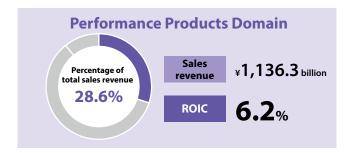
Overview of Business Domains | Summary

Financial results figures for each domain

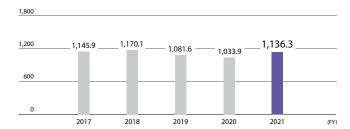
Note: Figures for past fiscal periods (up to and including FY2020) are the business results figures announced at the time.



Sales revenue

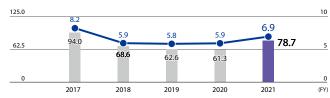
Sales revenue (Billions of yen)

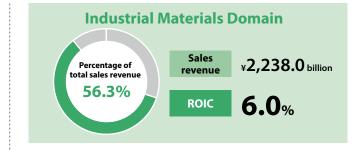
2,400



Core operating income and margin

Core operating income (left axis) - Core operating margin (right axis) (Billions of yen) 250.0 20 187.5





Sales revenue Sales revenue

(Billions of yen) 2,400 2,238.0 2,003.5 1.900.4 1,816.0 1,670.0 1,200 600

2019

2020

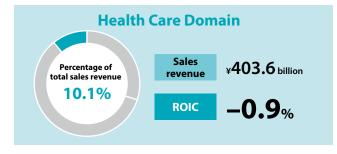
2021

Core operating income and margin

2018

2017





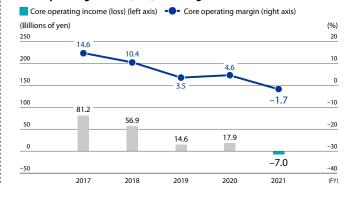


Sales revenue (Billions of yen)

1,200 556.6



Core operating income (loss) and margin

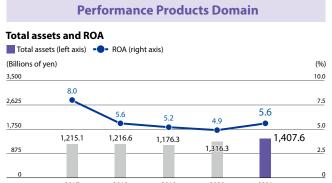


Overview of Business Domains | Summary

Financial results figures for each domain

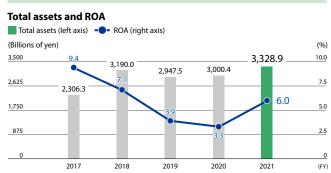
Notes: 1. Figures for past fiscal periods (up to and including fiscal 2020) are the business results figures announced at the time.

2. ROA was calculated as core operating income divided by the fiscal year average of total assets.





(Billions of yen)



-151.0 -

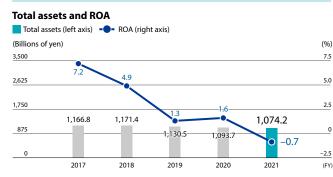
0.8

2020

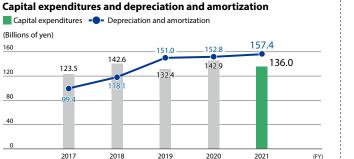
2021

0.7

2019



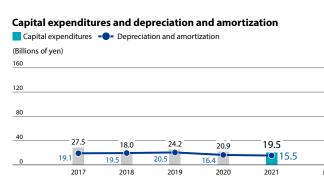
Health Care Domain

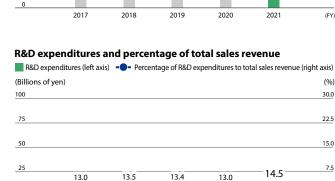


30.0

15.0

7.5

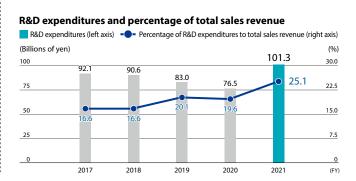


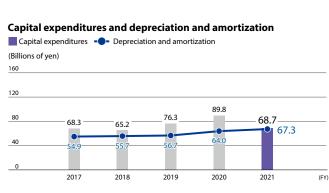


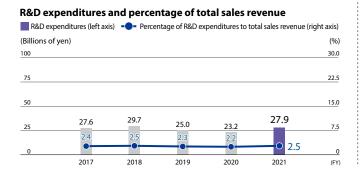
2018

0.7

2017







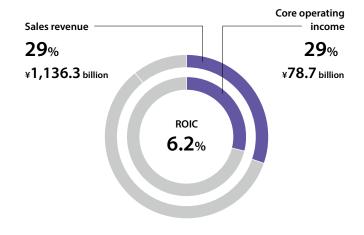
Note: The figures for each segment are based on the results for fiscal 2021.

Performance Products Domain

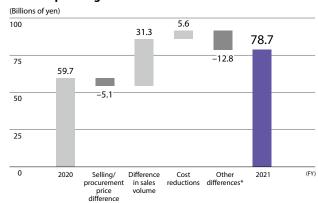
- Polymers & Compounds
- Films & Molding Materials
- Advanced Solutions



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.

Performance Products Domain

Polyester Films business

• Strong market position and ability to provide solutions in advanced polyester film applications

High-Performance Films business

• Technological capability to add various functions to create gas-barrier, porous, and multilayer films, etc.

High-Performance Engineering Plastics business

Global network of facilities capable of handling operations

Carbon Fiber and Composite Materials business

• Vertically integrated value chain spanning from carbon fibers to intermediate base materials and composite materials

Semiconductors business

- High-level purification and quality management technologies to monitor microscopic particulate contamination
- Cleaning services for semiconductor manufacturing equipment components

Battery Materials business

• Electrolytes: Ability to develop functional additives that create high-performance batteries

Strengths

Opportunities

Polvester Films business

• Ability to respond to short-term fluctuations beyond the

High-Performance Films business

Concentrated mainly in the domestic market

High-Performance Engineering Plastics business

• Vulnerable to social, economic, and currency risks in various regions

Carbon Fiber and Composite Materials business

• Impact of exchange rate fluctuations due to high ratio of overseas revenues

Semiconductors business

• Distinctive products yet to gain full recognition within the semiconductor industry

Weaknesses



Battery Materials business

 Dependence of raw material supply chain on China

Polyester Films business

 Increasingly sophisticated and complex market needs

High-Performance Films business

Supply of high-performance products to global market

High-Performance Engineering Plastics business

 Rising demand from the aircraft, semiconductor, and medical equipment industries

Carbon Fiber and Composite Materials business

 Increasing demand for automobile parts, wind turbine blades, and pressure vessel materials

Semiconductors business

 Increasing demand for new materials in response to rapid market expansion and microwiring and multilayering of circuits

Battery Materials business

Rapidly growing market

Threats

Polvester Films business

 Shrinking optical film market due to disruptive innovations

High-Performance Films business

• Declining demand forecast in the domestic market in medium term

High-Performance Engineering Plastics business

 Shrinking market due to growing adoption of 3D printers and other new technologies

Carbon Fiber and Composite Materials business

• Intensifying competition due to improving product quality in emerging countries

Semiconductors business

Strong pressure to localize production

Battery Materials business

• Profit squeeze due to sharp rise in raw material prices

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

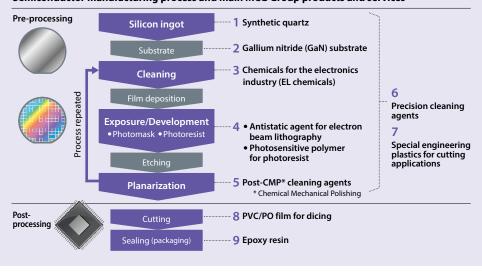
We are strengthening our offer of products and services in the semiconductor business to deliver new value to the semiconductor industry.

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



Performance Products Domain

Polyester Film

Strategey 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)





Germany: Increase of 27,000 tons/year (Planned completion in 2024)

- Industrial applications Labeling systems

economy

- CO₂ emissions reduction
- Promotes the circular

APAC (CAGR 5%)



Indonesia: Increase of 25,000 tons/year (Completed in 2021)

- Electronic displays
- Multilayer ceramic capacitor applications

Americas (CAGR 4%)



U.S.: Increase of 25,000 tons/year (Completed in 2017)

- Industrial applications
- · Labeling systems

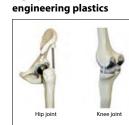
High-Performance Engineering Plastics Product rollout to respond flexibly to a wide range of medical needs

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.

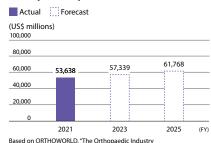
We will target growth in the high-performance engineering plastics business by combining the wide range of technologies and experience available within the MCG Group.

Biocompatible high-performance



Orthopedic implant market

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

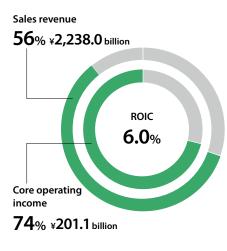
Note: The figures for each segment are based on the results for fiscal 2021.

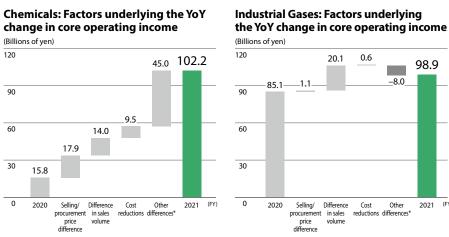
Industrial Materials Domain

- 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.





^{*} 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.

Industrial Materials Domain



• Three manufacturing methods and top share of global MMA market

Petrochemicals business

chain from basic petrochemicals to derivatives

Carbon Products business

Strengths Industrial Gases business

• Top share of Japan's industrial gas market and

MMA

• Fluctuating earnings due to raw material prices and global market conditions

Petrochemicals business

• Fluctuating earnings due to raw material prices and global market conditions

Weaknesses

Carbon Products business

 Fluctuating earnings due to raw material prices and global market conditions

Industrial Gases business

 Fluctuating earnings due to electricity costs

MMA

 Business operation network capable of meeting growing global demand

Petrochemicals business

 Technology license agreements and proprietary catalysts in growing global markets

Carbon Products business

 Growing demand for coke due to crude steel production expansion in developing countries such as India

Industrial Gases business

 Growing investment opportunities around the world and rising demand for gas applications in the electronics and medical device industries

Threats

MMA

Competition from alternative materials

Petrochemicals business

 Intensifying competition in domestic market due to unexpectedly high imports of petrochemicals derived from U.S. shale and Chinese coal

Carbon Products business

Adoption of low-carbon technology by the steel industry

Industrial Gases business

• Growing oligopoly of European and American gas majors in global market

Industrial Gases

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

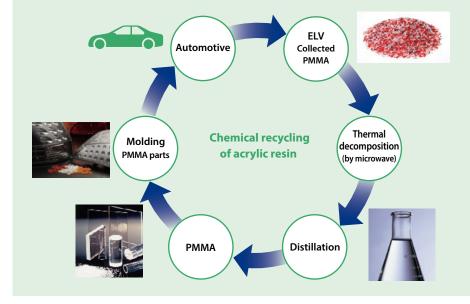
Opportunities

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.

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.



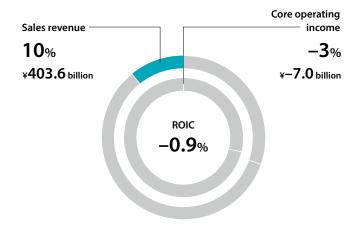
Note: The figures for each segment are based on the results for fiscal 2021.

Health Care Domain

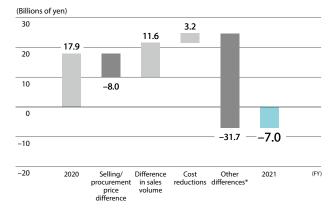
- Pharma
- Regenerative Medicine



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.

Health Care Domain



- New drug creation capabilities in the pharmaceuticals business
- Strong presence in priority drug markets including central nervous system and immuno-inflammation

Regenerative Medicine business

- medicine field
- Research experience with Muse cells

Pharma business

Delayed expansion into global markets

Weaknesses

Regenerative Medicine business

Labor shortage



Pharma business

- Demand for provision of diverse healthcare
- Increasingly diverse drug discovery activities due to technological advances
- Unmet medical needs

Regenerative Medicine business

- Diversifying needs in healthcare and medical sectors
- Unmet medical needs
- Growing expectations for the development of regenerative medicine products

Threats

Strengths

Opportunities

Pharma business

- Declining probability of success with drug discovery
- Increasing R&D expenditures
- Various government measures to control healthcare expenditures

Regenerative Medicine business

- Various government measures to control healthcare expenditures
- Risk of delay in establishing industrial structure for regenerative medicine

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)

2 Infiltration 1 Starting materials



Genes/plants



inserted into

the leaf tissue

The recombinant products created by the infiltrated plant cells

accumulate

The recombinant products are released into the solution



Highly pure product is obtained



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.





Common virus