

Environmental Accounting

To efficiently and effectively promote its environmental activities, Kao quantifies the costs and results of those activities in numerical terms.

2022 environmental accounting report

- The aggregation methods we use to comply with the Japanese Ministry of the Environment's Environmental Accounting Guidelines 2005. We also reference the Environmental Accounting Guidelines for Chemical Companies (November 2003) issued by the Japan Chemical Industry Association.
- Boundary: the domestic Kao Group*¹ and major overseas subsidiaries*²
- Concerns the period from January 1, 2022 to December 31, 2022

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*1 Kao Corporation, Kao-Quaker Company, Limited., Kao Group Customer Marketing Co., Ltd., Kao Sanitary Products Ehime Co., Ltd., Kanebo Cosmetics Inc., e'quipe, Ltd., Kao Professional Services Co., Ltd., Kao Salon Japan CO., LTD., Molton Brown Japan Ltd., Kao Paper Manufacturing Fuji, Kao Business Associe Co., Ltd., Kao Logistics Co., Ltd., Shohi Seikatsu Kenkyusho Inc., Kao Peony Co., Ltd., and Kao Cosmetic Products Odawara Co., Ltd.

*2 Kao (Taiwan) Corporation, Kao Vietnam Co., Ltd., Pilipinas Kao, Incorporated, Kao Industrial (Thailand) Co., Ltd., Kao Soap (Malaysia) Sdn. Bhd., Fatty Chemical (Malaysia) Sdn. Bhd., Kao Plasticizer (Malaysia) Sdn. Bhd., Kao Oleochemical (Malaysia) Sdn. Bhd., PT. Kao Indonesia Chemicals, Kao Specialties Americas LLC, Quimi-Kao, S.A. de C.V., Kao Corporation S.A., Kao (Hefei) Co., Ltd., Kao Chemicals GmbH, PT Kao Indonesia, Kao Manufacturing Germany GmbH, Kao (Shanghai) Chemical Industries Co., Ltd., Kao USA Inc., Molton Brown Limited, Kao Corporation Shanghai, Huludao Jinxing Casting Materials Co., Ltd.

Environmental conservation costs (categories corresponding to business activities)

(Unit: millions of yen)

Categories	Key activities	Japan		Asia, the Americas, Europe		
		Investment	Cost* ¹	Investment	Cost* ¹	
(1) Business area costs		785	4,361	5,428	5,353	
Breakdown	(i) Pollution prevention	Air pollution prevention, water contamination prevention	61	1,861	1,102	1,983
	(ii) Global environmental conservation	Energy conservation	460	586	1,219	1,011
	(iii) Resource circulation	Resource conservation, waste processing and disposal	264	1,914	3,106	2,357
(2) Upstream/downstream costs	Plant and equipment for eco-conscious products, packaging recycling	13	2,455	0	2,031	
(3) Administration costs	Acquisition and maintenance of EMS certification, environmental publicity, tree-planting within worksites	0	1,094	4	264	
(4) R&D costs	Eco-conscious R&D	405	7,565	2	325	
(5) Social activity costs	Nature and environmental conservation and tree-planting activities outside worksites, donations	0	22	16	13	
(6) Environmental remediation costs		0	0	0	29	
Total		1,203	15,497	5,876	8,023	

Environmental conservation costs (categories corresponding to business activities)

(Unit: millions of yen)

Categories	Key activities	Japan		Asia, the Americas, Europe	
		Investment	Cost* ¹	Investment	Cost* ¹
(i) Cost related to global warming measures	Energy conservation	460	586	835	725
(ii) Cost related to ozone layer protection measures	Switch to CFC alternatives	0	0	384	249
(iii) Cost related to air quality conservation measures	Air pollution prevention, dust pollution prevention, malodor prevention	3	505	423	708
(iv) Cost related to noise and vibration measures	Noise prevention	1	5	88	71
(v) Cost related to environmental conservation measures for aquatic, ground, and geologic environments	Water contamination prevention	58	1,351	588	1,190
(vi) Cost related to waste and recycling measures	Resource conservation, industrial waste reductions, recycling	277	4,369	3,106	2,625
(vii) Cost related to measures to reduce chemical risks and emissions	R&D on products and production	409	7,565	2	315
(viii) Cost related to nature and environmental conservation	Nature and environmental conservation and tree-planting activities outside worksites, donations	0	21	20	124
(ix) Other costs	Acquisition and maintenance of EMS certification, environmental publicity, tree-planting within worksites	0	1,083	1	2,343
Total		1,208	15,485	5,874	8,359

Economic effect associated with environmental conservation activities*²

(Unit: millions of yen)

Details of benefits	Japan	Asia, the Americas, Europe
	Amount	Amount
Revenue	526	304
Cost reductions*³	Reduction in costs through energy conservation	387
	Reduction in costs through resource conservation	1,359
	Reduction in operation costs (maintenance costs, etc. of eco-conscious equipment)	1,299
Total	2,470	3,349

*1 Cost includes depreciation costs.

*2 For economic effects, only amounts from selling valuable resources and fixed assets and the amount of cost reductions are recorded. Economic effects based on assumption such as risk mitigation, so-called "deemed effects" are not recorded.

*3 The amounts of cost reductions contains only the relevant fiscal year of the annual cost reduction for items generated during that year. Cost reduction amounts generated over multiple years are not included.