

Environmental Accounting

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

※Including affiliates transferred at the end of 2017

Domestic 13 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., Soflan Wiz Co., Ltd., Toyo Soflan Co., Ltd., Ayabe Toyo Rubber Co., Ltd., F.C.C Co., Ltd., Orient Machinery Co., Ltd.)

■Period Covered : January 2017~December 2017

Environmental Conservation Cost

Environmental Accounting Review for FY 2017 :

In fiscal 2017, Investment increased for Pollution Prevention such as renovation of the wastewater treatment facility, and Global Environmental Conservation such as updated boiler equipment.

(Units: million yen)

Category	Major Activities	Investment			Costs		
		2015	2016	2017	2015	2016	2017
1. Business Area Costs		146	87	211	1,672	1,470	1,466
Pollution Prevention Cost	Air pollution preventive measures and waste water treatment facilities improvement, etc.	59	6	119	810	620	588
Global Environment Conservation Cost	Energy-saving measures, greenhouse gas emissions control measures, etc.	85	81	92	306	264	269
Resource Circulation Cost	Processing and recycling of industrial waste, etc.	2	0	0	556	586	609
2. Upstream/Downstream Costs	Purchasing of eco-friendly products, pulverization of waste tires, etc.	0	0	0	37	34	26
3. Administration Cost	Operation of environmental management systems, environmental impact monitoring activities, etc.	7	9	3	81	89	88
4. R&D Cost	Development of alternative materials, research and development of fuel-efficient tires, etc.	5	28	13	514	654	545
5. Social Activities Cost	Tree-planting activities, contributions to the Environmental Protection Fund, etc.	0	0	0	30	29	31
6. Environmental Remediation Cost	Payments of levies related to pollution burdens, etc.	0	0	0	6	5	5
Grand Total		158	124	227	2340	2281	2161

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		
		2015	2016	2017
I. Reducing Costs through Energy-Saving.	Implementing cogeneration.			
	Changing fuel source.	177	116	132
	Other energy saving activities.	68	49	70
II. Profits from Recycling and Sale of Waste.	Recycling and selling wastes.	11	11	5
Grand Total		256	176	207