Environmental Accounting

Fuji Electric introduced environmental accounting in fiscal 2000 as a key means of assessing environmental management performance. Using the 2005 guidelines released by Japan's Ministry of the Environment, we established in-house calculation methods for environmental preservation costs and benefits. Each year, we ascertain and analyze these costs and benefits and disclose this information to the public.

Stance toward Environmental Accounting Calculations

We calculate “direct benefits,” such as revenue from sales of valuable items and energy conservation, as well as “estimated benefits,” which is a conversion to monetary value of the energy-savings benefit from the use by customers of existing environmentally friendly products (such as vending machines and some inverters) and energy-creating products (such as solar cells and geothermal systems).

Fiscal 2020 Achievements

Environmental conservation costs in fiscal 2020 totaled ¥20,720 million, with investment of ¥1,120 million and expenses of ¥19,600 million.

The environmental conservation benefit amounted to ¥108,690 million, including revenue from sales of items with value of ¥960 million, savings from energy conservation of ¥460 million, and estimated benefits of ¥107,270 million.
Environmental investment included in environmental conservation costs came to ¥960 million in fiscal 2020.
Investments were primarily aimed at energy conversation activities that made direct contributions to the reduction of greenhouse gas emissions during production and included the following:
(1) Installation of LED lighting
(2) Replacement of air conditioners with more efficient models
(3) Installation of inverters and other energy conserving equipment at production facilities

The economic benefit of these environmental preservation measures equated to savings of ¥460 million achieved through the aforementioned energy conservation activities in Fuji Electric factories. In addition, we estimate that the economic benefit from reductions in the electricity bills of customers through the use of our products was ¥10,727 million as a result of increased sales of inverters, power conditioning systems for mega solar power generation systems, solar power generation systems, and electronic devices.

Environmental Conservation Costs and Benefits (Fiscal 2020)

Period covered: April 1, 2020 to March 31, 2021
Scope: 12 business sites + 22 consolidated subsidiaries (nine subsidiaries in Japan and 13 overseas subsidiaries)

Environmental Conservation Costs (Fiscal 2020)

(Millions of yen)

Categories corresponding to business operations		Main Content	Total (Compared to the previous term)	Breakdown	
				Amount invested	Expenses
1	**Costs within the business sites**		2,169(+247)	957	1,212
	Pollution prevention costs	Cost of improving and maintaining atmospheric and wastewater emission treatment facilities and sound dampening equipment	418(-90)	141	275
	Global environmental conservation costs	Installation and maintenance of energy efficient equipment	1,115(+160)	686	430
	Materials recycling costs	Waste reduction, maintenance and management costs	638(+177)	130	508
2	**Upstream/downstream costs**	Cost of processing discarded products	0(-3)	0	0
3	**Management costs**	Costs of environmental education for employees, environmental management systems operation, monitoring and measurement of environmental impact, environmental conservation measures	502(-7)	0	502

Categories corresponding to business operations		Main Content	Total (Compared to the previous term)	Breakdown	
				Amount invested	Expenses
4	R&D costs	R&D costs for environmental conservation, such as energy conservation	18,020(-787)	166	17,854
5	Social activity costs	Greenery preservation, greening costs, and the cost of supporting environmental activities	10(-13)	0	10
6	Environmental damage costs	Cost of excavation and processing of contaminated ground, charges for the impact of pollution	16(-37)	0	16
Total			20,718(-601)	1,123	19,595

Economic Benefit of Environmental Conservation Measures (Fiscal 2020)

(Millions of yen)

Categories	Main details	Total (Compared to the previous term)
Revenue	Amount received from sale of valuable items for recycling	958(-37)
Savings	Reduction of expenses through energy conservation, reduction of landfill waste, reduction of water bill through water conservation	462(-401)
Estimated benefit	Energy reduction through the use of environmentally friendly products by customers	107,269(-23,119)
Total		108,689(-23,557)

Note 1: The “The “estimated benefit” is calculated as the economic benefit of energy savings when products with improved energy efficiency are used by customers, and is converted using the following formula:

Benefit (¥) = Σ〔(annual amount of electrical power consumed by former equipment - annual amount of electrical power consumed by new equipment)× Volume shipped annually in Japan × Electrical power standard cost〕(electrical power standard cost: ¥10/kWh)

Note 2: The “estimated benefit" includes environmentally friendly products (such as vending machines, inverters), and energy creation products (such as solar cells, geothermal power generators).