

Environmental Accounting

■Range of Data Collection : Manufacturing bases, R&D bases, office facilities in the area of main business activities (in Japan)

Domestic 10 sites;

TOYO TIRE & RUBBER CO., LTD. (Headquarters, Sendai Plant, Kuwana Plant, Hyogo Manufacturing Complex, Tire Technical Center, Automotive Parts Technical Center, Corporate Technology Center), Fukushima Rubber Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd.

■Period Covered : January 2018~December 2018

Environmental Conservation Cost

Environmental Accounting Review for FY 2018 :

In FY 2018, the investment and costs related to the introduction of a gas cogeneration system aimed at the prevention of air pollution and global warming, costs to improvement equipment efficiency, and costs to enhance the disclosure of information increased. At the same time, research and development costs (investment/expenses) decreased due to the business transfer. And the economic effects of the change in fuel source is unpublished because it is negative due to soaring fuel costs (natural gas).

(Units: million yen)

Category	Major Activities	Investment			Costs		
		FY2016	FY2017	FY2018	FY2016	FY2017	FY2018
1. Business Area Costs		74	204	146	1,433	1,443	2,797
Pollution Prevention Cost	Air pollution preventive measures and waste water treatment facilities improvement, etc.	1	118	17	619	585	696
Global Environment Conservation Cost	Energy-saving measures, greenhouse gas emissions control measures, etc.	72	86	128	260	271	1,592
Resource Circulation Cost	Processing and recycling of industrial waste, etc.	0	0	0	553	585	508
2. Upstream/ Downstream Costs	Purchasing of eco-friendly products, pulverization of waste tires, etc.	0	0	0	33	25	26
3.Administration Cost	Operation of environmental management systems, environmental impact monitoring activities, etc.	7	2	56	85	81	96
4.R&D Cost	Development of alternative materials, research and development of fuel-efficient tires, etc.	28	13	0	653	545	297
5.Social Activities Cost	Tree-planting activities, contributions to the Environmental Protection Fund, etc.	0	0	0	28	30	30
6.Environmental Remediation Cost	Payments of levies related to pollution burdens, etc.	0	0	0	5	5	4
Grand Total		109	220	203	2,241	2,130	3,253

The calculations conform to the Environmental Accounting Guidelines (2005 edition) published by the Ministry of the Environment.

Depreciation of investments is included in cost.

For costs spanning more than one category, only the costs related to environmental protection were included.

In cases where environmental protection costs cannot be clearly separated, a proportional calculation was made using the "environmental ratio" considering the degree of reference to the environmental protection efforts.

R&D costs include the costs of efforts to develop eco-friendly products and use alternative materials.

Personnel expenses were calculated by man-hours and average wages.

Environmental Conservation Benefit

(Units: million yen)

Category	Major Activities	Amount		
		FY2016	FY2017	FY2018
I. Reducing Costs through Energy-Saving.	Implementing cogeneration. Changing fuel source.	132	131	-
	Other energy saving activities.	53	69	45
II. Profits from Recycling and Sale of Waste.	Recycling and selling wastes.	11	9	16
Grand Total		196	210	62