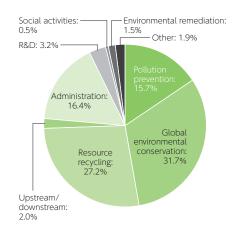
# **Environmental accounting**

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

## Fiscal 2018 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 calculate our fiscal 2018 environmental expenditure at a total of ¥712.9 million. The breakdown is shown in the table to the right. Due to a revision of various environmental activities, there have been increases from the previous fiscal year in costs associated with global environmental conservation, resource recycling and environmental damage, while there have been decreases in costs associated with research and development, pollution prevention, and other costs.



#### Fiscal 2018 - Cost of environmental conservation

(Units: ¥ million/vear)

Classification of costs	Main elements	Value* in FY2017	Value* in FY2018
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	137.9	112.1
2) Global environmental conservation	Preservation of green areas around plants, energy- saving measures, warming prevention, etc.	194.8	226.0
3) Resource recycling	Waste treatment, zero emissions measures, office recycling, etc.	181.1	194.0
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)	16.8	14.0
5) Administration	Waste manifest management, ISO 14001 maintenance and renewal inspections and ISO 14001 office personnel costs, reporting to the government, etc.	139.8	116.7
6) R&D	Research to reduce environmental loads and development of products to contribute to reducing environmental loads	88.7	22.9
7) Social activities	Social service activities (cleaning waterways and surroundings of plants), etc.	4.1	3.4
8) Environmental remediation	Remediating environmental damage to surroundings	0.7	10.4
9) Other	Costs for environmental conservation other than the above (including handling of PCB waste treatment)	125.4	13.3
Total			712.9

<sup>\*</sup> Value: Totals of Environmental Investments and Environmental Conservation



Fiscal 2018 - Cost of environmental conservation 712.9 million yen

## Classification and performance of fiscal 2018 investments

Fiscal 2018 results are shown in the table below. By promoting the recycling and recovering resources from waste into usable resources, we have maintained waste landfill volumes at minimum levels since fiscal 2010. While expansion of business activities resulted in increases from the previous fiscal year in unit energy

consumption and CO2 emissions, as well as waste recycling volume, we reduced the volume of landfill waste. 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 2018 investment effects

	Material effects*1			Economic effects*2			
	FY2017 performance	FY2018 performance	Effects	FY2017 performance	FY2018 performance	Effects	Assessment
Energy use per unit output (GJ/¥ million)*3	10.17	10.34	△ 0.17	_	_	_	X*4
CO <sub>2</sub> per unit output (ton C/¥ million)*3	0.114	0.116	△ 0.002	-	-	_	Δ
Wastes to landfill (tons/year)	5.7	4.3	1.4	-	-	_	0
Wastes recycled (tons/year)	21,596	21,941	△ 345	-	-	_	Δ
Energy costs per unit output (¥/¥ thousand)*3	-	-	_	14.9	14.9	0.00	Δ
Gain on sales from recycling (Unit: Millions of yen)	_	_	-	503	389	△ 114	△*5

<sup>\*1</sup> 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 Due to decrease in production efficiency \*5 Due to decrease in volume of valuables