

Data

Environmental Data Collection

Sony collects environmental performance and cost data on a global basis according to its original guidelines for Data Collection and Environmental Accounting.

The introduction in fiscal 2000 of the “ecos” on-line data collection system has facilitated prompt environmental data gathering from all sites including Group companies in Japan, as well as information sharing. Sony will make the most of this system to achieve more timely disclosures of environmental information and more efficient management of environmental performance.

In the future, Sony will develop a global system for on-line data collection to support centralized management by the Corporate Environmental Affairs at Headquarters with the aim of sharing environmental performance data among all divisions responsible for environmental affairs.

The data for fiscal 2000 (April 2000-March 2001) compiled in this databook are, as a rule, from sites around the world (Japan, the Americas except South America, Europe, Asia including Oceania and China) that had acquired ISO14001 certification as of fiscal 1999 year-end.

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Environmental Accounting

Sony has also established environmental accounting systems at sites around the world to direct business resources efficiently and effectively toward environmental conservation activities. Sony's environmental accounting for fiscal 2000 identifies environmental conservation costs as well as their effectiveness throughout the life-cycle, from business planning and energy and resources procurement to product use and recycling. The compilation of total environmental conservation cost data has been expanded to include the Americas and China, for which data were not previously compiled. There are some sites for which data has not been collected.

The effectiveness of Sony's environmental conservation efforts is expressed in terms of materials, an (eco-efficiency) index and monetary values to show the reduction in environmental impact more clearly. In determining the effectiveness, moreover, Sony has tried to calculate not only the environmental impact stemming directly from Sony Group operations but also that arising from the use of Sony products (social costs) wherever possible. The results of Sony's environmental accounting are shown as accurately as possible below, although some figures are necessarily estimates while others are actual calculations.

Environmental Conservation Costs			
Classification	Primary Measures	Environmental Conservation Cost (Million yen)	
		Investment	Expenses
Environmental conservation cost for product design and product recycling	Energy and resources conservation of products.		7,369
	Recycling of container and packaging, batteries, etc.	-	221
Environmental conservation cost for manufacturing and service activities	Pollution prevention		
	Air pollution prevention	887	1,473
	Water pollution prevention	2,130	2,933
	Soil and ground-water pollution prevention	140	170
	Noise and vibration prevention	13	195
	Odor and subsidence prevention	10	47
	Others	23	188
	Subtotal	3,202	5,006
	Reduction of environmental impact		
	Energy conservation	866	1,194
Resources conservation (including waste disposal, recycling and usage reduction)	342	3,891	
Reduction of water consumption	321	173	
Reduction of hazardous materials	470	433	
Others	32	151	
Subtotal	2,031	5,842	
	Green purchasing	3	48
Environmental conservation cost for management activities	Environmental management		
	ISO14001 certification acquisition	9	141
	Operation of environmental management organizations	154	3,434
	Environmental education and employee awareness activities	8	165
	Others	0	107
	Subtotal	171	3,847
	Risk management system		
	Education, training and drills focused on environmental risk management	18	111
	Restoration costs and expenditures following environmental pollution legal cases	2	1
	Others	41	68
Subtotal	61	181	
Environmental conservation cost for social activities	Communication and social contributions		
	Issuing of site reports	0	33
	PRTR-related costs	0	11
	Community-based environmental contributions, greenification, etc.	27	171
	Others	2	13
Subtotal	29	228	
Total		5,497	22,742

Environmental Conservation Effect							
Category	Main Environmental Conservation Effect Items	Environmental Impact			Environmental Conservation Effect		Monetary Conversion of Environmental Conservation Effect (Reference) (Million yen)*4
		FY1999 (Achieved value)	FY1999 (Adjusted computed value)*2	FY2000	Materials Volume Base	Eco-efficiency*3 Effect (Comparison with FY1999)	
Environmental conservation effect in use and end of life product	Energy conservation*1 (CO ₂ conversion of energy consumed in product use)	7,447,020 (ton-CO ₂)	(8,323,450)(ton-CO ₂)	8,118,537 (ton-CO ₂)	204,913 (ton-CO ₂)	1.03	2,869
	Resource conservation*1 (product weight)	1,039,740 (tons)	(1,162,106) (tons)	1,076,862 (tons)	85,244 (tons)	1.08	9,206
Environmental conservation effect in manufacturing and service activities	Energy conservation (CO ₂ conversion of energy consumed by sites)	1,548,904 (ton-CO ₂)	(1,731,192)(ton-CO ₂)	1,638,702 (ton-CO ₂)	92,490 (ton-CO ₂)	1.06	1,295
	Resource conservation (quantity of waste from sites)	58,810 (tons)	(65,732) (tons)	61,116 (tons)	4,616 (tons)	1.08	498
	Reduction of water (volume of water consumption by sites)	27,955 (Thousand km ³)	(31,245) (Thousand km ³)	28,619 (Thousand km ³)	4,216 (Thousand km ³)		919
	Reduction of environmental risk at sites*5 (Sony risk assessment score)		(624) (points)	296 (points)	328 (points)		289
	Reduction of hazardous materials*6						
	Class II substances	51 (tons)	(57) (tons)	65 (tons)	-9 (tons)		-6,173
	Class III substances	11,222 (tons)	(12,542) (tons)	10,034 (tons)	2,509 (tons)		3,512
	Class IV substances	28,824 (tons)	(32,216) (tons)	27,365 (tons)	4,851 (tons)		6,791
Total							19,206

Reduced Costs and Profits on Sales in Manufacturing and Service Activities	(Million yen)
Energy conservation-related	748
Resource (water) conservation-related	122
Resource (paper and others) conservation-related	183
Waste reduction	303
Profit on sale of securities	1,135
Others	43

*In comparisons between fiscal years, the spheres of data subject to comparison are unified for the fiscal years being compared.

*The environmental conservation effect includes social cost reductions.

*1) A product's environmental conservation effect is the total impact exerted by the number of products planned for manufacture during their life cycle. The products considered are final products and do not include OEM supplies. The numeric values are approximate, partly including estimated or anticipated values.

*2) The environmental impact in FY1999 was adjusted by the equation below to facilitate comparison with FY2000.

FY1999 (Adjusted computed value) = Environmental performance in FY1999 × Sales in FY2000 ÷ Sales in FY1999

The sales amount employs the total value for such business segments as electronics, games and music, considering the actual situation of environmental impact generation.

*3) Eco-efficiency = Sales amount in fiscal year concerned/Environmental performance in fiscal year concerned

*4) The coefficient below is employed for monetary conversion of the environmental conservation effect.

Energy conservation = 14,000 yen/ton-CO₂

Average value given by the Active Implemented Jointly (AIJ) Project conducted based on the United Nations Framework Convention on Climate Change.

Resources conservation = 108 yen/kg

Value computed from the cost of waste treatment and recycling.

Water 350 yen/m³

Computed from the averaged value of both waterworks and drainage costs.

Reduction of hazardous materials = Class II: 700,000 yen/kg Class III/ Class IV: 1,400 yen/kg

Computed based on Sony's Guideline for Environmental Risk Management.

Improvement in environmental risk assessment 1 point = 880,000 yen

Calculated based on environmental accidents occurring at Sony sites in the past.

*5) The risk score for FY1999 represents the score when no measures had been taken.

*6) Refer to page 57 for a classification of hazardous materials.

Costs incurred for environmental conservation activities in fiscal 2000 involved investment of 5,497 million yen and expenses of 22,742 million yen. These comprised the following: environmental conservation cost for product design and product recycling; environmental conservation cost for production and service activities; environmental management activity cost; and environment-related social activity cost. In fiscal 2000 Sony included environmental conservation costs in product design and product recycling for the first time, albeit on a trial calculation basis. This resulted in a significant increase in expenses as compared with the 11,986 million yen recorded in fiscal 1999.

The effectiveness of environmental conservation efforts is determined based on improvement from the fiscal 1999 level as a result of cost investment. To eliminate variations due to fluctuations in business scale, fiscal 1999 environmental impact was adjusted to the scale of fiscal 2000 sales for purposes of calculation (see *2).

Sony's energy and resources consumption increased from fiscal 1999 in terms of absolute volume in fiscal 2000. Nevertheless, global investment of environmental conservation costs led to the following environmental effects after adjustment to matching sales: a reduction to the equivalent of 204,913 ton-CO₂—the amount of energy consumed during product use converted to CO₂—with a rise in eco-efficiency of 1.03 times, and a reduction of 85,244 tons in terms of product weight as resources, with an improvement in eco-efficiency of 1.08 times. As for the environmental conservation effect in the areas of production and service activities, energy use by sites decreased in an amount equivalent to 92,490 ton-CO₂, with eco-efficiency growing by 1.06 times. Waste generated by sites as resources was reduced by 4,616 tons, and eco-efficiency rose by 1.08 times.

Sony intends to deploy environmental accounting fully as an effective evaluation tool in order to improve eco-efficiency by 1.5 times (as compared to fiscal 2000) by fiscal 2005.

Although fiscal 2000 figures are provided for reference purposes only, Sony has also presented the environmental effect in terms of monetary values, converted using estimated figures and a conversion coefficient. Estimates are included at this stage, but Sony plans to improve the usefulness of these data as a tool for environmental management promotion by converting them into monetary values as well as into volume data for energy and resources.

Energy

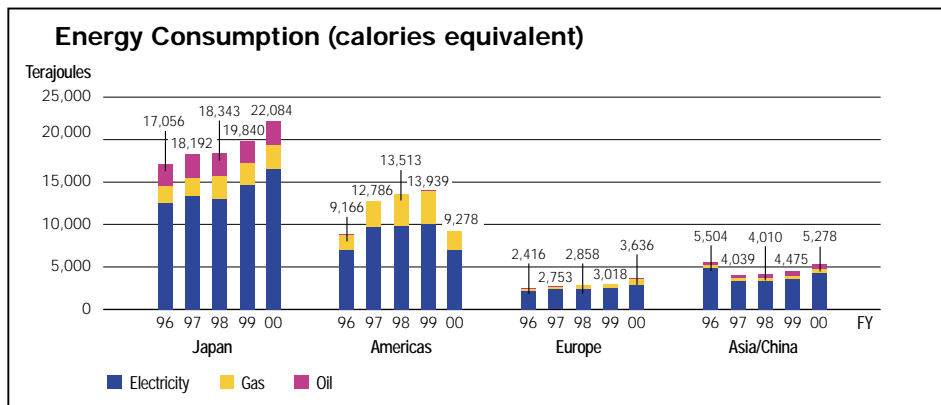
Status of Energy Use

The volume of energy consumed by Sony during fiscal 2000 amounted to the equivalent of 40,300 terajoules in terms of calories, or the equivalent of 1,638,702 tons in terms of CO₂.

The geographic breakdown of consumption shows that sites in Japan consumed the most energy, followed by those in the Americas, Asia/China and Europe, in that order. Energy consumption in Japan rose by 11%, primarily a result of the startup of an LCD-related facility and the initiation of full-scale operation by a semiconductor plant in Nagasaki Prefecture (Japan) during fiscal 2000.

In the Asia/China region, the launch of CRT production facilities in Shanghai, China, raised region-wide energy consumption by 18% from the previous year. Sony's European sites recorded an increase of 20%, the result of a change in recording practices to take energy consumption by non-manufacturing sites into account for the first time.

Every effort is and will be made to maximize energy savings at all new production facilities by incorporating energy planning as early as the design stage and by investing in ice thermal-storage and other highly energy-efficient systems. In addition, conferences are held for the personnel responsible for energy conservation activities at each site on a day-to-day basis. Besides presenting best practices to encourage further energy conservation efforts by the participants, the conferences provide an opportunity to share information and ideas among Sony Group sites.

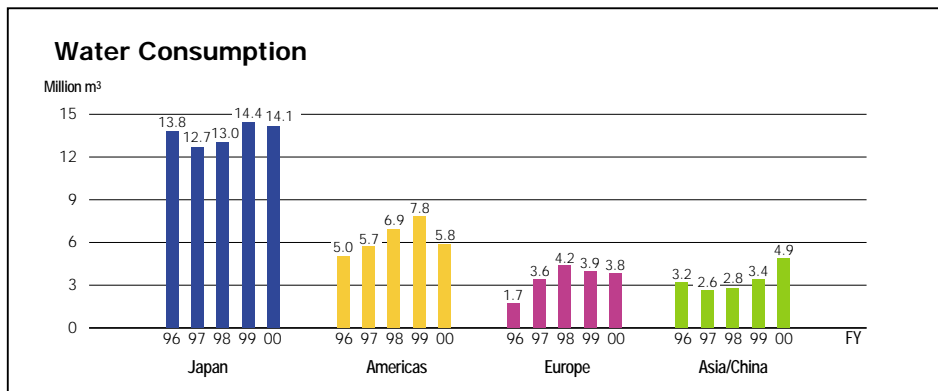


Water

Status of Water Use

The volume of water consumed by Sony during fiscal 2000 amounted 28,619,000 m³, 3% reduction from the previous year. Among the Group sites, manufacturing facilities producing semiconductors, CRTs and printed wiring boards consume the most water. Despite the start of full operations by an LCD-related facility and a semiconductor plant in Nagasaki Prefecture (Japan), Sony reduced net water consumption by 200,000 m³ by reinforcing management, including improvement of the collection rate for water used in washing, promotion of reuse of water and optimization of the pump-circulated water volume in Japan.

In the Asia/China region, meanwhile, a significant increase in CRT production by the plant in Shanghai raised overall water consumption by 44% from the previous year.



Chemical Substances

Status of Hazardous Materials Use

The Sony Group classifies the chemical substances used in production into four categories according to the degree of hazard they may pose to people and the environment. Hazardous materials are managed in accordance with standards established for each group.

Class I substances are prohibited; Class II substances were scheduled for phasing out by fiscal 2005 year-end; Class III substances to be significantly reduced on concrete targets; and Class IV substances will continue to be carefully supervised and controlled. Almost all manufacturing sites had obtained ISO14001 certification in fiscal 2000. In fiscal 2000, almost all manufacturing sites had acquired ISO14001 certification, and they are all promoting a reduction program for these hazardous materials as well as management to prevent pollution, aiming at the targets of Sony's Mid-Term Environmental Action Program Green Management 2002 and Green Management 2005.

* Consumption amount: The amount remaining after subtraction of the amount sold for purpose of recycling from the amount purchased.

Class I to IV Substances

Class I Substances	Prohibited	Chlorine Solvents <ul style="list-style-type: none"> Carbon tetrachloride 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,2-Dichloroethane 1,1-Dichloroethylene 	<ul style="list-style-type: none"> 1,2-Dichloroethylene Methylene chloride Chloroform Trichloroethylene Tetrachloroethylene 	Ozone-Depleting Substances <ul style="list-style-type: none"> CFC (non-refrigerant) HCFC (non-refrigerant) Methyl bromide 	Carcinogenic Substances <ul style="list-style-type: none"> Asbestos Vinyl chloride monomer PCB Benzene
Class II Substances	Phased out	Substances Harmful to Reproductive Functions <ul style="list-style-type: none"> Methyl cellosolve / acetate Ethyl cellosolve / acetate 	Endocrine Disruptors <ul style="list-style-type: none"> Dioxin (substance generated unintentionally) 	Ozone-Depleting Substances <ul style="list-style-type: none"> Halon CFC (used as refrigerant in freezers launched before 1980) 	Heavy Metal Compounds <ul style="list-style-type: none"> Lead solder
Class III Substances	Reduction	VOCs <ul style="list-style-type: none"> Methanol IPA MEK n-Hexane Toluene Xylene Ethyl acetate Butyl acetate 	Heavy Metal Compounds <ul style="list-style-type: none"> Chromium (VI) compounds Lead and its compounds Antimony and its compounds Arsenic and its compounds Nickel compounds Zinc compounds Cobalt and its compounds Manganese and its compounds 	Greenhouse Substances <ul style="list-style-type: none"> PFC (PRTR controlled) Sulfur hexafluoride HFC N₂O 	Air Pollutants <ul style="list-style-type: none"> NOx SOx
Class IV Substances	Control	<ul style="list-style-type: none"> Acetone Cyclohexanone Ammonia Acids and alkalis 	<ul style="list-style-type: none"> Substances for treating effluent (such as flocculating agents and precipitants) BOD COD 	<ul style="list-style-type: none"> CFC (used as refrigerant in freezers launched after 1981) HCFC (refrigerant) HFC (refrigerant) 	

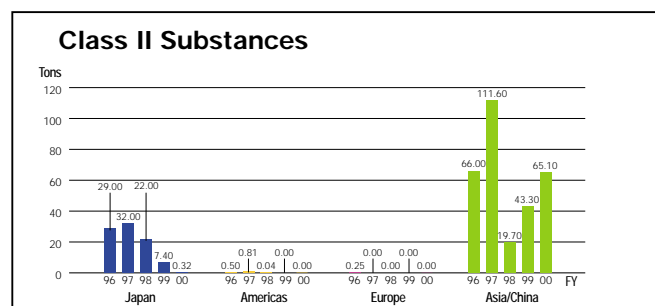
* Substances controlled by laws and regulations in individual countries.

Class I and Class II Substances (to be phased out from production by the end of fiscal 2005)

Among the prohibited hazardous materials, the Group still uses methylene chloride for surface treatment of metals. Trace amounts of mercury are also in use in airtight conditions. Among Class I substances, although already prohibited, tetrachloroethylene and dichloroethylene are still in use on a limited basis, moreover, due to the unavailability of substitutes. During fiscal 2000, the consumption of tetrachloroethylene and dichloroethylene amounted to 1.7 tons and eight kilograms, respectively. Beginning in fiscal 2001, however, the former is completely prohibited, while the latter is scheduled to be replaced by an alternative substance with lower environmental impact in fiscal 2001.

The use of methylene chloride, a degreasing agent employed for metal components, increased in the Asian region. Plans are in place, however, to eliminate work processes involving the use of methylene chloride by the early part of fiscal 2001. Mercury consumption, meanwhile, declined by 52% from the previous year to 299 kilograms.

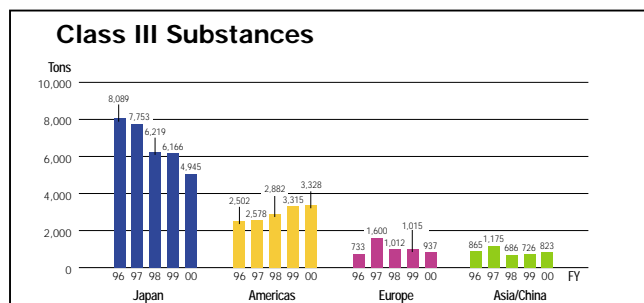
Note: The chart contains no data for Class I substances due to their virtual elimination.



Class III Substances (to be reduced based on concrete targets)

Substances targeted for reductions include volatile organic compounds (VOCs) such as isopropyl alcohol, methyl ethyl ketone and toluene as well as heavy metals such as lead contained in solder.

During fiscal 2000, Sony successfully reduced the volume of VOCs by 21%, while the amount of lead was cut by 14% from the previous year, largely through product downsizing, a shift to reflow soldering and the adoption of lead-free soldering processes. Sony will continue to concentrate on programs to switch to substitute compounds and otherwise reduce the volume of Class III substances used.

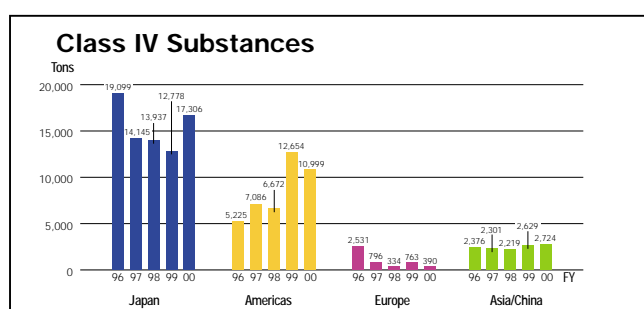


Class IV Substances (to be supervised and controlled)

Some chemical substances that are not covered by classes I to III above are often subject to regulation. Many of these, including ethyl alcohol, some acids, alkalies and metal chlorides, fall into this class.

In fiscal 2000, virtually every site obtained ISO14001 certification in Japan. At the same time, Sony carried out a variety of environmental programs aimed at reducing the volume of the substances used, inventories, and increasing recycling.

Beginning in fiscal 2000, hazardous materials used in the manufacture of CDs and other recording media are fully accounted for in the report.



Summary of Sony's Fiscal 2000 PRTR Assessment Survey Reports (Japan)

Since fiscal 1997 Sony has carried out Pollutant Release and Transfer Register (PRTR) surveys concerning the 179 substances designated by the Japanese electronics and electrical machinery industry. The PRTR law implemented in March 2000 designates 354 chemical substances as Type I chemical substances. The volumes of these substances released or transferred must be reported to the authorities. Sony uses 35 of the chemical substances designated Type I, and this report focuses on the 29 substances in this category employed with a consumption volume exceeding 0.1 tons.

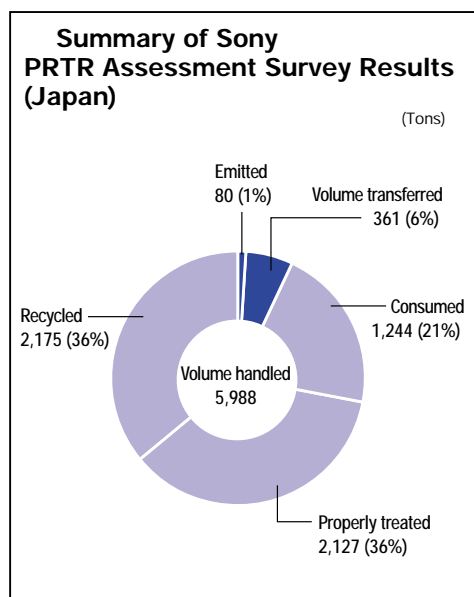
The volume released into the air, water and soil and the volume transferred as waste components amounted to 442 tons. The substances released consisted mainly of organic solvents such as toluene (240 tons) and ethylene glycol (56 tons). Although they are classified in the "transferred" category as waste, virtually all such compounds underwent thermal recycling and other recycling processes in an effort to ensure effective resources utilization.

*The data for chemical compounds containing lead are based partially on estimates provided by some sites for March, 2001.

*The volumes of metal compounds are stated in metal equivalents. (Calculation is based on coefficients for each metal stipulated in the PRTR Guideline for the Japanese electronics and electrical machinery industry.)

Breakdown of substances used and their respective volumes (Japan)

(Tons)



Substance No.	Substance	Volume handled	Emitted	Volume transferred	Consumed	Properly treated	Recycled
3	Acrylic acid	25.6	0.1	1.9	15.4	8.2	0.1
16	Monoethanolamine	6.1	0.0	6.0	0.0	0.1	0.0
25	Antimony and its compounds	19.8	0.0	1.9	15.5	0.0	0.0
43	Ethylene glycol	56.6	0.2	55.6	0.0	0.9	0.0
44	Ethyl glycol	0.4	0.4	0.0	0.0	0.0	0.0
63	Xylene	77.2	17.1	4.9	26.1	26.7	2.4
64	Silver and its water-soluble compounds	0.7	0.0	0.1	0.5	0.0	0.2
68	Chrome and trivalent chrome compounds	4.3	0.2	2.4	0.0	0.4	1.3
100	Cobalt and its compounds	678.2	0.0	40.3	502.4	0.0	135.5
102	Vinyl acetate	38	0.0	2.6	1.0	0.0	0.2
109	2-(Diethylamino)ethanol	16.2	0.0	15.9	0.0	0.3	0.0
175	Mercury and its compounds	0.4	0.0	0.0	0.3	0.0	0.1
200	Tetrachloroethylene	2.0	0.7	0.9	0.0	0.0	0.5
207	Copper water-soluble salts (excluding complex salt)	0.6	0.0	0.0	0.0	0.0	0.6
227	Toluene	4,677.4	51.0	188.7	411.1	2,085.5	1,941.0
230	Lead and its compounds	211.6	2.8	0.8	156.0	0.0	52.1
231	Nickel	10.6	0.0	0.0	6.7	0.0	3.9
243	Barium and its water-soluble compounds	1.6	0.0	0.0	1.4	0.0	0.2
252	Arsenic and its inorganic compounds	0.4	0.0	0.2	0.2	0.0	0.0
283	Hydrogen fluoride & its water-soluble salts	80.7	7.0	32.9	0.0	4.2	36.1
304	Boron and its compounds	0.3	0.0	0.2	0.0	0.0	0.1
307	Polyoxyethylene	1.8	0.0	1.7	0.0	0.0	0.0
310	Formaldehyde	7.7	0.3	5.0	2.4	0.0	0.0
311	Manganese and its compounds	102.8	0.0	1.5	100.9	0.0	0.4
346	Molybdenum and its compounds	0.5	0.1	0.3	0.0	0.0	0.1
	4 other substance groups	0.60	0.4	0.1	0.0	0.0	0.1
Total		5,987.8	80.2	361.3	1,244.3	2,127.3	2,174.7

Status of NOx and SOx Emissions (Japan)

On average, Sony's sites in Japan emitted 8,885 kilograms of NOx in fiscal 2000, a volume which compares favorably with the 11,221 kilograms of emissions in the previous year. This improvement was due to a re-examination of combustion factors by individual sites aimed at raising fuel efficiency.

SOx emissions by the sites amounted to 1,165 kilograms on average in fiscal 2000, a drastic reduction from the 8,269 kilograms emitted in the previous year. Increased use of fuel oils with a lower sulfur content, coupled with a shift to natural gas and other alternative energy sources, contributed to the reduction.

NOx and SOx Emission Volumes

	FY1999 (tons)	Number of sites	FY2000 (tons)	Number of sites
NOx	460	41	347	39
SOx	289	35	41	35

Status of BOD and COD Emissions (Japan)

During fiscal 2000, BOD emissions per site increased by about 27% year on year. Release of COD also recorded an increase of about 59%. The increases in BOD and COD emissions stemmed from a drastic increase in production of printed wiring boards.

BOD and COD Emissions Volume

	FY1999 (tons)	Number of sites	FY2000 (tons)	Number of sites
BOD	108	46	137	41
COD	60	33	96	34

Status of polychlorinated biphenyl (PCB) Storage (Japan)

It is obligatory in Japan to store used electric appliances containing PCB. The appliances concerned include power condensers for initial power reception equipment, fluorescent lighting stabilizers and small, low-voltage condensers for TVs. Today, they have almost no applications, except in certain initial power reception equipment. Out-of-use electric appliances containing PCB are stored at the various sites under strict supervision, and their storage status is periodically reported to the governments concerned. A law governing PCB disposal was enacted in March 2001*. As soon as disposal facilities are fully in place, Sony will promptly dispose of the PCB-containing electric appliances in its care.

*Law Concerning Special Measures for the Promotion of Proper Disposal of polychlorinated biphenyl

Storage Situation of Electric Appliances Containing PCB

High-voltage condensers	Fluorescent lighting stabilizers	Small, low-voltage condensers for TVs	Small condensers
306 units	21,357 units	43,906 units	33 units

(As of April 1, 2001)

Note: High-voltage condensers are reported to contain PCB in the amount of 40-45% of their average weight, fluorescent-lighting stabilizers in the amount of double-digit grams and low-voltage condensers in the amount of a few grams to low double-digit grams.

Waste

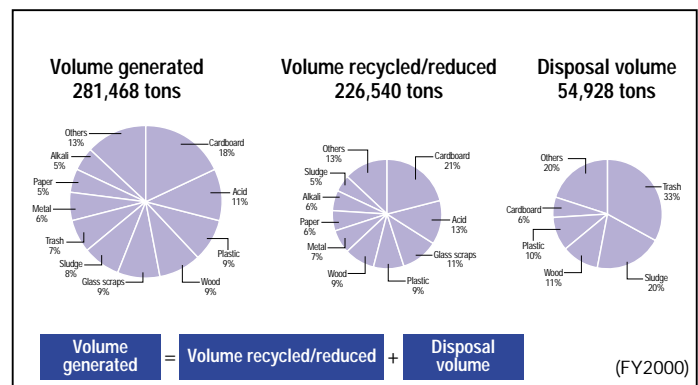
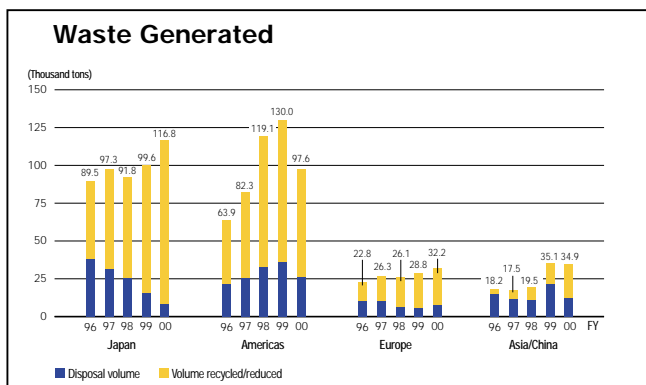
Status of Waste Generation

Total waste generated by Sony during fiscal 2000 decreased by 4% from the previous year to 281,000 tons, and the volume of waste ultimately disposed of also recorded a 30% year-on-year decline to 55,000 tons.

About 80% of the waste generated was either recycled or disposed of internally, with the recycling rate continuing its steady improvement from the previous year. In Europe, 14 non-manufacturing sites were newly included in the compilation, leading to an increase in the volume of waste of 43%.

Waste disposal decreased from the preceding year in Japan, the Americas and the Asia/China region. In Japan and Asia/China especially, the volume of recycled or reduced waste rose by 29% and 65%, respectively, as compared to the previous year. As a result, the final volume of waste disposal fell significantly, by 46% for Japan and 42% for Asia/China.

Although production, especially of digital devices and semiconductors, increased, the volumes of both generated waste and waste disposal declined overall due to improvements in the recycling and waste reduction rates.



Products

Environmental considerations with respect to electronic products can be divided mainly into energy conservation, resources conservation and reduction of hazardous materials. This section takes a close-up view of the most environmentally conscious advanced models in Sony's major product categories, and indicates improvements in environmental impact achieved during fiscal 1996 to fiscal 2000.

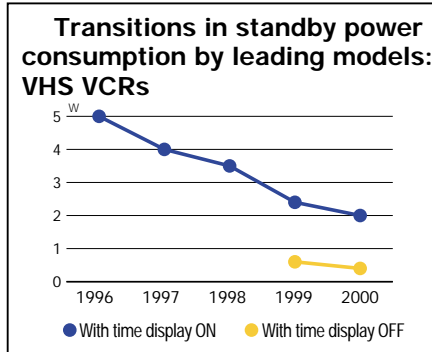
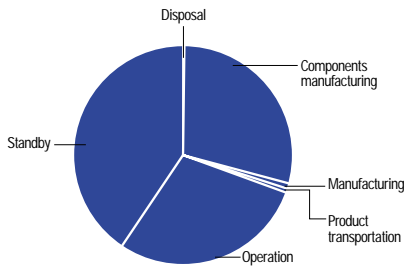
Energy Conservation

Measurement of a product's energy conservation comprises a reduction of power consumption both during standby and operation. Sony promotes efficient reduction after applying the Life-Cycle Assessment (LCA) approach to analyze and determine the impact exerted by individual products in the various stages.

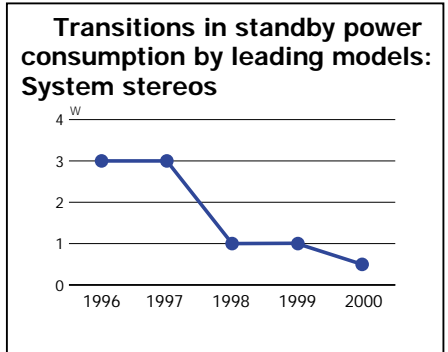
1. Standby power consumption

VHS-VCR

CO2 emission details (VHS VCR, FY2000 model)



System stereo

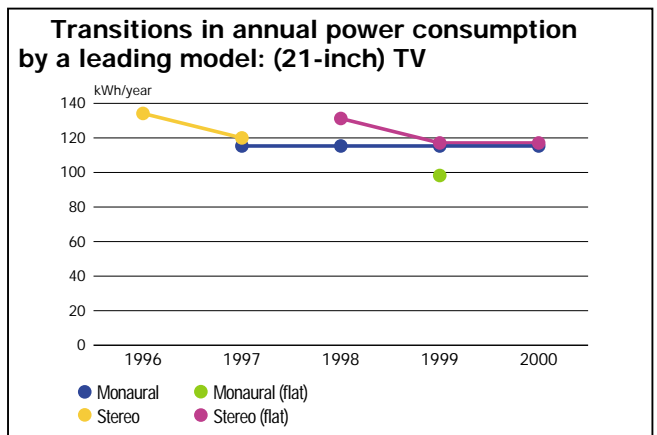
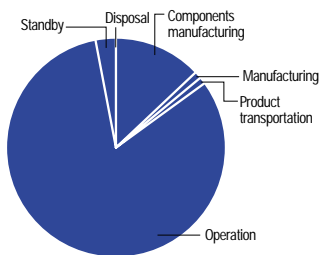


In the case of VCRs, LCA reveals that standby power consumption accounts for the largest portion. Reduction of not only power consumption in use but also during standby is thus essential. With respect to the standby power consumption of system stereos, Sony reduced it to 0.5 W in the latest model.

2. Annual power consumption

Color TV

CO2 emission details (FY1997 model 28-inch TV)



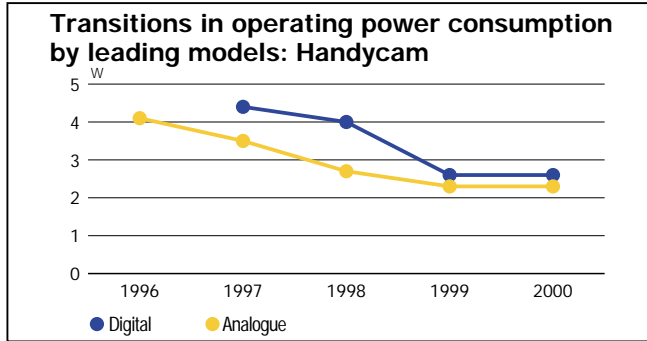
In the case of TVs, LCA shows that 82% of CO₂ is generated during product operation. Sony consequently implemented measures stressing reduction of operating power consumption. Sony reduced annual power consumption in a 21-inch TV as shown above, for example, by enhancing its circuit efficiency.

Annual power consumption is the volume of power consumption during one year, calculated based on both power consumption during operation and standby, assuming an average household TV watching time of 4.5 hours a day in accordance with the Japanese Law Concerning the Rational Use of Energy.

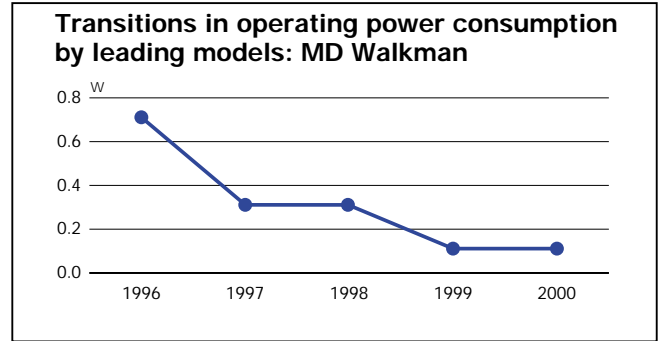
Calculation method

$$\text{Annual power consumption (kWh/year)} = \frac{(\text{Operating power consumption with power-saving function} \times 4.5 \text{ hours/day} \times 365 \text{ days}) + (\text{Standby power consumption} \times 19.5 \text{ hours/day} \times 365 \text{ days})}{1,000}$$

3. Operating power consumption Handycam



MD Walkman



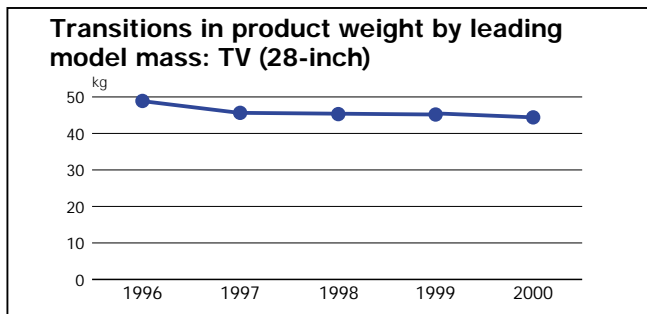
The Handycam's power consumption has been reduced mainly by integrating circuits and improving efficiency. Power consumption has shown little change since 1999, but energy-demanding functions such as image quality have improved continuously. Sony also reduced the MD Walkman's power consumption drastically by developing and introducing an energy-saving power control circuit.

Resources Conservation

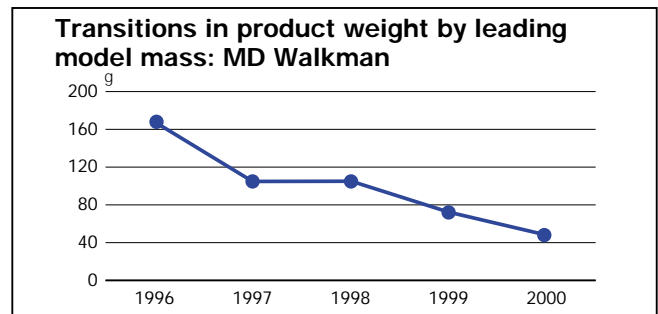
1. Products

As concerns resources conservation by products, Sony has continued efforts to minimize resource input and to supply much greater functionality and service using limited resources. The graphs below show transitions in mass reduction by Sony's leading two categories, TVs and the MD Walkman.

TV (28-inch flat)



MD Walkman

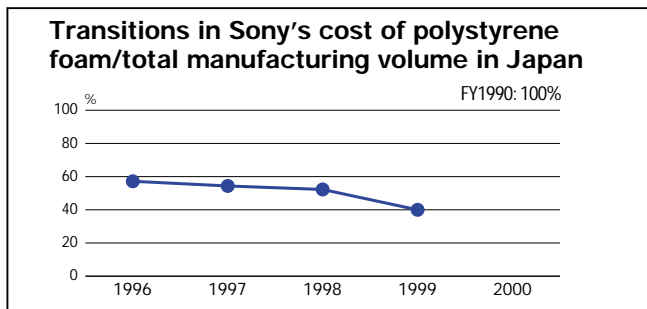


TV sets are among the Sony products that consume the most materials and Sony is implementing measures to reduce resources consumption step by step. Sony has promoted downsizing and mass reduction of portable products such as the MD Walkman.

2. Packaging materials

Sony has implemented measures to reduce environmental impact with respect to packaging that protects products from shock and vibrations during transportation. The graph below shows transitions in the reduction of polystyrene foam consumption by whole Sony in Japan.

Cost of polystyrene foam/ manufacturing volume in Japan

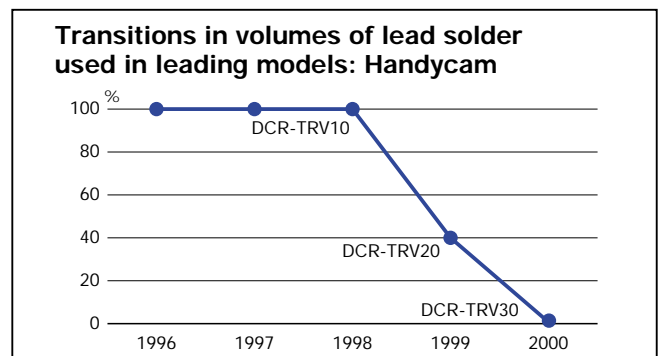


Reduction measures include reducing polystyrene foam consumption and conversion to paper materials. Sony achieved the target of reducing polystyrene foam use by 50% compared with fiscal 1990 before its fiscal 2000 target date. Sony is currently promoting reduction aimed at a much higher target.

Note: Figures for fiscal 2000 are currently being computed.

Reduction of Hazardous Materials

With respect to the chemical substances that exert a high impact on environment, Sony is promoting gradual reduction, substitution and elimination. The graph below shows transitions in volume of lead solder used in Handycams.



Sony reduced the ratio of lead solder used per total volume of solder processed in soldering as well as component electrodes to 1%.

Progress Review for Environmentally Conscious Items in Major Product Categories

The chart below shows a progress review for fiscal 2000 of the most environmentally advanced models among the major product categories in comparison with the targets set in the Sony Mid-Term Environmental Action Program "Green Management 2002."

Environmentally conscious items	Energy conservation		Recycling property	
	Operating power consumption	Standby power consumption	Reduction in product disassembly time	Recyclability rate
"Green Management 2002" target	FY2000 30-50% reduction FY2002 60% reduction (compared with FY1990)	FY1999 Less than 1 W FY2000 0 W	FY2000 50% reduction FY2002 60% reduction (compared with FY1990)	FY2000 50% improvement FY2002 60% improvement (FY1990 = 100)
Color TVs	46%	0.01 W	54%	78%
VCRs	68%	0.4 W	74%	62%
DVD players	30% (Compared with FY1997)	0.6 W	26% (Compared with FY1999)	No change
System stereos	78%	0.4 W	No change	No change
MD Walkman	98%	0.5 W (No load power consumption of AC adapter)	50%	-
Handycams	41% (Compared with FY1997)	0.4 W (No load power consumption of AC adapter)	-	-
Notebook computers	-	1.0 W	-	-
Mobile phones	Operation 64.2% Standby 88.7% (FY1994)	0.01 W (No load power consumption of AC adapter)	-	-
Playback-only VCRs for business use	77%	-	-	-

General progress reviews are given for the reduction of polystyrene foam, introduction of lead-free solder, reduction of vinyl chloride and reduction of halogenated flame retardants.

Environmentally conscious items	Resources conservation	Reduction of hazardous materials		
	Reduction of polystyrene foam of packaging materials	Introduction of lead-free solder	Reduction of vinyl chloride	Reduction of halogenated flame retardants
"Green Management 2002" target	FY2000 50% reduction FY2002 60% reduction (compared with FY1990)	FY2000 Total introduction for products manufactured in Japan	FY2000 Elimination from products manufactured in Japan One-half reduction in volume employed in cables FY2002 Elimination from products manufactured outside of Japan as well	FY2000 Total elimination from models sold in Europe FY2002 Total elimination from models sold worldwide
Color TVs	Reduced cost of polystyrene foam/manufacturing volume in Japan by 60% in FY1999.	Introduced lead-free solder into some model's printed wiring boards, although total introduction was not achieved.	Though vinyl chloride was eliminated from most mechanical parts, it is continued to be used in some mounting parts.	Total elimination from models sold in Europe was not achieved, although halogen- free flame retardants replaced halogenated flame retardants in printed wiring boards and the cabinets of some models.
VCRs				
DVD players				
System stereos				
MD Walkman				
Handycams				
Notebook computers				
Mobile phones				
Playback-only VCRs for business use				

Data at a Glance

Environmental Performance Data

Unit: 1 terajoule (TJ) = 1 trillion joule
1 kWh = 10,250 kilo joule

	Unit	FY1996	FY1997	FY1998	FY1999	FY2000	
Sony Group as a whole	Electricity consumption	TJ	26,736	28,500	28,489	30,643	30,390
	Gas consumption	TJ	4,555	6,089	7,172	7,376	6,370
	Oil consumption	TJ	2,880	3,211	3,094	3,285	3,513
	Water consumption	m ³	23,767,162	24,561,184	26,907,650	29,420,871	28,619,204
	Waste generated	Tons	194,273	223,388	256,450	293,652	281,468
	Recycled/reduced	Tons	109,909	144,395	180,878	215,150	226,540
	Disposal	Tons	84,364	78,993	75,572	78,502	54,928
	Class-II substances	Tons	95.75	144.39	41.75	50.65	65.43
	Class-III substances	Tons	12,189	13,106	10,799	11,222	10,034
	Class-IV substances	Tons	29,231	24,328	23,162	28,824	31,419
Japan	Electricity consumption	TJ	12,462	13,235	13,020	14,662	16,467
	Gas consumption	TJ	2,044	2,194	2,664	2,508	2,849
	Oil consumption	TJ	2,550	2,763	2,659	2,670	2,768
	Water consumption	m ³	13,820,781	12,714,002	12,954,771	14,383,977	14,117,409
	Waste generated	Tons	89,467	97,298	91,754	99,634	116,815
	Recycled/reduced	Tons	51,491	65,823	66,266	84,012	108,399
	Disposal	Tons	37,976	31,475	25,488	15,622	8,416
	Class-II substances	Tons	29.00	32.00	22.00	7.40	0.32
	Class-III substances	Tons	8,089	7,753	6,219	6,166	4,945
	Class-IV substances	Tons	19,099	14,145	13,937	12,778	17,306
Americas	Electricity consumption	TJ	7,305	9,613	9,782	9,933	6,972
	Gas consumption	TJ	1,846	3,138	3,698	3,972	2,300
	Oil consumption	TJ	15	35	33	34	6
	Water consumption	m ³	5,000,381	5,715,350	6,898,525	7,769,460	5,790,680
	Waste generated	Tons	63,874	82,261	119,120	130,041	97,578
	Recycled/reduced	Tons	42,339	56,703	86,257	94,166	71,384
	Disposal	Tons	21,535	25,558	32,863	35,875	26,194
	Class-II substances	Tons	0.50	0.81	0.04	0.00	0.00
	Class-III substances	Tons	2,502	2,578	2,882	3,315	3,328
	Class-IV substances	Tons	5,225	7,086	6,672	12,654	10,999
Europe	Electricity consumption	TJ	2,102	2,323	2,392	2,492	2,845
	Gas consumption	TJ	276	358	413	474	695
	Oil consumption	TJ	38	72	53	52	96
	Water consumption	m ³	1,746,000	3,558,715	4,211,392	3,863,706	3,793,565
	Waste generated	Tons	22,762	26,294	26,079	28,849	32,176
	Recycled/reduced	Tons	12,493	15,946	19,715	23,368	24,327
	Disposal	Tons	10,269	10,348	6,364	5,481	7,849
	Class-II substances	Tons	0.25	0.00	0.00	0.00	0.00
	Class-III substances	Tons	733	1,600	1,012	1,015	937
	Class-IV substances	Tons	2,531	796	334	763	390
Asia/China	Electricity consumption	TJ	4,838	3,298	3,268	3,523	4,107
	Gas consumption	TJ	389	399	397	423	527
	Oil consumption	TJ	277	342	349	529	644
	Water consumption	m ³	3,200,000	2,573,117	2,842,962	3,403,728	4,917,550
	Waste generated	Tons	18,170	17,535	19,497	35,128	34,899
	Recycled/reduced	Tons	3,586	5,923	8,640	13,604	22,430
	Disposal	Tons	14,584	11,612	10,857	21,524	12,469
	Class-II substances	Tons	66.00	116.58	19.71	43.25	65.11
	Class-III substances	Tons	865	1,175	686	726	823
	Class-IV substances	Tons	2,376	2,301	2,219	2,629	2,724

Note: Data for the 156 sites concerned include some data from sites that have not yet acquired ISO14001 certification, while some data from sites that have acquired ISO14001 certification are not included.

As concerns hazardous materials, sites that do not use them (most non-manufacturing sites) are excluded.

Japanese data are the values achieved during the 12 months from April 2000 to March 2001. Some European and Asian operations employ data compiled for the 10 months from April 2000 to January 2001 and estimated data for the final two months as fiscal year data. Some sites in the Americas, meanwhile, employ data compiled for the nine months from April 2000 to December 2000 and three months of estimated data as fiscal year data.

Note: The below corrections are made because there were some mistakes in the waste data for Japan, Europe and Asia/China in the fiscal 1999 report.

Japan (Generated waste: 102,506 tons 99,634 tons/ Volume recycled/reduced: 82,006 tons 84,012 tons/ Disposal volume: 20,500 tons 15,622 tons)

Europe (Generated waste: 30,838 tons 28,849 tons/ Volume recycled/reduced: 25,032 tons 23,368 tons/ Disposal volume: 5,805 tons 5,481 tons)

Asia/China (Generated waste: 34,017 tons 35,128 tons/ Volume recycled/reduced: 12,947 tons 13,604 tons/ Disposal volume: 21,070 tons 21,524 tons)

ISO14001 Certification Status¹

As of May 31, 2001

¹ The sites subject to ISO14001 certification acquisition are manufacturing sites, and non-manufacturing sites except for those under a certain size².² The standards for sites under a certain size are under 50 employees for hardware research, development, design, distribution, warehouse and assembly line plants; and under 100 employees for hardware sales, service, software research/production/sales, mail-order sales, insurance, finance and headquarters' functions at individual companies.

Japan: Manufacturing Sites	
Site	Acquired
Sony EMCS Corporation, Kohda TEC ^{*3}	May 1995
Sony Chemical Corporation, No.1 Site in Kanuma ^{*4}	Oct. 1995
Sony EMCS Corporation, Minokamo TEC ^{*5}	Feb. 1996
Sony EMCS Corporation, Kisarazu TEC ^{*6}	March 1996
Sony EMCS Corporation, Inazawa TEC ^{*7}	March 1996
Sony Fukushima Co., Motomiya Plant ^{*8}	March 1996
Sony EMCS Corporation, Saitama TEC ^{*9}	May 1996
Sony Max Corporation	May 1996
Sony EMCS Corporation, Mizunami TEC ^{*10}	July 1996
Sony EMCS Corporation, Ichinomiya TEC ^{*11}	Aug. 1996
Sony Corporation, Sendai Technology Center ^{*12}	Aug. 1996
Sony Hamamatsu Corporation	Oct. 1996
Sony Semiconductor Kyusyu Co., Kokubu Technology Center	Oct. 1996
Sony Semiconductor Kyusyu Co., Oita Technology Center	Dec. 1996
Sony Precision Technology Inc., Isehara Plant	Dec. 1996
Sony Components Chiba Corporation	Dec. 1996
Sony EMCS Corporation, Kosai TEC ^{*13}	Jan. 1997
Sony Semiconductor Kyusyu Co., Nagasaki Technology Center	Jan. 1997
AIWA IWATE CO., LTD.	Jan. 1997
Sony Miyagi Co., Nakada Plant/ Uguisuzawa Plant	Feb. 1997
Sony Fukushima Co., Koriyama Plant	March 1997
Sony Miyagi Co., Toyosato Plant	April 1997
Sony Music Entertainment, Production Center	April 1997
Sony Shiroishi Semiconductor Inc.	April 1997
Sony EMCS Corporation, Nagano TEC ^{*14}	July 1997
Sony EMCS Corporation, Senmaya TEC ^{*15}	Aug. 1997
AIWA AKITA CO., LTD.	Aug. 1997
Sony Neagari Corporation	Aug. 1997
Sony Tochigi Corporation	Sept. 1997
AIWA HANAIZUMI CO., LTD.	Oct. 1997
Sony Tectronix Corporation, Gotemba Plant	Dec. 1997
Sony PCL Hasso Corporation	Jan. 1998
Sony CP Laboratories Inc., Shizuoka Products Center/ Sony Creative Products Inc., Shizuoka Products Center	April 1998
Sony Taiyo Corporation	Jan. 1999

³ Formerly Sony Kohda⁴ Both Sony Chemical's No. 2 and No. 3 sites have been certified in expanded auditing.⁵ Formerly Sony Minokamo⁶ Formerly Sony Kisarazu⁷ Formerly Sony Inazawa⁸ Formerly Sony Motomiya⁹ Formerly Sony Bonson¹⁰ Formerly Sony Mizunami¹¹ Formerly Sony Ichinomiya, created through the acquisition of Ogiwara Electronics by Sony Ichinomiya in October 2000¹² Including the Sony Miyagi, Tagajo plant¹³ Formerly Sony Broadcast Products¹⁴ Formerly Sony Digital Products¹⁵ Formerly Sony Senmaya

Japan: Non-manufacturing Sites	
Site	Acquired
Sony Corporation, Atsugi Technology Center	March 1998
Sony Family Club Inc., Operation Center ^{*1}	Sept. 1998
Sony Corporation, Osaki West Technology Center	Nov. 1998
Sony Toyo Building Site ^{*2}	Feb. 1999
Sony Corporation Gotenyama Site ^{*3}	Aug. 1999
AIWA CO., LTD. ^{*4}	Sept. 1999
Sony Trading International Corporation ^{*5}	Sept. 1999
Sony System Design Corporation (Tokyo Data Center)	Sept. 1999
Hikari Electronics Corporation	Dec. 1999
Sony Corporation Haneda Technology Center	Dec. 1999
Sony EMCS Corporation World Repair Parts Center ^{*6}	Dec. 1999
Sony Plaza Co., Ltd.	Feb. 2000
Sony Human Capital Corporation ^{*7}	Feb. 2000
Sony Service Company Ltd.	Feb. 2000
Sony Corporation Shibaura Technology Center	Feb. 2000
Sony Marketing (Japan) Inc.	March 2000
Sony/Tektronix Corporation	May 2000
Sony Computer Entertainment Inc.	May 2000
Sony Broadband Solutions Corporation	May 2000
Sony Systems Service Inc. ^{*8}	May 2000
Sony Corporation Shinagawa Technology Center	July 2000
Sony Music Communications Inc.	Aug. 2000
Jared Inc.	Aug. 2000
Sony Finance International Inc.	Sept. 2000
Sony Logistics Corporation ^{*9}	Sept. 2000
Sony Enterprise Co., Ltd. ^{*10}	Oct. 2000
Sony Corporation, Yokohama Research Center	Nov. 2000
Sony Corporation, Osaki East Technology Center	Dec. 2000
Sony LSI Design Inc.	Jan. 2001
Sony PCL Inc.	Jan. 2001
Sony System Design Corporation (Nagoya Data Center)	Feb. 2001
Intervision Inc.	Feb. 2001
Sony Life Insurance Co., Ltd.	March 2001

¹ Formerly Sony Family Club² Joint acquisition of Sony Facility Management Corporation Headquarters, Sony Engineering Corporation and Sony Precision Technology Inc., Headquarters³ Including Sony Enterprise Co., Ltd., Sony Disk Technology, Sony Young Laboratory, Sony Techno Works, Sony Techno Research Corporation, Sony Cinematic Corp., Sony Communication Network Corporation and Sony Foundation for Science Education⁴ Multiple sites at Headquarters, Nakano, Urawa, Kawaguchi, Technology Center, Utsunomiya and Utsunomiya Logistics⁵ Multiple sites at Headquarters and Daiba⁶ Formerly Sony WRPC⁷ Merged with CDI⁸ Sony System Service Inc. changed its name effective April 1, 2001.⁹ Reacquisition following integration of five sites¹⁰ RR merged with Sony Enterprise Co., Ltd., on October 1, 2000.

Europe: Manufacturing Sites	
Site	Acquired
Sony Manufacturing Company UK, Ltd. Pencoed Technology Centre	Sept. 1996
Sony Manufacturing Company UK, Ltd. Bridgend Plant	Dec. 1996
Sony France S.A., Recording Media & Energy Production France	Feb. 1997
AIWA Wales Manufacturing Center	June 1997
Sony France S.A., Alsace Plant	June 1997
Sony Chemicals Europe B.V.	June 1997
Sony Italia S.p.A., Rovereto Plant [*]	Nov. 1997
Sony DADC Austria AG	Feb. 1998
Sony España S.A., Barcelona Plant	March 1998
Sony Slovakia spol. s.r.o., Trnava plant	Sept. 1998
Sony Hungarya Kft., Godollo Plant	July 1999

^{*}Note: Sony Italia Rovereto Plant was sold in April 1, 2001.

Europe: Non-manufacturing Sites	
Site	Acquired
Sony Deutschland	July 1996
Sony United Kingdom Ltd., Broadcast & Professional Europe	Aug. 1997
Sony Benelux D.V.	March 1998
AIWA Deutschland GmbH	Nov. 1998
Sony Music Entertainment (Holland) B.V., International Service Center	March 1999
AIWA (UK) Limited	April 1999
Sony United Kingdom Ltd., Corporate Services	May 1999
Sony Music UK	Dec. 1999
Sony Italia S.p.A.	March 2000
Sony Music Spain Distribution Center	Oct. 2000
Sony International (Europe) GmbH, DTCE	Dec. 2000
Sony España	Dec. 2000
Sony Music France Distribution Center	Dec. 2000
Sony Music Entertainment (France) S.A.	Dec. 2000
Sony Music Entertainment (Germany) GmbH	Dec. 2000
Sony France S.A.	Feb. 2001
Sony Information Technology Europe	March 2001
Sony Belgium	March 2001
Sony Semiconductors & Devices Europe	March 2001
Sony Service Centre Europe	March 2001

Americas: Manufacturing Sites	
Site	Acquired
Sony Semiconductor Company of America Inc.	June 1996
Sony Music Entertainment Inc., Pitman	Sept. 1997
Sony Nuevo Laredo S.A.	Nov. 1997
Digital Audio Disc Co. Terre Haute	Dec. 1997
Sony Electronics Inc.	Jan. 1998
Sony Disc Manufacturing, Springfield	Jan. 1998
Projection Television of America/ Color Television Pittsburgh	Jan. 1998
Sony Display Device Pittsburgh	Feb. 1998
Sony Chemical Corporation of America	Feb. 1998
Sony Music Entertainment (Canada) Inc.	March 1998
Sony de Mexicali S.A.	March 1998
Sony Magnetic Products Inc. of America	April 1998
Sony Music Entertainment Mexico S.A. de C.V.	April 1998
Sony Music Entertainment Brasil Industria e Comercio Ltda.	June 1998
Sony de Tijuana Este S.A.	July 1998
Sony de Tijuana Oeste S.A.	April 1999
Sony Music Entertainment (Colombia) S.A.	May 1999
Sony Music Entertainment Central America, S.A. Costa Rica	June 1999
Sony Music Entertainment (Argentina) S.A.	July 1999
Sony Music Entertainment (Chile) Ltda.	July 1999
Sony de Amazonia Ltda.	Oct. 1999
Sony Componentes Ltda.	Oct. 1999
Electronics Center Ltda.	Oct. 1999

Americas: Non-manufacturing Sites	
Site	Acquired
Sony Music Distribution	May 2001

*Note: 92 non-manufacturing sites in North America have adopted a collective certification system; they finished self-audit in March 2001 and are expected to acquire formal certification in August 2001.

Asia/China: Manufacturing Sites	
Site	Acquired
Sony Electronics of Korea Corporation	June 1996
Sony Electronics (Singapore) Pte., Ltd.	
Sony Display Device (Singapore)	June 1996
Sony Precision Engineering Center (Singapore)	Aug. 1996
Sony Semiconductor (Thailand) Ltd.	July 1997
Aiwa Electronics (Malaysia) Sdn. Bhd.	Sept. 1997
Sony Magnetic Products (Thailand) Co., Ltd.	March 1998
Sony Siam Industries Co., Ltd.	March 1998
Sony Mobile Electronic (Thailand) Co., Ltd.	March 1998
Shanghai Suoguang Electronics Co., Ltd.	April 1998
Sony Chemicals (Suzhou)	April 1998
PT Sony Chemicals (Indonesia)	May 1998
Beijing Suohong Electronics Co., Ltd.	July 1998
PT Sony Electronics Indonesia	July 1998
Shanghai Suoguang Visual Products Co., Ltd.	Aug. 1998
Sony Music Entertainment (Australia) Ltd.	March 1999
Sony India Pvt. Ltd.	April 1999
Sony Music Entertainment (Hong Kong) Ltd.	Oct. 1999
Sony Music Entertainment (India) Pvt. Ltd.	Oct. 2000
PT Aiwa Indonesia	Dec. 1999
Sony Electronics (Malaysia) Sdn. Bhd.	Dec. 1999
Sony Vietnam Ltd.	Dec. 1999
Sony Technology (Malaysia) Sdn. Bhd.	Feb. 2000
Aiwa Dharmala	July 2000

Asia/China: Non-manufacturing Sites	
Site	Acquired
Aiwa Singapore Ltd.	Sept. 1996
Sony Marketing Asia Pacific Pte. Ltd.	Dec. 1997
Sony Chemicals Singapore Pte. Ltd.	May 1998
Sony Logistics (Malaysia) Sdn. Bhd.	April 1999
Sony Logistics (Thai) Ltd.	April 1999
Sony Gulf FZE	April 1999
Sony International (Hong Kong) Ltd.	Sept. 1999
Sony China (Beijing), Sony Hong Kong Beijing Office	Sept. 1999
Sony (Malaysia) Sdn. Bhd.	Dec. 1999
Sony Korea Corporation	March 2000
Sony South Africa (Pty) Ltd.	April 2000
Sony Australia Ltd.	Feb. 2001
Sony Corporation of Hong Kong Ltd.	Feb. 2001
Sony Electronics (Singapore) Pte. Ltd. ^{*1} (Non-manufacturing Division Companies)	Feb. 2001
PT Sony Indonesia	March 2001
Sony Philippines Inc.	March 2001
Sony Thai Co. Ltd.	March 2001

*1 Formerly Sony International Singapore

Occupational Health and Safety Management System Certification Status

As of May 31, 2001

Site	Standard	Acquired
Sony Chemical Corporation, Kanuma Plant	DNV OHSMS standard	September 1998
Sony Manufacturing Company UK Bridgend Plant	ISA2000	February 1999
Sony Corporation, Sendai Technology Center	JACO OHSMS standard	April 1999
Sony Manufacturing Company UK Bridgend Plant	OHSAS18001	October 1999
Sony Display Device (Singapore)	OHSAS18001	October 1999
Sony Fukushima Co., Motomiya Plant	JACO OHSMS standard	December 1999
Sony EMCS Corporation, Kohda TEC	JACO OHSMS standard	March 2000
Sony Chemical Corporation, Kanuma Plant	OHSAS18001	March 2000
Sony Chemicals Corporation Singapore Pte. Ltd.	OHSAS18001	May 2000
Sony EMCS Corporation, Inazawa TEC	JACO OHSMS standard	June 2000
Sony Tochigi Corporation	JACO OHSMS standard	July 2000
Sony Corporation, Osaki West Technology Center	JACO OHSMS standard	August 2000
Sony EMCS Corporation, Kosai TEC	JACO OHSMS standard	September 2000
Sony Fukushima Co., Koriyama Plant	JACO OHSMS standard	September 2000
Sony Electronics of Korea Corporation	OHSAS18001	September 2000
Sony EMCS Corporation, Mizunami TEC	JACO OHSMS standard	October 2000
Sony EMCS Corporation, Kisarazu TEC	JACO OHSMS standard	November 2000
Sony EMCS Corporation, Saitama TEC	JACO OHSMS standard	November 2000
Sony Shiroishi Semiconductor Inc.	JACO OHSMS standard	November 2000
Sony France S.A., REPF DAX Plant	OHSAS18001	November 2000
Shanghai Suo Guang Electronics Co., Ltd.	OHSMS (SAC)	December 2000
Sony Semiconductor Kyusyu Co., Kokubu Technology Center	JACO OHSMS standard	January 2001
Sony Chemicals Europe B.V.	OHSAS18001	January 2001
Sony EMCS Corporation, Nagano TEC	JACO OHSMS standard	February 2001
Sony Semiconductor Kyusyu Co., Nagasaki Technology Center	JACO OHSMS standard	March 2001
Sony Semiconductor Kyusyu Co., Oita Technology Center	JACO OHSMS standard	April 2001
Sony Corporation, Atsugi Technology Center	JACO OHSMS standard	April 2001
Sony India Pvt. Ltd.	OHSAS18001	May 2001
Sony Precision Technology Inc., Isehara Plant	JACO OHSMS standard	May 2001

The sites below received recognitions or awards concerning occupational health and safety.

Certification/award	Site	Country	Acquired
Empresa Segura	Sony de Tijuana Este S.A. de C.V. (STE)	Mexico	May 1999
Royal Safety Award	Sony Manufacturing Company UK Pencoed Plant	United Kingdom	May 1999
National Safety Award	Sony Semiconductor Thailand (SCT)	Thailand	May 1999
Ministry of Labor Award	Sony Components Chiba Corporation, Togane Factory	Japan	July 1999
Merit Prize	Sony Nuevo Laredo S.A. de C.V. (SNL)	Mexico	August 1999
The Prime Minister Award	Sony Magnetic Products Thailand (SMPT)	Thailand	September 1999
Ministry of Labor Award	Sony Corporation, Atsugi Technology Center	Japan	October 1999
Ministry of Labor Award	Sony Corporation, Osaki West Technology Center	Japan	October 1999
Ministry of Labor Award	Sony Semiconductor Kyusyu Co., Kokubu Technology Center	Japan	October 1999
Voluntary Protection Program	Sony Magnetic Products Inc. of America	United States	May 2000

Fiscal 2000 External Awards Concerning Environmental Conservation Activities

(In order of receipt)

Award	Subject	Sponsor
24th Kinoshita-Award by Japan Packaging Institute: R&D Category	100% recycled magazine paper and an ink with solvent completely replaced with soybean oil developed by Sony in cooperation with Oji Paper Co., Ltd., Shinfuji Paper Co., Ltd. and Dainippon Ink and Chemicals Incorporated	Japan Packaging Institute
Best Factory Award 2000	Environmental and other activities by Sony Mobile Electronics (Thailand)	Royal Government of Thailand
Prime Minister's Commendations for Outstanding Contributions to the National Greening Campaign	Greenery promotion campaign by Sony Kohda	The Liaison Council for Greening
Prime Minister's Award for Outstanding Industries 2000	Results achieved in environmental activities by Sony Mobile Electronics (Thailand)	Royal Government of Thailand
The Excellent Consumer-oriented Group: Minister of International Trade and Industry Award	Measures concerning environmentally conscious packaging by the Sony Package Engineering Committee	Ministry of International Trade and Industry/Japan Industrial Association
Good Design Award 2000	Sony's Green Envelopes and Green Packaging	Japan Industrial Design Promotion Organization
Japan Star Award in Japan Packaging Contest 2000: Electric Equipment Packaging Category Award	EPS-free packaging for a computer LCD developed by Sony in cooperation with Chuoh Pack Industry Co., Ltd.	Japan Packaging Institute
Japan Star Award in Japan Packaging Contest 2000: Electric Equipment Packaging Category Award	"Zigzag cut cardboard buffer material" developed by Sony in cooperation with Rengo Co., Ltd.	Japan Packaging Institute
2000 Nikkei Superior Trend-setting Factories and Offices Awards	Environmentally conscious facilities at Sony Center am Potsdamer Platz (Germany)	Nihon Keizai Shimbun, Inc.
Ecohitech Award 2000	Results of environmental activities by Sony Italia	Italian Ministry of Industry, Commerce and the Handicrafts
Council for the Promotion of Recycling Chairman's Award in Fiscal 2000 in recognition of recycling promotional activities	Recycling activities by Sony Broadcasting Products, Sony Oita, Sony Kohda, Sony Atsugi Technology Center, Sony Sendai Technology Center, Sony Minokamo and Sony Tochigi	Recycle Promotion Association
The Fourth Environmental Report Awards: Excellence Prize	A site report by Sony Tochigi Corporation	National Association Promotion of Environmental Conservation
Regional Award for "Reforestation Campaign in Commemoration of the Royal Golden Jubilee"	Reforestation activity by Sony Logistics Corporation (Thailand)	Banpong Regional Forest Office (Thailand)
The Tenth Global Environment Award: Grand Prize	Activities conducted to consolidate Sony's new environmental management structure and global environmental activities (Sony Group)	Japan Industrial Journal Co.

Note: Organization names are of those in force at the time of award receipt.

Receipt of the 10th Global Environment Award

Sony received the Grand Prize in the 10th Global Environment Awards, an award presented to the most outstanding company (sponsored mainly by the Japan Industrial Journal). The awards recognize companies or local self-governing bodies that work energetically to implement measures to preserve the environment, with the aim of balancing industrial development with the global environment. Sony's selection for the Grand Prize was owing to its new environmental management structure, the core of which comprises the Sony Environmental Vision and evaluations of



Chairman and CEO Idei speaking on environmental management

Network Company, as well as the high evaluation given to the environmental conservation activities conducted on a consolidated Group-wide basis. At the awards ceremony in April 2001, Chairman and CEO Idei gave a lecture on "Environmental Management in the 21st Century" in which he spoke on the importance of conducting environmental conservation activities in concert with management. Sony had received the Minister of International Trade and Industry Award in the same awards in 1997.



10th Global Environmental Awards presentation ceremony

History of Environmental Activities and Occupational Health & Safety at Sony

		Principles and Organization	Action
1974	April	Sony Corporation Sony's General Principle on Occupational Health and Safety established.	
1975	July	Sony Corporation Sony's General Rules on Occupational Health and Safety established.	
1976	April	Environmental Conference formed, chaired by the President.	Prevention of hazardous materials use and occupational health and safety promoted in Sony Group operations in Japan.
	May	Environmental Science Center established.	Hazardous waste materials and working environments of Group operations in Japan evaluated.
1985	April		Sony Corporation of America begins environmental audits.
1989	March	Special committee convened to study measures to eliminate CFC use.	
1990	August	President's Policy on the Environment disseminated among Sony Corporation staff.	
	October	Sony Environmental Conservation Committee organized.	
1991	October	Policy for Product Assessment formulated.	
	November		Sony signs the Business Charter for Sustainable Development of the International Chamber of Commerce.
1992	December	Policy on environmental management established.	
1993	January		Environmental Fund System, a program supporting development of environmental protection technologies, inaugurated.
	March	Sony Global Environmental Policy and Environmental Action Program formulated.	
	April		CFC cleaning agents eliminated from all production processes of the Sony Group worldwide.
1994	January	Sony OH&S Committee organized. Made independent from the Sony Environmental Committee.	
	February		Sony Environmental Award program launched.
	April	Center for Environmental Technologies (CET) established at the Sony Research Center.	
	May		Greenplus Project to promote environmental consideration with respect to products launched.
	July	Guidelines for acquiring ISO environmental certification established and introduced.	
1995	May		Sony Kohda Corporation becomes the first Sony company in Japan to acquire ISO14001 certification.
1996	July		Sony Deutschland Service Division becomes the first non-manufacturing site in the Sony Group to acquire ISO14001 certification.
	October	Sony Environmental Action Program revised. Green Management 2000 formulated.	
1997	October	Operation of Recycle Research Center in Ichinomiya initiated.	
	December		Four sites in Singapore become the first non-manufacturing sites in Asia to acquire ISO14001 certification.
1998	February	Sony's Global Policy on Occupational Health and Safety enforced.	
	April	Composition of Sony Environmental Conservation Committee revised to give each member a specific responsibility.	
	September	Environmental R&D laboratory established at Environmental Center Europe, Germany.	
	October		The Sony Chemical Kanuma Plant completes the process of obtaining Health and Safety Management System certification (DNV OHSMS certification).
	November	Sony Environmental Action Program implemented uniformly across the Sony Group worldwide. "Green Management 2002" introduced.	
1999	February		Sony completes the process of acquiring ISO14001 certification at all 38 manufacturing sites in Japan.
	March		Sony Electronics Inc. awarded the 1999 Energy Star Home Electronics Partner of the year from the U.S. Environmental Protection Agency.
	April		A fire risk survey program launched in Japan.
	May		The Sony Eco Plaza environmental exhibition room is opened at Sony Headquarters.
	October		The Sony Manufacturing Company UK Bridgend Plant and SES Sony Display Device (Singapore) both acquire OHSAS18001 certification.
	November	Sony Global OH&S Management Structure Standard formulated and introduced.	
2000	April		Environmental factors incorporated into Network Companies' evaluations.
			Guideline for the Environmental Risk Management.
			A fire risk survey program launched for European and Asian operations.
	May		Sony Magnetic Products of America, Dothan Plant, recognized for its Voluntary Protection Program by the U.S. Occupational Safety and Health Administration (OSHA).
	September	Sony China Environmental Conservation Committee established.	
October	Sony Environmental Vision elucidated.		
2001	December		Periodic environmental information disclosure involving advertising and publicity introduced. "eco info" mark introduced.
	February		Sony OH&S Global Committee convenes for the first time.
	March	Sony Mid-Term Environmental Action Program revised. Green Management 2005 formulated.	

* Organization names appear as they were at the respective dates; some may not be current.

Note on the paper employed for the Data section

The Data section of this report employs 100% recycled magazine paper developed by Sony and a paper manufacturer. We promote cyclical use of resources by making use of recycled magazine paper, which has a low recycling ratio among recycled raw materials. The paper is grayish in color, moreover, because the manufacturing process omits the de-inking, bleaching and coloring processes generally applied to recycled paper in order to reduce environmental impact. The printing ink used is Volatile Organic Compound (VOC)-free vegetable oil based ink with no oil based solvents, developed by Sony and an ink maker. Sony is implementing various measures to reduce the environmental impact of packaging and printed materials, including paper and ink. (See page 23/30.)