

# Environmental Accounting

In order to promote higher efficiency and the continuous improvement of our environmental investments and activities, we adopted an environmental accounting system in 1999 based on the guidelines issued by the Ministry of the Environment.

## Costs and Effects

In fiscal 2003, the Hitachi Chemical Group spent 10,060 million yen on environmental-related costs, which was 16% higher than the previous year. This increase was mainly due to the increase in development expenditure for green products. The total amount of environmental investment in fiscal 2003 was 1,350 million

yen, approximately the same amount as the previous year. The major investment was in the installation of waste gas treatment facilities, aiming to reduce chemical substance emissions into the atmosphere.

One major achievement of fiscal 2003 was the substantial reduction in the total amount of waste to landfill from the

Hitachi Chemical Group, as a result of our zero emission activities. Our energy saving activities were also effective in fiscal 2003. Installation of co-generation units and deodorization systems, as well as heat recovery units, resulted in as much as 5,600 kiloliters of savings in annual energy consumption.

(Unit: millions of yen)

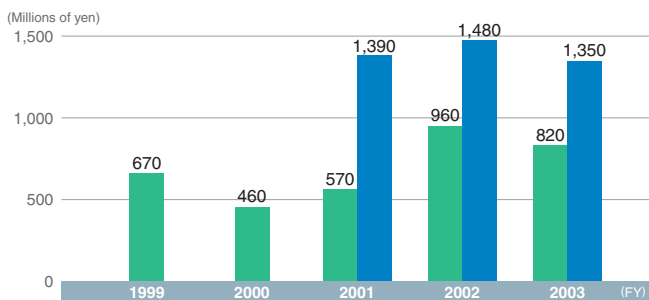
Item	Non-consolidated		Consolidated		Major description	
	FY 2003	FY 2002	FY 2003	FY 2002		
Expenses	Works area costs	3,090	2,370	4,720	4,670	Maintenance cost of equipment for reduction of environmental impacts, and depreciation cost
	Upstream/downstream costs	20	30	40	60	Recovery of packaging and recycling expenses
	Management activity costs	390	530	830	1,030	Greening, cleaning, and environmental management expenses
	Research and development costs	1,920	1,100	4,340	2,770	R&D for the reduction of environmental impacts, and product design expenses
	Social activity costs	50	60	60	80	Social contribution programs and publicity expenses
	Environmental damage costs	40	40	70	50	Recovery fees, contributions expenses, and charge for soil contamination, etc.
	<b>Total costs</b>	<b>5,510</b>	<b>4,130</b>	<b>10,060</b>	<b>8,660</b>	
<b>Environmental investment</b>	<b>820</b>	<b>960</b>	<b>1,350</b>	<b>1,480</b>		

(Unit: millions of yen)

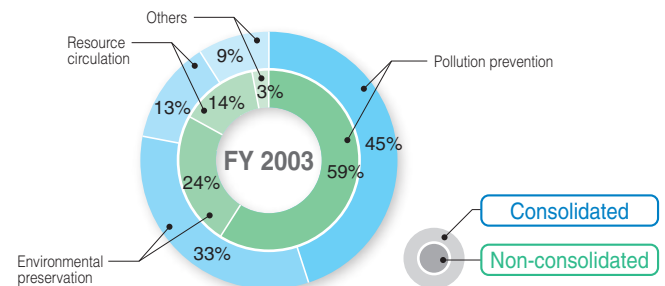
Item	Non-consolidated		Consolidated		Major description	
	FY 2003	FY 2002	FY 2003	FY 2002		
Economical effect	Net income effect	50	180	80	600	Profit on sales of recycled wastes, etc.
	Expense reduction effect	1,770	1,720	1,820	2,020	Reduction of power expenses and material costs, etc.
	<b>Total economical effect</b>	<b>1,820</b>	<b>1,900</b>	<b>1,900</b>	<b>2,620</b>	
Volume effect	Reduction in energy used (kiloliters)	5,400	18,000	5,600	18,900	Reduction due to energy-saving measures
	Reduction of final amount of landfill disposal (tons)	181	660	1,700	1,060	Decrease of ultimate landfills due to waste separation, recycling, and other means

Note: Energy consumption is in terms of crude oil equivalent.

■ Environmental investments    ■ Non-consolidated    ■ Consolidated



■ Breakdown of environmental investments



## Next Step

The operation of environmental accounting system since fiscal 1999 has shown us the trends in our environmental expenditure. We can use these results to make long-term environmental investment plans, as well as to analyze costs and improve the efficiency of our environmental activities.