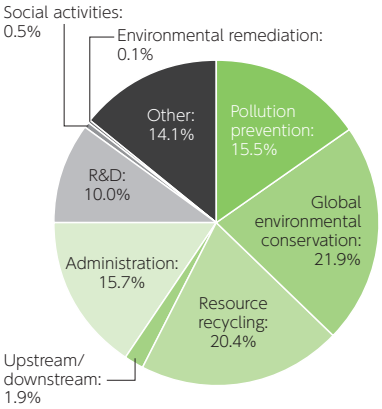
Environmental accounting

We identify the costs and effects of our environmental conservation activities in environmental accounting, and we use this in running the company.

Fiscal 2017 environmental accounts - classifications and results

We introduced environmental accounting in fiscal 2000 in accordance with the Environmental Accounting Guidelines (2005 edition) issued by the Ministry of the Environment while collecting data for the 9 categories listed in the table on the right.

Using the fixed standard we have set, we calculated our fiscal 2017 expenditure on supporting the environment at a total of ¥889.4 million. The breakdown is shown in the table to the right, but due to the review of various environmental conservation activities, the energy-saving and resource recycling costs increased year-on-year while the research and development as well as environmental conservation costs decreased.



Fiscal 2017 - Cost of environmental conservation

(Units: ¥ million/year)

Classification of costs	Main elements	Value* in FY2016	Value* in FY2017
1) Pollution prevention	Maintenance of effluent treatment facilities and dust collectors, measurement and monitoring of air and water quality and noise, and other preventive measures	148.1	137.9
2) Global environmental conservation	Preservation of green areas around plants, energy-saving measures, warming prevention, etc.	165.6	194.8
3) Resource recycling	Waste treatment, zero emissions measures, office recycling, etc.	156.0	181.1
4) Upstream/ downstream	Limiting environmental burdens from our suppliers and customers associated with our own production activities (green purchasing, product recycling, reduced packaging, and so on)	23.2	16.8
5) Administration	Waste manifest management, ISO 14001 maintenance and renewal inspections and ISO 14001 office personnel costs, reporting to the government, etc.	117.9	139.8
6) R&D	Research to reduce environmental loads and development of products to contribute to reducing environmental loads	146.2	88.7
7) Social activities	Social service activities (cleaning waterways and surroundings of plants), etc.	6.5	4.1
8) Environmental remediation	Remediating environmental damage to surroundings	0.6	0.7
9) Other	Costs for environmental conservation other than the above (including handling of PCB waste treatment)	14.4	125.4
Total		778.4	889.4

* Value: Totals of Environmental Investments and Environmental Conservation

Fiscal 2017 - Cost of environmental conservation

889.4 million yen

Classification and performance of fiscal 2017 investments

Our results for fiscal 2017 are shown in the table below. Promoting resource recovery and reclaiming of valuables from landfill waste has maintained a low level of waste since 2010. The amount of unit energy consumption and CO_2 emissions as well as landfill waste decreased year-on-year, but the amount of resource recovery waste increased due to an expansion in our business operations. The unit consumption of waste processing costs also increased due to rising prices of waste contractors. We will continue to make improvements for cost-effective investments in the future.

Performance of fiscal 2017 investment effects

	Material effects*1			Economic effects*2			Assessment
	FY2016 performance	FY2017 performance	Effects	FY2016 performance	FY2017 performance	Effects	
Energy use per unit output (GJ/¥ million)*3	10.30	10.17	△ 0.12	–	–	–	○
CO_2 per unit output (ton C/¥ million)*3	0.116	0.114	△ 0.002	–	–	–	○
Wastes to landfill (tons/year)	6.0	5.7	△ 0.3	–	–	–	○
Wastes recycled (tons/year)	20,948	27,351	6,403	–	–	–	○
Energy costs per unit output (¥/¥ thousand)*3	–	–	–	14.8	14.9	0.1	○
Waste treatment costs per unit output (¥/¥ thousand)*3	–	–	–	0.6	0.7	0.1	×*4

*1 Material effects: Reduction in environmental pollutants, etc. *2 Economic effects: Energy savings and cost reduction on waste, etc.
*3 Unit output: Values to Sales *4 Rise in unit cost of waste processing and unit cost of transport