Responsible Care Activities, Supplementary Data

1. Responsible Care Management

▶ Environmental Management System (ISO14001)

◆ Acquisition of ISO14001 Certification (Sumitomo Chemical (Target: All Works))

Works and Certificate Number	Certification Date	
	ISO14001:1996	ISO14001:2004
Ehime Works (including Ohe Works) [JCQA-E-018]	April 1998	April 2006
Chiba Works [KHK-97ER-04]	June 1997	March 2006
Osaka Works [JQA-E-90072]	November 1997	January 2006
Oita Works (Gifu Plant) [JCQA-E-0206]	December 2000	December 2005
Oita Works (Okayama Plant) [JCQA-E-0218]	January 2001	February 2006
Oita Works [JQA-E-90152]	March 1998	April 2006
Misawa Works [JQA-EM0355]	March 1999	February 2006

ISO14001:1996 certification was obtained at all Works between 1997 and 2001. From 2005 to 2006, these Works took steps to undergo transitional inspections and obtained certification for ISO14001:2004, the revised version of ISO14001:1996.

▶ Quality Management System (ISO9001)

◆ Acquisition of ISO9000 Series Certification (Sumitomo Chemical (Target: All Works))

Works and Certificate Number	ISO9002:1994 Certification Date	ISO9001:2008 Certification Date
Ehime Works [JCQA-0019] [YKA-4004422/J]	October 1994 —	October 2009 August 2009
Chiba Works [JQA-0829]	March 1995	April 2010
Osaka Works [JQA-0721]	December 1994	December 2009
Oita Works (Okayama Plant) [JQA-1650]	March 1997	April 2010
Oita Works [JQA-1069]	December 1995	January 2010
Misawa Works [JQA-0752]	December 1994	December 2009
Ohe Works [JCQA-0320] [JCQA-1720]	April 1998 —	April 2010 January 2010

Certification of compliance with ISO9002:1994 was completed for all Works except the Oita Works (Gifu Plant)*1 between 1994 and 1998. Sumitomo Chemical made the transition to compliance with ISO9001:2008 in 2009–2010. The Ohe Works registered for ISO9001:2008 in 2010.

*1 The Oita Works (Gifu Plant) has been pursuing Good Manufacturing Practice (GMP) management as have other Works, including the Osaka Works, the Oita Works (Okayama Plant), the Oita Works and the Misawa Works.

▶ Occupational Safety and Health Management System (OSHMS)

◆ Acquisition of OSHMS Certification (Sumitomo Chemical (Target: Works and Research Laboratories)

Facilities	Certificate Number	Certification Date
Chiba Works	03-12-1	May 2003
Osaka Works	05-27-3	February 2005
Oita Works (Utajima)	09-27-14	January 2009
Oita Works (Gifu Plant)	09-21-6	February 2009
Oita Works (Okayama Plant)	09-33-7	February 2009
Oita Works	06-44-1	July 2006
Ohe Works	10-38-4	March 2010
Health & Crop Sciences Research Laboratory	07-28-9	January 2007
Tsukuba Regional Research Laboratory*2	05-8-3	December 2005

By fiscal 2009, Sumitomo Chemical acquired OSHMS certification from the Japan Industrial Safety and Health Association (JISHA) at four of its Works and two of its Research Laboratories.

*2 The Tsukuba Regional Research Laboratory was reorganized into the Advanced Materials Research Laboratory, IT-related Chemicals Research Laboratory (Tsukuba), and Energy & Functional Materials Research Laboratory (Tsukuba).

JISHA's Official Websites: https://www.jisha.or.jp/english/index.html (English)
https://www.jisha.or.jp/about/index.html (Japanese)

▶ Voluntary Safety Management of High Pressure Gas based on Certification by the Minister

◆ Number of Accreditations of Completion and Safety Inspection Given for Sumitomo Chemical Facilities

Works	Area	Year of certification	Year and month renewed	Number of facilities given accreditation
Ehime Works	Niihama	2002	March 2013	13
	Kikumoto	2002	March 2013	4
Chiba Works	Anesaki	1987	May 2014	11
	Sodegaura	1987	May 2014	17

Note: Number of facilities given accreditation data as of the time of certification renewal.

To achieve safe operations, Sumitomo Chemical has obtained Accreditation of Completion and Safety Inspection as stipulated in the High Pressure Gas Safety Act for our 45 facilities. Certification for the Chiba Works, which has been certified since 1987, was renewed in May 2014. The Ehime Works, which has been certified since 2002, was also renewed in March 2013. The plants of both Works have been continuing stable operations. Ministerial certification is given to facilities which have achieved excellent safety and management levels and meet legal requirements. Such plants are allowed to conduct their safety inspections on a voluntary basis. In order to obtain ministerial certification, prior review is made by a special team that includes academic experts on the accuracy of daily safety inspection data and the safety management system. Every time, Sumitomo Chemical has been given high marks at the review for renewal of the certification.

▶ Responsible Care Audit Results

◆ Responsible Care Audit Results (Sumitomo Chemical Group)

Facilities		FY2014	FY2015	FY2016
Professional Audits	Works	10	8	9
	Research Laboratories	0	1	3
	Logistics Centers	0	0	0
	Business Sectors	5	4	6
	Group Companies in Japan	12	15	18
	Group Companies Overseas	13	6	7
Management Audits	Works and Research Laboratories	5	7	6
Total		45	41	49

◆ Professional Audits for Facilities and Business Sectors (Sumitomo Chemical)

Area	Facilities (Works, Research Laboratories)	Business Sectors (Head Office Business Sectors)	Total
Good	6	1	7
Needs Improvement	91	14	105
Needs to be Examined	55	2	57
Total	152	17	169

▶ Eco-First Commitments

In March 2012, Sumitomo Chemical reported the progress and results of its efforts to fulfill the Eco-First Commitments to the Japanese Minister of the Environment while announcing its Eco-First Commitments, Updated Version.

Note: The content was updated in November 2016. From fiscal 2016, measures are being taken in line with the updated content.

ECO FIRST 1

Eco-First Commitments

Updated Version

November 30, 2016

To Koichi Yamamoto
Minister of the Environment

President of
Sumitomo Chemical Co., Ltd.
Masakazu Tokura

As a leader in the chemical industry, Sumitomo Chemical Co., Ltd. considers the appropriate management of chemical substances to be fundamental and not only observes strict compliance with all relevant laws and regulations, but also works to ensure safety, environmental protection, health and product quality throughout the lifecycle of chemical products. The Company also strives to gain the further trust of society through continuous dialogue and undertakes voluntary initiatives (Responsible Care activities) to contribute to the sustainable development of society.

1 We will promote the management of chemical substances and the risk communication in an appropriate and proactive manner using proprietary technology.

- We will review the information on the safety for all our products manufactured and sold in annual amounts of one tonne or more by fiscal 2016, and we will conduct the appropriate risk assessments based on the results by fiscal 2020 using our proprietary technology. In addition we will make the results available to the general public as Safety Summaries.
- We will collaborate with chemical companies in the world on studies of the impact of chemical substances on human health and the environment (Long-range Research Initiative) in order to improve the safety of chemical substances.
- All the offices and facilities at Sumitomo Chemical will strive to communicate effectively with and promote information disclosure to local residents and other stakeholders in creative and voluntary ways that suit the needs of the local community.

2 We will develop and apply management technologies that help reduce environmental impacts to realize safe and secure water treatment.

- To make it easier to select the more appropriate water treatment method (either activated sludge or incineration), we will work to more uniformly standardize methods for evaluating the various kinds of process water expelled from plants.
- We will use microbiota analysis, microbial immobilization and other proprietary technology to increase the sophistication of activated sludge treatment and thereby achieve the following goals:
  1. Ensure stable water treatment by checking and managing the health of the sludge biota
  2. Improve our treatment capabilities
  3. Switch over a portion of the treatment of wastewater for which activated sludge treatment had been deemed too difficult from incineration to such treatment

3 We will proactively contribute to build a sustainable society.

- To contribute to society through the power of chemistry (and related businesses) and encourage reductions in CO_2 emissions through the widespread adoption of low-carbon products and technologies, we internally designate products and technologies that help address climate change, actively promote the development and widespread adoption of these products and technologies, and make available to the public quantitative information on emission reductions.
- We strive to improve the unit energy consumption of all plants by an annual average of 1%. We will switch to energy sources with low emission factors, introduce cogeneration systems and promote the installation of LED lighting at worksites. Through these and other efforts, we will improve CO_2 emission intensity from energy sources 15% relative to fiscal 2005 by fiscal 2020. As a result, total CO_2 emissions in fiscal 2020 will be about 3.2 million tonnes, 15% lower than those in fiscal 2005.
- We promote internal education and environmental education activities in different regions to deepen understanding of the importance of environmental protection.

The Company will monitor the progress made in
the above initiatives, make the results publicly available,
and report them to the Ministry of Environment on a regular basis.

SUMITOMO CHEMICAL

2. Environmental Protection

▶ 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, 2016 to March 31, 2017

(2) Boundary: Sumitomo Chemical and 20 major consolidated subsidiaries (15 in Japan and 5 overseas)*1

(3) Composition (Classification): Based on Ministry of the Environment (Japan) guidelines

(4) Outline of the results (investment and expenses): Consolidated investment increased by 2.6 billion yen, and consolidated expenses increased by 0.2 billion yen.

*1 Sumitomo Dainippon Pharma Co., Ltd.; Koei Chemical Co., Ltd.; Taoka 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

(100 million yen)

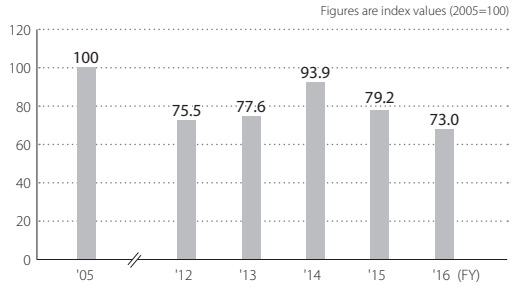
Classification		Details of Major Initiatives	FY 2015				FY 2016			
			Non-Consolidated		Consolidated		Non-Consolidated		Consolidated	
			Investment	Expenses	Investment	Expenses	Investment	Expenses	Investment	Expenses
Facility Area Costs			20	169	26	272	40	160	52	266
Breakdown	Pollution Prevention Costs	Prevention of air pollution, water pollution, soil contamination, noise pollution, odors, ground subsidence, etc.	(13)	(117)	(17)	(159)	(25)	(109)	(35)	(152)
Breakdown	Global Environmental Protection Costs	Energy saving, prevention of global warming, ozone layer depletion, and other measures	(3)	(3)	(6)	(34)	(13)	(3)	(15)	(34)
Breakdown	Resource Recycling Costs	Resource saving, water saving and rainwater usage, waste reduction/disposal treatment, recycling, etc.	(3)	(49)	(3)	(79)	(2)	(49)	(2)	(81)
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	4	0	0	0	3
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.	0	7	0	12	0	8	0	13
R&D Costs		Development of products with attention to environmental safety, research into energy-saving processes, etc.	1	60	1	60	0	68	0	68
Social Activity 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	5	0	8	0	5	0	8
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			21	241	27	357	40	240	53	359

◆Economic Effects

(100 million yen)

Results	FY2015		FY2016	
	Non-Consolidated	Consolidated	Non-Consolidated	Consolidated
Reduced costs through energy saving	3	6	5	15
Reduced costs through resource saving	3	20	4	40
Reduced costs through recycling activities	27	31	20	33
Total	33	57	28	88

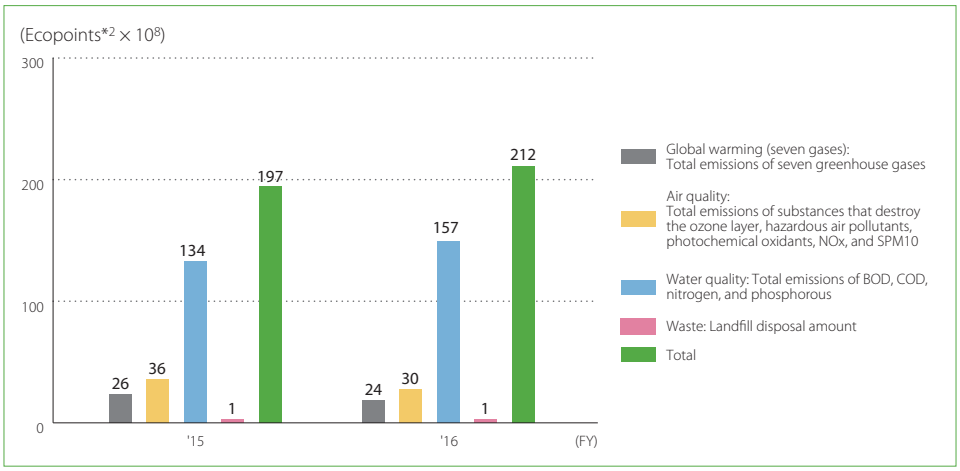
◆Cost Efficiency of Environmental Protection Measures (Sumitomo Chemical)



In fiscal 2009, 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 better to reflect actual production activities in the calculation.

▶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 2016, 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 lifecycles.

*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.

▶ Reducing Greenhouse Gas Emissions

◆ Greenhouse Gas Emissions (All Seven Gases) (Sumitomo Chemical (Target: All Facilities))

(1,000 tonnes in CO_2 equivalent)

		FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
CO_2	Energy sources	3,454	3,134	3,190	3,357	3,347	2,559	2,405
	From other than energy use	109	98	62	63	65	55	50
Methane (CH_4)		–	–	–	–	–	–	–
Nitrous oxide (N_2O) (CO_2 equivalent)		49	58	67	63	76	65	45
Hydrofluorocarbon (HFC)		–	–	–	–	–	–	–
Perfluorocarbon (PFC)		–	–	–	–	–	–	–
Sulfur hexafluoride (SF_6)		–	–	–	–	–	–	–
NF_3		–	–	–	–	–	–	–

Note: CH_4, HFC, PFC, SF_6, and NF_3 are outside the scope of reporting.

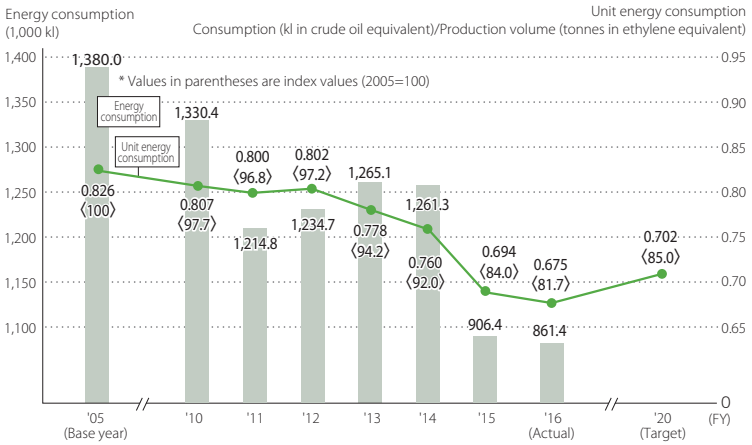
▶ Energy Saving

◆ Breakdown of Unit Energy Consumption (Sumitomo Chemical (Target: All Works))

	Energy consumption (1,000 kl in crude oil equivalent) (a)	Production (1,000 tonnes in ethylene equivalent) (b)	Unit energy consumption (a/b)
Ehime Works	401.2	672.3	0.597
Chiba Works	340.1	412.9	0.824
Osaka Works	23.4	12.8	1.824
Oita Works	49.0	43.5	1.125
Misawa Works	11.9	9.6	1.236
Ohe Works	35.8	125.2	0.286
Total	861.4	1276.4	0.675

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

◆ Energy Consumption and Unit Energy Consumption (Sumitomo Chemical (Target: All Works))



Target	Improve unit energy consumption for fiscal 2020 by 15% compared with fiscal 2005.
Results	In fiscal 2016, unit energy consumption improved 18.3% compared with fiscal 2005. • Unit energy consumption: improved 2.7% compared with fiscal 2015 • Energy consumption: totaled 861 thousand kl in crude oil equivalent in fiscal 2016

◆Energy Consumption and CO_2 Emissions*1 (Sumitomo Chemical and Group Companies in Japan*2 (Target: All Facilities))

	Energy consumption (1,000 kl in crude oil equivalent)	CO_2 emissions from energy use (1,000 tonnes)
Sumitomo Chemical	873	2,405
Works	861	2,382
Non-manufacturing sites including the Head Offices and Research Laboratories	12	23
Sumitomo Chemical and Group companies in Japan	1,109	3,032
Works	1,081	2,979
Non-manufacturing sites including the Head Offices and Research Laboratories	28	53

*1 Calculated based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.
*2 The boundary of calculation covers the same participating companies listed on page 2.

◆Initiatives for Energy Saving and CO_2 Emissions Reduction in the Logistics Division

Energy Consumption and CO_2 Emissions for Group Companies in Japan ("Specified Consigners")*3

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015*4	FY2016*4
Energy consumption (1,000 kl in crude oil)	3.4	4.1	3.9	3.9	3.9	1.6	1.6
CO_2 emissions (1,000 tonnes)	8.9	10.9	10.3	10.3	10.3	3.9	4.0

*3 Totals for Nippon A&L Inc. and Nihon Oxirane Co., Ltd. (2010–2014)
*4 Since fiscal 2015, the figures are only for Nippon A&L Inc.

▶Industrial Waste Reduction

◆PCB Waste (Sumitomo Chemical and Group Companies in Japan (Target: All Works)

Storage and Control of High Concentrations of PCB Waste (As of the End of Fiscal 2016)

	Number of units of PCB waste			Volume of PCBs (kl)
	Total	Storage	Usage	
Sumitomo Chemical	26	18	8	0.1
Sumitomo Chemical and Group Companies in Japan	61	53	8	1.0

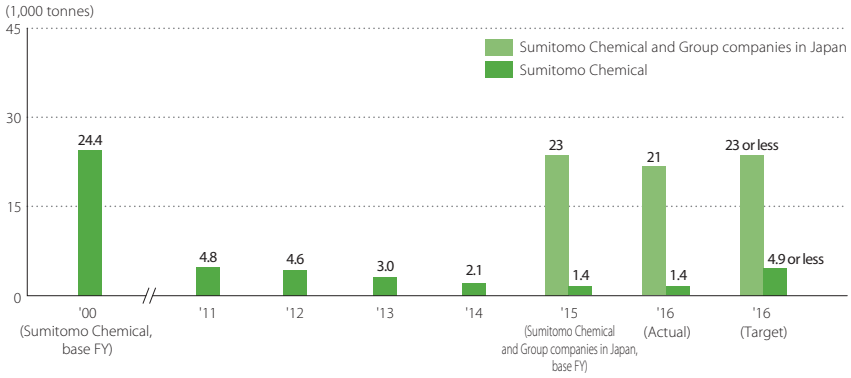
Note: The volume of PCBs does not include minute amounts of PCB waste in the PCB net conversion amount. High concentrations of PCBs classified into fluorescent lamps, mercury lamp ballast, and contaminated substances (wastepaper, etc.) fall outside the scope of collation.

In accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes, Sumitomo Chemical properly collects high-concentration polychlorinated biphenyl (PCB)-containing waste.*5 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 plans to treat all PCB waste ahead of the deadline specified under the Act.

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

Target	Properly collect and store high-concentration PCB-containing waste and complete treatment of this waste at an early date.

◆Landfill Disposal Amount★

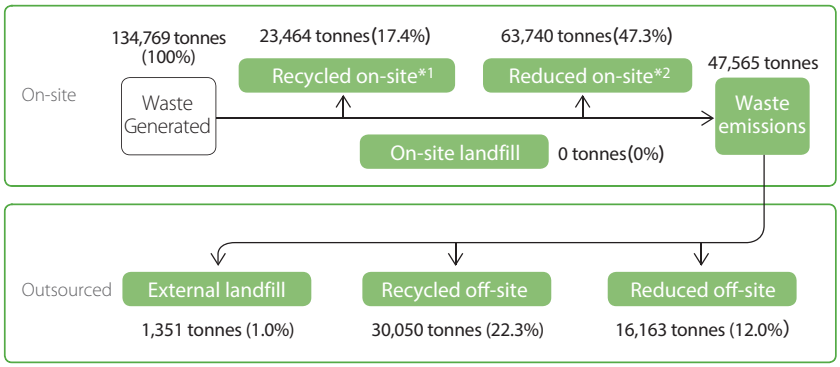


◆Digitization of Manifests to be Prepared Pursuant to the Waste Management and Public Cleansing Act (Sumitomo Chemical (Target: All Works))

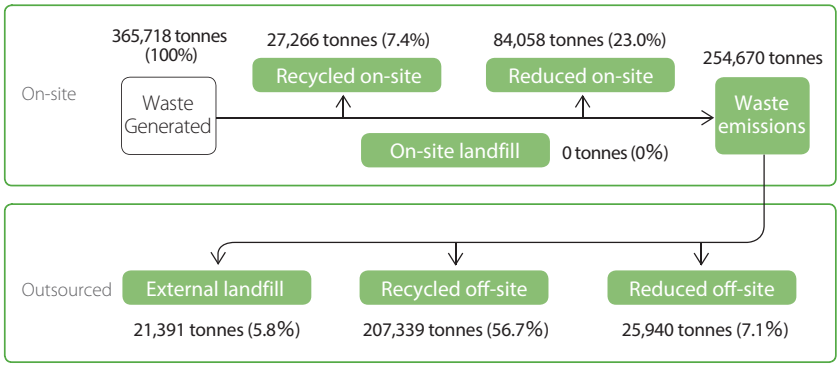
	Number of manifests issued	Number of manifests digitized	Digitization rate (%)
FY 2011	19,243	15,048	78
FY 2012	17,502	13,259	76
FY 2013	19,389	15,329	79
FY 2014	18,662	14,930	80
FY 2015	18,973	16,337	86
FY 2016	19,868	19,594	99

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 Results (Sumitomo Chemical (Target: All Works))



(Sumitomo Chemical and Group Companies in Japan (Target: All Works))



*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.

★: Assured by an independent assurance provider

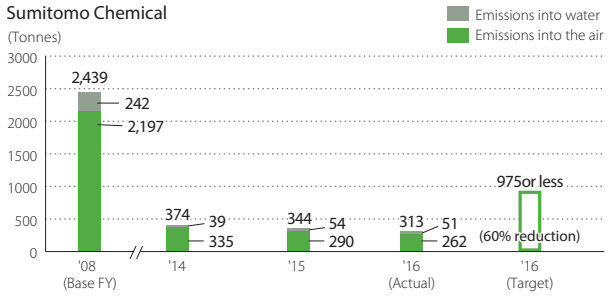
◆List of Results by Item in connection with the Disposal of Waste (Sumitomo Chemical (Target: All Works))

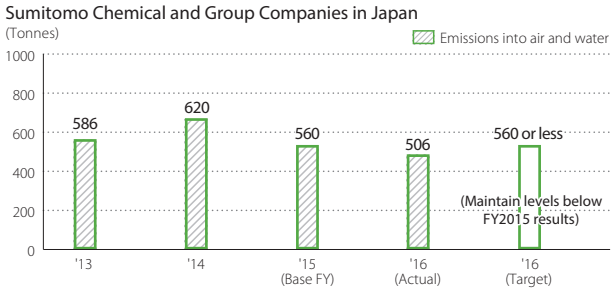
(Tonnes)

Type	Waste	Recycled on-site		Reduced on-site		Waste emissions	On-site landfill	Reduced off-site	Recycled off-site		External landfill
	Generated	Reused, recycled	Thermally	Incineration	Other				Reused, recycled	Thermally recycled	
Burnt residue	3,422.9	0.0	0.0	0.0	0.0	3,422.9	0.0	0.0	3,307.4	0.0	115.5
Sludge	46,032.1	0.0	10,743.2	19,473.6	2,911.0	12,904.2	0.0	2,744.8	9,719.3	0.3	439.9
Oil waste	30,687.6	2,483.8	9,764.4	9,701.3	0.0	8,738.1	0.0	4,034.8	3,705.9	981.1	16.1
Waste acid	8,784.9	24.0	1.2	4,884.7	1,497.7	2,377.3	0.0	1,645.0	707.1	11.8	13.5
Waste alkali	35,796.3	18.0	7.5	23,006.2	123.7	12,641.1	0.0	6,747.7	4,783.0	1,070.6	39.7
Waste plastic	5,646.3	0.0	310.8	1,160.3	15.5	4,159.6	0.0	424.7	3,085.9	103.0	546.3
Waste paper	1,172.2	0.0	92.8	844.2	0.0	235.2	0.0	18.7	216.3	0.0	0.2
Wood waste	1,126.3	0.0	0.0	81.4	0.0	1,044.9	0.0	101.1	671.7	260.4	11.8
Textile waste	36.0	0.0	0.0	36.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Animal and plant residues	7.4	0.0	0.0	0.0	0.0	7.4	0.0	7.4	0.0	0.0	0.0
Metal waste	581.2	0.0	0.0	4.8	0.0	576.4	0.0	191.7	361.7	0.0	23.2
Glass and pottery waste	553.3	0.0	0.0	0.0	0.0	553.3	0.0	33.0	485.3	0.0	35.0
Slag	504.0	0.0	0.0	0.0	0.0	504.0	0.0	0.0	504.0	0.0	0.0
Debris	360.0	13.0	0.0	0.0	0.0	347.0	0.0	203.5	74.0	0.0	69.5
Soot and dust	45.1	0.0	5.1	0.0	0.0	40.0	0.0	0.0	0.0	0.0	40.0
Textile waste	13.4	0.0	0.0	0.0	0.0	13.4	0.0	10.8	1.9	0.0	0.6
Total	134,769	2,539	20,925	59,192	4,548	47,565	0	16,163	27,623	2,427	1,351

▶Addressing PRTR and VOCs

◆Trends in Emissions of Substances Subject to the PRTR Act





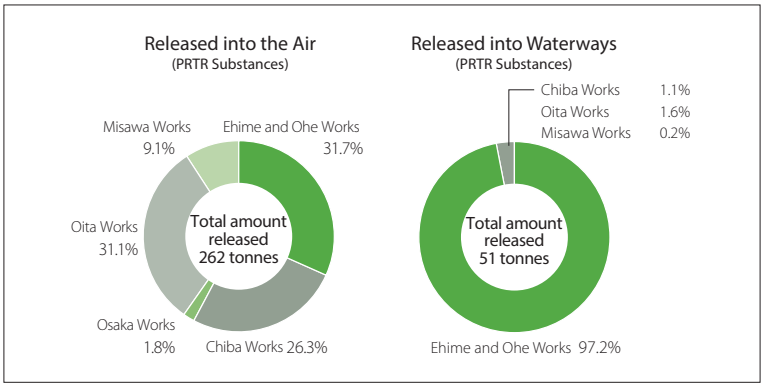
Note: Data for previous fiscal years has been retroactively adjusted to enhance accuracy.

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

(Tonnes)

	Released			Transferred		
	Air	Water	Subtotal	Sewage	Waste	Subtotal
PRTR substances						
Sumitomo Chemical (110 substances)	262	51	313	3.3	3,961	3,964
Sumitomo Chemical and Group companies in Japan	454	52	506	7.2	6,618	6,625
JCIA PRTR substances						
Sumitomo Chemical (143 substances)	864	94	958	62	6,256	6,319

◆PRTR Substances Released by Works (Sumitomo Chemical)



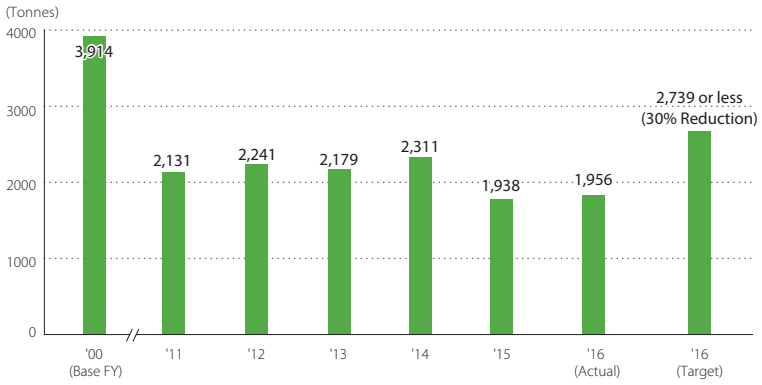
Note: Data for the Oita Works includes data for the Gifu and Okayama plants.

Target Reduce the total release of PRTR substances by 60% compared with fiscal 2008 by fiscal 2016.

▼

Results Reduced the total release of PRTR substances by 313 tonnes, or 87.2%, compared with fiscal 2008 by fiscal 2016.

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



Note: Data for previous fiscal years has been retroactively adjusted to enhance accuracy.

Target Maintain a 30% reduction in VOC emissions compared with fiscal 2000.

▶Prevention of Ozone Layer Depletion

◆Number of Refrigeration Units That Use Specified CFCs and HCFCs as Coolants (as of the end of fiscal 2016)

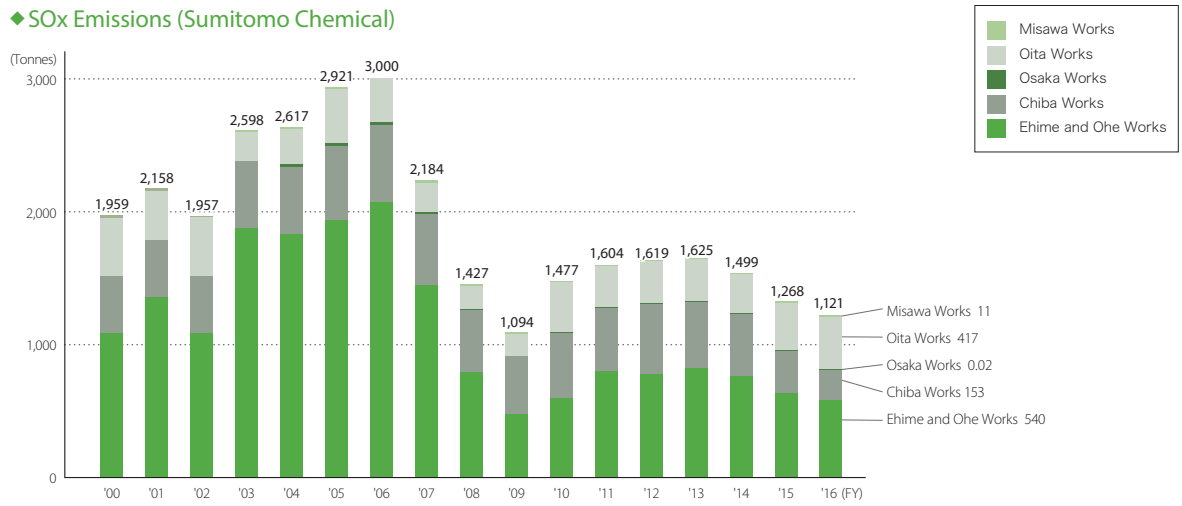
(Number of units)

	Sumitomo Chemical	Sumitomo Chemical and Group companies in Japan
CFC11	11	13
CFC12	2	31
CFC113	0	0
CFC114	0	0
CFC115	0	1
HCFC22	107	203
HCFC123	26	31
HCFC142b	0	1

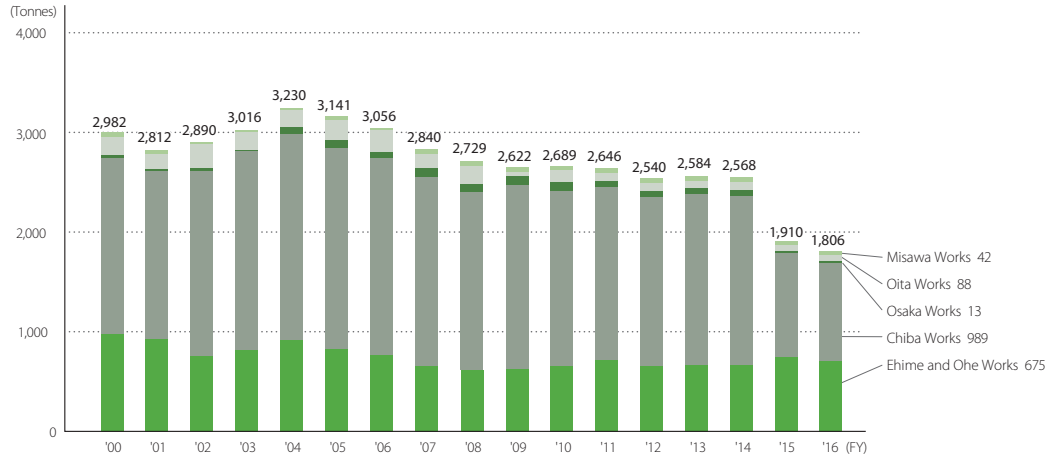
Target
- Eliminate the use of refrigeration units that use specified CFCs as coolants by fiscal 2025.
- Eliminate the use of refrigeration units that use HCFCs as coolants by fiscal 2045.

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

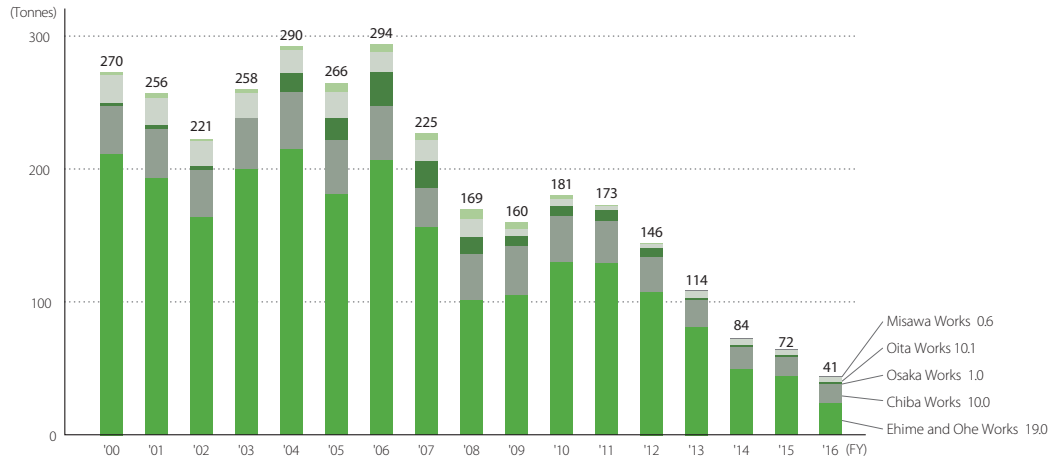
◆ SOx Emissions (Sumitomo Chemical)



◆ NOx Emissions (Sumitomo Chemical)



◆ Soot and Dust Emissions (Sumitomo Chemical)



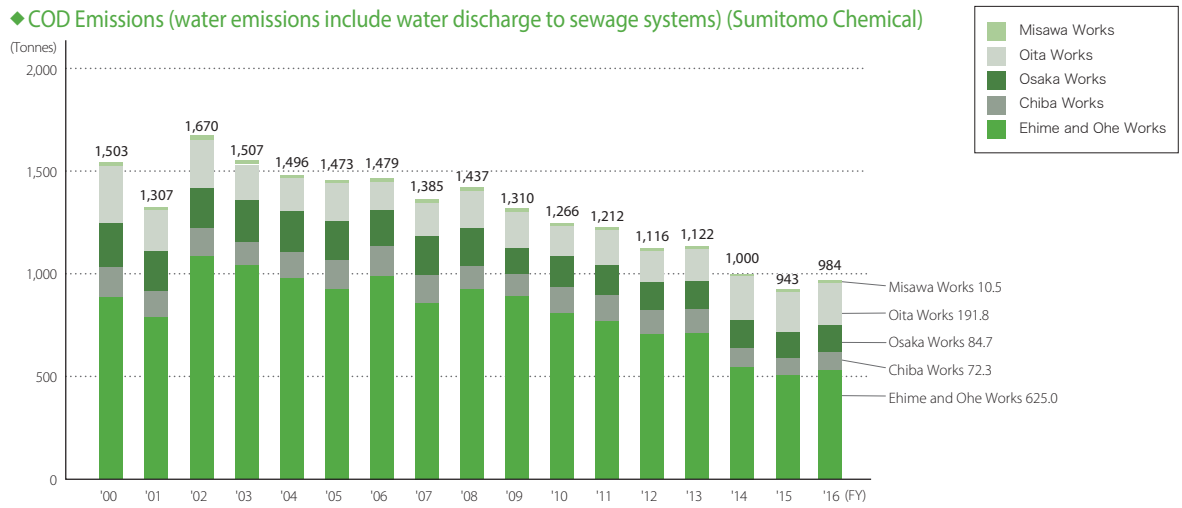
In 1970, Sumitomo Chemical achieved a marked reduction in the release of SOx, NOx, soot, and dust into the atmosphere, and continued to maintain low levels of emissions from 1980 to the present. Furthermore, the Company has concluded cooperative agreements with local municipal governments at each of 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.

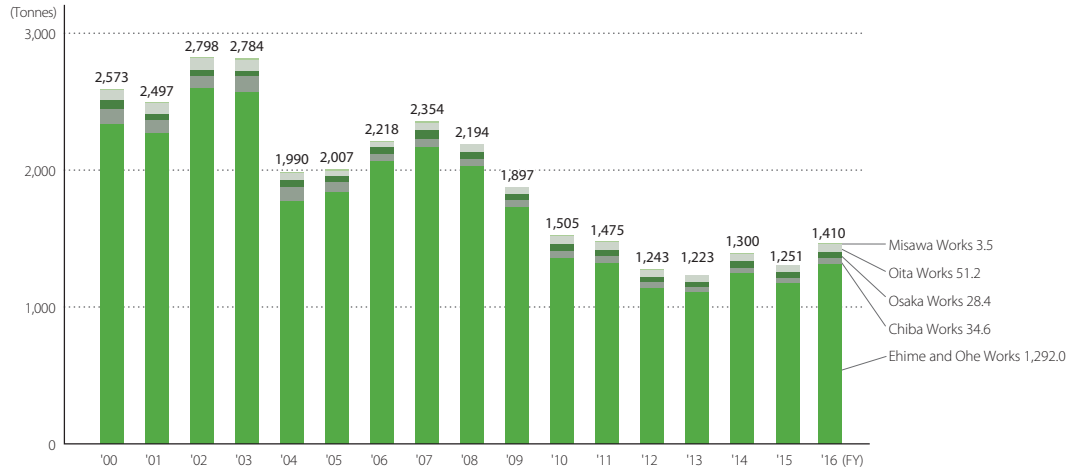
Target	Continue to sustain levels below voluntary control standard values.

▶ Water Emissions of COD, Nitrogen, and Phosphorus

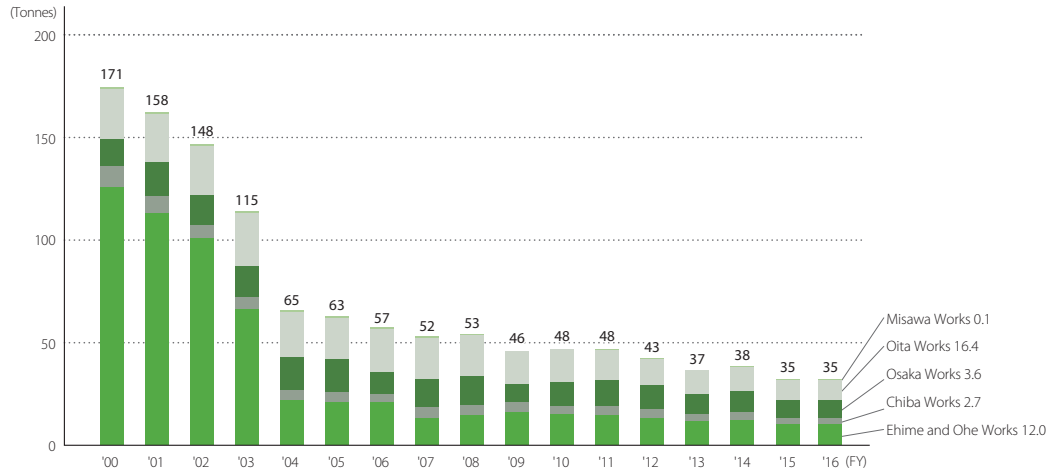
◆COD Emissions (water emissions include water discharge to sewage systems) (Sumitomo Chemical)



◆Nitrogen Emissions (Sumitomo Chemical)



◆Phosphorus Emissions (Sumitomo Chemical)



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.

Target	Continue to sustain levels below voluntary control standard values.

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

◆ Release and Transfer of PRTR Substances in Fiscal 2016 (Sumitomo Chemical (Target: All Works))

(Tonnes)

No.	Name of Chemical Compound	Amount Released					Amount Transferred		
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
1	Zinc compounds (water-soluble)	0.0	3.83	0.0	0.0	3.83	0.0	168.6	168.6
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	0.7	<0.1	0.0	0.0	0.7	0.0	0.0	0.0
4	Acrylonitrile	5.2	0.0	0.0	0.0	5.2	0.0	2.1	2.1
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	1.2	0.1	0.0	0.0	1.3	0.0	12.3	12.3
8	o-Anisidine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	Aniline	0.6	0.0	0.0	0.0	0.0	0.0	40.5	40.5
10	2-Aminoethanol	<0.1	0.2	0.0	0.0	0.2	0.0	19.9	19.9
11	m-Aminophenol	0.0	<0.1	0.0	0.0	<0.1	0.0	4.1	4.1
12	3-Amino-1-propene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Allyl alcohol	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
14	Antimony and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Isobutyraldehyde	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
16	Isoprene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	O-ethyl O-6-nitro-meta-tolyl-sec-butylphosphoramidothioate (Butamifos)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	Ethylbenzene	3.6	0.1	0.0	0.0	3.7	0.1	58.5	58.6
19	Epichlorohydrin	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
20	1,2-Epoxypropane (also known as propylene oxide)	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
21	ε-Caprolactam	0.3	5.2	0.0	0.0	5.5	0.0	0.4	0.4
22	Xylene	3.8	0.1	0.0	0.0	3.9	0.1	71.9	72.0
23	Quinoline	0.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0
24	Cumene	4.2	<0.1	0.0	0.0	4.2	0.0	0.0	0.0
25	Cresol	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0
26	Chloroaniline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	Chloroacetic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	Chlorodifluoromethane (also known as HCFC-22)	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
29	3-Chloropropene (also known as allyl chloride)	1.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0
30	Chlorobenzene	2.5	<0.1	0.0	0.0	2.5	0.0	89.5	89.5
31	Chloroform	<0.1	0.0	0.0	0.0	<0.1	0.0	53.6	53.6
32	Cobalt and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	Vinyl acetate	44.5	<0.1	0.0	0.0	44.5	0.0	19.8	19.8
34	Salicyl aldehyde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	(RS)-alpha-Cyano-3-phenoxybenzyl 2,2,3,3- tetramethylcyclopropanecarboxylate (Fenpropathrin)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Inorganic cyanide compounds (excluding complex salts and cyanates)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	1,4-Dioxane	<0.1	0.0	0.0	0.0	<0.1	<0.1	118.9	118.9
38	Cyclohex-1-ene-1,2-dicarboximidomethyl=(1RS)-sis-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
39	Cyclohexylamine	0.0	<0.1	0.0	0.0	<0.1	0.0	2.2	2.2
40	Dichlorodifluoromethane (also known as CFC-12)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	2,2-Dichloro-1,1,1- trifluoroethane (HCFC-123)	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0
42	1,2-Dichloropropane	<0.1	0.0	0.0	0.0	<0.1	0.0	363.6	363.6
43	1,3-Dichloropropene (also known as D-D)	0.6	0.0	0.0	0.0	0.6	0.0	236.4	236.4
44	Dichlorobenzene	0.0	0.0	0.0	0.0	0.0	0.0	72.9	72.9
45	Dichloromethane (also known as methylene chloride)	1.4	0.0	0.0	0.0	1.4	0.0	26.9	26.9
46	Dicyclopentadiene	0.1	0.0	0.0	0.0	0.1	0.0	4.4	4.4
47	2,4-Dinitrophenol	0.0	0.0	0.0	0.0	0.0	0.0	35.9	35.9
48	1,3-Diphenylguanidine	0.0	0.5	0.0	0.0	0.5	0.0	11.8	11.8
49	2,6-Di-tert-butyl-4-cresol	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
50	2,4-Di-tert-butylphenol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
51	N,N-Dimethylacetamide	0.0	0.0	0.0	0.0	0.0	0.0	7.7	7.7
52	N,N-Dimethylaniline	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5
53	Dimethylamine	0.0	11.3	0.0	0.0	11.3	0.0	0.9	0.9

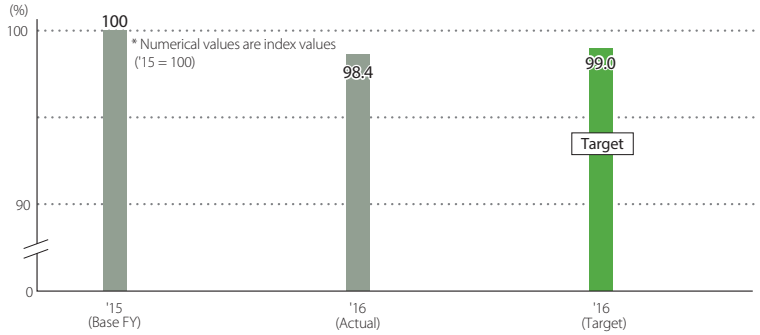
(Tonnes)

No.	Name of Chemical Compound	Amount Released					Amount Transferred		
		Air	Water	Soil	Landfill	Total	Sewage	Waste	Total
54	Dimethyl sulfide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	N,N-Dimethylformamide	<0.1	0.0	0.0	0.0	<0.1	0.0	115.9	115.9
56	Styrene	2.2	0.0	0.0	0.0	2.2	0.0	2.0	2.0
57	Dioxins*1	<0.1	<0.1	0.0	0.0	<0.1	<0.1	<0.1	<0.1
58	Thiourea	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
59	O,O-Dimethyl O-(3-methyl-4- nitrophenyl) phosphorothioate (Fenitrothion or MEP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	Decyl alcohol (Decanol)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	Terephthalic acid	0.0	0.0	0.0	0.0	0.0	0.0	423.0	423.0
62	Water-soluble copper salts (excluding complex salts)	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
63	Sodium dodecyl sulfate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	Triethylamine	1.5	27.6	0.0	0.0	29.1	0.5	59.7	60.2
65	2,4,6-Trichloro-1,3,5-triazine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	Trichlorofluoromethane (also known as CFC-11)	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
67	1,2,3-Trichloropropane	0.1	0.0	0.0	0.0	0.1	0.0	27.9	27.9
68	1,2,4-Trimethylbenzene	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
69	Toluidine	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
70	Toluene	140.6	0.3	0.0	0.0	140.9	0.2	1666.8	1667.0
71	Naphthalene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	Nickel compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
73	Nitrobenzene	0.6	0.5	0.0	0.0	1.1	0.0	41.9	41.9
74	Vanadium compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	Arsenic and its inorganic compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	Hydrazine	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0
77	Methyl 4-hydroxybenzoate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	Hydroquinone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	Biphenyl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	Pyridine	0.0	<0.1	0.0	0.0	<0.1	0.0	<0.1	<0.1
81	Phenylenediamine	0.0	<0.1	0.0	0.0	<0.1	0.0	0.4	0.4
82	1,3-Butadiene	0.0	0.0	0.0	0.0	0.0	0.0	4.1	4.1
83	Bis(2-ethylhexyl)phthalate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	tert-Butyl hydroperoxide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	2-tert-Butyl-5-methylphenol	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
86	2-Propyn-1-ol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
87	2-Bromopropane	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5
88	Hexadecyltrimethylammonium chloride	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
89	n-Hexane	30.5	0.1	0.0	0.0	30.6	0.0	130.7	130.7
90	Water-soluble salts of peroxydisulfuric acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	Benzyl chloride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	Benzaldehyde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	Benzene	0.3	0.2	0.0	0.0	0.5	0.0	0.0	0.0
94	Boron compounds	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
95	Polyoxyethylene 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
96	Formaldehyde	0.2	<0.1	0.0	0.0	0.2	2.5	1.2	3.7
97	Manganese and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	Phthalic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	Maleic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
100	Methacrylic acid	0.0	0.0	0.0	0.0	0.0	0.0	15.9	15.9
101	2,3-Epoxypropyl methacrylate	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
102	Methyl methacrylate	8.4	0.0	0.0	0.0	8.4	0.0	35.6	35.6
103	(Z)-2'-Methylacetophenone= 4,6-dimethyl-2-pyrimidinyl hydrazone (Ferimzone)	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0
104	Methylamine	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0
105	3-Methylsulfanylpropanal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106	Methylnaphthalene	3.3	0.0	0.0	0.0	3.3	0.0	0.0	0.0
107	Molybdenum and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108	Morpholine	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0
109	Triphenyl phosphate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	261.8	51.0	0.0	0.0	312.8	3.3	3960.9	3964.2

Under the PRTR Act, significant figures are presented as double-digit kilograms. Unit data in this report, however, is in tonnes rounded to the nearest first decimal place.
*1 Unit data for dioxins is in mg-TEQ.

▶ Sharing Environmental Protection and Management Targets (Japan*1)

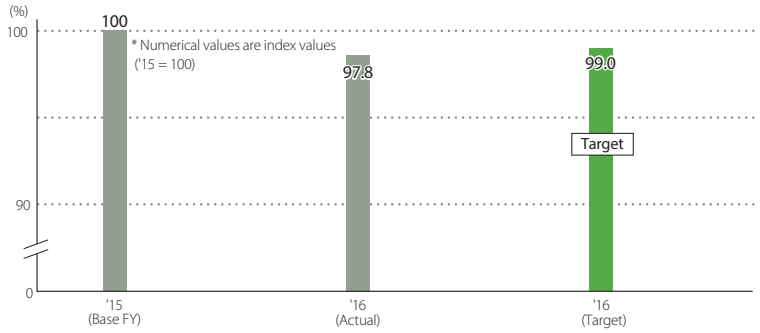
◆Unit Energy Consumption Index (2015 = 100)



Improvement in unit energy consumption

Target	Improve unit energy consumption by at least 1% annually on average.
Results	Unit energy consumption in fiscal 2016 improved by 1.6% compared with fiscal 2015.

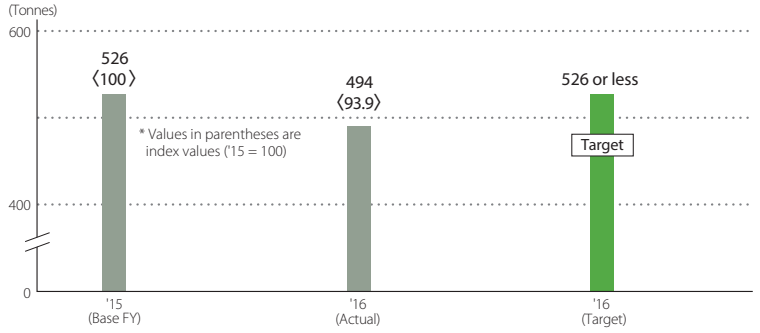
◆Unit CO_2 Emissions Index (2015 = 100)



Improvement in unit CO_2 emissions

Target	Improve unit CO_2 emissions by at least 1% annually on average.
Results	Unit CO_2 emissions in fiscal 2016 improved by 2.2% compared with fiscal 2015.

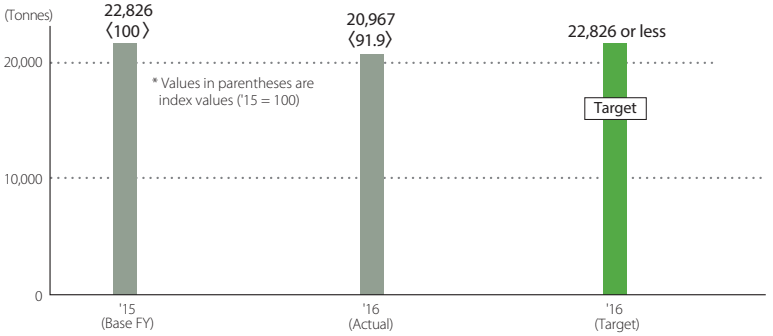
◆Volume of PRTR Substances Released (into the Air and Water) and PRTR Substance Emissions Indices (2015 = 100)



Reduction of volume of PRTR substances released

Target	Maintain the total volume of PRTR substances released (into the air and water) at or below fiscal 2015 levels.
Results	Total volume of PRTR substances released in fiscal 2016 was reduced by 6.1% compared with fiscal 2015.

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



Reduction of landfill disposal amount

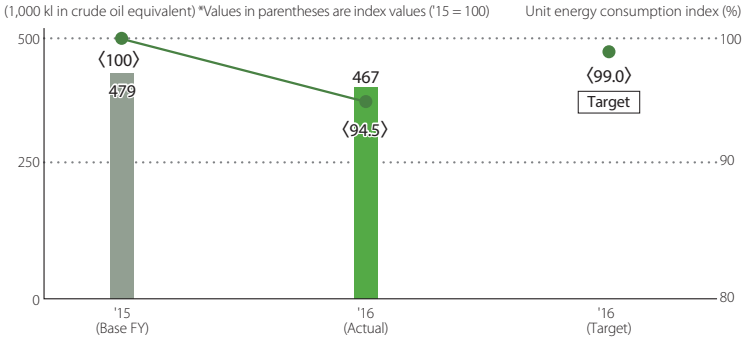
Target	Maintain landfill disposal amount at or below fiscal 2015 levels.
Results	Landfill disposal amount in fiscal 2016 was reduced by 8.1% compared with fiscal 2015.

*1 Sumitomo Chemical and the 15 Group companies listed below are included in the scope of calculation.

Sumitomo Joint Electric Power Co., Ltd.; Nippon A&L Inc.; Nihon Medi-Physics Co., Ltd.; Sumika Color Co., Ltd.; Sumika Agrotech Co., Ltd.; Sumika Assembly Techno Co., Ltd.; Ceratec Co., Ltd.; Nihon Methacryl Monomer Co., Ltd.; SC Environmental Science Co., Ltd.; Sumitomo Chemical Garden Products Inc.; Asahi Chemical Co., Ltd.; Sumika-Kakoushi Co., Ltd.; Sumika Agro Manufacturing Co., Ltd.; Sumika Plastech Co., Ltd.; SanTerra Co., Ltd.

▶ Sharing Environmental Protection and Management Targets (Overseas*1)

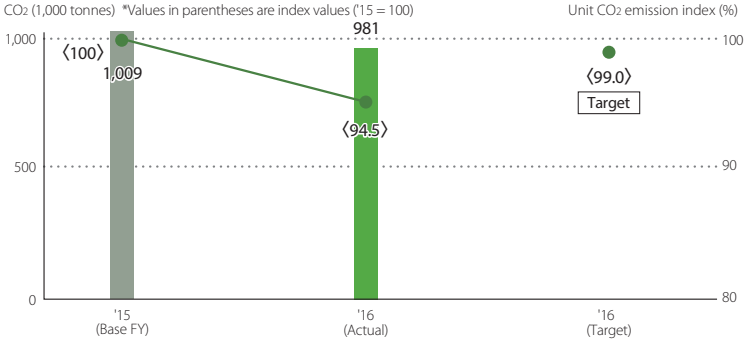
◆Energy Consumption and Unit Energy Consumption Indices (2015 = 100)



Improvement in Unit Energy Consumption

Target	Improve unit energy consumption by at least 1% annually on average.
Results	Unit energy consumption in fiscal 2016 improved by 5.5% compared with fiscal 2015.

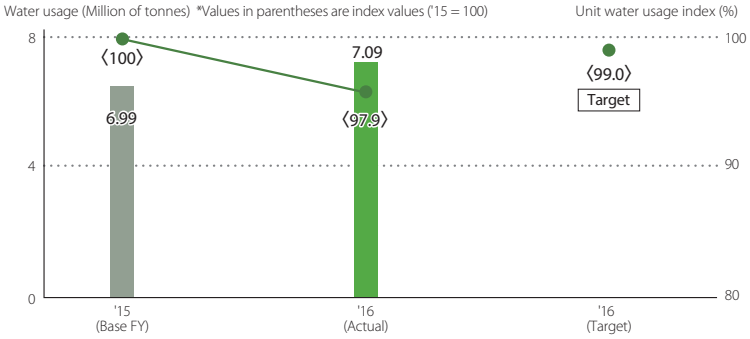
◆CO_2 Emissions (Energy use) and Unit CO_2 Emissions Indices (2015 = 100)



Improvement in Unit CO_2 Emissions

Target	Improve unit CO_2 emissions by at least 1% annually on average.
Results	Unit CO_2 emissions in fiscal 2016 improved by 5.5% compared with fiscal 2015.

◆Water Usage and Unit Water Usage Indices (2015 = 100)



Improvement in Unit Water Usage

Target	Improve unit water usage by at least 1% annually on average.
Results	Unit water usage in fiscal 2016 improved by 2.1% compared with fiscal 2015.

*1 The following 20 Group companies overseas are included in the scope of calculation:

Singapore
- 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.

Taiwan
- Sumika Technology Co., Ltd.
- Sumipex TechSheet Co., Ltd.

India
- Sumitomo Chemical India Private Limited

South Korea
- Dongwoo Fine-Chem Co., Ltd.
- SSLM Co., Ltd.

United States
- Sumitomo Chemical Advanced Technologies LLC

3. Occupational Safety and Health / Industrial Safety and Disaster Prevention

▶ Criteria and Results of the President's Safety Award for Zero-Lost Workday Operations (as of May 31, 2017)

◆ Sumitomo Chemical Employees

Facilities	Criteria for the President's Safety Award*1	Results
Ehime Works	3 million hours	Reached 9 million work hours in June 2017. Working to reach the target of 12 million work hours.
Ohe Works*2	3 million hours	Reached 9 million work hours in May 2017. Working to reach the target of 12 million work hours.
Chiba Works	3 million hours	Working to reach the target of 12 million work hours.
Osaka Works	3 million hours	Working to reach the target of 12 million work hours.
Oita Works*3	1.5 million hours	Reached 1.5 million work hours in April 2017. Working to reach the target of 3 million work hours.
Misawa Works	30 months	Working to reach the target of 180 months.
Health & Crop Sciences Research Laboratory	30 months	Working to reach the target of 30 months
Tsukuba Regional Research Laboratory*4	30 months	Working to reach the target of 360 months

Sumitomo Chemical has set facility specific criteria for the achievement of continuous periods of zero-lost workday operations for employees as well as contractors. The President's Safety Award is presented to facilities in recognition of their satisfaction of the above-mentioned criteria.

*1 Continuous periods of zero-lost workday operations.
*2 Ohe Works includes Sumika Assembly Techno Co., Ltd.
*3 Oita Works includes the Utajima Pilot Production Department, Gifu Plant, and Okayama Plant.
*4 The Tsukuba Regional Research Laboratory was reorganized into the Advanced Materials Development Research Laboratory, IT-related Chemicals Research Laboratory (Tsukuba), and Energy & Functional Materials Research Laboratory (Tsukuba).

◆ Contractors / Affiliated Company Employees

Facilities	Criteria for the President's Safety Award	Results
Ehime Association (Plant maintenance)	24 months	Working to reach the target of 24 months.
Ehime Logistics Association (Logistics)	24 months	Working to reach the target of 24 months.
Ohe Association (Plant maintenance)	48 months	Reached 96 months in March 2017. Working to reach the target of 144 months.
Ohe Logistics Association (Logistics)	48 months	Reached 96 months in March 2017. Working to reach the target of 144 months.
Chiba Association (Plant maintenance)	24 months	Working to reach the target of 24 months.
Chiba Logistics Association (Logistics)	24 months	Working to reach the target of 24 months.
Osaka Association	24 months	Working to reach the target of 48months.
Oita Association	24 months	Reached 72 months in April 2017. Working to reach the target of 96 months.
Okayama Association	48 months	Working to reach the target of 144 months
Gifu Association	48 months	Working to reach the target of 96 months.
Misawa Works	48 months	Working to reach the target of 96 months.
Health & Crop Sciences Research Laboratory	48 months	Working to reach the target of 240 months.
Tsukuba Regional Research Laboratory	48 months	Working to reach the target of 96 months.

▶ Safety Achievements

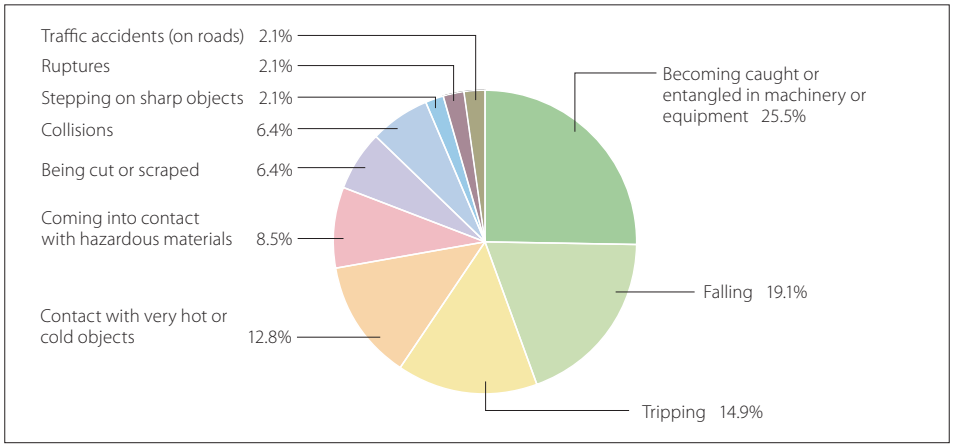
◆ Lost-Workday Injuries (Sumitomo Chemical Group*1)

	FY2013	FY2014	FY2015	FY2016
Number of lost-workday injuries	12	10	15	9
Frequency rate of lost-workday injuries	0.19	0.16	0.24	0.14

Note: Data for previous fiscal years has been retroactively adjusted to enhance accuracy.

In fiscal 2016, the number of injuries resulting in lost workdays decreased by 6 from the previous fiscal year. We will continue to raise awareness of the basic safety rules (ground rules) throughout the entire Group.

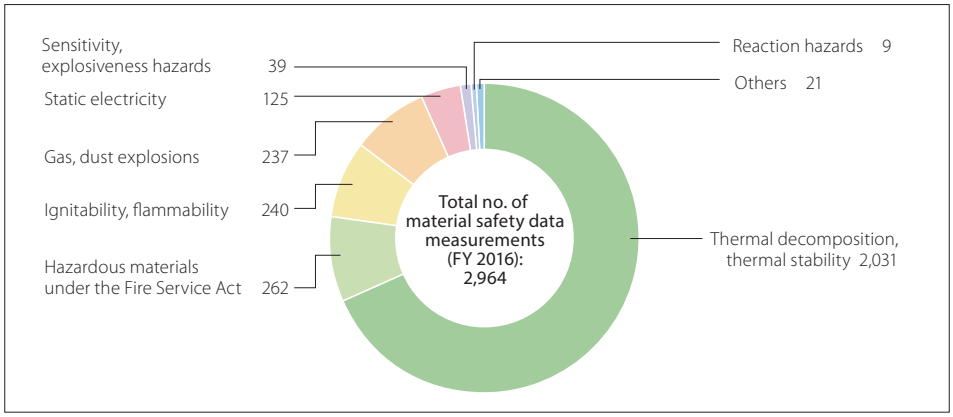
◆ Breakdown of Sumitomo Chemical Group Injuries by Type (Sumitomo Chemical Group*1)



*1 Employees of Sumitomo Chemical, Sumitomo Chemical contractors, and Group companies in Japan and overseas.

▶ Industrial Safety and Disaster Prevention Results

◆ Results of Material Safety Data Measurements



The Safety Engineering Group at the Production & Safety Fundamental Technology Center studies and assesses process safety, researches safety measures, measures and evaluates material safety data, compiles a database on safety technologies, and undertakes training for safety engineers in its efforts to enhance process safety management and to prevent accidents such as fires and explosions. A total of 2,736 material safety data measurements were taken in fiscal 2016 (2,616 measurements in fiscal 2015) from within Sumitomo Chemical. In addition, 228 measurements were taken in fiscal 2016 (205 measurements in fiscal 2015) from Group companies. Total measurements undertaken were 2,964 in fiscal 2016 (2,821 measurements in fiscal 2015).

◆The Launch of Several Process Safety Review Committees (Sumitomo Chemical)

	R&D stages		Industrialization stage		
Fiscal year	Level 1	Level 2	Level 3	Level 4	Level 5
2013	28	32	47	107	23
2014	17	40	44	112	31
2015	22	29	41	131	26
2016	14	33	37	81	17

When new processes are developed at Sumitomo Chemical, the Process Safety Review Committee (levels 1 to 5) convenes at every step, from R&D through to industrial scale production. In essence, this Committee focuses on process safety assessment results and confirms whether safety countermeasures are appropriate.

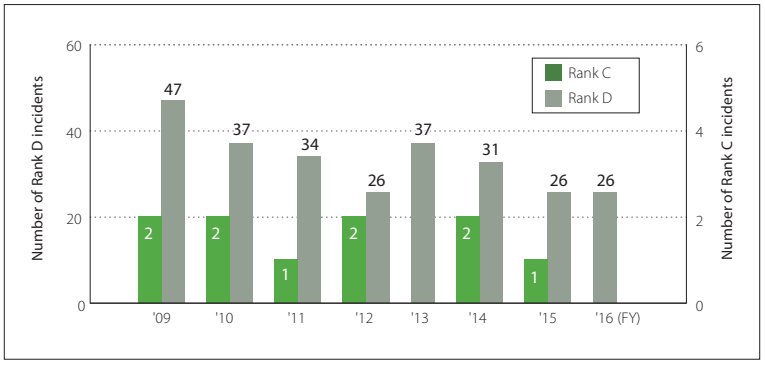
◆Safety Information Database (Sumitomo Chemical)

	Number of data sets	(Year on year comparison)
Accident prevention technology information	18,419	(Increased by 515)
Accident cause investigations	2,311	(Increased by 61)
Accident information	20,083	(Increased by 473)
As of March 31, 2017	40,813	(Increased by 1,049)

A safety information database has been created by collecting information on accidents in Japan and overseas and preparing abstracts of such accidents. As of the end of March 2017, 40,813 sets of data were stored in the database (39,764 sets of data as of March 31, 2016). This system allows all employees at each Works or Research Laboratory to search stored abstracts, and abstracts and their original data can be viewed or printed at individual terminals. These data are also used in process hazard evaluations and case study examinations to prevent similar accidents. In addition, accident data are also disclosed to Group companies as necessary.

▶Logistics Quality Assurance

◆Logistics Issues Having an Impact on Our Customers (Sumitomo Chemical)



Note: Ranks reflect Sumitomo Chemical's standard, which classifies incidents into Rank A, B, C, and D in descending order of severity. There were no occurrences of Rank A or Rank B (the most severe) incidents. Incidents within the scope of logistics operations consigned to Sumitomo Chemical

In fiscal 2016, the Company reported 0 incidents of rank C or above and 26 incidents of rank D. However, 13 of these incidents involved errors in shipment and delivery, which can cause significant problems in the quality of customers' products. Going forward, we will continue to promote measures to reduce the number of these incidents.