CSR Report 2005 DATA BOOK

SUMITOMO CHEMICAL

INDEX

SUSTAINABLE CHEMISTRY

1 Management System

～Introduction of Management System based on International Standards～

① Environmental Management System (ISO 14001)

ISO 14001:1996 certification was obtained at all works between 1997 and 1999. Among the Sumitomo Chemical Group companies, 19 domestic companies and four foreign companies had obtained ISO14001 certification as of July 2005.

Each company is to submit to transition inspections and to obtain certification for ISO 14001:2004, the revised issue of ISO 14001:1996, by June 2006.

Acquisition of ISO 14001:1996 certification for Sumitomo Chemical's five works

Works	Certificate Number	Certification Date
Ehime Works	JCQA-E-018	April 1998
Chiba Works	KHK-97ER-04	June 1997
Osaka Works	JQA-E-90072	November 1997
Oita Works	JQA-E-90152	March 1998
Misawa Works	JQA-EM0355	March 1999

② Quality Management System (ISO 9000 Series)

Certification of compliance with the ISO 9000 series was completed for all works between 1994 and 1995. After successfully completing inspections and examinations between late 2002 and early 2003, Sumitomo Chemical made the transition from compliance with ISO 9002:1994 to ISO 9001:2000, the 2000 revision of the ISO 9001 series. As of July 2005, 27 domestic group companies and 14 foreign group companies had obtained ISO 9000 series certification.

Acquisition of ISO 9000 series certification for Sumitomo Chemical's five works

Works and CertificateNumber	ISO 9002:1994 Certification Date	ISO 9001:2000 Certification Date
Ehime Works [JCQA-0019] [JCQA-0320]	October 1994 April 1998	December 2002 March 2003
Chiba Works [JQA-0829]	March 1995	September 2002
Osaka Works [JQA-0721]	December 1994	December 2002
Oita Works [JQA-1069]	December 1995	February 2003
Misawa Works [JQA-0752]	December 1994	December 2002

③ Occupational Safety and Health Management System (OSHMS)

Certification of the Occupational Safety and Health Management System (OSHMS) was completed by the Japan Industrial Safety and Health Association (JISHA) at the Chiba Works in May 2003—the first plant in Japan to receive such certification. This was followed by certification for the Ehime Works in September 2004, and for the Osaka Works in February 2005. The plan is to obtain certification under this system at all works and research facilities by the end of fiscal 2006.

Acquisition of OSHMS certification for Sumitomo Chemical's three works

Works	Certificate Number	Certification Date
Ehime Works	04-38-1	September 2004
Chiba Works	03-12-1	May 2003
Osaka Works	05-27-3	February 2005

【Preventing Pollution】

① Atmospheric emissions of SOx, NOx, and soot and dust

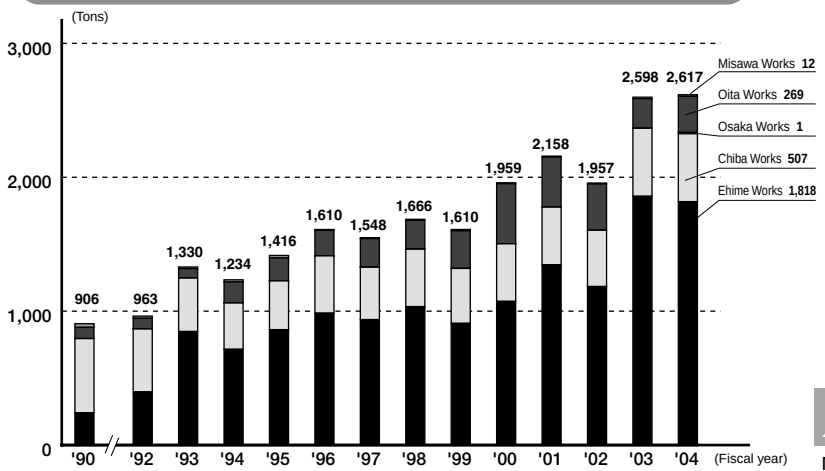
Since 1970, Sumitomo Chemical has achieved a marked reduction in the release of SOx, NOx, and soot and dust into the atmosphere, and has maintained this low level of emissions from 1980 to the present.

Furthermore, the Company has concluded cooperative agreements with local municipal governments at each of its manufacturing works, establishing voluntary control levels that are stricter than the standards of applicable laws and regulations.

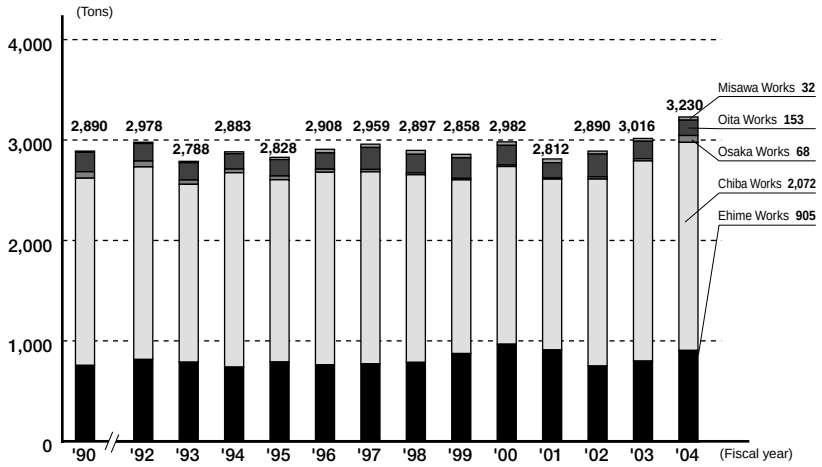
Although emissions of SOx and soot and dust have risen over the past few years due to the increased use of high-sulfur heavy oil, these levels are still substantially below the voluntary control levels.

Target : To continue to sustain levels below voluntary control standard values

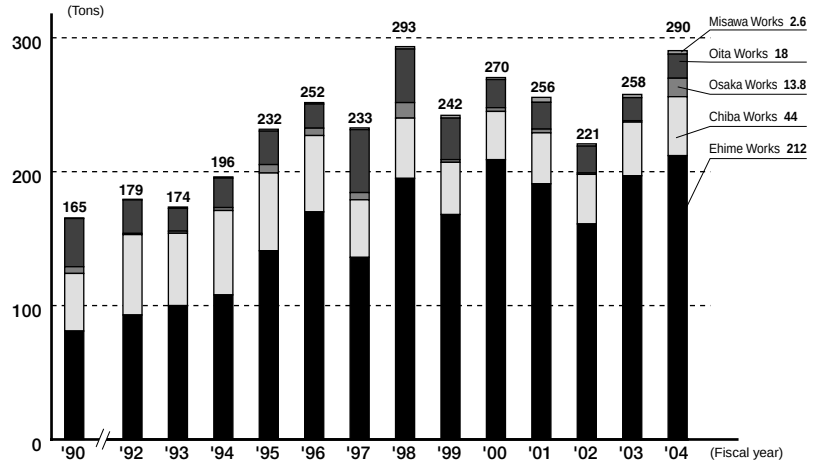
SOx Emissions



NOx Emissions



Soot and dust Emissions



Misawa Works
Oita Works
Osaka Works
Chiba Works
Ehime Works

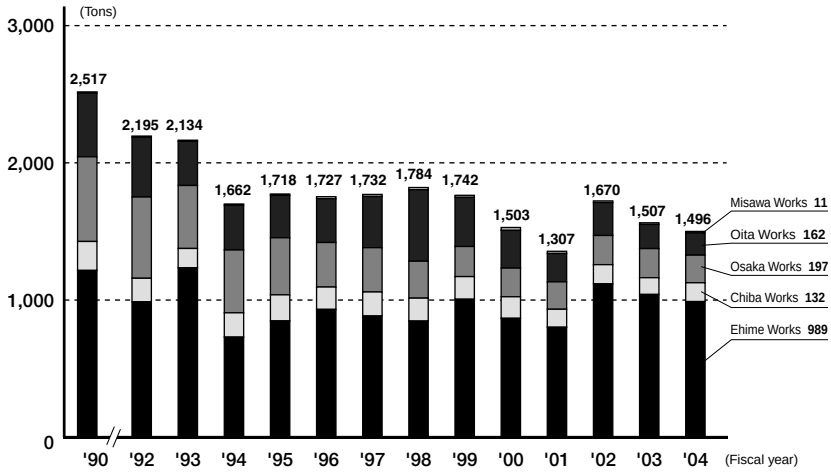
*Fiscal 2004 data for the Osaka Works include data for both the Gifu and Okayama Plants.

② Water Emissions— Levels of COD, Nitrogen, and Phosphorous

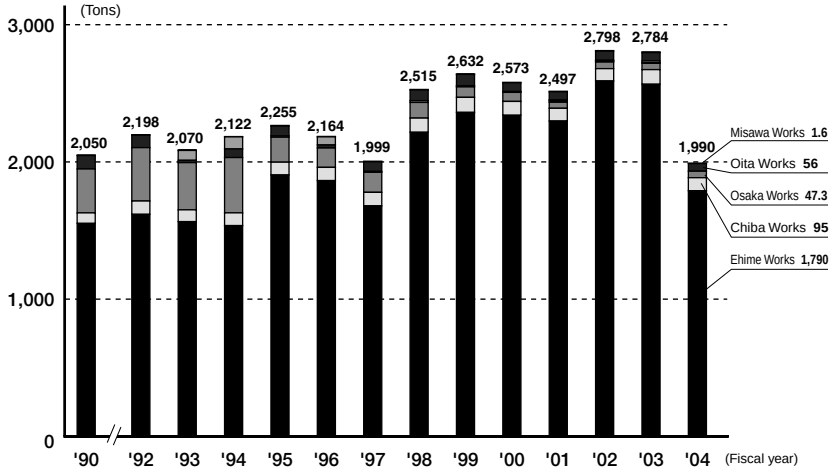
Sumitomo Chemical has also concluded cooperative agreements with local municipal governments to establish voluntary control levels for levels of COD, nitrogen, and phosphorous released into waterways. These standards are also stricter than those established under applicable laws and regulations. In fiscal 2004, a number of measures were implemented to cut emissions in line with 5th generation Water Quality Standards, and emissions of these substances were reduced significantly: by 0.7%, 28.5%, and 43.5% respectively compared with the previous fiscal year.

Target : To continue to sustain levels below voluntary control standard values

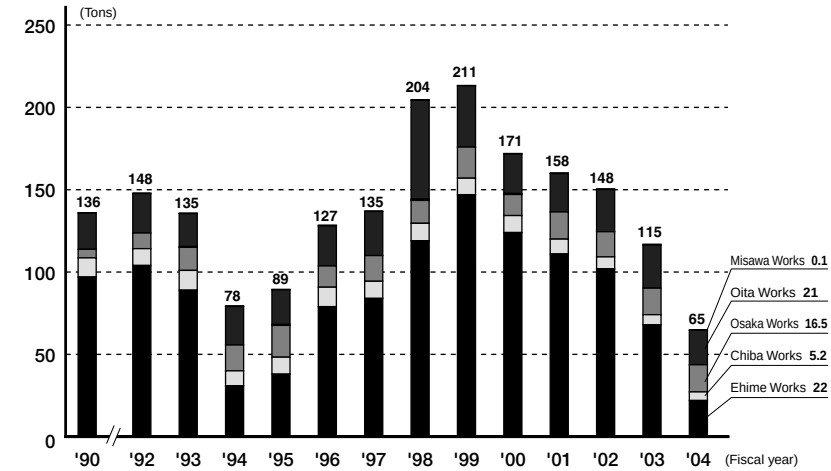
COD Emissions



Nitrogen Emissions



Phosphorous Emissions



Misawa Works
Oita Works
Osaka Works
Chiba Works
Ehime Works

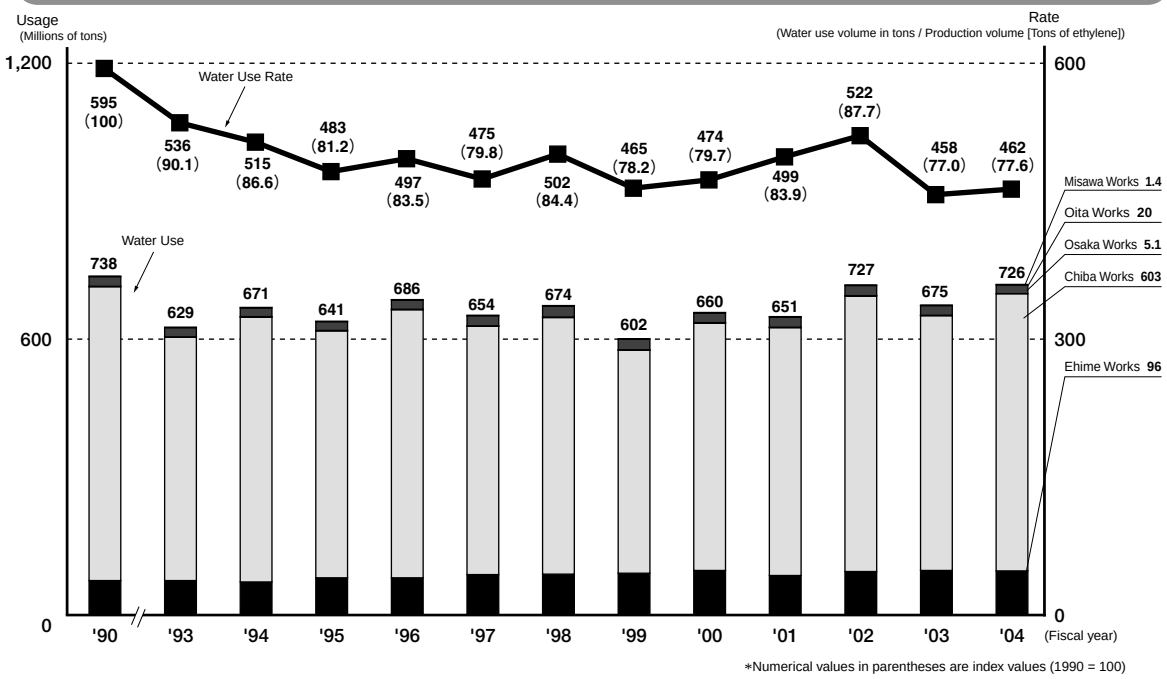
*Fiscal 2004 data for the Osaka Works include data for both the Gifu and Okayama Plants.

【Promoting Effective Use of Water】

In fiscal 2004, water use increased by 7.6% to 726 million tons as a result of the acquisition of Sumika Fine Chemicals (Gifu and Okayama Plants) by Sumitomo Chemical, and also due to increased production at existing works. Nevertheless, the increase in the water use rate was held at 0.9% compared with the previous fiscal year owing to improved productivity and more efficient use of water.

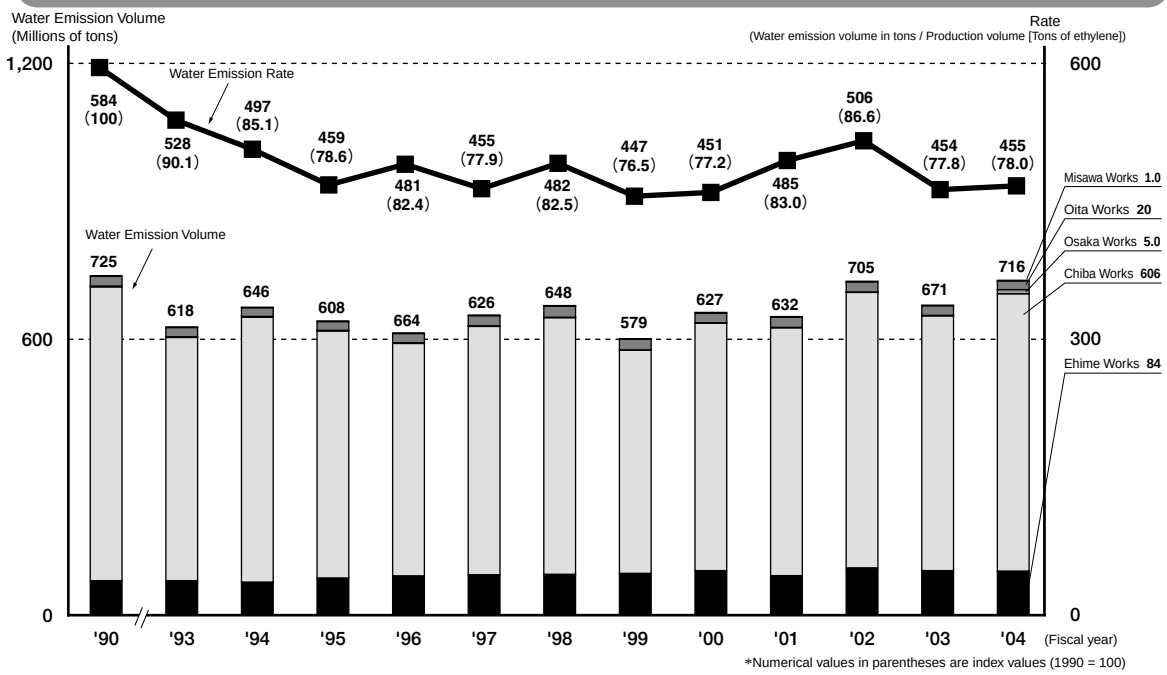
Target : Efficient use of water resources

Water Use and Water Use Rate



*Numerical values in parentheses are index values (1990 = 100)

Water Emission Volume and Water Emission Rate



*Numerical values in parentheses are index values (1990 = 100)

*Fiscal 2004 data for the Osaka Works include data for both the Gifu and Okayama Plants.

【Reducing Greenhouse Gas Emissions】

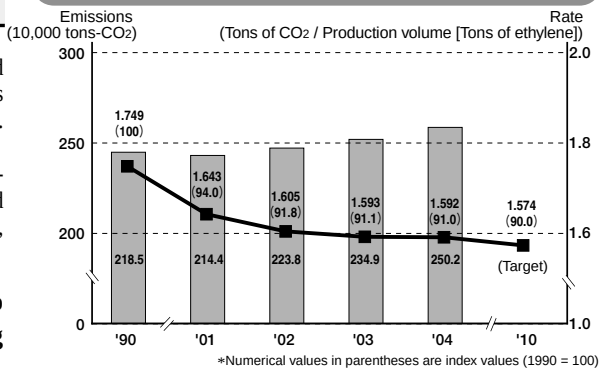
① Carbon dioxide (CO_2)

In fiscal 2004, Sumitomo Chemical's CO_2 emissions totaled 4.315 million tons, a 1.4% increase compared with the previous fiscal year, attributable to a 6.6% increase in production volume. This represents a 17.3% increase compared with fiscal 1990.

Nevertheless, in fiscal 2004, the CO_2 emission rate from in-house fossil fuel consumption remained virtually unchanged (0.1% improvement) compared with the previous fiscal year, representing a 9.0% improvement over figures for fiscal 1990.

Target : To achieve 10% improvement relative to fiscal 1990 in per-unit CO_2 emissions originating in fossil fuels consumed in-house by fiscal 2010

CO_2 Emissions from in-house Fossil Fuel Consumption and Corresponding Emission Rates



*Numerical values in parentheses are index values (1990 = 100)

*Figures for fiscal 1990, 2002, and 2003 have been revised due to improved accuracy of data.
*Fiscal 1990 and 2004 data include data for both the Gifu and Okayama Plants.

② Greenhouse Gases (All six gases)

Emissions of all six greenhouse gases regulated by the Law Concerning the Promotion of Measures to Cope with Global Warming increased by 1.4% from the previous year, to 4.366 million tons (CO_2 conversion).

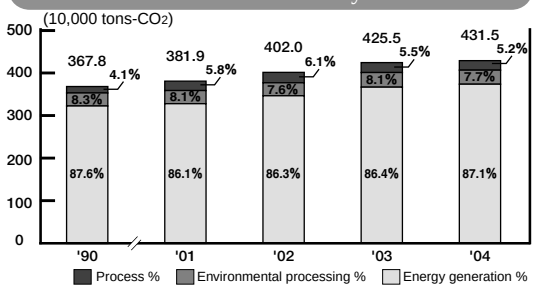
Emissions of Greenhouse Gases (All six gases)

(10,000 tons-CO_2 conversion)

	Fiscal 2002	Fiscal 2003	Fiscal 2004
CO_2	402.0	425.5	431.5
Methane	0.01	0.01	0.01
Nitrous oxide	5.6	5.3	5.1
Hydrofluorocarbon (HFC)	0.02	<0.01	0
Perfluorocarbon (PFC)	0	0	0
Sulfur hexafluoride	0	0	0
Total	407.6	430.8	436.6

*CO_2 figures for fiscal 2002 and 2003 have been revised due to improved accuracy of data.
*Fiscal 2004 data include data for both the Gifu and Okayama Plants.

Ratio of CO_2 Emissions by Source



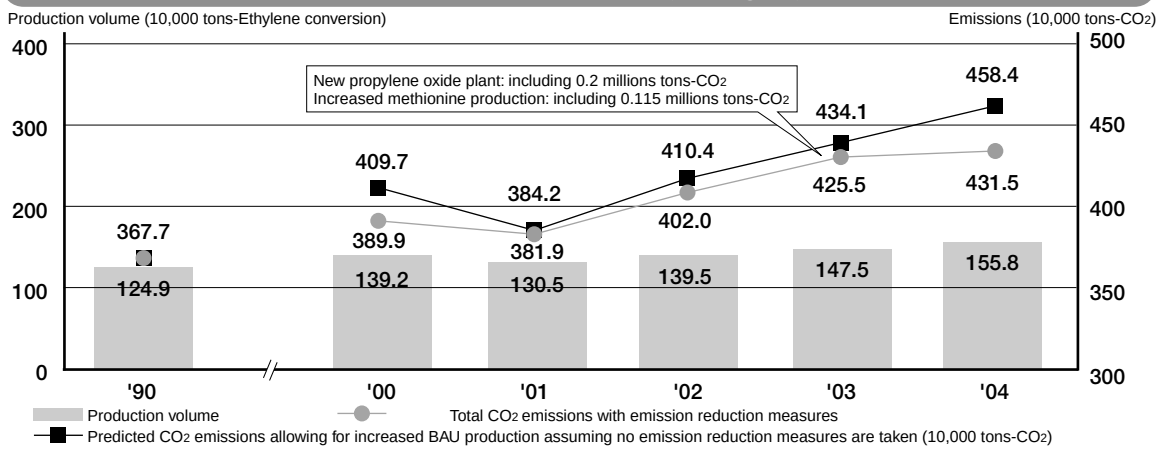
*Figures for fiscal 1990, 2002, and 2004 have been revised due to improved accuracy of data.
*Fiscal 1990 and 2004 data include data for both the Gifu and Okayama Plants.

【Examination of Greenhouse Gas Emission Calculation System and Analysis Methods】

① Quantitative Analysis of Effects of Greenhouse Gas Reductions

Production indicators and improvements in greenhouse gas emission rate are analyzed to determine quantitative trends in CO_2 emissions.

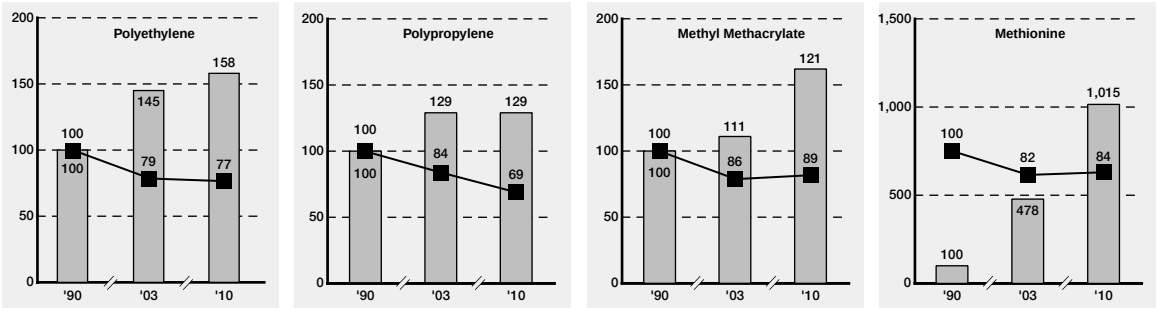
Emissions of Greenhouse Gases (All six gases)



② Analysis of CO_2 Emission Trends by Product Group

Analysis is applied to gain a quantitative understanding of improvements in CO_2 emission rates for individual product groups. Improvement targets are identified and efforts are made to enhance efficiency. Examples are provided for the product groups below.

Emissions of Greenhouse Gases (All six gases)



Production indicator[—] CO2 emission rate[—]

*Indicator and rates based on 1990 values as corresponding to 100.

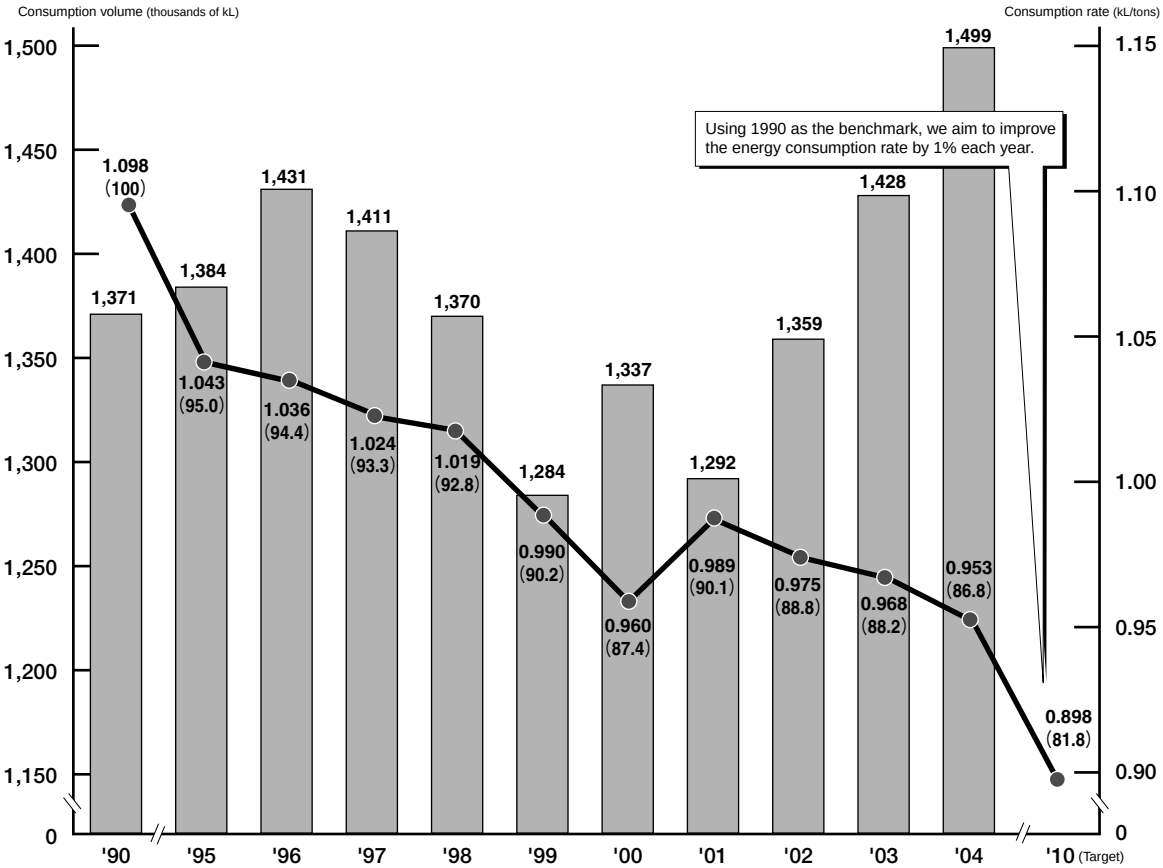
【Energy Saving】

In fiscal 2004, Sumitomo Chemical used 1.499 million kL of energy (crude oil conversion), representing a 5.0% increase over the previous fiscal year due to increased production volume. However, progress in energy saving measures such as waste heat recovery and high-efficiency power generation led to a 1.5% improvement over the previous year in terms of energy consumption rate.

Assigning to fiscal 1990 a value of 100 in the energy consumption index, the actual achievement for fiscal 2004 was 86.8, compared with the target of 86.9, representing a target-achievement rate of 100.8%.

Target : To improve the energy consumption rate by an average of at least 1% per year

Energy Consumption Volume and Energy Consumption Rate



*Fiscal 1990 (base year) and 2004 data include data for both the Gifu and Okayama Plants.

【Response to the Pollutant Release and Transfer Register (PRTR)】

Based on the results of risk assessments and release evaluations, Sumitomo Chemical has set for itself a new target for reducing release volumes (air and water) of PRTR-targeted substances by 50% relative to fiscal 2002 levels by fiscal 2010. Sumitomo Chemical is currently implementing a variety of systematic measures aimed at reducing release volumes of PRTR-targeted substances. In Fiscal 2004, the company released a total of 841.2 tons of such materials, an increase of 3.5% over the previous fiscal year. This increase was due to the addition of pollutant-release data for the Gifu and Okayama Plants following the acquisition of Sumika Fine Chemicals by Sumitomo Chemical. If the increase from these two plants is excluded, the total release volume is 744.4 tons, corresponding to an 8.4% reduction from the previous fiscal year.

Release and Transfer of PRTR-Targeted Substances in Fiscal 2004

Units: Tons (Dioxins are measured in mg-TEQ)

No.	PRTR-Targeted Substances	JCIA-Targeted Substances	Name of Chemical Compound	Amount Released					Amount Transferred		
				Air	Water	Soil	Landfill	Total	Sewerage	Waste	Total
1	○	○	Zinc compounds (water-soluble)	0.4	1.4	0.0	0.0	1.8	0.0	12.9	12.9
2	○	○	Acrylamide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	○	○	Acrylic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4		○	Butyl acrylate	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
5	○	○	Methyl acrylate	7.0	0.0	0.0	0.0	7.0	0.0	2.8	2.8
6	○	○	Acrylonitrile	14.7	0.0	0.0	0.0	14.7	0.0	0.0	0.0
7	○	○	Acrolein	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8		○	Adipic acid	0.9	2.9	0.0	0.0	3.8	0.0	0.0	0.0
9	○	○	Acetaldehyde	0.1	<0.1	0.0	0.0	0.1	0.0	0.0	0.0
10	○	○	Acetonitrile	0.4	0.0	0.0	0.0	0.4	0.0	41.0	41.0
11		○	Acetone	62.0	4.2	0.0	0.0	66.2	<0.1	375.6	375.6
12	○	○	2,2'-Azobisisobutyronitrile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	○	○	O-Anisidine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	○	○	Aniline	0.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0
15	○	○	2-Aminoethanol	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
16	○	○	m-Aminophenol	<0.1	0.0	0.0	0.0	<0.1	0.0	5.3	5.3
17	○	○	Allyl alcohol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	○	○	Antimony and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	6.1	6.1
19		○	Ammonia	7.1	<0.1	0.0	0.0	7.1	0.0	14.3	14.3
20		○	Aluminum compounds (water-soluble)	0.0	<0.1	0.0	0.0	<0.1	0.0	6.0	6.0
21	○	○	Isoprene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22		○	Indium and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	○	○	O-ethyl O-(6-nitro-m-tolyl) sec-butylphosphoroamidothioate (also known as Butamifos)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24		○	2-ethyl-1-hexanol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
25	○	○	Ethylbenzene	16.4	0.1	0.0	0.0	16.5	0.0	4.7	4.7
26	○	○	Ethylene oxide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	○	○	Ethylene glycol	<0.1	0.0	0.0	0.0	<0.1	0.0	0.4	0.4
28	○	○	Epichlorohydrin	17.3	0.4	0.0	0.0	17.7	0.0	<0.1	<0.1
29	○	○	1,2-epoxypropane (also known as Propylene oxide)	16.3	<0.1	0.0	0.0	16.3	0.0	0.0	0.0
30		○	Ammonium chloride	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9
31		○	Hydrogen chloride (excluding Hydrochloric acid)	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
32		○	Chlorine	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
33	○	○	e-Caprolactam	0.4	51.3	0.0	0.0	51.7	0.0	0.0	0.0
34		○	Formic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	○	○	Xylene	28.8	0.3	0.0	0.0	29.1	<0.1	271.8	271.8
36		○	Cumene/isopropylbenzene	12.6	<0.1	0.0	0.0	12.6	0.0	0.0	0.0
37	○	○	Glyoxal	<0.1	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
38	○	○	Cresol (o.m.p)	0.3	<0.1	0.0	0.0	0.3	0.0	0.0	0.0
39	○	○	Chromium and chromium(Ⅲ) compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40		○	Chlorosulphonic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	○	○	Chloroacetyl chloride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	○	○	o-Chloroaniline	0.0	0.0	0.0	0.0	0.0	0.0	<0.1	<0.1
43	○	○	p-Chloroaniline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	○	○	Chloroethane	12.1	0.0	0.0	0.0	12.1	0.0	0.0	0.0
45	○	○	Chloroethylene (also known as Vinyl chloride)	15.7	<0.1	0.0	0.0	15.7	0.0	0.0	0.0
46	○	○	Chlorodifluoromethane (also known as HCFC-22)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	○	○	3-Chloropropene (also known as Allyl chloride)	8.5	<0.1	0.0	0.0	8.5	0.0	0.0	0.0
48	○	○	Chlorobenzene	14.0	<0.1	0.0	0.0	14.0	0.0	344.0	344.0
49	○	○	Chloroform	0.6	0.0	0.0	0.0	0.6	0.0	11.4	11.4
50	○	○	Divanadium pentoxide	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
51	○	○	Cobalt and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7
52		○	Ethyl acetate	12.5	0.2	0.0	0.0	12.7	0.0	341.2	341.2
53	○	○	Vinyl acetate	246.5	0.2	0.0	0.0	246.7	0.0	68.0	68.0
54	○	○	a-Cyano-3-phenoxybenzyl N-(2-chloro-a, a, a-trifluoro-p-tolyl)-D-valinate (also known as Fluvalinate)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	○	○	a-Cyano-3-phenoxybenzyl 2-(4-chlorophenyl)-3-methylbutyrate (also known as Fenvalerate)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	○	○	Inorganic cyanide compounds (excluding Complex salts and cyanates)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57		○	Diethanolamine	0.0	1.4	0.0	0.0	1.4	0.0	0.0	0.0
58	○	○	1,4-Dioxane	2.9	0.0	0.0	0.0	2.9	0.0	128.9	128.9
59		○	Cyclohexanol	16.1	<0.1	0.0	0.0	16.1	0.0	0.0	0.0
60		○	Cyclohexane	57.3	0.0	0.0	0.0	57.3	0.0	0.0	0.0
61	○	○	Cyclohexylamine	0.0	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
62	○	○	1,2-Dichloroethane	8.1	0.0	0.0	0.0	8.1	0.0	200.0	200.0
63	○	○	1,1-Dichloroethylene (also known as Vinylidene dichloride)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	○	○	1,3-Dichloropropene (also known as D-D)	0.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0
65	○	○	o-Dichlorobenzene	0.7	0.0	0.0	0.0	0.7	0.0	107.8	107.8
66	○	○	Dichloropentafluoropropane (also known as HCFC-225)	16.3	0.0	0.0	0.0	16.3	0.0	0.0	0.0
67	○	○	Dichloromethane (also known as Methylene dichloride)	9.8	0.0	0.0	0.0	9.8	0.0	85.2	85.2
68	○	○	Dinitrotoluene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	○	○	2,4-Dinitrophenol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	○	○	Diphenylamine	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
71		○	2,6-Di-t-butyl-4-methylphenol/BHT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72		○	Dimethylamine	0.0	38.2	0.0	0.0	38.2	0.0	6.0	6.0

Release and Transfer of PRTR-Targeted Substances in Fiscal 2004

No.	PRTR-Targeted Substances	JCIA-Targeted Substances	Name of Chemical Compound	Amount Released					Amount Transferred		
				Air	Water	Soil	Landfill	Total	Sewerage	Waste	Total
73	○	○	N,N-Dimethylformamide	2.8	0.0	0.0	0.0	2.8	0.0	173.8	173.8
74		○	Hydrogen bromide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75		○	Oxalic acid	0.8	0.0	0.0	0.0	0.8	0.0	14.1	14.1
76		○	Bromine	0.0	<0.1	0.0	0.0	<0.1	0.0	19.8	19.8
77		○	Nitric acid	0.0	0.0	0.0	0.0	0.0	0.0	9.2	9.2
78	○	○	Styrene	4.9	0.0	0.0	0.0	4.9	0.0	0.0	0.0
79	○	○	Dioxines	30.0	15.3	0.0	0.0	45.3	0.0	17.1	17.1
80	○	○	Thiourea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	○	○	O, O-dimethyl S-2-[1-(N-methylcarbamoyl) ethylthio] ethyl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	○	○	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	0.0	0.0
83	○	○	1,3,5,7-tetraazatricyclo [3.3.1.13.7] decane (also known as Hexamethylenetetramine)	<0.1	0.0	0.0	0.0	<0.1	0.0	0.3	0.3
84	○	○	Tetrachloroethylene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85		○	Tetrahydrofuran	21.4	4.1	0.0	0.0	25.5	0.0	506.6	506.6
86		○	Tellurium and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	○	○	Terephthalic acid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	○	○	Copper salts (water-soluble, excluding complex salts)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89		○	Triethanolamine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90		○	Triethylamine	26.4	23.9	0.0	0.0	50.3	0.0	54.1	54.1
91	○	○	2,4,6-trichloro-1,3,5-triazine (Cyanuric chloride)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	○	○	Trichlorotrifluoroethane (also known as CFC-113)	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
93		○	Trimethylamine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	○	○	1,3,5-trimethylbenzene	<0.1	0.0	0.0	0.0	<0.1	0.0	0.2	0.2
95	○	○	o-Toluidine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	○	○	p-Toluidine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	○	○	Toluene	213.1	1.4	0.0	0.0	214.5	<0.1	1,042.5	1,042.5
98	○	○	Lead and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	○	○	Nickel	0.0	0.0	0.0	0.0	0.0	0.0	6.2	6.2
100	○	○	Nickel compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
101	○	○	N-Nitrosodiphenylamine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102	○	○	p-Nitrophenol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103	○	○	Nitrobenzene	0.2	0.2	0.0	0.0	0.4	0.0	0.0	0.0
104		○	Palladium and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	○	○	Hydrazine	0.5	0.1	0.0	0.0	0.6	0.0	37.3	37.3
106	○	○	Hydroquinone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107	○	○	Pyridine	0.4	0.2	0.0	0.0	0.6	0.0	6.4	6.4
108	○	○	Pyrocatechol (also known as Catechol)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109	○	○	m-Phenylenediamine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	○	○	Phenol	<0.1	0.0	0.0	0.0	<0.1	0.0	1.0	1.0
111	○	○	3-Phenoxybenzyl 3-(2,2- dichlorovinyl)-2, 2-dimethylcyclopropanecarboxylate (also known as Permethrin)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112	○	○	1,3-butadiene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113		○	Diisobutyl phthalate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	○	○	Di-n-butyl phthalate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	○	○	Bis (2-Ethylhexyl) Phthalate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116		○	Butyl alcohol	2.6	0.6	0.0	0.0	3.2	0.0	47.8	47.8
117		○	Butyraldehyde	2.5	0.0	0.0	0.0	2.5	0.0	28.6	28.6
118	○	○	Hydrogen fluoride and its water-soluble salts	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
119		○	Propyl alcohol	2.0	0.0	0.0	0.0	2.0	0.0	7.7	7.7
120		○	n-Hexane	143.6	1.0	0.0	0.0	144.6	1.4	173.4	174.8
121	○	○	Benzyl chloride	<0.1	<0.1	0.0	0.0	<0.1	0.0	0.0	0.0
122	○	○	Benzaldehyde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123	○	○	Benzene	71.9	0.8	0.0	0.0	72.7	0.0	0.0	0.0
124		○	Pentaerythritol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125	○	○	Boron and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	4.1	4.1
126	○	○	Phosgene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127	○	○	Poly (oxyethylene) alkyl ether(alkyl c=12-15)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128	○	○	Formaldehyde	0.2	<0.1	0.0	0.0	0.2	0.2	0.9	1.0
129	○	○	Manganese and its compounds	0.0	0.4	0.0	0.0	0.4	0.0	32.3	32.3
130	○	○	Phthalic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	○	○	Maleic anhydride	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132	○	○	2-Ethylhexyl methacrylate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133	○	○	2,3-Epoxypropyl methacrylate	7.3	0.0	0.0	0.0	7.3	0.0	2.3	2.3
134	○	○	Methyl methacrylate	40.6	0.0	0.0	0.0	40.6	0.0	15.6	15.6
135		○	Methanethiol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136		○	Methylamine	<0.1	0.0	0.0	0.0	<0.1	0.0	0.0	0.0
137		○	Methyl alcohol (methanol)	52.4	2.2	0.0	0.0	54.6	1.1	2,160.2	2,161.3
138		○	Methyl ethyl ketone	0.3	0.0	0.0	0.0	0.3	0.0	2.4	2.4
139	○	○	2-Isoprophenyl N-methylcarbamate (also known as Isoprocarb or MIPC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	○	○	a-Methylstyrene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141		○	N-Methylpyrrolidone	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7
142		○	Methyl isobutyl ketone	117.8	1.0	0.0	0.0	118.8	0.0	165.3	165.3
143		○	Melamine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144	○	○	Molybdenum and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	69.2	69.2
145		○	Sulfuric acid	0.2	0.0	0.0	0.0	0.2	0.0	164.6	164.6
146		○	Diethyl sulfate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147		○	Dimethyl sulfate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148		○	Phosphorus and its compounds	<0.1	32.9	0.0	0.0	32.9	0.0	61.9	61.9
			Total 148 substances used by Sumitomo Chemical (FY2004)	1,323.1	169.4	0.0	0.0	1,492.5	2.7	6,857.9	6,860.6

*The PRTR Law indicates the use of kilograms (rounded off to two significant figures) to express weight, but in this report numerical values are expressed in tons rounded off to one decimal place (except for dioxins, expressed in mg-TEQ).

*The data above include the data for the Gifu and Okayama Plants (formerly Sumika Fine Chemicals).

Release and Transfer of PRTR-Targeted Substances in Fiscal 2004

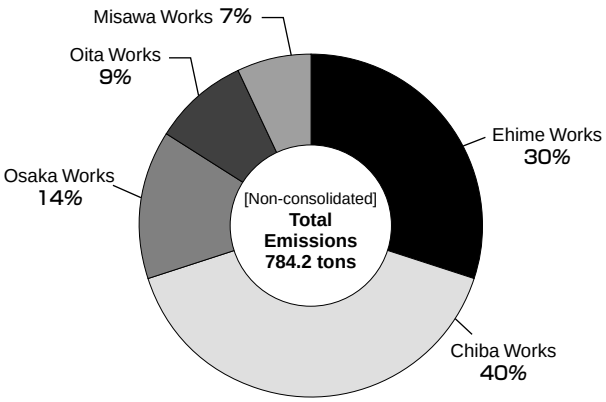
(Tons)

		Released			Transferred		
		Air	Water	Subtotal	Sewage	Waste	Subtotal
PRTR-targeted substances	Non-consolidated (104 substances)	784.2	57.0	841.2	0.2	2,691.7	2,691.9
	Consolidated	1,464.4	155.2	1,619.6	24.8	4,247.2	4,272.0
JCIA-targeted substances	Non-consolidated (148 substances)	1,323.1	169.4	1,492.5	2.7	6,857.9	6,860.6

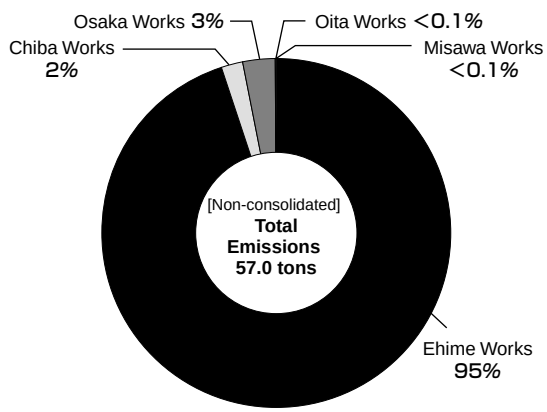
*Consolidated figures for the release and transfer of PRTR-targeted substances reflect totals for Sumitomo Chemical and its 18 domestic Group companies.

Breakdown of Emissions by Works

Atmospheric Emissions (PRTR-targeted substances)



Water Emissions (PRTR-targeted substances)



*The data for the Osaka Works include the data for the Gifu and Okayama Plants, which are now included in the figures.

【Initiatives to Reduce Emissions of Volatile Organic Compounds】

With the revision of the Air Pollution Control Law, volatile organic compounds (VOCs) became subject to new regulations. Thus in addition to its voluntary initiatives, Sumitomo Chemical established a new target in fiscal 2004 to reduce VOC emissions by 30% relative to fiscal 2000 levels by fiscal 2010. Studies on VOC emissions are currently underway, and work is continuing on PRTR-compliance and related plans to reduce emissions. In fiscal 2004, VOC emissions were reduced by approximately 22% relative to fiscal 2000.

【Prevention of Ozone Layer Damage】

Sumitomo Chemical maintains strict control of cooling devices that use specified CFCs (designated in the Law Concerning the Protection of the Ozone Layer Through the Control of Specified Substances and Other Measures) that are highly damaging to the ozone layer. The company is committed to ensuring that CFCs are not released accidentally into the atmosphere from devices that contain them and carries out the proper recovery, transportation and destruction of specified CFCs from refrigeration units upon disposal. In fiscal 2004, four systems using specified CFCs (CFC11 x 1, CFC12 x 3) were withdrawn from use.

Target : Eliminating the use of refrigeration units that use the specified CFCs (CFC11, CFC12, CFC113, CFC114, CFC115) as coolants by 2025

Number of Refrigeration Units in Use that Use Specified CFCs as of the End of Fiscal 2004 (Non-consolidated & Consolidated)

	Non-consolidated	Consolidated
Type	Number of units	
CFC11	25	32
CFC12	14	67
CFC113	0	0
CFC114	0	2
CFC115	0	10
Total	39	111

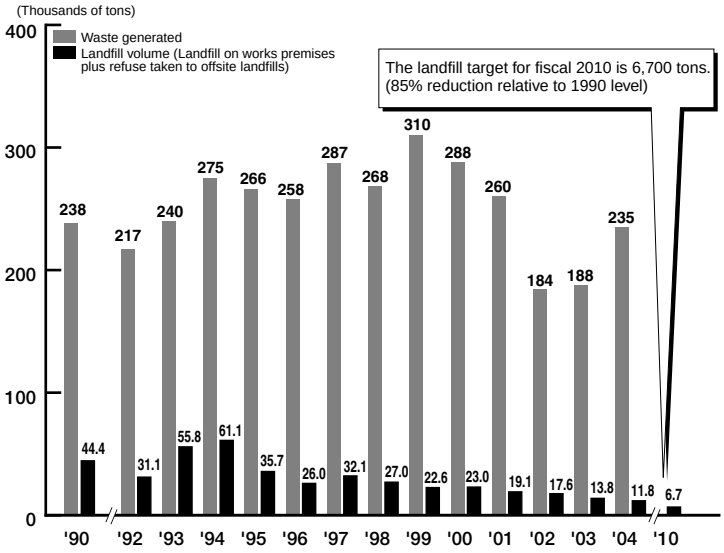
*These data have been revised due to improvements in accuracy

【Waste Reduction】

Thanks to Sumitomo Chemical's promotion of waste reduction, and reuse and recycling, landfill waste in fiscal 2004 totaled 11,800 tons, down 14.5% from the previous fiscal year and 73.4% from fiscal 1990.

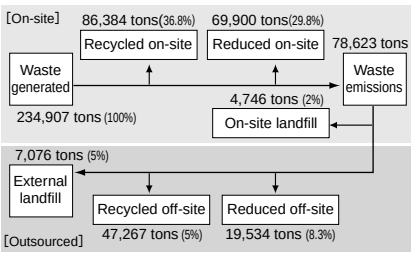
Target : To reduce landfill waste in fiscal 2010 by 85% relative to fiscal 1990 level

Trends in Waste Generated and Landfill Volume (Non-consolidated)

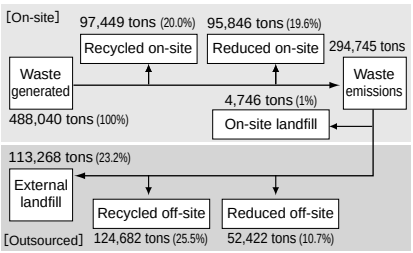


*The fiscal 1990 and 2004 data include data for the Gifu and Okayama Plants.

Waste Disposal Flow Chart and Results (Fiscal 2004, Non-consolidated)



Waste Disposal Flow Chart and Results (Fiscal 2004, Consolidated)



Waste recycled: Total amount of waste that was reused, recycled, or thermally recycled

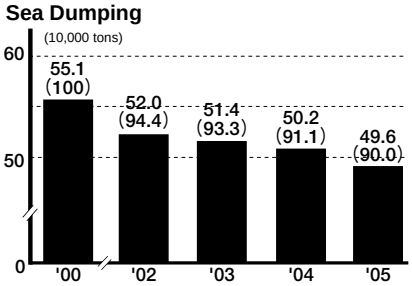
Waste reduced: Total amount of waste reduced through incineration

【Reducing Bauxite Residue】

The volume of red bauxite (the residue of natural bauxite from which aluminum has been extracted) disposed of through sea dumping declined 2.3% from the previous fiscal year to 502,000 tons, representing an 8.9% reduction relative to the fiscal 2000 level.

Target : To reduce the amount of red bauxite disposed through sea dumping in fiscal 2005 to 10% below fiscal 2000 level

Disposal of Red Bauxite Residue through Sea Dumping



*Numerical values in parentheses are index values (2000 = 100)

【PCB Recovery, Storage, and Treatment】

In accordance with the Law for Special Management of PCBs (polychlorinated biphenyls), Sumitomo Chemical recovers PCB waste (capacitors, transformers, and other electronic devices that contain PCB insulating oil). The Company then stores this industrial waste, which is subject to special control, in specified areas within the Company's waste storage facilities, subsequently ensuring strict control of these materials. Sumitomo Chemical plans to treat all of its PCB waste by March 2014, ahead of the deadline specified by the Law.

Target : To recover and store PCB waste products in an appropriate manner and to complete the treatment these materials by March 2014

PCB waste storage and control as of the end of fiscal 2004
(Non-consolidated & Consolidated)

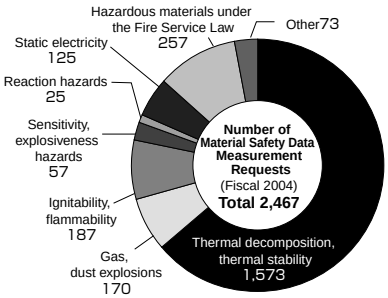
	Number of Units of PCB Waste	PCB Volume (m^3)
Non-consolidated	756 (717 Stored / 39 In Use)	42.2
Consolidated	1,531 (1,030 Stored / 501 In Use)	46.1

*Low-level PCB waste is not included.
*Data have been revised due to improvements in accuracy.

3 Process Safety and Disaster Prevention

【Results of Material Safety Data Measurement】

The Safety Engineering Laboratory at the Ehime Process & Production 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 2,467 material safety data measurements were taken in fiscal 2004, 64% of which measured thermal decomposition and thermal stability.



【Safety Information Database】

A safety information database has been created by preparing excerpts collected from accident data in Japan and overseas. As of June 2004, 26,594 data were stored in the database. Extracts of data can be searched from all employees' terminals at each facility or research laboratory, and the original data can be viewed or printed using dedicated terminals. These data are used in process hazard evaluations and case study examinations to prevent similar accidents.

Accident prevention technology information: 11,162 items ・Accident cause investigations: 1,623 ・Accident information: 13,809 items

【Process Safety Review Committee】

The Process Safety Review Committee convenes at every stage of the R&D and commericialization processes to oversee a system in which the safety of each stage is throughly verified before moving on to the next stage. This system is governed by in-house process Development Commercialization Regulations and Safety Management Guidelines, and ensures that work is conducted with clearly defined research and development supervision. Operations within the Company are also circulated to other Group companies involved. The Process Safety Review Committee convened a total of 146 times at all facilities in fiscal 2003, and in fiscal 2004, this was increased to a total of 160 sessions. Work continues on in-depth determination of process hazards.

Process Safety Review Committee conventions

Fiscal year	Level 1	Level 2	Level 3	Level 4	Level 5	Total
2003	5	16	38	67	20	146
2004	4	32	34	66	24	160

4 Audit

【Audit Overview】

The fiscal 2004 Responsible Care Audit marked the Company's 10th year following its transition to the current auditing system. During this 10-year period, a total of 225 audits have been conducted at Sumitomo Chemical Group companies. Auditing of Group companies commenced in 1999, and a total of 80 audits have been conducted under the new system, representing over 30% of the total.

The checklists used for auditing are revised every year, but with the increasing number of audits, there has been a reduction in the number of items requiring close attention, such as those classified under the headings "Needs Improvement" or "Needs to be Examined."

The number of "Good" results, meanwhile, has steadily risen. For this reason, work on improving auditing methods and increasing efficiency continued from fiscal 2003, for example by changing the evaluation criteria so that the majority of auditing time was allocated to identifying and examining items classified under "Needs Improvement" and "Needs to be Examined."

The fiscal 2004 Sumitomo Chemical EH&S audit covered a total of 282 areas at four works, one research laboratory, and six business divisions.

Responsible Care Audit Results (Past 10 Years)

Facilities		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
EH&S Audits	Works*	5	5	4	4	5	4	5	4	5	4
	Laboratories	0	0	2	1	0	2	1	0	1	1
	Distribution Center	0	0	0	1	0	0	0	1	0	0
	Business Divisions	0	0	4	0	4	4	4	5	5	6
	Group Companies (Japan)	0	0	0	0	5	22	16	9	8	12
	Group Companies (Overseas)	0	0	0	0	0	0	2	1	2	3
Management Audits	Works and Laboratories	5	5	6	6	5	6	6	5	6	6

*Including laboratories within the works compounds

Fiscal 2004 Environment, Health & Safety Audits

Facilities	4 Works, 1 Laboratory	6 Business Divisions
Good (Important)	28	7
Needs Improvement	57	40
Needs to be Examined	125	25

5 Unification of Group Environmental Preservation Targets

In fiscal 2004, actual quantitative targets were established Group-wide to reduce primary environmental impact systematically across the Group as a whole. These covered unit energy consumption, unit CO_2 emissions, emissions of PRTR-targeted substances (air and water), and landfill disposal. Clarification of specific measures to achieve these targets is planned.

① Improvement of unit energy consumption

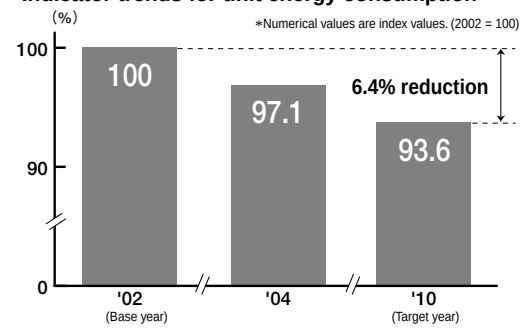
Target

To reduce unit energy consumption by 6.4% relative to fiscal 2002 levels by fiscal 2010

Results

Unit energy consumption in fiscal 2004 was reduced by 2.9% relative to fiscal 2002 levels.

Indicator trends for unit energy consumption



② Improvement of unit CO_2 emissions rate

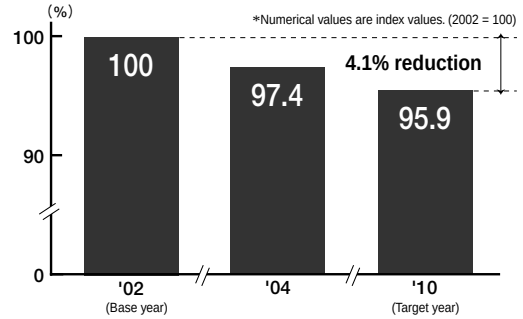
Target

To reduce unit CO_2 emissions by 4.1% relative to fiscal 2002 levels by fiscal 2010

Results

Unit CO_2 emissions in fiscal 2004 were reduced by 2.6% relative to fiscal 2002 levels.

Indicator trends for unit CO_2 emissions



③ Reducing emissions of PRTR-targeted substances

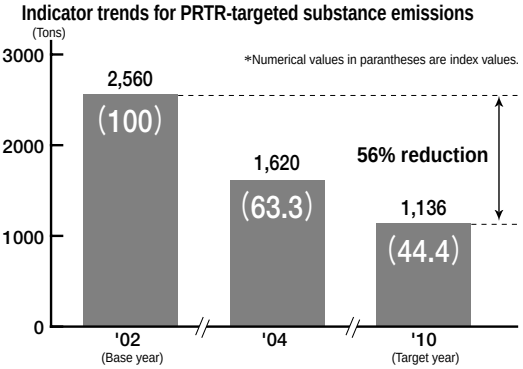
Target

To reduce total emissions of PRTR-targeted substances (air and water) by 56% relative to fiscal 2002 levels by fiscal 2010

Results

Total emissions of PRTR-targeted substances in fiscal 2004 were reduced by 37% relative to fiscal 2002 levels.

Indicator trends for PRTR-targeted substance emissions



④ Reduction of landfill disposal volume

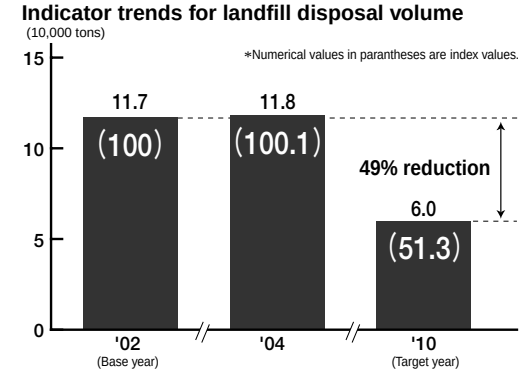
Target

To reduce landfill disposal volume by 49% relative to fiscal 2002 levels by fiscal 2010

Results

The landfill disposal volume in fiscal 2004 increased by 0.9% relative to fiscal 2002 levels.

Indicator trends for landfill disposal volume



*Individual target values are calculated on the basis of targets set by Sumitomo Chemical and 18 domestic Group companies.

【Individual Group Company Targets】

The individual company targets that formed the basis of the unified Group targets (specific target settings) are listed below for the major areas of environmental Preservation management.

Energy conservation and global warming initiatives

Company	Target Details
Asahi Chemical Co., Ltd.	Reduce energy consumption in fiscal 2010 by 10% relative to fiscal 1990
Kaito Chemical Industry Co., Ltd.	Work to use energy efficiently
Koei Chemical Co., Ltd.	Reduce unit energy consumption by 1% annually
Thermo Co., Ltd.	Reduce energy consumption in fiscal 2010 by 30% relative to fiscal 2003 Reduce unit CO_2 emissions in fiscal 2010 by 30% relative to fiscal 2003
Sanzen Kako Co., Ltd.	Reduce unit energy consumption by 1% annually
Shinto Paint Co., Ltd.	Reduce unit energy consumption by 1% annually
Sumika Color Co., Ltd.	Reduce unit energy consumption in fiscal 2010 by 20% relative to fiscal 1990
Sumitomo Joint Electric Power Co., Ltd.	Reduce unit CO_2 emissions from thermal power stations in fiscal 2010 by at least 10% relative to fiscal 1990
Sumitomo Pharmaceuticals Co., Ltd.	Maintain CO_2 emissions in fiscal 2010 below fiscal 1990 levels
Sumitomo Dow Ltd.	Reduce unit energy consumption by 1% annually Reduce unit CO_2 emissions from in-house fossil fuel consumption by 1% annually
Sumitomo Bayer Urethane Co., Ltd.	Reduce unit energy consumption by 1% annually Reduce unit CO_2 emissions from in-house fossil fuel consumption in fiscal 2010 by 10% relative to fiscal 1990
Taoka Chemical Co., Ltd.	Reduce unit energy consumption by 0.25% annually Reduce unit CO_2 emissions from in-house fossil fuel consumption in fiscal 2010 by 3% relative to fiscal 1990
Nippon A&L Inc.	Reduce unit energys consumption by 1% annually
Nihon Medi-Physics Co., Ltd.	Reduce electricity consumption by 1% annually
Nihon Oxirane Co., Ltd.	Reduce unit energy consumption by 1% annually Reduce unit CO_2 emissions from in-house fossil fuel consumption in fiscal 2010by 10% relative to fiscal 1990
Sumika Takeda Agrochemical Co., Ltd.	Reduce unit energy consumption by 1% annually Reduce unit CO_2 emissions from in-house fossil fuel consumption in fiscal 2010 by 10% relative to fiscal 1990
Chiba Polyethylene Co., Ltd.	Reduce unit energy consumption by 1% annually Reduce unit CO_2 emissions from in-house fossil fuel consumption in fiscal 2010 by 10% relative to fiscal 1990
New STI Technology Co., Ltd.	Reduce unit energy consumption by 1% annually Reduce unit CO_2 emissions from in-house fossil fuel consumption in fiscal 2010 by 10% relative to fiscal 1990
Sumitomo Chemical Co., Ltd.	Reduce unit energy consumption by 1% annually Reduce unit CO_2 emissions from in-house fossil fuel consumption in fiscal 2010 by 10% relative to fiscal 1990

PRTR Initiatives

Company	Target Details
Asahi Chemical Co., Ltd.	Maintain emissions (water/air) in fiscal 2010 below fiscal 2001 levels
Kaito Chemical Industry Co., Ltd.	Reduce emissions (water/air) in fiscal 2010 by 62% relative to fiscal 2002
Koei Chemical Co., Ltd.	Limit emission increases corresponding to production levels
Thermo Co., Ltd.	Maintain zero emissions (water/air)
Sanzen Kako Co., Ltd.	Maintain zero emissions (water/air)
Shinto Paint Co., Ltd.	Reduce emissions (water/air) in fiscal 2008 by 50% relative to fiscal 2001
Sumika Color Co., Ltd.	Reduce emissions (water/air) in fiscal 2010 by 15% relative to fiscal 2003
Sumitomo Joint Electric Power Co., Ltd.	Maintain zero emissions (water/air)
Sumitomo Pharmaceuticals Co., Ltd.	Reduce atmospheric dichloro methane emissions by at least 70% relative to fiscal 1999
Sumitomo Dow Ltd.	Reduce emissions (water/air) in fiscal 2010 by 50% relative to fiscal 2003
Sumitomo Bayer Urethane Co., Ltd.	Reduce emissions (water/air) in fiscal 2010 by 60% relative to fiscal 2002
Taoka Chemical Co., Ltd.	Maintain emissions (water/air) in fiscal 2010 below fiscal 2002 levels
Nippon A&L Inc.	Reduce emissions (water/air) in fiscal 2010 by 60% relative to fiscal 2002
Nihon Medi-Physics Co., Ltd.	Maintain zero emissions (water/air)
Nihon Oxirane Co., Ltd.	Reduce molybdenum waterway emissions in fiscal 2010 to 10 tons
Sumika Takeda Agrochemical Co., Ltd.	Reduce emissions (water/air) in fiscal 2010 by 50% relative to fiscal 2002
Chiba Polyethylene Co., Ltd.	Maintain zero emissions (water/air)
New STI Technology, Co., Ltd.	Reduce emissions (water/air) in fiscal 2010 by 50% relative to fiscal 2002
Sumitomo Chemical Co., Ltd.	Reduce emissions (water/air) in fiscal 2010 by 50% relative to fiscal 2002

Landfill Disposal Reduction Initiatives

Company	Target Details
Asahi Chemical Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 7% relative to fiscal 1990
Kaito Chemical Industry Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 50% relative to fiscal 2002
Koei Chemical Co., Ltd.	Reduce landfill disposal volume in fiscal 2005 by 5% relative to fiscal 2000
Thermo Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 12% relative to fiscal 2002
Sanzen Kako Co., Ltd.	Maintain landfill disposal volume in fiscal 2010 below fiscal 2003 levels
Shinto Paint Co., Ltd.	Reduce landfill disposal volume (excluding sludge) by 2% relative to previous year
Sumika Color Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 20% relative to fiscal 1990
Sumitomo Joint Electric Power Co., Ltd.	Achieve 70% utilization rate for coal ash
Sumitomo Pharmaceuticals Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by at least 70% relative to fiscal 1990
Sumitomo Dow Ltd.	Maintain landfill disposal volume in fiscal 2010 below fiscal 2003 levels
Sumitomo Bayer Urethane Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 85% relative to fiscal 1990
Taoka Chemical Co., Ltd.	Maintain landfill disposal volume in fiscal 2010 below fiscal 2002 levels
Nippon A&L Inc.	Reduce landfill disposal volume in fiscal 2010 by 85% relative to fiscal 1990
Nihon Medi-Physics Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 to 27 tons
Nihon Oxirane Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 85% relative to fiscal 1990
Sumika Takeda Agrochemical Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 85% relative to fiscal 1990
Chiba Polyethylene Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 85% relative to fiscal 1990
New STI Technology, Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 85% relative to fiscal 1990
Sumitomo Chemical Co., Ltd.	Reduce landfill disposal volume in fiscal 2010 by 85% relative to fiscal 1990

SUMITOMO CHEMICAL

Sumitomo Chemical produces an "Environment, Health & Safety Report"
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