Environmental Activities: Supplementary Data

1 Climate Change Mitigation and Adaptation

Reducing Greenhouse Gas Emissions

■ Greenhouse Gas Emissions (All Seven Gases) (Sumitomo Chemical: All Worksites)

(Thousand tons of CO_2e)

		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
CO_2	Energy sources	2,559	2,405	2,454	2,543	2,722	2,645	2,549	2,537
	From other than energy use	55	50	93	155	142	157	146	137
Methane (CH_4)		—	—	—	—	—	—	—	—
Nitrous oxide (N_2O)		65	45	35	23	15	20	22	22
Hydrofluorocarbon (HFC)		—	—	—	—	4	4	—	—
Perfluorocarbon (PFC)		—	—	—	—	—	—	—	—
Sulfur hexafluoride (SF_6)		—	—	—	—	—	—	—	—
Nitrogen trifluoride (NF_3)		—	—	—	—	—	—	—	—

Note: Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.

Energy Saving

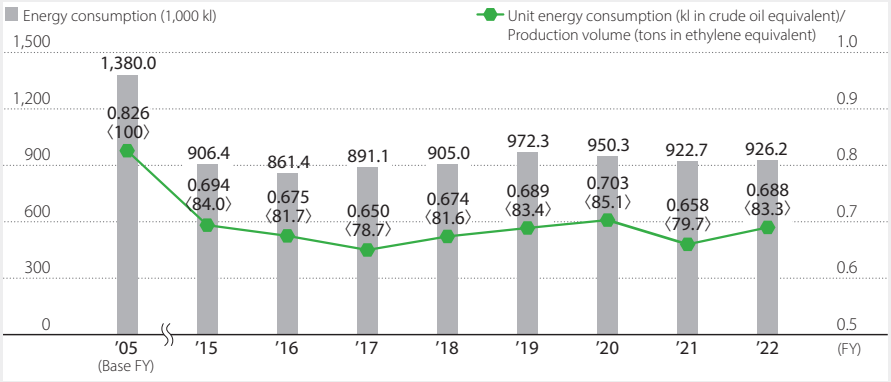
FY2022 Breakdown of Unit Energy Consumption (Sumitomo Chemical)

	Energy consumption (1,000 kl in crude oil equivalent) (a)	Production (1,000 tons in ethylene equivalent) (b)	Unit energy consumption (a/b)
Ehime Works	471	698	0.674
Chiba Works	329	390	0.845
Osaka Works	23	17	1.330
Oita Works*	61	62	0.970
Misawa Works	11	12	0.989
Ohe Works	31	168	0.183
Total	926	1,347	0.688 <83.3% compared with FY2005>

Notes: • Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.
• Ibaraki Works, which was added from fiscal 2022, is excluded.
Moreover, the Works' energy consumption, total floor area, and unit energy consumption were 6 thousand kl (crude oil equivalent), 17 thousand m^2, and 0.343, respectively.

* Data for the Oita Works includes data for the Gifu and Okayama plants.

Energy Consumption and Unit Energy Consumption (Sumitomo Chemical)



Notes: • Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.
• Ibaraki Works, which was added from fiscal 2022, is excluded.

FY2022 Results

Energy consumption totaled 926.2 thousand kl in crude oil equivalent in fiscal 2022.
In fiscal 2022, unit energy consumption worsened 4.6% compared with fiscal 2021 and improved 16.7% compared with fiscal 2005.

FY2022 Energy Consumption and CO_2 Emissions (Sumitomo Chemical and Group Companies in Japan: All Worksites)

	Energy consumption (1,000 kl in crude oil equivalent)	CO_2 emissions from energy use (1,000 tons)
Sumitomo Chemical	945	2,537
Works	932	2,513
Non-manufacturing sites including the Head Offices and Research Laboratories	13	24
Sumitomo Chemical and Group companies in Japan	1,638	4,667
Works	1,607	4,613
Non-manufacturing sites including the Head Offices and Research Laboratories	31	54

Notes: • Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.
• The boundary of calculation is the same as that for the companies listed on page 3 of the Sustainability Data Book 2023 and covers major consolidated Group companies, accounting for 99.8% of Sumitomo Chemical's consolidated net sales.

2 Contribute to Recycling Resources, Sustainable Use of Natural Capital

Environmental Performance

Sumitomo Chemical collates and totals environmental data for the Company and Group companies in Japan and overseas, including data on energy and resource consumption, production quantities, and environmental impact (e.g., release of pollutants into the air and water).

FY2020–2022 Environmental Performance (Sumitomo Chemical and Group Companies in Japan)

INPUT Energy and Resources

Water

(Million tons)

	FY2020	FY2021	FY2022
Industrial water	70.2	70.5	69.5
Drinking water	0.8	0.9	0.8
Seawater	884	862	763
Groundwater	26.8	25.5	26.3
Other water	2.6	2.7	2.5
Total	984	962	863

Energy

Calculated as kl of crude oil

(Thousand kl)

	FY2020	FY2021	FY2022
Fuel, heat, and electricity*1	1,767	1,801	1,634

Exhaustible Resources

(Thousand tons)

	FY2020	FY2021	FY2022
Hydrocarbon compounds	1,704	1,713	1,684
Metals (excluding minor metals)*2	90.2	115	104
Minor metals*3	12.5	17.4	16.2

PCB/CFCs under Secure Storage

	FY2020	FY2021	FY2022
No. of electrical devices containing high concentrations of PCBs*4	11	0	0
PCB volume (pure equivalent) (kl)*4	0.1	0	0
No. of refrigeration units using specified CFCs as a coolant	37	27	20
No. of refrigeration units using HCFCs as a coolant	255	286*5	277

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 3 is as follows for each year.
FY2020: Sumitomo Chemical and Group companies in Japan: 22 companies
FY2021: Sumitomo Chemical and Group companies in Japan: 23 companies
FY2022: Sumitomo Chemical and Group companies in Japan: 22 companies

*1 From fiscal 2017, the energy (calculated as kl of crude oil) indices were calculated based on the GHG Protocol (refer to "Calculation Standards for Environmental and Social Data Indicators").
- With the disclosure of our GHG emissions based on the GHG Protocol standards, we now include the following data previously excluded from calculations: amount of energy used to produce power and steam sold to external parties by Sumitomo Chemical and Group companies in Japan (the portion attributable to energy provider subsidiaries was included in years prior to fiscal 2016). In addition, the amount of energy used by Sumitomo Chemical's non-production sites is included from fiscal 2017, and the amount of energy used by the non-production sites of Group companies in Japan is included from fiscal 2018. From fiscal 2018, the boundary of calculation has been expanded to include principal consolidated Group companies in Japan, which account for up to 99.8% of consolidated net sales.

*2 Calculations include the following 12 metals: iron, gold, silver, copper, zinc, aluminum, lead, platinum, titanium, palladium, gallium, and lithium.
*3 Calculations include the following seven minor metals: nickel, chromium, tungsten, cobalt, molybdenum, manganese, and vanadium. The supply structure for each of these minor metals is extremely fragile. These minor metals are subject to national stockpiling.
*4 Fluorescent lamps and mercury lamp ballast as well as contaminated substances (wastepaper, etc.), including PCB waste, are not included in unit and volume data.
*5 Following a detailed analysis, data for fiscal 2021 was retroactively revised.

Environmental Activities: Supplementary Data

OUTPUT Product Manufacturing and Environmental Impact

Products

(Thousand tons)

	FY2020	FY2021	FY2022
(Calculated on the basis of ethylene production)*1	2,526	2,613	2,413

Water Pollutant Emissions

(Tons)

		FY2020	FY2021	FY2022
COD	Coastal waters/waterways	874	960	825
	Sewer systems	168	207	175
Phosphorus	Coastal waters/waterways	34.7	36.1	32.0
	Sewer systems	4.9	5.9	6.1
Nitrogen	Coastal waters/waterways	1,281	1,303	1,236
	Sewer systems	48.1	68.6	47.8
Substances subject to the PRTR Act		11.7	11.1	13.3

Water Discharge

(Million tons)

	FY2020	FY2021	FY2022
Total amount of water discharge	947	920	809

Note: Includes seawater emissions of Sumitomo Joint Electric Power Co., Ltd.

Waste Materials

(Thousand tons)

	FY2020	FY2021	FY2022
Waste emissions*2	248	276	232
Landfill*2	25.1	30.7	21.9
(Breakdown)			
On-site landfill	0	0	0
External landfill	25.1	30.7	21.9

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 4 is as follows for each year.
FY2020: Sumitomo Chemical and Group companies in Japan: 22 companies
FY2021: Sumitomo Chemical and Group companies in Japan: 23 companies
FY2022: Sumitomo Chemical and Group companies in Japan: 22 companies

*1 Certain assumptions were made in calculations due to the difficulty of obtaining weight-based figures for some products.
*2 The amount of coal ash generated at Sumitomo Joint Electric Power, which is included in "Waste emissions" and "Landfill" (Sumitomo Chemical and Group companies in Japan) is calculated on a dry-weight basis.

Environmental Activities: Supplementary Data

Atmospheric Emissions

(Thousand tons of CO_2e)

	FY2020	FY2021	FY2022
Greenhouse gases (seven gases)*1	6,072	6,241	5,418
Emissions from energy use (CO_2)	5,312	5,435	4,639
CO_2 emissions from other than energy use	661	655	633
CH_4	—	6	6
N_2O	94	143	137
HFC	4	2	3
PFC	—	—	—
SF_6	—	—	—
NF_3	—	—	—

Others

(Tons)

	FY2020	FY2021	FY2022
NOx	4,359	3,901	3,783
SOx	4,584	3,896	3,098
Soot and dust	211	173	167
Substances subject to the PRTR Act*2	419	420	404

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 5 is as follows for each year.
FY2020: Sumitomo Chemical and Group companies in Japan: 22 companies
FY2021: Sumitomo Chemical and Group companies in Japan: 23 companies
FY2022: Sumitomo Chemical and Group companies in Japan: 22 companies

*1 From fiscal 2017, the greenhouse gas (all seven gases) indices were calculated based on the GHG Protocol for greenhouse gas emissions (refer to "Calculation Standards for Environmental and Social Data Indicators") for principal consolidated Group companies in Japan, which account for up to 99.8% of consolidated net sales.
- Having adopted the GHG Protocol standards for our GHG emission disclosures, we now include the following data that was previously excluded from calculations: CO_2 emissions from energy sold to external parties by Sumitomo Chemical and Group companies in Japan (the portion attributable to energy provider subsidiaries was included in years prior to fiscal 2016); CO_2 emissions from energy use attributable to Sumitomo Chemical's non-production sites; and CO_2 emissions from non-energy sources not included in the scope of the Act on Promotion of Global Warming Countermeasures. In addition, from fiscal 2018, we include energy use attributable to the non-production sites of Group companies in Japan.

*2 Calculated based on the amount released into water/the air of each substance subject to the PRTR Act.

Compliance with Environmental Laws and Regulations

(Yen)

	FY2020	FY2021	FY2022
Total fines	0	0	0

Note: **Sumitomo Chemical and Group companies in Japan are included in the boundary of calculation.**
[The production sites of the 21 Group companies in the boundary are listed below]
Sumika-Kakoushi Co., Ltd.; Sumika Color Co., Ltd.; Sumika Plastech Co., Ltd.; Nippon A&L Inc.; Asahi Chemical Co., Ltd.; Ceratec Co., Ltd.; Sumika Assembly Techno Co., Ltd.; SanTerra Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; SC Environmental Science Co., Ltd.; Sumika Agrotech Co., Ltd.; Sumika Polycarbonate Ltd.; Nihon Medi-Physics Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.; Koei Chemical Co., Ltd.; Taoka Chemical Co., Ltd.; Tanaka Chemical Corporation; Sumitomo Pharma Co., Ltd.; SN Kasei Co., Ltd.; Sanritz Corporation; and Sumika Kowa Tech Co., Ltd.

Evaluation of Environmental Protection Costs and Economic Effects through Environmental Accounting

Sumitomo Chemical continuously gathers and evaluates data on environmental protection-related expenses, investments, and economic results in line with the Company's environmental accounting system introduced in fiscal 2000.

◆ Items Pertaining to Environmental Accounting

(1) Period: April 1, 2022 to March 31, 2023
(2) Boundary: Sumitomo Chemical and 21 major consolidated subsidiaries (16 in Japan and 5 overseas)*
(3) Composition (Classification): Based on Ministry of the Environment (Japan) guidelines
(4) Outline of the results (investment and expenses): Consolidated investment decreased year on year by 5 billion yen, and consolidated expenses increased by 5.6 billion yen.

* Sumitomo Pharma Co., Ltd.; Koei Chemical Co., Ltd.; Taoka Chemical Co., Ltd.; Asahi Chemical Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.; Sumika Color Co., Ltd.; Nihon Medi-Physics Co., Ltd.; Nippon A&L Inc.; SanTerra Co., Ltd.; Sumika-Kakoushi Co., Ltd.; Sumika Agrotech Co, Ltd.; Ceratec Co., Ltd.; SC Environmental Science Co., Ltd.; SN Kasei Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; Sumika Plastech Co., Ltd.; Dongwoo Fine-Chem Co., Ltd.; Sumitomo Chemical Asia Pte Ltd.; The Polyolefin Company (Singapore) Pte. Ltd.; Sumika Technology Co., Ltd.; and Sumika Electronic Materials (Wuxi) Co., Ltd.

■ Environmental Protection Cost

(Billion yen)

Classification		Details of Major Initiatives	FY2021				FY2022			
			Non-Consolidated		Consolidated		Non-Consolidated		Consolidated	
			Investment	Expenses	Investment	Expenses	Investment	Expenses	Investment	Expenses
Facility Area Costs			1.0	20.1	2.5	32.7	4.2	23.8	7.3	36.8
Breakdown	Pollution Prevention Costs	Prevention of air pollution, water pollution, soil contamination, noise pollution, odors, ground subsidence, etc. (pages 8–9)	(0.7)	(14.4)	(1.7)	(19.3)	(1.0)	(17.8)	(3.4)	(23.1)
Breakdown	Global Environmental Protection Costs	Energy saving, prevention of global warming, ozone layer depletion, and other measures (pages 2, 11)	(0)	(0.1)	(0.3)	(3.9)	(0)	(0.3)	(0.4)	(4.3)
Breakdown	Resource Recycling Costs	Resource saving, water saving and rainwater usage, waste reduction/disposal treatment, recycling, etc. (pages 15)	(0.3)	(5.6)	(0.5)	(9.5)	(3.2)	(5.8)	(3.5)	(9.5)
Upstream/ Downstream Costs		Green purchasing, recycling, recovery, remanufacturing and appropriate treatment of products, recycling costs associated with containers and packaging, environmentally friendly products and services, etc.	0	0	0	0.5	0	0.1	0	0.4
Administrative Costs		Costs associated with environmental education, environmental management systems, the monitoring and measuring of the environmental impact of business activities and products, environmental organization operations, etc. (page 21)	0	0.8	0	1.5	0	0.9	0	1.5
R&D Costs		Development of products with attention to environmental safety, research into energy-saving processes, etc.	0	8.0	0	8.2	0.1	9.5	0.1	9.7
Social Activities Costs		Protection of the natural environment and enhancement of its scenic beauty and greenery, support for community initiatives aimed at environmental protection, support for environmental preservation groups, environment-related paid contributions and surcharges, etc.	0	0.5	0	0.8	0	0.4	0	0.9
Environmental Remediation Costs		Environmental rehabilitation of contaminated environments and other environmental damage, reserve funds to cover environmental recovery, etc.	0	0	0	0	0	0	0	0
Total			1.0	29.4	2.5	43.7	4.3	34.7	7.5	49.3

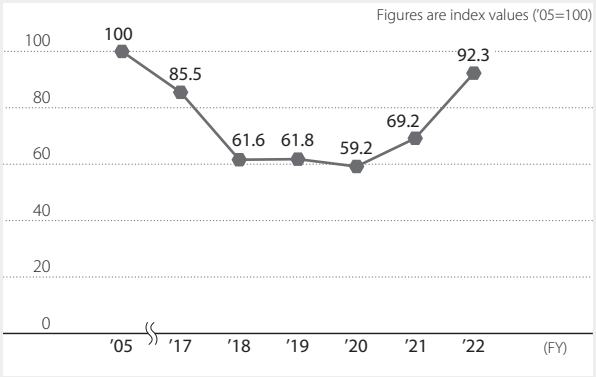
Environmental Activities: Supplementary Data

Economic Effects

(Billion yen)

Results	FY2021		FY2022	
	Non-Consolidated	Consolidated	Non-Consolidated	Consolidated
Reduced costs through energy saving	0.4	0.5	0.1	0.2
Reduced costs through resource saving	0.7	0.9	0.4	0.7
Reduced costs through recycling activities	4.1	4.5	4.0	4.5
Total	5.2	5.9	4.5	5.5

Cost Efficiency of Environmental Protection Measures (Sumitomo Chemical: All Worksites)



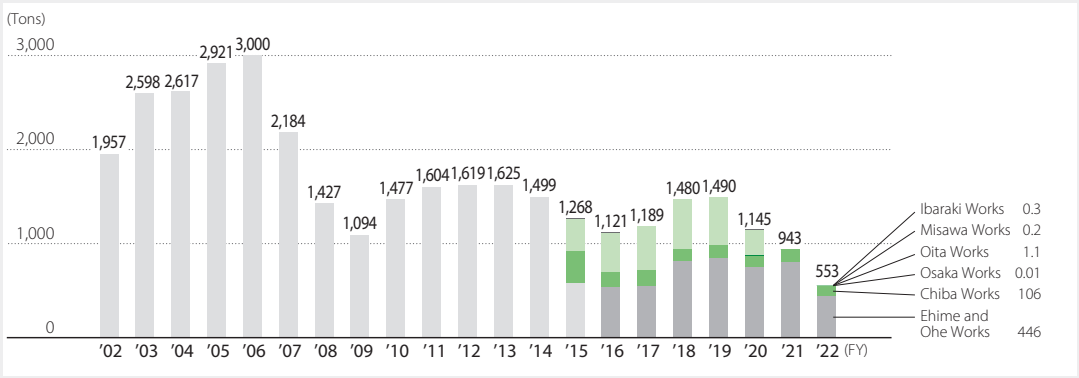
In fiscal 2005, we began implementing measures to improve the cost efficiency of our environmental protection measures by making sure that all activities were as cost effective as possible. We will implement more effective measures by analyzing and studying the breakdown of our environmental protection costs and reviewing each item to determine its importance. We calculate the cost efficiency of our environmental protection as the ratio of annual total production value to total environmental protection costs, in order to better reflect actual production activities in the calculation.

Preventing Pollution: Atmospheric Emissions of SOx, NOx, Soot, and Dust

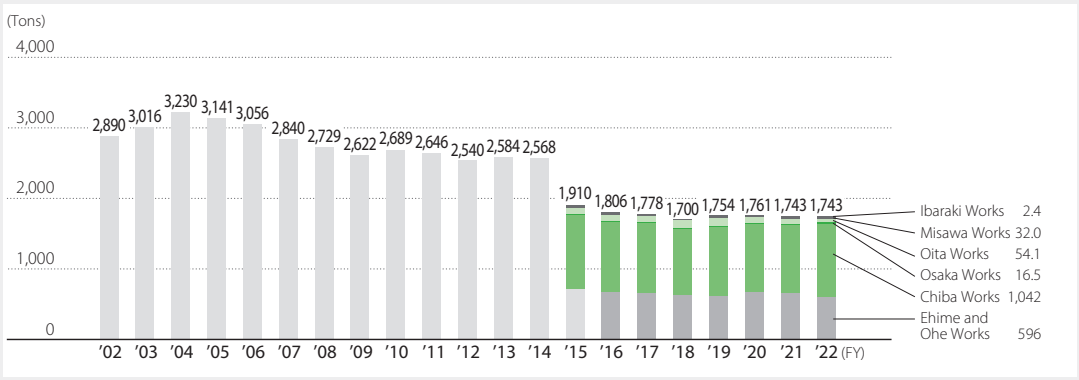
In 1970, Sumitomo Chemical achieved a marked reduction in the release of SOx, NOx, soot, and dust into the atmosphere, and continued to maintain low levels of emissions from 1980 to the present. Furthermore, the Company has concluded cooperative agreements with local municipal governments at each of its Works, establishing voluntary control levels that are stricter than the standards given under applicable laws and regulations.

Note: Data for the Gifu Plant and Okayama Plant from fiscal 2004 to fiscal 2012 is included in Osaka Works.
Data for the Gifu Plant and Okayama Plant from fiscal 2013 is included in Oita Works.

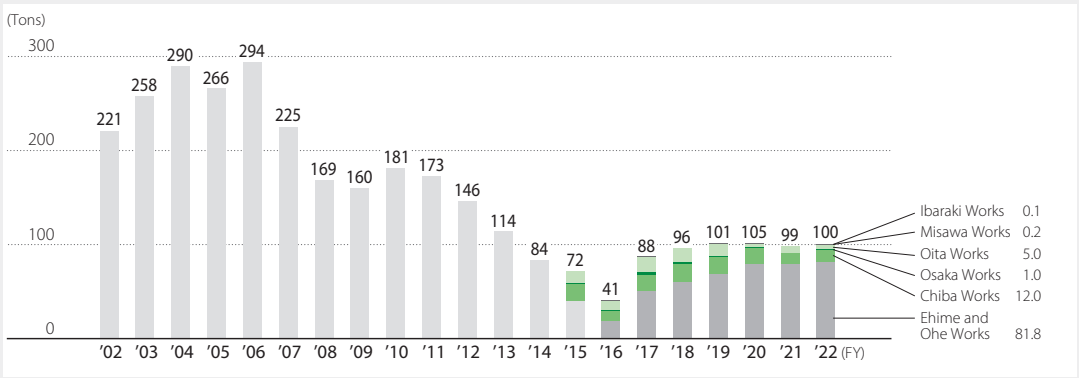
SOx Emissions (Sumitomo Chemical)



NOx Emissions (Sumitomo Chemical)



Soot and Dust Emissions (Sumitomo Chemical)



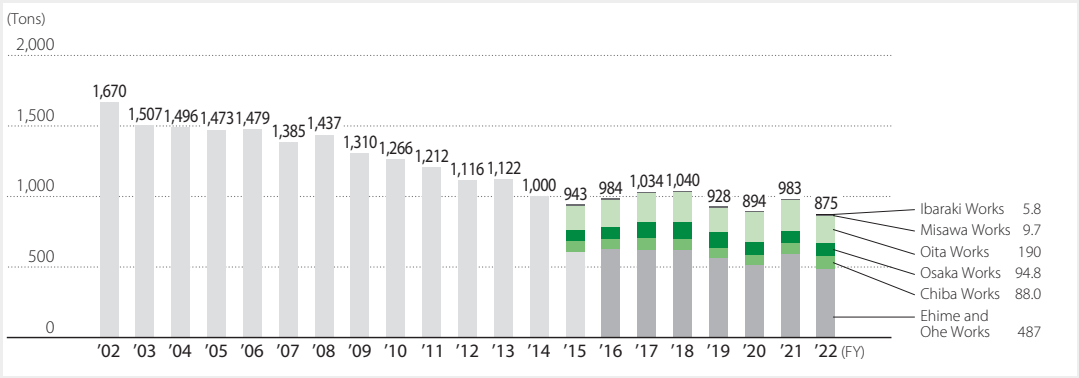
Target	Continue to sustain levels below voluntary control standard values.

Water Emissions of COD, Nitrogen, and Phosphorus

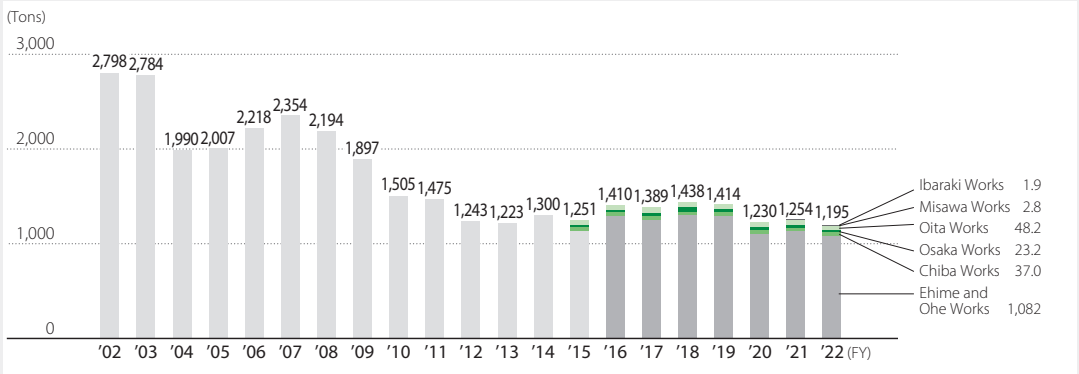
A number of measures have been implemented to cut emissions, in line with fifth-generation Water Quality Standards, and emissions of COD, nitrogen, and phosphorus into waterways have been significantly reduced since fiscal 2004. Sumitomo Chemical has also concluded cooperative agreements with local municipal governments to establish voluntary control levels for COD, nitrogen, and phosphorus released into waterways at each Works. These standards are also stricter than those established under applicable laws and regulations.

Note: Data for the Gifu Plant and Okayama Plant from fiscal 2004 to fiscal 2012 is included in Osaka Works.
Data for the Gifu Plant and Okayama Plant from fiscal 2013 is included in Oita Works.

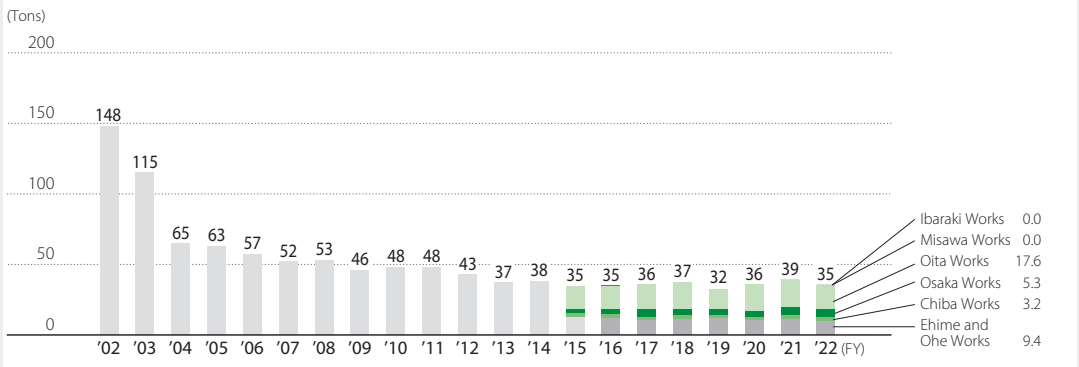
COD Emissions (water emissions include water discharge to sewage systems) (Sumitomo Chemical)



Nitrogen Emissions (Sumitomo Chemical)



Phosphorus Emissions (Sumitomo Chemical)

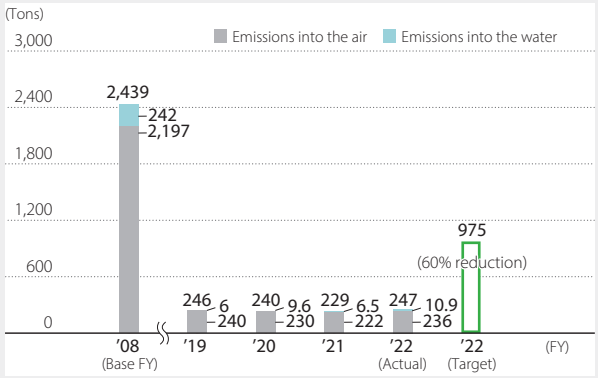


Target	Continue to sustain levels below voluntary control standard values.

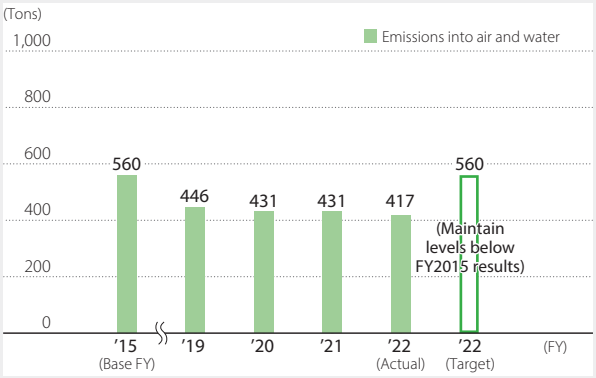
Addressing PRTR and VOCs

Trends in Emissions of Substances Subject to the PRTR Act

Sumitomo Chemical



Sumitomo Chemical and Group Companies in Japan



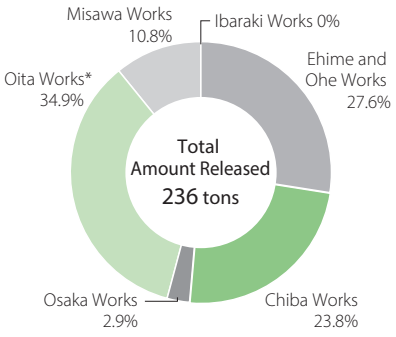
FY2022 Release and Transfer of PRTR Substances (Sumitomo Chemical and Group Companies in Japan)

(Tons)

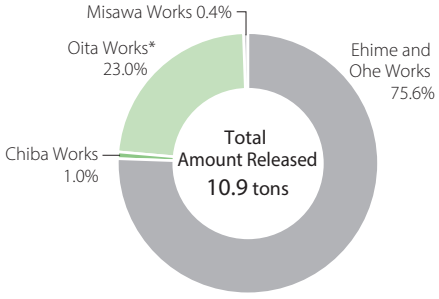
	Released			Transferred		
	Air	Water	Subtotal	Sewage	Waste	Subtotal
PRTR substances						
Sumitomo Chemical (125 substances)	236	10.9	247	4.2	4,479	4,483
Sumitomo Chemical and Group companies in Japan	404	13.3	417	6.7	6,395	6,402

FY2022 PRTR Substances Released by Works (Sumitomo Chemical)

Released into the Air
(PRTR Substances)



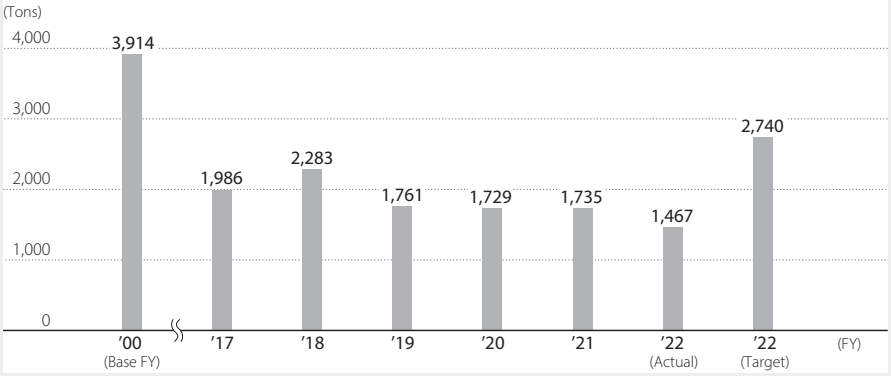
Released into Waterways
(PRTR Substances)



* Data for the Oita Works includes data for the Gifu and Okayama plants.

Target	Reduce the total release of PRTR substances by 60% compared with fiscal 2008 by fiscal 2022
Results	Reduced the total release of PRTR substances to 247 tons, by 89.9%, compared with fiscal 2008 by fiscal 2022, achieving the target.

Initiatives to Reduce Emissions of Volatile Organic Compounds (VOCs) (Sumitomo Chemical)



Target	Maintain a 30% reduction in VOC emissions compared with fiscal 2000.
Results	Reduced emissions by 1,467 tons, or 62.5%, compared with fiscal 2000 by fiscal 2022, achieving the target.

Prevention of Ozone Layer Depletion

Number of Refrigeration Units That Use Specified CFCs and HCFCs as Coolants (Sumitomo Chemical and Group Companies in Japan) as of the End of Fiscal 2022

(Number of Units)

	Sumitomo Chemical	Sumitomo Chemical and Group Companies in Japan
CFC11	5	5
CFC12	1	13
CFC13	0	0
CFC115	2	2
HCFC22	47	246
HCFC123	24	31

Target	• Eliminate the use of refrigeration units that use specified CFCs as coolants by fiscal 2025. • Eliminate the use of refrigeration units that use HCFCs as coolants by fiscal 2045.

Response to the Pollutant Release and Transfer Register Ordinance(Issued on November 21, 2008)

(Tons, Dioxins: mg-TEQ)

No.	Name of Chemical Compound	Amount Released					Amount Transferred		
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
1	Zinc compounds (water-soluble)	0.0	6.2	0.0	0.0	6.2	<0.1	139.7	139.8
2	Acrylic acid and its water-soluble salts	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
3	Methyl acrylate	0.6	0.0	0.0	0.0	0.6	0.0	<0.1	<0.1
4	Acrylonitrile	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
5	Acrolein	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Acetaldehyde	<0.1	<0.1	0.0	0.0	0.1	0.0	0.0	0.0
7	Acetonitrile	3.5	0.0	0.0	0.0	3.5	0.0	64.4	64.4
8	o-Anisidine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	Aniline	0.7	0.0	0.0	0.0	0.7	0.0	28.7	28.7
10	2-Aminoethanol	0.0	0.2	0.0	0.0	0.2	0.0	33.8	33.8
11	m-Aminophenol	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
12	Allyl alcohol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
13	Antimony and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Isobutyraldehyde	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
15	Ethanethiol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	O-ethylO-6-nitro-meta-tolyl-sec-butylphosphoramidothioate (also known as Butamifos)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	O-ethylO-4-nitrophenyl phenylphosphonothioate (also known as EPN)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	2-Ethylhexanoic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	Ethylbenzene	6.1	<0.1	0.0	0.0	6.1	<0.1	64.3	64.4
20	Ethylenediaminetetraacetate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Epichlorohydrin	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
22	1,2-Epoxypropane (also known as propylene oxide)	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
23	Ferric chloride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	Cadmium and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
25	ε-Caprolactam	0.2	0.7	0.0	0.0	0.9	0.0	0.0	0.0
26	Xylene	5.0	<0.1	0.0	0.0	5.1	<0.1	57.1	57.2
27	Quinoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	Cumene	3.2	<0.1	0.0	0.0	3.2	0.0	0.0	0.0
29	Cresol	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0
30	Chromium and chromium(III) compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	Chromium(VI) compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
32	Chloroacetic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	Chlorodifluoromethane (also known as HCFC-22)	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
34	2-chloro-4,6-bis (ethylamino)-1,3,5-triazine (also known as simazine or CAT)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
35	3-Chloropropene (also known as allyl chloride)	1.6	0.0	0.0	0.0	1.6	0.0	17.8	17.8
36	Chlorobenzene	2.8	<0.1	0.0	0.0	2.8	0.0	132.8	132.8
37	Chloroform	0.4	0.0	0.0	0.0	0.4	<0.1	218.4	218.4
38	Cobalt and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Vinyl acetate	14.7	<0.1	0.0	0.0	14.7	0.0	0.0	0.0
40	Salicyl aldehyde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	(RS)-α-Cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropanecarboxylate (also known as fenpropathrin)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	Inorganic cyanide compounds (excluding complex salts and cyanates)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
43	S-4-chlorobenzyl N,N-diethylthiocarbamate (also known as thiobencarb or benthiocarb)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1

(Tons, Dioxins: mg-TEQ)

No.	Name of Chemical Compound	Amount Released					Amount Transferred		
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
44	Tetrachloromethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
45	1,4-Dioxane	<0.1	0.0	0.0	0.0	<0.1	<0.1	134.0	134.0
46	cyclohexa-1-en-1,2-dicarboxyimidemethyl (1RS)-cis-trans-2,2-dimethyl-3-(2-methylprop-1-enyl) cyclopropanecarboxylate (also known as Tetramethrin)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	Cyclohexylamine	0.0	<0.1	0.0	0.0	<0.1	0.0	2.8	2.8
48	1,2-dichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1	<0.1
49	1,1-Dichloroethylene (also known as vinylidene chloride)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
50	Cis-1,2-dichloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
51	Dichlorodifluoromethane (also known as CFC-12)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	2,2-Dichloro-1,1,1- trifluoroethane (also known as HCFC-123)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	1,2-Dichloropropane	0.0	0.0	0.0	0.0	0.0	0.0	426.0	426.0
54	1,3-Dichloropropene (also known as D-D)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
55	Dichlorobenzene	<0.1	0.0	0.0	0.0	<0.1	0.0	104.3	104.3
56	Dichloromethane (also known as methylene chloride)	4.3	0.0	0.0	0.0	4.3	0.0	57.4	57.4
57	Dicyclopentadiene	<0.1	0.0	0.0	0.0	<0.1	0.0	6.8	6.8
58	2,4-Dinitrophenol	0.0	0.0	0.0	0.0	0.0	0.0	34.2	34.2
59	1,3-Diphenylguanidine	0.0	0.4	0.0	0.0	0.4	0.0	8.9	8.9
60	2,6-Di-tert-butyl-4-cresol (also known as BHT)	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
61	N,N-Dimethylacetamide	<0.1	0.0	0.0	0.0	<0.1	0.0	7.9	7.9
62	2,4-dimethylaniline	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
63	N,N-Dimethylaniline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	Dimethylamine	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
65	N,N-Dimethylformamide	<0.1	0.0	0.0	0.0	<0.1	0.0	47.1	47.1
66	Bromine	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
67	Mercury and its compounds	<0.1	0.0	0.0	0.0	<0.1	<0.1	0.0	<0.1
68	Styrene	2.2	0.0	0.0	0.0	2.2	0.0	0.0	0.0
69	Selenium and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
70	Dioxins	<0.1	<0.1	0.0	0.0	<0.1	<0.1	0.0	<0.1
71	O,O-dimethyl O-3-methyl-4-nitrophenyl phosphorothioate (also known as fenitrothion or MEP)	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
72	Tetrachloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
73	Tetramethylthiuram disulfide (also known as thiuram or thiram)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
74	Terephthalic acid	0.0	0.0	0.0	0.0	0.0	0.0	369.8	369.8
75	Water-soluble copper salts (excluding complex salts)	0.0	<0.1	0.0	0.0	<0.1	<0.1	0.5	0.5
76	Triethylamine	0.9	0.2	0.0	0.0	1.1	0.7	30.6	31.3
77	1,1,1-trichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
78	1,1,2-trichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
79	Trichloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
80	2,4,6-Trichloro-1,3,5-triazine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	1,2,3-Trichloropropane	<0.1	0.0	0.0	0.0	<0.1	0.0	18.1	18.1
82	1,2,4-Trimethylbenzene	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0
83	Toluidine	0.0	0.0	0.0	0.0	0.0	0.0	4.2	4.2
84	Toluene	134.0	0.2	0.6	0.0	134.7	0.4	2,265.5	2,265.9
85	Naphthalene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	Lead compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
87	Nickel compounds	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
88	Nitrobenzene	0.6	0.0	0.0	0.0	0.6	0.0	39.9	39.9
89	Vanadium compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	Arsenic and its inorganic compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.1	0.1
91	Hydrazine	0.1	<0.1	0.0	0.0	0.2	0.0	1.1	1.1

(Tons, Dioxins: mg-TEQ)

No.	Name of Chemical Compound	Amount Released					Amount Transferred		
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
92	Hydroquinone	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
93	4-Vinyl-1-cyclohexene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	Biphenyl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	Pyridine	0.2	0.0	0.0	0.0	0.2	0.0	6.6	6.6
96	Phenylenediamine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	1,3-Butadiene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	Bis(2-ethylhexyl)phthalate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	tert-Butyl hydroperoxide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	2-tert-Butyl-5-methylphenol	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
101	Hydrogen fluoride and its water-soluble salts	0.0	0.0	0.0	0.0	0.0	<0.1	0.7	0.8
102	2-Propyn-1-ol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
103	2-Bromopropane	0.6	0.0	0.0	0.0	0.6	0.0	7.4	7.4
104	Hexadecyltrimethylammonium chloride	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
105	n-Hexane	36.3	<0.1	0.0	0.0	36.3	0.0	104.9	104.9
106	Water-soluble salts of peroxydisulfuric acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	Benzyl chloride (also known as benzyl chloride)	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
108	Benzaldehyde	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
109	Benzene	0.3	0.2	0.0	0.0	0.5	<0.1	0.0	<0.1
110	Boron compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
111	Polychlorinated biphenyls (also known as PCBs)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
112	Poly (oxyethylene) alkyl ether (alkyl C=12–15 and its mixture)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	Formaldehyde	0.4	<0.1	0.0	0.0	0.4	2.7	2.8	5.5
114	Manganese and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
115	Phthalic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116	Maleic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
117	Methacrylic acid	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
118	2,3-Epoxypropyl methacrylate	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
119	Methyl methacrylate	8.8	0.0	0.0	0.0	8.8	0.0	40.8	40.8
120	(Z)-2'-Methylacetophenone= 4,6-dimethyl-2-pyrimidinyl hydrazone (also known as Ferimzone)	0.0	2.3	0.0	0.0	2.3	0.0	0.0	0.0
121	Methylamine	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
122	3-Methylthiopropanal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	Methylnaphthalene	1.8	0.0	0.0	0.0	1.8	0.0	0.0	0.0
124	Morpholine	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
125	Triphenyl phosphate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		236	10.9	0.6	0.0	247	4.2	4,484	4,488

Industrial Waste Reduction

PCB Waste (Sumitomo Chemical and Group Companies in Japan)

Storage and Control of High Concentrations of PCB Waste as of the End of Fiscal 2022

	Number of units of PCB waste			Volume of PCBs (kl)
	Total	Storage	Usage	
Sumitomo Chemical	0	0	0	0
Sumitomo Chemical and Group Companies in Japan	0	0	0	0

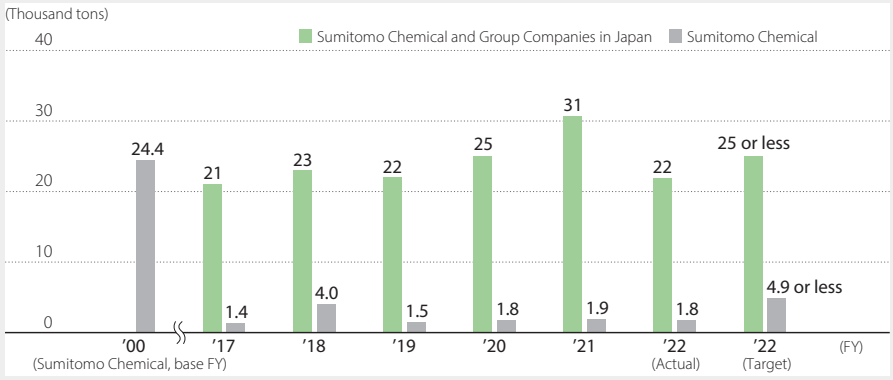
Note: The volume of PCBs does not include minute amounts of PCB waste in the PCB net conversion amount. High concentrations of PCBs in such classes of materials as fluorescent lamps, mercury lamp ballast, and contaminated substances (wastepaper, etc.) fall outside the scope of collation.

Target	Properly collect and store high-concentration PCB-containing waste and complete treatment of this waste at an early date.
Results	Sumitomo Chemical: As of March 31, 2021, the treatment of all high-concentration PCB-containing waste that had been stored and used has been completed. Group companies in Japan: As of March 31, 2022, the treatment of all high-concentration PCB-containing waste that had been stored and used has been completed.

In accordance with the Act on Special Measures against PCB Waste, Sumitomo Chemical properly collects high-concentration polychlorinated biphenyl (PCB)-containing waste.* The Company then stores this industrial waste, which is subject to special controls, in specified areas within the Company's waste storage facilities, subsequently ensuring strict control of this waste. Sumitomo Chemical completed treatment of all of its PCB-containing waste ahead of the legally prescribed deadline.

* Transformers, capacitors, and other electronic devices that contain PCB insulating oil.

Landfill Disposal Amount (Sumitomo Chemical and Group Companies in Japan)



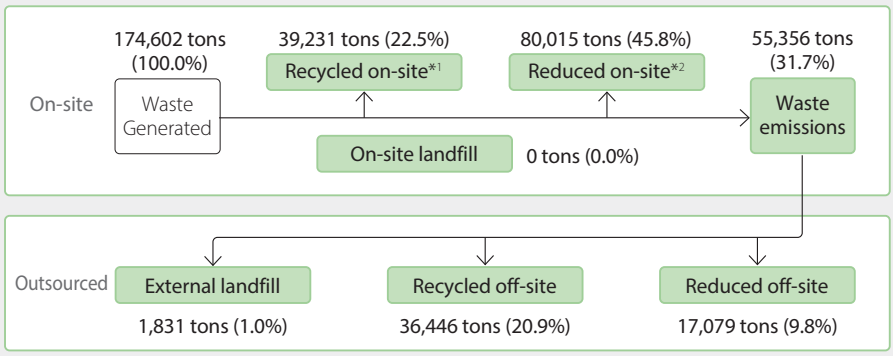
Target	Sumitomo Chemical: Maintain landfill disposal amount of no more than 4.9 thousand tons, 80% less than the fiscal 2000 levels. Sumitomo Chemical and Group Companies in Japan: Maintain landfill disposal amount of no more than 25 thousand tons, less than the fiscal 2020 levels.
Results	Sumitomo Chemical, Sumitomo Chemical and Group companies in Japan all achieved the target.

Digitization of Manifests to Be Prepared Pursuant to the Waste Management and Public Cleansing Act (Sumitomo Chemical)

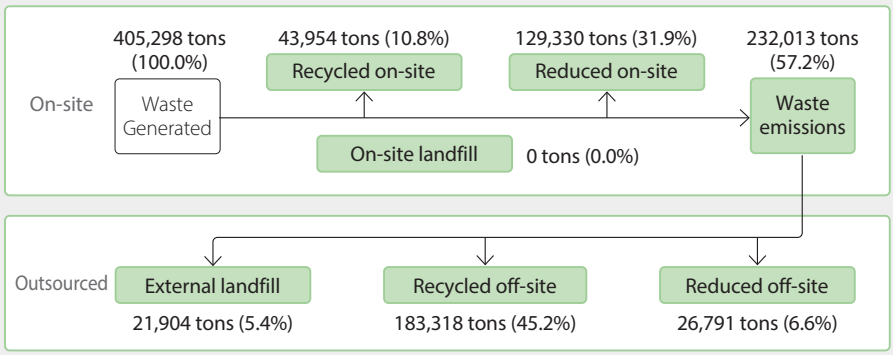
	Number of manifests issued	Number of manifests digitized	Digitization rate (%)
FY2015	18,973	16,337	86
FY2016	19,868	19,594	99
FY2017	19,858	19,585	99
FY2018	20,598	20,355	99
FY2019	19,835	19,726	99
FY2020	20,735	20,675	99
FY2021	23,027	22,961	99
FY2022	22,196	22,179	99

Sumitomo Chemical has been fostering the digitization of manifests to improve operational efficiency and ensure compliance with the law and transparency of data.

Waste Disposal Flow Chart and FY2022 Results (Sumitomo Chemical)



(Sumitomo Chemical and Group Companies in Japan)



Note: The waste amount for Sumitomo Chemical and Group companies in Japan accounts for around 80% of the entire Group total, which includes overseas Group companies.

*1 Recycled waste: Total amount of waste that was reused, recycled, or thermally recycled

*2 Reduced waste: Total amount of waste reduced through incineration, etc.

FY2022 Results by Item in Connection with the Disposal of Waste

(Sumitomo Chemical)

(Tons)

Type	Waste Generated	Recycled on-site		Reduced on-site		Waste emissions	On-site landfill	Reduced off-site	Recycled off-site		External landfill
		Reused, recycled	Thermally recycled	Incineration	Other				Reused, recycled	Thermally recycled	
Burnt residue	5,408.7	0.0	0.0	0.0	0.0	5,408.7	0.0	0.0	4,826.4	0.0	582.3
Sludge	50,395.1	3.4	11,015.5	20,404.6	2,826.9	16,144.8	0.0	2,731.1	11,775.2	1,376.5	262.1
Oil waste	40,794.0	4,508.5	10,913.7	12,396.0	0.0	12,975.8	0.0	4,572.8	7,087.8	1,179.8	135.1
Waste acid	8,491.4	0.0	1.7	5,366.5	1,046.1	2,077.1	0.0	1,801.3	131.4	99.6	44.9
Waste alkali	60,048.0	12,394.6	17.7	24,053.3	12,354.0	11,228.4	0.0	6,480.2	3,365.0	1,244.1	139.1
Waste plastic	5,406.6	0.0	320.8	636.5	0.0	4,449.3	0.0	466.1	3,316.9	270.1	396.2
Waste paper	992.6	0.0	54.8	808.3	0.0	129.4	0.0	9.9	119.4	0.0	0.1
Wood waste	947.3	0.0	0.0	122.7	0.0	824.6	0.0	64.6	518.4	226.7	14.9
Textile waste	14.7	0.0	0.0	0.0	0.0	14.7	0.0	12.5	2.0	0.0	0.2
Animal and plant residues	11.5	0.0	0.0	0.0	0.0	11.5	0.0	11.5	0.0	0.0	0.0
Metal waste	781.5	0.0	0.0	0.3	0.0	781.2	0.0	159.9	604.8	0.0	16.5
Glass and pottery waste	442.5	0.0	0.0	0.0	0.0	442.5	0.0	110.6	262.8	38.8	30.3
Slag	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Debris	842.0	0.0	0.0	0.0	0.0	842.0	0.0	658.8	0.0	0.0	183.2
Soot and dust	26.1	0.0	0.0	0.0	0.0	26.1	0.0	0.0	0.0	0.0	26.1
Total	174,602.1	16,906.4	22,324.2	63,788.2	16,227.0	55,356.1	0.0	17,079.3	32,010.1	4,435.6	1,831.1

(Sumitomo Chemical and Group Companies in Japan)

(Tons)

Type	Waste Generated	Recycled on-site		Reduced on-site		Waste emissions	On-site landfill	Reduced off-site	Recycled off-site		External landfill
		Reused, recycled	Thermally recycled	Incineration	Other				Reused, recycled	Thermally recycled	
Burnt residue	14,195.9	0.0	0.0	0.0	0.0	14,195.9	0.0	0.0	10,816.6	2.5	3,376.8
Sludge	94,228.9	3.4	11,015.5	20,404.6	39,693.7	23,111.8	0.0	6,639.4	13,101.2	1,611.5	1,759.6
Oil waste	48,654.8	4,524.0	15,621.8	12,396.0	0.0	16,113.1	0.0	3,993.6	7,750.9	4,197.3	170.9
Waste acid	10,512.7	0.0	1.7	5,366.5	1,046.1	4,098.4	0.0	3,110.8	329.0	573.6	85.0
Waste alkali	82,340.6	12,394.6	17.7	36,501.3	12,354.0	21,073.0	0.0	10,748.8	7,535.4	2,503.9	284.8
Waste plastic	9,414.7	0.0	320.8	636.5	0.0	8,457.5	0.0	1,116.4	5,569.0	687.7	1,084.4
Waste paper	1,893.5	0.0	54.8	808.3	0.0	1,030.3	0.0	96.3	930.2	0.8	3.1
Wood waste	1,311.1	0.0	0.0	122.7	0.0	1,188.4	0.0	100.0	790.2	279.2	19.1
Textile waste	14.7	0.0	0.0	0.0	0.0	14.7	0.0	12.5	2.0	0.0	0.2
Animal and plant residues	18.6	0.0	0.0	0.0	0.0	18.6	0.0	14.7	0.0	3.8	0.1
Metal waste	875.2	0.0	0.0	0.3	0.0	874.9	0.0	180.8	671.0	1.6	21.6
Glass and pottery waste	485.6	0.0	0.0	0.0	0.0	485.6	0.0	118.3	278.0	40.7	48.4
Slag	114.6	0.0	0.0	0.0	0.0	114.6	0.0	0.0	0.0	0.0	114.6
Debris	1,213.5	0.0	0.0	0.0	0.0	1,213.5	0.0	658.9	0.0	0.0	554.7
Soot and dust	140,023.1	0.0	0.0	0.0	0.0	140,023.1	0.0	0.0	125,642.0	0.0	14,381.1
Total	405,297.6	16,921.9	27,032.3	76,236.2	53,093.8	232,013.3	0.0	26,790.6	173,415.5	9,902.7	21,904.5

FY2022 Categories of Hazardous* and Non-Hazardous Waste

(Sumitomo Chemical)

(Tons)

Type	Waste Generated	Recycled on-site		Reduced on-site		Waste emissions	On-site landfill	Reduced off-site	Recycled off-site		External landfill
		Reused, recycled	Thermally recycled	Incineration	Other				Reused, recycled	Thermally recycled	
Non-Hazardous Waste	65,269	3	11,391	21,972	2,827	29,075	0	4,225	21,426	1,912	1,512
Hazardous Waste	109,334	16,903	10,933	41,816	13,400	26,281	0	12,854	10,584	2,523	319

(Sumitomo Chemical and Group Companies in Japan)

(Tons)

Type	Waste Generated	Recycled on-site		Reduced on-site		Waste emissions	On-site landfill	Reduced off-site	Recycled off-site		External landfill
		Reused, recycled	Thermally recycled	Incineration	Other				Reused, recycled	Thermally recycled	
Non-Hazardous Waste	263,789	3	11,391	21,972	39,694	190,729	0	8,937	157,800	2,628	21,364
Hazardous Waste	141,508	16,919	15,641	54,264	13,400	41,284	0	17,853	15,615	7,275	541

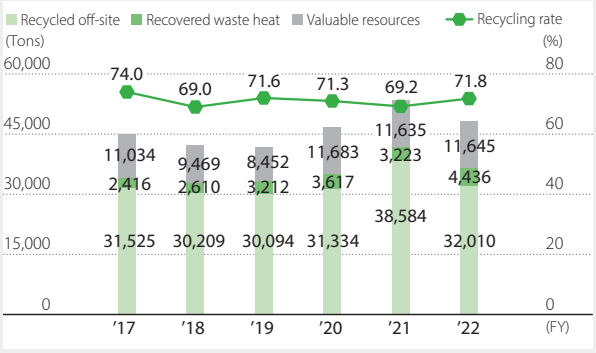
* Waste oil (including waste organic solvents), alkaline waste, acidic waste

Initiatives to Recycle and Reuse Plastic and Other Waste

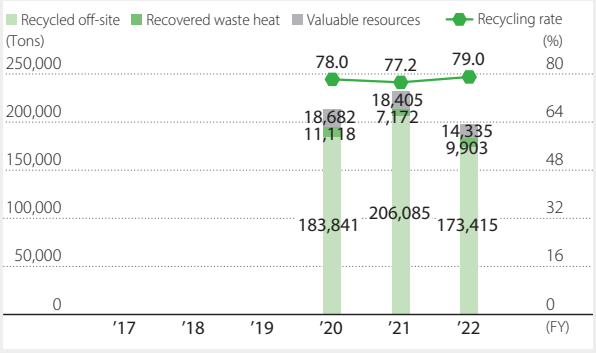
Sumitomo Chemical is proactively working to recycle and reuse plastic and other waste.

Results of Recycling and Reusing Waste (including valuable resources and recovered waste heat)*1

Sumitomo Chemical

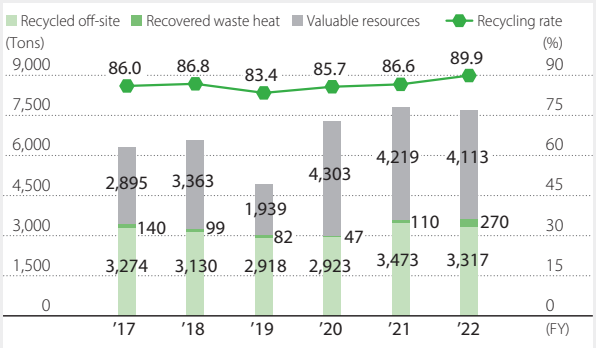


Sumitomo Chemical and Group Companies in Japan

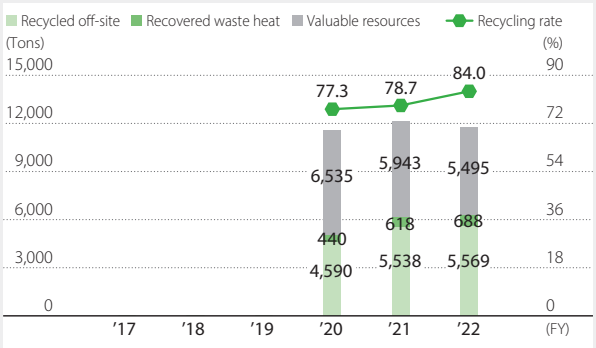


Results of Recycling and Reusing Plastic Waste (including valuable resources and recovered waste heat)*2

Sumitomo Chemical



Sumitomo Chemical and Group Companies in Japan

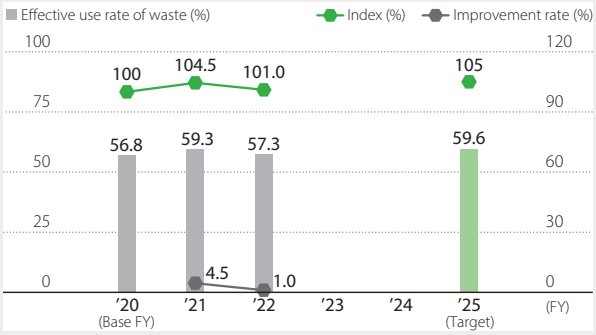


*1 Amount of recycled and reused waste (including valuable resources and recovered waste heat) = amount of externally recycled and reused waste + amount of externally recovered waste heat + amount of valuable resources
Percentage of recycled and reused waste (including valuable resources and recovered waste heat) = (amount of externally recycled and reused waste + amount of externally recovered waste heat + amount of valuable resources)/(amount of emitted waste + amount of valuable resources)

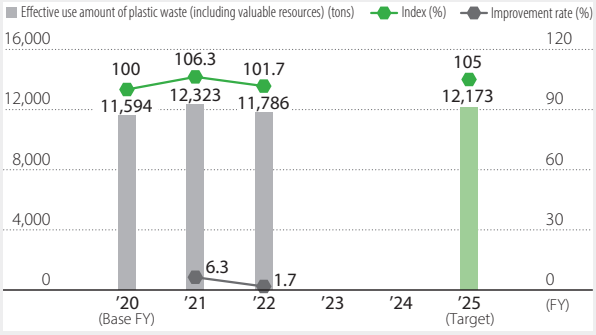
*2 Amount of recycled and reused plastic waste (including valuable resources and recovered waste heat) = amount of externally recycled and reused waste + amount of externally recovered waste heat + amount of valuable resources
Percentage of recycled and reused plastic waste (including valuable resources and recovered waste heat) = (amount of externally recycled and reused waste + amount of externally recovered waste heat + amount of valuable resources)/(amount of emitted waste + amount of valuable resources)

Common Environmental Protection and Management Targets (Japan)

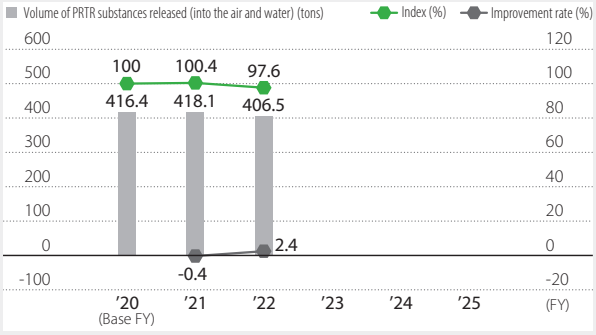
Effective Use Rate of Waste*1 (2020 = 100)



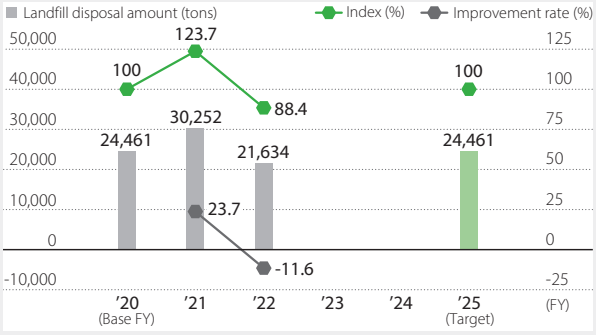
Effective Use Amount of Plastic Waste (including valuable resources)*2 (2020 = 100)



Volume of PRTR Substances Released (into the Air and Water) and PRTR Substance Emissions Indices (2020 = 100)



Landfill Disposal Amount and Landfill Disposal Indices (2020 = 100)



Improve the effective use rate of waste

Target	Improve by 5% or more relative to fiscal 2020 by fiscal 2025.
Results	Improved by 1.0% relative to fiscal 2020 in fiscal 2022, achieving the target.

*1 Effective use rate of waste = {(amount of internally recycled and reused waste + amount of internally recovered waste heat) + (amount of externally recycled and reused waste + amount of externally recovered waste heat)}/amount of waste generated × 100

Improve the effective use amount of plastic waste

Target	Improve by 5% or more relative to fiscal 2020 by fiscal 2025.
Results	Improved by 1.7% relative to fiscal 2020 in fiscal 2022, achieving the target.

*2 Effective use amount of plastic waste (including valuable resources) = (amount of valuable resources) + (amount of internally recycled and reused waste + amount of internally recovered waste heat) + (amount of externally recycled and reused waste + amount of externally recovered waste heat)

Reduction of volume of PRTR substances released

Target	Maintain emissions at or below the fiscal 2020 (target fiscal year: fiscal 2022)*3
Results	Decreased by 2.4% relative to fiscal 2020 in fiscal 2022, achieving the target.

*3 The new target will be set after the PRTR Act is amended in fiscal 2023.

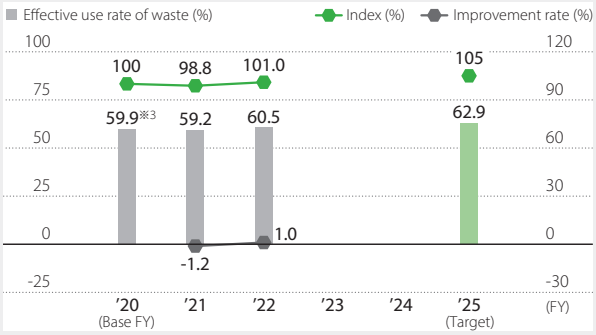
Reduction of landfill disposal amount

Target	Maintain landfill disposal amount at or below fiscal 2020 levels.
Results	The amount in fiscal 2022 decreased by 11.6% compared with fiscal 2020, achieving the target.

Note: **Sumitomo Chemical and the 17 Group companies in Japan listed below are included in the boundary of calculation.**
Sumika-Kakoushi Co., Ltd.; Sumika Color Co., Ltd.; Sumika Plastech Co., Ltd.; Nippon A&L Inc.; Asahi Chemical Co., Ltd.; Ceratec Co., Ltd.; SanTerra Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; Sumika Assembly Techno Co., Ltd.; SC Environmental Science Co., Ltd.; Sumika Agrotech Co., Ltd.; Nihon Medi-Physics Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.; SN Kasei Co., Ltd.; Sumika Polycarbonate Ltd.; Sanritz Corporation; and Sumika Kowa Tech Co., Ltd.

Common Environmental Protection and Management Targets (Overseas)

Effective Use Rate of Waste*1 (2020 = 100)

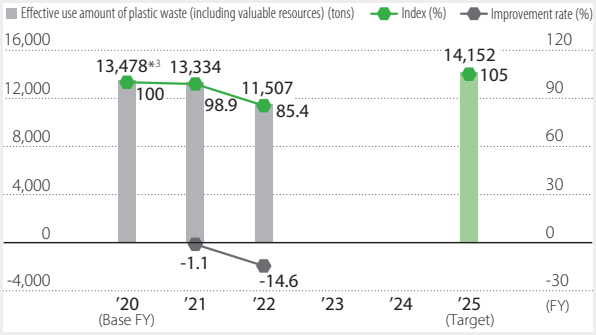


Improve the effective use rate of waste

Target	Improve by 5% or more relative to fiscal 2020 by fiscal 2025.
Results	The rate worsened 1.0% relative to fiscal 2020 in fiscal 2022, failing to achieve the target.

*1 Effective use rate of waste = {(amount of internally recycled and reused waste + amount of internally recovered waste heat) + (amount of externally recycled and reused waste + amount of externally recovered waste heat)}/ amount of waste generated × 100

Effective Use Amount of Plastic waste (including valuable resources)*2 (2020 = 100)

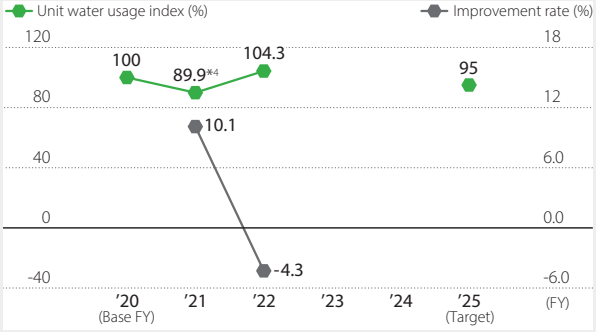


Improve the effective use amount of plastic waste

Target	Improve by 5% or more relative to fiscal 2020 by fiscal 2025.
Results	Worsened 14.6% relative to fiscal 2020 in fiscal 2022, failing to achieve the target.

*2 Effective use amount of plastic waste (including valuable resources) = (amount of valuable resources) + (amount of internally recycled and reused waste + amount of internally recovered waste heat) + (amount of externally recycled and reused waste + amount of externally recovered waste heat)

Unit Water Usage Indices (2020 = 100)



Improvement in Unit Water Usage Indices

Target	Improve unit water usage Indices by at least 1% annually on average.
Results	Worsened by 4.3% relative to fiscal 2020 in fiscal 2022, failing to achieve the target.

Note: **The following 30 Group companies overseas are included in the boundary of calculation:**

Singapore	• The Polyolefin Company (Singapore) Pte.Ltd. • Sumitomo Chemical Asia Pte Ltd (MMA&S-SBR)
Thailand	• Sumipex (Thailand) Co., Ltd. • Bara Chemical Co., Ltd. • Sumika Polymer Compounds (Thailand) Co., Ltd.
Vietnam	• Sumika Electronic Materials Vietnam Co., Ltd.
China	• Dalian Sumika Chemphy Chemical Co., Ltd. • Sumika Electronic Materials (Wuxi) Co., Ltd. • Sumika Electronic Materials (Hefei) Co., Ltd. • Sumika Huabei Electronic Materials (Beijing) Co., Ltd. • Sumika Electronic Materials (Xi'an) Co., Ltd. • Zhuhai Sumika Polymer Compounds Co., Ltd. • Dalian Sumika Jingang Chemicals Co., Ltd. • Sumika Electronic Materials (Changzhou) Co., Ltd. • Xuyou Electronic Materials (Wuxi) Co., Ltd. • Sumika Electronic Materials (Chongqing) Co., Ltd.
Taiwan	• Sumika Technology Co., Ltd. • Sumipex Techsheet Co., Ltd.
India	• Sumika Polymer Compounds India Co., Ltd.
South Korea	• Dongwoo Fine-Chem Co., Ltd. • SSLM Co., Ltd.
Australia	• Botanical Resources Australia Manufacturing Services Pty Ltd. • Botanical Resources Australia Agricultural Services Pty Ltd.
United States	• Sumitomo Chemical Advanced Technologies LLC • McLaughlin Gormley King Company • Valent BioSciences LLC • Sumika Polymer North America LLC
United Kingdom	• Sumika Polymer Compounds UK Co., Ltd.
Turkey	• Sumika Polymer Compounds Turkey Co., Ltd.
France	• Sumika Polymer Compounds France Co., Ltd.

*3 Following a detailed analysis, data for fiscal 2020 was retroactively revised.
*4 Following a detailed analysis, data for fiscal 2021 was retroactively revised.

Environmental Management System

Between 1997 and 2001, ISO 14001:1996 certification was obtained at all Works and continually maintained thereafter. Updated ISO 14001 certification was obtained later and all Works have been inspected on a continual basis to ensure the certification does not expire.

Acquisition of ISO 14001 Certification

1. Sumitomo Chemical (Acquisition Rate: 100%)

Works	Certificate Number	Certification Date
Ehime Works (including Ohe Works)	JCQA-E-0018	April 12, 2025
Chiba Works (including the SCIOCS Chiba Facility)	KHK-97ER, 004	June 25, 2024
Osaka Works	JQA-E-90072	November 27, 2024
Oita Works (Gifu Plant)	JCQA-E-0206	December 24, 2024
Oita Works (Okayama Plant)	JCQA-E-0218	January 21, 2025
Oita Works	JQA-E-90152	March 30, 2025
Misawa Works	JQA-EM0355	December 12, 2025

2. Group Companies In Japan

Companies	Certificate Number	Certification Date
Sumika-Kakoushi Co., Ltd.	JCQA-E-0532	January 12, 2025
Sumika Color Co., Ltd.	JUSE-EG-680	May 8, 2024
Nippon A&L Inc. (Ehime Works)	ISO 14001-0076790	January 3, 2025
Nippon A&L Inc. (Chiba Works)	(KHK-)97ER, 004	June 25, 2024
Asahi Chemical Co., Ltd.	JUSE-EG-717	February 26, 2024
Ceratec Co., Ltd.	JCQA-E-0018	April 12, 2025
Sumika Assembly Techno Co., Ltd.	JCQA-E-0018	April 12, 2025
Sumika Agro Manufacturing Co., Ltd. (Ehime Fertilizers Works)	JCQA-E-0018	April 12, 2025
Sumika Agro Manufacturing Co., Ltd. (Other Works)	13ER, 925	August 5, 2024
Koei Chemical Co., Ltd.	JCQA-E-0969	March 11, 2023
Taoka Chemical Co., Ltd. (Ehime Works)	JCQA-E-0018	April 12, 2025
Taoka Chemical Co., Ltd. (Yodogawa Works)	JQA-EM3938	November 27, 2024
Tanaka Chemical Corporation	4526844	July 25, 2023
Sumitomo Pharma Co., Ltd. (Suzuka Works)	00ER-094	December 21, 2024
Sumitomo Pharma Co., Ltd. (Oita Works)	JQA-E-90152	March 30, 2025
Sumika Polycarbonate Limited	JCQA-E-0436	December 23, 2023
SANRITZ Co., Ltd.	JMAQA-E105	April 26, 2024
Kohwa Chemicals Inc.	EMS 601582	December 26, 2025

3. Overseas Group Companies

Companies	Certificate Number	Certification Date
Bara Chemical Co., Ltd.	24120907002	August 29, 2024
SSLM Co., Ltd.	EAC-06178	May 7, 2024
Sumitomo Chemical India Private Limited (Tarapur plant)	IND.23.5072/IM/U	April 2, 2026
Sumitomo Chemical India Private Limited (Vapi plant)	EMS 740097	March 9, 2024
Sumitomo Chemical India Private Limited (Bhavnaga Plant)	99 104 00704/02	October 10, 2024
Sumitomo Chemical India Private Limited (Gajod Plant)	99 104 00704/03	October 10, 2024
Sumitomo Chemical India Private Limited (Silvassa Plant)	99 104 00704/04	October 10, 2024
Sumitomo Chemical Advanced Technologies LLC	43631-2008-AE-USA-ANAB	June 2, 2023
Sumika Technology Co., Ltd.	EMS 89814	December 26, 2024
Dongwoo Fine-Chem Co., Ltd. (Pyeongtaek)	EAC-06003	July 9, 2024
Dongwoo Fine-Chem Co., Ltd. (Iksan)	KR15/02363	July 14, 2023
Dongwoo Fine-Chem Co., Ltd. (Samki)	KR20/81826429	August 22, 2025
Sumika Electronic Materials (Xi'an) Co., Ltd.	CN15/10718	September 8, 2024
Sumika Huabei Electronic Materials (Beijing) Co., Ltd.	19919E00003ROM	January 3, 2025
Sumika Electronic Materials (Hefei) Co., Ltd.	268157-2018-AE-RGC-RvA	August 24, 2024
Sumika Electronic Materials (Shanghai) Co., Ltd.	11721EU0025-07 R1S	August 21, 2024
Sumika Electronic Materials (Wuxi) Co., Ltd.	64188-2009-AE-RCG-RVA	October 30, 2024
Sumika Electronic Materials (Changzhou) Co., Ltd.	CN20/10228	May 19, 2023
XUYOU Electronic Materials (Wuxi) Co., Ltd.	00220E34370R0M	December 24, 2023
Sumika Electronic Materials (Chongqing) Co., Ltd.	CN15/21719	December 6, 2024
Sumika Polymer Compounds (Thailand) Co., Ltd.	66 104 130035	September 9, 2025
Sumipex (Thailand) Co., Ltd.	TH10/4097	November 30, 2023
Sumitomo Chemical Asia Pte Ltd (MMA plant)	10369744	June 30, 2024
Sumitomo Chemical Asia Pte Ltd (S-SBR plant)	SCS 102718EI	September 8, 2024
The Polyolefin Company (Singapore) Pte. Ltd.	SG05/00847	May 14, 2026
Zhuhai Sumika Polymer Compounds Co., Ltd.	CN13/30779	August 19, 2025
Sumika Polymer Compounds Dalian Co., Ltd.	CN14/10103	March 25, 2026

Note: Surveys are conducted once per year, and the above list is based on the survey results as of March 31, 2023

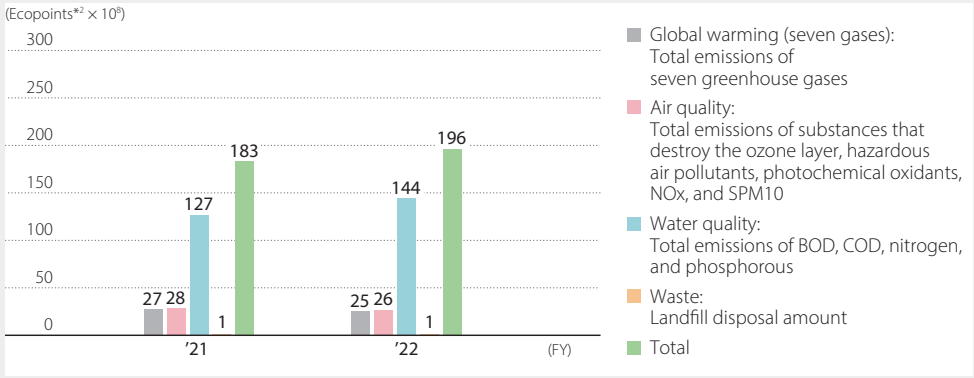
Energy Management System

■ Acquisition of ISO 50001 Certification

Works	Certificate Number	Certification Date
Dongwoo Fine-Chem Co., Ltd. (Pyeongtaek)	EN-0632901	October 13, 2025

Examining the Practical Use of Environmental Efficiency Indicators and Environmental Management Accounting Methods

■ Breakdown of Aggregate Values for Environmental Impact (Sumitomo Chemical) by JEPIX*1



Assessing the Environmental Impact of Each Group Company Using JEPIX

In fiscal 2022, as in the previous fiscal year, we undertook environmental impact assessments using JEPIX, in order to evaluate the effectiveness of this index as a strategic management indicator, and continued with relevant analyses.

Assessing the Environmental Impact of Each Product by LIME*3

For more practical use of LCA*4 data both internally and externally, we use LCA software (MiLCA) from the Japan Environmental Management Association for Industry to undertake environmental impact assessments of our major products using the LIME method.

Trial Evaluation of Material Flow Cost Accounting (MFCA)*5

We are continuing to evaluate the effectiveness of this tool and also are performing examinations for the simplification and standardization of the method and procedures in order to foster their use. MFCA, which focuses on the loss of energy and resources, helps minimize loss and cost and reduces environmental impact.

*1 Environmental Policy Priorities Index for Japan (JEPIX):
This method, which employs a uniform single indicator called "Ecopoints" to evaluate environmental impact, is derived from the Swiss LCIA Eco Scarcity methodology. The current method evaluates the discrepancy between targets (e.g., laws and environmental policies) and actual conditions based on material flow data.

*2 Ecopoints:
An indicator for total environmental impact—the smaller the value, the lower the environmental impact.

*3 Life-cycle Impact assessment Method based on Endpoint modeling (LIME)
A life-cycle impact assessment method developed in Japan as a cornerstone for measuring Japan's environmental conditions.

*4 Life Cycle Assessment (LCA):
A method for evaluating the environmental impact of products and services throughout their life cycles.

*5 Material Flow Cost Accounting (MFCA):
An environmental cost accounting method that identifies input costs of materials, processing, electricity, fuel, and others, and compares them with the energy and resources lost in manufacturing processes.