

Environment

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Production-related Inputs and Outputs (Non-consolidated)

Input		Output	
Raw materials	0.59Mt	Production volume	0.62Mt
Energy (as crude oil equivalent)	323ML	GHG emissions	0.67Mt-CO ₂ -e
Water withdrawal	28Mm ³	Water discharge	25Mm ³
		External waste discharge	17kt
		Recycling	25kt

Raw Materials / Production Volume (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Raw material input	kt	770	693	587	588
Production volume	kt	1,011	739	742	623

Basic Approach to Climate Change Mitigation

1. Formulate targets for reducing Scope 1 and 2*¹ GHG emissions and steadily reduce them through planning, execution, monitoring and reassessment.
2. Assess, manage, monitor and proactively disclose Scope 3*² GHG emissions and take action to reduce them in collaboration with suppliers.
3. Improve energy efficiency and raw materials' carbon cycle and promote energy transition toward realization of a zero-carbon society by 2050.
4. Contribute to solving energy and climate change challenges through business operations by deploying innovative process technologies and factoring whole-lifecycle GHG emissions into design and development processes.
5. Disclose information through climate change initiatives*³.

*1 Scope 1 emissions are GHG emissions directly generated by MGC. Scope 2 emissions are indirect GHG emissions associated with the use of energy (mainly electric power) purchased from external suppliers.

*2 Scope 3 emissions are indirect GHG emissions generated in supply chains through organizational activities such as raw material sourcing, manufacturing, distribution, sales and waste disposal.

*3 MGC proactively participates in various collaborative activities to mitigate climate change (climate change initiatives)

Basic Approach to Mitigation of Climate Change

The MGC Group recognizes responding to climate change as a universal global issue that surpasses national borders and requires unified initiatives between companies in Japan and overseas. In response to the rising global demand for decarbonization, in March 2022 the Group set a target of achieving carbon neutrality in the Mitsubishi Gas Chemical Group's GHG emissions by 2050. To achieve this target, we will strive to realize a decarbonized society through proactive measures including the use of low-carbon fuel and raw materials, promotion of energy saving, conversion to renewable energy, ultra-stable operation of production equipment, improvement of outputs through use of high-efficiency equipment, and transition to smart operations through the introduction of new technologies.

Furthermore, the Group is committed to upholding laws, regulations, and government policies related to climate change and reduction of energy usage at its companies in Japan and overseas, and responding appropriately to them (in the case of Japan, the relevant laws include the Act on Promotion of Global Warming Countermeasures and the Act on Rationalizing Energy Use).

Involvement with Industry Groups and Initiatives

The MGC Group announced its agreement with the basic concept of the GX (Green Transformation) League announced by the Ministry of Economy, Trade and Industry in March 2022, and has participated in the GX League since April 2023.

The GX League is an initiative to promote GX through companies that demonstrate leadership in resolutely striving to transition towards carbon neutrality.

Participating companies are required to autonomously disclose their reduction targets and progress, and to take initiatives to reach their targets.

MGC has participated in various meetings held by the GX League to gather information and share it internally with a view to bringing its climate change strategies in line with the League's position.

Furthermore, we confirm that the League's information is in alignment with our own position and approach, and in cases where there is a conflict, we discuss and make adjustments at the Carbon Neutrality Promotion Technical Committee, which is composed of members from the Production Technology Division, the Corporate Planning Division, the Business Administrative Division, and the Sustainability Promotion Department. Through this process, we match our climate change strategy with our activities with the GX League.

Greenhouse Gas (GHG) Emissions

Scope1+2 (Consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
		Consolidated	Consolidated	Consolidated	Consolidated
CO ₂ emissions from non-energy use	kt-CO ₂ -e	1,379	1,219	1,289	1,094
CO ₂ emissions from non-energy use	kt-CO ₂ -e	101	91	90	99
CH ₄	kt-CO ₂ -e	3	14	10	5
N ₂ O	kt-CO ₂ -e	0	1	5	4
HFCs	kt-CO ₂ -e	3	1	3	3
PFCs	kt-CO ₂ -e	0	0	0	0
SF ₆	kt-CO ₂ -e	0	0	0	0
NF ₃	kt-CO ₂ -e	0	0	0	0
Total	kt-CO ₂ -e	1,487	1,326	1,396	1,206
Scope1	kt-CO ₂ -e	770	743	715	619
Scope2 (market based)	kt-CO ₂ -e	717	583	682	586
GHG emissions intensity ratio per unit to sales	t-CO ₂ -e / million yen	2.1	1.7	1.7	1.6

Notes: 1. Due to rounding off figures, there are places where the sums for each item do not match the total.
2. Data for prior fiscal years were revised to reflect changes in the Group's composition and revision of calculation standards.
3. For the above table's reporting boundaries, see page 23.

Scope 3 (Consolidated)

Category	Unit	FY2021	FY2022	FY2023	FY2024
		Consolidated	Consolidated	Consolidated	Consolidated
Purchased goods and services	kt CO ₂ -e	7,780	5,856	5,325	6,003
Capital goods	kt CO ₂ -e	161	179	230	243
Activities related to fuels and energy not includable in Scopes 1 and 2	kt CO ₂ -e	266	275	278	407
Transportation and distribution (upstream)	kt CO ₂ -e	703	301	335	548
Waste generated in operations	kt CO ₂ -e	5	9	32	35
Business travel	kt CO ₂ -e	1	1	1	1
Employee commuting	kt CO ₂ -e	1	1	1	1
Leased assets (upstream)	kt CO ₂ -e	7	3	3	4
Transportation and distribution (downstream)	kt CO ₂ -e	150	71	161	182
Processing of sold products	kt CO ₂ -e	—	—	—	—
Use of sold products	kt CO ₂ -e	75	419	277	460
End-of-life treatment of sold products	kt CO ₂ -e	3,841	2,963	2,062	2,727
Leased assets (downstream)	kt CO ₂ -e	1	2	2	20
Franchises	kt CO ₂ -e	0	0	0	0
Total	kt CO ₂ -e	11,358	9,374	9,607	10,631

Notes: 1. Due to rounding off figures, there are places where the sums for each item do not match the total.
2. Data for prior fiscal years were revised to reflect changes in the Group's composition and revision of calculation standards.
3. For the above table's reporting boundaries, see page 23.
4. We have reviewed past data and revised figures.

GHG emissions per unit of sales (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
GHG emissions(Non-consolidated)	kt CO ₂ -e	812	725	696	663
GHG emissions per unit of sales	kt CO ₂ -e / million yen	0.0019	0.0016	0.0017	0.0015

GHG Emissions in Transportation Sector (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
By rail	kt CO ₂ -e	0.60	0.62	0.53	0.47
By ship	kt CO ₂ -e	11.5	10.4	9.3	8.7
By truck	kt CO ₂ -e	16.9	15.1	12.8	11.5

Basic Approach to Resource Use

The MGC Group promotes efficient utilization of fuel and other resources (including product raw materials) and development of innovative process technologies at its domestic and overseas production sites and contributes to reduction in GHG emissions.

Use of Resources

The MGC Group is promoting Carbopath™, a concept for a circular environmental platform. We have started examining commercialization of a process that uses catalyst development and synthesis technologies cultivated over many years to convert atmospheric CO₂ emissions and waste plastic into methanol, thereby recycling it for use in chemicals, fuel, and power generation applications. We will further accelerate collaboration with companies and local governments, aiming to transform society with a circular economy.

Energy Management

Energy Use (Ratio of grid power, renewable energy and self-generated energy) (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Total energy use	MWh	3,475,701	3,176,431	3,006,312	3,176,431
Ratio of grid power	—	9.4%	9.6%	8.4%	9.6%
Ratio of renewable energy	—	0.0%	0.6%	1.0%	0.6%
Total self-generated energy	MWh	260,992	243,480	236,937	225,997

Notes: 1. Calculated based on SASB standards

Energy Use (Ratio of grid power, renewable energy and self-generated energy) (Consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Total energy use	MWh	—	5,060,414	5,108,119	5,089,106
Ratio of grid power	—	—	17.5%	18.2%	17.4%
Ratio of renewable energy	—	—	1.2%	1.5%	1.2%
Total self-generated energy	MWh	—	264,238	254,802	257,303

Note: For the above table's reporting boundaries, see page 23.

Energy Use (Ratio of renewable/non-renewable energy) (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Nonrenewable fuels purchased and consumed (A) (nuclear power, coal, oil, natural gas, etc.)	MWh	2,820,676	2,592,443	2,488,961	2,522,380
Nonrenewable Electricity purchased (B)	MWh-purchased electricity	331,496	303,900	253,414	271,407
Steam, heat, cooling and other nonrenewable energy purchased (C)	MWh	392,187	342,541	331,193	342,640
Renewable energy purchased or generated. (D) (wind, energy solar, biomass, hydroelectric, geothermal etc.)	MWh	12	18,990	31,483	25,053
Non-renewable energy sold (E) (electricity, heating, cooling)	MWh	68,658	62,452	67,256	70,030
Total non-renewable energy consumed (A+B+C-E)	MWh	3,475,701	3,176,431	3,006,312	3,066,396

Energy Use (Ratio of renewable/non-renewable energy) (Consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Nonrenewable fuels purchased and consumed (A) (nuclear power, coal, oil, natural gas, etc.)	MWh	—	3,350,502	3,197,249	2,777,763
Nonrenewable Electricity purchased (B)	MWh-purchased electricity	—	887,187	930,644	812,389
Steam, heat, cooling and other nonrenewable energy purchased (C)	MWh	—	885,177	1,047,482	1,276,573
Renewable energy purchased or generated. (D) (wind, energy solar, biomass, hydroelectric, geothermal etc.)	MWh	—	60,824	79,876	31,206
Non-renewable energy sold (E) (electricity, heating, cooling)	MWh	—	33,761	38,614	34,224
Total non-renewable energy consumed (A+B+C-E)	MWh	—	5,089,106	5,136,755	4,832,502

Notes: 1. For the above table's reporting boundaries, see page 23.
2. We have reviewed past data and revised figures.

Energy Use (crude oil equivalent) (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Production and research divisions, Corporate Sector	ML-crude oil equivalent	380	347	322	323
Logistics division	ML-crude oil equivalent	10	10	9	8
Energy intensity (Logistic division)	KL/million-ton kilo	20	21	20	20

Energy Use (crude oil equivalent) (Consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Production and research divisions, Corporate Sector	ML-crude oil equivalent	—	633	640	575

Note: For the above table's reporting boundaries, see page 23.

Energy consumption per unit of sales (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Energy use	ML-crude oil equivalent	380	347	322	323
Energy consumption per unit of sales	ML-crude oil equivalent / million yen	0.00089	0.00079	0.00080	0.00075

Water Resources (Non-consolidated)

Water Resource Risk Management

MGC uses large quantities of water, both as a raw material of chemical products and for various other purposes, including steam-heating and cooling in chemical manufacturing processes, product refining and cleaning containers. To sustainably use water resources essential to manufacturing chemicals, MGC manages a variety of risks. Specifically, MGC monitors its actual water consumption and uses water efficiently by measuring water withdrawal, water discharge, water usage and water recycling. In drawing from water sources, MGC restricts its intake to permitted quantities in accord with applicable laws or agreements with municipalities. Additionally, MGC discharges wastewater into rivers, the sea or other public water bodies in compliance with effluent standards after treating it to filter out identified pollutants. Data on these water-related environmental impacts are presented in detail below.

Additionally, MGC maintains a sanitary water-use environment at all its sites to provide its workforce with access to properly functioning, safely managed sanitary facilities (wash service).

From a business continuity standpoint, MGC has identified production downtime due to drought or flooding of production facilities as a water-related risk, formulated a business continuity plan (BCPs) that addresses this risk and implemented measures to mitigate it. None of the areas in which MGC's plants are located has experienced either adverse impacts on production activities due to water stress or conflicts with stakeholders regarding use of water resources.

Meanwhile, MGC sees opportunities in businesses that provide solutions for issues surrounding the coolant water of air conditioning equipment and cooling systems. Such solutions include water treatment agents that maintain healthy coolant water quality by killing disease-causing legionella bacteria and a comprehensive water treatment system service offered through affiliate Día Aqua Solutions Co., Inc.

Going forward, MGC will set qualitative and quantitative targets for efficient water usage to more effectively preserve water resources.

Approach to water recycling

In the chemical industry, a large proportion of water is used as cooling water, and the water is usually circulated through cooling towers to reduce its temperature.

If this cooling water were to be used in one pass instead of being circulated, it would be possible to reduce the amount of electricity used by the pump, but the amount of water intake and discharge would increase by 100 times.

For this reason, we have set a goal of improving the water reuse rate and are working to reduce water intake.

Efficient Water Use

The MGC Group monitors water withdrawal, discharge, and recycling amounts to ascertain water consumption (water withdrawal - water discharge) and strives to use water efficiently.

At production sites that use particularly large amounts of water, we strive to efficiently use and reduce water withdrawal by aggressively recycling water through means such as use of circulating cooling water systems.

Results of Survey on Water Stressed Areas

Using the ENCORE tool recommended by the Taskforce on Nature-related Financial Disclosures, we conducted screening of MGC Group sites and identified sites that correspond to areas of high physical water risks (index 4) as sensitive locations. Considering the level of importance of material locations, we identify priority areas and promote responses to reduce risk and dialogue with local communities.

Use of Water Resources (Non-consolidated)

Indicator		Unit	FY2021	FY2022	FY2023	FY2024
Water withdrawal	Tap water (Third party water source)	1000 m ³	1,613	1,543	1,476	1,483
	Surface water (fresh water such as lakes, rivers, etc.)	1000 m ³	33,296	30,016	26,769	25,795
	Ground water	1000 m ³	387	395	232	214
	Total	1000 m ³	35,296	31,954	28,477	27,492
Water discharge	Sewage system	1000 m ³	2,233	2,038	1,931	2,055
	Ocean/sea	1000 m ³	9,455	9,252	8,351	7,286
	River/lake(freshwater)	1000 m ³	19,585	16,686	14,847	15,355
	Other	1000 m ³	0	0	0	0
	Total	1000 m ³	31,274	27,976	25,130	24,696
Water consumption*		1000 m ³	4,022	3,978	3,347	2,796
Percentage of water recycled for use		1000 m ³	511,862	478,178	397,831	451,374
Ratio of water recycled for use		%	94	94	93	94

* Water withdrawal — Water discharge

Amount of water withdrawn per unit of sales (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Water withdrawal	1000 m ³	35,296	31,954	28,477	27,492
Amount of water withdrawn per unit of sales	1000m ³ /million yen	0.082	0.073	0.071	0.063

Water consumption per unit of sales (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Water consumption	1000 m ³	4,022	3,978	3,347	2,796
Water consumption per unit of sales	1000m ³ /million yen	0.0094	0.0091	0.0083	0.0065

Water recycling achievement status (Non-consolidated)

Indicator	Unit	FY2020	FY2021	FY2022	FY2023
Water recycling rate	%	94	94	93	94
Target: at least 95%	—	×	×	×	×

Resource Recycling (Non-consolidated)

Waste

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Volume of waste generation	Ton	84,046	79,130	85,486	85,381
Volume of waste to off-site	Ton	11,277	10,927	14,363	16,634
Volume of recyclable waste (Including waste that has been recycled after disposal)	Ton	26,131	21,891	23,219	25,455
Final disposal volume	Ton	231	199	113	118
Recycling rate	%	31	28	27	30

Harmfulness • specially controlled industrial waste

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Volume of Harmfulness and specially controlled industrial waste	Ton	—	—	63,365	26,768
Volume of Harmfulness and specially controlled industrial waste to off-site	Ton	—	—	9,108	12,233

Zero waste emission rate

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Amount of final disposal/total amount of waste generated	%	0.27	0.25	0.13	0.14
Target: at most 0.3%	—	○	○	○	○

PRTR Scheme Substances (Non-consolidated)

Emissions of PRTR Scheme Substances

	Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Emissions of PRTR Substances	Atmosphere	Ton	239	328	198	153
	Water bodies	Ton	11	10	10	8
	Soil	Ton	0	0	25	0
	Total*	Ton	250	338	233	160

* Due to rounding off figures, there are places where the sums for each item do not match the total.

High-emission Substances Notified under the PRTR Scheme

Government-designated number	Substance	Unit	FY2021	FY2022	FY2023	FY2024
296	1,2,4-Trimethylbenzene	Ton	111	206	—	—
691	Trimethylbenzene	Ton	—	—	97	53
186	Dichloromethane	Ton	68	56	40	36
213	N,N-Dimethylacetamide	Ton	0	0	27	0
65	Epichlorohydrin	Ton	1	1	15	12
80	Xylene	Ton	28	32	12	10
300	Toluene	Ton	13	18	12	15

Pollution Prevention (Non-consolidated)

Air Emissions

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Volatile organic compounds (VOCs)	Ton	298	379	247	205
SO _x	Ton	30	36	59	16
NO _x	Ton	368	407	398	347
Dust	Ton	8	12	8	4

Control of Water Discharge

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
BOD	Ton	38	25	21	23
COD	Ton	137	136	95	89
Total oxygen demand (BOD+COD)	Ton	175	161	116	112
Total nitrogen emissions	Ton	309	239	196	277
Total phosphorus emissions	Ton	56	49	50	47

Environmental Accounting (Non-consolidated)

Environmental Accounting

Breakdown			Unit	FY2021		FY2022		FY2023		FY2024	
				Amount invested	Expenses	Amount invested	Expenses	Amount invested	Expenses	Amount invested	Expenses
Onsite cost	Pollution prevention cost	Air pollution	Million yen	72	859	46	923	16	554	13	961
		Water pollution	Million yen	144	1,667	62	1,976	109	1,293	56	1,533
		Soil/noise pollution	Million yen	19	3	10	0	1	47	0	3
		Global environmental protection cost	Million yen	499	2,173	632	1,818	263	1,433	293	1,776
		Resource recycling cost	Million yen	0	819	28	1,088	14	764	0	1,991
Up or down stream cost			Million yen	4	112	9	0	14	6	0	1,040
Management activity cost			Million yen	1	1,391	6	1,496	1	399	3	699
R&D cost			Million yen	1,189	2,826	734	4,170	1,187	28	808	2,987
Social contribution cost			Million yen	0	5	0	4	0	16	0	44
Environmental damage cost			Million yen	0	75	0	48	0	58	0	31
Total*			Million yen	1,929	9,929	1,527	11,522	1,604	4,597	1,172	11,046

* Due to rounding off figures, there are places where the sums for each item do not match the total.

Economic Benefits Associated with Environmental Protection Measures

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Income	Million yen	8	61	22	28
Reduction of expenses	Million yen	74	242	225	867

Water Conservation Expenditure

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Water-related investment (CAPEX)	Million yen	144	62	109	56
Water-related expenses (OPEX)	Million yen	1,667	1,976	1,293	1,533

Biodiversity Conservation Project Expenditures (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Biodiversity conservation project investment (CAPEX)	Million yen	0	0	0	0
Biodiversity conservation project expenses (OPEX)	Million yen	85	91	88	88

Environment-related Accidents / Violations of Environmental Laws and Regulations (Non-consolidated)

Indicator	Unit	FY2021	FY2022	FY2023	FY2024
Violations of environmental laws and regulations	Cases	2	0	1	1
Accidents/pollution with potential to cause environmental problems	Cases	1	0	1	0
Complaints regarding environmental problems	Cases	0	0	0	0
Total environmental fines/penalties	Thousand yen	0	0	0	0

Reporting Scope

Environmental Data, The Scope of Scope1+2,3, Energy

Japan

Company	Scope1+2,3	Energy
MITSUBISHI GAS CHEMICAL COMPANY, INC.	●	●
MITSUBISHI GAS CHEMICAL NEXT COMPANY, INC.	●	●
TOHO EARTHTECH, INC	●	●
FUDOW COMPANY LTD.	●	●
MGC Terminal Company, Inc.	●	●
MGC Advance Co., Ltd.	●	●
MGC Woodchem Corporation	●	●
Polyols Asia Company, Inc.		
MGC ENERGY Company Limited		
Cultivecs Inc	●	●
KYODOU KASANKASUIISO CORP.	●	●
MGC Filsheet Co., Ltd.	●	●
MGC Electrotechno Co., Ltd.	●	●
Yonezawa Dia Electronics Co., Inc.	●	●
MGC AGELESS Co., Ltd.	●	●
Mitsubishi Engineering-Plastics Corporation		
Global Polyacetal Co., Ltd.		
Kashima Polymers Corporation	●	●
EIWA CHEMICAL IND. CO., LTD.	●	●
Toyo Kagaku Co., Ltd.	●	●
Mitsubishi Gas Chemical Trading, Inc.		
Ryowa Enterprise Co., Ltd.		

Overseas

Company	Scope1+2,3	Energy
SAMYOUNG PURE CHEMICALS CO., LTD.	●	●
Korea Polyacetal Co., Ltd	●	●
MGC PURE CHEMICALS TAIWAN, INC.	●	●
MITSUBISHI GAS CHEMICAL ENGINEERING- PLASTICS (SHANGHAI) CO., LTD.	●	●
TAIXING MGC LINGSU CO., LTD.	●	●
MGC PURE CHEMICALS SINGAPORE PTE. LTD.	●	●
MITSUBISHI GAS CHEMICAL SINGAPORE PTE. LTD.		
PT PEROKSIDA INDONESIA PRATAMA	●	●
THAI POLYACETAL CO., LTD	●	●
THAI POLYCARBONATE CO., LTD.	●	●
AGELESS (THAILAND) CO., LTD.	●	●
MGC ELECTROTECHNO (THAILAND) CO., LTD	●	●
MGC ADVANCED POLYMERS, INC.	●	●
MGC PURE CHEMICALS AMERICA, INC	●	●
MITSUBISHI GAS CHEMICAL AMERICA, INC		
MGC Specialty Chemicals Netherlands B.V.		

Status of External Certification

Status of External Certification (As End of March 2023)

Japan

Company	Business Sites	ISO 14001	ISO 45001	ISO 9001
MITSUBISHI GAS CHEMICAL COMPANY, INC.	Niigata Plant	●		●
	Mizushima Plant	●		●
	Yokkaichi Plant	●		●
	Kashima Plant	●		●
	Yamakita Plant	●		●
MITSUBISHI GAS CHEMICAL NEXT COMPANY, INC.	Kagawa Factory	●		●
	Niigata Factory	●		●
	Syounan Factory			●
	Yamaguchi Factory	●		●
TOHO EARTHTECH, INC.	Factory			●
	Construction Business Headquarters	●		●
MGC Woodchem Corporation	Hiratsuka Factory			
	Shimizu Factory			
	Mizushima Factory			
Fudow Company Limited	Fujinomiya Factory	●		●
	Hiratsuka Factory	●		●
	Gamagori Factory			●
	Tokai Office			●
Cultivecs Inc	Niigata Factory			
KYODOU KASANKASUIISO CORP.	Factory			
MGC Filsheet Co., Ltd.	Tokorozawa Factory			●
	Osaka Factory			●
	Shirakawa Factory			●
MGC Electrotechno Co., Ltd.	Factory	●		●
Yonezawa Dia Electronics Co., Inc.	Factory	●		●
MGC AGELESS Co., Ltd.	Factory			●
Kashima Polymers Corporation	Factory	●		●
EIWA CHEMICAL IND. CO., LTD	Kinuura Factory			●
	Ujitawara Factory			●
TOYO KAGAKU, INC.	Headquarters Factory	●		●
	Mitake Factory	●		●
	Mizushima Factory	●		●

Asia

Company	Business Sites	ISO 14001	ISO 45001	ISO 9001
■ Korea				
Samyoung Pure Chemicals Co., Ltd	Cheonan Plant	●	●	●
	Ulsan Plants	●	●	●
KOREA POLYACETAL CO., LTD.	Wonju Plant	●		●
■ Taiwan				
MGC Pure Chemicals Taiwan, Inc.	Factory	●	●	●
■ China				
MITSUBISHI GAS CHEMICAL ENGINEERING-PLASTICS (SHANGHAI) CO., LTD.	Factory	●		●
Taixing Lingsu Specialty Materials Co., Ltd.	Factory	●	●	●
■ Singapore				
MGC PURE CHEMICALS SINGAPORE PTE. LTD.	Factory	●	●	●
■ Indonesia				
PT PEROKSIDA INDONESIA PRATAMA	Factory	●	●	●
■ Thailand				
THAI POLYACETAL CO., LTD	Factory	●	●	●
THAI POLYCARBONATE CO., LTD.	Factory	●	●	●
AGELESS (THAILAND) CO., LTD.	Factory		●	●
MGC ELECTROTECHNO (THAILAND) CO., LTD	Factory	●		●

Americas

Company	Business Sites	ISO 14001	ISO 45001	ISO 9001
MGC ADVANCED POLYMERS, INC.	Factory	●		●
MGC PURE CHEMICALS AMERICA, INC	Arizona Factory	●	●	●
	Texas Factory	●	●	●
	Oregon Factory	●	●	●

Europe

Company	Business Sites	ISO 14001	ISO 45001	ISO 9001
MGC Specialty Chemicals Netherlands B.V.	Factory			

Notes: 1. Total 33sites (66%) of 50 production sites acquired ISO 14001 certification.
2. Total 12sites (24%) of 50 production sites acquired ISO 45001 certification.