

# Environmental accounting

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

## 2019 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\*<sup>1</sup> and major overseas subsidiaries\*<sup>2</sup>.
- Concerns the period from January 1, 2019 to December 31, 2019.



Please see below for environmental conservation results (numerical results).  
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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., Kanebo Cosmetics Sales Inc., e'quipe, Ltd., Kao Professional Services Co., Ltd., Goldwell Japan Co., Ltd., Molton Brown Japan Ltd., Kao Paper Manufacturing Fuji, Kao Business Associe Co., Ltd., Kao Logistics Co., Ltd., Kao System Logistics Co., Ltd., Kao Field Marketing Co., Ltd., Kao Creative House Corporation, Shohi Seikatsu Kenkyusho Inc., Kao Peony Co., Ltd., Healthcare Committee Inc., and Kao Cosmetic Products Odawara Co., Ltd.

\*2 Kao Chemical Corporation Shanghai, 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 Jinjing 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* <sup>1</sup>	Investment	Cost* <sup>1</sup>	
<b>(1) Business area costs</b>		1,811	4,140	1,896	3,803	
Breakdown	①Pollution prevention	Air pollution prevention, water contamination prevention	173	1,785	823	1,592
	②Global environmental conservation	Energy conservation	710	471	382	750
	③Resource circulation	Resource conservation, waste processing and disposal	928	1,884	691	1,461
<b>(2) Upstream/downstream costs</b>		0	2,374	0	85	
<b>(3) Administration costs</b>		0	1,877	0	203	
<b>(4) R&amp;D costs</b>		2,359	5,446	2	113	
<b>(5) Social activity costs</b>		8	110	13	9	
<b>(6) Environmental remediation costs</b>		0	0	0	10	
<b>Total</b>		<b>4,178</b>	<b>13,947</b>	<b>1,911</b>	<b>4,223</b>	

### 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* <sup>1</sup>	Investment	Cost* <sup>1</sup>
①Cost related to global warming measures	Energy conservation	710	471	322	408
②Cost related to ozone layer protection measures	Switch to CFC alternatives	0	0	60	320
③Cost related to air quality conservation measures	Air pollution prevention, dust pollution prevention, malodor prevention	2	455	607	505
④Cost related to noise and vibration measures	Noise prevention	0	2	4	51
⑤Cost related to environmental conservation measures for aquatic, ground, and geologic environments	Water contamination prevention	171	1,328	189	1,025
⑥Cost related to waste and recycling measures	Resource conservation, industrial waste reductions, recycling	928	4,258	691	1,543
⑦Cost related to measures to reduce chemical risks and emissions	R&D on products and production	2,359	5,446	2	112
⑧Cost related to nature and environmental conservation	Nature and environmental conservation and tree-planting activities outside worksites, donations	8	109	36	79
⑨Other costs	Acquisition and maintenance of EMS certification, environmental publicity, tree-planting activities within worksites	0	1,878	0	180
<b>Total</b>		<b>4,178</b>	<b>13,947</b>	<b>1,911</b>	<b>4,223</b>

### Economic effect associated with environmental conservation activities\*<sup>2</sup>

(Unit: millions of yen)

Details of benefits	Inside Japan		Asia, Americas and Europe	
	Amount	Amount	Amount	Amount
<b>Revenue</b>	Sales value of valuable resources and fixed assets		420	211
<b>Cost reductions*<sup>3</sup></b>	Reduction in costs through energy conservation		223	157
	Reduction in costs through resource conservation		1,135	1,442
	Reduction in operation costs (maintenance costs, etc. of eco-conscious equipment)		192	562
<b>Total</b>			<b>1,970</b>	<b>2,372</b>

\*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.