

Green Management

Basis of Environmental Management Promotion

Environmental Report

Environmental Accounting

The Kyocera Group established an Environmental Accounting System in FY2003. By introducing quarterly data collection in FY2005, 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: 220 sites]

- ① Sites collectively certified under the Kyocera Group Integrated Environment & Safety Management System: 195 sites
 - ② Dongguan Shilong KYOCERA Optics Co., Ltd. (China); Shanghai KYOCERA Electronics Co., Ltd. (China); AVX Group (18 sites); KII Group (5 sites)
- Period covered: April 2010 through March 2011
 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 FY2011, environmental preservation costs were 1.78 billion yen for investments and 11.81 billion yen for expenses.

The investments in FY2011 increased from FY2010 by 234 million yen because of an increase in investments in research and development related to energy creation such as next-generation solar cells and fuel cells in addition to the reinforcement of a waste water treatment facility associated with an increased production of solar cells at the Shiga Yokkaichi Plant, an introduction of solar power generating systems at manufacturing plants and energy saving measures for air-conditioning facilities.

The costs increased from FY2010 by 50 million yen due to the costs related to the new waste water treatment facilities at the Shiga Yasu Plant and an increase in costs for climate change prevention measures such as solar cells.

On the other hand, the enhanced economic effects from environmental conservation measures increased from FY2010 by 1.169 billion yen due to further reductions in use of fuels, raw materials, indirect materials and chemical substances as well as an increase in proceeds from the promotion of producing valuables and a production recovery in spite of a decrease in economic effect from energy saving. The economic effects in FY2011 resulting from environmental preservation measures exceeded expenses by 2.887 billion yen (excluding research and development costs).

Environmental conservation benefits exceeded those of FY2010 in almost all items despite a decrease in effect due to a suspension of facilities in an effort to reduce power usage.

Emissions per unit of sales improved in 11 out of 13 items, and Kyocera will continue to promote proactive environmental conservation measures.

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

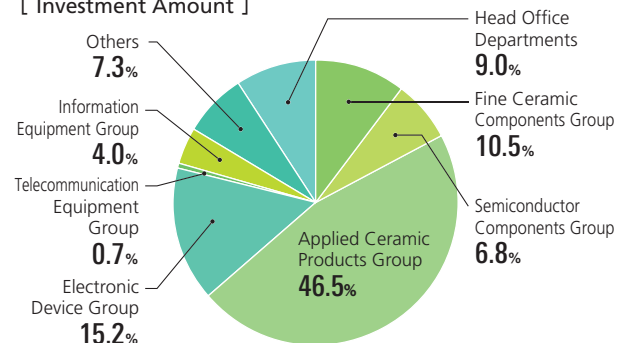
For environmental conservation facilities, the investment amount and running costs are totaled. For environmental conservation activities, the expenses spent for such activities are totaled. Research and development costs included in costs for environmental conservation are included in fundamental research and development.

Definition of Environmental Conservation Effects and Economic Benefits

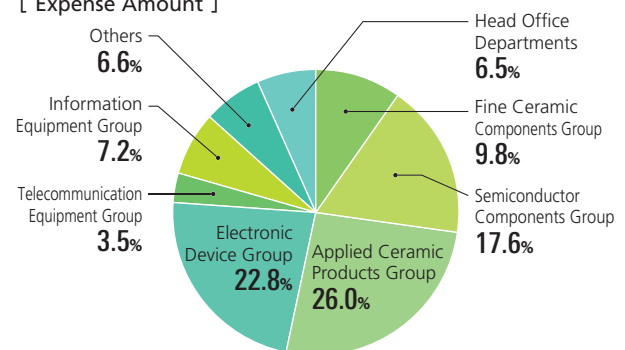
The economic benefits of environmental conservation efforts are computed only for cases in which there is clear, quantifiable evidence of an improvement in environmental conservation. The economic effects as a result of environmental conservation measures for research and development costs are not computed.

Analysis by Business Segment

[Investment Amount]



[Expense Amount]



Environmental Conservation Costs

(Unit: Million yen)

Cost Classification	Investment		Cost		Main Measures
	FY2010	FY2011	FY2010	FY2011	
Business area costs	1,260	806	5,835	6,178	
1. Pollution prevention costs	1,141	409	3,035	3,303	Introduction and maintenance / Management of pollution prevention equipment / Measurement and analysis of environmental load
2. Global environmental conservation costs	85	358	832	956	Introduction of energy-saving devices / Greenhouse gas reduction activities
3. Resource recycling costs	34	39	1,968	1,919	Resource-saving activities / Introduction and maintenance / Management of waste-recycling equipment
Upstream / downstream costs	—	—	391	354	Responding to green procurement / Collection and recycling of used products
Management costs	3	10	1,485	1,477	Improvement and application of the environmental management system / Coping with PRTR
R&D costs	283	964	4,019	3,756	Product development contributing to environmental conservation
Social activity costs	—	—	23	36	Co-sponsored donations for environmental associations, Eco-Lessons
Environmental remediation costs	—	—	7	9	Clean-up and monitoring of groundwater
Total	1,546	1,780	11,760	11,810	

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

Item	Amount		Main Matters
	FY2010	FY2011	
Income	2,014	2,208	Sale of property
Cost-cutting measures	7,758	8,733	Reductions in electric expenses, fuel expenses, waste disposal costs
Total	9,772	10,941	

Environmental Conservation Effects

Effect Content	Annual Effect			CO ₂ equivalent	CO ₂ Reduction Effect	
	FY2010	FY2011	Unit		FY2009	FY2010
Reduction of electricity	169,483	139,767	MWh	→	Amount of reduction	146,185 ton-CO ₂
Reduction Tons-CO ₂ of fuel	11,604	13,104	Kℓ(crude oil equivalent)			127,175 ton-CO ₂
Reduction of greenhouse gases such as PFC	28,422	28,082	Ton-CO ₂	Monetary equivalent	262 million yen	228 million yen

1,790 yen/ton-CO₂, which is the EU emissions trading average price for the whole financial year of 2011, is used as the monetary equivalent of the CO₂ reduction effect.

Cost-Effectiveness (Unit: Million yen)

	FY2010	FY2011
Expense amount excluding research and development costs (1.)	7,741	8,054
Economic effects resulting from environmental preservation measures (2.)	9,772	10,941
Cost-effectiveness (2.-1.)	2,031	2,887

Effect Content	FY2010	FY2011	Unit
Reduction of water usage	36,709	37,890	1,000m ³
Reduction of chemical substances	15,999	21,798	Tons
Reduction of waste	43,035	45,900	Tons

Environmental Conservation Effects (total gross)

		Unit	FY2010	FY2011	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	15,480,679	18,585,386	△3,104,707	3.0%	
	Introduction of energy by type	Electricity	MWh	1,376,701	1,652,134	△275,433	3.1%
		Fuel	Kℓ(crude oil equivalent)	50,251	60,499	△10,248	2.8%
	Handled volume of materials subject to PRTR	Tons	4,665	4,418	247	23.5%	
	Input water resource	1,000m ³	10,906	13,284	△2,378	1.6%	
Environmental conservation effects concerning environmental impact and waste discharged by business activities	Greenhouse gas emissions	Ton-CO ₂	722,558	816,317	△93,759	8.8%	
	Greenhouse gas emission by type	CO ₂	Ton-CO ₂	717,790	811,174	△93,384	8.7%
		PFC	Ton-CO ₂	4,768	5,143	△375	12.9%
	Release / transfer of materials subject to PRTR	Tons	272	403	△131	△19.9%	
	Total discharge of industrial waste	Tons	19,992	24,510	△4,518	1.0%	
	Total drainage volume	1,000m ³	6,444	7,797	△1,354	2.3%	
	NOx emission	Tons	43.5	49.9	△6.4	7.3%	
SOx emission	Tons	2.2	3.3	△1.1	△22.6%		

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.
*1 Indicates environmental conservation effect values by difference between FY2010 and FY2011 (gross amount) and percentage change per sales amount of 100 million yen in FY2010 and FY2011.

Major Greenhouse Gas Reduction Measures

Plant Name	Subject	Summary	Effects Expected (annually)	
			Reduction	Economic Effects
Hokkaido Kitami Plant	Introduction of solar power generating system	We installed a solar power generating system on the plant building to reduce power consumption.	120,000	7.3 million yen
Fukushima Tanagura Plant			30,000	
Nagano Okaya Plant			65,000	
Shiga Gamo Plant			131,000	
Shiga Yasu Plant			83,000	
Kagoshima Sendai Plant			162,000	
Tamaki Plant, Kyocera Mita Japan Corp.			47,500	
KYOCERA Mexicana, S.A.de C.V.	115,000			

Major Environmental Conservation Measures

Plant Name	Subject	Summary	Investment Amount	Effects Expected (annually)	
				Reduction	Economic Effects
Shiga Yokkaichi Plant	Reinforcement of discharge water treatment facility	We reinforced the discharge water treatment facility in conjunction with an increase in solar cell production.	232 million yen	—	—
Kagoshima Hayato Plant	Introduction of cyanogen-contaminated water recycling system	We recycled discharged water by collecting precious metals and removing cyanogen in cyanogen contaminated water.	1.8 million yen	Cyanogen discharge amount: none Reduced water consumption: 904m ³ Precious metals collected	3 million yen
Shiga Yokkaichi Plant	Reduction of wastewater sludge	We have reduced waste by injection control of wastewater treatment agent.	1.3 million yen	Waste reduction: 227 tons	5.9 million yen