



Reference Material

Environmental Data Sheet

The Oki group manages environmental impact data to use them for its environmental conservation activities. Using environmental accounting, the aggregation system for chemical substances and other methods, we keep track of a variety of environmental impact data, aggregating them on a companywide basis. The following shows some typical data for fiscal 2004.

Detailed Environmental Accounting Data of Oki Electric and Group Companies

The tables below present separate environmental accounting data for Oki Electric and its group companies in Japan and overseas.

Environmental Conservation Costs

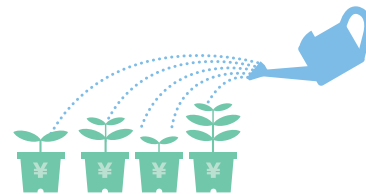
(Unit: thousand yen)

Category	Oki Electric	Investment		Total (consolidated)	Costs			Total (consolidated)	
		Group companies			Oki Electric	Group companies			
		Japan	Overseas			Japan	Overseas		
Business area cost	*Pollution prevention cost	17,199	54,595	0	71,794	519,104	537,597	13,053	1,069,754
	*Global environmental conservation cost	81,587	105,816	0	187,403	65,824	259,157	17,993	342,974
	*Resource recycling cost	700	4,327	0	5,027	238,379	310,516	73,713	622,608
	Sub-total	99,486	164,738	0	264,224	823,308	1,107,270	104,758	2,035,336
Upstream/downstream cost	8,000	0	23,714	31,714	51,249	199,984	2,497	253,729	
Administration cost	0	95	0	95	475,723	189,261	15,200	680,184	
R&D cost	0	0	980	980	52,513	117,781	980	171,274	
Social activity cost	0	100	0	100	20	872	721	1,613	
Environmental damage cost	0	0	0	0	1,043	7,492	0	8,535	
Other cost	0	230	0	230	0	0	0	0	
	Total	107,486	165,163	24,694	297,343	1,403,855	1,622,660	124,156	3,150,671

Economic Benefit

(Unit: thousand yen)

Category	Oki Electric	Group companies		Total (consolidated)	
		Japan	Overseas		
Cost reduction effect	Effect from energy and resource conservation	138,613	-649,552	-88,982	-599,922
	Effect from reduction of processing costs	-14,743	-24,257	-3,112	-42,112
	Sub-total	123,870	-673,810	-92,094	-642,034
Expense saving benefit	Amounts from selling valuable waste	36,179	170,766	35,462	242,408
	Total	160,049	-503,044	-56,632	-399,626



Energy Consumption

We are using various types of energy. The following shows some data by energy type.

Energy Type	Use
Electric power	Electric power (kwh) 808,077,536
Oil	Benzine (kℓ) 595
	Kerosine (kℓ) 63
	Diesel oil (kℓ) 47
	Heavy oil (kℓ) 12,295
	Total 13,000
Gas	Liquefied petroleum gas (LPG) (tons) 297
	Liquefied natural gas (LNG) (tons) 0
	Total 297
	City gas (km ³) 6,167
Water	City water (tons) 436,572
	Industrial water (tons) 2,823,752
	Underground water / well water (tons) 1,940,105
	Total 5,200,430

Major Environmental Conservation Efforts

The following table shows major efforts related to the investments, costs and economic benefits counted in our environmental accounting.

(Unit: thousand yen)

Category	Main Efforts	Amount
Investment	Introduction of equipment related to lead-free soldering	83,417
	Upgrading of turbo freezer at semiconductor plants	37,086
	Refurbishing of outside air conditioner for clean room in semiconductor plants	36,000
	Additional installation of raw garbage processors (Biomighty) at semiconductor plant	29,500
	Upgrading of dry air system at semiconductor plants	14,210
	Heat shield paint for roof of semiconductor plants	9,850
Costs	Introduction of X-ray fluorescence spectrometer with RoHS support	8,000
	Maintenance and management cost for electricity/boiler facilities	302,041
	Maintenance and management costs for waste water treatment facilities at semiconductor plants	230,152
	Maintenance and management costs for cogeneration system at semiconductor plants	204,000
	Amounts paid to contractors for waste processing	141,172
	R&D costs for lead-free solder (includes depreciation costs of test equipment)	71,713
Economic Benefit	Costs for measures to respond to the RoHS directive (research, assessment, etc.)	40,918
	Reduction of purchasing costs for containers and packaging material through promotion of simple packaging	117,710
	Increase of sales of valuable waste from the recovery of precious metals in rhodium plating fluid	98,303
	Energy savings through stop of production and air conditioning facilities with the partial shutdown in semiconductor plants	65,517
	Increase of sales of valuable waste (metals)	37,403
	Increase of sales of valuable waste (ICs) with the increase in production quantities	10,610

CO₂ Emissions

The scope of the data counted in this report is limited to certain sites. The following table shows separate data for this limited number of sites and for other sites.

Category	Emissions (Thousand tons-CO ₂)	Site
Major production sites of the Oki group	243	Hachioji district, Miyazaki Oki Electric Co., Ltd., Miyagi Oki Electric Co., Ltd., Honjo district, Tomioka district, Numazu district, Takasaki district, Shibaura district
Other sites	146	The sites included into the scope of this report as described on page 2, except for the above sites
Total	389	All sites included into the scope of this report as described on page 2