2023
MGC REPORT

Financial Section

MITSUBISHI GAS CHEMICAL COMPANY, INC.

Consolidated Financial Summary

Mitsubishi Gas Chemical Company, Inc. and Consolidated Subsidiaries
Fiscal year period: April 1 to March 31

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Operating results (Millions of yen)						
Net sales	¥467,979	534,443	529,570	593,502	556,480	635,909
Operating profit	11,421	11,488	14,996	34,018	43,762	62,741
Ordinary profit	27,651	30,804	42,000	45,432	62,430	80,711
Profit (loss) attributable to owners of parent	(7,793)	14,921	43,346	34,134	48,013	60,531
Share of profit of entities accounted for using equity method	19,045	20,466	27,895	16,683	21,125	18,277
EBITDA	53,328	57,327	68,211	74,631	89,407	108,807
Financial position (Millions of yen)						
Current assets	¥261,397	287,642	372,166	341,237	326,674	384,249
Total assets	613,908	657,838	790,784	739,582	738,188	785,687
Current liabilities	195,438	178,897	225,068	214,676	188,426	206,835
Net assets	294,895	323,858	422,851	423,135	473,370	519,144
Interest-bearing debt	182,644	204,489	215,614	181,427	118,713	106,964
Cash flows (Millions of yen)						
Operating activity cash flow	¥31,169	27,182	76,982	84,671	82,711	90,720
Investing activity cash flow	(30,818)	(29,883)	(23,531)	(31,922)	(31,119)	(33,614)
Financing activity cash flow	(14,356)	7,124	(25,005)	(47,335)	(60,217)	(33,038)
Total cash and cash equivalents at end of year	26,907	37,310	72,678	75,828	67,177	90,304
Per share data (Yen)						
Earnings per share (EPS)*1	¥(34.50)	66.07	191.94	153.85	221.83	281.39
Net assets per share*1	1,256.81	1,382.52	1,672.25	1,707.01	1,967.94	2,187.99
Ratios (%)						
Operating profit margin	2.4	2.1	2.8	5.7	7.9	9.9
Return on equity (ROE)	(2.8)	5.0	12.6	9.0	12.0	13.6
Return on assets (ROA)	4.6	4.8	5.8	5.9	8.4	10.6
Return on invested capital (ROIC)	5.8	6.1	7.2	7.3	10.4	13.2
Equity ratio	46.2	47.5	47.8	51.0	57.5	59.5
EBITDA margin	11.4	10.7	12.9	12.6	16.1	17.1
Others (Millions of yen)						
Capital expenditures	¥30,982	25,409	22,226	30,512	35,010	30,959
Depreciation and amortization	23,096	23,528	23,770	26,705	25,631	27,027
Research and development costs	15,332	16,122	16,873	18,936	19,267	18,987
Number of employees	5,323	5,445	8,254	8,176	8,034	8,009

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

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2022
Operating results (Millions of yen)						(Thousands of U.S. dollars)*2
Net sales	¥648,986	613,344	595,718	705,656	**781,211**	**$5,850,453**
Operating profit	41,386	34,260	44,510	55,360	**49,030**	**367,183**
Ordinary profit	69,199	31,116	50,240	74,152	**69,764**	**522,459**
Profit (loss) attributable to owners of parent	55,000	21,158	36,070	48,295	**49,085**	**367,595**
Share of profit of entities accounted for using equity method	28,408	(1,282)	5,162	14,883	**17,546**	**131,401**
EBITDA	97,668	61,675	81,726	107,009	**105,074**	**786,894**
Financial position (Millions of yen)						(Thousands of U.S. dollars)*2
Current assets	¥378,845	358,669	402,141	452,210	**483,249**	**$3,619,029**
Total assets	804,038	771,733	836,364	928,651	**1,029,317**	**7,708,507**
Current liabilities	188,420	163,574	167,947	198,969	**220,442**	**1,650,880**
Net assets	553,282	548,141	581,411	630,887	**671,249**	**5,026,953**
Interest-bearing debt	95,751	74,713	98,476	117,650	**166,944**	**1,250,236**
Cash flows (Millions of yen)						(Thousands of U.S. dollars)*2
Operating activity cash flow	¥64,042	74,234	55,464	52,090	**55,222**	**$413,555**
Investing activity cash flow	(42,761)	(33,922)	(40,370)	(64,954)	**(64,071)**	**(479,825)**
Financing activity cash flow	(31,396)	(49,563)	5,154	(3,666)	**7,996**	**59,882**
Total cash and cash equivalents at end of year	80,379	70,043	91,075	92,257	**101,185**	**757,770**
Per share data (Yen)						(U.S. dollars)*2
Earnings per share (EPS)*1	¥257.46	100.50	173.41	232.15	**239.08**	**$1.79**
Net assets per share*1	2,354.25	2,368.11	2,520.34	2,733.86	**2,970.07**	**22.24**
Ratios (%)						
Operating profit margin	6.4	5.6	7.5	7.8	**6.3**	**6.3**
Return on equity (ROE)	11.3	4.3	7.1	8.8	**8.3**	**8.3**
Return on assets (ROA)	8.7	3.9	6.2	8.4	**7.1**	**7.1**
Return on invested capital (ROIC)	10.9	4.9	7.7	10.4	**8.8**	**8.8**
Equity ratio	62.6	63.8	62.7	61.2	**59.0**	**59.0**
EBTDA margin	15.0	10.1	13.7	15.2	**13.4**	**13.4**
Others (Millions of yen)						(Thousands of U.S. dollars)*2
Capital expenditures	¥39,279	42,389	40,282	54,793	**64,650**	**$484,161**
Depreciation and amortization	27,451	29,591	30,686	31,999	**33,565**	**251,367**
Research and development costs	18,607	19,696	19,905	21,093	**23,512**	**176,080**
Number of employees	8,276	8,954	8,998	9,888	**10,050**	**10,050**

*2 U.S. dollar amounts are translated from yen, for convenience only, at the approximate rate of ¥133.53 = US$1 prevailing on March 31, 2023.

Management's Discussion and Analysis

Results of Operations

1. Management Policies, Operating Environment and Challenges to Be Addressed

Forward-looking statements contained herein are based on MGC Group's judgment as of March 31, 2023.

1) Progress in Priority Initiatives during Fiscal 2022

Our Medium-Term Management Plan launched in fiscal 2021 set two objectives in accord with the MGC Way, the new MGC Group philosophy system: shift to a profit structure resilient to changes in the business environment, and balance social and economic value. MGC is implementing a three-pronged strategy to achieve each objective.

Medium-Term Management Plan

●Objective 1
Shift to a Profit Structure Resilient to Environmental Changes: Business Portfolio Reforms

■Strategies
- Further strengthen competitively advantageous ("differentiating") businesses
- Accelerate creation and development of new businesses
- Reevaluate and rebuild unprofitable businesses

To move forward with business portfolio reforms under the Plan, the MGC Group has reevaluated its business categories, classifying those businesses with both competitive advantage and growth potential as "differentiating businesses." The MGC Group is developing a broad range of differentiating businesses. In chemicals and materials, these include Meta-xylenediamine (MXDA), MX-Nylon, aromatic aldehydes and polyacetal (POM); specialty products include electronic chemicals, BT materials, optical polymers and ultra-high refractive lens monomers. The MGC Group will continue to focus management resources on these differentiating businesses, further strengthening profitability.

During the fiscal year under review, we promoted plans to build a new MXDA plant in Europe, and a program of new construction and expansion for electronic chemicals facilities in Japan, North America, China and Taiwan. In addition, we completed work to increase production capacity of BT materials at MGC Electrotechno (Thailand) Co., Ltd., and granted supervisory functions for the POM business to Global Polyacetal Co., Ltd. to create an integrated system of management for production, sales and development.

MGC also forged ahead with active R&D investment in order to accelerate creation and development of new businesses. Specifically, we increased the number of research personnel, established DX team along with AI, and MI promotion teams to encourage initiatives to accelerate research activities through the promotion of DX, began operation of a new stage-gate system, and promoted the strategic use of the IP landscape. In order to put in place an environment in which companies of the Group can work together to promote innovation, we made the decision to construct a new building for the Hiratsuka Research Laboratory.

In terms of initiatives to reevaluate and rebuild unprofitable businesses, the Company terminated production of formalin at the Yokkaichi Plant in the fiscal year under review, and is aiming to terminate production of formalin, paraform, and hexamine at the Niigata Plant during the first quarter of fiscal 2023. Following termination of trimethylolpropane production at the Mizushima Plant, we are proceeding to reevaluate and rebuild the formalin and polyol product lines. In April 2022 subsidiaries J-Chemical, Inc. and Yutaka Chemicals Corporation merged with the objective of establishing a competitive advantage through the building of an integrated production system that ranges from formalin raw materials to wood adhesives, and converting the formalin business to a base for stable earnings.

By implementing these strategies, the MGC Group attempts to shift to a profit structure that is resilient to changes in the business environment. Specifically, by fiscal 2023, the Group aims to have more than 40% of overall sales come from differentiating businesses, and for unprofitable businesses or those needing rebuilding to represent less than 3% of total sales.

●Objective 2
Balance Social and Economic Value: Toward Sustainable Growth

■Strategies
- Solve social issues through business
- Harmonize shared-value creation with environmental protection
- Strengthen discipline and foundation supporting business activities

Three strategies will be executed with the goal of balancing social and economic value.

In April 2020, MGC identified materiality --priority issues for management-- in line with the formulation of a medium-term management plan. It has also established fiscal 2030 targets to allow the Company to make steady progress in materiality management, and has set key performance indicators (KPIs) for fiscal 2023 as milestones on the road to achieving those targets. Specifically, KPIs have been set for GHG emission reductions aimed at air quality control, investments and R&D expenditures aimed at solving energy and climate change-related problems, and cultivating a corporate culture of job satisfaction. During the fiscal year under review we took various steps, including acquiring ISCC PLUS certification for MX-Nylon and methanol, investing in the Abashiri Biomass Power Plant, investigating the manufacture of methanol and polycarbonate using CO_2 as a raw material, and beginning construction of "MGC Commons" as a center for human resource development and innovation. MGC will continue to tie materiality management to sustainable growth.

Materiality KPIs and SDG targets: Pursuing Creation of Value to Share with Society

Materiality		KPIs			Relationship to SDGs (Targets)
Category	Elements	KPIs	Fiscal 2023 targets	Fiscal 2030 targets	
Creating Shared Value (CSV)	Contribution through business operations • Contribute to development of ICT/mobility society • Solve energy and climate change problems • Solve medical and food problems	Sales from ICT and mobility applications	¥320.0 billion (Consolidated)	Create new businesses that accelerate digital innovation	3.6, 9.4
		Contribution to solving energy and environmental problems	Investment: ¥12.0 billion (Consolidated: 2021-2023 cumulative) Investment: Acquisition; Financing: Approval basis	Commercialize carbon-negative technology	9.4
		Sales from medical and food applications	¥50.0 billion (Consolidated)	• Advances in preventive and predictive medicine, enhanced healthy life expectancy • Further advance food preservation technology	3.8, 12.3
Foundation for shared-value creation (S)	Cultivating a corporate culture of job satisfaction	Percentage taking fewer than 10 days of annual paid leave*1,2	0%	0%	8.5 8.8
	Occupational safety and health/Process safety and disaster prevention	Serious occupational accidents*1,3	0	0	3.9
		Serious accidents*1,4	0	0	
	Highly energy-and resource-efficient production	GHG emissions intensity Baseline: fiscal 2013*1	19.9% reduction	28.0% reduction	7.3
	Promotion of innovative R&D	R&D investments devoted to solving climate change problems*1,5	5% or higher	7% or higher	9.5
Harmonization of shared-value creation with environmental protection (E)	Proactive response to environmental problems • Air quality control • Water and biodiversity conservation • Reduction of industrial waste	GHG emissions Baseline: fiscal 2013*1	28.0% reduction	36.0% reduction	13.2
		Renewable energy as percentage of electric power purchased*1	10%	50%	7.2
		Zero waste emission rate*1,6,	0.3% or less	0.15% or less	12.5

*1 On non-consolidated basis
*2 For employees granted 20 days of annual leave
*3 Accidents resulting in lost work days eligible for disability compensation, including death and permanent disability, or potential disability, and those with four or more lost work days
*4 Accidents that threaten third parties, including those resulting in environmental pollution involving community or that cause damage to local residents, and other accidents involving serious damage
*5 R&D investments including basic research, pilot plants, technical testing, etc.
*6 Amount of final disposal/total amount of waste generated

2) Future Initiatives

With the advance of global inflation, monetary tightening, and geopolitical risks such as the situation in Ukraine, the business environment remains difficult to read, but going forward the MGC Group will continue to work together as one to achieve the management objectives set out in the plan.

Specifically, with regard to achieving the first objective of "Shift to a profit structure resilient to environmental changes," we will continue to invest proactively in differentiated products including MXDA, electronic chemicals, and BT materials, and prioritize allocation of management resources to these areas. In addition, for other foundation products, including PC products and methanol, we will also promote measures to further increase added value and improve efficiency. For businesses with profitability issues, we aim to move forward with further structural changes and overhauls with the goal of removing businesses from the list of those classified as unprofitable businesses or those needing rebuilding. In addition, we will actively commit R&D resources with the aim of creating and nurturing new/next-generation businesses.

In order to achieve objective 2, "Balance social and economic value," we will link our mission of "Creating value to share with society" to sustainable growth via materiality management. Particularly with regard to initiatives for carbon neutrality, this is one of the most important issues for the management strategy of the Company. This is one that, while working to reduce greenhouse gas emissions, we will pursue through the use of our unique and distinctive technology by developing products and technologies that will contribute to decarbonization, such as investigating circular carbon methanol projects that use green hydrogen and CO_2, planning pilot projects for gasification and methanol conversion of waste plastic, and developing of direct air capture systems.

This Management Policies, Operating Environment and Challenges to be Addressed contains forward-looking statements, including ones pertaining to plans and targets, based on information available at the time these materials were prepared, and certain assumptions deemed reasonable. They involve uncertainty. Actual performance may differ significantly from such forward-looking statements as a result of various factors.

2. Sustainability Approach and Initiatives

MGC Group's approach to sustainability and our sustainability initiatives are as follows.
Forward-looking statements contained herein are based on MGC Group's judgment as of March 31, 2023.

(1) Matters Related to Sustainability in General

1) Corporate Governance

Important sustainability issues are examined by the advisory body Sustainability Promotion Committee attended by corporate sector heads, based upon which they are reviewed and approved by the Sustainability Promotion Council. This is chaired by MGC's president and is comprised primarily of directors, including outside directors, with audit & supervisory board members also attending.

Particularly important sustainability issues are deliberated by the Sustainability Promotion Council before being resolved by the Board of Directors.

2) Risk Management

As described in "1. Management Policies, Operating Environment and Challenges to Be Addressed" under "Results of Operations," the MGC Group has set an objective of "Balance Social and Economic Value," and manages risk by identifying priority issues for management (materiality) and gaining an understanding of associated risks and opportunities.

When identifying the priority of the materiality, we assess many social issues from the standpoint of their importance to stakeholders and to the MGC Group. These are then deliberated by the Sustainability Promotion Council before being resolved by the Board of Directors.

3) Strategy

As described in "2) Risk management," the MGC Group first identifies the Materiality, gains an understanding of associated risks and opportunities, and works to mitigate risks while also aiming to help achieve a sustainable society and sustainable corporate growth by creating a new business model that resolves social issues.

4) Indicators and Targets

The MGC Group has set KPIs for each Materiality, and monitors the progress of materiality management.

Using the frameworks set out in "1) Corporate governance" and "2) Risk management," the MGC Group has designated tackling climate change and addressing human capital as particularly important issues, and has drawn up strategies and set indicators and targets for each as follows.

For details of strategies, and indicators and targets for other issues, please refer to the Integrated Report (https://www.mgc.co.jp/eng/corporate/report.html).

(2) Response to Climate Change (Initiatives Based on TCFD Recommendations)

1) Strategy

The MGC Group has set targets for cutting greenhouse gas (GHG) emissions, and is working steadily on reduction initiatives. While developing existing businesses with strengths in such initiatives, MGC is leveraging R&D capabilities and promoting cooperation with other businesses, other group companies and external third parties. During the transitional stage we will promote the use of electricity generated from LNG, which has low GHG emissions, and the adoption of renewable energy, as well as taking specific steps toward achieving carbon neutrality by establishing and installing a variety of carbon-free energy systems, CCUS*, and recycling systems.

*CCUS: CO_2 capture, utilization and storage; involves technologies to both capture/store CO_2 and use stored CO_2 as, e.g., a chemical feedstock.

To gain a quantitative understanding of climate change risks, MGC has also introduced an internal carbon pricing system. In capital investment plans involving an increase or decrease in CO_2 emissions, the cost or effect of applying and converting the internal carbon price (10,000 yen/Mt-CO_2 equivalent) will be used to help make investment decisions. We encourage the creation of technologies and products that promote CO_2 emission reductions and contribute to building a low-carbon society.

MGC has also declared its support for the Task Force on Climate-related Financial Disclosures (TCFD). MGC has assessed the risks and opportunities climate change represents for the Group, and we are working to strengthen resilience through scenario analysis while also engaging in healthy dialogue with our stakeholders.

For the foundation/differentiating businesses of MXDA, MX-Nylon, hydrogen peroxide, polycarbonate, optical materials, and oxygen absorbers, the MGC Group has conducted analyses of the impacts of climate change using two scenarios, and examined measures to address them.

Under a scenario in which the increase in temperature is controlled to +2°C of the pre-Industrial Revolution level, the introduction of carbon taxes to encourage decarbonization and cost increases driven by increasingly stringent GHG regulations could lead to the Group's operating results being adversely affected. In such a scenario, the MGC Group would take steps to control the impact of such risks by rebuilding its business portfolio, adopting energy-saving measures and using renewable energy, and utilizing electricity generated from LNG, which has low GHG emissions. In addition, our analysis suggests that measures taken by a decarbonizing society to further reduce product weight through the substitution of metals and conventional materials, renewable energy infrastructure development, and the growth of the market for high value-added-products offer opportunities for the MGC Group to expand its business.

Under a scenario in which global warming cannot be sufficiently prevented and the temperature increases to +4°C of the pre-Industrial Revolution level, soaring prices for fossil resources, rising utility costs, and the impact on factory operation of increasingly severe natural disasters could lead to the Group's operating results being adversely affected. The MGC Group is seeking to mitigate the impact of such risks by shifting away from fossil resources, bringing higher added value to its products, and strengthening business continuity planning. We accelerate market development as the population of emerging countries increases significantly.

As described above, there are concerns about the adverse impact of climate change on the business of the MGC Group, but these risks can be addressed by the diverse nature of its business portfolio, which ranges from chemical products and material products to products with highly specialized functionality, and we have confirmed that the effects on the financial position of the Group can be controlled.

Going forward, we will broaden the scenario analysis to include the electronic chemicals and electronic materials businesses.

2) Indicators and Targets

The MGC Group* has set long-term targets for reducing GHG emissions in the aim of achieving carbon neutrality by 2050.
* Non-consolidated company and consolidated subsidiaries with Scope 1 and 2

2030 targets	2050 targets
Scope 1+2: reduction of 36% compared to fiscal 2013	Achieve carbon neutrality

For historical data on GHG emissions by the MGC Group, please refer to the Integrated Report (https://www.mgc.co.jp/eng/corporate/report.html).

(3) Addressing Human Capital

1) Strategy

1. Approach to human resource development

The MGC Group's philosophy for being is "creating values to share with society," and its management philosophy places importance on "creating a place with job satisfaction and a dynamic group in which motivations and abilities are respected." Each group company establishes and expands systems to achieve this, and works on education and related matters.

With the aim of realizing the MGC Group mission of "creating value to share with society" we have formulated a human resource development basic policy to enable employees to improve their knowledge and capabilities, set ambitious targets while refining their **individuality** as professionals, and through achieving this create workplaces that are infused with vibrancy through self-improvement.

The human resource vision articulated in this basic policy is for individuals to aim to be "autonomous and highly-motivated employees," "warm-hearted and sensitive employees" and "employees that think and learn through work," while the educational policy is to "provide development that makes the most of each and every employee's **distinctiveness**." The Group is working to establish an internal environment that enables a diverse range of employees to exercise their individuality through their participation in the workplace.

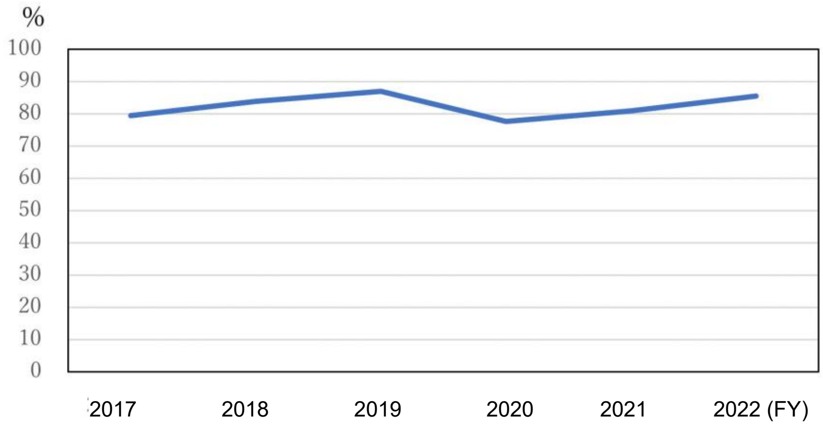
2. Specific Initiatives

• Cultivating a Corporate Culture of Job Satisfaction

MGC promotes work style reforms as an initiative that is essential for improving both employee job satisfaction and productivity, and for the creation of innovation. We have in the past implemented initiatives, such as reducing working hours by reviewing workflow and shortening meeting times, in order to enable work styles that do not rely on long work hours. In 2020 we introduced super flextime (with no core period), and have conducted trials of a system for working at home as part of efforts to establish an environment that permits more flexible work styles.

The ratio of annual paid leave taken has been fluctuating between 80% and 85% (around 90% for those in non-managerial roles), but we are working to raise awareness among employees of the need to take annual paid leave from the perspective of work-life balance, and we have set a KPI of 0% of employees taking fewer than 10 days of annual paid leave for fiscal 2023. To achieve this we are using internal newsletters and posters, which also target those who take little annual paid leave, to foster employee awareness and establish an accommodating workplace environment.

Ratio of Taking Annual Leave (all employees, %)



Note: On non-consolidated basis

Internal Newsletter Promoting Annual Paid Leave

Poster Promoting Annual Paid Leave

• Promotion of Diversity and Inclusion
MGC defines diversity and inclusion (D&I) as all employees utilizing their individuality to work together and recognize one another. The goals of the Diversity and Inclusion Basic Policy include promoting awareness about respect for diverse values and ways of thinking, creating an environment that ensures diverse work styles, diversification of human resources and the creation of an organization that optimizes the utilization of each and every human resource, development of human resources who can demonstrate individual strengths, and promoting mental and physical health. By promoting D&I, we aim to maximize the performance of people and organizations through various activities, in which diverse human resources exhibit their individuality and skills, as well as to engender innovation and improve decision-making quality through collaboration among human resources with diverse values, approaches, views and knowledge.

With the workforce shrinking as a result of the declining birthrate and aging population, we also believe that promoting women’s empowerment is essential for maintaining and enhancing corporate competitiveness over the medium to long term. We are moving forward with the promotion of career development support for female employees through such measures as providing various types of training for female employees and managers who are responsible for the development of female employees. Furthermore, we perceive mid-career hires and foreign nationals with different cultures, customs, experience, and skills to be valuable diverse human resources that contribute new perspectives and ideas. We are actively promoting recruitment of foreign students and mid-career hires in order to achieve further improvements in the generation of innovation and the quality of decision-making.

2) Indicators and Targets

As described in “• Cultivating a Corporate Culture of Job Satisfaction“ under “2. Specific Initiatives” under “1) Strategy,” we have set the ratio of employees taking fewer than 10 days of annual paid leave as a KPI.

Ratio of Employees Taking Fewer Than 10 Days of Annual Paid Leave

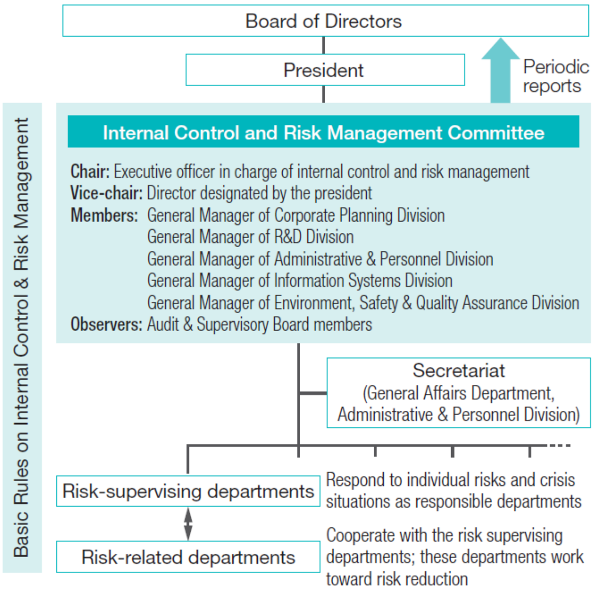
	Targets		Results		
	Fiscal 2023	Fiscal 2030	Fiscal 2020	Fiscal 2021	Fiscal 2022
Ratio of employees taking fewer than 10 days of annual paid leave	0%	0%	15.1%	11.7%	4.0%

Note: On non-consolidated basis

3. Business and Other Risks

MGC Group defines "risk" as possibilities or hazards that, if they were to manifest, could inflict economic losses on MGC due to human casualties, property damage, reputational damage, opportunity losses or other such detriments. The Group has built a risk management regime designed for both routine and exigent circumstances. Specifically, it has established Basic Rules on Internal Control & Risk Management, formulated risk management/mitigation policies and established an Internal Control & Risk Management Committee chaired by the officer in charge of internal control and risk management as a decision-making body that reports directly to the president. The committee makes decisions on matters related to risk management policies, initiatives and plans; matters related to business and operational risk management and guidance, direction and oversight incidental thereto; and matters related to guidance, direction and oversight related to business continuity planning. Additionally, it periodically reports to the Board of Directors on the state of risk management.

The main foreseeable risks that could affect the Group's business results, share price, or financial condition are enumerated from 1) through 13) below. They are all risks that the Group deems to be a realistic possibility, though specifics such as the degree and timing of their manifestation and their impacts are impossible to estimate as of the end of fiscal year ended March 31, 2023 (however, they do not necessarily include every risk to which the Group is exposed).



1) Endogenous Business Risk

Nature of Risk

MGC Group is primarily a manufacturer. With many of its products used as raw materials, intermediate goods or pharmaceutical inputs in customers' business activities, its sales are sensitive to economic conditions in the countries and regions where its customers' products are sold, and to the operating environment in its customers' business areas. In particular, market-priced commodities such as methanol, methanol derivatives, general-purpose aromatic chemicals and polycarbonate resins are generally prone to declines in unit sales and sales prices during economic downturns. Some specialty and high-value-added product markets are also subject to the silicon cycle and other drivers of ebbs and flows in customer demand, and reduced volumes could adversely affect the Group's operating results and/or financial condition.

In specialty and high-value-added product markets, the Group competes on multiple dimensions, including price, quality, functionality, delivery time and customer service. Intensification of competition due to, for example, the advent of products offering alternative functionality, could adversely affect the Group's operating results and/or financial condition. For example, products that are supplied mainly to the electronics industry, which includes advanced semiconductors, typically have a short product lifecycle and are constantly exposed to competition through technological innovation. The Group's sales consequently could decline as a result of existing products' obsolescence or product development delays. Additionally, some of the Group's products are sold to only a limited number of customers. If one customer stops using such a product, the Group's sales could decrease.

MGC Group externally sources electric power and raw materials like xylene, and is constantly performing maintenance on existing production facilities and installing new equipment. Its manufacturing operations could be disrupted if a required input, material, or facility were to become unavailable. Its operating results and/or financial condition could be adversely affected by a sharp rise in input prices also.

MGC Group's operations depend on the work of many and diverse employees across multiple areas of business, including research and development, production, sales, distribution, planning, and administration. The impact of increasingly fluid movement of human resources and of the declining birthrate and aging population in Japan could make it impossible or excessively burdensome to secure such personnel. In such an event, the Group's operating results and/or financial condition could be adversely affected.

Main Risk Mitigation Measures

In order to achieve further improvements in productivity, MGC Group endeavors to develop new, high-added value markets and businesses as well as conducting basic and applied research to develop new products and manufacturing processes and improve existing ones. Other risk mitigation measures include close communication and collaboration, inclusive of R&D, with customers, use of long-term supply contracts with both suppliers and customers, and sourcing of raw materials and other inputs from multiple suppliers.

We are working to utilize IT systems and other new technologies to improve productivity not only in manufacturing operations but in all the business activities of MGC Group. In order to secure human resources we create workplace environments in which employees mutually respect each other's individuality, and in which they can fully participate and grow as people. To this end we are working to nurture an invigorated culture of collaboration between individuals with diverse values that is of new ideas and technological innovation, and establishing dedicated departments in addition to implementing various other measures.

2) Overseas Business Risk

Nature of Risk

MGC Group sources, manufactures, and sells either directly from Japan or through its subsidiaries in Asia, North America, South America, the Middle East and elsewhere. Depending on country-specific conditions or the geopolitical situation, such overseas operations and funds or dividend remittances from overseas subsidiaries could be disrupted by political instability or societal or economic turmoil due to a natural disaster, war, infrastructure failure, a widespread infectious disease outbreak or other unforeseeable circumstances. Other risks that could adversely affect the Group's operating results and/or financial condition include problems due to differences in legal systems, investment restrictions imposed by foreign governments, nationalization or expropriation of assets, and personnel or labor issues.

Main Risk Mitigation Measures

To respond to overseas risks as effectively and expeditiously as possible, while monitoring the latest developments in the global situation, MGC Group endeavors to gather information from various sources, including locally stationed expat personnel, joint venture partners, attorneys and government authorities. MGC Group works to tailors its response to the specifics of each business or region in order to achieve its objectives, which include ensuring the safety of those working locally.

3) Joint Venture Risk

Nature of Risk

MGC Group has numerous manufacturing joint ventures in not only Japan but also foreign countries such as Saudi Arabia, Venezuela, Thailand, China, South Korea, and Trinidad and Tobago. It sources and sells products such as methanol and engineering plastics through its joint ventures. The Group's joint venture partners are not under the control of the Group. There is consequently no assurance they will make decisions in the best interests of the Group or even the joint ventures themselves. In the event of a joint venture's dissolution or other such circumstances, the Group's operating results and/or financial condition could be adversely affected.

Main Risk Mitigation Measures

MGC Group seeks to maintain and further improve good communication, share targets and objectives and maintain relationships with its joint venture partners while mitigating risks through joint venture agreements and other operational agreements.

4) Product Quality Risk

Nature of Risk

As noted above, MGC Group manufactures many products that are used as raw materials, intermediate goods or pharmaceuticals in customers' business activities and that conform to specifications agreed upon with the customer. However, if it sells a qualitatively defective product, it may have to compensate customers that used the defective product, end-product users and/or other parties for not only direct damages but also opportunity losses. Its societal reputation also may be impaired. In such an event, the Group's operating results and/or financial condition could be adversely affected.

Main Risk Mitigation Measures

Even though most MGC Group manufacturing sites operate in conformance with globally recognized quality control standards, the Group has liability insurance coverage that includes product liability insurance as a precaution against risk. Other means by which the Group mitigates risk include explicitly limiting the scope of its liability as necessary in agreements with customers.

5) Natural Disaster and Accident Risks

Nature of Risk

MGC Group has numerous manufacturing sites in Japan and elsewhere. Their production activities could be disrupted by earthquakes, storms, flooding or other natural disasters, war, terrorism, civil unrest, labor actions, communication infrastructure failures, lockdowns and other measures taken in response to outbreaks of infectious diseases, equipment malfunctions, human error or other unforeseeable circumstances. Given that MGC Group handles hazardous chemical substances on a daily basis, it cannot completely eliminate the possibility of explosions, fires, toxic gas leaks or other accidents that damage production facilities, harm employees, inflict losses on neighboring property owners or customers, pollute the environment or otherwise inflict damages. Additionally, many MGC Group manufacturing sites have multiple production facilities that share utilities such as electricity, water and steam. Interruption of utility service to a manufacturing site consequently could shut down the site’s entire production operations. In such an event, the Group’s operating results and/or financial condition could be adversely affected.

Main Risk Mitigation Measures

While pursuing continuous improvement based on the promotion of Responsible Care activities as part of its comprehensive environmental safety management, MGC Group diligently strives to upgrade its safety and disaster preparedness regime through better risk assessment and thorough safety training. In addition to, of course, endeavoring to maintain and ensure stable operation of its manufacturing facilities, the Group also formulates business continuity plans and builds redundancy into its network of production sites, including those overseas. Additionally, the Group mitigates risk with broad insurance coverage that includes fire, business interruption, oil pollution and liability insurance.

As a response to the COVID-19 pandemic, MGC Group swiftly set up a Crisis Response Headquarters and expeditiously implemented anti-pandemic measures. Measures taken to improve productivity, such as the usage of online video conferencing throughout the Group, also contributed to initiatives to address the spread of infectious disease. In addition to continuing their use going forward, we will customize thoroughgoing measures to prevent infection to specific operations, on a workplace-by-workplace basis.

6) Information Security Risk

Nature of Risk

MGC Group possesses confidential and personal information required for its business activities and uses various information systems in its operations amid ongoing digitalization of its businesses. In the event of a leak of such information, an information system failure, a cyberattack, fraud committed by a malicious third-party or other such event, the Group’s business activities and/or operating results could be adversely affected.

Main Risk Mitigation Measures

MGC Group has established an information security regime and internal regulations based on various guidelines and educates its employees to increase their information-security literacy. It also conducts ongoing initiatives to ensure the adequacy of and upgrade its information security.

7) Compliance Risk

Nature of Risk

MGC Group handles toxic and otherwise hazardous chemical substances, including high-pressure gases, as an inherent aspect of its operations. As such, it is globally subject to various legal and regulatory restrictions at every stage from manufacturing to storage, distribution and sales. In all its business activities and transactions, the Group is required to not only comply with laws and regulations but also to fulfill social responsibilities that are not limited to such rules. However, in the event that an infringement of laws and, regulations, or social norms, including the rules described above, is deemed to have occurred, the Group’s operating results and/or financial condition could be adversely affected as a result of incurring legal liability and rectification costs, social sanctions and loss of trust.

Main Risk Mitigation Measures

In addition to establishing specialized organizational units to oversee environmental and other regulatory compliance, MGC Group has built a compliance regime, including an internal whistleblowing system, and endeavors to fully comply with laws and regulations. It also implements various measures to foster a general compliance consciousness among its personnel.

The Group takes a broad view of compliance, one that involves not only abiding by laws but also upholding the fair, transparent, and flexible conduct of business, while respecting social and other norms, in acknowledgment of its responsibilities to society, and makes this known to all employees.

8) Human Rights Risk

Nature of Risk

Awareness of human rights continues to increase, primarily in developed nations, and companies are now being required to make efforts at a global level to respect and protect human rights in the course of business, including the supply chain. In the event that the Group does not address these issues appropriately, the Group’s operating results and/or financial condition could be adversely affected by not only legal and regulatory responsibility but also the termination of transactions, social sanctions, and loss of trust.

Main Risk Mitigation Measures
The MGC Corporate Behavior Principles and the MGC Group Code of Conduct call for respect for human rights, and the Group is also a signatory of the UN Global Compact. On its own initiative, MGC promotes responsible business, which includes protection of human rights, through such actions as showing the "Mitsubishi Gas Chemical CSR Procurement Guidelines" and other documents to its supply chain partners in order to gain their understanding and cooperation.

9) Climate Change Risk

Nature of Risk
MGC Group recognizes that climate change caused by greenhouse gases emitted in the course of its business and other activities, and a variety of related changes that occur in the natural and business environments constitute material risk factors. In the event that the Group's initiatives to address greenhouse gas emissions are inadequate, social sanctions and loss of trust may result. In addition, for example, if various emissions control measures are introduced, such as new carbon taxes or emissions trading systems, the Group's operating results and/or financial condition could be adversely affected.

Main Risk Mitigation Measures
In May 2019, MGC declared its support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Risks and opportunities posed to MGC Group by climate change are examined by an advisory body attended by general managers of the head office's corporate sector, based upon which they are reviewed and approved by a Sustainability Promotion Council chaired by MGC's president and comprised primarily of directors, including outside directors, but also attended by audit & supervisory board members and others.

In addition to mitigating risks due to climate change through analyses based on decarbonization scenarios and scenarios in which no specific action is taken, the Group will strengthen its resilience to be better able to transform risks into business opportunities. In fiscal 2022 the Group implemented scenario analyses for the optical materials and oxygen absorber businesses, and confirmed the potential for mitigating financial impacts in the decarbonization scenario through enhancing product performance, strengthening the lineup, and other measures.

By developing existing MGC businesses with strengths in carbon-neutral initiatives and leveraging R&D capabilities, we are promoting the use of electricity generated from LNG, which has low greenhouse gas emissions, and the adoption of renewable energy in the transition stage, while working in collaboration with other MGC Group businesses and external entities. Going forward, we will take specific steps toward helping to achieve carbon neutrality by 2050 in the form of establishing and installing a variety of carbon-free energy systems, CCUS, and recycling systems.

10) Investment Risk

Nature of Risk
MGC Group invests in capital assets and R&D to grow its businesses and increase its competitiveness. In doing so, it focuses its efforts on strengthening existing businesses and developing new businesses aligned with prospective market needs. The Group also invests and intends to continue investing in business expansion in Japan and overseas through such means as establishing or co-founding new companies, including joint ventures, and acquiring existing companies.

If the Group fails to earn adequate returns on such investments or if the value of securities that it holds declines significantly, leading to impairments on non-current assets, securities valuation losses or equity-method investment losses, its operating results and/or financial condition could be adversely affected.

Main Risk Mitigation Measures
MGC Group has established and carries out internal investment screening procedures and performs additional due diligence as warranted by the nature of the prospective investment. Additionally, involved organizational units endeavor to devise appropriate risk mitigation measures.

11) Currency Risk

Nature of Risk
Export, import, and other transactions denominated in foreign currencies could adversely affect MGC Group's operating results and/or financial condition, including by reducing sales revenues or exacerbating losses, as a result of exchange rate movements.

Additionally, financial statement accounts denominated in the Group overseas subsidiaries' local currencies are translated into yen to prepare MGC's consolidated financial statements. Such currency translation could adversely affect the Group's operating results and/or financial condition depending on then-prevailing exchange rates.

Main Risk Mitigation Measures
MGC Group partially hedges currency risk associated with foreign-currency receivables and payables, mainly using currency forward contracts, in accord with internal regulations.

12) Financing and Interest Rate Risks

Nature of Risk
MGC Group partially meets its financing needs by borrowing from financial institutions. In the event of a precipitous change in the financial environment, the Group's operating results and/or financial condition could be adversely affected, including by inability to access funding or increased interest expense due to a rise in interest rates.

Main Risk Mitigation Measures

MGC Group strives to maintain adequate financial soundness as measured by indicators such as debt/equity ratio and shareholders' equity ratio. It also endeavors to optimize its mix of fixed- and variable-rate debt and maintain healthy, favorable relationships with financial institutions and other sources of capital.

13) Litigation Risk

Nature of Risk

In the event of an unfavorable outcome to litigation or other legal proceedings brought against MGC Group in connection with its domestic or overseas operations, the Group's operating results and/or financial condition could be adversely affected. For example, the Group seeks to protect its intellectual property through such means as applying for and obtaining patents in Japan and overseas. It also endeavors to avoid infringing on other parties' rights. However, if litigation pertaining to intellectual property rights was to be decided against MGC, the Group's operating results and/or growth could be adversely affected.

Main Risk Mitigation Measures

MGC Group endeavors to not only comply with all laws and regulations applicable to its operations but also avoid disputes through such means as researching other parties' rights and drafting proper agreements that explicitly delineate rights and obligations with the assistance of attorneys and other expert advisors.

4. Management's Analysis of Financial Position, Business Results and Cash Flows

1) Summary of Operating Performance

The fiscal-2022 financial position, business results and cash flows (collectively referred to below as "operating performance") of MGC Group (MGC and its consolidated subsidiaries and equity-method affiliates) are summarized below.

(1) Consolidated Business Results

During the fiscal year ended March 31, 2023 (April 1, 2022 – March 31, 2023), the global economy was supported by the gradual normalization of socio-economic activities in step with the relaxation of movement restrictions aimed at preventing the spread of COVID-19 infection. However, the prolongation of Russia's invasion of Ukraine led to surges in prices of raw materials, fuels and other items. Around the world, countries have thus been stricken with steep inflation, prompting the financial authorities of the United States, EU members and other nations to continue with monetary tightening. This policy trend, in turn, resulted in a looming sense of vigilance against major recessions and negatively affected capital expenditure and personal consumption. Because of these and other factors, the economic situation remained unstable.

Although the MGC Group has benefitted from the depreciation of the yen, the business environment surrounding it remained harsh under the influence of surges in raw material and fuel costs, slower-than-expected recovery in demand in China, declining demand in the United States and Europe in the face of anxiety over economic deceleration, and other factors. Furthermore, sales of PCs, smartphones and other electronic devices have dropped as demand for these items ceased to be strong due to the end of temporary surge seen during the pandemic, with inflation now leading to sluggish consumption. In addition, there has been notable stagnation in demand for semiconductor-related and other products in the second half of the fiscal year due mainly to the growing volume of supply chain inventories.

Against this backdrop, the MGC Group has promoted a medium-term management plan launched in April 2021. In line with this plan, the Group aims to shift to a profit structure resilient to changes in the business environment. To this end, the Group is striving to:

- "Further strengthen competitively advantageous ("differentiating") businesses,"
- "Accelerate creation and development of new businesses," and
- "Reevaluate and rebuild unprofitable businesses."

These efforts will help push ahead with business portfolio reforms.

In addition, the Group is countering surges in raw material and fuel prices and transportation costs by revising sales prices upward to align with an overall increase in costs. Through these and other initiatives, the Group is endeavoring to maintain and enhance its earnings power.

As a result, the MGC Group's net sales increased, despite lower sales of electronic materials and other offerings, due mainly to the impact of foreign exchange fluctuations and upwardly revised sales prices aligned with higher raw material and fuel prices and growing transportation costs, along with the recent inclusion of a South Korea-based polyacetal sales company into the scope of consolidation.

However, operating profit decreased, despite the depreciation of the yen, robust polyacetal sales and other positive factors, due primarily to surges in raw material and fuel prices and transportation costs, along with lower sales of electronic materials and other offerings as well as growth in repair costs and R&D expenses.

In the face of downturns in methanol market prices, ordinary profit decreased despite an increase in equity in earnings of affiliates in light of such positive factors as the reversal of deferred tax liabilities at an overseas methanol producing company. This decrease was mainly attributable to a decline in equity in earnings of affiliates related to engineering plastics and the decrease in operating profit.

(Billions of yen)

	Fiscal 2021	**Fiscal 2022**	Change
Net sales	705.6	**781.2**	75.5
Operating profit	55.3	**49.0**	(6.3)
Equity in earnings of affiliates	14.8	**17.5**	2.6
Ordinary profit	74.1	**69.7**	(4.3)
Profit attributable to owners of parent	48.2	**49.0**	0.7

Operating results by segment are as described below.

[Basic Chemicals]

The methanol business saw increases in both net sales and earnings thanks to the depreciation of the yen, an increase in equity in earnings of affiliates and other positive factors, despite somewhat lower market prices compared with the previous fiscal year.

Methanol and ammonia-based chemicals posted a decrease in earnings due mainly to deterioration in neopentyl glycol market prices and an increase in repair costs, despite progress in profitability adjustments offsetting the negative impact of higher raw material and fuel prices.

High-performance products posted a decrease in earnings due mainly to the lower sales volume of meta-xylenediamine, despite the higher sales volume of aromatic aldehydes.

Xylene separators and derivatives saw a decrease in earnings due to rises in raw material and fuel prices, and resulting deterioration in the profitability of purified isophthalic acid (PIA).

Foamed plastics posted a decrease in earnings due mainly to rises in raw material and fuel prices outpacing the timing of product price revisions.

(Billions of yen)

	Fiscal 2021	**Fiscal 2022**	Change
Net sales	419.9	**472.1**	52.2
Operating profit	25.7	**18.8**	(6.9)
Ordinary profit	30.0	**30.5**	0.4

[Specialty Chemicals]

Inorganic chemicals posted a decrease in earnings despite progress in the upward revision of sales prices to align with rises in transportation costs and prices for raw materials and fuel, with sluggish semiconductor demand leading to the lower sales volume of chemicals for use in semiconductor manufacturing in some market regions.

Engineering plastics saw increases in net sales and earnings, despite lower sales volumes of polycarbonates and polycarbonate sheet films, thanks to constantly robust sales of polyacetal as well as the inclusion of a South Korea-based polyacetal sales company into the scope of consolidation.

Optical materials posted a decrease in earnings amid stagnant demand for smartphones, a primary application of optical polymers, despite the disappearance of the negative impact of inventory adjustments carried out by customers in the prior fiscal year.

Electronic materials saw decreases in net sales and earnings. This reflected such factors as declining demand for general-purpose materials for use in PC-related devices and home appliances, which constitute a part of BT materials for IC plastic packaging, the core product category for electronic materials. Other negative factors included stagnation in demand for highly functional materials for use in smartphones and memory devices.

Earnings from oxygen absorbers such as AGELESS™ declined due mainly to rises in raw material prices and transportation costs.

(Billions of yen)

	Fiscal 2021	**Fiscal 2022**	Change
Net sales	285.4	**308.9**	23.4
Operating profit	33.6	**32.6**	(0.9)
Ordinary profit	45.4	**38.7**	(6.6)

[Other]

(Billions of yen)

	Fiscal 2021	**Fiscal 2022**	Change
Net sales	0.2	**0.1**	(0.1)
Operating profit	(0.0)	**(0.0)**	(0.0)
Ordinary profit	0.0	**(0.0)**	(0.0)

(2) Financial Position

Consolidated assets at March 31, 2023, totaled ¥1,029.3 billion, a ¥100.6 billion increase from the previous fiscal year-end.

Current assets rose ¥31.0 billion to ¥483.2 billion. The increase was mainly due to an increase in merchandise and finished goods.

Non-current assets totaled ¥546.0 billion, a ¥69.6 billion increase. This was mainly due to an increase in investment securities.

Total liabilities rose ¥60.3 billion to ¥358.0 billion. Current liabilities increased ¥21.4 billion, driven mainly by short-term borrowings. Non-current liabilities increased ¥38.8 billion, driven mainly by long-term borrowings.

Net assets totaled ¥671.2 billion, a ¥40.3 billion increase largely due to growth in retained earnings.

The Group consequently ended the fiscal year with an equity ratio 59.0%.

(3) Cash Flows

Cash and cash equivalents at March 31, 2023, totaled ¥101.1 billion, an ¥8.9 billion increase from the previous fiscal year-end.

(Cash Flows from Operating Activities)
Operating activities provided net cash of ¥55.2 billion, a ¥3.1 billion increase from the previous fiscal year. This was mainly due to a decrease in trade receivables.

(Cash Flows from Investing Activities)
Investing activities used net cash of ¥64.0 billion, ¥0.8 billion less than in the previous fiscal year. This was mainly due to a decrease in purchase of investment securities.

(Cash Flows from Financing Activities)
Financing activities provided net cash of ¥7.9 billion, compared using net cash of ¥3.6 billion in the previous fiscal year. This was mainly due to an increase in proceeds from long-term borrowings.

2) Discussion and Analysis of Operating Performance from Management's Perspective

The following discussion and analysis of MGC Group's operating performance from management's perspective contains forward-looking statements based on management's judgment as of March 31, 2023.

(1) Assessment, Discussion and Analysis of Operating Performance

Operating results for the first and second years of the Medium-Term Management Plan, and targets for the final year of the plan (fiscal 2023) are as follows.

(Billions of yen)

Consolidated KPI	Fiscal 2021 results	**Fiscal 2022 results**	Fiscal 2023 target
Net sales	705.6	**781.2**	730.0
Operating profit	55.3	**49.0**	70.0
Ordinary profit	74.1	**69.7**	80.0
ROIC	10.4%	**8.8%**	≥ 10%
ROE	8.8%	**8.3%**	≥ 9%

Note: ROIC = Ordinary profit/invested capital

Management perceptions of operating results in the fiscal year under review are presented in "(1) Consolidated Business Results" under "1) Summary of Operating Performance."

Medium/long-term challenges to be addressed include the two objectives in the Medium-Term Management Plan and their respective three-pronged strategies discussed above in "1. Management Policies, Operating Environment and Challenges to Be Addressed" under "Results of Operations." Additionally, we plan to invest a cumulative ¥240 billion and spend a cumulative ¥73 billion on R&D during the plan's three-year term. In addition to proactively making strategic investments in differentiating businesses, we will maximally leverage intra- and extra-Group technologies and human resources through our newly reorganized R&D system to progress as a unified group toward our top priorities: shifting to a profit structure resilient to changes in the business environment and balancing social and economic value.

Following is management's assessment, discussion and analysis of operating performance by segment.

[Basic Chemicals]

The operating results for the Basic Chemicals Business Sector are as follows.

(Billions of yen)

Consolidated KPI	Fiscal 2021 results	**Fiscal 2022 results**	Fiscal 2023 target
Net sales*	425.3	**478.9**	410.0
Operating profit	25.7	**18.8**	25.0
Ordinary profit	30.0	**30.5**	31.0

* Including intersegment sales and transfers

As described in “(1) Consolidated Business Results” under “1) Summary of Operating Performance”, operating profit in fiscal 2022 decreased due mainly to higher raw material and fuel prices, an increase in repair costs, and the lower sales volume of meta-xylenediamine, while ordinary profit increased due to a rise in equity in earnings from an overseas methanol producing company.

Going forward, we will invest proactively, primarily in differentiated products, such as by establishing new manufacturing facilities for meta-xylenediamine, aromatic aldehydes, and other specialized aromatic chemicals. In addition, we will promote the development of manufacturing technology for methanol as a circular carbon product, work on initiatives for the commercialization of CCS, reduce costs through improving the efficiency of logistics and production, and promote other measures aimed at continuing to enhance added value and improve efficiency of foundation businesses. We will take further steps to restructure and overhaul unprofitable businesses or those needing rebuilding.

[Specialty Chemicals]

The operating results for the Specialty Chemicals Business Sector are as follows.

(Billions of yen)

Consolidated KPI	Fiscal 2021 results	**Fiscal 2022 results**	Fiscal 2023 target
Net sales*	285.5	**309.0**	330.0
Operating profit	33.6	**32.6**	49.0
Ordinary profit	45.4	**38.7**	53.0

* Including intersegment sales and transfers

As described in “(1) Consolidated Business Results” under “1) Summary of Operating Performance,” net sales in fiscal 2022 grew as a result of the strong performance of a newly consolidated polyacetal sales company in South Korea, but although operating profit benefited from strong sales of polyacetal, lower sales volumes of electronic materials and polycarbonates resulted in lower profits.

Going forward, we will promote various strategies aimed at growth in differentiated products, such as strengthening the global rollout of new and existing production sites for super-pure hydrogen peroxide and other electronic chemicals, restructuring the polyacetal business to enhance our market presence, increasing production capacity for electronic materials at overseas manufacturing subsidiaries, and setting up a new plant for monomer raw materials for optical polymers. For the foundation businesses of the Specialty Chemicals Business Sector, such as the polycarbonate business, which consolidated Mitsubishi Engineering-Plastics Corporation, we will promote high value-added products to shift to a profit structure resilient to changes in the business environment.

(2) Factors that May Materially Affect Operating Performance

Factors that may materially affect operating performance are discussed in “3. Business and Other Risks” under “Results of Operations.”

As of the filing of this annual securities report the COVID-19 pandemic appears to trending towards resolution, but in the event of a resurgence in infections, declining demand and other factors could adversely affect the Group’s operating results.

(3) Capital Resources and Liquidity

MGC Group’s main uses of working capital are manufacturing expenses and operating expenses such as selling, general and administrative expenses.

Its uses of capital for investment purposes include capital expenditures, which it primarily funds with cash on hand, borrowings from financial institutions and bond issuance.

Fiscal 2022 cash flows are analyzed in “(3) Cash Flows” under “1) Summary of Operating Performance.”

MGC ended fiscal 2022 with ¥166.9 billion of interest-bearing debt and ¥101.1 billion of cash and cash equivalents.

(4) Objective Metrics for Assessing Management Policies/Strategies’ Execution Status and Management Targets’ Attainment

Objective metrics MGC Group uses to assess its management policies/strategies execution status and its management targets’ attainment are disclosed above in “1) Management Policies, Operating Environment and Challenges to Be Addressed” under “Results of Operations.” To facilitate swift management decision-making on matters such as investments in and exits from businesses, said metrics include a measure of capital efficiency in addition to net sales and profits.

(5) Significant Accounting Estimates and Their Underlying Assumptions

Significant accounting estimates used to prepare consolidated financial statements and their underlying assumptions are disclosed in “(r) Significant Accounting Estimates” under “1. Summary of Significant Accounting Policies” under “Notes to Consolidated Financial Statements.”

5. Research and Development

To coincide with the beginning of the Medium-Term Management Plan, a structure for the promotion of research was established by integrating and restructuring R&D organizations. A new Research & Development Division and Intellectual Infrastructure Center have been established and have begun operations to lead an R&D organization that will leverage the overall strength of the Group to generate innovation. Under this new structure, by taking a whole-company perspective to allocating management resources and further accelerating research and development, we enhanced the profitability of existing businesses and promoted the creation of new businesses. In addition, the assignment of a specialist DX team to handle computational chemistry and data science analysis for the three research laboratories has significantly accelerated the speed of R&D.

Through R&D activities based on cooperation with external organizations, such as collaboration with and investment in startups, joint research with public research institutions and other initiatives, the Research & Development Division (Future Strategy Group, New Business Development Group) has continued to create businesses in new business areas. It also took steps to build businesses around internally developed products, including medical packaging materials and solid electrolytes, while developing products in new domains, including allergy diagnostics, through open innovation. The factory-grown produce business in Shirakawa, Fukushima Prefecture, provides reliably safe vegetables to the public.

MGC Group inclusive of its subsidiaries employs a total of 1,048 personnel, roughly 10% of its total workforce, in research and development. Its research expenses totaled ¥23,512 million in fiscal 2022.

Fiscal 2022 research and development costs by segment were as follows:

(Millions of yen)

Segment	Fiscal 2022
Basic Chemicals Business Sector	10,471
Specialty Chemicals Business Sector	13,041

6. Capital Expenditures

Summary of Capital Expenditures

Fiscal-2022 capital expenditures of MGC Group (MGC and its consolidated subsidiaries) were as follows.

(Millions of yen)

Segment	Fiscal 2022
Basic Chemicals Business Sector	32,051
Specialty Chemicals Business Sector	28,658
Other	1
Eliminations and corporate	3,940
Total	64,650

7. Dividend

(Yen)

	Interim	Fiscal year-end	Annual
Fiscal 2021	45.00	35.00	80.00
Fiscal 2022	40.00	40.00	80.00

Breakdown of interim dividend for fiscal 2021:
Ordinary dividend: 35.00 yen
Commemorative dividend: 10.00 yen

Consolidated Balance Sheet

Mitsubishi Gas Chemical Company, Inc. and Consolidated Subsidiaries
March 31, 2023

	Millions of yen		Thousands of U.S. dollars (note 2)
	2023	2022	**2023**
Assets			
Current assets:			
Cash and deposits (notes 3 and 20)	¥ 108,378	¥ 102,049	$ 811,638
Notes and accounts receivable - trade, and contract assets (notes 20,and 24)	176,626	176,556	1,322,744
Securities (notes 3,4 and 20)	93	6	696
Inventories	178,143	155,670	1,334,105
Other	20,775	19,381	155,583
Less allowance for doubtful receivables	(767)	(1,453)	(5,744)
Total current assets	483,249	452,210	3,619,029
Non-current assets:			
Property, plant and equipment (notes 6 and 22):			
Buildings and structures	265,074	254,276	1,985,127
Machinery, equipment and vehicles	550,543	523,244	4,122,991
Land	43,843	42,889	328,338
Leased assets	6,603	3,622	49,450
Construction in progress	66,467	42,385	497,768
Other	57,618	55,361	431,499
	990,151	921,780	7,415,195
Less accumulated depreciation	(676,384)	(645,396)	(5,065,409)
Total property, plant and equipment	313,767	276,384	2,349,787
Intangible assets, net:			
Goodwill	4,425	4,811	33,139
Leased assets	34	4	255
Software	3,479	2,992	26,054
Other	4,041	3,482	30,263
Total intangible assets	11,980	11,290	89,718
Investments and other assets:			
Investment in securities (notes 4, 5, 6 and 20)	200,101	171,446	1,498,547
Long-term loans receivable	8,184	5,159	61,290
Deferred tax assets (note 9)	3,863	3,493	28,930
Retirement benefit asset (note 8)	1,387	1,226	10,387
Other investments and other assets (notes 5 and 20)	8,706	8,047	65,199
Less allowance for doubtful receivables	(1,922)	(607)	(14,394)
Total investments and other assets	220,320	188,765	1,649,966
Total non-current assets	546,068	476,440	4,089,478
Total assets	¥ 1,029,317	¥ 928,651	$ 7,708,507

Liabilities and Net Assets	Millions of yen 2023	Millions of yen 2022	Thousands of U.S. dollars (note 2) 2023
Current liabilities:			
Notes and accounts payable - trade (note 20)	¥ 88,342	¥ 92,387	$ 661,589
Short-term borrowings and current installments of long-term borrowings (notes 6 and 20)	47,913	38,925	358,818
Lease obligations (note 6)	1,074	565	8,043
Accrued expenses (note 20)	23,413	19,187	175,339
Income taxes payable (notes 9 and 20)	5,274	11,997	39,497
Provision for bonuses	6,220	6,144	46,581
Other (notes 7, 20 and 24)	48,203	29,760	360,990
Total current liabilities	220,442	198,969	1,650,880
Non-current liabilities:			
Long-term borrowings (notes 6 and 20)	94,680	66,621	709,054
Lease obligations (note 6)	3,276	1,537	24,534
Retirement benefit liability (note 8)	4,453	6,252	33,348
Provision for directors’ retirement benefits (note 8)	279	285	2,089
Deferred tax liabilities (note 9)	12,514	11,458	93,717
Asset retirement obligations (note 7)	5,272	5,216	39,482
Provision for business restructuring	2,499	2,305	18,715
Other	14,649	5,115	109,706
Total non-current liabilities	137,625	98,794	1,030,667
Total liabilities	358,068	297,763	2,681,555
Stockholders’ equity:			
Common stock (note 10): Authorized 492,428,000 shares; issued 222,239,199 and 225,739,199 shares in 2023 and 2022	41,970	41,970	314,311
Additional paid-in capital (note 10)	34,293	34,339	256,819
Retained earnings (note 11)	521,426	492,455	3,904,935
Treasury stock, at cost; 17,660,740 and 17,693,673 shares in 2023 and 2022	(23,838)	(21,525)	(178,522)
Total stockholders’ equity	573,852	547,239	4,297,551
Accumulated other comprehensive income:			
Valuation difference on available-for-sale securities (note 4)	8,950	11,376	67,026
Deferred gains (losses) on hedges (note 21)	110	(326)	824
Foreign currency translation adjustments	22,894	9,861	171,452
Remeasurements of defined benefit plans (note 8)	1,805	614	13,518
Total accumulated other comprehensive income	33,760	21,526	252,827
Non-controlling interests	63,636	62,121	476,567
Total net assets	671,249	630,887	5,026,953
Total liabilities and net assets	¥ 1,029,317	¥ 928,651	$ 7,708,507

See accompanying notes to consolidated financial statements.

Consolidated Statement of Income

Mitsubishi Gas Chemical Company, Inc. and Consolidated Subsidiaries
For the year ended March 31, 2023

	Millions of yen		Thousands of U.S. dollars (note 2)
	2023	2022	2023
Net sales (note 24)	¥ 781,211	¥ 705,656	$ 5,850,453
Cost of sales (note 13)	613,031	543,070	4,590,961
Gross profit	168,179	162,586	1,259,485
Selling, general and administrative expenses (notes 12 and 13)	119,149	107,225	892,301
Operating profit	49,030	55,360	367,183
Other income (expenses):			
Interest income	1,157	346	8,665
Dividend income	3,021	3,218	22,624
Interest expenses	(1,745)	(858)	(13,068)
Share of profit of entities accounted for using equity method	17,546	14,883	131,401
Gain on sale of investments in securities (note 4)	3,732	3,011	27,949
Rent expenses	(735)	(818)	(5,504)
Loss on valuation of investments in securities (note 4)	—	(286)	—
Personnel expenses for seconded employees	(1,852)	(1,361)	(13,870)
Impairment loss (note 14)	(1,128)	(7,059)	(8,448)
Loss on valuation of shares of subsidiaries and associates (note 4)	(846)	—	(6,336)
Loss on sale/disposal of non-current assets	(1,730)	(1,833)	(12,956)
Land maintenance expenses	(275)	—	(2,059)
Insurance claim income	151	2,616	1,131
Compensation income	649	—	4,860
Gain on recovery of money transfer scam at subsidiary	215	—	1,610
Reversal of Provision for loss on business of subsidiaries and associates	128	—	959
Gain on step acquisitions	—	796	—
Provision for business restructuring	(870)	(1,733)	(6,515)
Provision of allowance for doubtful accounts	(410)	(960)	(3,070)
Provision for loss on business of subsidiaries and associates	—	(188)	—
Fire loss	—	(128)	—
Loss on change in retirement benefit plan at subsidiary (note 8)	—	(109)	—
Other, net	4,199	4,734	31,446
Total other income (expenses)	21,208	14,267	158,826
Profit before income taxes	70,239	69,628	526,017
Income taxes (note 9):			
Current	13,831	16,542	103,580
Deferred	1,619	555	12,125
Total income taxes	15,450	17,098	115,704
Profit	¥ 54,788	¥ 52,530	$ 410,305
Profit attributable to non-controlling interests	5,703	4,235	42,710
Profit attributable to owners of parent	¥ 49,085	¥ 48,295	$ 367,595

See accompanying notes to consolidated financial statements.

Consolidated Statement of Comprehensive Income

Mitsubishi Gas Chemical Company, Inc. and Consolidated Subsidiaries
For the year ended March 31, 2023

	Millions of yen				Thousands of U.S. dollars (note 2)	
		2023		2022		2023
Profit	¥	54,788	¥	52,530	$	410,305
Other comprehensive income arising during the year (note 15):						
Valuation difference on available-for-sale securities		(2,430)		(3,118)		(18,198)
Deferred gains (losses) on hedges		51		(14)		382
Foreign currency translation adjustments		9,408		9,330		70,456
Remeasurements of defined benefit plans		901		1,032		6,748
Shares of other comprehensive income of entities accounted for by the equity method		7,033		6,471		52,670
Total other comprehensive income arising during the year		14,963		13,701		112,057
Comprehensive income	¥	69,751	¥	66,232	$	522,362
Comprehensive income attributable to:						
Owners of the parent	¥	61,319	¥	60,083	$	459,215
Non-controlling interests		8,432		6,149		63,147

See accompanying notes to consolidated financial statements.

Consolidated Statement of Changes in Net Assets

Mitsubishi Gas Chemical Company, Inc. and Consolidated Subsidiaries
For the year ended March 31, 2023

	Millions of yen				
	Stockholders' equity				
	Common stock (note 10)	Additional paid-in capital (note 10)	Retained earnings (note 11)	Treasury stock	Total
Balance as of April 1, 2021	¥ 41,970	¥ 34,301	¥ 459,790	¥ (21,562)	¥ 514,499
Cumulative effects of changes in accounting policies			(50)		(50)
Restated balance	41,970	34,301	459,739	(21,562)	514,448
Changes arising during year:					
Cash dividends			(16,642)		(16,642)
Profit attributable to owners of parent			48,295		48,295
Purchase of treasury stock				(5)	(5)
Disposition of treasury stock		39		42	81
Change in scope of consolidation			441		441
Change in scope of equity method			620		620
Change in treasury stock of parent arising from transactions with non-controlling interests		(0)			(0)
Net changes other than stockholders' equity					
Total changes during the year	—	38	32,715	36	32,791
Balance as of March 31, 2022	¥ 41,970	¥ 34,339	¥ 492,455	¥ (21,525)	¥ 547,239
Changes arising during year:					
Cash dividends			**(15,464)**		**(15,464)**
Profit attributable to owners of parent			**49,085**		**49,085**
Purchase of treasury stock				**(7,083)**	**(7,083)**
Disposition of treasury stock		**23**		**47**	**70**
Retirement of treasury stock		**(4,724)**		**4,724**	**(0)**
Transfer of retained earnings to additional paid-in capital		**4,647**	**(4,647)**		**—**
Change in scope of consolidation			**(1)**		**(1)**
Change in treasury stock of parent arising from transactions with non-controlling interests		**7**			**7**
Net changes other than stockholders' equity					**—**
Total changes during the year	**—**	**(46)**	**28,971**	**(2,312)**	**26,612**
Balance as of March 31, 2023	**¥ 41,970**	**¥ 34,293**	**¥ 521,426**	**¥ (23,838)**	**¥ 573,852**

	Millions of yen						
	Accumulated other comprehensive income						
	Valuation difference on available-for-sale securities (note 4)	Deferred gains (losses) on hedges (note 21)	Foreign currency translation adjustments	Remeasure-ments of defined benefit plans (note 8)	Total	Non-controlling interests	Total net assets
Balance as of April 1, 2021	¥ 14,419	¥ (618)	¥ (3,542)	¥ (494)	¥ 9,765	¥ 57,146	¥ 581,411
Cumulative effects of changes in accounting policies							(50)
Restated balance	14,419	(618)	(3,542)	(494)	9,765	57,146	581,360
Changes arising during year:							
Cash dividends							(16,642)
Profit attributable to owners of parent							48,295
Purchase of treasury stock							(5)
Disposition of treasury stock							81
Change in scope of consolidation							441
Change in scope of equity method							620
Change in treasury stock of parent arising from transactions with non-controlling interests							(0)
Net changes other than stockholders' equity	(3,043)	291	13,404	1,108	11,761	4,974	16,736
Total changes during the year	(3,043)	291	13,404	1,108	11,761	4,974	49,527
Balance as of March 31, 2022	¥ 11,376	¥ (326)	¥ 9,861	¥ 614	¥ 21,526	¥ 62,121	¥ 630,887
Changes arising during year:							
Cash dividends							**(15,464)**
Profit attributable to owners of parent							**49,085**
Purchase of treasury stock							**(7,083)**
Disposition of treasury stock							**70**
Retirement of treasury stock							**(0)**
Transfer of retained earnings to additional paid-in capital							**—**
Change in scope of consolidation							**(1)**
Change in treasury stock of parent arising from transactions with non-controlling interests							**7**
Net changes other than stockholders' equity	**(2,426)**	**436**	**13,032**	**1,191**	**12,234**	**1,514**	**13,748**
Total changes during the year	**(2,426)**	**436**	**13,032**	**1,191**	**12,234**	**1,514**	**40,361**
Balance as of March 31, 2023	**¥ 8,950**	**¥ 110**	**¥ 22,894**	**¥ 1,805**	**¥ 33,760**	**¥ 63,636**	**¥ 671,249**

	Stockholders' equity				
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock	Total
Balance as of March 31, 2022	$ 314,311	$ 257,163	$ 3,687,973	$ (161,200)	$ 4,098,248
Changes arising during year:					
Cash dividends			(115,809)		(115,809)
Profit attributable to owners of parent			367,595		367,595
Purchase of treasury stock				(53,044)	(53,044)
Disposition of treasury stock		172		352	524
Retirement of treasury stock		(35,378)		35,378	(0)
Transfer of retained earnings to additional paid-in capital		34,801	(34,801)		—
Change in scope of consolidation			(7)		(7)
Change in treasury stock of parent arising from transactions with non-controlling interests		52			52
Net changes other than stockholders' equity					—
Total changes during the year	—	(344)	216,962	(17,314)	199,296
Balance as of March 31, 2023	$ 314,311	$ 256,819	$ 3,904,935	$ (178,522)	$ 4,297,551

Thousands of U.S. dollars (note 2)

	Accumulated other comprehensive income						
	Valuation difference on available-for-sale securities	Deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasure-ments of defined benefit plans	Total	Non-controlling interests	Total net assets
Balance as of March 31, 2022	$ 85,194	$ (2,441)	$ 73,849	$ 4,598	$ 161,207	$ 465,221	$ 4,724,684
Changes arising during year:							
Cash dividends							(115,809)
Profit attributable to owners of parent							367,595
Purchase of treasury stock							(53,044)
Disposition of treasury stock							524
Retirement of treasury stock							(0)
Transfer of retained earnings to additional paid-in capital							—
Change in scope of consolidation							(7)
Change in treasury stock of parent arising from transactions with non-controlling interests							52
Net changes other than stockholders' equity	(18,168)	3,265	97,596	8,919	91,620	11,338	102,958
Total changes during the year	(18,168)	3,265	97,596	8,919	91,620	11,338	302,262
Balance as of March 31, 2023	$ 67,026	$ 824	$ 171,452	$ 13,518	$ 252,827	$ 476,567	$ 5,026,953

See accompanying notes to consolidated financial statements.

Consolidated Statement of Cash Flows

Mitsubishi Gas Chemical Company, Inc. and Consolidated Subsidiaries
For the year ended March 31, 2023

	Millions of yen		Thousands of U.S. dollars (note 2)
	2023	2022	2023
Cash flows from operating activities:			
Profit before income taxes	¥ 70,239	¥ 69,628	$ 526,017
Adjustments to reconcile profit before income taxes to net cash provided by operating activities:			
Depreciation and amortization	33,565	31,999	251,367
Amortization of goodwill	405	396	3,033
Loss on sale/disposal of non-current assets	1,653	1,630	12,379
Impairment loss	1,128	7,059	8,448
Share of profit of entities accounted for using equity method	(17,546)	(14,883)	(131,401)
Increase (decrease) in allowance for doubtful receivables	531	1,027	3,977
Increase (decrease) in net defined benefit liability	(851)	140	(6,373)
Increase (decrease) in provision for directors' retirement benefits	(2)	49	(15)
Provision for business restructuring	870	1,733	6,515
Interest and dividend income	(4,179)	(3,564)	(31,296)
Interest expenses	1,745	858	13,068
Gain on sale of short-term investments and investments in securities	(3,980)	(3,041)	(29,806)
Loss on devaluation of short-term investments and investments in securities	4	332	30
Decrease (increase) in trade receivables	2,412	(9,273)	18,063
Increase (decrease) in inventories	(19,711)	(28,992)	(147,615)
Increase (decrease) in trade payables	(6,868)	9,792	(51,434)
Other, net	(1,458)	(12,396)	(10,919)
Sub total	57,957	52,497	434,037
Interest and dividend received	4,361	3,526	32,659
Dividend received from entities accounted for using equity method	15,082	4,439	112,948
Interest paid	(1,654)	(818)	(12,387)
Income taxes paid	(20,686)	(10,386)	(154,916)
Other, net	163	2,831	1,221
Net cash provided by operating activities	55,222	52,090	413,555
Cash flows from investing activities:			
Purchase of non-current assets	(62,721)	(56,347)	(469,715)
Proceeds from sale of non-current assets	202	463	1,513
Proceeds from sale of investments in securities	5,739	5,724	42,979
Purchase of investments in securities and subsidiaries	(1,795)	(11,849)	(13,443)
Loan advances	(2,354)	(824)	(17,629)
Proceeds from collection of loans receivable	469	101	3,512
Purchase of shares of subsidiaries resulting in change in scope of consolidation	—	(2,668)	—
Other, net	(3,612)	445	(27,050)
Net cash used in investing activities	(64,071)	(64,954)	(479,825)
Cash flows from financing activities:			
Increase (decrease) in short-term borrowings	(7,062)	316	(52,887)
Proceeds from long-term borrowings	50,289	16,641	376,612
Payments on long-term borrowings	(7,965)	(10,641)	(59,650)
Purchase of treasury stock	(7,083)	(5)	(53,044)
Proceeds from sale of treasury stock	0	0	0
Dividends paid to stockholders	(15,464)	(16,642)	(115,809)
Dividends paid to non-controlling interests	(4,695)	(2,551)	(35,161)
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(2,195)	—	(16,438)
Other, net	2,173	9,216	16,273
Net cash (used in) provided by financing activities	7,996	(3,666)	59,882
Effect of exchange rate changes on cash and cash equivalents	7,737	6,502	57,942
(Decrease) increase in cash and cash equivalents	6,885	(10,028)	51,561
Cash and cash equivalents at beginning of year	92,257	91,075	690,908
Increase in cash and cash equivalents resulting from inclusion of subsidiaries in consolidation	2,041	11,210	15,285
Cash and cash equivalents at end of year (note 3)	¥ 101,185	¥ 92,257	$ 757,770

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

1. Summary of Significant Accounting Policies

(a) Basis of Presenting Consolidated Financial Statements

Mitsubishi Gas Chemical Company, Inc. (the Company) and its domestic subsidiaries maintain their books of account and prepare their financial statements in conformity with financial accounting standards of Japan, and its foreign subsidiaries in conformity with those of the countries of their domicile.

"Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for Consolidated Financial Statements" (Accounting Standards Board of Japan (ASBJ) Practical Issues Task Force (PITF) No. 18, May 17, 2006) and "Practical Solution on Unification of Accounting Policies Applied to Associates Accounted for by the Equity Method" (ASBJ PITF No. 24, March 10, 2008) require that for the preparation of consolidated financial statements, the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should be unified, in principle, and financial statements prepared by foreign subsidiaries in accordance with International Financial Reporting Standards (IFRS) or the generally accepted accounting principles in the United States (U.S. GAAP) tentatively may be used for the consolidation process, however, the items listed in the PITF should be adjusted in the consolidation process so that profit (loss) is accounted for in accordance with Japan GAAP unless they are not material. The Company made necessary modification to the consolidated financial statements according to the PITF.

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations, and in conformity with accounting principles and practices generally accepted in Japan, which may differ in certain respects from accounting principles and practices generally accepted in countries and jurisdictions other than Japan.

In preparing the accompanying consolidated financial statements, certain reclassifications have been made in the financial statements issued domestically in Japan in order to present them in a form which is more familiar to readers outside Japan. In addition, the notes to the consolidated financial statements include information which is not required under accounting principles generally accepted in Japan but is presented herein as additional information.

(b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and 71subsidiaries (71 in 2022). The Company and its consolidated subsidiaries are collectively referred to as "MGC."

All significant intercompany accounts and transactions have been eliminated in consolidation.

KOREA POLYACETAL CO., LTD. was included in the scope of consolidation due to their significance during the year ended March 31, 2023.

J-Chemical Inc. was excluded from the scope of consolidation because it was eliminated in an absorption-type merger with Yutaka Chemical Corporation as the company surviving absorption-type merger. In addition, Yutaka Chemical Corporation changed its trade name to MGC Woodchem Corporation at the time of the merger.

Investments in 16 affiliates (15 in 2022) are accounted for by the equity method.

The Accounting Standards for Consolidation require the control or influence concept for the consolidation scope of subsidiaries and affiliates. Under the control or influence concept, a company in which the parent company or its consolidated subsidiaries, directly or indirectly, are able to exercise control over operations is fully consolidated, and a company over which the parent company and/or its consolidated subsidiaries have the ability to exercise significant influence is accounted for by the equity method.

The difference between the cost and the underlying net assets at the date of investments in subsidiaries or affiliates is allocated to identifiable assets and liabilities based on fair market value at the date of investments.

The unallocated portion of the difference, which is recognized as goodwill, is being amortized using the straight-line method over an expected benefit period by each investment within 20 years.

The fiscal year-ends of 30 consolidated subsidiaries (30 in 2022) are December 31. For consolidation purposes, the Company uses their financial statements as of December 31 with necessary consolidation adjustments made to reflect any significant transactions which occurred between January 1 and March 31.

(c) Cash and Cash Equivalents

For the purpose of the statement of cash flows, MGC considers all highly liquid investments with insignificant risk of changes in value, which have maturities of generally three months or less when purchased, to be cash equivalents.

(d) Securities and Investments in Securities

Under the Accounting Standards for Financial Instruments, securities are classified into four categories – "trading securities," "held-to-maturity securities," "investments in entities" and "other securities." Securities classified as "trading securities" are stated at fair value and unrealized gains or losses are recorded in the consolidated statement of income. Securities classified as "held-to-maturity securities" are stated at amortized cost. Securities classified as "other securities" except for equity securities without market price are stated at fair value and unrealized gains or losses, net of related taxes, are excluded from earnings and reported as accumulated other comprehensive income in the consolidated balance sheet. Debt classified as "other securities" for which fair value is not available are stated at the amortized cost. Equity securities classified as "other securities" without market price is not available are stated at the moving-average cost. Realized gains and losses on the other securities are computed using the moving-average cost. Securities held by the Company are classified as held-to-maturity securities, investments in entities and other securities.

(e) Inventories
Inventories held for sale in the ordinary course of business are measured at the lower of cost or net selling value, which is defined as the selling price less additional estimated manufacturing costs and estimated direct selling expenses, determined principally by the average method.

(f) Property, Plant and Equipment
Property, plant and equipment are carried substantially at cost. Depreciation of the property, plant and equipment is provided principally by the straight-line method based on the estimated useful lives.

The estimated useful lives are as follows:

Buildings and structures	7-50 years
Machinery, equipment and vehicles	8-15 years

(g) Intangible Assets
Intangible assets are carried at cost less accumulated amortization. The expenses for internal use computer software are deferred and amortized by the straight-line method over the estimated useful lives (5 years). Intangible assets other than software are deferred and amortized by the straight-line method at rates based on the estimated useful lives of the respective assets.

(h) Impairment of Long-lived Assets
The standard for the impairment of long-lived assets requires that fixed assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. An impairment loss would be recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.

Recognized impairment losses, except for those to be deducted directly from acquisition costs of corresponding fixed assets, are included in accumulated depreciation on the consolidated balance sheet.

(i) Allowance for Doubtful Receivables
An allowance for doubtful receivables is provided at an amount of uncollectible receivables based on historical loss ratios and an amount that takes into consideration the possibility of specific liabilities.

(j) Retirement Benefits
In calculating retirement benefit obligation, the benefit formula basis is used for the method of attributing expected retirement benefits to the periods up to the end of the current fiscal year.

Past service costs are amortized by the straight-line method over a certain period within the average remaining years of service of the eligible employees (10 years) when such past service costs occur.

Actuarial gains and losses are amortized by the declining-balance method over a certain period within the average remaining years of service of the eligible employees (10 years) from the year following the year in which the gains or losses occur.

The Company and certain subsidiaries have unfunded defined benefit pension plans for directors, corporate auditors and executive officers. The provision for the plans has been made in the accompanying consolidated financial statements for the vested benefits to which directors, corporate auditors and executive officers are entitled if they were to retire or sever immediately at the balance sheet dates (See note 8).

(k) Leases
All finance lease transactions are capitalized. Leased assets related to finance lease transactions without title transfer are depreciated on a straight-line method, with the lease periods as their useful lives and no residual value.

(l) Foreign Currency Translation
Under the Accounting Standards for Foreign Currency Transactions, foreign currency transactions are translated into yen on the basis of the rates in effect at the transaction dates, receivables and payables denominated in foreign currencies are translated into yen at the rate of exchange as of the balance sheet dates, and gains or losses resulting from the translation of foreign currencies are credited or charged to income. Assets and liabilities of overseas subsidiaries are translated into yen at the rate of exchange as of the balance sheet date, and revenues and expenses of them are translated into yen using the average rate in the year, and a comprehensive adjustment resulting from translation is presented as “Foreign currency translation adjustments” and “Non-controlling interests” in a component of net assets.

(m) Recognition of Significant Revenues and Expenses
MGC is primarily engaged in business activities related to manufacturing and sales of products in the “Basic Chemicals Business Sector” and “Specialty Chemicals Business Sector.” For the sale of these products, revenue is recognized upon delivery of the products since MGC determines that the customer obtains control of the products and the performance obligations are satisfied at the time of delivery. For transactions in which MGC acts as an agent in sales of products to customers, revenue is recognized at net amount after deducting the amount paid to the supplier from the total amount of considerations received from the customer.

(n) Income Taxes

Income taxes in Japan applicable to the Company and its domestic consolidated subsidiaries consist of corporate tax, inhabitant tax and business tax.

The Accounting Standards for Income Taxes require that deferred income taxes be accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled, and the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

(o) Asset Retirement Obligations

The Company recognized an asset retirement obligation which is statutory or similar obligation with regard to the removal of assets as a liability. An asset retirement obligation is recognized as a liability at the time that the asset is incurred by its acquisition, construction, development or ordinary use. When an asset retirement obligation is recognized as a liability, the asset retirement cost corresponding to it is included in the cost of the relevant asset by the same amount.

(p) Provision for business restructuring

The Company provides a reasonably estimated amount of structural reform costs for its businesses.

(q) Reclassifications

Certain reclassifications have been made to the prior years' consolidated financial statements to conform to the presentation used for the year ended March 31, 2023.

(r) Significant Accounting Estimates

Impairment of fixed assets

(i) Amount recorded on the consolidated financial statements for the year ended March 31, 2023 and 2022

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Property, plant and equipment	¥ 313,767	¥ 276,384	$ 2,349,787
Intangible assets	11,980	11,290	89,718
Impairment loss	1,128	7,059	8,448

(ii) Information on the nature of significant accounting estimates for identified items

The fixed assets held by the Company and its consolidated subsidiaries are accounted for in accordance with the accounting standards for impairment of fixed assets. In calculating the recoverable amount used to measure the impairment loss, certain assumptions are made regarding the economic remaining useful life, future cash flows, discount rate, etc.

Although these assumptions are determined based on management's best estimates, they may be affected by the results of changes in uncertain economic conditions in the future. If a revision is needed, the amount to be recognized in the consolidated financial statements for the following fiscal year may be affected.

(iii) Test for impairment at MITSUBISHI GAS CHEMICAL ENGINEERING-PLASTICS(SHANGHAI)CO., LTD.

MITSUBISHI GAS CHEMICAL ENGINEERING-PLASTICS (SHANGHAI) CO., LTD. is engaged in manufacturing and sales of polycarbonates and has adopted IFRS. MGCEPS's business plan was reviewed considering sluggish demand in China and its sales results in the face of downturns in polycarbonates market prices especially in this fiscal year, in addition to the spread between prices of polycarbonates and its raw material, bisphenol A, has been low for a few years. As a result of the review, the recoverable amounts of property, plant and equipment and intangible assets fell below their carrying amounts, and an impairment loss of ¥699 million ($5,235 thousand) was recognized for the year ended March 31, 2023. The balance of property, plant and equipment and intangible assets related to MITSUBISHI GAS CHEMICAL ENGINEERING-PLASTICS(SHANGHAI)CO., LTD. at the March 31, 2023 was ¥941 million ($7,047 thousand) and ¥1,517 million ($11,361 thousand), respectively.

The recoverable amount is calculated based on discounted future cash flows. In calculating the cash flows, assumptions regarding sales volume, sales prices, marginal profit ratio, discount rates, and other items have been made based on trends from prior years, market data for polycarbonates and bisphenol A, and the cost of capital of other companies in the same industry.

(s) Changes in Accounting Policies

(i) Application of the Implementation Guidance on Accounting Standard for Fair Value Measurement

The Company has applied the "Implementation Guidance on Accounting Standard for Fair Value Measurement" (ASBJ Guidance No. 31, June 17, 2021; hereinafter referred to as "Fair Value Measurement Guidance") from the beginning of the current fiscal year, and will prospectively apply the new accounting policies stipulated by the Fair Value Measurement Guidance in accordance with the transitional treatment provided in Paragraph 27-2 of the Fair Value Measurement Guidance. This change has no impact on the consolidated financial statements for the current fiscal year.

(ii) Application of Accounting Standards Update (ASU) 2016-02, Leases
Overseas consolidated subsidiaries that apply the USGAAP have applied the Accounting Standards Update (ASU) 2016-02, Leases from the beginning of the current fiscal year, and, in principle, all leases as lessee are now recorded as assets and liabilities on the consolidated balance sheets. In applying such accounting standards update, the cumulative effect of applying such accounting standards update, which is permitted as a transitional measure, is recognized at the start date of application. This change has only minor impact on the consolidated financial statements for the current fiscal year.

(t) Accounting Pronouncements Not Yet Adopted
“Practical Solution on the Accounting for and Disclosure of the issuance and holding of Electronically Recorded Transferable Rights That Must Be Indicated on Securities, etc.” (Practical Solution No. 43,issued on August 26, 2022)

(1) Overview
The Financial Instruments and Exchange Act was amended in line with establishment of the Act for the Partial Revision of the Payment Services Act to Address the Diversification of Financial Transactions based on Advances in Information Technology (Act No. 28 of 2019) in May 2019. An ICO, an activity to raise funds from the public using a digital token issued by a company or an individual, became subject to regulations under the Financial Instruments and Exchange Act. As a result, the ASBJ issued to clarify Practical Solution on the Accounting for and Disclosure of the issuance and holding of Electronically Recorded Transferable Rights on the Cabinet Office Order on Financial Instruments Business.

(2) Scheduled date of adoption
This guidance will be adopted effective from the beginning of the fiscal year ending March 31, 2024.

(3) Impact of the adoption of the accounting standards
Impact of the adoption of the “Practical Solution on the Accounting for and Disclosure of the issuance and holding of Electronically Recorded Transferable Rights That Must Be Indicated on Securities, etc” on the consolidated financial statements is currently under evaluation.

- “Accounting Standard for Current Income Taxes” (ASBJ Statement No. 27, October 28, 2022)
- “Accounting Standard for Presentation of Comprehensive Income” (ASBJ Statement No. 25, October 28, 2022)
- “Implementation Guidance on Accounting Standard for Tax Effect Accounting” (ASBJ Guidance No. 28, October 28, 2022)

(1) Overview
These accounting standards and guidance establish the accounting classification for corporate taxes resulting from other comprehensive that is subject to taxation, as well as the treatment of tax effects related to the sale of shares in subsidiaries when group taxation regime is applied.

(2) Scheduled date of adoption
These accounting standards and guidance will be adopted effective from the beginning of the fiscal year ending March 31, 2025.

(3) Impact of the adoption of the accounting standards
Impact of the adoption of the “Accounting Standard for Current Income Taxes” on the consolidated financial statements are currently under evaluation.

(u) Additional Information
Assumptions regarding impact of novel coronavirus (COVID-19) in making accounting estimate
Although there are concerns about a decrease in demand, etc. due to the impact of the COVID-19, the Company believes that the impact on the accounting estimates for impairment of fixed assets, etc. will be immaterial.

2. Financial Statement Translation
The translations of the yen amounts into U.S. dollars are included solely for the convenience of the readers, using the prevailing exchange rate as of March 31, 2023, which was ¥133.53 to U.S. $1. This translation should not be construed as a representation that the amounts shown could be converted into U.S. dollars at such rate.

3. Cash and Cash Equivalents

Reconciliation between “Cash and deposits” in the consolidated balance sheet and “Cash and cash equivalents” in the consolidated statement of cash flows as of March 31, 2023 and 2022 is as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Cash and deposits	¥ 108,378	¥ 102,049	$ 811,638
Time deposits with maturities of over three months	(7,286)	(9,797)	(54,565)
Securities	93	6	696
Cash and cash equivalents	¥ 101,185	¥ 92,257	$ 757,770

4. Securities and Investments in Securities

Balance sheet amount, acquisition cost, and gross unrealized gain and loss of other securities with fair value as of March 31, 2023 and 2022 are summarized as follows:

	Millions of yen			
	Balance sheet amount	Gross unrealized gain	Gross unrealized loss	Acquisition cost
March 31, 2023				
Equity securities	¥ 26,697	¥ 13,552	¥ (292)	¥ 13,436
Bonds	1,563	0	—	1,563
Other securities	93	—	—	93
	¥ 28,354	¥ 13,552	¥ (292)	¥ 15,094
March 31, 2022				
Equity securities	¥ 31,798	¥ 17,148	¥ (497)	¥ 15,146
Bonds	1,737	—	(0)	1,737
Other securities	104	55	—	48
	¥ 33,639	¥ 17,204	¥ (497)	¥ 16,932

	Thousands of U.S. dollars			
	Balance sheet amount	Gross unrealized gain	Gross unrealized loss	Acquisition cost
March 31, 2023				
Equity securities	$ 199,933	$ 101,490	$ (2,187)	$ 100,622
Bonds	11,705	0	—	11,705
Other securities	696	—	—	696
	$ 212,342	$ 101,490	$ (2,187)	$ 113,038

Securities classified as other securities without market price are unlisted equity securities amounting to ¥3,074 million ($23,021 thousand) and ¥3,843 million as of March 31, 2023 and 2022, respectively.

For the years ended March 31, 2023 and 2022, proceeds from the sale of other securities are ¥5,739 million ($42,979 thousand) and ¥ 5,724 million, respectively. Gross realized gains are ¥ 3,980 million ($29,806 thousand) and ¥ 3,041 million for the years ended March 31, 2023 and 2022, respectively.

The Company recognized impairment losses on securities of ¥850 million ($6,366 thousand) and ¥ 332 million for the years ended March 31, 2023 and 2022, respectively.

The Company recognizes impairment losses on securities with market price when the fair value declines by more than 50 percent. When the fair value declines by more than 30 percent but less than 50 percent, the Company recognizes necessary impairment losses as a result of considering the possibility of recovery. The Company recognizes impairment losses on securities without market price when the value declines significantly due to an issuer’s financial condition.

5. Investments in Affiliates

The aggregate carrying amounts of investments in affiliates as of March 31, 2023 and 2022 are ¥170,128 million ($1,274,081 thousand) and ¥ 135,489 million, respectively.

6. Short-term and Long-term Borrowings

Short-term borrowings are represented by bank loans which are due within one year. The weighted average interest rate of short-term borrowings is 1.4% and 1.7% as of March 31, 2023 and 2022, respectively.

Long-term borrowings as of March 31, 2023 and 2022 is summarized as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	**2023**
Loans, principally from banks, maturing in installments through 2037 with weighted average interest of 0.55% as of March 31, 2023, partially secured by mortgage of property, plant and equipment and securities	**¥ 115,109**	¥ —	**$ 862,046**
Loans, principally from banks, maturing in installments through 2035 with weighted average interest of 0.99% as of March 31, 2022, partially secured by mortgage of property, plant and equipment and securities	**—**	63,753	**—**
Lease obligations maturing in installments through 2056 as of March 31, 2023	**4,351**	—	**32,584**
Lease obligations maturing in installments through 2056 as of March 31, 2022	**—**	2,102	**—**
Unsecured bonds, due 2030 with interest of 0.340%	**10,000**	10,000	**74,890**
Unsecured bonds, due 2025 with interest of 0.170%	**10,000**	10,000	**74,890**
	139,460	85,855	**1,044,409**
Less current installments:			
Loans	**36,651**	8,092	**274,478**
Lease obligations	**1,074**	565	**8,043**
	¥ 101,735	¥ 77,198	**$ 761,889**

Note: The weighted average interest rates on lease obligations as of March 31, 2023 and 2022 are omitted because lease obligations were recorded in the consolidated balance sheet based on the total lease payment which includes assumed interests portion.

The aggregate annual maturities of loans after March 31, 2024, are as follows:

	Millions of Yen	Thousands of U.S. dollars
Year ending March 31,		
2025	¥ 7,057	$ 52,850
2026	6,717	50,303
2027	11,076	82,948
2028	5,842	43,750

The aggregate annual maturities of bonds after March 31, 2024, are as follows:

	Millions of Yen	Thousands of U.S. dollars
Year ending March 31,		
2025	¥ —	$ —
2026	10,000	74,890
2027	—	—
2028	—	—

Property, plant and equipment and Securities with a book value as of March 31, 2023 of ¥12,149 million ($90,983 thousand) were mortgaged to secure certain debts.

As is customary in Japan, both short-term and long-term bank loans are under general agreements which provide that security and guarantees for present and future indebtedness will be given upon request of the bank, and that the bank shall have the right, as the obligations become due or in the event of default, to offset cash deposits against obligations due the banks.

7. Asset Retirement Obligations

(a) Asset retirement obligations recognized on the consolidated balance sheet

The Company is obliged to restore its natural gas mining facilities except for mentioned below (b) according to law and land lease contracts. The **asset retirement obligations are based** on estimated future cash flows for the restorations. The obligations are calculated by using the estimated mine lives of 18 to 76 years and discounted rate of 0.828% to 2.385%.

Asbestos are used in part of fixed assets held by the Company and certain consolidated subsidiaries. The Company is obliged to conduct a special treatment when asbestos are removed. The **asset retirement obligations are based** on estimated future cash flows for the treatment. The obligations are calculated by using the estimated useful lives of the fixed assets mainly of 8 years and discounted rate mainly of 1.035%.

The following table provides a total asset retirement obligation for the years ended March 31, 2023 and 2022:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Balance at beginning of year	¥ 5,334	¥ 5,113	$ 39,946
Liabilities incurred due to the acquisition	1	1	7
Accretion expenses	43	43	322
Liabilities settled	(81)	(85)	(607)
Other	13	261	97
Balance at end of year	¥ 5,312	¥ 5,334	$ 39,781

(b) Asset retirement obligations not recognized on the consolidated balance sheet

The Company is obliged to restore its natural gas mining facilities according to law and land lease contracts, and the Company plans to use part of the facilities as storage facilities after mining continuingly. The Company and certain consolidated subsidiaries are obliged to restore their piers and pipelines according to law and lease contracts, and the piers and pipelines can be used for a substantial long-term with appropriate repair. Asset retirement obligations relating to these assets are not recognized because it is extremely difficult to estimate the time of fulfilling the obligations reasonably.

8. Retirement Benefits

MGC has defined retirement benefit plans such as lump-sum retirement benefit plans and defined benefit corporate pension plans, besides defined contribution pension plans.

In addition, the Company has also set up retirement benefit trusts.

Certain consolidated subsidiaries apply the simplified method in computing net defined benefit liability and retirement benefit expenses for their defined benefit corporate pension plans and lump-sum retirement benefit plans.

In the year ended March 31, 2023, Mitsubishi Gas Chemical Trading Inc., a consolidated subsidiary of the Company, integrated retirement benefit plans of the former TOKYO SHOKAI, LTD., the former RYOYO TRADING CO., LTD. and the former RYOKO CHEMICAL CO., LTD. into a new retirement benefit plan. In line with this integration, the method of calculating retirement benefit obligations was also unified to the principle method.

Defined benefit plans

(a) Reconciliation between retirement benefit obligations at beginning of year and end of year (excluding plans applying the simplified method):

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Retirement benefit obligation at beginning of year	¥ 43,076	¥ 42,555	$ 322,594
Service costs	2,177	2,190	16,303
Interest costs	382	379	2,861
Actuarial gains and losses arising during year	(607)	(36)	(4,546)
Retirement benefits paid	(3,109)	(2,492)	(23,283)
Effect of change in retirement benefit plan at subsidiary	—	424	—
Other	91	54	681
Retirement benefit obligation at end of year	¥ 42,010	¥ 43,076	$ 314,611

(b) Reconciliation between plan assets at beginning of year and end of year (excluding plans applying the simplified method):

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Plan assets at beginning of year	¥ 40,800	¥ 39,548	$ 305,549
Expected return on plan assets	528	527	3,954
Actuarial gains and losses arising during year	704	1,106	5,272
Contribution from employer	1,288	1,133	9,646
Retirement benefits paid	(1,907)	(1,688)	(14,281)
Effect of change in retirement benefit plan at subsidiary	—	160	—
Other	57	12	427
Plan assets at end of year	¥ 41,472	¥ 40,800	$ 310,582

(c) Reconciliation between retirement benefit liabilities of plans applying the simplified method at beginning of year and end of year:

	Millions of yen				Thousands of U.S. dollars	
	2023		2022		2023	
Retirement benefit liability at beginning of year	¥	2,750	¥	2,746	$	20,595
Retirement benefit expenses		11		295		82
Retirement benefits paid		(70)		(133)		(524)
Contribution to plans		(92)		(7)		(689)
Increase due to change in scope of consolidation		—		254		—
Effect of change in retirement benefit plan at subsidiary		(98)		(397)		(734)
Other		28		(6)		210
Retirement benefit liability at end of year	¥	2,529	¥	2,750	$	18,940

(d) Reconciliation between retirement benefit obligations and plan assets at end of year and net defined benefit asset and defined benefit liability on the consolidated balance sheet:

	Millions of yen				Thousands of U.S. dollars	
	2023		2022		2023	
Funded retirement benefit obligation	¥	42,647	¥	43,097	$	319,381
Plan assets		(44,443)		(42,997)		(332,832)
		(1,796)		99		(13,450)
Unfunded retirement benefit obligation		4,862		4,926		36,411
Net balance of liability and asset recorded on the consolidated balance sheet	¥	3,066	¥	5,025	$	22,961
Retirement benefit asset	¥	(1,387)	¥	(1,226)	$	(10,387)
Retirement benefit liability		4,453		6,252		33,348
Net balance of liability and asset recorded on the consolidated balance sheet	¥	3,066	¥	5,025	$	22,961

(e) Retirement benefit expenses and components thereof:

	Millions of yen				Thousands of U.S. dollars	
	2023		2022		2023	
Service costs	¥	2,177	¥	2,190	$	16,303
Interest costs		382		379		2,861
Expected return on plan assets		(528)		(527)		(3,954)
Amortization of actuarial gains and losses		(425)		(209)		(3,183)
Amortization of past service costs		(25)		(13)		(187)
Retirement benefit expenses applying the simplified method		11		295		82
Loss (gain) on change in retirement benefit plan at subsidiary		(98)		109		(734)
Other		6		29		45
Retirement benefit expenses under defined benefit plans	¥	1,499	¥	2,253	$	11,226

(f) Components of items recorded in remeasurements of defined benefit plans in other comprehensive income, before tax, are as follows:

	Millions of yen				Thousands of U.S. dollars	
	2023		2022		2023	
Past service costs	¥	4	¥	223	$	30
Actuarial gains and losses		844		780		6,321
Total	¥	849	¥	1,004	$	6,358

(g) Components of items recorded in remeasurements of defined benefit plans in accumulated other comprehensive income, before tax, are as follows:

	Millions of yen				Thousands of U.S. dollars	
	2023		2022		2023	
Unrecognized past service costs	¥	(265)	¥	(261)	$	(1,985)
Unrecognized actuarial gains and losses		(2,725)		(1,871)		(20,407)
Total	¥	(2,991)	¥	(2,132)	$	(22,399)

(h) Plan assets

(i) Components of plan assets

Percentages to total plan assets by major category are as follows:

	2023	2022
Debt securities	20%	30%
Equity securities	44	36
Cash and deposits	13	12
Other	23	22
Total	100%	100%

(ii) Determination of expected long-term rate of return on plan assets

The expected long-term rate of return on plan assets is determined considering current and expected allocation of plan assets and current and expected long-term rate of return derived from various components of plan assets.

(i) Actuarial assumptions

	2023	2022
Discount rate	Mainly 0.8%	Mainly 0.8%
Expected long-term rate of return on plan assets	Mainly 2.0%	Mainly 2.0%

Defined contribution plans

The required contribution of MGC to the defined contribution plans amounted to ¥903 million ($6,763 thousand) and ¥816 million as of March 31, 2023 and 2022, respectively.

9. Income Taxes

The Company and its domestic subsidiaries are subject to Japanese corporate, inhabitant and business taxes based on income which, in the aggregate, result in a statutory tax rate of approximately 30.6% in 2023 and 2022.

A reconciliation of the statutory tax rate and the effective tax rate as a percentage of profit before income taxes for the years ended March 31, 2023 and 2022 is as follows:

	2023	2022
Statutory tax rate	30.6%	30.6%
Share of profit of entities accounted for using equity method	(8.9)	(6.5)
Dividend income eliminated in consolidation	12.4	5.7
Valuation allowance	3.2	3.5
Income not credited for tax purposes	(8.7)	(6.2)
Foreign taxes	0.3	0.7
Other	(6.9)	(3.3)
Effective tax rate	22.0%	24.6%

Significant components of deferred tax assets and liabilities as of March 31, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Deferred tax assets:			
Tax loss carryforward	¥ 8,108	¥ 6,092	$ 60,720
Retirement benefit liability	7,281	7,178	54,527
Loss on valuation of investments in securities	1,600	1,249	11,982
Provision for bonuses	1,684	1,684	12,611
Intercompany profits	2,888	2,921	21,628
Depreciation	469	445	3,512
Impairment loss	2,855	3,120	21,381
Asset retirement obligations	1,672	1,676	12,522
Other	5,171	4,724	38,725
	31,732	29,093	237,639
Valuation allowance for tax loss carryforward	(6,772)	(4,756)	(50,715)
Valuation allowance for the total amount of deductible temporary differences	(14,011)	(14,269)	(104,928)
Valuation allowance	(20,783)	(19,025)	(155,643)
	10,949	10,067	81,997
Deferred tax liabilities:			
Valuation difference on available-for-sale securities	(3,865)	(4,992)	(28,945)
Gain by contributing the assets to the trust	(1,255)	(1,255)	(9,399)
Tax purpose reserves etc. regulated by Japanese tax law	(2,070)	(2,189)	(15,502)
Asset retirement cost	(121)	(132)	(906)
Retained earnings of overseas consolidated subsidiaries and others	(7,211)	(5,174)	(54,003)
Other	(5,075)	(4,287)	(38,006)
	(19,600)	(18,032)	(146,783)
Net deferred tax assets (liabilities)	¥ (8,651)	¥ (7,964)	$ (64,787)

Notes 1: The change in valuation allowance is mainly due to an increase of valuation allowance for tax loss carryforward.

2: The expiration of tax loss carryforward and the resulting net deferred tax assets as of March 31, 2023 and 2022 were as follows:

March 31, 2023	Millions of yen						
	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years	Total
Tax loss carryforward*	¥ 151	¥ 763	¥ 1,506	¥ 1,003	¥ 1,002	¥ 3,681	¥ 8,108
Valuation allowance	(52)	—	(1,276)	(997)	(1,002)	(3,443)	(6,772)
Deferred tax assets	98	763	229	6	—	237	1,336

March 31, 2022	Millions of yen						
	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years	Total
Tax loss carryforward*	¥ 825	¥ 279	¥ 1,116	¥ 1,097	¥ 717	¥ 2,056	¥ 6,092
Valuation allowance	(42)	(55)	(1,097)	(1,091)	(654)	(1,814)	(4,756)
Deferred tax assets	782	223	19	5	63	242	1,336

March 31, 2023	Thousands of U.S. dollars						
	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years	Total
Tax loss carryforward*	$ 1,131	$ 5,714	$ 11,278	$ 7,511	$ 7,504	$ 27,567	$ 60,720
Valuation allowance	(389)	—	(9,556)	(7,466)	(7,504)	(25,784)	(50,715)
Deferred tax assets	734	5,714	1,715	45	—	1,775	10,005

* Tax loss carryforward was calculated by multiplying the statutory tax rate.

10. Common Stock

Under the Companies Act, the entire amount of the issue price of shares is required to be designated as stated common stock account although a company in Japan may, by resolution of its Board of Directors, account for an amount not exceeding 50% of the issue price of new shares as additional paid-in capital.

11. Retained Earnings and Dividends

The Companies Act provides that an amount equal to 10% of distributions from retained earnings paid by the Company and its Japanese subsidiaries be appropriated as a legal reserve. No further appropriations are required when the total amount of the additional paid-in capital and the legal reserve equals 25% of their respective stated capital. The Companies Act also provides that additional paid-in capital and legal reserve are available for appropriations by the resolution of the stockholders. Balances of the legal reserve are included in retained earnings in the accompanying consolidated balance sheet.

Cash dividends charged to retained earnings for the years ended March 31, 2023 and 2022 represent dividends paid out during those years. The amount available for dividends is based on the amount recorded in the Company's non-consolidated books of account in accordance with the Companies Act.

(a) Dividends paid during the year ended March 31, 2022

The following was approved by the Board of Directors held on May 26, 2021

(i)	Total dividends	¥7,280 million
(ii)	Cash dividends per common share	¥35
(iii)	Record date	March 31, 2021
(iv)	Effective date	June 7, 2021

The following was approved by the Board of Directors held on November 5, 2021

(i)	Total dividends	¥9,362 million
(ii)	Cash dividends per common share	¥45
(iii)	Record date	September 30, 2021
(iv)	Effective date	December 6, 2021

(b) Dividends paid during the year ended March 31, 2023

The following was approved by the Board of Directors held on May 26, 2022

(i)	Total dividends	¥7,281 million ($54,527 thousand)
(ii)	Cash dividends per common share	¥35 ($0.26)
(iii)	Record date	March 31, 2022
(iv)	Effective date	May 26, 2022

The following was approved by the Board of Directors held on November 8, 2022

(i)	Total dividends	¥8,183 million ($61,282 thousand)
(ii)	Cash dividends per common share	¥40 ($0.30)
(iii)	Record date	September 30, 2022
(iv)	Effective date	December 6, 2022

(c) Dividends to be paid after the balance sheet date but the record date for the payment belongs to the year ended March 31, 2023

The following was approved by the Board of Directors held on May 26, 2023.

(i)	Total dividends	¥8,183 million ($61,282 thousand)
(ii)	Dividend source	Retained earnings
(iii)	Cash dividends per common share	¥40 ($0.30)
(iv)	Record date	March 31, 2023
(v)	Effective date	June 8, 2023

12. Selling, General and Administrative Expenses

Significant components of selling, general and administrative expenses are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	**2023**
Freight	¥ **30,964**	¥ 27,713	$ **231,888**
Stevedoring and warehouse fee	**4,537**	3,811	**33,977**
Salaries	**21,402**	19,842	**160,279**
Employees' bonuses	**6,023**	5,785	**45,106**
Pension cost	**1,129**	1,118	**8,455**
Welfare	**5,348**	5,045	**40,051**
Transportation	**1,772**	847	**13,270**
Depreciation	**7,069**	5,906	**52,939**

13. Research and Development Costs

Research and development costs charged to following items for the years ended March 31, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	**2023**
Research and development costs which were included in selling, general and administrative expenses	¥ **22,264**	¥ 19,755	$ **166,734**
Research and development costs which were included in general and administrative expenses and manufacturing costs	**23,512**	21,093	**176,080**

14. Impairment Loss

MGC reviewed its long-lived assets for impairment and, as a result, recognized an impairment loss for the years ended March 31, 2023 and 2022 as follows:

Location	Usage	Classification	Millions of yen		Thousands of U.S. dollars
			2023	2022	**2023**
Shanghai City, China	Manufacturing facilities for synthetic resins	Buildings, machinery and equipment, etc.	¥ **699**	¥ 3,736	$ **5,235**
Yokkaichi-shi Mie Pref. Japan	Storage facilities	Structures, etc.	**210**	—	**1,573**
State of Michigan, U.S.A	Manufacturing facilities	Machinery and equipment	**115**	—	**861**
Shirakawa-shi Fukushima Pref. Japan	Facilities for rent	Buildings, machinery and equipment, etc.	**—**	1,194	**—**
Yokkaichi-shi Mie Pref. Japan	Manufacturing facilities for synthetic resins	Machinery and equipment, etc.	**—**	769	**—**
Niigata-shi Niigata Pref. Japan	Manufacturing facilities for organic chemicals	Machinery and equipment, etc.	**—**	611	**—**
Maebashi-shi Gunma Pref. Japan	Manufacturing facilities	Buildings, machinery and equipment, etc.	**—**	177	**—**
Kurashiki-shi Okayama Pref. Japan	Manufacturing facilities for aromatic chemicals	Machinery and equipment	**—**	147	**—**
Ishikari-shi Hokkaido Pref. Japan	Manufacturing facilities	Buildings, machinery and equipment, etc.	**—**	117	**—**

The long-lived assets that are used for business are grouped according to the classification which is used for monitoring the profit and loss continuously under the management accounting system, and the idle assets are grouped individually by each item.

The carrying amounts of manufacturing facilities owned by the Company and its consolidated subsidiaries, and of facilities for rent owned by the Company were written down to their recoverable amounts because the carrying amounts fell below the recoverable amounts.

The recoverable amounts were measured using the net selling value or value in use per each asset group, and evaluated based on reasonable estimation by cost approach or based on memorandum value due to negative future cash flow.

Impairment loss on the asset groups consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Buildings and structures	¥ 386	¥ 2,084	$ 2,891
Machinery, equipment and vehicles	551	4,243	4,126
Intangible assets	—	55	—
Other	87	373	652
Total	¥ 386	¥ 6,756	$ 7,684

15. Other Comprehensive Income

The reclassification adjustment and the related income tax effects allocated to each component of other comprehensive income for the years ended March 31, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Valuation difference on available-for-sale securities:			
Arising during the year	¥ 202	¥ (1,433)	$ 1,513
Reclassification adjustment	(3,732)	(2,974)	(27,949)
Before tax amount	(3,529)	(4,407)	(26,429)
Tax benefit (expense)	1,098	1,289	8,223
Net-of-tax amount	(2,430)	(3,118)	(18,198)
Deferred losses on hedges:			
Arising during the year	73	(20)	547
Reclassification adjustment	—	—	—
Before tax amount	73	(20)	547
Tax benefit (expense)	(22)	6	(165)
Net-of-tax amount	51	(14)	382
Foreign currency translation adjustments:			
Arising during the year	9,408	9,330	70,456
Net-of-tax amount	9,408	9,330	70,456
Remeasurements of defined benefit plans:			
Arising during the year	1,349	1,313	10,103
Reclassification adjustment	(499)	(309)	(3,737)
Before tax amount	849	1,004	6,358
Tax benefit (expense)	52	28	389
Net-of-tax amount	901	1,032	6,748
Share of other comprehensive income of entities accounted for by the equity method:			
Arising during the year	7,033	6,471	52,670
Reclassification adjustment	—	—	—
Net-of-tax amount	7,033	6,471	52,670
Total other comprehensive income	¥ 14,963	¥ 13,701	$ 112,057

16. Per Share Information

(a) Earnings per share

Earnings per share, and reconciliation of the numbers and the amounts used in the earnings per share computations for the years ended March 31, 2023 and 2022 are as follows:

	Yen		U.S. dollars
	2023	2022	2023
Earnings per share	¥ 239.08	¥ 232.15	$ 1.79

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Profit attributable to owners of parent	¥ 49,085	¥ 48,295	$ 367,595
Profit not applicable to common stockholders	—	—	—
Profit attributable to common stockholders of parent	¥ 49,085	¥ 48,295	$ 367,595

	Number of shares	
	2023	2022
Weighted average number of shares outstanding on which earnings per share is calculated	205,305,427	208,036,405

The diluted earnings per share for the years ended March 31, 2023 and 2022 are not presented because there are no dilutive potential shares as of March 31, 2023 and 2022.

(b) Net assets per share

Net assets per share as of March 31, 2023 and 2022 are as follows:

	Yen		U.S. dollars
	2023	2022	2023
Net assets per share	¥ 2,970.07	¥ 2,733.86	$ 22.24

17. Leases

Operating lease

Future minimum lease payments required under non-cancellable operating leases as of March 31, 2023 and 2022 are as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Within one year	¥ 444	¥ 754	$ 3,325
Over one year	1,583	2,470	11,855
	¥ 2,027	¥ 3,224	$ 15,180

18. Balances and Transactions with Related Party

The information for the year ended March 31, 2023 is not presented since their balance is immaterial.

	Millions of yen
	2022
Balances:	
Accounts receivable - trade	¥ 9,509
Transactions:	
Sales	39,252

The Company has a 50% equity ownership in BRUNEI METHANOL COMPANY SDN. BHD. as of March 31, 2022.
As of March 31, 2022, the Company has guaranteed ¥1,235 million of the company's loans to financial institutions.
The affiliated company of the Company has a 35% equity ownership in CARIBBEAN GAS CHEMICAL LTD. as of March 31, 2022 .
As of March 31, 2022, the Company has guaranteed ¥27,612 million of the company's loans to financial institutions.

The condensed financial information of all of 15 affiliates accounted for by the equity method, including the significant affiliate, Japan Saudi Arabia Methanol Company, Inc., are as follows:

	Millions of yen
	2022
Total current assets	¥ 252,314
Total non-current assets	421,830
Total current liabilities	169,348
Total non-current liabilities	205,190
Total net assets	299,706
Sales	410,666
Profit before income taxes	56,274
Profit	35,856

19. Commitments and Contingencies

The Company guarantees certain obligations of its associated companies and employees, etc. As of March 31, 2023 and 2022, guarantees for affiliates and employees, etc. loans amounted to ¥8,355 million ($62,570 thousand) and ¥35,809 million, respectively.

20. Financial Instruments

Conditions of financial instruments

(a) Management policy

MGC raises necessary funds through bank borrowings and issue of bonds in accordance with a funds management plan. Surplus funds are invested in highly safe financial instruments. MGC raises funds through bank borrowings for short-term operating fund. MGC uses derivatives to avoid risks mentioned below and does not enter into derivatives for speculative purposes.

(b) Financial instruments and risks

Trade notes and accounts receivable are exposed to customer's credit risk. Maturities of trade notes and accounts payable are mostly within one year. Part of trade receivables and payables is denominated in foreign currency and is exposed to fluctuation risk of foreign exchange rates. MGC uses foreign exchange contracts to hedge the net position.

Securities and investments in securities are mainly equity securities held for business relations and are exposed to market fluctuation risk.

Borrowings, bonds and lease obligations for finance leases are mainly for financing of funds for capital expenditure and operating. Part of the liabilities is with variable interest rate and thus is exposed to interest rate fluctuation risk. MGC uses interest rate swaps to hedge the risk.

MGC uses foreign exchange contracts to hedge future fluctuation of foreign exchange rates of operating receivables and payables and forecasted transactions denominated in foreign currencies, interest rate swaps and currency swaps to hedge future fluctuation of interest rates and foreign exchange rates of borrowings.

Hedge accounting is applied for certain derivative transactions. MGC applies the deferral hedge accounting method for hedge accounting. MGC has entered into forward exchange contracts for receivables and payables and forecasted transactions denominated in foreign currencies, and interest rate swap agreements to manage interest rate exposures on certain borrowings. Hedges for fluctuation risk of foreign exchange rates that meet certain criteria are accounted for using the allocation method. If interest rate swap agreements are used as hedges and meet certain hedging criteria, the difference in amounts to be paid or received on the interest rate swap agreements is recognized over the life of the agreements as an adjustment to interest expense. MGC employs derivative transactions within actual demand and does not hold or issue derivative financial instruments for speculative purposes. The hedge effectiveness is assessed based on the fluctuation ratio of hedged items and hedging instruments by comparing the cumulative market fluctuations or cash flow fluctuations of hedged items and those of related hedging instruments. The Company omits to assess hedge effectiveness of interest rate swaps which qualify for hedge accounting and meet certain criteria.

(c) Financial instruments risk management

(i) Credit risk

To mitigate and quickly capture the collectability issues, sales administration divisions regularly monitor major customers' credit status, and perform due date controls and balance controls for each customer in accordance with trade receivables and credit control rules. Held-to-maturity securities are debt securities readily convertible into cash which are invested in accordance with investment of surplus funds rules.

Maximum risk as of March 31, 2023 and 2022 is represented by the carrying amount of financial assets exposed to credit risk.

(ii) Market risk
The finance departments have executed the transactions with market risk with the director's approval in accordance with the finance rules and the derivatives control rules.

To mitigate the foreign currency fluctuation risk recognized by currency and month, MGC enters into a forward exchange contract for hedging the cash flow fluctuation risk associated with operating receivables and payables and forecasted transactions denominated in foreign currencies and surplus funds. To mitigate the foreign currency and interest rate fluctuation risk, MGC enters into an interest rate swap and a currency swap for hedging the cash flow fluctuation risk associated with borrowings.

MGC regularly monitors a price and an issuer's financial condition, and continuously considers whether MGC holds the securities or the investments in securities except for held-to-maturity bond.

(iii) Liquidity risk
To mitigate the liquidity risk, a finance department prepares and updates a funds management plan as necessary, and maintains an appropriate level of liquidity.

(d) Supplemental explanation regarding fair value of financial instruments
Fair value of financial instruments is determined based on certain assumptions, and the fair value might differ if different assumptions are used. In addition, the contract amount of the derivative transactions described below in **Fair value of financial instruments** does not represent the market risk of the derivative transactions.

Fair value of financial instruments

Balance sheet amount, fair value, and differences as of March 31, 2023 and 2022 are as follows.

	Millions of yen			Thousands of U.S. dollars		
March 31, 2023	Balance sheet amount	Fair value	Differences	Balance sheet amount	Fair value	Differences
Assets:						
(1) Securities and investments in securities	¥ **28,354**	¥ **28,354**	¥ **—**	$ **212,342**	$ **212,342**	$ **—**
Total assets	¥ **28,354**	¥ **28,354**	¥ **—**	$ **212,342**	$ **212,342**	$ **—**
Liabilities:						
(1) Bonds	¥ **20,000**	¥ **19,649**	¥ **(350)**	$ **149,779**	$ **147,150**	$ **(2,621)**
(2) Long-term borrowings	**74,680**	**73,214**	**(1,465)**	**559,275**	**548,296**	**(10,971)**
Total liabilities	¥ **94,680**	¥ **92,864**	¥ **(1,815)**	$ **709,054**	$ **695,447**	$ **(13,592)**
Derivative transactions (*4):						
Hedge accounting not applied:	¥ **(295)**	¥ **(295)**	¥ **—**	$ **(2,209)**	$ **(2,209)**	$ **—**
Hedge accounting applied:	**25**	**25**	**—**	**187**	**187**	**—**
Total derivative transactions	¥ **(270)**	¥ **(270)**	¥ **—**	$ **(2,022)**	$ **(2,022)**	$ **—**

	Millions of yen		
March 31, 2022	Balance sheet amount	Fair value	Differences
Assets:			
(1) Securities and investments in securities	¥ 33,636	¥ 33,636	¥ —
Total assets	¥ 33,636	¥ 33,636	¥ —
Liabilities:			
(1) Bonds	¥ 20,000	¥ 19,866	¥ (133)
(2) Long-term borrowings	46,621	47,465	843
Total liabilities	¥ 66,621	¥ 67,332	¥ 710
Derivative transactions (*4):			
Hedge accounting not applied:	¥ (456)	¥ (456)	¥ —
Hedge accounting applied	(48)	(48)	—
Total derivative transactions	¥ (504)	¥ (504)	¥ —

*1. Disclosure of notes on Cash is omitted. Disclosure of notes on Deposits, Notes and accounts receivable - trade, and contract assets, Notes and accounts payable - trade, Short-term borrowings, Accrued expenses and Income taxes payable is omitted since their carrying amounts approximate their fair values because of the short maturity of these instruments.
*2. Equity securities without market price are not included in "Assets (1) Securities and investments in securities." The balance

sheet amount of these instruments is as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	**2023**
Unlisted equity securities	**¥ 171,572**	¥ 137,531	**$ 1,284,895**

*3. Investment in partnerships is not included in “Assets (1) Securities and investments in securities” as the Company has applied the accounting treatment prescribed in Paragraph 27 of the Implementation Guidance on Accounting Standard for Fair Value Measurement. The balance sheet amount of these instruments is as follows:

	Millions of yen		Thousands of U.S. dollars
	2023	2022	**2023**
Investment in partnerships	**¥ 268**	¥ 284	**$ 2,007**

*4. Derivative receivables and payables are on net basis. Items that are net payables are shown in parenthesis.

<1> Projected future redemption of monetary claim and securities with maturities as of March 31, 2023 and 2022 are as follows.

	Millions of yen			
March 31, 2023	Due within one year	Due after one year through five years	Due after five years through ten years	Due after ten years
(1) Cash and deposits	¥ 108,378	¥ —	¥ —	¥ —
(2) Notes and accounts receivable - trade, and contract assets	176,489	—	—	—
(3) Securities and investments in securities:				
Held-to-maturity securities:				
Government bonds	—	—	—	—
Certificates of deposit	—	—	—	—
Other securities with maturity:				
Bonds	—	—	—	1,563
Other	—	—	—	—
Total	¥ 284,867	¥ —	¥ —	¥ 1,563

	Millions of yen			
March 31, 2022	Due within one year	Due after one year through five years	Due after five years through ten years	Due after ten years
(1) Cash and deposits	¥ 102,049	¥ —	¥ —	¥ —
(2) Notes and accounts receivable - trade, and contract assets	175,993	—	—	—
(3) Securities and investments in securities:				
Held-to-maturity securities:				
Government bonds	—	—	—	—
Certificates of deposit	—	—	—	—
Other securities with maturity:				
Bonds	—	—	—	1,737
Other	—	—	—	100
Total	¥ 278,042	¥ —	¥ —	¥ 1,837

	Thousands of U.S. dollars			
March 31, 2023	Due within one year	Due after one year through five years	Due after five years through ten years	Due after ten years
(1) Cash and deposits	$ 811,638	$ —	$ —	$ —
(2) Notes and accounts receivable - trade, and contract assets	1,321,718	—	—	—
(3) Securities and investments in securities:				
Held-to-maturity securities:				
Government bonds	—	—	—	—
Certificates of deposit	—	—	—	—
Other securities with maturity:				
Bonds	—	—	—	11,705
Other	—	—	—	—
Total	$ 2,133,356	$ —	$ —	$ 11,705

<2> The annual maturities of the bonds and long-term borrowings as of March 31, 2023 and 2022 are as follows.

	Millions of yen					
March 31, 2023	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Bonds	¥ **—**	¥ **—**	¥ **10,000**	¥ **—**	¥ **—**	¥ **10,000**
Long-term borrowings	**12,542**	**7,057**	**6,717**	**11,076**	**5,842**	**43,987**

	Millions of yen					
March 31, 2022	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Bonds	¥ **—**	¥ **—**	¥ **—**	¥ **10,000**	¥ **—**	¥ **10,000**
Long-term borrowings	**8,092**	**17,028**	**5,142**	**4,104**	**1,868**	**18,477**

	Thousands of U.S. dollars					
March 31, 2023	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Bonds	$ **—**	$ **—**	$ **74,890**	$ **—**	$ **—**	$ **74,890**
Long-term borrowings	**93,926**	**52,850**	**50,303**	**82,948**	**43,750**	**329,417**

Breakdown by level of fair value of financial instruments

Fair value of financial instruments is categorized into following three levels depending on observability and materiality of inputs used for the measurement of fair values.

Level 1: Fair value determined based on unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2: Fair value determined based on inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Fair value determined based on significant unobservable inputs for the asset or liability.

If multiple inputs that have significant impact on the fair value measurement are used, the fair value is categorized in the level of the lowest level input used in the fair value measurement.

(i) Financial instruments whose fair value is presented as carrying amount in the balance sheet

	Millions of yen			
	2023			
	Fair value			
	Level 1	Level 2	Level 3	Total
Securities and investments in securities:				
Other securities:				
Equity securities	¥ 26,697	¥ —	¥ —	¥ 26,697
Bonds	—	1,563	—	1,563
Other	93	—	—	93
Total assets	¥ 26,791	¥ 1,563	¥ —	¥ 28,354
Derivative transactions (*):				
Hedge accounting not applied:				
Forward exchange contracts and currency swap agreements	¥ —	¥ (420)	¥ —	¥ (420)
Interest rate swap agreements	—	125	—	125
Hedge accounting applied:				
Forward exchange contracts	—	25	—	25
Total derivative transactions	¥ —	¥ (270)	¥ —	¥ (270)

	Millions of yen			
	2022			
	Fair value			
	Level 1	Level 2	Level 3	Total
Securities and investments in securities:				
Other securities:				
Equity securities	¥ 31,795	¥ —	¥ —	¥ 31,795
Bonds	—	1,737	—	1,737
Other	104	—	—	104
Total assets	¥ 31,899	¥ 1,737	¥ —	¥ 33,636
Derivative transactions (*):				
Hedge accounting not applied:				
Forward exchange contracts and currency swap agreements	¥ —	¥ (498)	¥ —	¥ (498)
Interest rate swap agreements	—	42	—	42
Hedge accounting applied:				
Forward exchange contracts	—	(48)	—	(48)
Total derivative transactions	¥ —	¥ (504)	¥ —	¥ (504)

	Thousands of U.S. dollars			
	2023			
	Fair value			
	Level 1	Level 2	Level 3	Total
Securities and investments in securities:				
Other securities:				
Equity securities	$ 199,933	$ —	$ —	$ 199,933
Bonds	—	11,705	—	11,705
Other	696	—	—	696
Total assets	$ 200,637	$ 11,705	$ —	$ 212,342
Derivative transactions (*):				
Hedge accounting not applied:				
Forward exchange contracts and currency swap agreements	$ —	$ (3,145)	$ —	$ (3,145)
Interest rate swap agreements	—	936	—	936
Hedge accounting applied:				
Forward exchange contracts	—	187	—	187
Total derivative transactions	$ —	$ (2,022)	$ —	$ (2,022)

* Derivative receivables and payables are on net basis. Items that are net payables are shown in parenthesis.

(ii) Financial instruments whose carrying amount in the balance sheet is not based on fair value

	Millions of yen			
	2023			
	Fair value			
	Level 1	Level 2	Level 3	Total
Bonds	¥ 19,649	¥ —	¥ —	¥ 19,649
Long-term borrowings	—	73,214	—	73,214
Total liabilities	¥ 19,649	¥ 73,214	¥ —	¥ 92,864

	Millions of yen			
	2022			
	Fair value			
	Level 1	Level 2	Level 3	Total
Bonds	¥ 19,866	¥ —	¥ —	¥ 19,866
Long-term borrowings	—	47,465	—	47,465
Total liabilities	¥ 19,866	¥ 47,465	¥ —	¥ 67,332

	Thousands of U.S. dollars			
	2023			
	Fair value			
	Level 1	Level 2	Level 3	Total
Bonds	$ 147,150	$ —	$ —	$ 147,150
Long-term borrowings	—	548,296	—	548,296
Total liabilities	$ 147,150	$ 548,296	$ —	$ 695,454

Note: Explanation on techniques and inputs used for fair value measurement

Securities and investments in securities:
Equity securities are valued using quoted market prices. The fair value of equity securities is categorized in Level 1 as they are traded in active markets. The fair value of bonds is categorized in Level 2 since it is not considered a quoted price in an active market as bonds they are not frequently traded in the market.

Derivative transactions:
The fair value of derivatives is determined based on prices obtained from counterparty financial institutions and categorized in Level 2.

Bonds:
The fair value of bonds issued by the Company is determined based on market prices and categorized in Level 1.

Long-term borrowings:
The fair value of long-term borrowings is determined by the present value based on the total principal and interest discounted by the interest rates assumed for similar new loans, and categorized in Level 2.

21. Derivative Financial Instruments

The contract or notional amounts and fair value of derivative financial instruments held as of March 31, 2023 and 2022 are summarized as follows:

Derivative financial instruments to which hedge accounting is not applied are summarized as follows:

(a) Forward exchange contracts and currency swap agreements

	Millions of yen		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2023			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	¥ **30,055**	¥ **(4)**	¥ **(4)**
Euro	**4,843**	**(5)**	**(5)**
New Taiwan dollar	**784**	**29**	**29**
Chinese Yuan	**3,404**	**(3)**	**(3)**
To buy foreign currency:			
U.S. dollar	**265**	**2**	**2**
Currency swap agreements:			
Receive/U.S. dollar, Pay/Japanese Yen	**907**	**21**	**21**
Receive/U.S. dollar, Pay/Thai Baht	**597**	**(35)**	**(35)**
Receive/Japanese Yen, Pay/Chinese Yuan	**1,942**	**(424)**	**(424)**
	¥ **42,800**	¥ **(420)**	¥ **(420)**

	Millions of yen		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2022			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	¥ 15,953	¥ (123)	¥ (123)
Euro	3,387	(6)	(6)
Thai Baht	230	(0)	(0)
New Taiwan dollar	604	(21)	(21)
Chinese Yuan	2,254	(0)	(0)
To buy foreign currency:			
U.S. dollar	189	2	2
New Taiwan dollar	2	(0)	(0)
Currency swap agreements:			
Receive/U.S. dollar, Pay/Japanese Yen	802	43	43
Receive/U.S. dollar, Pay/Thai Baht	575	9	9
Receive/Japanese Yen, Pay/Chinese Yuan	1,926	(402)	(402)
	¥ 25,926	¥ (498)	¥ (498)

	Thousands of U.S. dollars		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2023			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	$ **225,081**	$ **(30)**	$ **(30)**
Euro	**36,269**	**(37)**	**(37)**
New Taiwan dollar	**5,871**	**217**	**217**
Chinese Yuan	**25,492**	**(22)**	**(22)**
To buy foreign currency:			
U.S. dollar	**1,985**	**15**	**15**
Currency swap agreements:			
Receive/U.S. dollar, Pay/Japanese Yen	**6,792**	**157**	**157**
Receive/U.S. dollar, Pay/Thai Baht	**4,471**	**(262)**	**(262)**
Receive/Japanese Yen, Pay/Chinese Yuan	**14,544**	**(3,175)**	**(3,175)**
	$ **320,527**	$ **(3,145)**	$ **(3,145)**

(b) Interest rate swap agreements

	Millions of yen		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2023			
Interest rate swap agreements:			
Receive/floating and pay/fixed	¥ 3,259	¥ 125	¥ 125

	Millions of yen		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2022			
Interest rate swap agreements:			
Receive/floating and pay/fixed	¥ 3,606	¥ 42	¥ 42

	Thousands of U.S. dollars		
	Contract or notional amounts	Fair value	Valuation gain (loss)
March 31, 2023			
Interest rate swap agreements:			
Receive/floating and pay/fixed	$ 24,407	$ 936	$ 936

Derivative financial instruments to which hedge accounting is applied are summarized as follows:

Forward exchange contracts

	Hedged items	Millions of yen Contract or notional amounts	Millions of yen Fair value
March 31, 2023			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	Accounts receivable - trade	**¥ 1,841**	**¥ 23**
To buy foreign currency:			
U.S. dollar	Accounts payable - trade	**68**	**1**
To sell foreign currency:			
U.S. dollar	Forecasted transactions	**1,523**	**24**
To buy foreign currency:			
U.S. dollar	Forecasted transactions	**68**	**1**
		¥ 3,501	**¥ 50**

	Hedged items	Millions of yen Contract or notional amounts	Millions of yen Fair value
March 31, 2022			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	Accounts receivable - trade	¥ 1,579	¥ (79)
To buy foreign currency:			
U.S. dollar	Accounts payable - trade	245	11
To sell foreign currency:			
U.S. dollar	Forecasted transactions	1,101	(48)
To buy foreign currency:			
U.S. dollar	Forecasted transactions	90	0
		¥ 3,017	¥ (116)

	Hedged items	Thousands of U.S. dollars Contract or notional amounts	Thousands of U.S. dollars Fair value
March 31, 2023			
Forward exchange contracts:			
To sell foreign currency:			
U.S. dollar	Accounts receivable - trade	**$ 13,787**	**$ 172**
To buy foreign currency:			
U.S. dollar	Accounts payable - trade	**509**	**7**
To sell foreign currency:			
U.S. dollar	Forecasted transactions	**11,406**	**180**
To buy foreign currency:			
U.S. dollar	Forecasted transactions	**509**	**7**
		$ 26,219	**$ 374**

22. Investment and Rental Property

The Company and certain consolidated subsidiaries own land and buildings for rent in Tokyo and other areas (hereafter “rental property”).

The amounts recognized in the consolidated balance sheet and fair values related to the rental property for the years ended March 31, 2023 and 2022 are as follows:

	Millions of yen **2023**	Millions of yen 2022	Thousands of U.S. dollars 2023
Consolidated balance sheet amount:			
Balance at beginning of the year	**¥ 6,314**	¥ 10,200	**$ 47,285**
Increase/(decrease)	**202**	(3,886)	**1,513**
Balance at end of the year	**¥ 6,516**	¥ 6,314	**$ 48,798**
Fair value	**¥ 8,883**	¥ 9,448	**$ 66,524**

Notes: 1. Consolidated balance sheet amount is its cost minus accumulated depreciation and accumulated impairment loss.
2. Increase for the year ended March 31, 2023 was mainly due to new rents executed by the Company of ¥469 million ($3,512 thousand).Decrease for the year ended March 31, 2022 was mainly due to exclusion of ¥3,755 million on changes in the scope of consolidation.
3. Fair value is based on roadside value, etc.

Rent income from the rental property is ¥137 million ($1,026 thousand) and ¥230 million for the years ended March 31, 2023 and 2022, respectively.

Loss on sale from the rental property is ¥124 million ($929 thousand) for the years ended March 31, 2023.

23. Business Combination

Transactions under common control

Acquisition of additional shares of a subsidiary

(a) Summary of the Transactions

(i) Name of the entity and description of the business involved in the business combination

Name: JAPAN U-PICA COMPANY, LTD.

Business: Manufacture and sale of unsaturated polyester resins, coating resins, and methacrylic acid esters

(ii) Date of the business combination

March 31, 2023

(iii) Legal form of the business combination

Acquisition of shares from a non-controlling shareholder

(iv) Name of company after the business combination

No change

(v) Other matters regarding overview of the business combination

Ratio of voting rights acquired is 30%

The objective is maximization of the value as a group as strengthen current and new business development, and communicate with MGC.

(b) Outline of accounting treatment

This business combination was accounted for as a transaction under common control in accordance with the “Accounting Standard for Business Combinations” and “Implementation Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures.”

(c) Matters to be described in the case of acquisition of additional shares of a subsidiary

Undisclosed due to duty of confidentiality

(d) Matters on changes in the Company’s ownership interest in subsidiaries due to transactions with non-controlling shareholder

(i) Major factor of change in additional paid-in capital

Acquisition of additional shares of a subsidiary

(ii) Amount of additional paid-in capital increased by transactions with non-controlling shareholder

¥378 million ($2,831 thousand)

24. Revenue Recognition

(a) Breakdown of revenue from contracts with customers for the year ended March 31, 2023 and 2022

Millions of yen — 2023

	Reported segment: Basic Chemicals Business Sector	Reported segment: Specialty Chemicals Business Sector	Other (note)	Adjustments	Total
Japan	¥ 236,568	¥ 86,085	¥ 65	¥ —	¥ 322,720
Asia (China)	36,209	60,950	—	—	97,160
Asia (Other)	87,836	112,329	—	—	200,166
America	41,287	27,568	—	—	68,856
Other	70,265	21,969	2	—	92,237
Revenue from contracts with customers	¥ 472,167	¥ 308,904	¥ 68	¥ —	¥ 781,141
Other revenue	¥ —	¥ —	¥ 69	¥ —	¥ 69
Sales to third parties	¥ 472,167	¥ 308,904	¥ 138	¥ —	¥ 781,211

Millions of yen — 2022

	Reported segment: Basic Chemicals Business Sector	Reported segment: Specialty Chemicals Business Sector	Other (note)	Adjustments	Total
Japan	¥ 199,830	¥ 112,327	¥ 75	¥ —	¥ 312,233
Asia (China)	39,500	52,706	—	—	92,207
Asia (Other)	90,022	86,258	0	—	176,280
America	30,331	21,812	0	—	52,143
Other	60,275	12,314	1	(0)	72,591
Revenue from contracts with customers	¥ 419,959	¥ 285,419	¥ 76	¥ (0)	¥ 705,456
Other revenue	¥ —	¥ —	¥ 200	¥ —	¥ 200
Sales to third parties	¥ 419,959	¥ 285,419	¥ 277	¥ (0)	¥ 705,656

Thousands of U.S. dollars — 2023

	Reported segment: Basic Chemicals Business Sector	Reported segment: Specialty Chemicals Business Sector	Other (note)	Adjustments	Total
Japan	$ 1,771,647	$ 644,687	$ 487	$ —	$ 2,416,835
Asia (China)	271,168	456,452	—	—	727,627
Asia (Other)	657,800	841,227	—	—	1,499,034
America	309,196	206,455	—	—	515,659
Other	526,211	164,525	15	—	690,759
Revenue from contracts with customers	$ 3,536,037	$ 2,313,368	$ 509	$ —	$ 5,849,929
Other revenue	$ —	$ —	$ 517	$ —	$ 517
Sales to third parties	$ 3,536,037	$ 2,313,368	$ 1,033	$ —	$ 5,850,453

Note: 1. Other includes real estate business which is not included in reported segments.
2. The information of breakdown of revenue from contracts with customers has been changed from product segmentation to geographic segmentation from the year ended March 31, 2023

(b) Basic information to understand the revenue from contracts with customers

Based on the following five-step approach, MGC recognizes revenue at the time of the transfer of promised goods or services to customers in the amount that reflects the consideration to which MGC expects to be entitled in exchange for those goods or services.

Step 1: Identify the contract(s) with a customer.
Step 2: Identify the performance obligations in the contract.
Step 3: Determine the transaction price.
Step 4: Allocate the transaction price to the performance obligations in the contract.

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

MGC is primarily engaged in business activities related to manufacturing and sales of products in the "Basic Chemicals Business Sector" and "Specialty Chemicals Business Sector." For the sale of these products, revenue is recognized upon delivery of the products since MGC determines that the customer obtains control of the products and the performance obligations are satisfied at the time of delivery.

Revenue is measured at the amount of consideration promised in a contract with a customer, excluding discounts, rebates, returns, etc. For transactions in which MGC acts as an agent in sales of products to customers, revenue is recognized at net amount after deducting the amount paid to the supplier from the total amount of considerations received from the customer.

Consideration in sales contracts for goods and products is principally received within one year from the time control of the goods and services are transferred to the customer and does not include any significant financing component.

(c) Information to understand amounts of revenue for the year ended March 31, 2023 and the year ending March 31, 2024 onward

(i) Balance of contract assets and contract liabilities

The MGC's contract assets and contract liabilities are not presented since their balance is immaterial and there is no significant fluctuation. Revenue recognized in the year ended March 31, 2023 from performance obligations that were satisfied (or partially satisfied) in prior periods is not material.

(ii) Transaction price allocated to the remaining performance obligations

MGC has applied a practical expedient and does not provide information on the transaction price allocated to the remaining performance obligations since there is no significant contract that has an original expected duration of one year or more, excluding the sales-based or usage-based royalty. In addition, there is no significant amount not included in the transaction price among considerations arising from contracts with customers.

(d) Notes and accounts receivable - trade, and contract assets from contracts with customers is as follows

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Notes receivable- trade	¥ 18,479	¥ 18,675	$ 138,388
Accounts receivable- trade	158,010	(157,317)	(1,183,330)
Contract assets	¥ 137	¥ 562	$ 1,026

(e) The amount of contract liabilities from contracts with customers is as follows

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Contract liabilities	¥ 700	¥ 124	$ 5,242

25. Segment Information

The MGC's reported segments consist of "Basic Chemicals Business Sector" and "Specialty Chemicals Business Sector" for which the Company is able to obtain respective financial information separately in order for the Board of Directors to conduct periodic investigation to determine distribution of management resources and evaluate their business results.

"Basic Chemicals Business Sector" mainly produces and sells methanol, chemical products for methanol and ammonia, life science products, general aromatic products, specialty aromatic products, foaming plastics and electric power.

"Specialty Chemicals Business Sector" mainly produces and sells inorganic chemicals, plastic lens monomer, engineering plastics, electronic materials and oxygen absorbers.

Segment sales, profit, assets, liabilities and others are calculated by accounting methods similar to those employed to prepare the accompanying consolidated financial statements. Segment profit are calculated based on "Keijo-rieki" disclosed in the consolidated statement of income under accounting principles generally accepted in Japan (See note 25). Intersegment revenue and transfer are based on arm's-length transactions.

The MGC's reported segment information for the years ended March 31, 2023 and 2022 is summarized as follows:

		Millions of yen								
		2023								
		Basic Chemicals Business Sector		Specialty Chemicals Business Sector		Other		Adjustments		Consolidated
Sales:										
Sales to third parties	¥	472,167	¥	308,904	¥	138	¥	—	¥	781,211
Inter-segment sales		6,806		129		7		(6,943)		—
	¥	478,974	¥	309,034	¥	145	¥	(6,943)	¥	781,211
Segment profit	¥	30,558	¥	38,745	¥	(13)	¥	474	¥	69,764
Segment assets	¥	531,556	¥	457,916	¥	26,447	¥	13,396	¥	1,029,317
Others:										
Depreciation and amortization	¥	17,971	¥	13,774	¥	17	¥	1,802	¥	33,565
Amortization of goodwill		405		—		—		—		405
Interest income		658		531		0		(33)		1,157
Interest expenses		501		1,593		0		(350)		1,745
Share of profit (loss) of entities accounted for using equity method		11,418		6,137		—		(8)		17,546
Investments in entities accounted for by the equity method		95,370		56,116		—		(31)		151,455
Capital expenditures		32,051		28,658		1		3,940		64,650

		Millions of yen								
		2022								
		Basic Chemicals Business Sector		Specialty Chemicals Business Sector		Other		Adjustments		Consolidated
Sales:										
Sales to third parties	¥	419,959	¥	285,419	¥	277	¥	(0)	¥	705,656
Inter-segment sales		5,383		98		16		(5,499)		—
	¥	425,343	¥	285,518	¥	294	¥	(5,499)	¥	705,656
Segment profit	¥	30,083	¥	45,433	¥	22	¥	(1,387)	¥	74,152
Segment assets	¥	481,866	¥	405,824	¥	26,971	¥	13,988	¥	928,651
Others:										
Depreciation and amortization	¥	17,165	¥	13,083	¥	18	¥	1,732	¥	31,999
Amortization of goodwill		393		—		3		—		396
Interest income		268		140		0		(62)		346
Interest expenses		411		687		0		(240)		858
Share of profit (loss) of entities accounted for using equity method		5,136		9,747		—		0		14,883
Investments in entities accounted for by the equity method		86,149		39,434		—		(40)		125,543
Capital expenditures		19,256		32,623		1		2,911		54,793

	Thousands of U.S. dollars				
	2023				
	Basic Chemicals Business Sector	Specialty Chemicals Business Sector	Other	Adjustments	Consolidated
Sales:					
Sales to third parties	$ 3,536,037	$ 2,313,368	$ 1,033	$ —	$ 5,850,453
Inter-segment sales	50,970	966	52	(51,996)	—
	$ 3,587,014	$ 2,314,341	$ 1,086	$ (51,996)	$ 5,850,453
Segment profit	$ 228,847	$ 290,160	$ (97)	$ 3,550	$ 522,459
Segment assets	$ 3,980,798	$ 3,429,312	$ 198,060	$ 100,322	$ 7,708,507
Others:					
Depreciation and amortization	$ 134,584	$ 103,153	$ 127	$ 13,495	$ 251,367
Amortization of goodwill	3,033	—	—	—	3,033
Interest income	4,928	3,977	0	(247)	8,665
Interest expenses	3,752	11,930	0	(2,621)	13,068
Share of profit (loss) of entities accounted for using equity method	85,509	45,960	—	(60)	131,401
Investments in entities accounted for by the equity method	714,222	420,250	—	(232)	1,134,239
Capital expenditures	240,028	214,618	7	29,506	484,161

Notes: 1. Other includes real estate business which is not included in reported segments.

2. Adjustments in the above tables are made for the followings:

(1) Adjustments in segment profit

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Elimination of intersegment transactions	¥ 121	¥ (109)	$ 906
Unallocated company-wide expenses	353	(1,278)	2,644
	¥ 474	¥ (1,387)	$ 3,550

* Company-wide expenses are administrative expenses, financial income and expenses and other income and expenses which are not allocated to reported segments.

(2) Adjustments in segment assets

	Millions of yen		Thousands of U.S. dollars
	2023	2022	2023
Elimination of intersegment balances	¥ (76,969)	¥ (63,025)	$ (576,417)
Unallocated company-wide assets	90,366	77,013	676,747
	¥ 13,396	¥ 13,988	$ 100,322

* Company-wide assets include cash and deposits which are not allocated to reported segments.

(3) "Adjustments in depreciation and amortization" of ¥1,802 million ($13,495 thousand) and ¥1,732 million are depreciation and amortization of company-wide assets which are not allocated to reported segments for the years ended March 31, 2023 and 2022, respectively.

(4) "Adjustments in interest income" of ¥(33) million ($(247) thousand) and ¥(62) million are mainly elimination of intersegment transactions for the years ended March 31, 2023 and 2022, respectively.

(5) "Adjustments in interest expenses" of ¥(350) million ($(2,621) thousand) and ¥(240) million are mainly elimination of intersegment transactions for the years ended March 31, 2023 and 2022, respectively.

(6) "Adjustments in investments in entities accounted for by the equity method" of ¥(31) million ($(232) thousand) and ¥(40) million are mainly investments which are not allocated to reported segments for the years ended March 31, 2023 and 2022, respectively.

(7) "Adjustments in capital expenditures" of ¥3,940 million ($29,506 thousand) and ¥2,911 million are related to company-wide assets which are not allocated to reported segments for the years ended March 31, 2023 and 2022, respectively.

3. **Segment profit is adjusted** with "Keijo-rieki" disclosed in the consolidated statement of income under accounting principles generally accepted in Japan (See note 25).

Related information

1. Information by products and services
   Disclosures are omitted because the classification of products and services are same as the classification of the reported segments.

2. Geographical information

(1) Sales

	Millions of yen		Thousands of U.S. dollars
	2023	2022	**2023**
Japan	**¥ 322,789**	¥ 312,433	**$ 2,417,352**
Asia:			
China	**97,160**	92,207	**727,627**
Other	**200,166**	176,280	**1,499,034**
U.S.A.	**68,856**	52,143	**515,659**
Other	**92,237**	72,591	**690,759**
Total	**¥ 781,211**	¥ 705,656	**$ 5,850,453**

Note: Geographical sales are classified by customer's location.

(2) Property, plant and equipment

	Millions of yen		Thousands of U.S. dollars
	2023	2022	**2023**
Japan	**¥ 199,735**	¥ 189,484	**$ 1,495,806**
Asia	**64,338**	50,331	**481,824**
U.S.A.	**37,750**	29,557	**282,708**
Other	**11,942**	7,010	**89,433**
Total	**¥ 313,767**	¥ 276,384	**$ 2,349,787**

3. Information by major customers
   Disclosures are omitted because no particular customer whose sales are over 10% of sales in the consolidated statement of income exists.

Information of impairment loss on fixed assets by reported segments

	Millions of yen				
	2023				
	Basic Chemicals Business Sector	Specialty Chemicals Business Sector	Other	Adjustments	Consolidated
Impairment loss	**¥ 358**	**¥ 770**	**¥ —**	**¥ —**	**¥ 1,128**

	Millions of yen				
	2022				
	Basic Chemicals Business Sector	Specialty Chemicals Business Sector	Other	Adjustments	Consolidated
Impairment loss	¥ 1,160	¥ 4,694	¥ 10	¥ 1,194	¥ 7,059

	Thousands of U.S. dollars				
	2023				
	Basic Chemicals Business Sector	Specialty Chemicals Business Sector	Other	Adjustments	Consolidated
Impairment loss	**$ 2,681**	**$ 5,766**	**$ —**	**$ —**	**$ 8,448**

Note: Adjustments for the year ended March 31, 2023 are impairment loss on company-wide assets which are not allocated to reported segments.

Information of balance of goodwill by reported segments

	Millions of yen									
	2023									
		Basic Chemicals Business Sector		Specialty Chemicals Business Sector		Other		Adjustments		Consolidated
Goodwill	¥	**4,425**	¥	**—**	¥	**—**	¥	**—**	¥	**4,425**

	Millions of yen									
	2022									
		Basic Chemicals Business Sector		Specialty Chemicals Business Sector		Other		Adjustments		Consolidated
Goodwill	¥	4,811	¥	—	¥	—	¥	—	¥	4,811

	Thousands of U.S. dollars									
	2023									
		Basic Chemicals Business Sector		Specialty Chemicals Business Sector		Other		Adjustments		Consolidated
Goodwill	$	**33,139**	$	**—**	$	**—**	$	**—**	$	**33,139**

Information of negative goodwill by reported segments

No negative goodwill was recognized for the years ended March 31, 2023 and 2022.

26. The Statement of Income Disclosure under Accounting Principles Generally Accepted in Japan

Under accounting principles generally accepted in Japan, an ordinary profit, "Keijo-rieki" should be disclosed in the statement of income. The ordinary profit is an income figure with certain adjustments made to profit before income taxes.

Followings are the summary information of the statement of income under accounting principles generally accepted in Japan.

	Millions of yen		Thousands of U.S. dollars
	2023	2022	**2023**
Net sales	¥ **781,211**	¥ 705,656	$ **5,850,453**
Gross profit	**168,179**	162,586	**1,259,485**
Operating profit	**49,030**	55,360	**367,183**
Ordinary profit	**69,764**	74,152	**522,459**
Profit before income taxes	**70,239**	69,628	**526,017**
Profit	**54,788**	52,530	**410,305**

Independent Auditor's Report

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Independent Auditor's Report

To the Board of Directors
Mitsubishi Gas Chemical Company, Inc.

Opinion

We have audited the consolidated financial statements of Mitsubishi Gas Chemical Company, Inc. and its subsidiaries (the Group), which comprise the consolidated balance sheet as at March 31, 2023, and the consolidated statement of income, comprehensive income, changes in equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at March 31, 2023, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How the scope of our audit addressed the key audit matter
Impairment loss on fixed assets recognized and measured by Mitsubishi Gas Chemical Engineering-Plastics Mitsubishi Gas Chemical Engineering-Plastics (Shanghai) Co., Ltd ("MGCEPS") is one of the consolidated subsidiaries that operates in China (Shanghai) and is engaged in manufacturing polycarbonates. At the end of the current fiscal year, the ending balance of their property, plant and equipment is JPY 941 million, and the ending balance of their intangible assets is JPY 1,517 million. As described in Note1(**r**) to the consolidated financial statements, MGCEPS's business plan was reviewed considering sluggish demand in China and its sales results in the face of downturns in polycarbonates market prices especially in this fiscal year, in addition to the spread between prices of polycarbonates and	In regard to examining impairment loss on fixed assets recognized and measured by MGCEPS, we instructed its external auditor to perform audit. We received the results for the following audit procedures and determined if sufficient appropriate audit evidence was obtained. •Evaluating the design and operating effectiveness of internal controls regarding the impairment loss on fixed assets. •Assessing the reasonableness by analyzing trends from previous years, comparing with external information including polycarbonate prices and market data of bisphenol A, and discussing with MGCEPS management regarding sales volume, selling price, and marginal profit ratio which are the main

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its raw material, bisphenol A, has been low for a few years. As a result, the recoverable amount of their property, plant and equipment and their intangible assets were less than the carrying amount Therefore, an impairment loss of JPY 699 million is recorded in the current fiscal year. MGCEPS has adopted IFRS. The recoverable amount of a fixed asset is measured by its value in use, and the value in use is determined by the total amount of discounted future cash flows based on the business plan. The business plan used for future cash flow projection includes management's estimate and judgement and has possibilities to be subject to future market trends of products and raw materials. As the estimates and assumptions in the business plan include high uncertainty, we determined impairment loss on fixed assets recognized and measured by MGCEPS to be a key audit matter.	assumptions of future business plan, which is the basis of future discounted cash flow. •Assessing the discount rate applied to compute future discounted cash flow by benchmarking against external data including cost of capital of other companies in the same business. We also performed mainly the following audit procedures in addition to above. •Discussing Mitsubishi Gas Chemical Company, Inc. ("MGC") management plan which is the basis of future discounted cash flow with the Group management. •Obtaining supporting documentations including sales results of similar products in MGC and verifying the rationality regarding product profits and losses related to the business plan.

Other Information

The other information comprises the information included in the Corporate Report 2023 Financial Section, but does not include the consolidated financial statements, the financial statements, and our auditor's reports thereon. Management is responsible for the preparation and disclosure of the other information. The Audit & Supervisory Board and its Members are responsible for overseeing the execution of duties of Directors relating to the design and operation of the Group's reporting process for the other information.

Our opinion on the consolidated financial statements does not cover the other information and we do not express our opinion on the other information.

Our responsibilities for the audit of the consolidated financial statements are to read the other information, and in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Responsibilities of Management, the Audit & Supervisory Board and its Members

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern using the going concern basis of accounting, disclosing, as applicable, matters related to going concern in accordance with accounting principles generally accepted in Japan.

The Audit & Supervisory Board and its Members are responsible for overseeing the execution of the duties of Directors related to designing and operating the Group's financial reporting process.

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Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks. The audit procedures shall be selected and applied as determined by the auditor. In addition, sufficient and appropriate audit evidence shall be obtained to provide a basis for our opinion.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate whether the presentation and disclosure of the consolidated financial statements are in accordance with accounting principles generally accepted in Japan, the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit & Supervisory Board and its Members regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit & Supervisory Board and its Members with a statement that we have complied with relevant ethical requirements regarding independence in Japan, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit & Supervisory Board and its Members, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report

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unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan
Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

Convenience Translation
Our audit also comprehended the translation of Japanese yen amounts into United States dollar amounts and, in our opinion, such translation has been made in conformity with the basis stated in Note 2 to the consolidated financial statements. Such United States dollar amounts are presented solely for the convenience of readers outside Japan.

小林 弥
Wataru Kobayashi
Designated Engagement Partner
Certified Public Accountant

井澤 浩昭
Hiroaki Izawa
Designated Engagement Partner
Certified Public Accountant

川久保 孝之
Takayuki Kawakubo
Designated Engagement Partner
Certified Public Accountant

Crowe Toyo & Co.
Tokyo, Japan
27 June 2023

Corporate Data

Corporate Information (As of March 31, 2023)

Company Name	MITSUBISHI GAS CHEMICAL COMPANY, INC.
Address	Mitsubishi Building 5-2 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8324, Japan
Originally founded	January 15, 1918
Incorporated	April 21, 1951
Capital	41.97 billion yen
Fiscal Year	Accounts closed in March
Number of employees	2,448 (non-consolidated) 10,050 (consolidated)

Shareholder Information (As of March 31, 2023)

Listing	Tokyo Stock Exchange Prime Market
Ticker symbol	4182
Total number of authorized shares	492,428,000
Number of outstanding shares	222,239,199
Stock transaction unit	100
Number of shareholders	40,932
Composition of shareholders	
Financial institutions	46.3%
Securities companies	3.8%
Other companies in Japan	7.8%
Foreign investors	23.0%
Individuals and others	19.1%

Major shareholders (top 10)

Name of shareholder	Investment in MGC: Number of shares held (thousands)	Investment in MGC: Percentage of total outstanding shares
The Master Trust Bank of Japan, Ltd. (Trust Account)	30,590	14.9
Custody Bank of Japan, Ltd. (Trust Account)	17,668	8.6
Meiji Yasuda Life Insurance Company	8,797	4.3
Nippon Life Insurance Company	5,858	2.8
The Norinchukin Bank	5,026	2.4
AGC Inc.	3,526	1.7
National Mutual Insurance Federation of Agricultural Cooperatives	3,235	1.5
The Bank of Yokohama, Ltd.	3,085	1.5
MUFG Bank, Ltd.	2,700	1.3
JPMorgan Securities Japan Co., Ltd.	2,694	1.3

Notes 1: MGC holds 17,660 thousand shares of treasury stock, which is not included in the above list of major shareholders.

2: Percentage of total outstanding shares does not include treasury stock.