

Environmental accounting

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

2021 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, 2021 to December 31, 2021

➔ Product lifecycle and environmental impact

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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 Fujii, 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	Inside Japan		Asia, Americas and Europe	
		Investment	Cost* ¹	Investment	Cost* ¹
(1) Business area costs		991	4,488	3,396	5,924
Breakdown	① Pollution prevention	76	1,897	1,049	1,762
	② Global environmental conservation	751	624	665	1,145
	③ Resource circulation	164	1,967	1,682	3,017
(2) Upstream/downstream costs	Plant and equipment for eco-conscious products, packaging recycling	0	2,467	0	1,910
(3) Administration costs	Acquisition and maintenance of EMS certification, environmental publicity, tree-planting within worksites	0	1,125	2	240
(4) R&D costs	Eco-conscious R&D	2,766	7,579	4	175
(5) Social activity costs	Nature and environmental conservation and tree-planting activities outside worksites, donations	2	89	14	11
(6) Environmental remediation costs		0	0	0	27
Total		3,759	15,748	3,416	8,287

Environmental conservation costs (categories corresponding to areas of environmental conservation measures)

(Unit: millions of yen)

Categories	Key activities	Inside Japan		Asia, Americas and Europe	
		Investment	Cost* ¹	Investment	Cost* ¹
① Cost related to global warming measures	Energy conservation	751	624	373	599
② Cost related to ozone layer protection measures	Switch to CFC alternatives	0	0	292	519
③ Cost related to air quality conservation measures	Air pollution prevention, dust pollution prevention, malodor prevention	0	495	521	587
④ Cost related to noise and vibration measures	Noise prevention	0	3	29	62
⑤ Cost related to environmental conservation measures for aquatic, ground, and geologic environments	Water contamination prevention	76	1,399	495	1,101
⑥ Cost related to waste and recycling measures	Resource conservation, industrial waste reductions, recycling	164	4,434	1,682	3,148
⑦ Cost related to measures to reduce chemical risks and emissions	R&D on products and production	2,766	7,579	4	174
⑧ Cost related to nature and environmental conservation	Nature and environmental conservation and tree-planting activities outside worksites, donations	2	88	18	94
⑨ Other costs	Acquisition and maintenance of EMS certification, environmental publicity, tree-planting activities within worksites	0	1,126	2	2,003
Total		3,759	15,748	3,416	8,287

Economic effect associated with environmental conservation activities^{*2}

(Unit: millions of yen)

Details of benefits	Inside Japan	Asia, Americas and Europe
	Amount	Amount
Revenue		
Sales value of valuable resources and fixed assets	674	227
Cost reductions^{*3}	Reduction in costs through energy conservation	124
	Reduction in costs through resource conservation	1,368
	Reduction in operation costs (maintenance costs, etc. of eco-conscious equipment)	76
Total	2,242	2,263

*1 Cost includes depreciation costs.

*2 For economic effect, 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.