

## Kao's approach

Kao gives due consideration to the environment and human safety in all stages from raw materials procurement to product development, manufacturing, sales, distribution, use, disposal and recycling to contribute to the sustainability of the world.

## Kao's creating value to address social issues

In the Kao Environmental Statement, we set four areas as key environmental issues to address. They are CO<sub>2</sub>, water, chemical substances, and biodiversity.

In setting these environmental areas, we took the following factors into consideration.

- (1) **Social issues that are global in scale and common to humankind**
- (2) **Size of our business impact on the society**

Our products impact the environment across all stages of the product lifecycle. Therefore, we believe that conducting environmental conservation

activities in all stages is essential, focusing our efforts on the above four environmental areas.

Based on this policy, for instance, offering water-saving products that reduce the environmental impact in the use stage is one of our major initiatives. Collaboration with consumers, business partners and all other stakeholders in society is fundamental to conducting these initiatives across the product lifecycle. We use the slogan "eco together" in our communications and collaborations with stakeholders.

Initiatives that take a lifecycle approach are not necessarily easy, but we believe they generate

major value through their social contributions and we intend to conduct industry-leading, progressive activities.



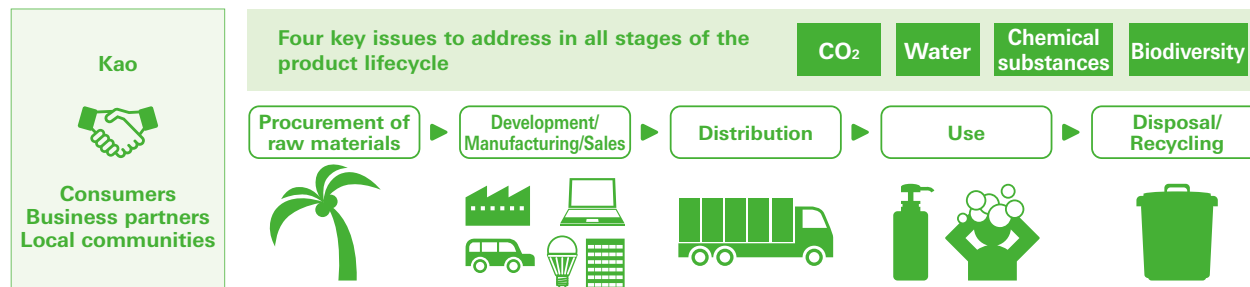
→ Environmental Statement: Medium-term Objectives

<http://www.kao.com/global/en/sustainability/environment/statement-policy/statement/medium-term-objectives/>

### Contributions to the SDGs



### Four key issues



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Our initiatives

## Policies

In the Kao Environmental Statement, we pledge our commitment to environmentally responsible management and conducting environmental conservation efforts together with stakeholders across the whole product lifecycle. We have defined our basic policies in Basic Policies on Environmental Measures, and our activities policy in the Kao Responsible Care Policy. These policies are incorporated into all of our business activities.



→ Basic Policies on Environmental Measures  
<http://www.kao.com/global/en/sustainability/environment/statement-policy/policy/philosophy-policies/>

→ Kao Environmental Statement  
<http://www.kao.com/global/en/sustainability/environment/statement-policy/statement/>

→ Kao Responsible Care Policy  
<http://www.kao.com/global/en/sustainability/environment/statement-policy/policy/responsible-care/>

## Framework

The Kao Responsible Care (RC) Policy and the promotion framework and activities can be found on the following page.



→ p. 184 Governance > Responsible care activities

## Education and promotion

Our environmental initiatives are defined in the Kao Business Conduct Guidelines (BCG), which we practice along with ongoing education and awareness-raising through various opportunities to create awareness for self-responsibility and action-taking among all employees.

We hold educational seminars on the environment to build awareness and understanding for the Kao Environmental Statement. In 2017, 160 new employees took these seminars in new employee group trainings, and 302 current employees took these seminars in group trainings held according to employee rank and division.

As part of awareness-raising among employees, we have employees participate as staff providing information during environmental exhibitions to build understanding for our environmental initiatives. In 2017, about 100 employees participated in these exhibitions in Japan and Vietnam.

We also encourage volunteering in environmental activities in local communities and viewing of environment-themed films to broadly raise awareness for the environment.

Under the Responsible Care (RC) promotion framework, the Kao RC Promotion Committee Secretariat and staff in promoting divisions conducted educational activities for employees and employees at partner companies as needed. The Kao RC Promotion Committee Secretariat

held educational activities 50 times for a total of 756 participants (625 participants in Japan, 84 participants in Asia, 39 participants in the Americas, and 8 participants in Europe).

Sites that have introduced ISO 14001 and other environmental management systems provide training to all employees including new and transferred employees at least once a year.



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Conservation

Community

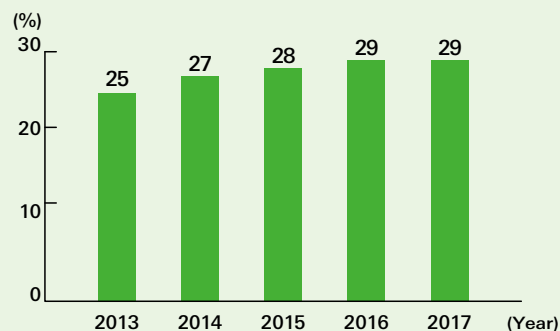
Corporate Culture

Governance

## Performance in 2017

Products with small environmental impact that have passed our original rigorous certification standards display the "eco together" logo.

### Sales percentage of products displaying the "eco together" logo (Consumer products in Japan)



### CDP\* evaluation

The CDP has highly rated our environmental initiatives and named Kao an A or A- List company in multiple categories.



\*CDP  
CDP is a London-based NPO operated by institutional investors, and it motivates companies to disclose information related to climate change, water and forests.

### CDP evaluation

Category	Evaluation
Climate change	A-
Water	A-
Forests (Timber)	A-
Forests (Palm oil)	A-
Supply chain engagement	A

## Collaboration with stakeholders

We engage in proactive communications to advance our "eco together" activities with consumers and many other stakeholders across the product lifecycle from raw materials procurement to product development, manufacturing, sales, distribution, use, disposal and recycling. We disclose our environmental activities publicly, exchange information with suppliers through the CDP Supply Chain program, and exchange information and collaborate with government and industry groups. For example, we participated in the CO<sub>2</sub> Reduction/Light-Down Campaign sponsored by the Japanese Ministry of the Environment and the 2017 Containers and Packaging Diet Campaign sponsored by a group of nine prefectures and cities in Japan.

Since many Kao products are used on a daily basis in the home, cooperation by consumers in the use and disposal stages is essential. For this reason, we are actively providing information to the consumers through our products and conducting the following activities to raise awareness for the environment.



→ "eco together" logo display standards  
<http://www.kao.com/global/en/sustainability/environment/statement-policy/eco-friendly-products/eco-together-logo/>

→ List of products displaying the "eco together" logo  
<http://www.kao.com/jp/corporate/sustainability/environment/phase/eco-together-products.html>  
(Japanese)



→ CDP results  
CDP 2017 climate change  
<http://www.kao.com/content/dam/sites/kao/www-kao-com/global/en/sustainability/pdf/cdp2017-001.pdf>

CDP 2017 water  
<http://www.kao.com/content/dam/sites/kao/www-kao-com/global/en/sustainability/pdf/cdp2017-002.pdf>

CDP 2017 forests  
<http://www.kao.com/content/dam/sites/kao/www-kao-com/global/en/sustainability/pdf/cdp2017-003.pdf>



→ p. 141 Corporate Culture > Sustainable and responsible procurement/Our initiatives: partnership with supplier/CDP Supply Chain Program

→ p. 23 Our initiatives: Raising environmental awareness through the Kao International Environment Painting Contest for Children

→ p. 25 Our initiatives: Developing and holding experience-based educational programs about the environment

## Our initiatives

### Product design with environmental considerations

We employ the following two systems to ensure that our products are designed with environmental considerations.

One system is to verify the environmental impact of our products before releasing them into the world, and the other is to communicate to consumers that the products are environmentally friendly by displaying the "eco together" logo on the products. These systems have cleared our rigorous certification standards.

For the major product categories, we evaluate multifaceted environmental aspects in an integrated manner and analyze the characteristics of the environmental impacts to facilitate product development.

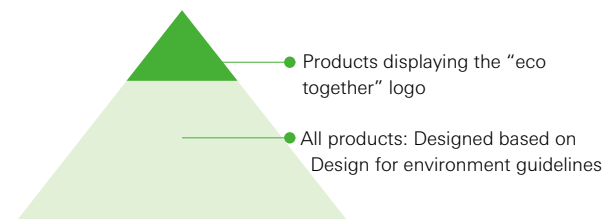
#### 1. Design for environment guidelines

When deciding to launch new and improved products, we verify that the products satisfy our environmental standards. How this is implemented and the standards are defined in our Design for environment guidelines. These guidelines also define how assessments of CO<sub>2</sub> emissions across the entire product lifecycle (LCA) are conducted.

#### 2. "eco together" logo display standards

Kao products with small environmental impact display the "eco together" logo. This shows consumers that the product achieves a high level of environmental performance and can be used as a guide at the time purchase. Our rigorous certification standards require products to reduce lifecycle CO<sub>2</sub> emissions compared with comparable standard products and clear at least one of the certification criteria that we have set.

#### Environmental standards for new and improved products



→ Design for environment guidelines  
<http://www.kao.com/global/en/sustainability/environment/statement-policy/eco-friendly-products/designing/>

→ "eco together" logo display standards  
<http://www.kao.com/global/en/sustainability/environment/statement-policy/eco-friendly-products/eco-together-logo/>

#### Environmental impact assessments of products using the LCA framework

The LCA framework comprehensively assesses the impacts of a product on various aspects of the environment. Receiving advice from Professor Norihiro Itsubo of Tokyo City University, we are using LIME\* (second version of the Japanese lifecycle impact assessment method), which enables quantification of comprehensive environmental impacts. By assessing multiple environmental aspects in an integrated manner, this method can identify hot spots such as a large impact on water resources even though CO<sub>2</sub> emissions are low. We conduct environmental impact assessments for 35 major product categories and gain an understanding of the balance of environmental aspects to benefit product development.

\*ILCD Handbook, pp. 33-36.

<http://eplca.jrc.ec.europa.eu/uploads/ILCD-Handbook-LCIA-Background-analysis-online-12March2010.pdf>

## Raising awareness among consumers (customers) in collaboration with various stakeholders

### Raising environmental awareness through the Kao International Environment Painting Contest for Children

Governments | Other companies/  
Business partners | NPOs/  
NGOs

We have been holding the Kao International Environment Painting Contest for Children since 2010 with the wish of reaching people around the world to think about the environment and to take actions in their daily life. In the contest, children think seriously about the future of the Earth's environment and steps we can take to conserve it in our daily lives, and then express their ideas in paintings, which we communicate to large numbers of people.

#### The 8th Kao International Environment Painting Contest for Children

In 2017, we received 11,048 entries from children in 41 countries and regions around the world (861 entries from Japan, 9,054 entries from Asia, 115 entries from the Americas, 370 entries from Europe, 634 entries from the Middle East, and 14 entries from Africa). After a preliminary screening by Kao's designers, a final screening was conducted by a panel of judges from inside and outside Kao, and 32 entries were selected for awards. These 32 prize-winning works were exhibited at the Kao booth at EcoPro 2017 held in December, and the top nine winners were invited to the awards ceremony. In a talk session after the ceremony, the winners from the various countries talked about the environment in their country or region as well as the message of their painting.



Prizewinners who participated in the awards ceremony

#### Painting exhibitions in collaboration with governments, NPOs and business partners

We seek out ways to exhibit current and former prizewinning paintings to communicate to as many people as possible the messages of the children's paintings and create greater identification with them.

Internally at Kao, we exhibit paintings at permanent exhibits at all 10 plants in Japan as well as at 5 worksites and training centers in Japan, which have been viewed by employees and more than 60,000 visitors and guided tour participants.

Outside Kao, in addition to planned exhibitions in the Sumida and Minato wards of Tokyo, we have begun

lending paintings free of charge to environment-related facilities operated by government bodies throughout Japan, NPOs and other groups, with the NPO BeGood Cafe serving as the secretariat of the exhibition. In 2017, a total of 11 facilities and groups borrowed paintings, which were viewed by more than 20,000 people.

Of its environmental events held jointly with business partners and government bodies, Kao CMK exhibited paintings at 10 locations having more than 14,000 visitors.

Kao (China) Holding and Kao (Taiwan) incorporate exhibits of paintings in campaign activities to raise environmental awareness in various regions.



A painting exhibition at a facility in Sumida Ward, Tokyo



## Direct dialogue with consumers at exhibitions and the Kao Eco-Lab Museum Other companies/ Business partners

Raising environmental awareness among consumers is important for both the wider society and Kao.

This is why we believe in the need for easy-to-understand, fun and influential communication, and we are focusing on educational activities at venues that allow us direct dialogue with consumers.

### Eco-Products International Fair 2017 (May 2017, Ho Chi Minh, Vietnam)

We participated in one of the largest environmental exhibitions in Asia. Kao Vietnam employees served as booth guides and communicated directly with visitors to introduce our environmental policies and the environmental contributions of Kao Vietnam's consumer products and chemical products whose use we are aiming to expand in Asia. Booth visitors learned about our initiatives for the environment while participating employees also increased their environmental awareness.



Kao exhibit at the Eco-Products International Fair

### EcoPro 2017 (December 2017, Tokyo Big Sight)

Kao has been exhibiting at EcoPro, one of the largest exhibitions on the environment in Japan, for 10 years in a row. In 2017, we narrowed our focus to communication with consumers on three themes based on the Kao corporate message. Visitors learned about our environmental activities through fun experiences designed to raise their environmental awareness. In the exhibition's RecyCreation® zone, we set up an experience with recycled resin blocks made from used refill packs that we collected from people internally and in local communities. We also linked our activities to environmental websites and guided the visitors to visit various websites. More than 10,000 people visited our booth over three days.



"Kirei equals happiness" was the overall theme of our booth



Communication focused on experience and dialogue

\*RecyCreation®

A portmanteau word coined by Kao. We registered trademark combining recycling, which turns used items back into resources, and creation to create new value.

### Communication activities at the Kao Eco-Lab Museum

The Kao Eco-Lab Museum uses experiential content to engage in direct dialogue with consumers and many other stakeholders throughout the year. Approximately 12,700 people visited the museum in 2017. We have also developed parent-and-child environmental workshops with more effective experiential and dialogue content for community residents. In 2017, we held these workshops 9 times having 378 participants in total.

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Our initiatives

## Developing and holding experience-based educational programs about the environment

Governments Other companies/  
Business partners

Society for Sustainable Food & Lifestyles was established in 2011 by Kao, Ajinomoto Co. Inc. and E-Square Inc.

In 2017, we conducted an experience-based educational program called “the Earth’s Future through Food and Living—Summer Challenge” for 13 sets of fifth-grade students and parents in Kawasaki City in cooperation with Kawasaki City. Through experiences at the plants of Kao and Ajinomoto located in Kawasaki City, keeping journals, and workshops, the parents and children consider how environmental issues are connected to their daily life and consider modifying their lifestyles. This program began in 2016 and received the 11th Kids Design Award in the Creative Category (designs that develop children’s creativity and shape their future) in August 2017.

To expand this activity to other regions and companies, we are publishing information on websites, in magazines and other venues as well as giving presentations on this activity.



Sharing the results of group work

## Sixth year of water conservation campaign in cooperation with the Chinese government

Governments

Kao (China) has conducted the Nationwide Cleanliness and Water-saving Initiatives jointly with the Center for Environmental Education and Communications (CEECC), part of the State Environmental Protection Administration (SEPA) of China, since 2012.

These initiatives encourage people in China to conserve water with the slogan of “Save 10,000 liters of water annually per household.” In China, the shortage of water resources has become a serious problem. The Chinese government’s promotion of the importance of conserving water aligns with Kao’s wish to promote environmental activities that can be done together with consumers in China, through sales of water-saving laundry detergent. Kao has participated in the initiatives for six consecutive years.

The campaign begins in March each year, with informational sessions held in various cities on conserving water and the importance of water resources. The initiatives were expanded in 2015 to include awareness-raising events held at universities in China. In 2017, these events were held at 53 universities in 13 provinces including Guangzhou, Xi’an, Liaoning, Anhui, Zhejiang and Inner Mongolia.

An environmental protection contest for university students in China has also been held since 2015, with 445 entries for public service announcements and 90 educational PowerPoint entries for environmental protection received in 2017.

In June, a closing ceremony was held at a university in Beijing, with awards presentation to the contest winners.

## Communication targeting consumers at stores

Governments Other companies/  
Business partners

To communicate the environmental value of Kao products to consumers and promote “eco together,” Kao Group Customer Marketing Co., Ltd. holds environmental events together with distribution companies and local governments on the theme of conserving water and electricity and reducing waste. Wide range of fun, experience-based events include exhibits of prizewinning works from the Kao International Environment Painting Contest for Children and tours of the Kao Eco-Lab Museum and attract the attention of consumers. In 2017, these events were held at 210 stores and government facilities nationwide in Japan, attracting approximately 90,000 visitors. Of these, events held in collaboration with distribution companies and local governments at 38 stores in places like Sapporo City and Ehime and Okinawa prefectures had an influential impact on the local communities.



Environmental fair co-sponsored by Sapporo City and a distribution company

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## Educational activities on the environment and hygiene at elementary schools

NPOs/  
NGOs

Since 2016, PT Kao Indonesia has been providing education on the environment and hygiene through the Anak Kao program at elementary schools jointly with the NGO YCAB Foundation. PT Kao Indonesia visits elementary schools in Jakarta and Cikarang and Karawang, where Kao plants are located, to teach the importance of washing hands and brushing teeth as well as keeping the environment clean with the keywords of creative, active and optimistic. In 2016, 3,070 students, and in 2017, 2,660 students participated in the lessons.



Students at an elementary school participated in the session

## Redesigned Kao environmental website

Experts

In June 2017, we redesigned our environmental website for the general public. The new website introduces specific eco initiatives that we are implementing at all stages from raw materials procurement to product development, production, sales, distribution, use, disposal and recycling in easy-to-understand ways. In the Japanese website, topics on the environment including global warming and biodiversity are introduced in a Q&A format in the Kao Environmental Lesson section with editorial supervision by experts. Videos and illustrations are used to create a fun learning experience about our environmental initiatives for children and adults alike.



→ Kao environmental website  
<http://www.kao.com/jp/en/environment/>

→ "Let's eco together!" leaflet (Japanese)  
[http://www.kao.com/content/dam/sites/kao/www-kao-com/jp/ja/environment/index/index-article-h-data-pdf\\_01-s.pdf](http://www.kao.com/content/dam/sites/kao/www-kao-com/jp/ja/environment/index/index-article-h-data-pdf_01-s.pdf)



Leaflet containing some of the environmental website's content

## Community-based environmental conservation activities by employees

Through environmental conservation activities in communities and around our sites, we promote contributions to society and raising awareness among employees.

For example, at Kao USA, a team of 20-some employee volunteers are conducting Kao Zero, an activity aimed at minimizing the environmental impact of the Cincinnati facilities. In 2017, the team installed LED lights and reduced food waste from the employee cafeteria. During the week of Earth Day in April, the team collected recycling brought from employees' houses and cleaned waterways on and nearby company grounds. Along with raising environmental awareness among employees, Kao USA intends to build on its environmental conservation activities and expand their scope.



Employees participating in cleanup activities around the site grounds

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