Green Management

Environmental Accounting

The Kyocera Group established an Environmental Accounting System in FY2003. To ensure timely and accurate data, quarterly data collection was introduced in FY2005.
Kyocera will continue to expand the range of application of the system and use it as a global environmental management indicator.

Range of data collection : 1. Sites collectively certified for the Kyocera Group Integrated Environment & Safety Management System – 210 sites (refer to page 83)
2. Dongguan Shilong KYOCERA Optics Co., Ltd. (China), Shanghai KYOCERA Electronics Co., Ltd. (China), AVX Group (21 sites), KII Group (4 sites) – Total of 237 sites
Period covered : April 2007 through March 2008
Guideline for reference : Ministry of the Environment's "Environmental Accounting Guidelines 2005"

Environmental Accounting Analysis Results

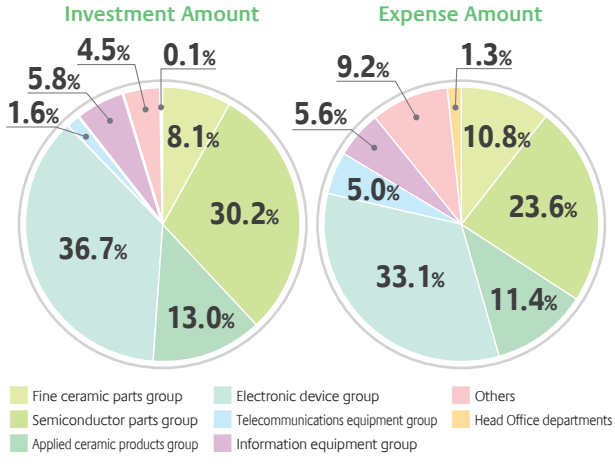
The Kyocera Group has introduced consolidated environmental accounting based on the Kyocera Group Environmental Accounting System. In FY2008, environmental preservation costs were 1.738 billion yen for investments, and 13.682 billion yen for expenses.
The investment amount for FY2008 was reduced by 284 million yen as compared to FY2007.
The expenses increased by 982 million yen due to increased depreciation allowance and the running costs of new facilities, as well as, increased research and development expenses for energy conservation, energy creation, and pollution control measures.
Meanwhile, the economic effects, as a result of environmental conservation measures, increased by 891 million yen compared to FY2007. These conservation efforts included essential measures for the prevention of global warming and the reduction of chemical substances. Note that the economic effects do not include the effects due to product development contributing to environmental conservation.
In FY2008, the economic effects resulting from environmental preservation measures exceeded expenses, excluding research and development costs, by 264 million yen.
Business segment data showed that the businesses related to electronic devices had the highest investments and expenses just as they did in FY2007.
In regard to environmental conservation benefits, electricity usage was reduced by installing inverters and improving the operation efficiency of chiller, and fuel consumption was reduced by introducing turbo chillers. These improvements resulted in a 23.9% increase over FY2007 in the effective amount of CO_2 reduction.
In the category of reducing chemical substances, the effective amount of chemical substance reduction increased by 35.8% as compared to FY2007, due to ambient gas reduction and chemical use reduction by improving manufacturing processes, etc.
The environmental conservation benefits (gross amount) by each of the environmental load items, such as total input of energy and greenhouse gas emission, showed many gains over FY2007. Eleven out of the thirteen items were improved for the gross amount, and 12 items on a basic unit per sale amount as compared with FY2007.
The main forces for reduction in environmental impact for FY2008 included environmental conservation measures through the introduction of turbo chillers and a hydrogen generation plant converting ammonia gas for hydrogen production to LNG.
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 of other than 100%, data collection is performed by regarding the investment amount, expense amount, and environmental conservation effects as 100%, without proportionally dividing them according to the equity ratio.

Concept of Environmental Conservation Costs
For environmental conservation facilities, the investment amount and running costs are totaled. For environmental conservation activities, expenses accruing from such activities are computed.

Concept 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.

Analysis by Business Segment



Environmental Conservation Costs

(Unit: Million yen)

	Investment		Cost		Main Measures	Appropriate Page
	FY2007	FY2008	FY2007	FY2008		
Business area costs	1,364	1,133	6,313	6,980		
1. Pollution prevention costs	771	513	3,206	3,594	Introduction and maintenance / management of pollution prevention equipment, Measurement and analysis of environmental load	P53, 74
2. Global environmental conservation costs	430	192	799	854	Introduction of energy-saving devices / greenhouse gas reduction activities	P66~69
3. Resource recycling costs	163	428	2,308	2,532	Resource conservation activities, Introduction and maintenance / management of waste recycling equipment	P70~73
Upstream / downstream costs	—	—	264	313	Responding to green procurement, Collection and recycling of used products	P64~65
Management costs	77	72	1,026	1,153	Improvement and application of the environmental management system, Coping with PRTR	P50~55, 75
R & D costs	581	532	5,071	5,211	Product development contributing to environmental conservation	P58~65
Social activity costs	—	1	20	16	Co-sponsored donations for environment-related associations, Environmental classes on site	P16, 76
Environmental remediation costs	—	—	6	9	Cleanup and monitoring of groundwater	P53
Total	2,022	1,738	12,700	13,682		

Economic Effects of Environmental Preservation Measures

(Unit: Million yen)

Item	Amount of Money		Main Matters
	FY2007	FY2008	
Income	3,225	3,081	Selling of valuable properties
Cutting costs	4,619	5,654	Reduction in electric expenses, Reduction in fuel expenses, Reduction in waste disposal costs
Total	7,844	8,735	

Cost-effectiveness

(Unit: Million yen)

	FY2007	FY2008
Expense amount excluding research and development costs (1)	7,629	8,471
Economic effects resulting from environmental preservation measures (2)	7,844	8,735
Cost-effectiveness (2 - 1)	215	264

Environmental Conservation Effects

Effect Content	Annual Effect		
	FY2007	FY2008	Unit
Reduction of electricity	77,954	94,572	MWh
Reduction of fuel	8,507	13,212	Kℓ (Crude oil equivalent)
Reduction of greenhouse gases such as PFC	25,572	26,154	Ton-CO_2
Reduction of water usage	40,315	42,762	1,000 m^3
Reduction of chemical substances	12,795	17,372	Tons
Reduction of waste	36,463	38,590	Tons

CO_2 equivalent

	CO_2 Reduction Effect	
	FY2007	FY2008
Amount of reduction	73,977 Ton-CO_2	91,625 Ton-CO_2
Monetary equivalent	245 million yen	304 million yen

¥3,316/ton-CO_2, which is the EU emissions trading average price for the whole financial year of 2007, is used as the monetary equivalent of the CO_2 reduction effect.

Environmental Conservation Effects (total gross)

			Unit	FY2007	FY2008	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	17,025,100	16,213,184	811,916	5.4%
	Introduction of energy by type	Electricity	MWh	1,461,307	1,417,153	44,154	3.6%
		Fuel	Kℓ (Crude oil equivalent)	68,640	58,890	9,750	14.8%
	Handled volume of materials subject to PRTR		Ton	5,434	5,152	282	5.8%
	Input water resource		m^3	11,449,098	10,980,933	468,165	4.7%
Environmental conservation effects concerning environmental impact and waste discharged by business activities	Greenhouse gas emissions		Ton-CO_2	749,690	699,444	50,246	7.3%
	Greenhouse gas emission by type	CO_2	Ton-CO_2	746,673	695,982	50,691	7.4%
		PFC	Ton-CO_2	3,017	3,461	Δ444	Δ14.0%
	Release / transfer of materials subject to PRTR		Tons	380	363	17	4.9%
	Total discharge of industrial waste		Tons	28,794	26,241	2,553	9.5%
	Total drainage volume		m^3	7,301,672	7,328,518	Δ26,846	0.3%
	NOx emission		Tons	65.8	53.9	11.9	18.5%
	SOx emission		Tons	3.2	2.0	1.2	39.1%

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

*1: Indicates environmental conservation effect values by percentage change per sales amount of 100 million yen in FY2008 and FY2007. (Benefit Per Net Sales)

Major Greenhouse Gas Reduction Measures

Plant Name	Subject	Summary	Investment Amount	Effects Expected (annually)	
				Reduction	Economic Effects
Kagoshima Hayato Plant	Introduction of turbo chillers	Reduction of CO_2 by high-efficiency turbo chillers	49 million yen	890 Ton-CO_2	10 million yen
Central Research Laboratory (R & D Center, Keihanna)			31 million yen	630 Ton-CO_2	6 million yen
KYOCERA KINSEKI Yamagata Corp.			24 million yen	349 Ton-CO_2	7 million yen

Major Environmental Conservation Measures

Plant Name	Subject	Summary	Investment Amount	Effects Expected (annually)	
				Reduction	Economic Effects
Kagoshima Sendai Plant	Installation of CVD waste liquid treatment equipment	Waste liquid treatment by chemical reaction treatment	18 million yen	Waste reduction: 196 tons	9 million yen
Kagoshima Kokubu Plant	Installation of hydrogen generation plant	Converting ammonia gas for hydrogen production to LNG	285 million yen	Reduction of chemical substances: 672 tons Reduction of electricity: 1.44 million kWh	63 million yen