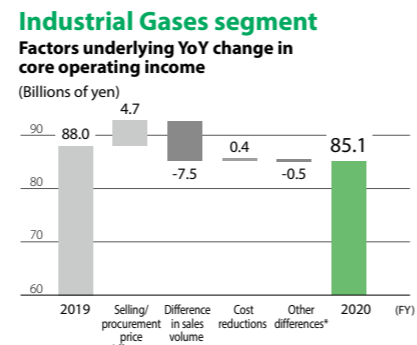
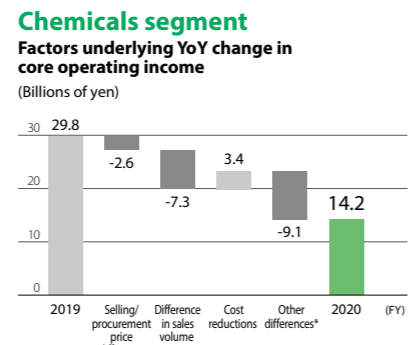
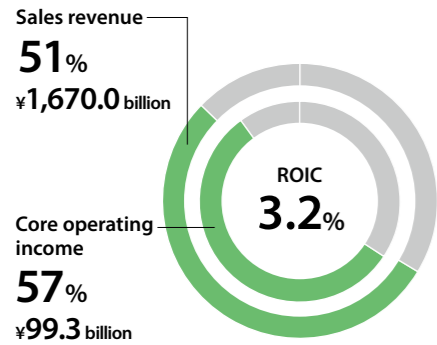


Industrial Materials Domain

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 ¥858.2 billion, a year-on-year decrease of ¥185.3 billion, and core operating income to ¥14.2 billion, a decrease of ¥15.6 billion. The MMA subsegment saw a decline in sales revenue due to the lower market prices compared to the previous fiscal year, despite an improvement from the second half of the year in the price of MMA monomer and related products. The Petrochemicals subsegment saw a decrease in sales revenue that was due on one hand to lower sales volume owing to the increased impact of scheduled maintenance and repairs at our ethylene production facilities, and on the other hand to lower sales prices arising mainly from the fall in raw material prices. In the Carbon Products subsegment, sales revenue fell

on the twin impact of lower sales prices, due mainly to the fall in raw material prices, and reduced sales volume, due to declining demand for coke and related products. Core operating income in the segment decreased due to the falling market price of MMA monomer and related products and to the lower sales volume of carbon products.

Industrial Gases segment

Sales revenue amounted to ¥818.8 billion, a year-on-year decrease of ¥31.5 billion, and core operating income to ¥85.1 billion, a decline of ¥2.9 billion. The Industrial Gases segment experienced a drop in both sales revenue and core operating income, despite the strong performance of gases for electronic applications, as domestic and overseas demand fell overall.

<p>MMA</p> <ul style="list-style-type: none"> We use three manufacturing methods and hold the top share of the global MMA market. <p>Petrochemicals business</p> <ul style="list-style-type: none"> We have amassed advanced technologies across a broad product chain ranging from basic petrochemicals to derivatives. <p>Carbon Products business</p> <ul style="list-style-type: none"> We possess exceptional coking coal blending technologies and coke quality management technologies. <p>Industrial Gases</p> <ul style="list-style-type: none"> As a group, we hold the top share of Japan's industrial gases market and can supply these gases to markets around the world. 	<p>Strengths</p> <p>S</p>	<p>Weaknesses</p> <p>W</p>
<p>MMA</p> <ul style="list-style-type: none"> Our international operations have enough capacity to meet growing global demand. <p>Petrochemicals business</p> <ul style="list-style-type: none"> This business can leverage technology license agreements and proprietary catalysts in growing markets around the world. <p>Carbon Products business</p> <ul style="list-style-type: none"> We can tap into growing demand for coke as crude steel production expands in developing countries such as India. <p>Industrial Gases</p> <ul style="list-style-type: none"> As a group, we can take advantage of growing investment opportunities around the world and rising demand for gas applications in the electronics and medical device industries. 	<p>Opportunities</p> <p>O</p>	<p>Threats</p> <p>T</p>

Financial results and main products

MMA FY2020 Sales revenue ¥250.6 billion FY2020 Core operating income ¥14.8 billion

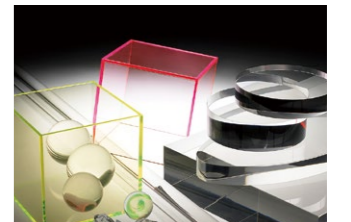
MMA and PMMA

MMA*1 Our production capacity of this organic compound accounts for approximately 40% of total global capacity. We produce this through three methods*2 using different raw materials, and are pursuing advancements in its manufacturing processes while leveraging cost competitiveness and access to raw materials through a global supply chain.

*1 Methyl methacrylate
*2 The acetone cyanohydrin (ACH) method, C4 direct oxidation process and Mitsubishi Chemical Corporation (MCC)'s new ethylene method called Alpha technology.

PMMA*3 We manufacture this thermoplastic, which boasts excellent transparency, weather-resistance, and formability, for use in a wide range of products, particularly acrylic sheets for signs, display cases and aquarium tanks. It is also used in auto parts, optical components, consumer electronics components, plastic optical fibers and partitions to prevent airborne droplet infection.

*3 Polymethyl methacrylate



Petrochemicals FY2020 Sales revenue ¥430.2 billion FY2020 Core operating loss ¥(1.5) billion

Basic petrochemicals and basic chemical derivatives, and polyolefins

Basic petrochemicals and basic chemical derivatives This business supplies olefins, including ethylene and propylene, and aromatics, such as benzene and toluene. It also sells terephthalic acid and various derivatives from ethylene, propylene and C4. The MCHC Group operates two ethylene plants in Japan, one in Ibaraki Prefecture owned by MCC, and another in Okayama Prefecture owned by Asahi Kasei Mitsubishi Chemical Ethylene Corporation, a 50:50 joint venture company between MCC and Asahi Kasei Corporation.



Polyolefins Applying our proprietary catalyst and process technologies, this business supplies high-quality and high-performance polyethylene and polypropylene materials, which are used to manufacture a diverse range of products spanning from auto parts and electrical wires to medical equipment and food packaging.

Carbon Products FY2020 Sales revenue ¥177.4 billion FY2020 Core operating income ¥0.9 billion

Coke, carbon materials, carbon black, and synthetic rubber

Coke Coke is a major raw material for the global steel industry. The coal tar produced in its manufacturing process is also used as a raw material for many types of products. We procure coal from a number of countries and blend it with 60 to 70 types of raw materials to produce coke of various quality grades.



Carbon black Carbon black is used to make many common goods, such as tires, printing ink and rubber coloring. We apply strict quality controls at every stage of the carbon black manufacturing process, from raw material processing to finished product inspections.

Industrial Gases FY2020 Sales revenue ¥811.8 billion FY2020 Core operating income ¥85.1 billion

Industrial gases and related equipment and facilities

Industrial gases Having secured the top share (40%) of Japan's market for industrial gases, which includes oxygen, nitrogen and argon, we are working to expand this business in other major markets of the world, particularly in North America, Europe, Asia and Oceania.

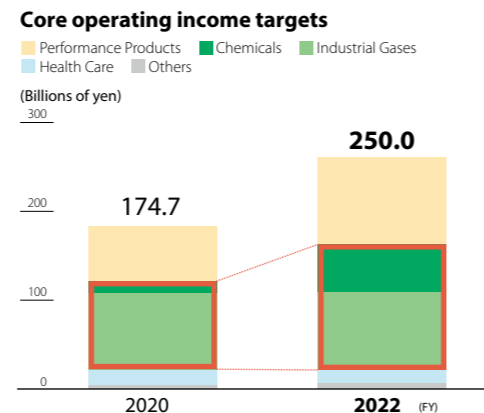


Industrial gas-related equipment and facilities Building on a long history of achievements, such as constructing Japan's first air separation units in 1935, we have earned a strong reputation around the world as a manufacturer of industrial gas-related equipment and facilities, including space-simulation chambers and liquid helium equipment.

Overview of Business Domains

APTSIS 25 Step 1

Policies	<ul style="list-style-type: none"> Accelerated reorganization and restructuring of risk businesses Business model reform to strengthen the business foundation
Key strategies	<ul style="list-style-type: none"> Strengthen the partnership with oil refining (Petrochemicals) Reform the business model to shift from domestic market dependency to export-oriented operation (Carbon Products) Strengthen global management (MMA, Industrial Gases) Develop an innovative Intelligent Gas Supply System to realize smart factory operation Promote a plastic recycling society through supply chain management in partnership with customers and consumers Implement DX



Strategy for improving competitiveness in the Petrochemicals business

We have worked to stabilize revenues in this business through major structural reforms, such as consolidating naphtha cracker operations and withdrawing from unprofitable businesses. Looking ahead, we will further strengthen the partnership with the oil refining business and implement chemical recycling. In parallel, we will target differentiation and a competitive advantage by developing high-performance polyolefins.

In July 2021, Japan Polychem Corporation, a consolidated subsidiary of MCC, acquired the stock of the overseas Group company operating the PPCP*1 business of Japan Polypropylene Corporation*2. PPCP is expected to attract growing demand going forward as a material contributing to lighter-weight vehicles. We are committed to responding swiftly to customer needs by making active use of the overseas business foundations of the MCC Group.

*1 Polypropylene compound
*2 Joint venture between Japan Polychem Corporation and JNC Petrochemical Corporation

Example of PPCP applications (Daihatsu Mira e:S)



Left: Rear door interior
Right: Rear door exterior



Reform of the Carbon Products business model

The coke supplied by MCC 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 worldwide. Going forward, we will continue with restructuring to achieve an optimal sales portfolio and production system to match structural changes in the domestic steel industry. This will enable us to ensure a stable supply of high-quality coke and to realize global business expansion. We will continuously strengthen the revenue base by progressively increasing the added value of needle coke and other coke byproducts.



The Group's Material Issues
 •GHG reduction • Sustainable resource management • Circular economy

A pioneering chemical recycling project

As a concrete solution to the problem of plastic waste and other issues, we are implementing a pioneering chemical recycling project. Impressed with this initiative, the Development Bank of Japan Inc. (DBJ) has concluded a loan agreement with MCHC in the framework of DBJ Sustainability Linked Loans with an Engagement Dialogue (DBJ-SLL). In July 2021, it was decided to build a plastic-to-oil conversion-based chemical recycling plant for waste plastics at MCC's Ibaraki Plant in a joint project with ENEOS Corporation. The target is to launch commercial operation by fiscal 2024.

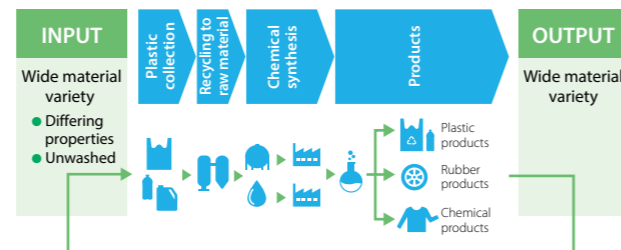
By ensuring that our business activities help address social challenges such as GHG reduction and the carbon cycle, we are committed to ongoing contributions to the realization of a sustainable society.

Outline of DBJ-SLL program*

Date of agreement	November 30, 2020
Agreement period	10 years
Loan amount	¥30 billion

* The loan conditions are linked to the degree of fulfillment of the borrower's ESG activity targets, which incentivizes the borrower to carry out business activities to meet the targets.

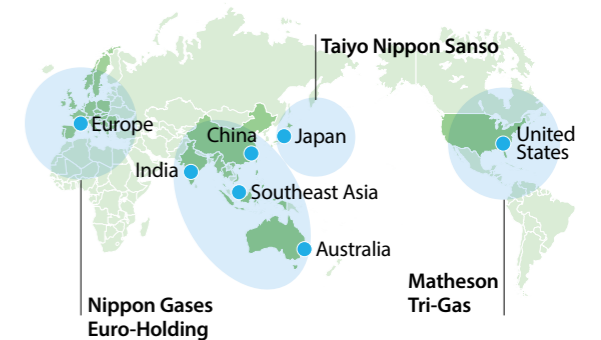
Envisioned plastic waste recycling process



Strategy to strengthen Industrial Gases competitiveness

In the industrial gas industry, increasingly dominated by major corporations, our acquisition of a European business operator in December 2018 establishes for the Group a system with bases in the four regions of Japan, Americas, Europe and Asia Pacific. To leverage its collective capabilities for successful competition with the major players in the global industrial gas market, in October 2020 the Group shifted to a holding company structure under which it is transferring authority to its operating companies in the respective regions and taking measures to clarify responsibilities for business execution and speed up management decision-making. It also plans to strategically distribute operational resources and formulate strategies for the Group as a whole while stepping up corporate governance and improving its risk management system.

New global management system



Focus Strategy for expanding the MMA business Building a solidly reliable worldwide supply network

MCC, which is unique worldwide in possessing capability in all three main MMA manufacturing methods, is the leading global supplier, boasting an approximate 40% share of the world's production capacity. Going forward, to maintain our competitive advantage in the world market and continue to secure stable revenues, our two main tasks are to eliminate technical issues arising from outdated facilities and to optimize the production and supply network.

To meet these challenges, we will launch a global supply chain management system using the mathematical optimization technologies associated with DX. In parallel, we need to strengthen the management base by integrating and speeding up decision-making processes and to promote the advancement of diverse human resources. With these

aims in mind, in April 2021 we centralized the head office functions of the MMA business in Singapore.

Meanwhile, in March 2021 we closed the Beaumont site in the United States and are now considering the construction of a new MMA monomer plant in the United States. Envisaged as using a new ethylene method known as Alpha technology, it would follow the start of full operations at SAMAC in the Middle East in April 2018.

Going forward, we will leverage the strong competitive advantage afforded by the prime location of our plants and our proprietary technologies to build an optimal supply system covering all regions of the world, consolidating our position as one of the industry's leading companies.

History and future development of the MMA business

Wide-ranging applications of MMA

- Store signboards and signage
- Automotive light covers
- Optical lenses
- Liquid crystal light-guide panels
- Lighting equipment
- Stationery
- Aquarium tanks
- Optical fibers
- Partitions to prevent airborne droplet infection
- Adhesive agents
- Coating agents

Top share of the world market

Acquisition of the Lucite International Group establishes a production technology system encompassing all three manufacturing methods

Acquisition cost
Approx. ¥160 billion

In Saudi Arabia, we have begun construction of a plant with the world's largest production capacity.

Capital investment
Approx. ¥100 billion

Worldwide demand for MMA in 2020
Three million tons plus

Share of world market: Approx. 40%

Plan for increased yearly MMA production capacity (Thousand tons)

Manufacturing method	FY2020	FY2025
C4 direct oxidation process	560	560
ACH method	900	770* 2</td
New ethylene method (Alpha technology)*1	380	730**3
Total	1,840	2,060

