal 2021, 175 cases were reported via the hotline systems. We respond to reported issues through our investigation teams, which are headed by the managers of the internal control departments. Corrective measures are taken promptly in line with the relevant regulations under the direction of the CCO.

Measures and results in fiscal 2021

In fiscal 2021, we commissioned an external agency to survey employees' awareness of compliance within the Group in Japan in order to continuously monitor the spread of compliance awareness. The survey results were presented as feedback to all Group companies and departments, who use them to enhance compliance awareness through education and training and other activities. At the same time, we have quantified the responses to questions related to matters such as individual awareness and behavior and the workplace climate as a compliance improvement awareness index and incorporated it into our MOS Indices.

ACTION

Compliance training

The MCG Group provides grade-specific compliance training every year in Japan and overseas. We provide a variety of learning settings, including lecture-style training for large groups and discussion-style training for small groups to enhance the effectiveness of such training.

In fiscal 2021, the president delivered a message to executives on the importance of compliance, using a live remote format. Using the same live remote format, a symposium for all employees was held on optimal compliance practice during the pandemic period as a way to encourage sharing of ideas on compliance.



Open Culture

I hope that everyone will feel free to share their opinions and contribute to the company. As one team, we can continue to make the company better and better.

To everyone who participated today

Tone from the Top

I would like to ask you to get your message out to your supervised business area that Compliance is as important as Safety at every opportunity.

Left: Sending a message on the importance of compliance through a live remote format

Above: Accompanying screen display

Sustainability

Message from the Officer Supervising Corporate Sustainability Management



We will aim for innovative business growth that balances market needs with the environmental and social impacts while delivering superior value to our stakeholders.

Joseph Rinaldi

Vice President
Chief Strategy Officer

Aiming for a balanced growth

For any company to be successful, it must make sustainable management one of its top priorities. It is no longer a question of whether a company's growth should be oriented toward environmental and social sustainability but how it should be put into practice. There is no doubt that sustainability has been a hallmark of the Mitsubishi Chemical Group for a long time and this will not change. Sustainability management will remain a critical issue under the new management structure and will continue to be housed within the strategy office to ensure its undiluted attention.

In line with the new management policy, "Forging the future" our objective is innovative business growth that balances market needs with the environmental and social impacts while delivering superior value to our stakeholders.

Progress on our material issues

The MCG Group has identified material issues, including perspectives from business foundations and environmental and social impacts. We have also set KPIs and targets to measure the progress of these issues (▶ Page 70). Under the "One Company, One Team" culture and flat organization, each corporate function division, business group, and strategy will work as one to accelerate initiatives, achieve targets, and strengthen our sustainability management. In addition, we aim for an operation that enables us to monitor progress easily and engage more actively with our stakeholders.

In fiscal 2021, we announced our policy to achieve carbon neutrality. In line with this, we are making progress in developing an LCA calculation system that will serve as a management tool for shifting our corporate activities toward

carbon neutrality and a circular economy (▶ Page 76). We have also reaffirmed our commitment by earmarking significant investment capital yearly to make the policy a reality.

Regarding employee engagement and diversity, we have increased opportunities for dialogue between management and employees to deepen our mutual understanding. Also, the increasing diversity among leadership will lay the groundwork for enhancing diversity and inclusion.

Superior safety and compliance are at the core of a company's existence. Therefore, we will place greater emphasis and work as one team to improve our performance in these areas.

Meeting the expectation of our stakeholders

Even though the future of the socio-economic situation is challenging to predict, the movement for building a standard framework for sustainability information disclosure is accelerating. We interpret this acceleration as a clear indication of our stakeholders and society's high expectations toward sustainability. Therefore, we will push for growth and value creation that meets those expectations. Furthermore, we will fulfill our accountability by disclosing our process and results and being transparent in our corporate activities.

Sustainability

Implementing Sustainability

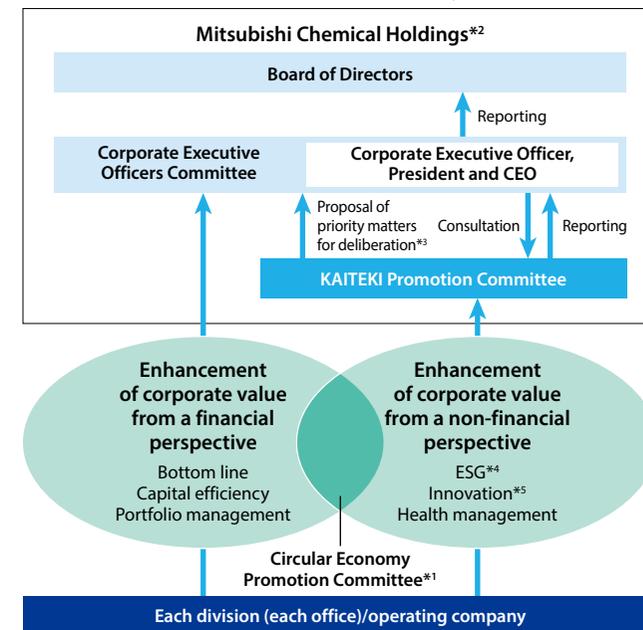
The Mitsubishi Chemical Group recognizes sustainability as an important management theme and is addressing the material issues identified in the formulation of the medium-term management plan by working to fulfill the targets set in connection with the issues.

Under the new management policy, "Forging the future," the Group will target sustainable growth by further strengthening the business foundation, working to improve environmental and social sustainability, including in the area of carbon neutrality, and nurturing businesses that support the portfolio strategy.

Structure for implementing sustainability

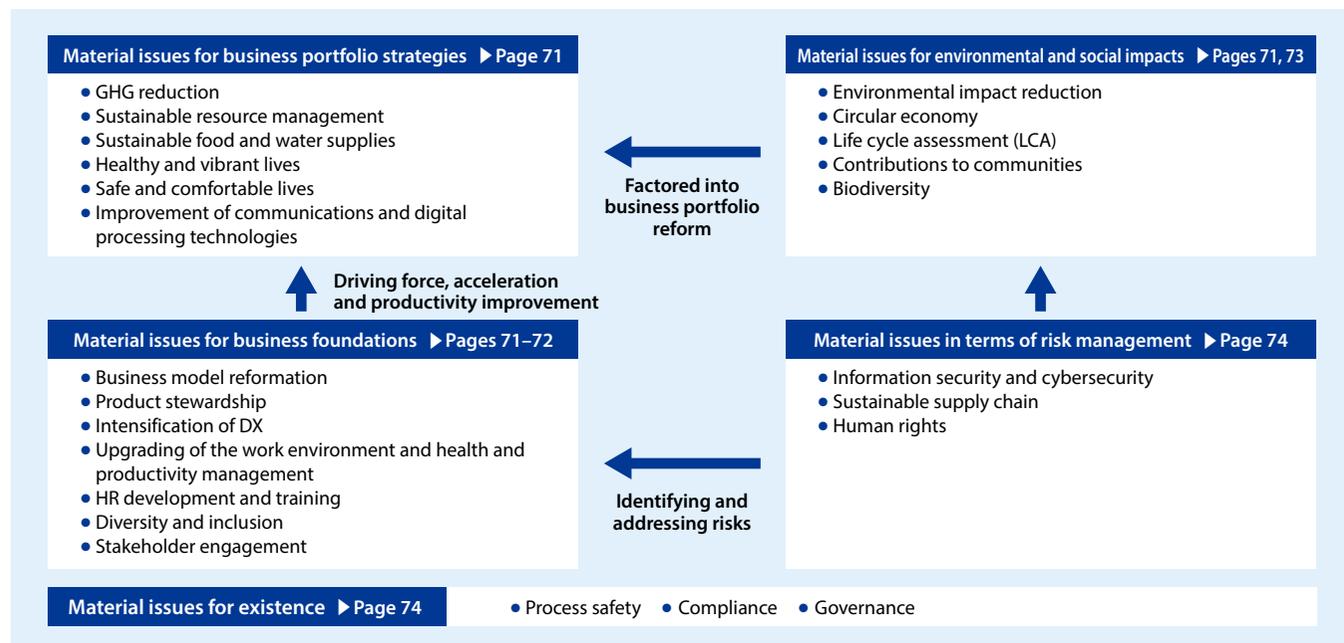
The MCG Group is taking measures to increase long-term corporate value and has established the KAITEKI Promotion Committee to coordinate the increase in corporate value from a non-financial perspective. Meanwhile, as a crossover between social and economic value, the Circular Economy Promotion Committee*1 has implemented Group-wide measures to advance the circular economy. Going forward, MCG will continue to steadily implement sustainability initiatives based on a structure aligned with the new management policy.

Structure for implementing sustainability in fiscal 2021



*1 Changed in 2022 to Green Transformation Promotion Committee
 *2 Currently Mitsubishi Chemical Group Corporation
 *3 Where necessary
 *4 Governance issues are mainly addressed by committees such as the Nominating Committee.
 *5 Determination of the direction of technologies, etc.

Overview of material issues [Identification process of material issues and related activities](#)



For the material issues identified, a strategic response is formulated and indices (MOS Indices) and targets are set to measure progress (Pages 71-74).

Discussions by the KAITEKI Promotion Committee

July 2021	<ul style="list-style-type: none"> Progress of MOS activities Exploring the path to carbon neutrality Activities for KAITEKI Health and Productivity Management Progress of MOT activities
February 2022	<ul style="list-style-type: none"> Sustainability-related information disclosure Activities related to MOS and human resources and work styles

Sustainability

Sustainability Indices

For the material issues identified by the Mitsubishi Chemical Group, targets are set and progress is measured with the Management of Sustainability (MOS) Indices.

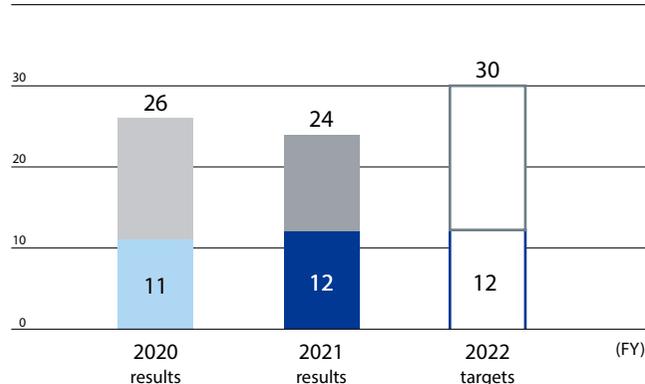
We will proceed steadily with initiatives on material issues by monitoring the yearly progress of each index.

Material issues for business portfolio strategies / Material issues for environmental and social impacts / Material issues for business foundation

Index

Percentage of sales revenue from the growth businesses (businesses that contribute to solving social issues)/ Percentage of sales revenue from products that contribute to the circular economy or mitigate and adapt to climate change*

■ Percentage of sales revenue from the growth businesses (businesses that contribute to solving social issues)
 ■ Percentage of sales revenue from products that contribute to the circular economy or mitigate and adapt to climate change
 (%)



* Products from growth businesses (businesses that contribute to solving social issues) that contribute specifically to the circular economy or mitigate and adapt to climate change.

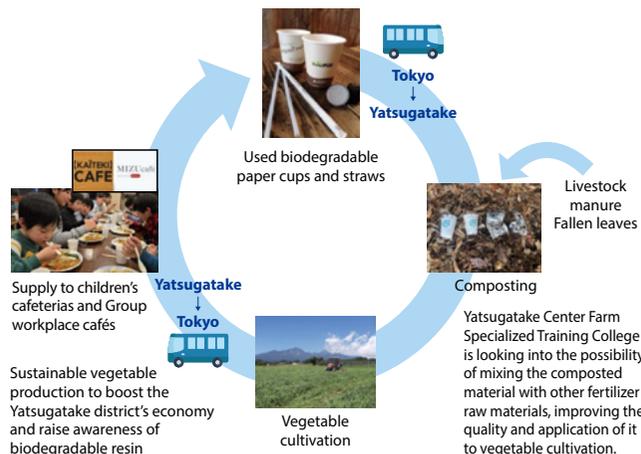
We will work steadily to achieve business growth by continuing to concentrate efforts on strategic focus markets where we have product strengths as a Group. Among these are products that contribute to wider use of EVs, products such as bioplastics that contribute to the circular economy, semiconductor materials, and healthcare products.



Finding solutions for a sustainable future

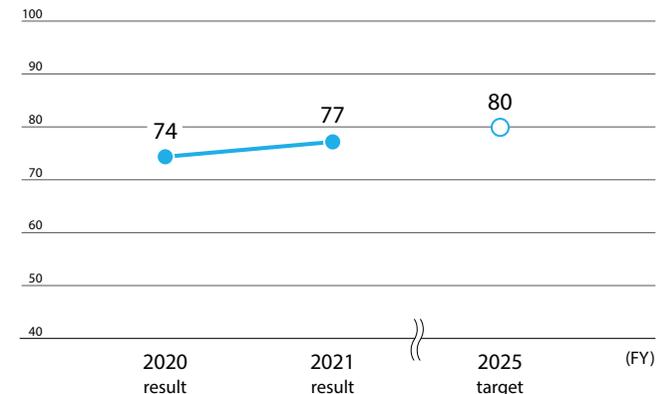
Building a recycling-oriented society through use of the biodegradable resin BioPBS and local resources

BioPBS is made with plant-based raw materials and can be fully biodegraded by soil microorganisms into water and CO₂. As a result, this material can contribute to reducing plastic waste and CO₂ emissions. Since 2020, Mitsubishi Chemical Corporation (MCC) has been engaged in a pilot study in the Yatsugatake district that takes BioPBS as the starting point for development toward a recycling-oriented society. In the study, paper cups and other items made with BioPBS are processed at Yatsugatake Center Farm Specialized Training College into compost for use by partner farms in the cultivation of vegetables.



Index

Level of customer satisfaction



The MCG Group is committed to showing respect for and maintaining close communication with customers and other stakeholders in order to build a better society together. The Group carries out a survey of customer satisfaction every year and analyzes the results as the basis for the PDCA cycle. This helps us to provide better services and improve customer satisfaction. In addition to satisfaction with services and products, the survey covers customer awareness of our sustainability initiatives and other items that allow us to track customer evaluation of the Group from multiple perspectives. Going forward, we will continue to strengthen relationships with customers by listening carefully to their voices, thereby promoting sustainable growth.

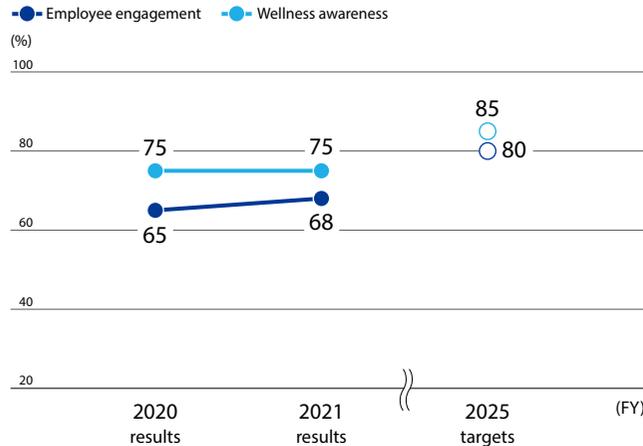
Sustainability

Sustainability Indices

Material issues for business foundations

Index

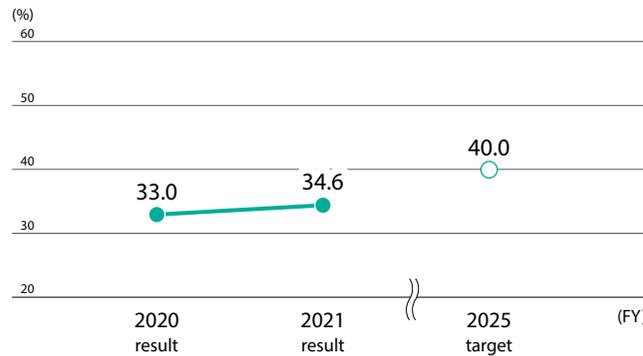
Employee engagement / Wellness awareness



The MCG Group attaches importance to creating an environment where employees are empowered to maximize their individual strengths and abilities. We believe that this results in high levels of creativity and productivity, which in turn strengthens the business foundation. The graph above shows the proportion of employees giving a favorable response under the items “Employee engagement” and “Wellness awareness” in the employee awareness survey. To reach the target for employee engagement, we have been holding town-hall meetings and creating opportunities for dialogue between management and employees to deepen mutual understanding. To raise wellness awareness, we provide an environment that enables diverse and flexible work styles and take measures to support employee health.

Index

Diversity among management



Diversity among management means the proportion of managerial staff with a diversity attribute. Increasing diversity among management will result in management decision-making by human resources with wide-ranging experience.

Index

Evaluation related to the ESG stock index

In recognition of the MCG Group’s initiatives, we have been included continuously in the ESG stock indices indicated below (as of June 30, 2022).

Dow Jones Sustainability Indices
Member of
Dow Jones Sustainability Indices
Powered by the S&P Global CSI

MSCI Japan ESG Select Leaders Index*
2022 CONSTITUENT MSCI JAPAN
ESG SELECT LEADERS INDEX
MSCI Japan Empowering Women Index*
2022 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)

FTSE4Good Index Series

FTSE4Good

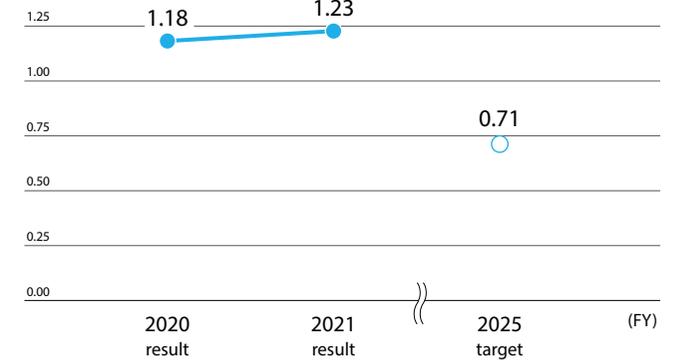
FTSE Blossom Japan Index

FTSE Blossom Japan Index

* The inclusion of the MCG Group in any MSCI Index, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, or promotion of MCG by MSCI or any of its affiliates. The MSCI Indexes are the exclusive property of MSCI. MSCI and the MSCI index names and logos are trademarks or service marks of MSCI or its affiliates.

Index

Lost-time injury frequency rate (LTIFR)



LTIFR, including overseas business sites, remains low. We will continue working to meet our target by strengthening measures to prevent occupational accidents, including ensuring strict compliance with basic safety practice and procedures, providing training, and conducting risk assessments.

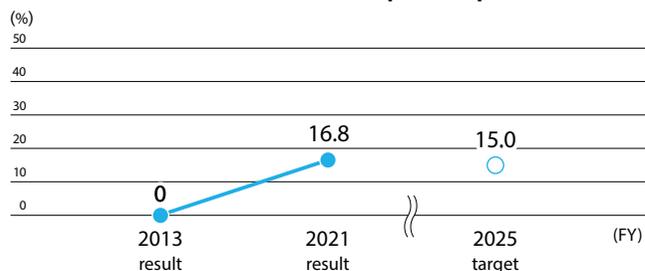
Sustainability

Sustainability Indices

Material issues for environmental and social impacts

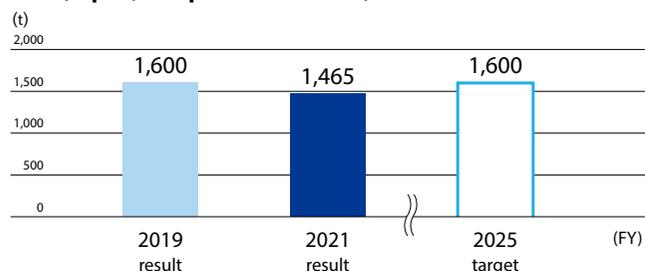
Index

Rate of reduction of GHG emissions (Japan, compared to FY2013)



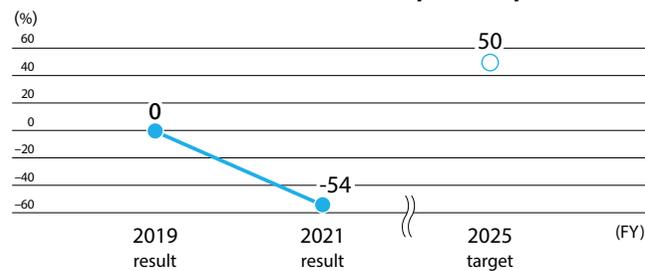
Index

COD (Japan, compared to FY2019)



Index

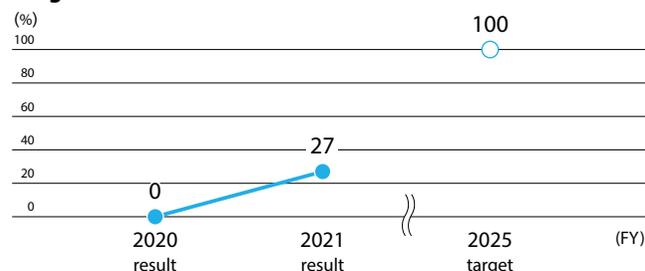
Rate of reduction of landfill waste* (Japan, compared to FY2019)



* Amount of landfill waste regularly generated in the Company's routine production and logistics activity

Index

Progress of LCA activities



Finding solutions for a sustainable future

Investment in GHG reduction

At the MCC Ogaki Plant, we installed a solar power generation facility in 2017. We plan to expand the facility and use the generated electric power within the plant to achieve an annual reduction of 40 to 50 tons in CO₂ emissions. Meanwhile, in March 2022 we purchased 20,000 kWh of environmental value (green power) from Ogaki City and received a Green Power Certificate from the city authorities.

Going forward, the MCG Group will promote wider use of solar power generation across its operations and drive global initiatives to realize carbon neutrality by 2050.



As a step toward reducing negative impacts on the global environment, resolving the issues of climate change and water resources, and building a recycling-oriented society, we have set indices to measure impact reduction in the atmosphere, water, and waste.

In fiscal 2021, due to increased production efficiency and facility upgrades, we achieved a 16.8% reduction in domestic GHG emissions compared to fiscal 2013 and a reduction in COD compared to fiscal 2019. To reduce the amount of landfill waste, we are working to improve production yield and boost the recycling rate. To continue reducing the environmental impact going forward, we will push ahead with reduction measures and consider setting new GHG and global targets for fiscal 2025.

Concurrently, we are progressing with an initiative to use LCA as a management tool and in fiscal 2021 we established a standard method for calculating the product carbon footprint (▶ Page 76).

Sustainability

Sustainability Indices

Material issues for existence / Material issues in terms of risk management

Index

Number of serious compliance violations

3

(Fiscal 2025 target: 0)

We take a serious view of the outcome in fiscal 2021 and are taking far-reaching corrective action and measures to prevent a recurrence under the guidance and supervision of the Chief Compliance Officer. Under the “One Company, One Team” approach, we will roll out a compliance implementation program on a shared global platform and provide regular education and training for all employees, with ongoing monitoring of the progress in instilling a culture of compliance awareness.

Index

Number of accidents

Process safety accidents

17

(Fiscal 2025 target: 16)

Environmental accidents

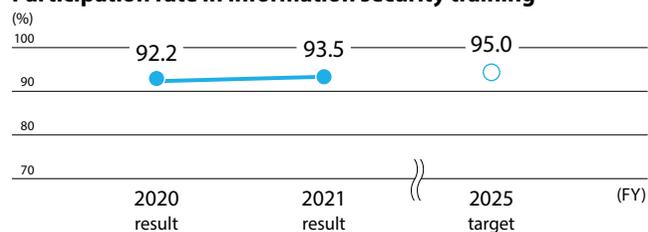
0

(Fiscal 2025 target: 0)

There were 17 process safety accidents in fiscal 2021. Recognizing safety assurance as a corporate social responsibility, we undertake risk assessment to prevent accidents and support ongoing stable operations. As in fiscal 2020, there were no environmental accidents in fiscal 2021.

Index

Participation rate in information security training



To cultivate in all staff members an awareness of the importance of protecting information assets as an employee responsibility, we work through annual training to enhance awareness of information security. Employees who have not yet undergone the training receive repeated invitations to participate in order to underline its importance. As a result, the participation rate for fiscal 2021 increased over the previous fiscal year.



Finding solutions for a sustainable future

Strengthening sustainable supply chains

We support our business partners to help them understand the MCG Group's corporate mission and work with them to address environmental and social issues in order to build and strengthen the sustainability of our supply chain.

We distribute to our business partners a guidebook entitled *Developing Cooperative Business Practices with Suppliers and Business Partners*, which summarizes our standards across a wide range of areas including respect for human rights, employment, environmental protection, and ensuring occupational health and safety. We use a questionnaire to check the status of related activities. By presenting the results of the questionnaire as feedback to business partners, we engage in dialogue to better identify risks and improve response to individual issues. In this way, we aim to cultivate healthy relationships that promote mutual growth.



Finding solutions for a sustainable future

Fostering a safety culture

Safety is the foremost priority of the MCG Group's business activities. An example of our activities in this area was the safety culture assessment carried out by a third-party organization at the MCC Toyama Plant. A questionnaire survey of all plant employees was conducted, with the results analyzed to identify issues. Addressing the issues head-on, we have discussed improvement strategies, put safety systems in place, worked to reform awareness, and enhanced educational facilities as part of wide-ranging measures to foster a safety culture. This initiative was recognized by the Japan Chemical Industry Association with the Jury's Special Award in the fiscal 2021 Responsible Care Awards.



Recital of safety guidelines at the morning meeting

Sustainability

Promoting a Circular Economy

In 2022, Mitsubishi Chemical Group Corporation expanded the mission of the Circular Economy Promotion Committee, established in 2019, to create the Green Transformation Promotion Committee. The committee promotes the circular economy on a Group-wide basis through a fusion of social and economic value. The main strands of this initiative are the cyclical use of carbon (CO₂), plastics and water resources, and the evolution of LCA tools.

Action rollout through alliances

One of Mitsubishi Chemical Corporation (MCC)'s activities to reduce pollution, waste emissions, and resource consumption throughout the supply chain is its participation in the Japan Clean Ocean Material Alliance (CLOMA*4).

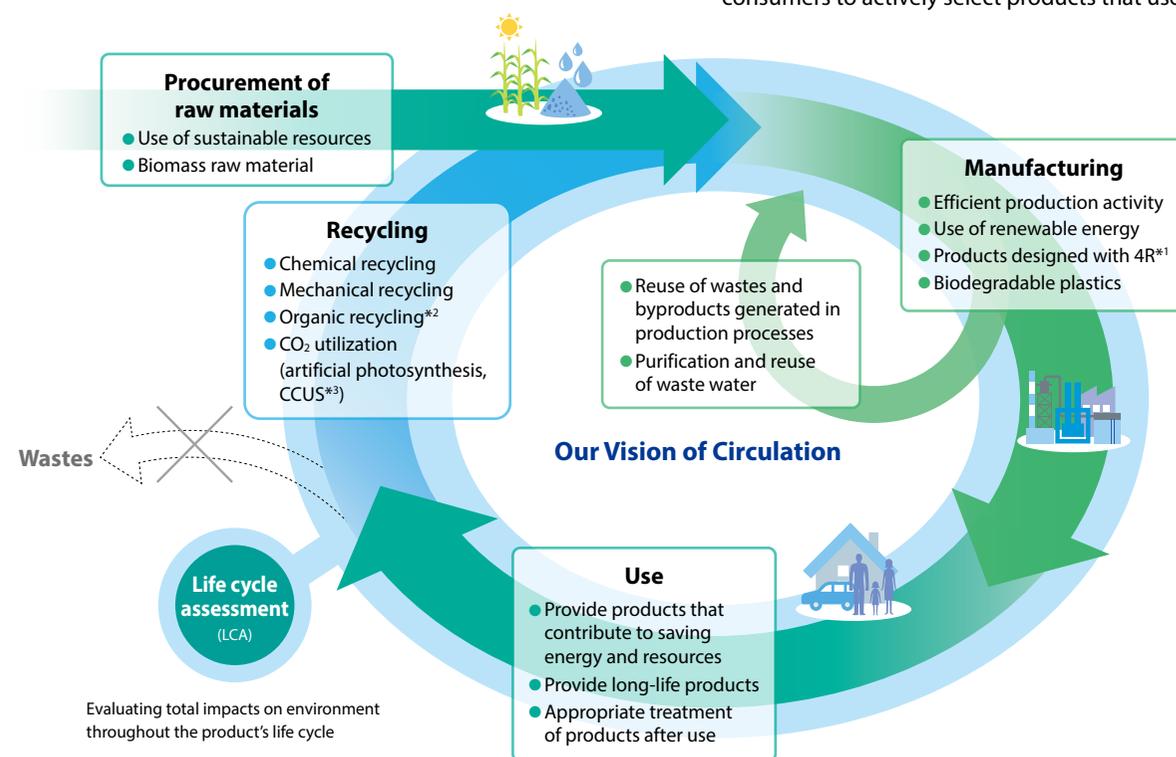
At the CLOMA Forum 2021, we gave a presentation on the development and utilization of biodegradable plastics such as biodegradable barrier packaging. We will continue working to promote the adoption of biodegradable plastics that contribute to environmental impact reduction and to expand their applications. We will also create an environment that encourages consumers to actively select products that use these materials.

Realizing sustainability throughout the life cycle: Utilization of biomass materials

MCC is working with Toyota Tsusho Corporation on a commercialization project with the aim of launching production and sales in fiscal 2025 of plant-based ethylene, propylene, and derivative products produced from bioethanol made with sugarcane or other source materials. We envisage their use across a wide range of sectors, including in products that are normally difficult to collect and recycle. The use of plant-based raw materials will enable us to contribute to realizing a sustainable life cycle.

Design of pilot plant for MMA monomers using plant-derived materials has begun

MMA is a raw material for acrylic resins, which are used in a wide range of products from automotive lamp covers, signs, and aquarium tanks to paint and construction materials. Global demand is expected to show solid growth. MCC has developed a manufacturing technology to produce MMA monomers from plant-derived materials and begun designing a pilot plant. The plant is due to begin operations in fiscal 2023. After demonstrating the technology's viability, we aim to apply it to a commercial-scale plant in 2026. We are also looking into the possibility of molecular recycling to reutilize acrylic resins through processing back into MMA monomer. In this way, we will continue working for environmental impact reduction across the supply chain (▶ Page 91).



*1 4R: Reuse, Reduce, Recycle, Renewable

*2 Technology to produce valuable products through composting and methane fermentation

*3 Carbon capture, utilization, and storage, a technology for capturing CO₂ and using or storing it to prevent its release into the atmosphere

*4 An organization set up within the Japan Environmental Management Association for Industry in 2019 to accelerate innovation to resolve the issue of marine plastic waste through cross-industry collaboration

Sustainability

Evolving LCA Systems Further

To achieve carbon neutrality by 2050, we will use life cycle assessment (LCA) systems to determine our priorities when selecting focus markets.

In order to use LCA systems as an advanced management tool in the chemicals industry, Mitsubishi Chemical Group Corporation is (1) laying foundations for the systems, (2) broadening the scope of calculation, and (3) developing new uses. By taking these steps, we will be able to make accurate comparisons not just at the product and service level, but also across the entire product value chain including businesses and manufacturing sites, which will inform our “selection and focus” efforts for businesses, investment, and R&D as we work to become carbon neutral.

(1) Standardizing methods to lay the foundations

We have standardized the methods we use to calculate product carbon footprints. This information allows us to appropriately quantify and report the environmental and social impact of our products and services, as well as how our products and services contribute to reduced environmental impacts.

(2) Broadening the scope of calculation to include Scope 3 emissions

As well as calculating carbon footprints for each product and service, we are applying these calculations to quantify how far we have reduced the environmental impact across the product and service life cycle and to specify GHG emissions (Scopes 1, 2, and 3) for each business, process, and manufacturing site.

By continuing these efforts to accurately evaluate business activities using such LCA systems, we will build up expertise and regularly review and improve the systems to further evolve our LCA tools and expand their scope.

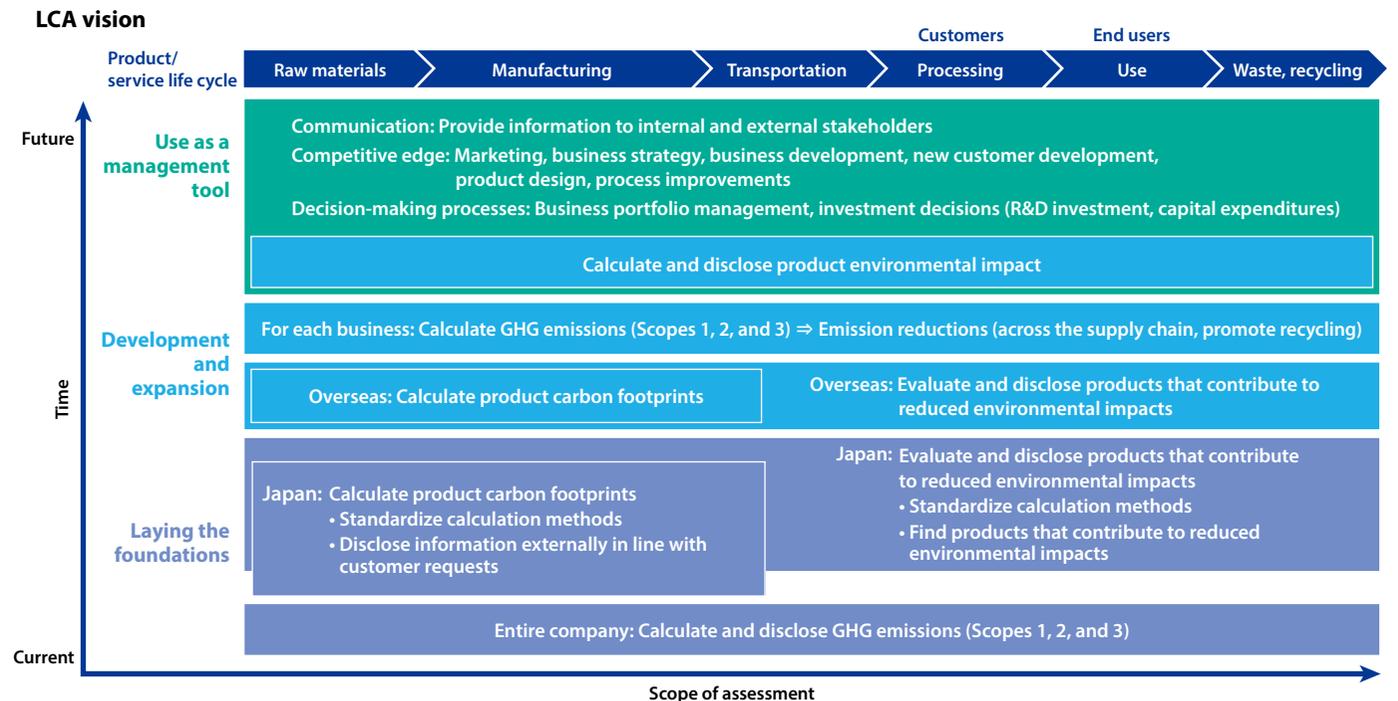
(3) Use as a management tool

In the future, we will use the results from these LCA calculations as an advanced management tool in the following three ways:

- **Fostering communication:** Provide information to internal and external stakeholders and gather feedback from these stakeholders
- **Improving our competitive edge:** Use as evidence to support accurate marketing, product design, and process improvements

- **Rationalizing decision-making processes:** Apply to decision-making processes for business portfolio management and investment programs

Through the comprehensive implementation of these systems, we aim to quantify the social contributions made by the MCG Group and achieve the new management policy, “Forging the future.”



Sustainability

Reporting in Line with the TCFD Recommendations

In October 2018, Mitsubishi Chemical Group Corporation announced its support for the final recommendations prepared by the Task Force on Climate-related Financial Disclosures (TCFD)*.

The Mitsubishi Chemical Group is working to enhance its climate change-related measures in areas such as environmental impact reduction, driving energy-saving activities, promoting renewable energy use, and adding to the range of products that contribute to GHG emissions reduction. Through these measures and progressive enhancement of information disclosure, we are targeting increase in our corporate value.

* The TCFD is a body established by the Financial Stability Board in 2015. In June 2017, it announced the final recommendations concerning disclosure of information to encourage companies to voluntarily disclose to investors the impacts of climate change-related risks and business opportunities on corporate finances.

[🔗 The report in line with the TCFD recommendations](#)

Governance

At MCG, we have identified GHG reduction, environmental impact reduction, and circular economy as the material issues (▶ Page 70) to be addressed in our medium-term management plan, *APTSIS 25*. In parallel, we have set management indicators and targets (▶ Page 79) to measure progress with these initiatives to mitigate and adapt to climate change. Monitoring of progress toward the target values takes place with the involvement of the MCG president and other members of the management team.

Director remuneration

The performance-based evaluation of the remuneration of corporate executive officers and executive officers is determined based on the degree of achievement of the targets for each fiscal year. In addition to economic benefit and capital efficiency, the evaluation considers indices relating to improvement in sustainability and other factors, including GHG emissions reduction. For detailed information, please see the Securities Report.

For reference:

Corporate Governance: Director remuneration (▶ Pages 58–61)

Strategy and risk management

Transition plan

In December 2021, MCG announced a new management policy entitled “Forging the future.” The policy includes a plan for the transition to carbon neutrality in line with the basic policy for the realization of carbon neutrality that had been announced in October of the same year.

The plan sets the new targets of a 29% reduction in GHG emissions by fiscal 2030 compared to fiscal 2019, and a further reduction to net zero in 2050 to achieve carbon neutrality. It also sets out a concrete roadmap. Going forward, our portfolio management will include a carbon-neutral perspective, which will enable us to remain competitive in a society that is in transition to carbon neutrality.

For reference:

New Management Policy, “Forging the future” (▶ Pages 23–29)

Business opportunities and risks from perceived social issues

In the formulation of its medium- to long-term basic management strategy KAITEKI Vision 30 (KV30), the MCG Group identified the business opportunities and risks arising from the challenges facing society in the period up to 2030. As part of this, KV30 gives a quantitative evaluation of the risks envisaged if the social issues are left unmanaged (▶ Page 78).

A climate change-related risk that we recognize as having a particularly large impact is a decrease in product demand and profitability due to factors such as an increased carbon tax burden and regulation of the usage of plastic products.

Meanwhile, to prepare for major natural disasters, in addition to taking steps to minimize damage and ensure business continuity, we will work to realize a safe and secure society by presenting solutions that contribute to disaster prevention and mitigation.

For reference:

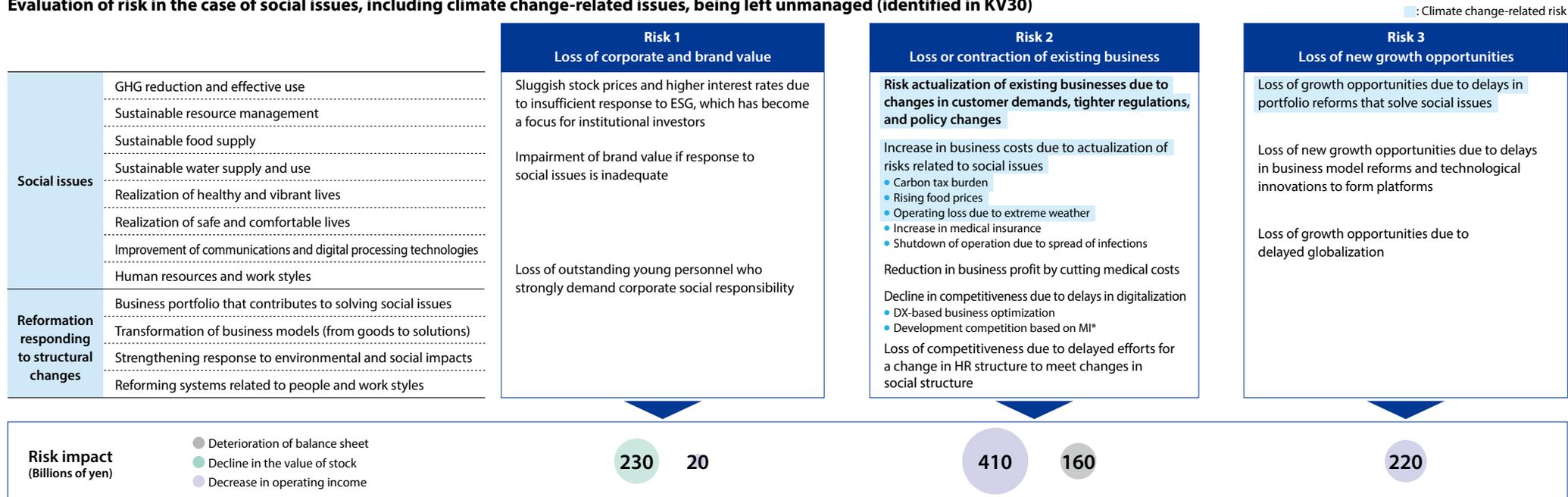
Sustainability: Overview of material issues (▶ Page 70)

Risk management: Measures against major risks (▶ Page 66)

Sustainability

Reporting in Line with the TCFD Recommendations

Evaluation of risk in the case of social issues, including climate change-related issues, being left unmanaged (identified in KV30)



* Materials informatics: AI-based method to design new materials and explore alternative materials rapidly and efficiently.

Overview of risk based on scenario analysis (focusing on risks with a heavy impact)

Risks recognized	Outline of risk based on the scenario*	Impact on MCG	Response to potential risk
Regulation of usage of plastic-products	Decreased demand for virgin petrochemical products due to an increase in the plastic collection rate	Reduced demand for petrochemical products	Focus on businesses that contribute to achieving carbon neutrality
Rise in carbon price	Increase in operating costs due to a carbon price rise	Rise in operating costs	GHG emissions reduction in line with the basic policy for realizing carbon neutrality
Operating loss due to extreme weather	Increased impact on manufacturing sites due to increased flood risk in Asia	Shut-down of plant operations in coastal areas due to disaster	Measures to prepare for major natural disasters to minimize damage and ensure business continuity

* Based on the World Energy Outlook (WEO) Sustainable Development Scenario (SDS) and other sources:
 The SDS scenario is one outlined by the International Energy Agency (IEA) in line with the Paris Agreement target, where the global mean temperature rise compared to pre-industrial levels is kept to well below 2°C, with efforts to reduce it to 1.5°C.

Sustainability

Reporting in Line with the TCFD Recommendations

Business opportunities

As set out in our new management policy, we will also devote resources to businesses that contribute to realizing carbon neutrality based on portfolio management with a focus on growth, performance, and sustainability.

We will progressively expand the business scale and strengthen the profitability of specific focus businesses that offer climate change-related business opportunities, including lighter mobility materials, vehicle-mounted battery materials, bioplastics, and carbon fiber and composite materials.

Impact of business opportunities and risks from perceived social issues

- In fiscal 2022, the target year of *Step 1* of the medium-term management plan *APTSIS 25*, we aim to raise to 12% the proportion of sales revenue from products that contribute to the circular economy or mitigate and adapt to climate change.
- We estimate risk associated with social issues and structural change in 2030 at around ¥1 trillion.

For reference:

New Management Policy, "Forging the future" (▶ Pages 23–29)
Overview of Business Domains (Performance Products Domain) (▶ Pages 87–89)

Process of risk identification, evaluation, and management

Portfolio management

As announced in the new management policy, MCG has designated carbon neutrality as a selection criterion for its focus businesses. Incorporating a carbon-neutral perspective, our portfolio management will focus on growth markets where we have a competitive advantage.

For reference:

Portfolio for the New Management Policy "Forging the future" (▶ Pages 24–26)

Risk management

We will strive to avoid the occurrence of major risks and minimize losses when they occur under our risk management system.

In addition, we have begun studying the introduction of Enterprise Risk Management (ERM), which comprehensively manages risk relating to Group business activities that are linked to significant issues identified from the perspective of material issues, and promotes minimization of loss and appropriate risk acceptance from a Company-wide standpoint.

For reference:

Risk Management (▶ Pages 65–67)

Metrics and targets

Metrics and targets to assess risks and opportunities

The management indices (MOS Indices) set to measure progress with material issues include the GHG emissions reduction rate and the percentage of sales revenue from products that contribute to the circular economy or mitigate and adapt to climate change.

We have also established medium-term targets and will measure progress year by year (▶ Page 77, "Strategy and risk management"). As indicated under Strategy, the GHG emissions reduction targets have been changed to targets for the realization of carbon neutrality.

For reference:

Risk Management (▶ Pages 65–67)
Sustainability Indices (▶ Pages 71–74)

Scope 1, 2, 3 GHG emissions

Please see GHG emissions in "Non-Financial Highlights" for the performance in fiscal 2021. We have received independent assurance for GHG emissions, and are working to disclose highly reliable information.

For reference:

Non-Financial Highlights (▶ Page 97)
Environmental Data / Independent Assurance Report (▶ Pages 107, 109)

Human Resources

Message from the CHRO



Value creation begins with our people, so we are making changes to maximize their potential.

Tomoyo Hiraoka

Vice President
Chief Human Resource Officer

Creating an environment where everyone can embrace ongoing personal development

The Mitsubishi Chemical Group believes that our people are the source of value creation, and we position our human resources as the driver of company growth and the realization of KAITEKI. Every single employee has limitless potential. My mission is to move our Company continuously forward to create an environment in which the MCG Group can unlock the potential of its people and all our employees can embrace ongoing personal development.

In order to achieve this mission, under the policy set forth in the medium- to long-term basic management strategy KAITEKI VISION 30 (KV30), we are working toward reforming the human resource systems at all Group companies. We have put in place systems to realize diversity, equity, and inclusion, proactive career development, and work-style reforms.

I feel that these changes have created opportunities for employees to reconsider the value of their work and the career paths that might interest them, and to volunteer for new challenges. We are also investing proactively in human resources and corporate culture reforms to help our people grow in tandem with the ongoing

developments at the Company. We are expanding programs to train the next generation of leaders to drive change, setting up e-learning platforms, running seminars on diversity and inclusion to drive changes in our corporate culture, and implementing mentoring programs. Our overall goal is to create an environment whereby the Company respects individual aspirations and encourages personal development. We aim to achieve this by providing greater choice in available training programs that match individual career interests as well as strengthening leadership and management problem-solving. Company growth can be thought of as the sum total of the contributions made by, and personal development of, each employee. Looking ahead, we want to roll out programs across the entire Group to enhance our human capital, as our people are the starting point for value creation.

Accelerating initiatives to implement the “One Company, One Team” concept

Fiscal 2022 will see the implementation of the “One Company, One Team” concept in our new organizational structure, as we work to execute the new management policy, “Forging the

future.” This concept is aimed at moving away from business optimized for individual companies and developing instead a management structure that operates across company borders at the level of the business domain or geographical region. We are changing our systems with the goal of promoting collaboration and accelerating information transfer and decision-making. In terms of the corporate functions, we will integrate reporting lines globally and consolidate Group company governance systems to improve operational efficiency. We will roll out this new management structure to become “One” global organization. We will invest in systems for an integrated human resources platform to visualize, on a global level, our employees, organizations, positions, and job roles, making our human resources processes more sophisticated and efficient. We will develop programs to identify and train our talent and develop succession plans. We will foster a corporate culture that attracts diverse talents and allows them to reach their full potential. All of these initiatives are aimed at achieving both growth and greater efficiency. For succession planning, in particular, we are working more closely with the Nominating Committee to incorporate ideas from external stakeholders, with the goal of implementing bold programs unlike anything done before for executive placement and development.

Each individual employee needs to change their mindset and behavior if we are to execute such a huge transformation. Therefore, we will strive for communication to foster expectations and confidence that taking on the challenge of this transformation will increase the motivation and satisfaction of employees themselves, and lead to a sense of personal growth for each and every employee. In fiscal 2022, we will continue to pursue the five pillars outlined in KV30, and position the realization of the “One Company, One Team” concept as the highest priority, working with our employees to steadily execute these programs.

Human Resources

Human Resources Strategy

The Mitsubishi Chemical Group is working on a global level to make its organization more diverse.

Diversity, equity, and inclusion as a human resources strategy

Mitsubishi Chemical Group Corporation introduced a new management structure in April 2022.

In this new environment, we will promote the transformation of the organization into one where diverse individuals are respected and valued for their contributions and are able to fulfill their potential.

We are creating more diverse leadership teams so that we can achieve this human resource strategy, and we will engage in lively discussions with broadly experienced people both inside and outside the Company in order to inform our business decisions. In practical terms, we are bringing in more people from overseas, as well as providing focused training for the local employees who could become their successors. In the future, we plan to introduce new training programs, developed in partnership with world-class human resource training institutions, to visualize and focus training for our top management.

Obviously, if we are to pursue greater diversity and inclusion, we need measures to address a multitude of challenges while also ensuring diversity in our management team. We will continue working to eliminate stereotyping, shine a light on unconscious bias*, and change awareness in all employees. We want each employee to understand that combining the wisdom of a diverse range of people makes our organization stronger, and we aim to foster an organizational culture that allows people to embody this concept every day and uncover new value.

* Unconscious assumptions and prejudices

Developing the next generation of leaders to drive transformation

In the past, in-house training focused on achieving operational certainty and stability through staff postings to different departments for a period of time to build up experience. This method of staff development through accumulated experience is no longer sufficient if we are to respond in a timely fashion to changes in the market or demands from society. We also need to put systems in place to continue building a rich and diverse pipeline of talent. We have therefore established two new human resource training programs: The Top Leader's College (TLC), to develop the next generation of management executives, and the Future Leader's College (FLC), to train team

Defining what we need in our management leaders

Basic qualities	<ul style="list-style-type: none"> • Personal attributes (reliability, ambition, honesty, inquisitiveness), courage • Embodies our vision, mission, and values • Cooperative ability (collaboration, relationships with stakeholders)
Management competencies	<ul style="list-style-type: none"> • Market insights • Strategic thinking • Ability to drive transformation based on a future-oriented approach • Organizational and human resource management capabilities (psychological stability, receptivity to diversity, ability to create a vision, resilience) • Results focused
Expertise, experience	<ul style="list-style-type: none"> • Acute skills and expertise in social issues beyond conventional business boundaries • Wide range of experience, including outside the Company • Broad knowledge
Results, track record	<ul style="list-style-type: none"> • Business track record through bold decision-making based on medium- and long-term perspectives • Outstanding track record of driving transformation

leaders with the potential to move into top leadership ranks. Our goal is to build a diverse management team of winners who are capable of anticipating social change, driving transformation, and articulating their vision for the Company's future.

Top Leader's College (TLC) Program

Based on the concept of developing leaders for transformation, we have introduced a program to train those with potential to become the next generation of management leaders, in terms of skills related to "wisdom" and "focus" that will allow them to lead the Company on the path of sustained growth. The program includes direct interactions with people in managerial roles inside and outside the Company, as well as external coaches, to nurture participants' views. Participants are asked to describe their vision for the Company not in terms of what should be, but rather in terms that express their own determination. They are asked to create a real, all-encompassing company strategy, take on challenges, and make recommendations with preparation and purpose, as if they are managing the organization themselves.

Future Leader's College (FLC) Program

This program aims mostly to change team leaders' mindsets to prepare them to act as leaders who are driving transformation of the entire company, not just their own position. In this program, participants are asked to go beyond the current trajectory of their daily work tasks, with the goal of developing a broader perspective, eliminating a subordinate mindset, and focusing outward. Moreover, engaging in friendly competition with colleagues at the college can make ongoing learning a habit. We have received a great deal of feedback from participants, who said that this program was a watershed moment in their lives. We expect these talented people to drive change in the future.

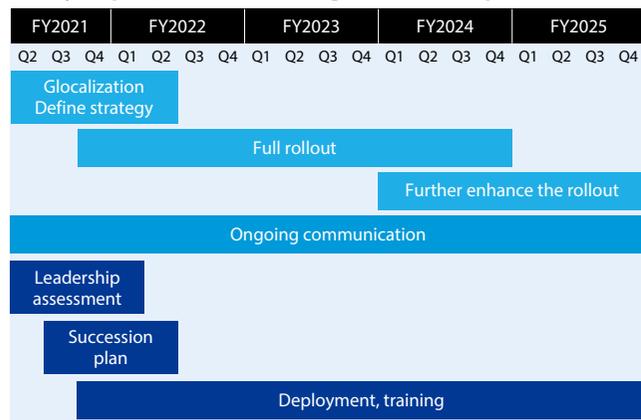
Human Resources

Human Resources Strategy

Training management leaders at overseas subsidiaries

At MCG, we are accelerating the development of potential management leaders on a global level. In some regions, we are working to promote local employees to the top positions, and the management teams in each region are taking the initiative and implementing measures to achieve this. We are using assessments to visualize the potential of the human resources within the region, while setting localized KPIs relevant for promotion to key positions, implementing focused human resource development and human resource assessments, and investigating and executing plans for promotion. Through these initiatives, we aim to transition to group companies that are managed by people who know the region best and are best placed to maximize corporate value in their region. For the local employees as well, these initiatives may prompt them to think through their own career path from a medium- or long-term perspective.

Plans for management successor training at overseas subsidiaries (Five-year plan, with the China region as an example)



Programs to change employee mindsets

To foster a corporate culture that is open and energetic and where diverse human resources can maximize their potential, we must do more than just establish the right working environment; we need to change existing employee mindsets as well. We have a number of projects and training programs underway to achieve this.

In fiscal 2018, Mitsubishi Chemical launched a cross-departmental project called the Mitsubishi Chemical Women’s Council. Managers take on the role of sponsors and employees from different departments receive real feedback from on-site workers via open discussions on diversity where ideas are put forward in a bottom-up approach. This allows us to get on-site perspectives to incorporate in programs to change our workplace culture. The council opens up various lines of communication, providing a direct route for feedback for management from on-site workplaces.

Unconscious bias training

When laying the foundations for everyone to thrive, it is important that all employees, regardless of whether they are in managerial or non-managerial roles, be aware of unconscious bias.

Mitsubishi Chemical started providing e-learning programs and workshops on unconscious bias in fiscal 2021, with programs tailored to employees, managers, and executives. More than 3,000 employees have taken these courses, deepening their understanding of unconscious bias.

Week of events for International Women’s Day

Mitsubishi Chemical held a five-day online event to mark the United Nations International Women’s Day on March 8, based on the concept of making Mitsubishi Chemical a fulfilling workplace where people can be themselves. During this event, we operated a range of programs, including roundtable sessions for discussions between management and workers, as well as conversations with male employees who had taken childcare leave. The sessions featured lively exchanges of opinion among participants and provided opportunities for reflection on how diversity and inclusion affects everyone.

We will continue our efforts to create workplaces that maximize the overall value created by individual employees, where all people respect and appreciate each other’s difference.



Online event web page

Event activities

	Activities	Description
DAY 1	Eliminating unconscious stereotyping	Discussions with management
DAY 2	Eliminating childcare stereotyping	Conversations with male employees who take childcare leave
DAY 3	Eliminating stereotyping on women’s views about careers	Career lectures by outside speakers
DAY 4	Eliminating “grass is greener” stereotyping	Examples of in-house stereotypes
DAY 5	Eliminating “not my problem” stereotyping	Review of how to utilize what we have learned in the workplace

Human Resources

Building a Fulfilling Workplace Environment

We are working to ensure that one of the Company's most precious resources (our people) can make the most of their talents and participate fully, through initiatives on health support and work-style reforms.

Health support initiatives

Mitsubishi Tanabe Pharma Corporation has worked to understand and address the decline in physical activity by employees following the sudden increase in teleworking and restrictions on movement brought about by the pandemic. For teleworkers who are experiencing lower back pain, shoulder problems, or VDT symptoms,* we have provided an app-based program to help with back and shoulder problems and have run online training sessions and private consultations on how to improve home working environments. Our workers have been particularly satisfied with the app for back and shoulder problems, with participants in private consultations giving a satisfaction rating of 4.7 out of five points and the data showing a reduction in the number of symptoms logged after app use.

Taiyo Nippon Sanso Corporation, a member of the Nippon Sanso Holdings Group, is offering health measurement sessions, health news, and health webinars to raise awareness among employees of health matters and prevention of lifestyle disease. The company has also distributed wearable devices that visualize exercise habits and sleep patterns and connect with a health management system to allow analysis of this information alongside previous health check-up data.

As a result, the percentage of employees engaging in regular exercise has risen from 25.5% to 30.6%. Because these programs are implemented each year, employees can compare their health with previous years and obtain a detailed understanding of their physical health status today.

These health initiatives have been a contributing factor in Nippon Kenko Kaigi's ranking of Mitsubishi Tanabe Pharma and Taiyo Nippon Sanso as among the top 500 large enterprises ("White 500") recognized under the Outstanding Enterprise in Health and Productivity Management Certification System, run by the Ministry of Economy, Trade and Industry (METI).

Going forward, we aim to implement more programs to maintain and improve employee health to support better performance by individual employees and create a more dynamic organization.

* Symptoms caused by physical issues arising from long hours spent working at visual display terminals (VDTs) on PCs and other devices.



Programs to support new work styles

One of the many changes thrust upon us by the pandemic was the rapid diversification of work styles. In response, we have initiated a cross-departmental operational reform project to promote switching to paperless procedures, use of digital tools, and more efficient, improved operational processes. This project has also implemented proposals to create comfortable work environments at home or in satellite offices as well as introduce new electronic approval systems, thereby providing further support for teleworking.

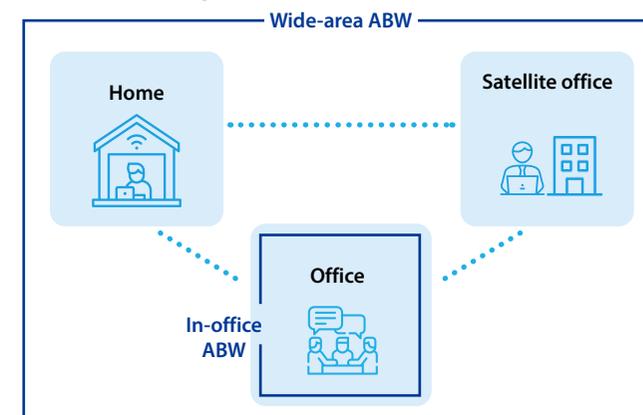
We have also consolidated our sites near the Tokyo Head Office and changed office layouts to suit the new work styles. Using the concept of activity-based working (ABW), we have introduced a free addressing system for our office spaces so that

employees can select where they work depending on what they need to do that day. By combining this free addressing office system with work from home (WFH) and satellite offices, we aim to achieve work styles that allow employees to choose more effective time slots and locations for their work and be self-directed in how they manage their work-life balance.



New Head Office layout to promote ABW

New office concept



5

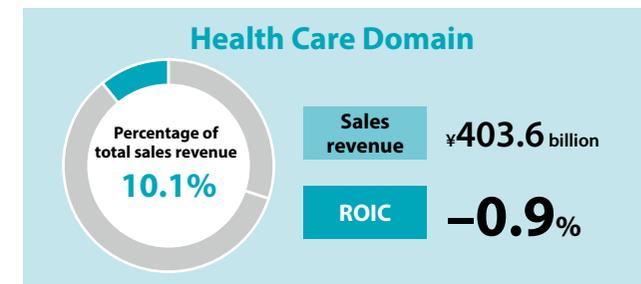
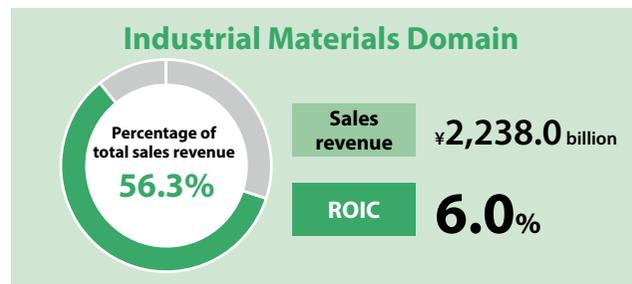
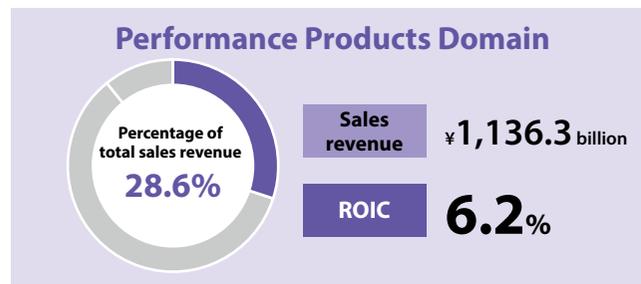
Financial and Non-Financial Information

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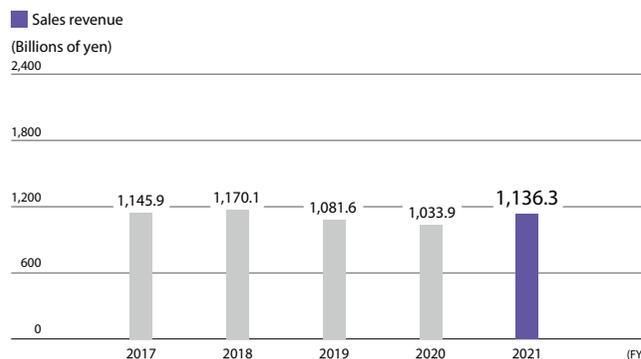
Overview of Business Domains | Summary

[Financial results figures for each domain](#)

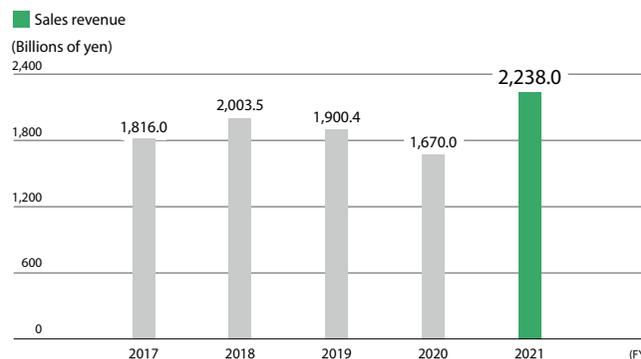
Note: Figures for past fiscal periods (up to and including FY2020) are the business results figures announced at the time.



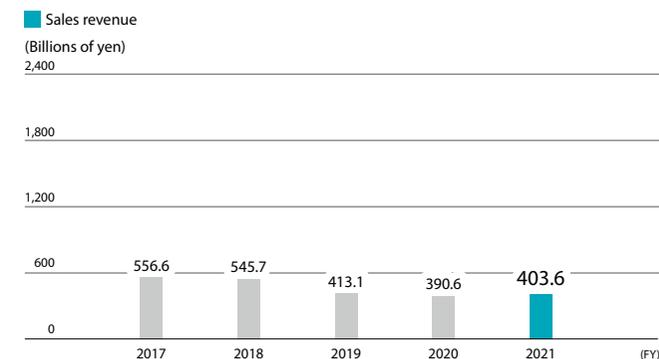
Sales revenue



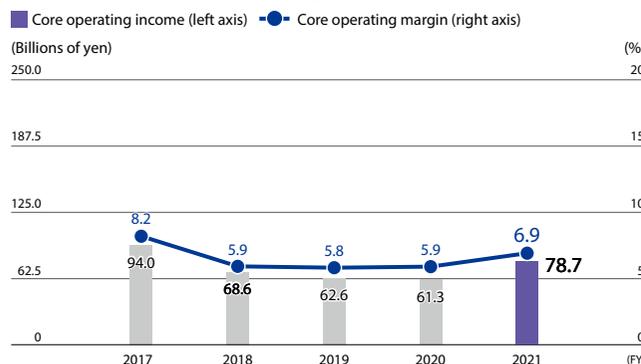
Sales revenue



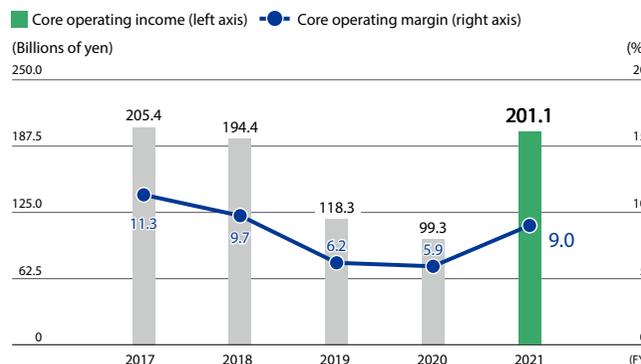
Sales revenue



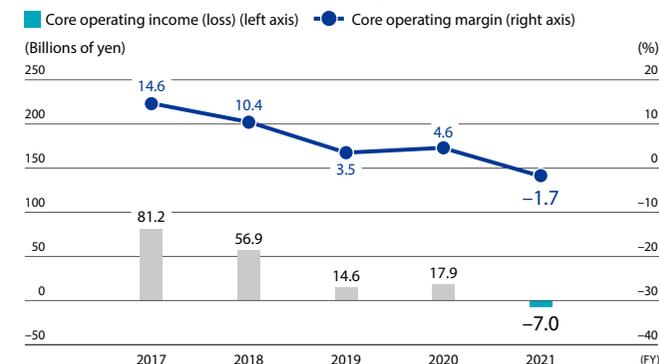
Core operating income and margin



Core operating income and margin



Core operating income (loss) and margin



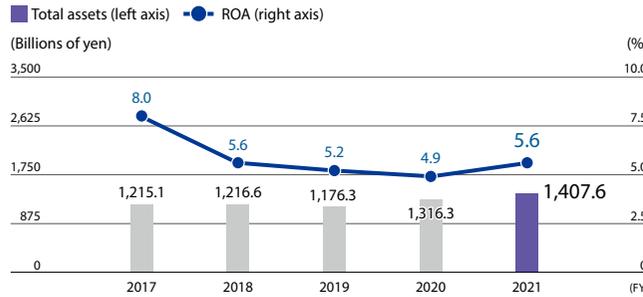
Overview of Business Domains | Summary

[Financial results figures for each domain](#)

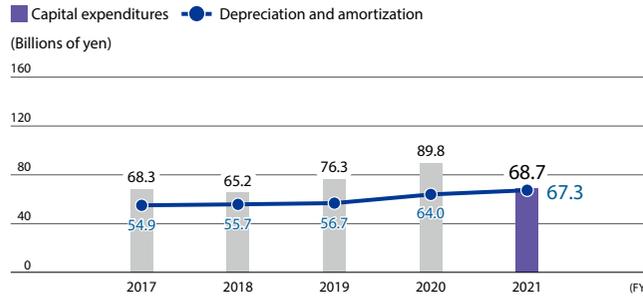
Notes: 1. Figures for past fiscal periods (up to and including fiscal 2020) are the business results figures announced at the time.
2. ROA was calculated as core operating income divided by the fiscal year average of total assets.

Performance Products Domain

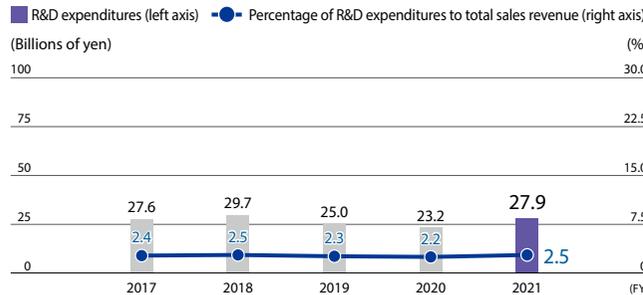
Total assets and ROA



Capital expenditures and depreciation and amortization



R&D expenditures and percentage of total sales revenue

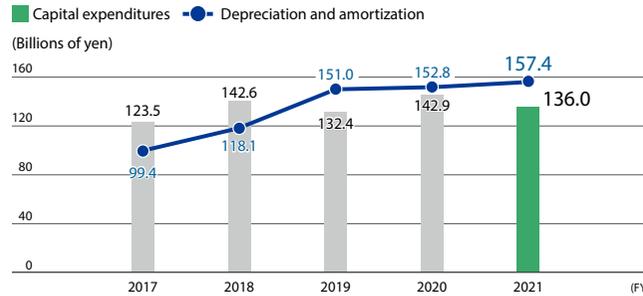


Industrial Materials Domain

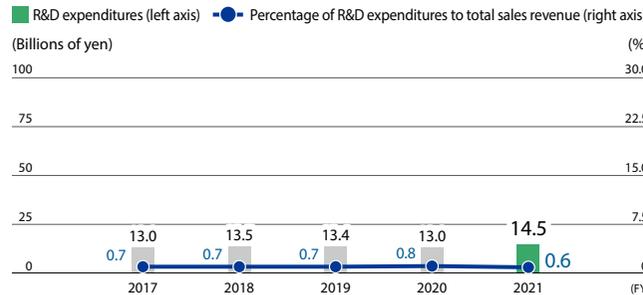
Total assets and ROA



Capital expenditures and depreciation and amortization

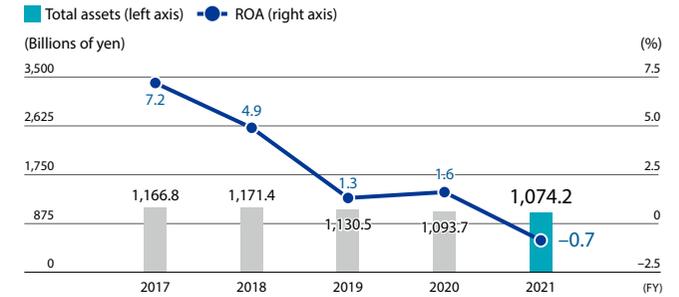


R&D expenditures and percentage of total sales revenue

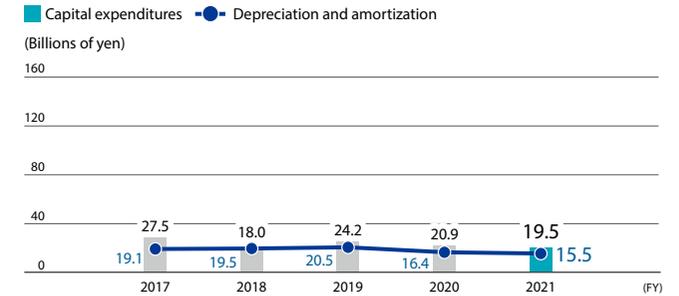


Health Care Domain

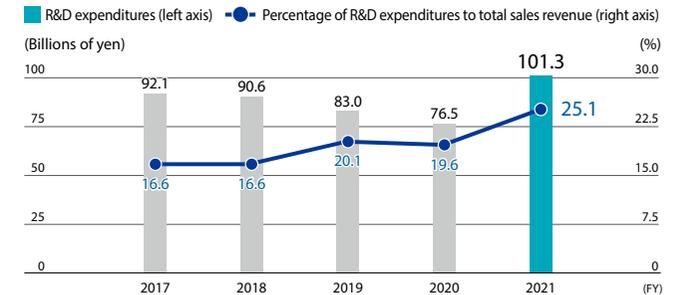
Total assets and ROA



Capital expenditures and depreciation and amortization



R&D expenditures and percentage of total sales revenue



Overview of Business Domains

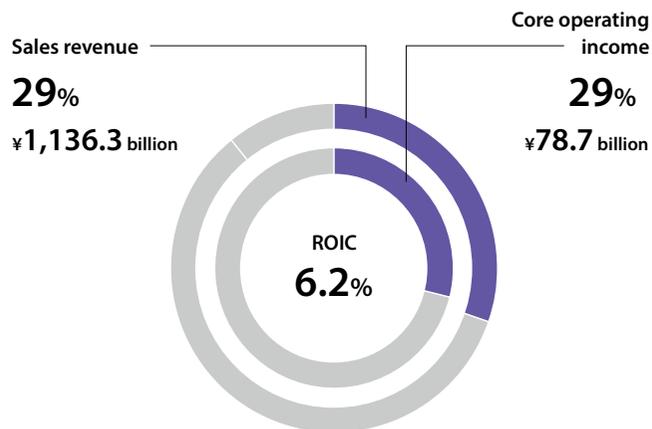
Note: The figures for each segment are based on the results for fiscal 2021.

Performance Products Domain

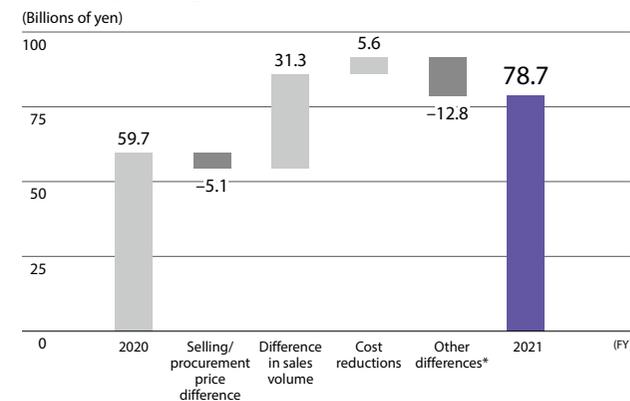
- Polymers & Compounds
- Films & Molding Materials
- Advanced Solutions



We will seek to achieve differentiation and advanced functions by collaborating creatively across the Group on a diverse range of products and technologies to offer varied solutions to different target markets.



Performance Products: Factors underlying the YoY change in core operating income



* Includes differences in inventory valuation and gains/losses on equity-method investments

Performance Products segment

Sales revenue amounted to ¥1,136.3 billion, a year-on-year increase of ¥141.7 billion, and core operating income to ¥78.7 billion, an increase of ¥19.0 billion.

The Polymers & Compounds subsegment posted a rise in sales revenue due to increased sales to the automotive industry and other sectors and an improvement in market conditions for certain polymer products.

The Films & Molding Materials subsegment also posted growth in sales revenue. This was due to an increase in sales volume on recovering demand, particularly for molding materials

in the automotive industry and other sectors, coupled with a strong performance in the first half-year by some film products, especially optical films for electronic displays.

In the Advanced Solutions subsegment as well, increased sales volume due to the recovery in economic activity contributed to growth in sales revenue.

Core operating income in this segment also grew despite the rise in raw material prices, which was counterbalanced by factors such as the overall growth in the volume of sales, particularly to the automotive industry.

Overview of Business Domains

Performance Products Domain

<p>Polyester Films business</p> <ul style="list-style-type: none"> Strong market position and ability to provide solutions in advanced polyester film applications <p>High-Performance Films business</p> <ul style="list-style-type: none"> Technological capability to add various functions to create gas-barrier, porous, and multilayer films, etc. <p>High-Performance Engineering Plastics business</p> <ul style="list-style-type: none"> Global network of facilities capable of handling operations from plastic production to molding and processing <p>Carbon Fiber and Composite Materials business</p> <ul style="list-style-type: none"> Vertically integrated value chain spanning from carbon fibers to intermediate base materials and composite materials <p>Semiconductors business</p> <ul style="list-style-type: none"> High-level purification and quality management technologies to monitor microscopic particulate contamination Cleaning services for semiconductor manufacturing equipment components <p>Battery Materials business</p> <ul style="list-style-type: none"> Electrolytes: Ability to develop functional additives that create high-performance batteries 	<p>Polyester Films business</p> <ul style="list-style-type: none"> Ability to respond to short-term fluctuations beyond the expected range <p>High-Performance Films business</p> <ul style="list-style-type: none"> Concentrated mainly in the domestic market <p>High-Performance Engineering Plastics business</p> <ul style="list-style-type: none"> Vulnerable to social, economic, and currency risks in various regions <p>Carbon Fiber and Composite Materials business</p> <ul style="list-style-type: none"> Impact of exchange rate fluctuations due to high ratio of overseas revenues <p>Semiconductors business</p> <ul style="list-style-type: none"> Distinctive products yet to gain full recognition within the semiconductor industry <p>Battery Materials business</p> <ul style="list-style-type: none"> Dependence of raw material supply chain on China
<p>Strengths</p> <p>S</p>	<p>Weaknesses</p> <p>W</p>
<p>Polyester Films business</p> <ul style="list-style-type: none"> Increasingly sophisticated and complex market needs <p>High-Performance Films business</p> <ul style="list-style-type: none"> Supply of high-performance products to global market <p>High-Performance Engineering Plastics business</p> <ul style="list-style-type: none"> Rising demand from the aircraft, semiconductor, and medical equipment industries <p>Carbon Fiber and Composite Materials business</p> <ul style="list-style-type: none"> Increasing demand for automobile parts, wind turbine blades, and pressure vessel materials <p>Semiconductors business</p> <ul style="list-style-type: none"> Increasing demand for new materials in response to rapid market expansion and microwiring and multilayering of circuits <p>Battery Materials business</p> <ul style="list-style-type: none"> Rapidly growing market 	<p>Polyester Films business</p> <ul style="list-style-type: none"> Shrinking optical film market due to disruptive innovations <p>High-Performance Films business</p> <ul style="list-style-type: none"> Declining demand forecast in the domestic market in medium term <p>High-Performance Engineering Plastics business</p> <ul style="list-style-type: none"> Shrinking market due to growing adoption of 3D printers and other new technologies <p>Carbon Fiber and Composite Materials business</p> <ul style="list-style-type: none"> Intensifying competition due to improving product quality in emerging countries <p>Semiconductors business</p> <ul style="list-style-type: none"> Strong pressure to localize production <p>Battery Materials business</p> <ul style="list-style-type: none"> Profit squeeze due to sharp rise in raw material prices
<p>Opportunities</p> <p>O</p>	<p>Threats</p> <p>T</p>

Focus

Expansion of the semiconductor-related business Helping to build the infrastructure of the digital society

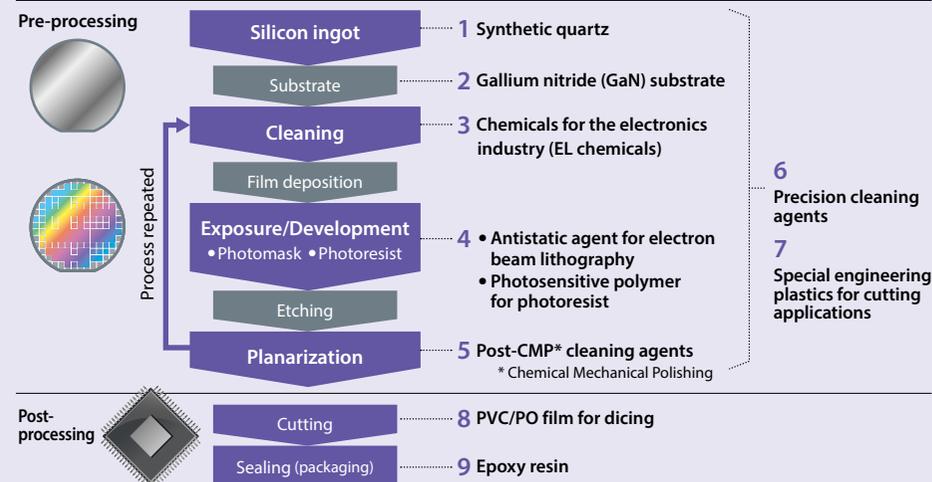
We are strengthening our offer of products and services in the semiconductor business to deliver new value to the semiconductor industry.

In October 2018, we acquired Cleanpart Group GmbH, a leading company in the provision of precision cleaning and coating services to semiconductor manufacturers and other business operators in Europe and the United States. This gives us the capability to deliver semiconductor precision cleaning services on a global basis, in addition to our existing operations in Japan and Asia.

In April 2020, we centralized the Mitsubishi Chemical Group's semiconductor-related business and at the same time established a global organization free of restrictive corporate structures. This has allowed us to work as one team on an integrated range of semiconductor-related products and services under a system that provides one-stop support to our customers worldwide. Meanwhile, we are driving the creation of synergies with the semiconductor-related businesses and technologies of Gelest, Inc., which we acquired in October 2020.

In our new management policy, "Forging the future," we identify the semiconductor business as one of our focus businesses that we will work to strengthen and expand.

Semiconductor manufacturing process and main MCG Group products and services



Overview of Business Domains

Performance Products Domain

Polyester Film

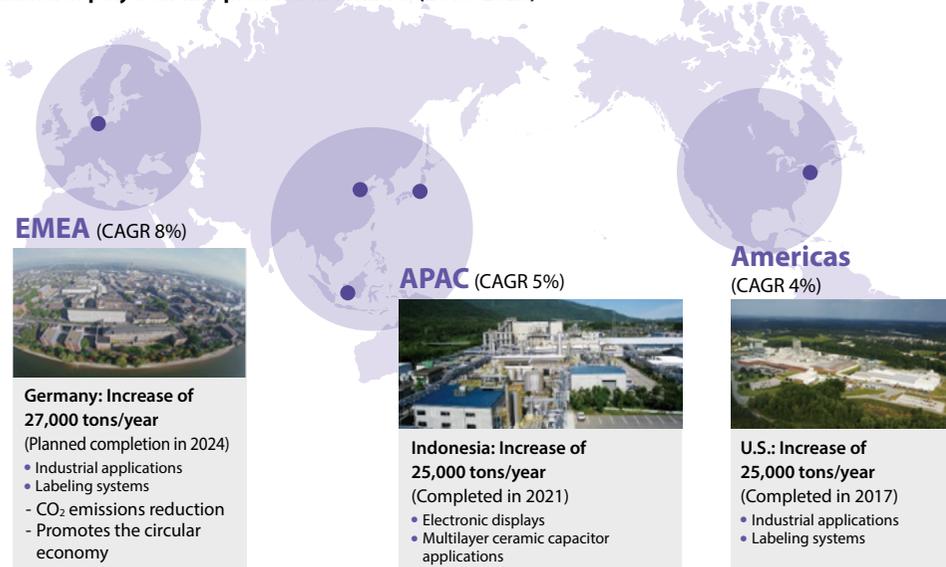
Strategy for expansion as the leading company

We manufacture polyester films at five sites in Japan, China, Indonesia, the United States, and Germany for supply to a range of applications, including as optical materials, particularly for electronic displays; as industrial materials for electronic components, automotive parts, and medical equipment; and as packaging materials for food and other products. In October 2021, anticipating robust expansion of demand for polyester films, we decided to establish a new manufacturing line in Germany with a yearly production capacity of 27,000 tons, among the world's largest in the field of high-performance polyester film.

The new facility will incorporate the latest energy-saving technology and other measures designed to expand production capacity, while at the same time reducing the plant's overall CO₂ emissions. Additionally, we will put in place a system to enable polyester film collected from customers and consumers to be reused as raw material, thus accelerating initiatives to achieve a circular economy.

We will continue to engage in active business development matched to demand in each region, thus contributing to fulfilling the SDGs and realizing a circular economy.

Expansion of polyester film production facilities (2015–2025)



High-Performance Engineering Plastics

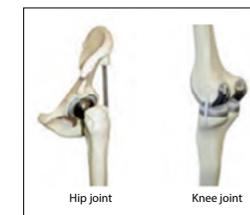
Product rollout to respond flexibly to a wide range of medical needs

Progressive population aging in developed countries, and rapid population growth in emerging countries, are expected to result in significant expansion of the global medical market going forward. With our focus on this growing medical market, we are rolling out products to respond flexibly to diverse medical needs.

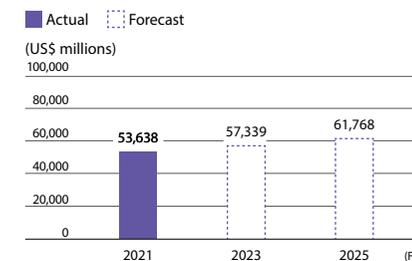
For instance, our high-performance engineering plastics business, which operates from sites in 17 countries worldwide, has for many years supplied the ultra-high molecular weight polyethylene materials *Chirulen* and *Extrulen* to implant manufacturers around the world for use as artificial joint materials.

We will target growth in the high-performance engineering plastics business by combining the wide range of technologies and experience available within the MCG Group.

Biocompatible high-performance engineering plastics



Orthopedic implant market



Based on ORTHOWORLD, "The Orthopaedic Industry Annual Report" (published in June 2022)

Finding solutions for a sustainable future

Bioengineering plastic *DURABIO*—increasingly used in vehicle manufacturing

To meet bio-based polymer demand in the mobility, optics, agriculture, and food packaging markets, we offer a range of solutions that contribute to the circular economy. Among these are bioengineering plastics, which are made with plant-based raw material; biopolyester, which uses renewable resources and is also biodegradable; and polyvinyl alcohol, which combines biodegradability with strong barrier properties.

The bioengineering plastic *DURABIO* not only boasts the physical properties required in automotive interior finish materials (namely, shock resistance and chemical resistance) but has also won acclaim for its use of plant-based raw materials. As a result, it is increasingly used in automotive parts and materials, including for Toyota Motor Corporation's MIRAI range. By developing the applications of *DURABIO*, we will make ongoing contributions to environment-friendly vehicle manufacture.



New model of Toyota's MIRAI range

Overview of Business Domains

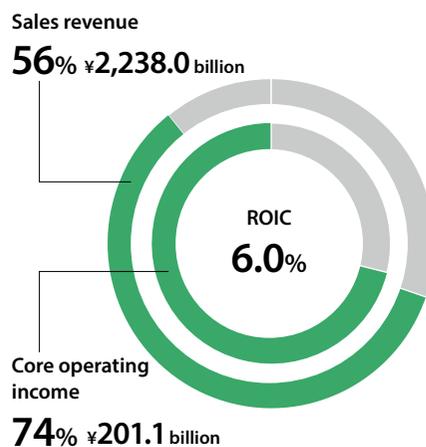
Note: The figures for each segment are based on the results for fiscal 2021.

Industrial Materials Domain

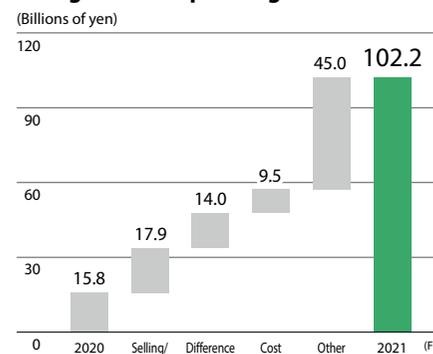
- MMA
- Petrochemicals
- Carbon Products
- Industrial Gases



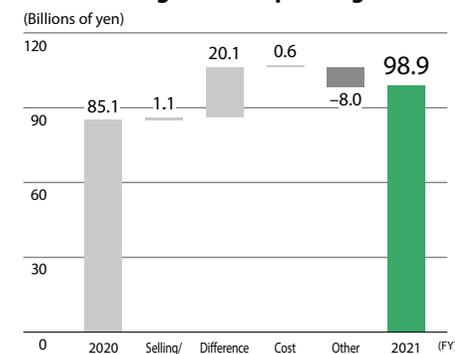
In the Industrial Materials domain, we will support growth markets by delivering products and technologies through a corporate structure that is continuously adapted to meet contemporary needs, while seeking to diversify our raw material procurement including through the use of renewable resources.



Chemicals: Factors underlying the YoY change in core operating income



Industrial Gases: Factors underlying the YoY change in core operating income



* Includes differences in inventory valuation and gains/losses on equity-method investments

Chemicals segment

Sales revenue amounted to ¥1,287.9 billion, a year-on-year increase of ¥396.8 billion, and core operating income to ¥102.2 billion, an increase of ¥86.4 billion.

In the MMA subsegment, sales revenue increased on improved market conditions for MMA monomer and other products, against a background of sustained, robust demand.

The Petrochemicals subsegment saw sales revenue expand. This was due partly to higher sales prices resulting mainly from rising raw material prices, but other factors were the reduced impact of scheduled maintenance and repairs at our ethylene production facilities and increased sales volume on recovering demand.

Sales revenue also increased in the Carbon Products subsegment due to higher sales prices for export coke as a result of the recovery in demand.

Core operating income grew in this segment. Among the contributing factors were an increase in the sales volume of petrochemicals, an increase in the inventory valuation due to higher raw material prices, and an improvement in market conditions for MMA monomer, export coke, and other products.

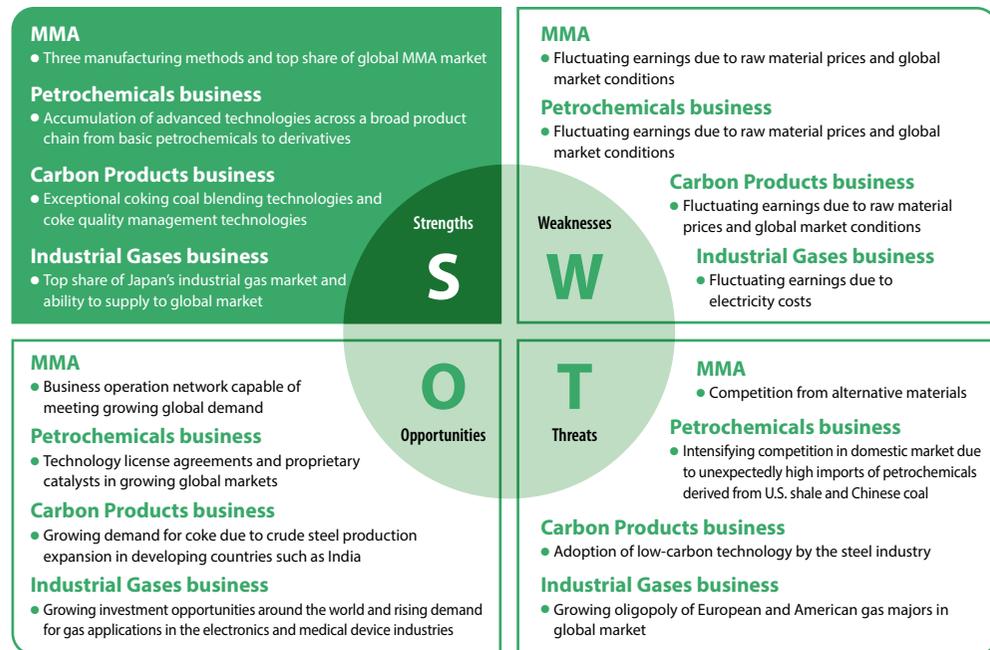
Industrial Gases segment

Sales revenue amounted to ¥950.1 billion, a year-on-year increase of ¥138.3 billion, and core operating income to ¥98.9 billion, an increase of ¥13.8 billion.

Here, the overall recovery of demand in Japan and overseas resulted in increases in both sales revenue and core operating income.

Overview of Business Domains

Industrial Materials Domain



Industrial Gases

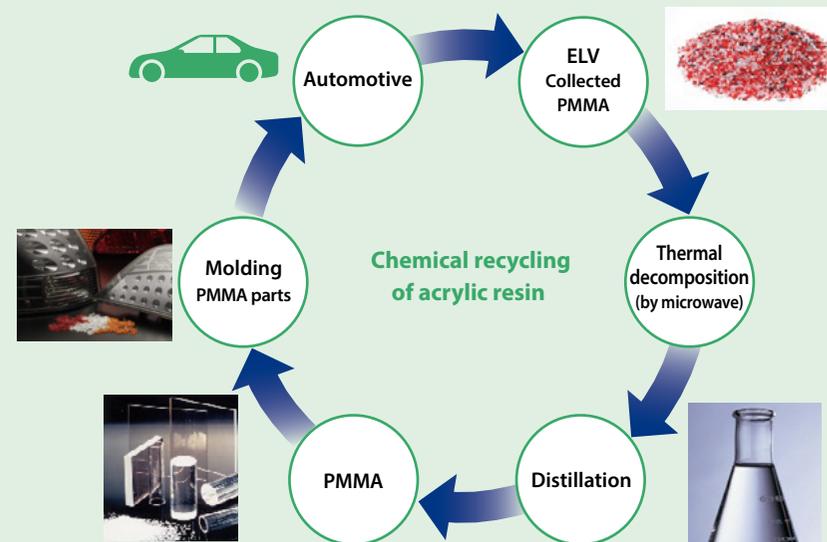
Expansion of manufacturing capacity for semiconductor material gas in the Asia region

Demand for semiconductor devices is rising continuously due to factors such as lifestyle changes, increased data flows from the spread of 5G and IoT, and increased semiconductor demand from the automotive industry. The diborane gas we produce is essential to the manufacture of a wide range of semiconductor devices, from logic and storage to discrete devices, and demand is growing rapidly.

To meet the expanding diborane gas demand from semiconductor manufacturers, we have been boosting supply capacity since 2018 by successively expanding our manufacturing operations, previously limited to sites in Japan, with new sites in South Korea and China. As continuing demand growth is forecast, especially in the Asia region, we will strengthen the global supply chain through ongoing investment.

Focus Initiatives as a leading company in the MMA industry to achieve a circular economy

Mitsubishi Chemical Group Corporation—which is unique worldwide in possessing capabilities in all three main MMA manufacturing methods—is the leading global supplier, boasting an approximately 30% share of the world's production capacity. To put in place an optimal supply system with global reach based on highly competitive manufacturing plants, we closed the Beaumont site in the United States in March 2021 and are now looking to construct a new U.S.-based MMA monomer plant using our new ethylene method (Alpha technology). We are also studying approaches to the recycling of acrylic resin, which is an MMA derivative. In June 2021, we launched a trial aimed at realizing chemical recycling in Japan on a commercial basis. Using tail lamps collected from end-of-life vehicles (ELVs) and other used acrylic resin materials, we have been exploring systems for chemical recycling and reuse in a joint project with Honda Motor Co., Ltd., which is also our partner in the recycling system trial. As the manufacturer with the world's leading market share in MMA and acrylic resin, we will take an active lead in initiatives to realizing the circular economy, to consolidate our position as the leading company in the sector.



Overview of Business Domains

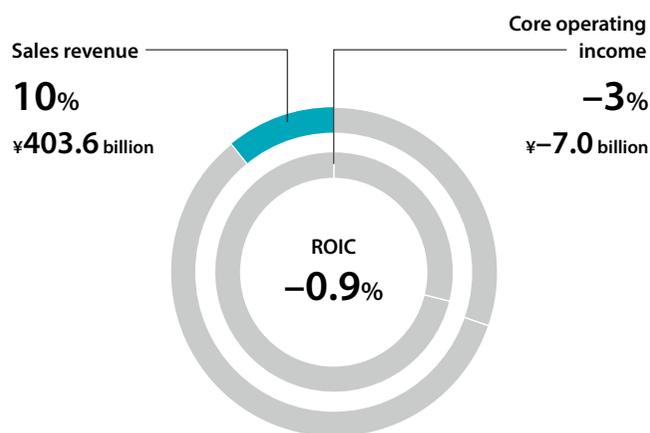
Note: The figures for each segment are based on the results for fiscal 2021.

Health Care Domain

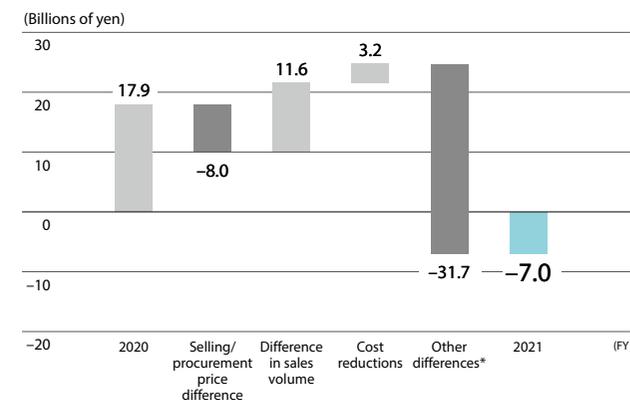
- Pharma
- Regenerative Medicine



In the Health Care domain, we not only work to provide treatments for diseases but also products and services that help people around the world live longer and healthier lives.



Health Care: Factors underlying the YoY change in core operating income (loss)



* Includes differences in inventory valuation and gains/losses on equity-method investments

Health Care segment

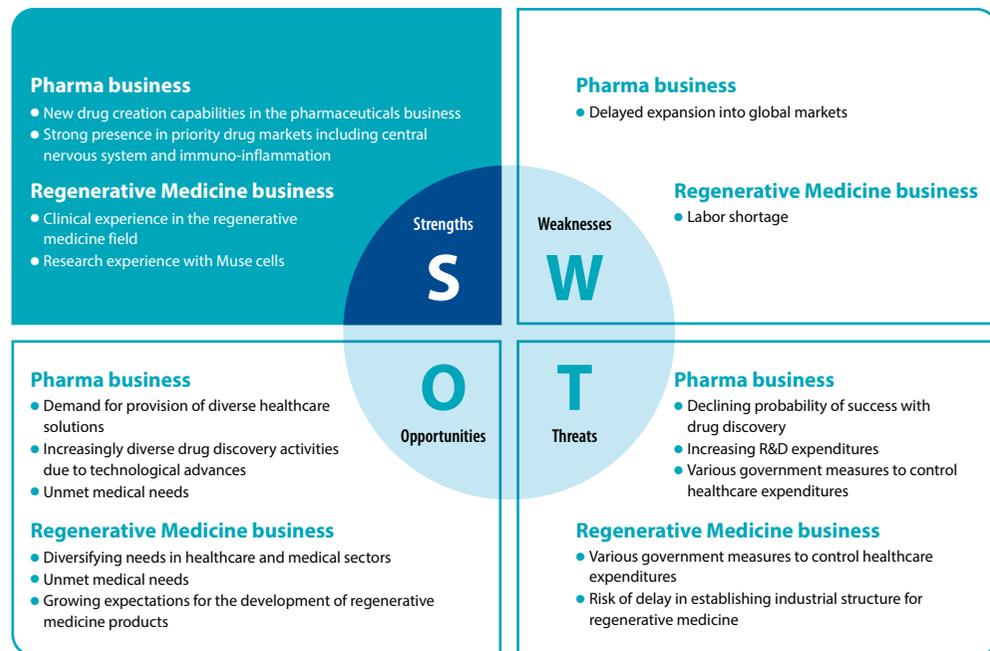
Sales revenue amounted to ¥403.6 billion, a year-on-year increase of ¥13.0 billion, while we recorded a core operating loss of ¥7.0 billion, a decrease of ¥24.9 billion.

The pharmaceuticals business posted increased sales revenue due to growth in the sales volume of priority products, which outweighed the impact of negative factors including National Health Insurance drug price revisions in the Japanese ethical pharmaceuticals market. Core operating income

decreased, mainly due to R&D expenditures on the COVID-19 vaccine project. Note that some royalty revenue from Novartis Pharma AG for *Gilenya*[®], a treatment agent for multiple sclerosis, has not been recognized as sales revenue in accordance with IFRS 15 (Revenue from Contracts with Customers) due to the start of arbitration proceedings in February 2019. In fiscal 2021, likewise, some royalty revenue was not recognized as sales revenue due to the ongoing arbitration proceedings.

Overview of Business Domains

Health Care Domain



Finding solutions for a sustainable future

New ALS treatment option for patients in the United States



In June 2022, we released *RADICAVA ORS* in the United States. *RADICAVA ORS* is an oral suspension formulation containing the same active ingredient as Edaravone Infusion *RADICUT* (*RADICAVA* in the United States), which is a treatment for amyotrophic lateral sclerosis (ALS). *RADICAVA ORS* is specifically formulated for patients with ALS and provides a flexible administration option with a small, 5mL dose (taken orally or via feeding tube), a portable bottle, an oral dosing syringe, and no need for refrigeration or reconstitution.

We undertook its development with the aim of reducing burdens on ALS patients such as injection pain and outpatient visits. Previously, intravenous infusion was the only available route of administration, but now there is the option of taking the drug orally.

Focus

Contributing through vaccines to infectious disease prevention Development of a VLP vaccine to prevent COVID-19 infection

The COVID-19 vaccine *COVIFENZ* received approval in Canada in February 2022. We have concluded a supply contract with the Canadian government, and preparations for a swift launch of supply are underway. We are also preparing to file for approval in Japan, with Phase 1 and 2 trials launched in October 2021.

The plant-based VLP vaccine is a new type of vaccine produced using VLP manufacturing technology. VLPs have an external structure similar to that of a virus and the vaccine is expected to induce high immunogenicity. Since VLPs do not contain genetic materials, they do not proliferate in the body and are attracting attention as a promising vaccine technology with excellent safety. In addition, plant-derived VLP manufacturing technology is expected to enable mass production in a short period of time.

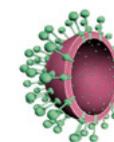
COVIFENZ is the world's first plant-based COVID-19 vaccine. Additionally, it can be stored and distributed under refrigerated conditions (2–8°C). By delivering the new option of a plant-based VLP vaccine, we will strengthen our contribution to the prevention of infectious diseases, which is an important social issue worldwide.

Plant-based VLP vaccine manufacturing process (utilizing transient gene expression)

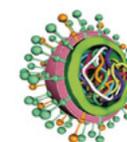


Advantages expected with VLP manufacturing technology

- The use of plants allows large-volume production in a short timespan.
- There is excellent safety, as there is no virus proliferation.



VLP

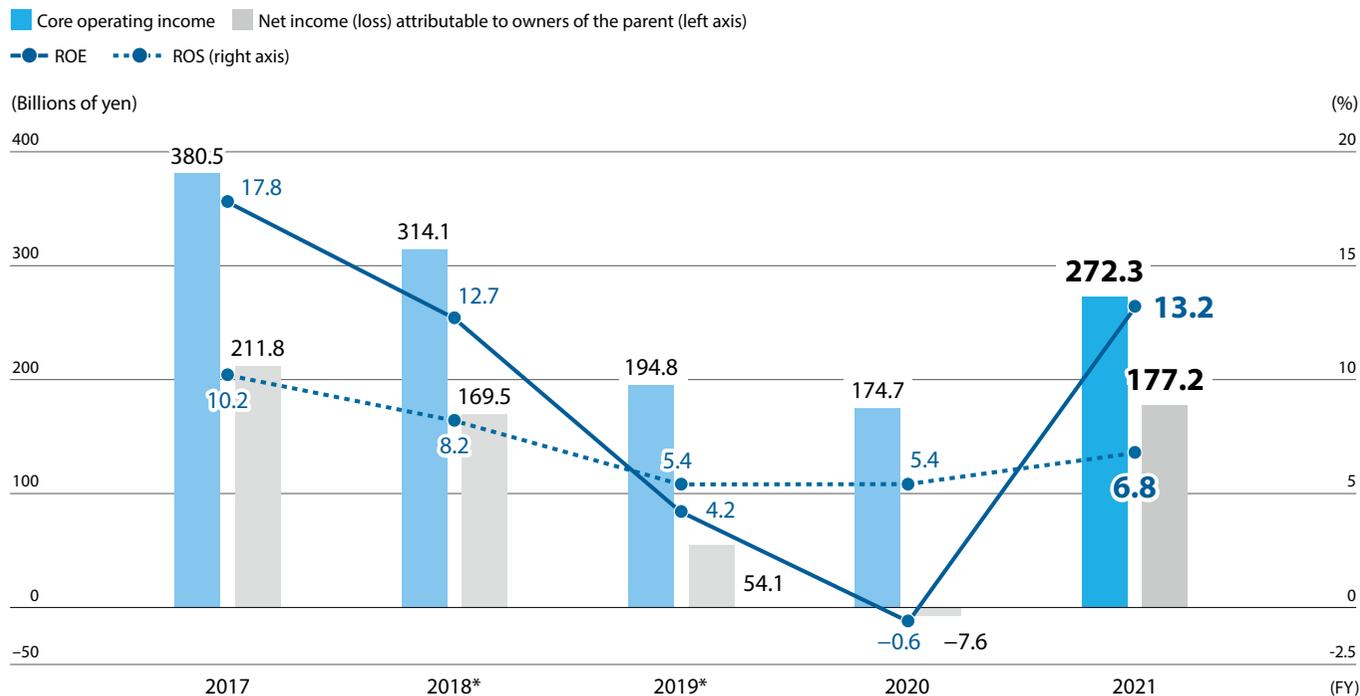


Common virus

Financial Highlights

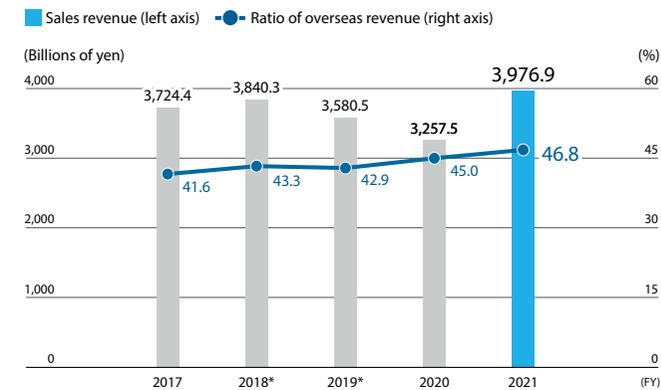
Figures for years indicated with (*) do not include results from discontinued operations.

Net income and ROS/ROE



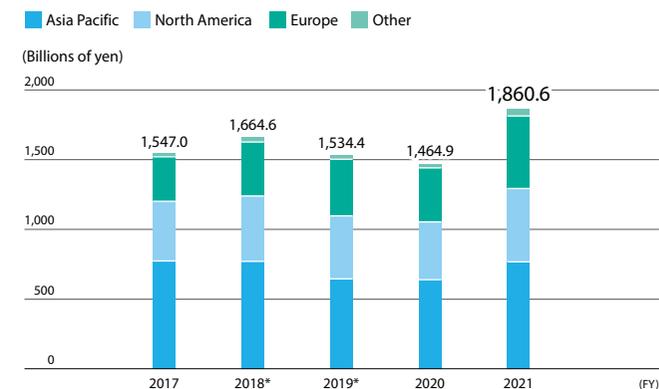
Fiscal 2017 saw an increase in sales revenue in the Industrial Materials domain and expanded sales volume, mainly in the Performance Products domain, resulting in new records for both core operating income and net income attributable to owners of the parent. From fiscal 2018, sales revenue went into decline under the deteriorating economic conditions arising from the economic downturn, trade friction between the United States and China, the impact of the COVID-19 pandemic, and other factors. This trend was accentuated by further impacts, notably the inability of the Health Care domain to record royalty revenue due to ongoing arbitration proceedings. In fiscal 2021, global economic activity began to pick up from the impact of the COVID-19 pandemic and demand in the domestic and overseas markets showed a recovering trend. Despite these conditions, fiscal 2021 saw core operating income increase by ¥97.6 billion (55.9%) year on year to ¥272.3 billion, while ROS rose by 1.4 points to 6.8%. Net income attributable to owners of the parent grew by ¥184.8 billion to ¥177.2 billion. The increase was due mainly to reduced impairment loss compared to the previous fiscal year, when such losses were recorded on non-recurring items in the Health Care domain, and to income from the transfer of the polycrystalline alumina fiber business in fiscal 2021. ROE climbed by 13.8 points year on year to 13.2%.

Sales revenue and ratio of overseas revenue



In fiscal 2021, sales revenue increased by ¥719.4 billion (22.1%) year on year to a record figure of ¥3,976.9 billion. In addition to the increase in sales volume from recovering demand, higher sales prices on rising raw material prices in the Industrial Materials domain were another factor in the increase. The ratio of overseas revenue rose by 1.8 points to 46.8%.

Overseas revenue by region



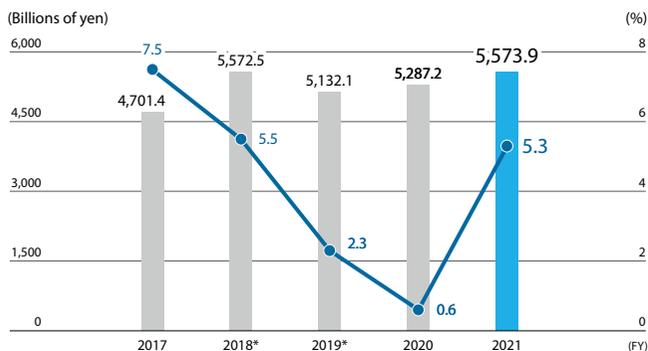
In Europe and the United States, as well as in Asia, demand showed a trend toward recovery from the impact of the COVID-19 pandemic, while the effect of exchange rate differences due to the falling yen also contributed to the increase.

Financial Highlights

Figures for years indicated with (*) do not include results from discontinued operations.

Total assets and ROA

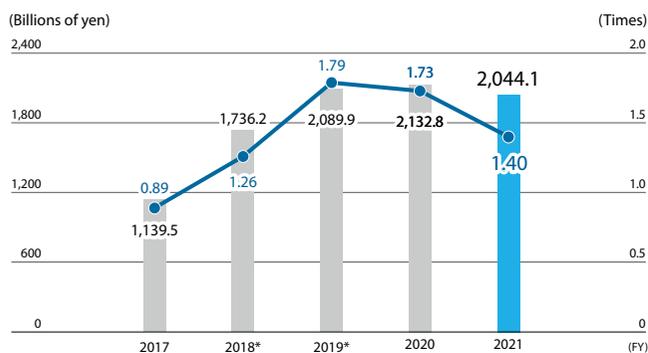
■ Total assets (left axis) ● ROA (right axis)



Total assets amounted to ¥5,573.9 billion. The year-on-year increase of ¥286.7 billion was due to a rise in the yen-denominated value of the assets of overseas consolidated subsidiaries accompanying the progressive depreciation of the yen, growth in inventory assets as a result of rising raw material prices, and increased trade receivables from increased sales revenue. ROA improved by 4.7 points year on year to 5.3%.

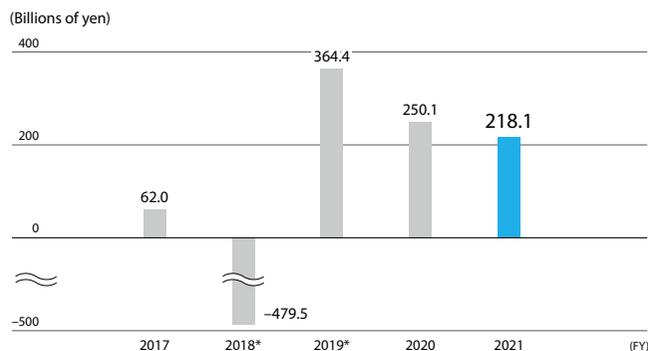
Net interest-bearing debt and net D/E ratio

■ Net interest-bearing debt (left axis) ● Net D/E ratio (right axis)



The net D/E ratio saw a year-on-year reduction of 0.33 to 1.40, due among other factors to repayment of interest-bearing debt and exchange rate impacts. We will target an improvement in the ratio to between 0.5 and 1.0 by expanding cash flows from sources such as cost reductions, income growth, and sale of businesses and by steadily reducing interest-bearing debt.

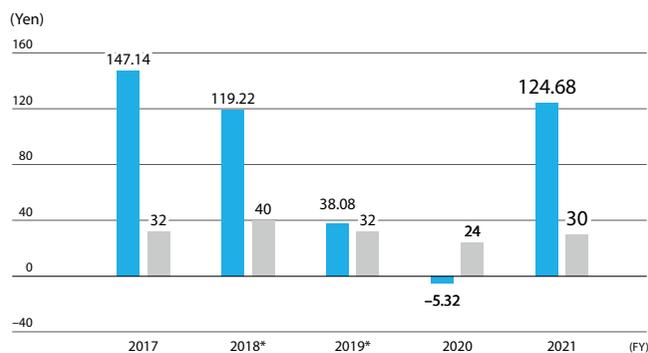
Free cash flow



Net cash flows provided by operating activities amounted to ¥346.9 billion. Here, income before taxes and depreciation and amortization offset the increase in working capital and other factors. Net cash used in investing activities amounted to ¥128.8 billion. Here, acquisition of property, plant and equipment and other expenditures outweighed the income from a business transfer and other sources. The resulting balance of free cash flow was ¥218.1 billion.

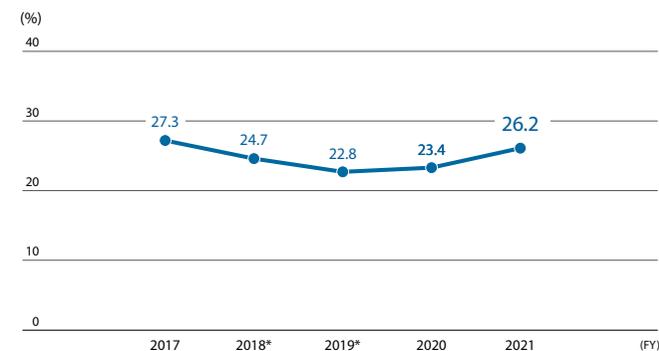
Basic earnings (loss) per share and cash dividends per share

■ Basic earnings (loss) per share ■ Cash dividends per share



In fiscal 2021, basic earnings per share came to ¥124.68. The full-year cash dividend per share is based on an overall consideration of our financial position and future business conditions. Given the increases in core operating income and net income attributable to owners of the parent that resulted from the recovery of demand in fiscal 2021, we have increased the full-year dividend by ¥6 from the previous fiscal year to ¥30.

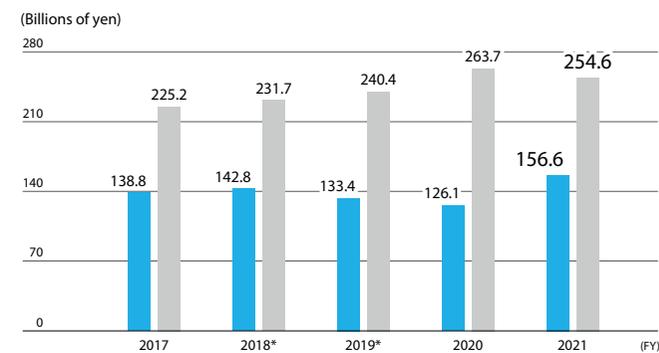
Ratio of equity attributable to owners of the parent



Equity attributable to owners of the parent increased ¥221.8 billion year on year to ¥1,458.1 billion. Consequently, the ratio of equity attributable to owners of the parent increased 2.8 points year on year to 26.2%.

R&D expenditures and capital expenditures

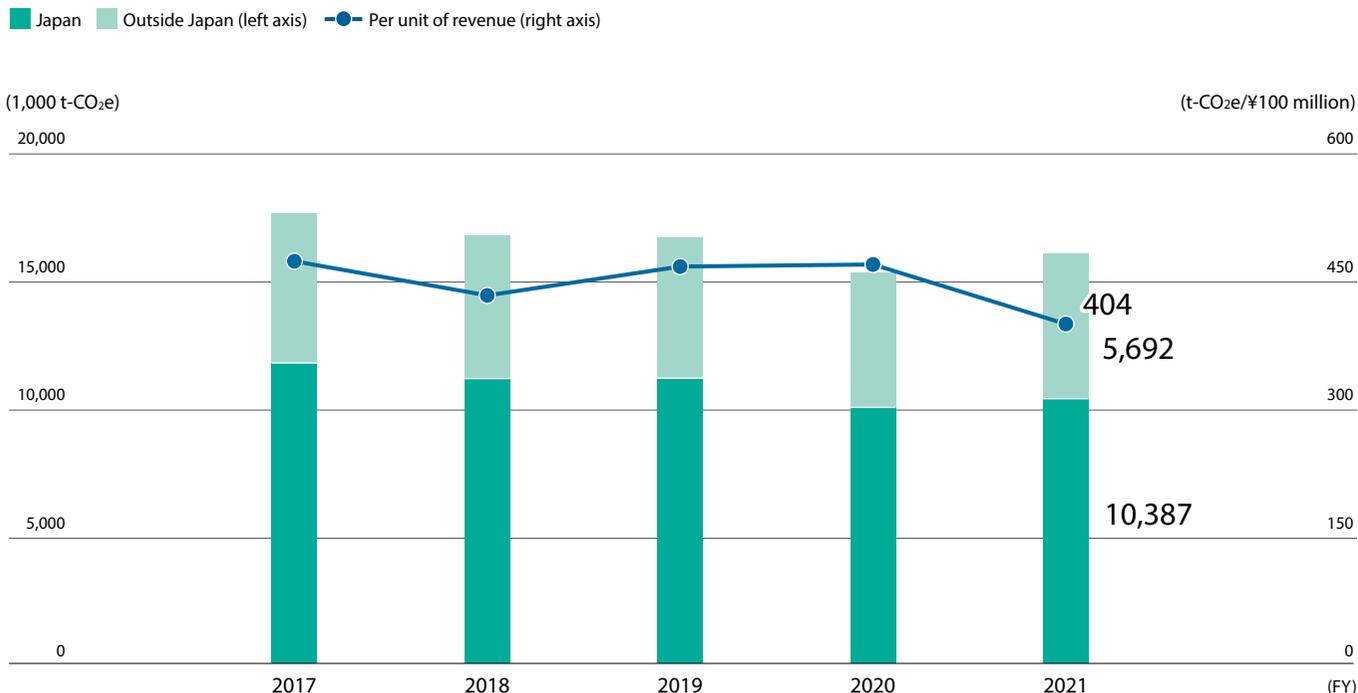
■ R&D expenditures ■ Capital expenditures



In fiscal 2021, R&D expenditures grew by ¥30.5 billion year on year to ¥156.6 billion due to an increase in expenditures on a COVID-19 vaccine and other projects. Capital expenditures decreased by ¥9.1 billion to ¥254.6 billion.

Non-Financial Highlights

GHG emissions*1

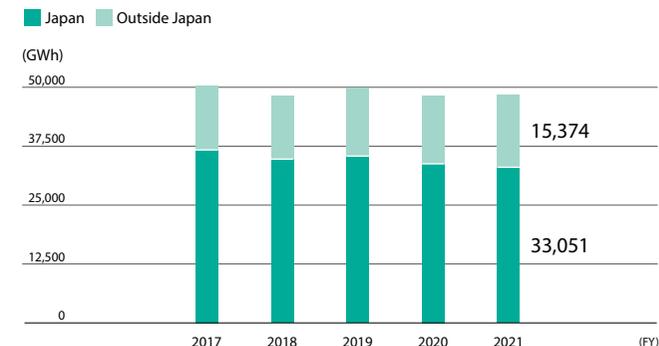


Fiscal 2021 GHG emissions (Scope 1 and Scope 2) totaled 16,079 thousand t-CO₂e.

Total emissions rose year on year, due chiefly to increased operation of plants as economic activity recovered from the decline caused by the pandemic. However, sales rose as well, so emissions per unit of revenue fell to 404 t-CO₂e/¥100 million.

GHG reduction is viewed as one of the most important social issues under the new management policy, "Forging the future." In addition to contributing to the reduction of emissions through our products and services, we are investigating what steps we need to take to further accelerate the reduction of GHG emissions from business activities including production.

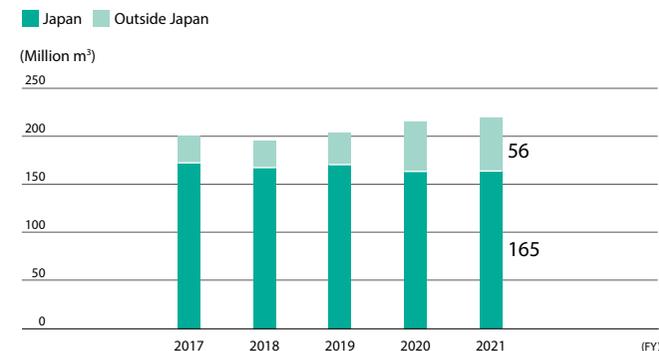
Energy consumption*1



Energy consumption rose in fiscal 2021 due to increased operation of plants as economic activity recovered from the decline caused by the pandemic.

Because improving production efficiency by implementing energy-saving activities and stabilizing process operations is directly linked to GHG reductions, we will continue to reduce energy consumption as an important initiative to realize the new management policy.

Water withdrawal (excluding seawater)*1

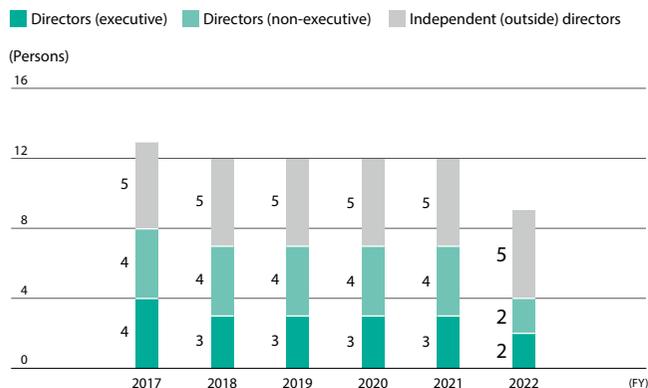


In fiscal 2021, water consumption rose due to increased operation of plants as economic activity recovered from the decline caused by the pandemic. However, ongoing efforts to use water more efficiently meant that we reined in this increase in water consumption, so that overall water consumption was almost at the same level as in fiscal 2020. Alleviating global water supply concerns is viewed as one of the most important social issues under the new management policy. We will continue to promote effective use of water resources and reduction of water intake to ensure that our use of water resources does not place a significant burden on the region.

*1 Data for fiscal 2019 and subsequent periods are calculated based on boundaries revised to reflect the scope of activity of KV30. Figures for fiscal 2018 and earlier periods shown in the graph have been recalculated based on the revised boundaries. Figures for fiscal 2019 and subsequent periods, calculated based on the post-revision boundaries, have received independent assurance.

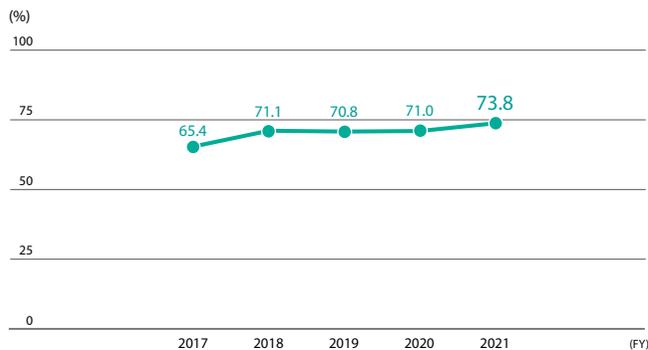
Non-Financial Highlights

Number of directors and outside directors



▶ Pages 63–64 for a list of directors.

Paid leave utilization rate (%)^{*2}



The paid leave utilization rate was much the same as the previous fiscal year. We will work to reform operational procedures in line with the approaching New Normal as we continue with strengthened initiatives to improve the work-life balance.

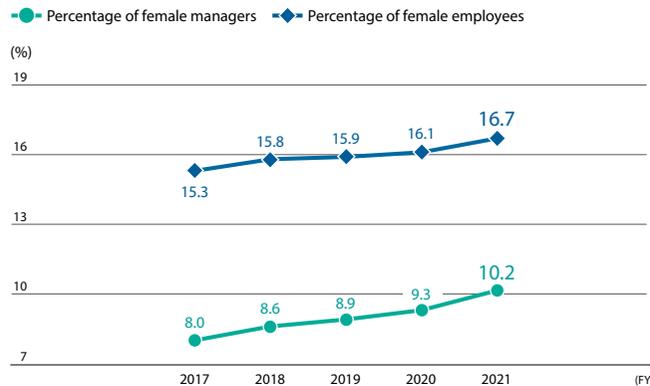
Lost-time injury frequency rate (LTIFR)



The LTIFR in Japan was 0.22, an improvement on the previous fiscal year. The corresponding global figure, for which data has been collected and aggregated since fiscal 2017, is still higher than in Japan.

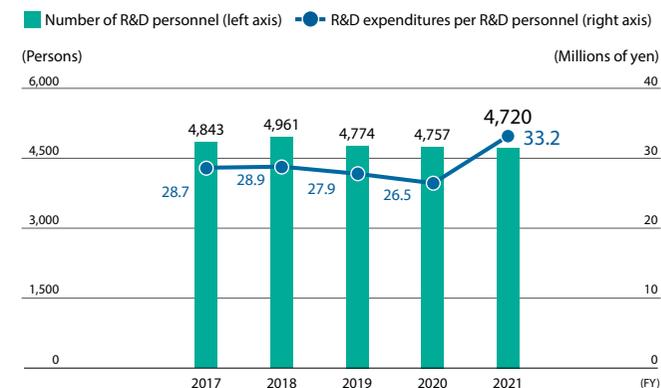
We are committed to efforts to reduce the LTIFR by stepping up initiatives to prevent occupational accidents. These will include a range of measures such as ensuring compliance with basic safety practice and operational safety rules and undertaking risk assessments.

Percentage of female employees and percentage of female managers^{*2}



The percentage of female employees increased by 0.6 points to 16.7% from the previous fiscal year, while the percentage of female managers was 10.2%, up 0.9 points from the previous fiscal year. We operate a range of initiatives to promote the empowerment of women.

Number of R&D personnel and R&D expenditures per R&D personnel



In fiscal 2021, the number of R&D personnel fell by 37 from the previous fiscal year to 4,720, giving a figure of ¥33.2 million for R&D expenditures per R&D personnel.

^{*2} For the boundary data aggregation, ▶ see page 108.

Shareholder Information

Basic policy on shareholder returns

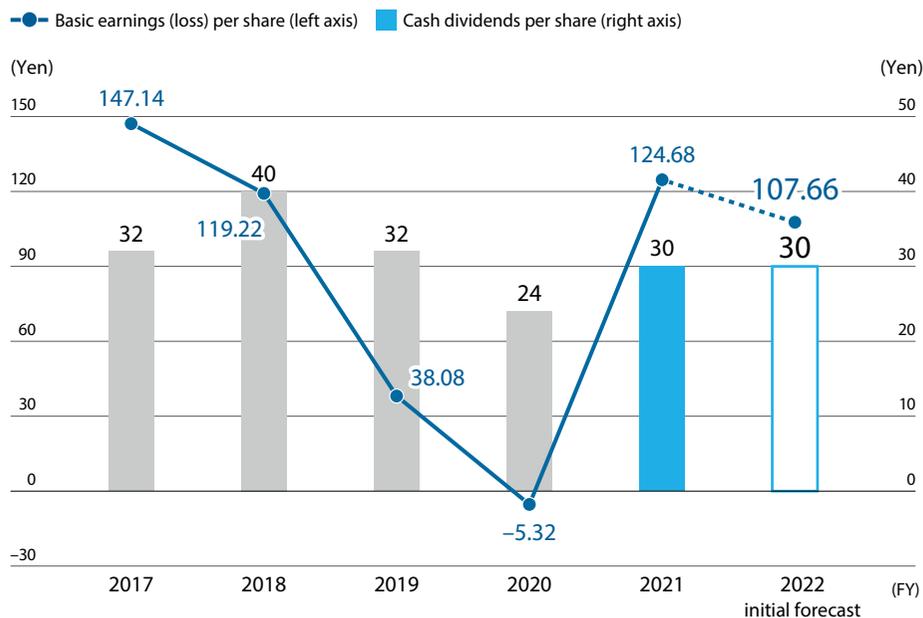
Mitsubishi Chemical Group Corporation aims to improve shareholder value by enhancing corporate value.

We consider achieving a balance between growth investment and improving our financial position in our dividend policy.

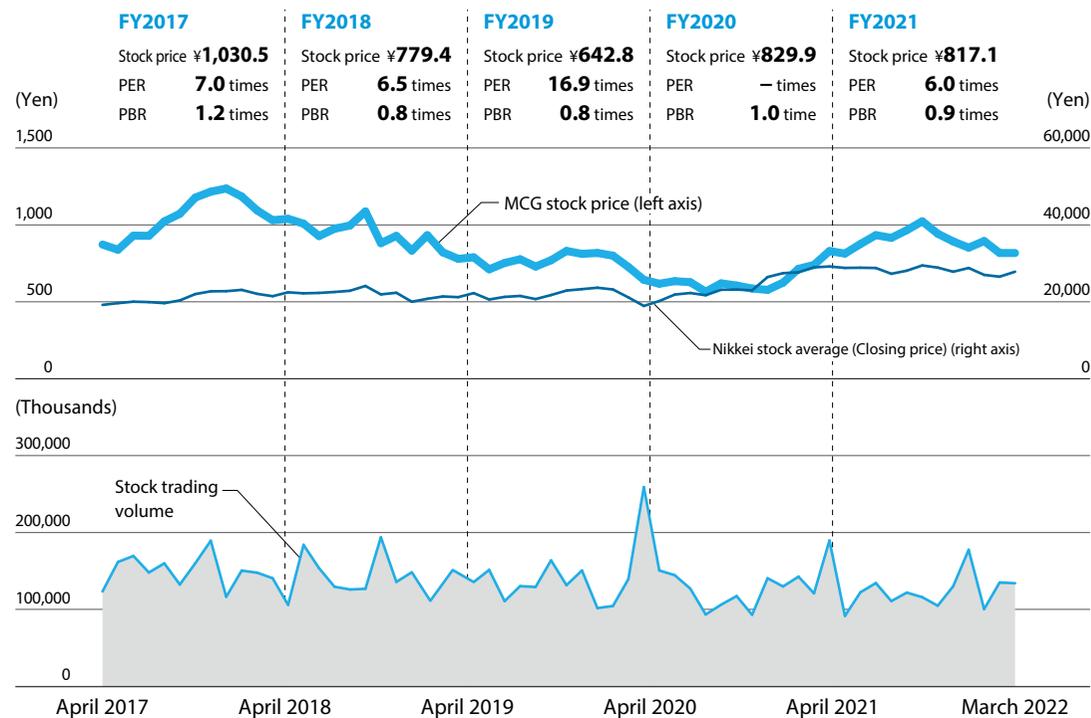
Targeting a medium-term consolidated payout ratio of 30%

Paying stable dividends

Basic earnings (loss) per share and cash dividends per share



Stock price and stock trading volume



Stock price: As of March 31
 PER: Share price as of March 31/Basic earnings (loss) per share
 PBR: Share price as of March 31/Equity attributable to owners of the parent per share

Shareholder Information

Shareholder information (As of March 31, 2022)

Securities code	4188 (Tokyo Stock Exchange Prime Market*) * From April 4, 2022
Shares per unit	100
Authorized shares	6,000,000,000
Outstanding shares	1,506,288,107
Number of shareholders	274,369

Major shareholders

Name	Number of shares (Thousands)	Percentage (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	229,624	16.1
SSBTC CLIENT OMNIBUS ACCOUNT	122,749	8.6
Custody Bank of Japan, Ltd. (Trust account)	82,609	5.8
Meiji Yasuda Life Insurance Company	64,389	4.5
Nippon Life Insurance Company	42,509	3.0
Custody Bank of Japan, Ltd. (Trust account 4)	22,105	1.6
STATE STREET BANK WEST CLIENT - TREATY 505234	21,837	1.5
Taiyo Life Insurance Company	18,838	1.3
JPMorgan Securities Japan Co., Ltd.	17,859	1.3
JP MORGAN CHASE BANK 385781	16,592	1.2

Notes: 1. In addition to the above, Mitsubishi Chemical Holdings holds 82,367 thousand shares as treasury stock, but these shares are non-voting pursuant to the provisions of Article 308, Paragraph 2 of the Companies Act.

2. Equity investment ratios are calculated to the exclusion of the treasury stock (82,367 thousand shares).

Composition of shareholders



FY2021 IR Report

Mitsubishi Chemical Group engages in active and constructive dialogues with shareholders, customers, and other stakeholders through various opportunities to share issues and goals and collaboration.

In dialogues with shareholders and investors, we will ensure appropriate disclosures so as to gain the trust of our shareholders and encourage the long-term holding of our shares. We also intend to engage in active dialogues with shareholders and reflect such dialogues in our corporate activities.

Activities	Description
1 General Meeting of Shareholders	Held on June 24, 2022  General Meeting of Shareholders
IR briefings (large meetings)	1 event: Briefing on management policy (December) Audio and documentation available on our website (Japanese and English)
Top management's dialogue with investors	Small meetings (June, December), individual interviews with domestic and overseas institutional investors
2 For domestic and overseas institutional investors, analysts	Conference calls, following the financial results announcement 4 sessions (following the quarterly financial results announcement) Audio and documentation available on our website (Japanese and English)
Participation in conferences held by securities firms	14 events: Mainly individual interviews with overseas institutional investors
Small meetings on individual themes	1 session: MMA business (June)
Other IR activities	Meetings following the financial results announcement and other events  Briefing on management policy
3 For individual investors	Individual investors' briefings 4 sessions: Including presentation by CEO/CFO

Consolidated Financial Statements

Consolidated Statement of Income

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Fiscal years ended March 31

	Millions of yen	
	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2022
Continuing operations:		
Sales revenue	¥ 3,257,535	¥ 3,976,948
Cost of sales	(2,331,286)	(2,862,224)
Gross profit	926,249	1,114,724
Selling, general and administrative expenses	(752,693)	(854,455)
Other operating income	30,713	81,692
Other operating expenses	(172,391)	(59,961)
Share of profit of associates and joint ventures	15,640	21,194
Operating income	47,518	303,194
Financial income	8,252	9,368
Financial expenses	(22,862)	(22,192)
Income before taxes	32,908	290,370
Income taxes	(10,186)	(80,965)
Net income from continuing operations	¥ 22,722	¥ 209,405
Net income (loss) attributable to:		
Owners of the parent	¥ (7,557)	¥ 177,162
Non-controlling interests	30,279	32,243
Earnings per share:		
		(Yen)
Basic earnings (loss) per share attributable to owners of the parent	¥ (5.32)	¥ 124.68
Diluted earnings (loss) per share attributable to owners of the parent	¥ (5.32)	¥ 115.03

Consolidated Financial Statements

Consolidated Statement of Comprehensive Income

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Fiscal years ended March 31

	Millions of yen	
	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2022
Net income	¥ 22,722	¥209,405
Other comprehensive income:		
Items that will not be reclassified to profit or loss:		
Net gain (loss) on revaluation of financial assets measured at fair value through other comprehensive income	26,675	4,471
Remeasurements of defined benefit pensions plans	26,817	7,328
Share of other comprehensive income (loss) of associates and joint ventures for using the equity method	(191)	(6)
Total items that will not be reclassified to profit or loss	53,301	11,793
Items that may be subsequently reclassified to profit or loss		
Exchange differences on translation of foreign operations	81,019	104,596
Net gain (loss) on derivatives designated as cash flow hedges	180	2,384
Share of other comprehensive income (loss) of associates and joint ventures for using the equity method	3,329	4,656
Total items that may be subsequently reclassified to profit or loss	84,528	111,636
Total other comprehensive income (net of tax)	137,829	123,429
Total comprehensive income	¥160,551	¥332,834
Total comprehensive income attributable to:		
Owners of the parent	¥ 97,068	¥268,003
Non-controlling interests	63,483	64,831

Consolidated Financial Statements

Consolidated Statement of Financial Position

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

		Millions of yen	
		March 31, 2021	March 31, 2022
Assets	Current assets:		
	Cash and cash equivalents	¥ 349,577	¥ 245,789
	Trade receivables	716,392	825,996
	Inventories	576,473	745,248
	Other financial assets	47,818	51,085
	Other current assets	83,462	106,556
	Subtotal	1,773,722	1,974,674
	Assets held for sale	23,812	11,442
	Total current assets	1,797,534	1,986,116
	Non-current assets:		
	Property, plant and equipment	1,813,838	1,899,695
	Goodwill	671,889	705,412
	Intangible assets	455,317	448,805
	Investments accounted for using the equity method	162,042	174,791
	Other financial assets	251,211	233,533
	Other non-current assets	68,051	60,923
	Deferred tax assets	67,346	64,596
	Total non-current assets	3,489,694	3,587,755
	Total assets	¥5,287,228	¥5,573,871

		Millions of yen	
		March 31, 2021	March 31, 2022
Liabilities and Equity			
Liabilities	Current liabilities:		
	Trade payables	¥ 382,272	¥ 486,874
	Bonds and borrowings	653,475	411,213
	Income tax payable	22,283	34,875
	Other financial liabilities	272,341	291,237
	Provisions	11,690	15,601
	Other current liabilities	147,911	178,613
	Subtotal	1,489,972	1,418,413
	Liabilities directly associated with assets held for sale	2,534	880
	Total current liabilities	1,492,506	1,419,293
	Non-current liabilities:		
	Bonds and borrowings	1,696,029	1,748,756
	Other financial liabilities	118,300	112,554
	Retirement benefit liabilities	112,272	103,941
	Provisions	27,398	22,673
	Other non-current liabilities	113,730	147,212
	Deferred tax liabilities	155,845	175,123
	Total non-current liabilities	2,223,574	2,310,259
	Total liabilities	3,716,080	3,729,552
Equity	Common stock	50,000	50,000
	Additional paid-in capital	179,716	170,600
	Treasury stock	(63,244)	(62,870)
	Retained earnings	1,060,069	1,213,677
	Other components of equity	9,798	86,670
	Equity attributable to owners of the parent	1,236,339	1,458,077
	Non-controlling interests	334,809	386,242
	Total equity	1,571,148	1,844,319
	Total liabilities and equity	¥5,287,228	¥5,573,871

Consolidated Financial Statements

Consolidated Statement of Changes in Equity

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Fiscal year ended March 31, 2021

	Millions of yen			
	Common stock	Additional paid-in capital	Treasury stock	Retained earnings
Balance at April 1, 2020	¥50,000	¥176,715	¥(63,485)	¥1,071,260
Net income (loss)	—	—	—	(7,557)
Other comprehensive income	—	—	—	—
Total comprehensive income	—	—	—	(7,557)
Purchase of treasury stock	—	—	(20)	—
Disposal of treasury stock	—	(198)	261	—
Cash dividends	—	—	—	(34,091)
Share-based payment transactions	—	(13)	—	—
Changes in interests in subsidiaries	—	756	—	—
Business combinations or business divestitures	—	2,456	—	—
Changes in scope of consolidation	—	—	—	51
Transfer from other components of equity to retained earnings	—	—	—	30,406
Transfer from other components of equity to non-financial assets	—	—	—	—
Total transactions with owners	—	3,001	241	(3,634)
Balance at March 31, 2021	¥50,000	¥179,716	¥(63,244)	¥1,060,069

	Other components of equity				Total	Equity attributable to owners of the parent	Non-controlling interests	Total equity
	Net gain (loss) on revaluation of financial assets measured at fair value through other comprehensive income	Remeasurements of defined benefit pensions plans	Exchange differences on translation of foreign operations	Net gain (loss) on derivatives designated as cash flow hedges				
Balance at April 1, 2020	¥38,335	¥ —	¥(102,773)	¥ 170	¥(64,268)	¥1,170,222	¥280,607	¥1,450,829
Net income (loss)	—	—	—	—	—	(7,557)	30,279	22,722
Other comprehensive income	22,523	26,255	55,696	151	104,625	104,625	33,204	137,829
Total comprehensive income	22,523	26,255	55,696	151	104,625	97,068	63,483	160,551
Purchase of treasury stock	—	—	—	—	—	(20)	—	(20)
Disposal of treasury stock	—	—	—	—	—	63	—	63
Cash dividends	—	—	—	—	—	(34,091)	(11,049)	(45,140)
Share-based payment transactions	—	—	—	—	—	(13)	—	(13)
Changes in interests in subsidiaries	—	—	—	—	—	756	361	1,117
Business combinations or business divestitures	—	—	—	—	—	2,456	1,488	3,944
Changes in scope of consolidation	—	—	—	—	—	51	(81)	(30)
Transfer from other components of equity to retained earnings	(4,151)	(26,255)	—	—	(30,406)	—	—	—
Transfer from other components of equity to non-financial assets	—	—	—	(153)	(153)	(153)	—	(153)
Total transactions with owners	(4,151)	(26,255)	—	(153)	(30,559)	(30,951)	(9,281)	(40,232)
Balance at March 31, 2021	¥56,707	¥ —	¥ (47,077)	¥ 168	¥ 9,798	¥1,236,339	¥334,809	¥1,571,148

Consolidated Financial Statements

Consolidated Statement of Changes in Equity

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Fiscal year ended March 31, 2022

	Millions of yen			
	Common stock	Additional paid-in capital	Treasury stock	Retained earnings
Balance at April 1, 2021	¥50,000	¥179,716	¥(63,244)	¥1,060,069
Net income (loss)	—	—	—	177,162
Other comprehensive income	—	—	—	—
Total comprehensive income	—	—	—	177,162
Purchase of treasury stock	—	—	(31)	—
Disposal of treasury stock	—	(403)	405	—
Cash dividends	—	—	—	(38,367)
Share-based payment transactions	—	533	—	—
Forfeiture of share acquisition rights	—	(1,106)	—	823
Changes in interests in subsidiaries	—	(8,140)	—	—
Business combinations or business divestitures	—	—	—	—
Changes in scope of consolidation	—	—	—	21
Transfer from other components of equity to retained earnings	—	—	—	13,969
Total transactions with owners	—	(9,116)	374	(23,554)
Balance at March 31, 2022	¥50,000	¥170,600	¥(62,870)	¥1,213,677

	Other components of equity							Equity attributable to owners of the parent	Non-controlling interests	Total equity
	Net gain (loss) on revaluation of financial assets measured at fair value through other comprehensive income	Remeasurements of defined benefit pensions plans	Exchange differences on translation of foreign operations	Net gain (loss) on derivatives designated as cash flow hedges	Total					
Balance at April 1, 2021	¥56,707	¥ —	¥(47,077)	¥ 168	¥ 9,798	¥1,236,339	¥334,809	¥1,571,148		
Net income (loss)	—	—	—	—	—	177,162	32,243	209,405		
Other comprehensive income	1,063	7,155	80,395	2,228	90,841	90,841	32,588	123,429		
Total comprehensive income	1,063	7,155	80,395	2,228	90,841	268,003	64,831	332,834		
Purchase of treasury stock	—	—	—	—	—	(31)	—	(31)		
Disposal of treasury stock	—	—	—	—	—	2	—	2		
Cash dividends	—	—	—	—	—	(38,367)	(15,963)	(54,330)		
Share-based payment transactions	—	—	—	—	—	533	—	533		
Forfeiture of share acquisition right	—	—	—	—	—	(283)	—	(283)		
Changes in interests in subsidiaries	—	—	—	—	—	(8,140)	2,553	(5,587)		
Business combinations or business divestitures	—	—	—	—	—	—	(9)	(9)		
Changes in scope of consolidation	—	—	—	—	—	21	21	42		
Transfer from other components of equity to retained earnings	(6,814)	(7,155)	—	—	(13,969)	—	—	—		
Total transactions with owners	(6,814)	(7,155)	—	—	(13,969)	(46,265)	(13,398)	(59,663)		
Balance at March 31, 2022	¥50,956	¥ —	¥ 33,318	¥2,396	¥ 86,670	¥1,458,077	¥386,242	¥1,844,319		

Consolidated Financial Statements

Consolidated Statement of Cash Flows

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Fiscal year ended March 31

	Millions of yen	
	Fiscal year ended March 31, 2021	Fiscal year ended March 31, 2022
Cash flows from operating activities:		
Income before taxes	¥ 32,908	¥ 290,370
Depreciation and amortization	243,793	251,469
Share of (profit) loss of associates and joint ventures	(15,640)	(21,194)
Impairment loss	127,193	26,047
Loss on sales and retirement of property, plant and equipment	11,458	14,407
Loss on liquidation of subsidiaries and associates	7,379	270
Provision for loss related to plant closure	3,318	—
Gain on transfer of businesses	(1,428)	(60,838)
Gain on sales of property, plant and equipment	(9,869)	(9,121)
Gain on sales of shares of subsidiaries and associates	(1,168)	(1,888)
Gain on step acquisitions	(1,295)	—
Interest and dividend income	(5,547)	(5,875)
Interest expense	21,404	20,985
(Increase) decrease in trade receivables	(237)	(88,721)
(Increase) decrease in inventories	44,629	(152,599)
Increase (decrease) in trade payables	(27,240)	86,511
Increase (decrease) in retirement benefit assets and liabilities, net	446	9,222
Others	71,695	45,566
Subtotal	501,799	404,611
Interest received	1,391	1,134
Dividends received	19,019	14,204
Interest paid	(19,891)	(20,250)
Income tax (paid) received, net	(35,185)	(52,828)
Net cash provided by (used in) operating activities	467,133	346,871
Cash flows from investing activities:		
Purchase of property, plant and equipment	(246,410)	(244,851)
Proceeds from sales of property, plant and equipment	15,843	24,707
Purchase of intangible assets	(10,606)	(12,814)
Purchase of other financial assets	(3,106)	(4,070)
Proceeds from sales/redemption of other financial assets	76,982	38,988
Purchase of investments in subsidiaries	(28,677)	(6,501)
Proceeds from sales of investments in subsidiaries	3,020	0
Payments for transfer of businesses	(983)	(700)
Proceeds from transfer of businesses	1,747	81,901
Net (increase) decrease in time deposits	5,708	476
Others	(30,528)	(5,917)
Net cash provided by (used in) investing activities	(217,010)	(128,781)

Cash flows from financing activities:		
Net increase (decrease) in short-term borrowings	(115,453)	(89,129)
Net increase (decrease) in commercial papers	(3,000)	(60,000)
Proceeds from long-term borrowings	301,531	66,162
Repayment of long-term borrowings	(171,789)	(130,246)
Proceeds from issuance of bonds	69,640	94,636
Redemption of bonds	(55,000)	(125,000)
Repayment of lease liabilities	(30,349)	(32,349)
Net (increase) decrease in treasury stock	(19)	(27)
Dividends paid to owners of the parent	(34,091)	(38,367)
Dividends paid to non-controlling interests	(11,007)	(15,810)
Payment for acquisition of subsidiaries' interests from non-controlling interests	(98,779)	(512)
Proceeds from stock issuance to non-controlling interests	4,404	1
Repayments to non-controlling interests	—	(5,600)
Others	1,139	(42)
Net cash provided by (used in) financing activities	(142,773)	(336,283)
Effect of exchange rate changes on cash and cash equivalents	13,094	14,276
Net increase (decrease) in cash and cash equivalents	120,444	(103,917)
Cash and cash equivalents at the beginning of the period	228,211	349,577
Net increase (decrease) in cash and cash equivalents resulting from transfer to assets held for sale	49	(137)
Net increase (decrease) in cash and cash equivalents resulting from change in scope of consolidation	854	266
Net increase in cash and cash equivalents resulting from merger and acquisition	19	—
Cash and cash equivalents at the end of the period	¥ 349,577	¥ 245,789

Non-Financial Information

Environmental Data

☑ Indicators with this icon have been assured by KPMG AZSA Sustainability Co., Ltd. for fiscal 2021.

Boundary of data aggregation

The data covers the four operating companies (Mitsubishi Chemical, Mitsubishi Tanabe Pharma, Life Science Institute, and Nippon Sanso Holdings) and their domestic and overseas Group companies.

Energy consumption/Greenhouse gases (GHG)*1	FY2018	FY2019	FY2020	FY2021
☑ GHG emissions (Scope 1 + Scope 2) (1,000 metric t-CO ₂ e)*2	14,187	16,629*4	15,325	16,079
☑ Scope 1	6,787	8,455	7,786	7,829
☑ Scope 2	7,400	8,174	7,540	8,250
☑ Scope 3*5	49,260	51,820	51,930	53,637
☑ Energy consumption (GWh)*3	39,126	49,110	47,335	48,425

Environmental impact	FY2018	FY2019	FY2020	FY2021
☑ NOx emissions (1,000 metric tons)	7.54	8.28	7.94	7.91
☑ SOx emissions (1,000 metric tons)	4.07	3.39	3.23	3.08
☑ COD (1,000 metric tons)*6	1.84	1.80	1.68	1.70
☑ Total nitrogen emissions (1,000 metric tons)*6	5.64	5.67	4.87	4.85
☑ Total phosphorous emissions (1,000 metric tons)*6	0.10	0.11	0.10	0.09

Water use	FY2018	FY2019	FY2020	FY2021
☑ Water withdrawal (Million m ³) (excluding seawater)	189	204	216	222

*1 Based on the GHG Protocol, energy used to produce electricity and steam sold externally and the resulting CO₂ emissions are not excluded. Since fiscal 2019, the data has included half of the energy consumption and GHG emissions of joint operations in Japan.

*2 For the calculation of emissions in Japan, the base emission factors of individual electric power companies specified in the Act on Promotion of Global Warming Countermeasures are used in principle, with an alternative emission factor used in cases where the specific emission factor is unavailable. GHG emissions that are not subject to reporting under the Act are mostly calculated based on the mass balance of chemical reactions. Overseas Scope 1 emissions are calculated with the emission factors specified in the Act on Promotion of Global Warming Countermeasures, and overseas Scope 2 emissions are calculated with power company-specific emission factors or country-level emission factors for electricity published by the IEA.

*3 The unit higher heating values for fuels specified in the Act on the Rational Use of Energy are used.

*4 In fiscal 2019, the expanded boundary of data aggregation under our medium- to long-term basic management strategy KAITEKI Vision 30 resulted in the additional inclusion of one joint operations company. Given the additional effect of expansion due to acquisitions in previous fiscal years, the total of Scope 1 + Scope 2 emissions showed an increase of 2,442 thousand metric t-CO₂e from fiscal 2018 to 16,629 thousand metric t-CO₂e. Excluding these effects, however, emissions fell by 54 thousand metric t-CO₂e compared to fiscal 2018.

*5 See page 3 of the non-financial data sheet on the Mitsubishi Chemical Group Corporation's website for the calculation method for Scope 3 GHG emissions.

*6 COD, total nitrogen emissions, and total phosphorous emissions each show total quantity of emissions discharged into rivers, lakes, and oceans. Emissions into sewage systems and off-site wastewater treatment plants are excluded.

Non-Financial Information

Social Data

☑ Indicators with this icon have been assured by KPMG AZSA Sustainability Co., Ltd. for fiscal 2021.

Constitution of employees (Mitsubishi Chemical Group)	FY2018	FY2019	FY2020	FY2021
Number of consolidated employees	72,020	69,609	69,607	69,784
Number of employees by district Japan	43,709	40,732	40,774	40,289
Outside Japan	28,311	28,877	28,833	29,495

Aggregation period

Each fiscal year from April 1 to March 31, or as of March 31

Boundary of data aggregation

The figures show those employed by Mitsubishi Chemical, Mitsubishi Tanabe Pharma, Life Science Institute, and Taiyo Nippon Sanso (including those seconded to other companies but excluding those seconded from other companies and workers in fixed-term employment).

Diversity/Work-life balance/Occupational safety	FY2018	FY2019	FY2020	FY2021
☑ Number of employees	22,064	23,116	23,147	22,739
☑ Number of employees by gender Male	18,578	19,444	19,429	18,934
☑ Female	3,486	3,672	3,718	3,805
☑ Percentage of female employees (%)	15.8	15.9	16.1	16.7
☑ Percentage of female managers (%) ^{*7}	8.6	8.9	9.3	10.2
☑ Paid leave utilization rate (%) ^{*8}	71.1	70.8	71.0	73.8
☑ Lost-time injury frequency rate (LTIFR) ^{*9, *10}	0.99	1.09	1.18	1.23

^{*7} Percentage of female employees out of all employees at assistant manager level and above.

^{*8} The denominator is the number of days newly granted and the numerator is the number of days acquired in the reporting fiscal year. The denominator does not include the number of days carried over from the previous fiscal year.

^{*9} Boundary of data aggregation: From fiscal 2018, the data covers the four operating companies and their domestic and overseas Group companies with operating divisions active. From fiscal 2020, the boundary of the LTIFR includes the staff of Mitsubishi Tanabe Pharma's Head Office, branches, and sales offices in Japan.

^{*10} The LTIFR is the number of lost-time injuries and fatalities per million hours worked.

Independent Assurance Report

To the President and CEO of Mitsubishi Chemical Group Corporation

We were engaged by Mitsubishi Chemical Group Corporation (the “Company”) to undertake a limited assurance engagement of the environmental and social performance indicators marked with (the “Indicators”) for the period from April 1, 2021 to March 31, 2022 included in its KAITEKI REPORT 2022 (the “Report”) for the fiscal year ended March 31, 2022.

The Company’s Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the “Company’s reporting criteria”), as described in the Report.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the ‘International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information’ and the ‘ISAE 3410, Assurance Engagements on Greenhouse Gas Statements’ issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company’s responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company’s reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company’s reporting criteria, and recalculating the Indicators.
- Visiting the Yoshitomi Plant of Mitsubishi Tanabe Pharma Factory Ltd. and the Yoshitomi Plant of API Corporation selected on the basis of a risk analysis.
- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company’s reporting criteria as described in the Report.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

/s/ Kazuhiko Saito

Kazuhiko Saito, Partner, Representative Director

KPMG AZSA Sustainability Co., Ltd.

Tokyo, Japan

November 28, 2022

Notes to the Reader of Independent Assurance Report:

This is a copy of the Independent Assurance Report and the original copies are kept separately by the Company and KPMG AZSA Sustainability Co., Ltd.

MITSUBISHI CHEMICAL GROUP CORPORATION

1-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8251, Japan

www.mitsubishichem-hd.co.jp/english/



Disclaimer

This report contains forward-looking statements that reflect Mitsubishi Chemical Group Corporation's assumptions and beliefs based on currently available information. Actual results may differ materially from forecasts due to various risk factors and uncertainties. These include, but are not limited to, demand in Japan and overseas, exchange rates, price and procurement volume of crude oil and naphtha, market trends, technological innovation, National Health Insurance drug price revisions, product liabilities, lawsuits, laws, and regulations, as the Mitsubishi Chemical Group Corporation is engaged in a wide range of businesses, including various performance products, MMA, petrochemicals, coal chemicals, industrial gases, and pharmaceuticals.