

Global Data

Calculating Konica Minolta's Environmental Impact

Impacts on the environment are not limited by geographic boundaries. Based on our awareness that Konica Minolta's business activities impact the Earth's environment through the use of resources and the disposal of waste, we collect and analyze data concerning our environmental impact on a global scale and seek to reduce our impact on the environment. Our reporting here includes data from overseas operations beginnings in fiscal 2001, when data on all of our production sites became available. Fiscal 2003 data also are broken down by region.

In the future, we will expand the coverage of our global data, collecting and disclosing even more detailed information on our overseas operations.

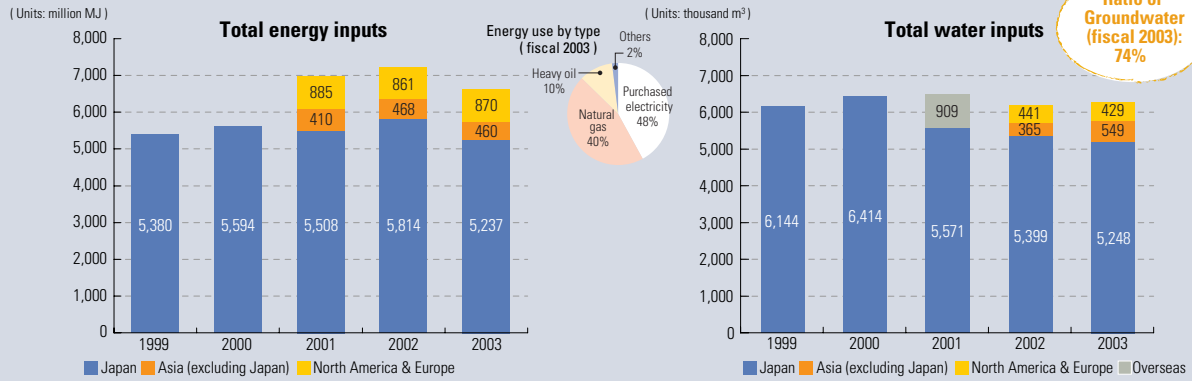
Fiscal 2003 Data—Coverage & Methodology

Environmental impact data are collected for all Konica Minolta Group production sites. Environmental impacts of production sites account for the majority of the Group's environmental impacts—for example, more than 95% of our greenhouse gas emissions and more than 99% of our water usage. For the items that required the standardization of data collection, calculation methods and criteria as a result of our corporate integration—such as waste, energy use and greenhouse gas emissions—people responsible for each category did the calculations in close cooperation with each site, checking the details as they went along.

Production sites

Site name	Location	Items produced
Konica Minolta production sites		
Konica Minolta Tokyo site (Hino block)	Hino-shi, Tokyo	Color film and photosensitive materials
Konica Minolta Tokyo site (Hachioji block)	Hachioji-shi, Tokyo	Optical parts
Konica Minolta Odawara site	Odawara-shi, Kanagawa Prefecture	Photo printing and inkjet papers
Konica Minolta Kofu site	Nakakoma-gun, Yamanashi Prefecture	Medical imaging materials
Konica Minolta Mizuho site	Toyokawa-shi, Aichi Prefecture	Image information equipment
Konica Minolta Itami site	Itami-shi, Hyogo Prefecture	Optical-related products
Konica Minolta Osakasayama site	Osakasayama-shi, Osaka	Optical-related products
Konica Minolta Kobe site	Kobe-shi, Hyogo Prefecture	Triacetyl-cellulose (TAC) film for use in LCD polarizing plates
Japanese affiliate production sites		
Konica Minolta Technoproducts Co., Ltd. Headquarters	Sayama-shi, Saitama Prefecture	Assorted machinery
Konica Minolta Technoproducts Co., Ltd. Hachioji Facility	Hachioji-shi, Tokyo (within Tokyo site)	Machining
Konica Minolta Technoproducts Co., Ltd. Tsuru Facility	Tsuru-shi, Yamanashi Prefecture	Electronics parts
Konica Minolta Supplies Manufacturing Co., Ltd.	Kofu-shi, Yamanashi Prefecture	Toner for image information equipment
Miki Minolta Industries Co., Ltd.	Miki-shi, Hyogo Prefecture	Consumables for image information equipment
Toyohashi Precision Products Co., Ltd.	Toyohashi-shi, Aichi Prefecture	Equipment parts
Sankei Precision Products Co., Ltd.	Toyokawa-shi, Aichi Prefecture (within Mizuho site)	Image information equipment
Konica Minolta Opto Products Co., Ltd.	Higashiyatsushiro-gun & Minamitsuru-gun, Yamanashi Prefecture	Optical parts
Konica Minolta Components Co., Ltd.	Toyokawa-shi, Aichi Prefecture	Optical parts
Nankai Optical Co., Ltd.	Kainan-shi, Wakayama Prefecture	Optical parts
MYG Disk Co., Ltd. Headquarters	Osakasayama-shi, Osaka (within Osakasayama site)	Optical parts
MYG Disk Co., Ltd. Iruma Facility	Iruma-shi, Saitama Prefecture	Optical parts
Konica Minolta Packaging Co., Ltd.	Hamura-shi, Tokyo	Color film
Konica Minolta Chemical Co., Ltd. Fukushima Facility	Soma-gun, Fukushima Prefecture	Chemicals
Konica Minolta Chemical Co., Ltd. Shizuoka Facility	Iwata-gun, Shizuoka Prefecture	Chemicals
Okayama Minolta Seimitsu Co., Ltd.	Maniwa-gun, Okayama Prefecture	Optical instruments
Overseas affiliate production sites		
Konica Minolta Business Solutions(Wuhan)Co., Ltd.	China	Image information equipment
Konica Minolta Business Technologies Manufacturing(HK)Ltd.	China	Image information equipment
Konica Minolta Opto(Dalian)Co., Ltd.	China	Optical-related products
Konica Minolta Optical Products(Shanghai)Co., Ltd.	China	Cameras
Konica Minolta Optical Technologies(Shanghai)Co., Ltd.	China	Cameras
Konica Minolta Precision Engineering Malaysia Sdn. Bhd.	Malaysia	Camera parts
Konica Minolta Photochem(Thailand)Co., Ltd.	Thailand	Photographic chemicals
Konica Supplies Manufacturing U.S.A., Inc.	United States	Image information equipment toner
Minolta Advance Technology, Inc.	United States	Image information equipment toner
Konica Minolta Manufacturing U.S.A., Inc.	United States	Photo printing paper
Konica Minolta Graphic Imaging U.S.A., Inc.	United States	Photosensitive materials for printing
Konica Minolta Supplies Manufacturing France S.A.S.	France	Image information equipment toner

INPUT



Electricity : 328,915 MWh Natural gas : 70,014 thousand m³ Heavy oil : 16,012 kiloliters Ground water : 4,615 thousand m³ in fiscal 2003



Konica Minolta



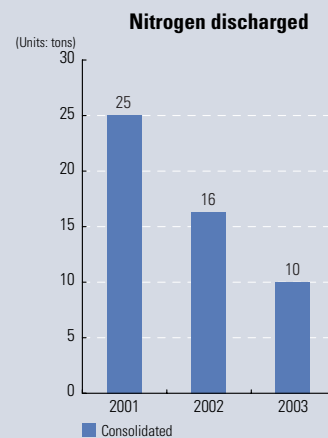
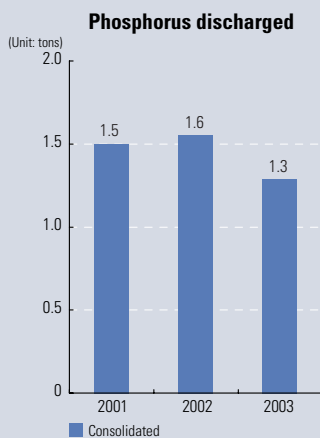
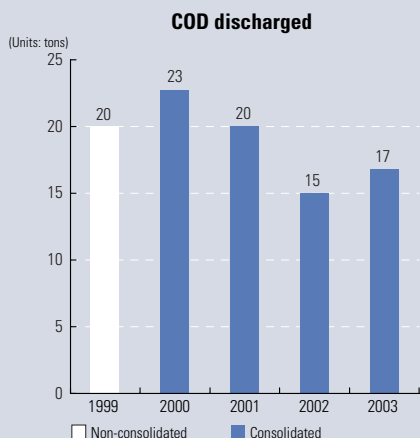
OUTPUT



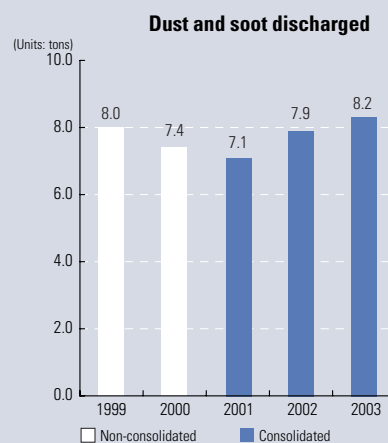
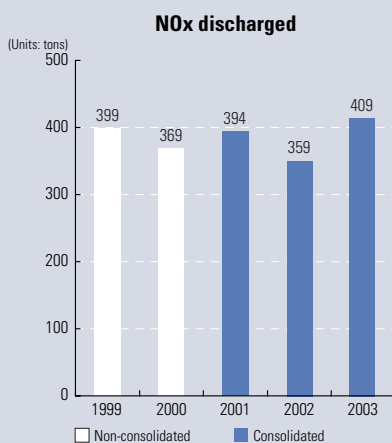
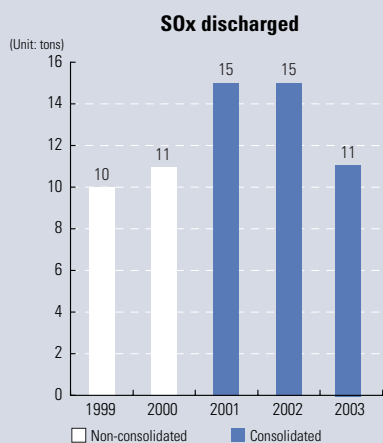
CO₂ : 327,650 tons Waste water : 5.085 million m³ Total waste sent to landfill : 762 tons in fiscal 2003

Data for Japan

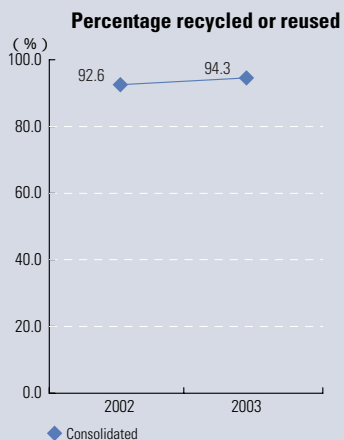
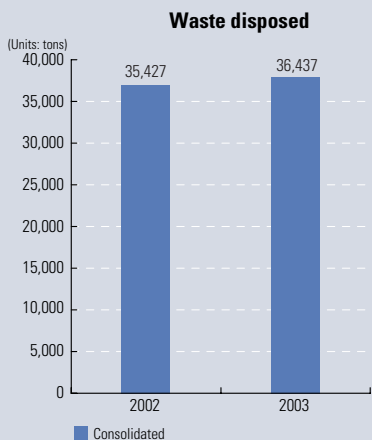
Public water bodies



Air



Waste



Substances Controlled by PRTR (Pollution Release and Transfer Register) Regulations

Fiscal 2003 / Consolidated (Japan)

Units: tons

PRTR Law identification number	Name of chemical substance	Amount handled	Releases			Amounts used (in products)	Treated on-site (incinerated, decomposed)	Amount transferred externally		Recycled
			To air	To water	To soil			*Waste	Sewage	
4	Ethyl acrylate	5.7	0.1	0.0	0.0	5.5	0.0	0.1	0.0	0.0
12	Acetonitrile	359.2	14.6	0.0	0.0	0.0	38.6	302.3	0.0	3.6
15	Aniline	7.3	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0
19	3-Amino-1,2,4-triazole	2.7	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0
25	Antimony and its compounds	44.9	0.4	0.0	0.0	43.1	0.0	1.4	0.0	0.0
43	Ethylene glycol	8.7	0.6	0.0	0.0	2.8	0.0	5.0	0.2	0.0
45	Ethylene glycol monomethyl ether	6.3	0.0	0.0	0.0	2.5	0.0	3.8	0.0	0.0
46	Ethylenediamine	2.9	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0
63	Xylene	24.5	3.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0
64	Silver compounds (Ag equivalent)	704.8	0.0	0.0	0.0	690.3	0.0	6.0	0.1	8.4
65	Glyoxal	1.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
67	Cresol	1.3	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0
83	1-Chloro-2,4-dinitrobenzene	4.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
95	Chloroform	32.0	2.6	0.0	0.0	0.0	2.4	27.0	0.0	0.0
116	1,2-Dichloroethane	16.0	2.8	0.0	0.0	12.2	0.0	1.0	0.0	0.0
117	1,1-Dichloroethylene	8.7	0.0	0.0	0.0	8.6	0.0	0.1	0.0	0.0
139	o-Dichlorobenzene	1.3	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0
145	Dichloromethane	294.4	161.4	0.0	0.0	5.8	1.6	79.9	0.0	45.8
172	N,N-Dimethyl formamide (DMF)	220.2	3.5	0.0	0.0	3.8	36.4	176.5	0.0	0.0
177	Styrene	1,237.4	2.6	0.0	0.0	1,228.4	0.0	2.1	4.2	0.0
212	2,4,6-Trichloro-1,3,5-triazine (also known as cyanuric chloride)	16.8	0.0	0.0	0.0	16.8	0.0	0.0	0.0	0.0
227	Toluene	172.7	14.9	0.0	0.0	3.1	0.8	140.6	13.2	0.0
230	Lead and its compounds (amounts contained in solder, etc.)	2.5	0.0	0.0	0.0	1.6	0.0	0.3	0.0	0.6
232	Nickel compounds	15.8	0.0	2.2	0.0	6.9	0.0	6.7	0.0	0.0
241	Carbon disulfide	1.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
243	Barium and its water-soluble compounds (such as barium iodide)	12.8	0.1	0.0	0.0	5.3	0.0	7.4	0.0	0.0
253	Hydrazine	8.3	0.0	0.0	0.0	4.3	3.6	0.4	0.0	0.0
254	Hydroquinone	21.2	0.0	0.0	0.0	18.5	0.0	2.6	0.0	0.0
259	Pyridine	19.0	0.0	0.0	0.0	2.7	1.8	14.5	0.0	0.0
266	Phenol	1.4	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
272	Bis (2-ethylhexyl) phthalate (DOP)	29.7	0.0	0.0	0.0	28.7	1.0	0.0	0.0	0.0
283	Hydrogen fluoride and its water-soluble salts	2.0	0.0	0.0	0.0	1.5	0.0	0.5	0.0	0.0
304	Boron and its compounds (B equivalent)	4.0	0.0	0.2	0.0	3.4	0.0	0.3	0.1	0.0
310	Formaldehyde	3.3	0.1	0.0	0.0	2.7	0.0	0.5	0.0	0.0
313	Maleic anhydride	5.4	0.1	0.0	0.0	5.1	0.1	0.1	0.0	0.0
314	Methacrylic acid	139.0	0.2	0.0	0.0	138.1	0.0	0.1	0.5	0.0
316	2,3-Epoxypropyl methacrylate	1.7	0.0	0.0	0.0	1.6	0.1	0.0	0.0	0.0
320	Methyl methacrylate	25.3	0.0	0.0	0.0	25.1	0.0	0.2	0.0	0.0

* In accordance with PRTR Law definitions, even if materials were recycled later, they were counted here as waste if they were not sold at a price.