

## Environmental Accounting

The Kyocera Group established an Environmental Accounting System in FY 2003. By introducing quarterly data collection in FY 2005, we have now improved the accuracy and timely review of our data. We will continue to use the system as a global environmental management indicator.

**Range of data collection :** 236 sites

1. Sites collectively certified for the Kyocera Group Integrated Environment & Safety Management System – 211 sites
2. Dongguan Shilong KYOCERA Optics Co., Ltd. (China), Shanghai KYOCERA Electronics Co., Ltd. (China), AVX Group (19 sites), KII Group (4 sites)

**Period covered :** April 2008 through March 2009

**Guideline for reference :** Ministry of the Environment's "Environmental Accounting Guidelines 2005"

### Environmental Accounting Analysis Results

The Kyocera Group has introduced consolidated environmental accounting based on the Kyocera Group Environmental Accounting System.

In FY 2009, environmental preservation costs were 2.206 billion yen for investments and 15.033 billion yen for expenses.

The FY 2009 investment was increased by 468 million yen as compared with that for FY 2008. This was due to the introduction of energy-saving equipment during building construction at subsidiaries and an increase in research and development costs.

The expenses increased by 1.351 billion yen because of an increase in publicity and advertising costs as well as an increase in research and development expenses for energy conservation, energy creation, and pollution control measures.

Meanwhile, the enhanced economic effects from environmental conservation measures increased by 1.514 billion yen, as compared to last year. This includes essential measures for the prevention of global warming and the reduction of waste. Particularly, revenue due to changing wastes to valuable materials greatly increased.

Note that these economic effects do not include product development which contributes to environmental conservation.

In FY 2009, the economic effects resulting from environmental preservation measures exceeded expenses by 1.236 billion yen, (excluding research and development costs).

The data collected by business segment reveals that the highest investment amounts were from the businesses related to information equipment and the highest expense amounts were from businesses related to electronic devices.

In regard to environmental conservation benefits (cumulative calculations), the effective amount of CO<sub>2</sub> reduction increased

by 67.6% as compared with that in FY 2008. This was the result of installing energy-saving equipment in addition to posting the effects of measures taken in FY 2008.

Environmental conservation benefits for 9 out of the 13 environmental load items, such as total input of energy and greenhouse gas emissions, improved on the gross amount and four items improved on a basic unit-per-sale amount as compared with FY 2008.

Kyocera will continue to promote such positive environmental conservation initiatives.

#### Concept of Environmental Accounting

Double reporting of internal transactions is prevented in companies subject to data collection.

For group companies with an equity ratio not equal to 100%, data collection is performed by regarding the investment amount, expense amount, and environmental conservation effects as 100%.

#### Concept of Environmental Conservation Costs

For environmental conservation facilities, the investment amount and running costs are totaled.

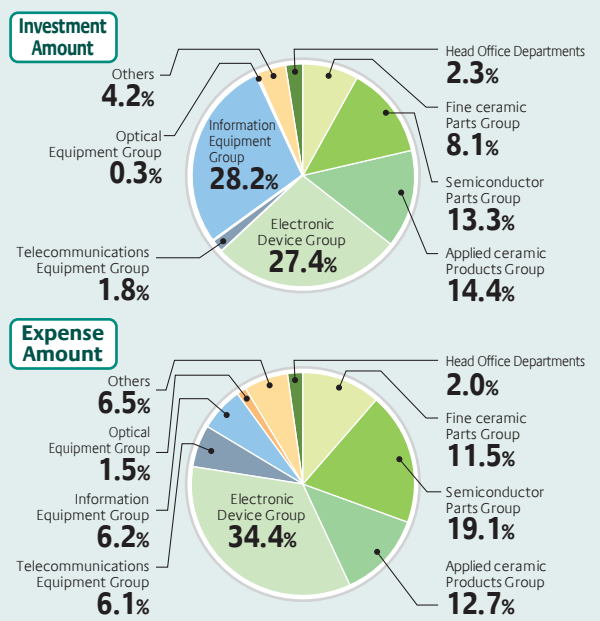
Research and development costs included in costs for environmental conservation are included in fundamental research and development.

#### The definition of Environmental Conservation Effects and Economic Benefits

The economic benefits of environmental conservation efforts are computed only for cases in which there is clear, quantifiable evidence of the improvement on environmental conservation.

The economic effects as a result of environmental conservation measures for research and development costs are not computed.

### Analysis by Business Segment



## Environmental Conservation Costs

(Unit: Million yen)

Cost Classification	Investment		Cost		Main Measures	Appropriate Page
	FY2008	FY2009	FY2008	FY2009		
Business area costs	1,133	1,380	6,980	6,596		
① Pollution prevention costs	513	606	3,594	3,485	Introduction and maintenance / Management of pollution prevention equipment / Measurement and analysis of environmental load	P.57, P.78
② Global environmental conservation costs	192	578	854	855	Introduction of energy-saving devices / Greenhouse gas reduction activities	P.70~73
③ Resource recycling costs	428	196	2,532	2,256	Resource-saving activities / Introduction and maintenance / Management of waste-recycling equipment	P.74~77
Upstream / downstream costs	—	—	313	405	Responding to green procurement / Collection and recycling of used products	P.68~69
Management costs	72	173	1,153	1,969	Improvement and application of the environmental management system / Coping with PRTR	P.52~59, P.79
R & D costs	532	653	5,211	6,020	Product development contributing to environmental conservation	P.62~69
Social activity costs	1	—	16	29	Co-sponsored donations for environment-related associations, Environmental classes onsite	P.80~82
Environmental remediation costs	—	—	9	14	Cleanup and monitoring of groundwater	P.57
<b>Total</b>	<b>1,738</b>	<b>2,206</b>	<b>13,682</b>	<b>15,033</b>		

## Economic Effects of Environmental Preservation Measures (Unit: Million yen)

Item	Amount of Money		Main Matters
	FY2008	FY2009	
Income	3,081	3,767	The sale of property
Cost cutting measures	5,654	6,482	Reduction in electric expenses, reduction in fuel expenses, reduction in waste disposal costs
<b>Total</b>	<b>8,735</b>	<b>10,249</b>	

## Cost-effectiveness (Unit: Million yen)

	FY2008	FY2009
Expense amount excluding research and development costs (1)	8,471	9,013
Economic effects resulting from environmental preservation measures (2)	8,735	10,249
<b>Cost-effectiveness (2 - 1)</b>	<b>264</b>	<b>1,236</b>

## Environmental Conservation Effects

Effect Content	Annual Effect			CO <sub>2</sub> equivalent	CO <sub>2</sub> Reduction Effect		
	FY2008	FY2009	Unit		FY2008	FY2009	
Reduction of electricity	94,572	149,878	MWh	→	Amount of reduction	91,625 Tons-CO <sub>2</sub>	153,607 Tons-CO <sub>2</sub>
Reduction of fuel	13,212	18,346	Kℓ (Crude oil equivalent)		Monetary equivalent	277 million yen	464 million yen
Reduction of greenhouse gases such as PFC	26,154	30,931	Ton-CO <sub>2</sub>				

Reduction of water usage	42,762	41,376	1,000m <sup>3</sup>
Reduction of chemical substances	17,372	21,885	Tons
Reduction of waste	38,590	40,193	Tons

3,019yen/ton-CO<sub>2</sub>, which is the EU emissions trading average price for the whole financial year of 2009, is used as the monetary equivalent of the CO<sub>2</sub> reduction effect.

## Environmental Conservation Effects (total gross)

		Unit	FY2008	FY2009	Total Environmental Conservation Effects	Benefit of Environmental Conservation Effects per Net Sales*1	
Environmental conservation effects concerning resources used for business activities	Total input of energy	GJ	17,205,219	16,341,054	-864,165	7.1%	
	Introduction of energy by type	Electricity	MWh	1,518,535	1,435,430	-83,105	6.6%
		Fuel	Kℓ (Crude oil equivalent)	58,773	57,554	-1,219	10.4%
	Handled volume of materials subject to PRTR	Tons	5,152	4,125	-1,027	-9.7%	
Environmental conservation effects concerning environmental impact and waste discharged by business activities	Input water resource	m <sup>3</sup>	11,794,529	11,047,937	-746,592	5.6%	
	Greenhouse gas emissions	Ton-CO <sub>2</sub>	762,936	771,488	8,552	14.0%	
		Greenhouse gas emission by type	CO <sub>2</sub>	759,475	767,167	7,692	13.9%
		PFC	3,461	4,321	860	40.8%	
	Release / transfer of materials subject to PRTR	Tons	363	288	-75	-10.4%	
	Total discharge of industrial waste	Tons	29,851	26,159	-3,692	-1.2%	
	Total drainage volume	m <sup>3</sup>	7,328,518	6,736,742	-591,776	3.7%	
	NOx emission	Tons	53.9	44.1	-9.8	-7.8%	
SOx emission	Tons	2.0	2.3	0.3	31.4%		

Note: Since the range of data collected for environmental conservation effects (gross amount) is adjusted to the range of data collected for environmental conservation costs, they are different from the total values on other pages.

Note: Data in FY 2008 was corrected due data collection errors.

\*1: Indicates environmental conservation effect values by percentage change per sales amount of 100 million yen in FY 2009 and FY 2008. (Benefit Per Net Sales)

## Major Greenhouse Gas Reduction Measures

Plant Name	Subject	Summary	Investment Amount*2	Effects Expected (annually)	
				Reduction	Economic Effects
Shiga Yohkaichi Plant	Energy savings from photovoltaic cell production equipment	CO <sub>2</sub> reduction by installing a highly efficient furnace	—	444 Ton-CO <sub>2</sub>	12 million yen
Kagoshima Hayato Plant	Energy savings from clean room	CO <sub>2</sub> reduction by adjusting the air-conditioning equipment to meet production needs	11 million yen	999 Ton-CO <sub>2</sub>	24 million yen
KYOCERA KINSEKI Yamagata Corp.	Installation of centrifugal chiller	Reduction of CO <sub>2</sub> by high-efficiency centrifugal chillers	30 million yen	234 Ton-CO <sub>2</sub>	9.1 million yen

\*2: The reported investment amount for environmental conservation.

## Major Environmental Conservation Measures

Plant Name	Subject	Summary	Investment Amount	Effects Expected (annually)	
				Reduction	Economic Effects
Kagoshima Kokubu Plant	Installation of recycling system for lead effluent	100% recycling of discharged water by removing lead from lead effluent	256 million yen	Lead discharge: Zero Reduction of water: 119,000 m <sup>3</sup>	— 300,000 yen
Tamaki Plant of KYOCERA MITA Corp.	Internal treatment of toner effluent	Volume reduction of effluent discharged when manufacturing toner	40 million yen	Waste reduction: 348 tons	5.2 million yen
Kagoshima Kokubu Plant	Installation of plastic-waste compressor	Compressing plastic-waste into valuable materials	1.4 million yen	Waste reduction: 143 tons	8.5 million yen