

Environmental Accounting

Daicel has introduced an environmental accounting system with the goal of implementing efficient environmental preservation activities and increasing the transparency of the status of those activities.

Daicel strives to tackle environmental problems such as global warming. In fiscal 2014, we invested ¥3,094 million in measures to preserve the global environment, such as for the installation of prototype equipment for vapor recompression (VRC) technology as a part of our initiative to revolutionize energy conservation, as well as for the start of installation of a new circulating fluidized bed boiler for in-house power generation that effectively incinerates used tires and other recyclable fuels. Our total investment in the environment was ¥3,262 million, roughly four times the level in the previous fiscal year.

We will continue implementing measures to preserve the environment.

The quantitative results (environmental preservation effects) are presented under "Environmental Preservation" in the "Detailed information on the Responsible Care Initiative" of CSR Report 2015  (<http://www.daicel.com/csr/library.html>), as well as under "Environmental Preservation" on pages 32-33 of the report.

Time period for reported totals: April 2014 to March 2015

Calculation method for reported totals: Calculated according to the Environmental Accounting Guidelines, Year 2005 Edition, published by the Ministry of the Environment of Japan and the Environmental Accounting Guidelines for the Chemical Industry, published by the Japan Chemical Industry Association (JCIA).

Amounts invested: Actual sums for capital investment in environmental preservation in fiscal 2014.

Cost amounts: The totals for actual expenses of equipment depreciation, maintenance, management and labor related to environmental preservation.

Economic effects resulting from environmental preservation activities: Indicated as monetary benefits only and do not include risk avoidance effects or de facto effects. Economic effects attributable to reductions in energy costs are presented as the effects of energy cost reductions over a 12-month period realized through energy-saving initiatives.

► Environmental Preservation Costs

Classification		Major Initiatives	Amounts Invested (¥ million)	Cost (¥ million)
Environmental preservation costs of controlling the environmental impact of our production and service operations that occur within business areas (business area costs)			3,220	4,844
Breakdown	Pollution prevention costs	Prevention of air and water pollution, control of harmful substances, levies for pollution-related health damages	123	2,264
	Global environmental preservation costs	Started construction on a circulating fluidized bed boiler for in-house power generation, installed prototype equipment for vapor recompression (VRC) technology, pinch analysis costs	3,094	1,242
	Resource recycling costs	Appropriate treatment and disposal of industrial waste	3	1,338
Costs of controlling the environmental impact of production and service operations occurring upstream or downstream (upstream and downstream costs)		Costs of recycling containers and packing materials and green purchasing	3	226
Environmental preservation costs in management activities		Labor costs of environmental management, expenses for EMS operations and maintenance, costs of environmental education, costs of environmental impact alleviation	0	551
Environmental preservation costs in R&D activities (R&D costs)		R&D work for reducing the environmental impact of products and technologies	39	138
Environmental preservation costs in community activities (community activities costs)		Costs of environmental promotion activities and participation in community events	0	31
Costs of environmental damage (environmental damage costs)		Environmental remediation costs, compensation for damages related to environmental preservation, and insurance premiums and transfers to reserves for environmental damage	0	3
Total			3,262	5,833

Item	Amount (¥ million)	Environmental Rate (%)
Capital expenditures in the applicable period	22,450	14.5%
R&D expenditures in the applicable period	9,638	1.4%

► Economic Effects (Monetary Benefits) Resulting from Environmental Preservation Activities

Item	Amount (¥ million)
Cost reduction through energy conservation	929
Cost reduction through resource conservation	314
Benefits obtained by recycling	436
Reduction of expenses for waste treatment or disposal	56
Total	1,735