

1 Addressing Climate Change

Reducing Greenhouse Gas Emissions

■ Greenhouse Gas Emissions (All Seven Gases) (Sumitomo Chemical (All worksites))

(Thousand tons of CO2e)

		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
CO ₂	Energy sources	3,347	2,559	2,405	2,454	2,543	2,722	2,645
	From other than energy use	65	55	50	93	155	142	157
Methane (CH4)		_	_	_	_	_	_	_
Nitrous ox	ride (N2O)	76	65	45	35	23	15	20
Hydrofluo	rocarbon (HFC)	_	_	_	_	_	4	4
Perfluorocarbon (PFC)		_	_	_	_	_	_	_
Sulfur hexafluoride (SF6)		_	_	_	_	_	_	_
Nitrogen trifluoride (NF3)		<u> </u>	_	_	_	_	_	

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



Energy Saving

Sumitomo Chemical Sustainability Data Book 2021

FY2020 Breakdown of Unit Energy Consumption (Sumitomo Chemical)

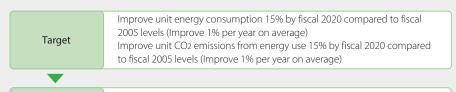
	Energy consumption (1,000 kl in crude oil equivalent) (a)	Production (1,000 tons in ethylene equivalent) (b)	Unit energy consumption (a/b)
Ehime Works	480.2	762.3	0.630
Chiba Works	341.2	380.1	0.898
Osaka Works	22.9	16.2	1.415
Oita Works*	62.1	67.0	0.927
Misawa Works	10.4	9.2	1.127
Ohe Works	33.6	117.8	0.285
Total	950.3	1,352.6	0.703 <85.1% compared with FY2005>

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

■ Energy Consumption and Unit Energy Consumption (Sumitomo Chemical)



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



Results

Energy consumption totaled 950.3 thousand kl in crude oil equivalent in fiscal 2020.

In fiscal 2020, unit energy consumption worsened 2.7% compared with fiscal 2019 and improved 15% compared with fiscal 2005.

Unit CO2 emissions from energy use worsened 2.2% compared with fiscal 2019 and improved 13% compared with fiscal 2005.

■ FY2020 Energy Consumption and CO₂ Emissions (Sumitomo Chemical and Group Companies in Japan (All worksites))

	Energy consumption (1,000 kl in crude oil equivalent)	CO2 emissions from energy use (1,000 tons)
Sumitomo Chemical	963	2 645
Works	950	2,620
Non-manufacturing sites including the Head Offices and Research Laboratories	13	24
Sumitomo Chemical and Group companies in Japan	1,767	5,312
Works	1,737	5,257
Non-manufacturing sites including the Head Offices and Research Laboratories	30	55

 $Notes: \bullet Calculated \ based \ on \ the \ Act \ on \ the \ Rational \ Use \ of \ Energy \ and \ the \ Act \ on \ Promotion \ of \ Global \ Warming \ Countermeasures.$

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

[•] The boundary of calculation covers the same participating companies listed on page 3.



Environmental Activities: Supplementary Data

*: Assured by an independent assurance provider

2 Environmental Protection

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).

■ FY2018-2020 Environmental Performance (Sumitomo Chemical and Group Companies in Japan)

INPUT Energy and Resources



			(IVIIIIOTI LOTIS)
	FY2018	FY2019	FY2020*
Industrial water*1	63.1	63.7	63.4
Drinking water	0.8	0.8	0.8
Seawater	848	918	878
Groundwater*1	28.3	25.3	26.8
Other water	2.4	2.2	2.6
Total*1	943	1,010	972



			(Thousand kl)
	FY2018	FY2019	FY2020*
Fuel, heat, and electricity*2	1,690	1,720	1,767



		(1	nousand tons)
	FY2018	FY2019	FY2020
Hydrocarbon compounds	1,676	1,829	1,704
Metals (excluding minor metals)*3	121	109	90.2
Minor metals*4	13.5	11.2	12.5

PCB/CFCs under Secure Storage

	FY2018	FY2019	FY2020
No. of electrical devices containing high concentrations of PCBs*5	10	13	11
PCB volume (pure equivalent) (kl)*5	0.1	0.1	0.1
No. of refrigeration units using specified CFCs as a coolant	32	32	37
No. of refrigeration units using HCFCs as a coolant	272	260	255

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 128 is as follows for each year.

FY2018: Sumitomo Chemical and Group companies in Japan: 21 companies

FY2019: Sumitomo Chemical and Group companies in Japan: 21 companies

FY2020: Sumitomo Chemical and Group companies in Japan: 22 companies

- *1 At Sumitomo Chemical's Works, it became apparent that some of the industrial water and groundwater withdrawal had not been included in the calculations, so industrial water in fiscal 2019 has been retrospectively revised by 0.2 million tons while groundwater in fiscal 2018 has been revised by 5.6 million tons and in fiscal 2019 by 3.5 million tons. Totals have also been revised accordingly.
- *2 From fiscal 2017, the energy (calculated as kl of crude oil) indices were calculated in accordance with the GHG Protocol (refer to page 225 "Calculation Standards for Environmental and Social Data Indicators").
 - · Having adopted the GHG Protocol standards for our GHG emission disclosures, 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 Group companies in Japan non-production sites 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
- *3 Calculations include the following 12 metals: iron, gold, silver, copper, zinc, aluminum, lead, platinum, titanium, palladium, gallium, and lithium.
- *4 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.
- *5 Fluorescent lamps and mercury lamp ballast as well as contaminated substances (wastepaper, etc.), including PCB waste, are not included in unit and volume data.

Environment



Environmental Activities: Supplementary Data

★: Assured by an independent assurance provider

OUTPUT Product Manufacturing and Environmental Impact



		(T	housand tons)
	FY2018	FY2019	FY2020*
(Calculated on the basis of ethylene production)*1	2,490	2,521	2,526



				(Tons)
		FY2018	FY2019	FY2020★
COD	Coastal waters/waterways	998	887	874
COD	Sewer systems	216	197	168
Dhacabarus	Coastal waters/waterways	35	30.5	34.7
Phosphorus	Sewer systems	5	4.7	4.9
Nitromon	Coastal waters/waterways	1,488	1,457	1,281
Nitrogen	Sewer systems	96	53.3	48.1
Substances	subject to the PRTR Act	13	8.0	11.7



			(IVIIIIOI1 LOI1S)
	FY2018	FY2019	FY2020
Total amount of water discharge	911	980	947

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



	(Thousand tons		
	FY2018	FY2019	FY2020*
Waste emissions*2	244	232	248
Landfill*2	23	22	25.1
(Breakdown)			
On-site landfill	0	0	0
External landfill	23	22	25.1

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 129 is as follows for each year.

FY2018: Sumitomo Chemical and Group companies in Japan: 21 companies

FY2019: Sumitomo Chemical and Group companies in Japan: 21 companies

FY2020: 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



Environmental Activities: Supplementary Data

★: Assured by an independent assurance provider



	(Thousand tons of CO2e		
	FY2018	FY2019	FY2020*
Greenhouse gases (seven gases)*1	5,957	5,962	6,072
Emissions from energy use (CO ₂)	5,172	5,209	5,312
CO2 emissions from other than energy use	684	659	661
N2O	101	89	94
HFC*2	_	4	4
PFC*2	_	_	_
CH4*2		_	_
SF6*2			
NF3*2	_	_	_

(Tons) FY2018 FY2019 FY2020* Others NOx 4,326 4,208 4,359 SOx 5,152 4,621 4,584 Soot and dust 222 211 Substances subject to the PRTR Act*3 458 419

Note: The number of companies included in the boundary of calculation for the environmental performance data on page 130 is as follows for each year.

FY2018: Sumitomo Chemical and Group companies in Japan: 21 companies

FY2019: Sumitomo Chemical and Group companies in Japan: 21 companies

FY2020: Sumitomo Chemical and Group companies in Japan: 22 companies

- *1 From fiscal 2017, the greenhouse gas (all seven gases) indices were calculated using the GHG Protocol for greenhouse gas emissions (refer to page 226 "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: CO2 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); CO2 emissions from energy use attributable to Sumitomo Chemical's non-production sites; and CO2 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 Group companies in Japan non-production sites.
- *2 Outside the scope of reporting under the Act on Promotion of Global Warming Countermeasures.
- *3 Calculated based on the amount released into water/the air of each substance subject to the PRTR Act.

■ Compliance with Environmental Laws and Regulations

	FY2018	FY2019	FY2020		
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 22 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 Limited; Nihon Medi-Physics Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.; Koei Chemical Co., Ltd.; Taoka Chemical Co., Ltd.; Tanaka Chemical Corporation; SCIOCS COMPANY LIMITED; Sumitomo Dainippon Pharma Co., Ltd.; SN Kasei Co., Ltd.; SANRITZ CO., LTD.; and Sumika High-Purity Gas Co., Ltd.

Environment



Environmental Activities: Supplementary Data

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, 2020 to March 31, 2021
- (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 increased year on year by 1.3 billion yen, and consolidated expenses decreased by 0.6 billion yen.

■ Environmental Protection Cost

(Billion ven)

				FY2	019		FY2020				
	Classification	Details of Major Initiatives	Non-Con	solidated	Conso	lidated	Non-Con	solidated	Conso	lidated	
			Investment	Expenses	Investment	Expenses	Investment	Expenses	Investment	Expenses	
Faci	lity Area Costs		0.7	20.4	1.9	32.7	1.0	19.2	3.2	31.2	
Φ.	Pollution Prevention Costs	Prevention of air pollution, water pollution, soil contamination, noise pollution, odors, ground subsidence, etc. (pages 133–134)	(0.5)	(15.2)	(1.3)	(19.6)	(0.6)	(13.8)	(2.3)	(18.1)	
Breakdown	Global Environmental Protection Costs	Energy saving, prevention of global warming, ozone layer depletion, and other measures (pages 127, 136)	(0)	(0.2)	(0.4)	(4.3)	(0)	(0.2)	(0.4)	(4.1)	
Š	Resource Recycling Costs	Resource saving, water saving and rainwater usage, waste reduction/disposal treatment, recycling, etc. (pages 122, 140)	(0.2)	(5.0)	(0.2)	(8.8)	(0.4)	(5.2)	(0.5)	(9.0)	
	tream/ vnstream Costs	Green purchasing, recycling, recovery, remanufacturing and appropriate treatment of products, recycling 0 0 0 0.3 0 costs associated with containers and packaging, environmentally friendly products and services, etc.		0	0	0.4					
Adn	ninistrative Costs	Costs associated with environmental education, environmental management systems, the moni-		1.4	0	0.8	0	1.5			
R&D	Costs	Development of products with attention to environmental safety, research into energy-saving processes, etc. (pages 36–40)	0.1	7.4	0.1	7.5	0.1	8.1	0.1	8.2	
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	0.6	0	0.8	
Environmental Environmental rehabilitation of contaminated environments and other environmental damage, reserve funds to cover environmental recovery, etc.			0	0	0	0	0	0	0	0	
Tota	ıl		0.8	29.1	2.0	42.7	1.1	28.7	3.3	42.1	

^{*} Sumitomo Dainippon 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.; Sumika Co., Ltd.; Ceratec Co., Ltd.; Science Co., Ltd.; Scie 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 $(Singapore)\ Pte.\ Ltd.; Sumika\ Technology\ Co.,\ Ltd.; and\ Sumika\ Electronic\ Materials\ (Wuxi)\ Co.,\ Materials\ (Wuxi)\ Co.,\ Materials\ (Wuxi)\ Co.,\ Materials\ (Wuxi)\ Co.,\ Materials\ (Wu$



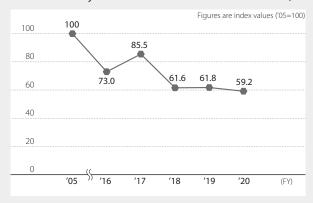
■ Economic Effects

Sumitomo Chemical Sustainability Data Book 2021

(Billion yen)

Results	FY2	019	FY2020		
Results	Non-Consolidated	Consolidated	Non-Consolidated	Consolidated	
Reduced costs through energy saving	0.2	0.3	0.2	0.3	
Reduced costs through resource saving	0.3	0.4	0.4	0.6	
Reduced costs through recycling activities	2.8	3.0	2.4	2.6	
Total	3.3	3.7	3.0	3.5	

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.



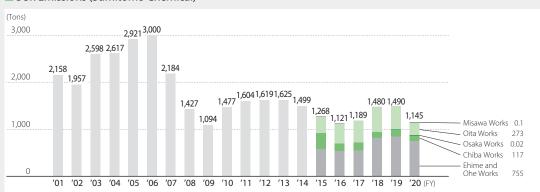
Preventing Pollution: Atmospheric Emissions of SOx, NOx, Soot, and Dust

For a Sustainable Future

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.



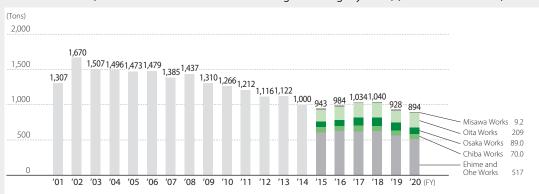
Environmental Activities: Supplementary Data

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.

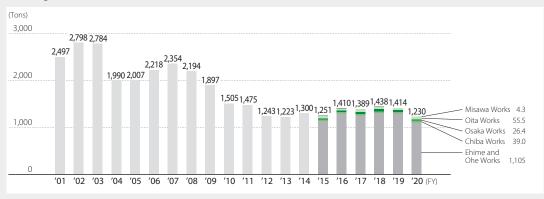
Note: Data for the Gifu Plant and Okayama Plant from fiscal 2004 to fiscal 2012 is included in Osaka Works. Data for the Gifu Plant and Okayama Plant from fiscal 2013 is included in Oita Works.

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

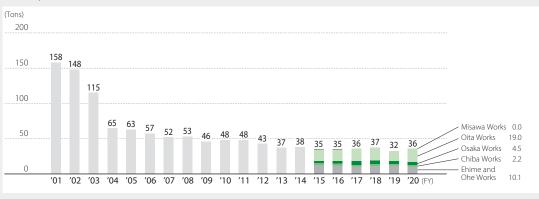




■ Nitrogen Emissions (Sumitomo Chemical)



Phosphorus Emissions (Sumitomo Chemical)



Target Continue to sustain levels below voluntary control standard values.

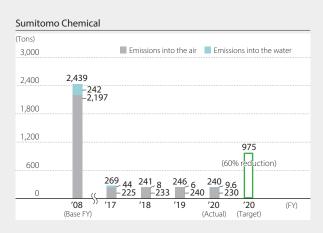


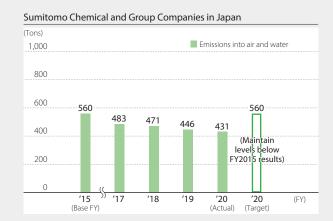
Environmental Activities: Supplementary Data

For a Sustainable Future

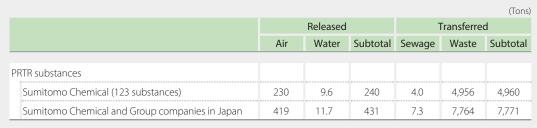
Addressing PRTR and VOCs

■ Trends in Emissions of Substances Subject to the PRTR Act

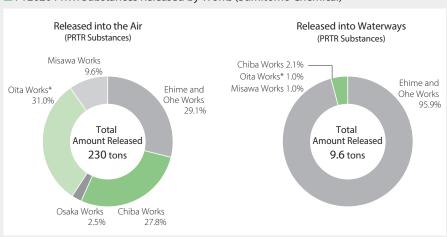




■ FY2020 Release and Transfer of PRTR Substances (Sumitomo Chemical and Group Companies in Japan)



FY2020 PRTR Substances Released by Works (Sumitomo Chemical)



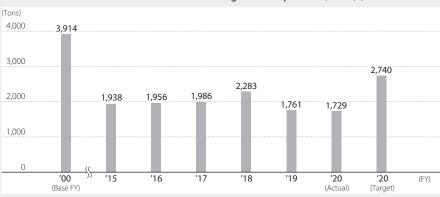
^{*} Data for the Oita Works includes data for the Gifu and Okayama plants.





Environmental Activities: Supplementary Data

■ 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 1,729 tons, or 55.8%, compared with fiscal 2000 by fiscal 2020, 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 2020

(Number of units

	Sumitomo Chemical	Sumitomo Chemical and Group Companies in Japan
CFC11	8	8
CFC12	6	26
CFC13	0	1
CFC115	2	2
HCFC22	71	222
HCFC123	26	33

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: m						s: mg-TEQ)	
No.	Name of Chemical Compound			ount Rele				erred	
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
1	Zinc compounds (water-soluble)	0.0	3.1	0.0	0.0	3.1	<0.1	81.6	81.7
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	0.0	0.0
4	Acrylonitrile	3.9	0.0	0.0	0.0	3.9	0.0	0.0	0.0
5	Acrolein	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
6	Sodium azide	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
7	Acetaldehyde	<0.1	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
8	Acetonitrile	1.1	0.0	0.0	0.0	1.1	0.0	39.4	39.4
9	o-Anisidine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	Aniline	0.7	0.0	0.0	0.0	0.7	0.0	6.9	6.9
11	2-Aminoethanol	<0.1	0.2	0.0	0.0	0.2	0.0	28.2	28.2
12	5-amino-1-[2,6-dichloro-4-(trifluoromethyl) phenyl]-3-cyano -4-[(trifluoromethyl) sulfinyl]pyrazole (also known as fipronil)	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
13	m-Aminophenol	0.0	<0.1	0.0	0.0	<0.1	0.0	11.7	11.7
14	Allyl alcohol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
15	Antimony and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Isobutyraldehyde	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
17	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
18	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
19	Ethylbenzene	3.4	<0.1	0.0	0.0	3.4	0.1	17.0	17.1
20	Epichlorohydrin	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
21	1,2-Epoxypropane (also known as propylene oxide)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	Cadmium and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
23	ε-Caprolactam	0.2	1.5	0.0	0.0	1.7	0.0	0.0	0.0
24	Xylene	3.0	<0.1	0.0	0.0	3.0	0.1	20.0	20.1
25	Quinoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	Cumene	9.1	<0.1	0.0	0.0	9.1	0.0	0.0	0.0
27	Cresol	0.2	0.0	0.0	0.0	0.2	0.0	<0.1	<0.1
28	Chromium and chromium(III) compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
29	Chromium(VI) compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
30	Chloroacetic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	Chlorodifluoromethane (also known as HCFC-22)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	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
33	3-Chloropropene (also known as allyl chloride)	1.6	0.0	0.0	0.0	1.6	0.0	17.8	17.8
34	Chlorobenzene	4.6	<0.1	0.0	0.0	4.6	0.0	158.5	158.5
35	Chloroform	<0.1	0.0	0.0	0.0	<0.1	0.0	266.4	266.4
36	Cobalt and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Vinyl acetate	37.2	<0.1	0.0	0.0	37.2	0.0	0.0	0.0
38	Salicyl aldehyde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	(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
40	Inorganic cyanide compounds (excluding complex salts and cyanates)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1



Environmental Activities: Supplementary Data

			Amo	ount Rele	eased			ons, Dioxin unt Trans	is: mg-TEQ) ferred
No.	Name of Chemical Compound	Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
41	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
42	Tetrachloromethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
43	1,4-Dioxane	<0.1	0.0	0.0	0.0	<0.1	<0.1	129.0	129.0
44	Cyclohexylamine	0.0	<0.1	0.0	0.0	<0.1	0.0	1.1	1.1
45	1,2-dichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1	<0.1
46	1,1-Dichloroethylene (also known as vinylidene chloride)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
47	Cis-1,2-dichloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
48	2,2-Dichloro-1,1,1- trifluoroethane (also known as HCFC-123)	1.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0
49	1,2-Dichloropropane	0.0	0.0	0.0	0.0	0.0	0.0	426.0	426.0
50	1,3-Dichloropropene (also known as D-D)	0.4	0.0	0.0	0.0	0.4	<0.1	71.0	71.0
51	Dichlorobenzene	0.0	0.0	0.0	0.0	0.0	0.0	82.0	82.0
52	Dichloromethane (also known as methylene chloride)	2.4	0.0	0.0	0.0	2.4	0.0	47.7	47.7
53	Dicyclopentadiene	<0.1	0.0	0.0	0.0	<0.1	0.0	5.9	5.9
54	O,O-dimethyl S-(N-methylcarbamoyl)methyl phosphorodithioate (also known as dimethoate)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	2,4-Dinitrophenol	0.0	0.0	0.0	0.0	0.0	0.0	27.5	27.5
56	1,3-Diphenylguanidine	0.0	0.3	0.0	0.0	0.3	0.0	7.5	7.5
57	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
58	2,4-Di-tert-butylphenol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
59	N,N-Dimethylacetamide	0.0	0.0	0.0	0.0	0.0	0.0	9.5	9.5
60	2,4-dimethylaniline	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6
61	N,N-Dimethylaniline	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
62	Dimethylamine	0.0	<0.1	0.0	0.0	<0.1	0.0	2.2	2.2
63	N,N-Dimethylformamide	0.2	<0.1	0.0	0.0	0.2	0.0	230.8	230.8
64	Mercury and its compounds	<0.1	0.0	0.0	0.0	<0.1	<0.1	0.0	<0.1
65	Styrene	2.0	0.0	0.0	0.0	2.0	0.0	0.4	0.4
66	Selenium and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
67	Dioxins	<0.1	<0.1	0.0	0.0	<0.1	<0.1	<0.1	<0.1
68	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	1.1	1.1
	Tetrachloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
70	Tetramethylthiuram disulfide (also known as thiuram or thiram)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
71	Terephthalic acid	0.0	0.0	0.0	0.0	0.0	0.0	415.8	415.8
72	Water-soluble copper salts (excluding complex salts)	0.0	<0.1	0.0	0.0	<0.1	<0.1	0.0	<0.1
73	Triethylamine	0.6	0.4	0.0	0.0	1.0	0.5	57.6	58.1
74	1,1,1-trichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
75	1,1,2-trichloroethane	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
	Trichloroethylene	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
	2,4,6-Trichloro-1,3,5-triazine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	Trichlorofluoromethane (also known as CFC-11)	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
79	1,2,3-Trichloropropane	<0.1	0.0	0.0	0.0	<0.1	0.0	2.2	2.2
80	1,2,4-Trimethylbenzene	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0
81	Toluidine	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
82	Toluene	119.3	0.1	0.0	0.0	119.4	0.3	2,445.3	2,445.6
83	Naphthalene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Environmental Activities: Supplementary Data

			Amo		(Tons, Dioxins: mg-TEQ) Amount Transferred				
No.	Name of Chemical Compound	Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
0.4	Load compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
	Lead compounds	0.0	0.0	0.0	0.0				<0.1
	Nickel compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
	Nitrobenzene	0.5	3.5	0.0	0.0	4.1	0.0	32.1	32.1
	Vanadium compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Arsenic and its inorganic compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
	Hydrazine	<0.1	<0.1	0.0	0.0	<0.1	0.0	12.5	12.5
	Hydroquinone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4-Vinyl-1-cyclohexene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Biphenyl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pyridine	0.0	<0.1	0.0	0.0	<0.1	0.0	0.5	0.5
	Phenylenediamine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1,3-Butadiene	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
	Bis(2-ethylhexyl)phthalate	0.0	0.0	0.0	0.0	0.0	0.0	5.2	5.2
	tert-Butyl hydroperoxide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-tert-Butyl-5-methylphenol	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
99	Hydrogen fluoride and its water-soluble salts	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
	2-Propyn-1-ol	<0.1	0.0	0.0	0.0	<0.1	0.0	94.8	94.8
101	Hexadecyltrimethylammonium chloride	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
102	n-Hexane	21.8	<0.1	0.0	0.0	21.9	0.0	145.1	145.1
103	Water-soluble salts of peroxydisulfuric acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104	Benzyl chloride	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
105	Benzaldehyde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	Benzene	0.3	0.1	0.0	0.0	0.4	<0.1	0.0	<0.1
107	Boron compounds	0.0	0.0	0.0	0.0	0.0	<0.1	1.2	1.2
108	Polychlorinated biphenyls (also known as PCBs)	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
109	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
110	Formaldehyde	<0.1	<0.1	0.0	0.0	<0.1	2.4	14.5	16.9
111	Manganese and its compounds	0.0	0.0	0.0	0.0	0.0	<0.1	0.0	<0.1
112	Phthalic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113	Maleic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	Methacrylic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	2,3-Epoxypropyl methacrylate	1.8	0.0	0.0	0.0	1.8	0.0	0.0	0.0
116	Methyl methacrylate	8.7	0.0	0.0	0.0	8.7	0.0	33.4	33.4
117	(Z)-2'-Methylacetophenone= 4,6-dimethyl-2-pyrimidinyl hydrazone (also known as Ferimzone)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118	Methylamine	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
119	3-Methylthiopropanal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	Methylnaphthalene	2.5	0.0	0.0	0.0	2.5	0.0	0.0	0.0
121	Molybdenum and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122	Morpholine	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
123	Triphenyl phosphate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tota		230	9.6	0.0	0.0	240	4.0	4,956	4,960



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 2020

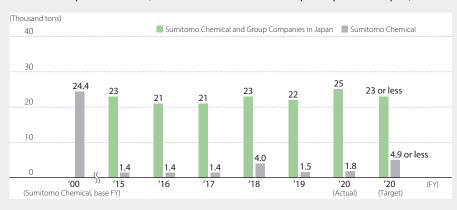
	Number	Volume of		
	Total	Storage	Usage	PCBs (kl)
	_		_	_
Sumitomo Chemical	0	0	0	0
Sumitomo Chemical and Group Companies in Japan	11	0	11	0.1

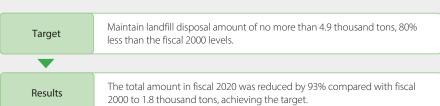
Note: The volume of PCBs does not include minute amounts of PCB waste in the PCB net conversion amount. High concentrations of PCBs in such classes of materials as fluorescent lamps, mercury lamp ballast, and contaminated substances (wastepaper, etc.) fall outside the scope of collation.

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

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.

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





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





Environmental Activities: Supplementary Data

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

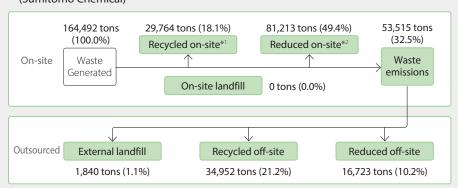
	Number of manifests issued	Number of manifests digitized	Digitization rate (%)
FY2014	18,662	14,930	80
FY2015	18,973	16,337	86
FY2016	19,868	19,594	99
FY2017	19,858	19,585	99
FY2018	20,598	20,355	99
FY2019	19,835	19,726	99
FY2020	20,735	20,675	99

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

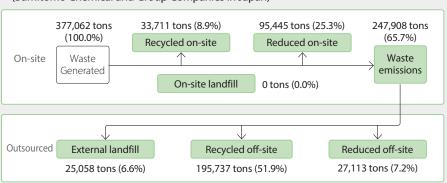


Environmental Activities: Supplementary Data

■ Waste Disposal Flow Chart and FY2020 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.

■ List of FY2020 Results by Item in connection with the Disposal of Waste (Sumitomo Chemical)

											(Tons)
	14 / /	Recycle	d on-site	Reduced	d on-site	NA (,	0		Recycle	d off-site	F
Туре	Waste Generated	Reused, recycled	Thermally recycled	Incineration	Other	Waste emissions	On-site landfill	Reduced off-site	Reused, recycled	Thermally recycled	External landfill
Burnt residue	5,284.5					5,284.5			4,885.8		398.7
Sludge	48,671.4		10,468.1	21,348.7	2,835.7	14,018.9		3,495.1	10,315.8	1.9	206.2
Oil waste	42,811.0	3,791.7	12,567.3	12,553.4		13,898.6		5,505.0	6,382.7	1,935.5	75.6
Waste acid	8,458.8		0.9	6,311.4	582.7	1,563.8		1,430.8	120.4		12.6
Waste alkali	49,902.0	2,590.9	22.4	35,810.9		11,477.8		4,939.2	5,131.5	1,235.3	171.9
Waste plastic	5,294.7		273.4	837.0		4,184.3		421.6	2,923.2	46.9	636.4
Waste paper	975.3		47.0	834.0		94.3		25.8	68.4		0.1
Wood waste	1,020.7			93.0		927.7		48.1	462.0	397.9	19.7
Textile waste	13.7					13.7		11.7	2.1		
Animal and plant residues	12.8					12.8		12.8			
Metal waste	701.6			6.5		695.1		155.3	681.1		14.9
Glass and pottery waste	507.6					507.6		84.2	361.3	0.0	62.1
Slag											
Debris	799.6					799.6		581.4			218.2
Soot and dust	38.6		2.7			35.9		12.0			23.9
Total	164,492.3	6,382.6	23,381.8	77,794.9	3,418.4	53,514.6	0.0	16,723.0	31,334.3	3,617.5	1,840.3



Environmental Activities: Supplementary Data

■ Categories of Hazardous* and Non-Hazardous Waste (Sumitomo Chemical)

(Tons)

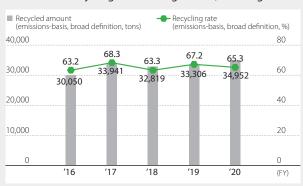
	\\/+-	Recycle	d on-site	Reduced	d on-site	\\/+-	On site	On site	On site	0 "	0 "	Reduced	Recycle	Recycled off-site	
Туре	Waste Generated	Reused, recycled	Thermally recycled	Incineration	Other	Waste emissions	On-site landfill	off-site	Reused, recycled	Thermally recycled	External landfill				
Non-Hazardous Waste	63,320	0	10,791	23,119	2,836	26,574	0	4,848	19,700	447	1,580				
Hazardous Waste	101,172	6,383	12,591	54,676	583	26,940	0	11,875	11,635	3,171	260				

 $^{^{*}}$ 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 heat recovery)*1



■ Results of Recycling and Reusing Plastic Waste (including heat recovery)*1,2



^{*1} Recycling and reuse of plastic and other waste is calculated based on waste emissions.

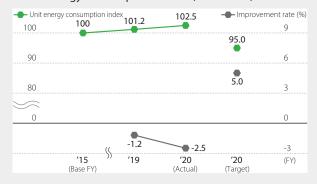
^{*2} Figures for the emission, recycling and reuse of plastic waste are also included in figures for the emission, recycling and reuse of general waste.



Sharing Environmental Protection and Management Targets (Japan)

For a Sustainable Future

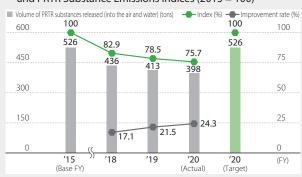
■ Unit Energy Consumption Indices (2015 = 100)



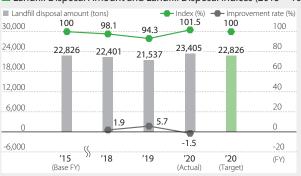
■ Unit CO₂ Emissions from Energy Use Indices (2015 = 100)



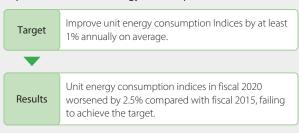
■ Volume of PRTR Substances Released (into the Air and Water) and PRTR Substance Emissions Indices (2015 = 100)



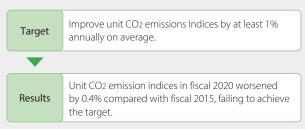
■ Landfill Disposal Amount and Landfill Disposal Indices (2015 = 100)



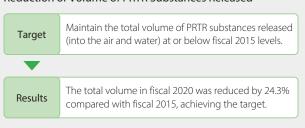
Improvement in Unit Energy Consumption Indices



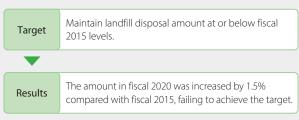
Improvement in Unit CO₂ Emissions from Energy Use Indices



Reduction of Volume of PRTR Substances Released



Reduction of landfill disposal amount



Note: Sumitomo Chemical and the 13 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.; Sumika Assembly Techno Co., Ltd.; SanTerra Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; SC Environmental Science Co., Ltd.; Sumika Agrotech Co., Ltd.; Nihon Medi-Physics Co., Ltd.; Sumitomo Joint Electric Power Co., Ltd.

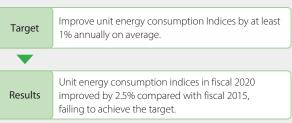


Sharing Environmental Protection and Management Targets (Overseas)

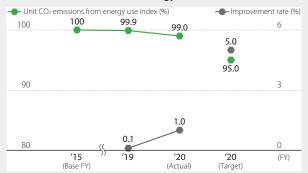
■ Unit Energy Consumption Indices (2015 = 100)



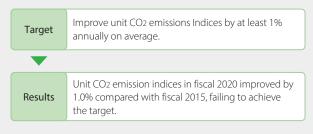
Improvement in Unit Energy Consumption Indices



■ Unit CO₂ Emissions from Energy Use Indices (2015 = 100)



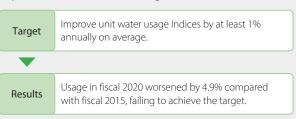
Improvement in Unit CO2 Emissions from **Energy Use Indices**



■ Unit Water Usage Indices (2015 = 100)



Improvement in Unit Water Usage Indices



Note: The following 20 Group companies overseas are included in the boundary of calculation:

• The Polyolefin Company (Singapore) Pte. Ltd. • Sumitomo Chemical Asia Pte Ltd Thailand • Sumipex (Thailand) Co., Ltd. • Bara Chemical Co., Ltd. • Sumika Polymer Compounds (Thailand) Co., Ltd. China • Dalian Sumika Chemphy Chemical Co., Ltd. • Sumika Electronic Materials (Wuxi) Co., Ltd.

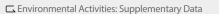
• Sumika Electronic Materials (Hefei) Co., Ltd. • Sumika Huabei Electronic Materials (Beijing) Co., Ltd.

• Sumika Electronic Materials (Shanghai) Co., Ltd. • Sumika Electronic Materials (Xi'an) Co., Ltd. • Sumika Polymer Compounds Dalian Co., Ltd. • Zhuhai Sumika Polymer Compounds Co., Ltd.

• Dalian Sumika Jingang Chemicals Co., Ltd.

• Sumika Technology Co., Ltd. • Sumipex Techsheet Co., Ltd. Taiwan

India • Sumitomo Chemical India Private Limited • Dongwoo Fine-Chem Co., Ltd. • SSLM Co., Ltd. United States • Sumitomo Chemical Advanced Technologies LLC





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, 2022
Chiba Works (including the SCIOCS Chiba Facility)	KHK-97ER, 004	December 25, 2021
Osaka Works	JQA-E-90072	November 27, 2021
Oita Works (Gifu Plant)	JCQA-E-0206	December 24, 2021
Oita Works (Okayama Plant)	JCQA-E-0218	January 21, 2022
Oita Works	JQA-E-90152	March 30, 2022
Misawa Works	JQA-EM0355	December 12, 2022

2. Group Companies In Japan

Companies	Certificate Number	Certification Date
Sumika-Kakoushi Co., Ltd.	JCQA-E-0532	January 12, 2022
Sumika Color Co., Ltd.	JUSE-EG-680	May 8, 2024
Nippon A&L Inc.	10157569	January 3, 2022
Asahi Chemical Co., Ltd.	JUSE-EG-717	February 26, 2024
Ceratec Co., Ltd.	JCQA-E-0018	April 12, 2022
Sumika Assembly Techno Co., Ltd	JCQA-E-0018	April 12, 2022
Sumika Agro Manufacturing Co., Ltd.	13ER, 925	August 5, 2021
Koei Chemical Co., Ltd.	JCQA-E-0969	March 11, 2023
Taoka Chemical Co., Ltd.	JQA-EM3938	November 27, 2021
Tanaka Chemical Corporation	4526844	July 25, 2023
SCIOCS COMPANY LIMITED	EC15J0024	March 24, 2024
Sumitomo Dainippon Pharma Co., Ltd. (Suzuka Works)	00ER-094	December 21, 2021
Sumitomo Dainippon Pharma Co., Ltd. (Oita Works)	JQA-E-90152	March 30, 2022

3. Overseas Group Companies

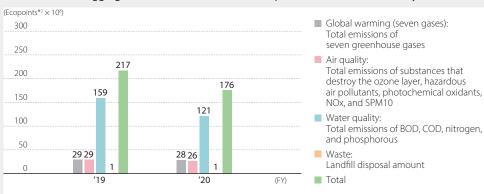
Companies	Certificate Number	Certification Date
BARA CHEMICAL CO., LTD.	24120907002	August 29, 2021
SSLM CO., LTD.	EAC-06178	May 7, 2021
SUMITOMO CHEMICAL INDIA PRIVATE LIMITED (ECC)	99 104 00704/02	December 26, 2021
SUMITOMO CHEMICAL INDIA PRIVATE LIMITED (SCIL)	IND.20.3082/IM/U	April 2, 2023
SUMITOMO CHEMICAL ADVANCED TECHNOLOGIES LLC	43631-2008-AE-USA-ANAB	June 2, 2023
SUMIKA TECHNOLOGY CO., LTD.	EMS 89814	December 26, 2021
Dongwoo Fine-Chem Co., Ltd. (Pyongtaek)	EAC-06003	July 9, 2021
Dongwoo Fine-Chem Co., Ltd. (Iksan)	KR15/02363	July 14, 2023
Dongwoo Fine-Chem Co., Ltd. (Samki)	KR20/81826429	August 22, 2022
SUMIKA ELECTRONIC MATERIALS (XI'AN) CO., LTD.	CN15/10718	November 21, 2021
SUMIKA HUABEI ELECTRONIC MATERIALS (BEIJING) CO., LTD.	19919E00003ROM	January 3, 2022
SUMIKA ELECTRONIC MATERIALS (HEFEI) CO., LTD.	268157-2018-AE-RGC-RvA	August 24, 2021
SUMIKA ELECTRONIC MATERIALS (SHANGHAI) CO., LTD.	11718EU0067-08 ROS	June 22, 2021
SUMIKA ELECTRONIC MATERIALS (WUXI) CO., LTD.	64188-2009-AE-RCG-RVA	October 30, 2021
SUMIKA POLYMER COMPOUND (THAILAND) CO., LTD.	66 104 130035	September 10, 2022
SUMIPEX (THAILAND) CO., LTD.	TH10/4097	November 30, 2023
Sumitomo Chemical Asia Pte Ltd (MMA plant)	10105637	June 30, 2021
Sumitomo Chemical Asia Pte Ltd (S-SBR plant)	ISO14001-0052710	June 30, 2021
THE POLYOLEFIN COMPANY (SINGAPORE) PTE. LTD.	N°CN/16164E	September 8, 2021
ZHUHAI SUMIKA POLYMER COMPOUNDS CO., LTD.	CN13/30779	August 19, 2022
SUMIKA POLYMER COMPOUNDS DALIAN CO., LTD.	CN14/10103	March 25, 2023

Note: Surveys are conducted once per year, and the above list is based on the survey results as of March 31, 2021

Environmental Activities: Supplementary Data

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 2020, 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.