

Kao
Sustainability
Data Book

2018



kao

Contents

How to Use This PDF	3
Editorial Policy	4
CEO Message	5
The Future of Packaging for a Comfortable and Eco-friendly Life	6
Kao Sustainability Statement	8
Major Sustainability Indicators	15

2017 Our initiatives

Conservation

Initiatives for the environment	19
CO ₂	27
Water	36
Chemical substances management	43
Biodiversity	55
Waste	60
Packaging	66
Product lifecycle and environmental impact	71
Environmental accounting	73

Community

Product quality management	76
Universal Design	82
Communication with consumers	88
Communication with corporate customers (Consumer Products Business)	94
Communication with corporate customers (Chemical Business)	98
Communication with corporate customers (Professional Service Business)	103
Corporate citizenship activities	108

Corporate Culture

For realization of the Kao Corporate Philosophy	117
Integrity	121
Human rights	130
Sustainable and responsible procurement	134
Overall vision for human capital development	143
Human capital development	145
Diversity and inclusion	148
Dialogue with employees	155
Health	158
Occupational safety	165
Process safety and disaster prevention	170




Governance

Corporate governance	176
Responsible care activities	184
Risk and crisis management	191
Information disclosure	195
Information security	200
IP protection and utilization	207
External recognition	211
Independent assurance report	213
GRI Standards table	214
ISO 26000 table	221
Indexes for survey	223



How to Use This PDF

The navigation buttons, the category tabs, and the table of contents buttons are located at the right edge of each page for easy page scrolling. The link buttons to relevant pages and external sites are also available in the text.

Navigation buttons

	Click the left arrow to go back one page
	Click the right arrow to go forward one page
	Click the return arrow to go back to the previous page

Link buttons

	Click the icon to go to the relevant page in this data book
	Click the icon to go to the relevant external site

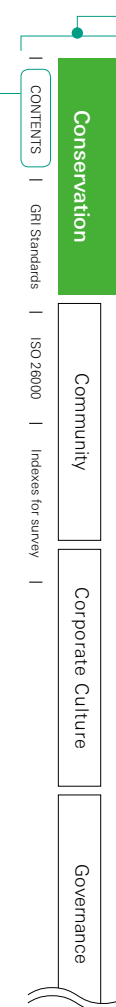
Category tabs

Click the tab to see the table of contents

Contents
How to Use This PDF
Editorial Policy
CEO Message
The Future of Packaging for a Comfortable and Eco-friendly Life
Kao Sustainability Statement
Major Sustainability Indicators
2017 Our initiatives
Conservation
Community
Corporate Culture
Governance
External recognition
Independent assurance report
GRI Standards table
ISO 26000 table
Indexes for survey

Click a title to go to the top page of the section

Click a title to go to the top page of the category



Conservation

Community

Corporate Culture

Governance

Editorial Policy 102-48, 102-50, 102-51, 102-52, 102-56

Since 2017, Kao has issued the Kao Integrated Report, with the aim of presenting a comprehensive picture of the value that Kao provides.

The Kao Sustainability Data Book complements the Kao Integrated Report, introducing various activities contributing to the sustainability of the world along with detailed performance data.

Scope and boundary of reporting

In general, we report the activities of the Kao Group (Kao Corporation, its subsidiaries and affiliates). Environmental and social performance data covers Kao Corporation and its subsidiaries.

Exceptions to this data scope have been clearly stated in the text.

In this data book, “Kao” means the Kao Group. We have stated the names of individual organizations covered if it is necessary to identify the boundary.

Organizations covered



→ List of Kao Group companies
<http://www.kao.com/global/en/about/outline/group-companies.html>

Period covered

Fiscal 2017

(January 1, 2017–December 31, 2017)

Some qualitative information includes performance of fiscal 2018.

International Financial Reporting Standards (IFRS)

International Financial Reporting Standards (IFRS) has applied since fiscal 2016. Per unit of sales in this data book is calculated based on Japanese standards up to fiscal 2015, and on IFRS fiscal 2016 thereafter.

Independent assurance

We have had our reports independently assured since 2003. KPMG AZSA Sustainability Co., Ltd. provides independent assurance for this data book. Indicators for which assurance is provided are marked with a [check](#) . A list of those indicators is shown in p. 214 and the [GRI Standards table](#).

Issuance period

Issued on: June 12, 2018

Next report scheduled for issue in June 2019

(Previous issue: June 2017)

Guidelines referenced

- GRI Sustainability Reporting Standards in 2016
*The number of referenced GRI disclosures are noted next to the title of each page.
- Environmental Reporting Guidelines (2012) and Environmental Accounting Guidelines (2005) by the Ministry of the Environment of Japan
- Environmental Accounting Guidelines for Chemical Companies (November 2003) by the Japan Chemical Industry Association
- ISO 26000 (guidance on social responsibility)

Kao's corporate communication tools



→ Kao Integrated Report 2018
<http://www.kao.com/content/dam/sites/kao/www-kao-com/global/en/investor-relations/pdf/reports-fy2018e-all.pdf>

→ Kao Sustainability Data Book 2018
(This data book)
<http://www.kao.com/global/en/sustainability/databook/>

→ Corporate Governance
<http://www.kao.com/global/en/about/policies/corporate-governance/>

→ Financial Report
<http://www.kao.com/global/en/investor-relations/library/financial-report/>

Toward a Global Presence

The Kao Group has made the Kao Way, the Group's corporate philosophy, the foundation of all of its corporate activities. Our mission is to strive for the wholehearted satisfaction and enrichment of the lives of people globally and to contribute to the sustainability of the world.

Since our foundation in 1887, we have delivered products to people worldwide through both our Consumer Products Business, which contributes to cleanliness, beauty, and well-being in everyday life, and through our Chemical Business, which contributes to the growth of a variety of industries.

In fiscal year 2017, we launched the Kao Group's Mid-term Plan (K20) with the aim of becoming a company with an even stronger global presence. Our K20 goals include developing a distinctive corporate image, promoting profitable growth, and delivering a high level of returns to stakeholders. We also want to contribute to the sustainable development of society through our ESG initiatives. This requires environmental consciousness, corporate activities aimed at creating a society where people can live life to the fullest, and operating under strong corporate governance.

The Kao Group will continue to anticipate changes in the times and people's lifestyles. Through consumer engagement and our heartfelt *Yoki-Monozukuri**, we will work toward a more beautiful future for people and the earth.

* We define *Yoki-Monozukuri* as "a strong commitment by all members to provide products and brands of excellent value for consumer satisfaction".



Michitaka Sawada

President and Chief Executive Officer



The Future of Packaging for a Comfortable and Eco-friendly Life

Kao delivers an annual average of 40 products per household in Japan. Through the packaging for these products, we aim to offer lifestyle comfort as well as environmental friendliness.



From refilling to replacing at bathtime

Refill products have become a fixture of everyday life in Japan. Refill products are less expensive than their standard counterparts and allow consumers to use to the original product container. The refill product packaging can be rolled into small and compact size after refilling containers, and this leads to help to reduce household waste.

Kao's first refill product was launched in 1991. The number of refill products has grown year after year, reaching 289 products as of December 2017. After various product improvements, we launched our new refill packaging in 2016, which offers easier container refilling with little residual waste. The new refill packaging has been adopted in several

brands that offer personal care products used in the bathroom.

We have also launched the *Smart Holder*, in which the new refill packages can be inserted and used without needing the conventional product container. With its slim body, *Smart Holder* also helps de-clutter the bathroom of bottles to create a neat and tidy appearance. Several designs can be selected in order to add personalized style to personal care routine.



How the *Smart Holder* is used

Environmentally friendly refills

Many product containers are made of plastic, which is primarily derived from petroleum. Petroleum-based plastic is difficult to recycle and closely linked to environmental problems, namely global warming from the carbon dioxide that is produced when they are burned. We are therefore working to reduce the amount of petroleum-based plastics used by offering refill products.

Pouches for refill products greatly reduce the amount of plastic used compared with the conventional standard product containers. As an example, the increased use of refill products reduced our plastic use by 92,300 tons in 2017. Switching the raw materials for packaging to plant-based substances is another way to reduce the use of petroleum-based plastics. The new refill packaging uses 15% plant-based plastics by container weight.



Environmentally friendly and easy to use new refill packaging

The future of packaging is eco-friendly while also being easy to use

If environmentally friendly packaging is not convenient to use, consumers would not make a habit of using it. The new refill packaging is compact and easy to store, with a shape that does not easily fall over. The pour spout fits snugly over the product container's opening for added stability and to prevent spills when refilling, making the packaging easier to use. It can also be used together with the *Smart Holder* to save time by eliminating the need to refill containers all together.

Consumers can choose the container that fits their style to make their personal care routine more fun while being environmentally friendly as well.



Improving quality of life with environmentally friendly packaging

Kao products are used in many other areas of the home in addition to the bathroom. The new refill packaging and *Smart Holder* will continue to evolve through our cycle of improvements. Comfortable living can in fact be eco living. We are working toward this future through a variety of product packaging.

Comments from Kao staff

Many refill products can be found on store shelves in Japan, but they are less common in other countries. We want to reduce our use of plastic to make more efficient use of precious resources. This is one reason why we intend to increase the use of this futuristic packaging around the world.



See here for back issues of Pick up

➡ Pick up 01 "Learning hygiene habits for good health"

<http://www.kao.com/global/en/sustainability/pickup/pickup-1/>

➡ Pick up 02 "The big spring-cleaning before graduation"

<http://www.kao.com/global/en/sustainability/pickup/pickup-2/>

Kao Sustainability Statement 102-15,102-16

The Kao Sustainability Statement was revised in 2018.

In the three areas of Conservation, Community and Corporate Culture, we have specified main themes and indicated the social issues to be addressed.

Philosophy underlying our sustainability activities

The Kao Way

In the Kao Way, our corporate philosophy, we define *Yoki-Monozukuri* as “a strong commitment by all members to provide products and brands of excellent value for consumer satisfaction.” Our mission as defined in the Kao Way is “to strive for the wholehearted satisfaction and enrichment of the lives of people globally and to contribute to the sustainability of the world.”

As members of the Kao Group, in order to fulfill this mission, we commit fully to working together to share joy with consumers and customers through our products and brands of value, contributing to clean, beautiful, and healthy living and, in the Chemical Business, contributing to the development of industry.



→ The Kao Way

<http://www.kao.com/global/en/about/policies/kaoway/>

Kao Sustainability Statement

Based on the Kao Way, we developed the Kao Sustainability Statement in 2013 to communicate our approach to contributing to the sustainability of the world and where we would focus our efforts.

Based on changes in international society regarding sustainability and internal discussions on achieving the Kao Group Mid-term Plan 2020 (K20), we revised the Kao Sustainability Statement in 2018. The revision is intended to better communicate our basic approach to contributing to the sustainability of the world and clearly indicate the social issues to be addressed.

Kao Sustainability Statement

Kao's mission is to strive for the wholehearted satisfaction and enrichment of the lives of people globally and to contribute to the sustainability of the world.

Now and in the future, we aim to be an integral part of people's lives by creating, through our corporate activities, a world in which all people can live life to the fullest.

We will contribute to a sustainable society by working to solve social issues together with various stakeholders.

Nine Main Themes



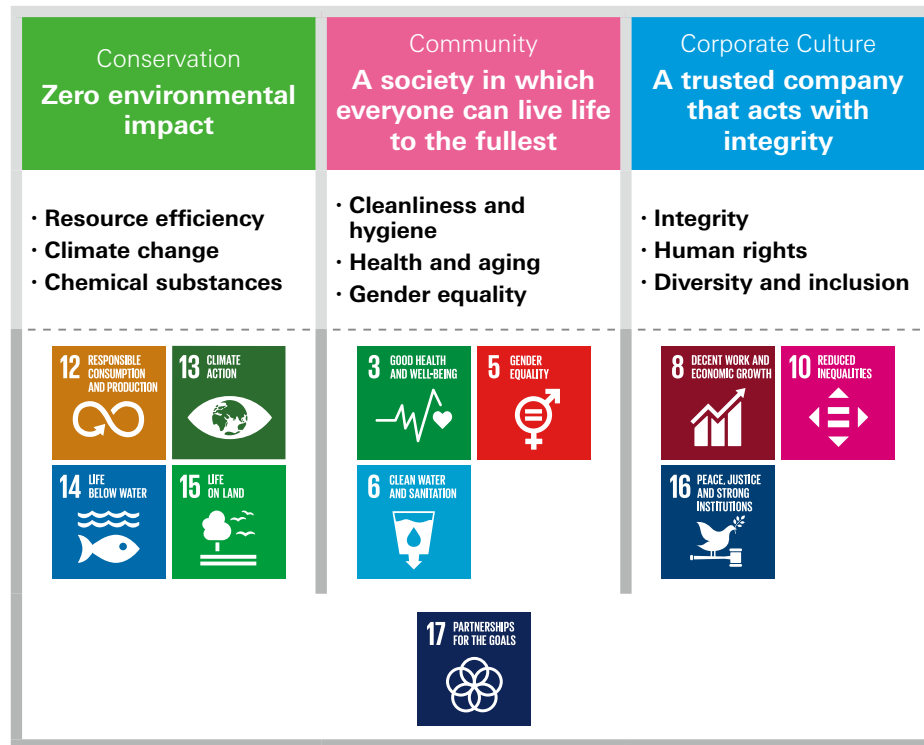
Kao Sustainability Statement 102-11,102-12

Contributions to the Sustainable Development Goals

The Sustainable Development Goals (SDGs) have been agreed upon by the international community as targets for achieving sustainable development with a target year of 2030. The SDGs seek integrated economic, social, and environmental improvements. Contributions by companies are considered extremely important to achieve them.

Of the 17 SDGs, the nine main themes we have specified contribute to achieving the following goals.

Nine Main Themes and Their Contributions to the Sustainable Development Goals



Our initiatives

The following activities have been defined and are being conducted for each of the nine main themes.

Conservation Zero environmental impact	Community A society in which everyone can live life to the fullest	Corporate Culture A trusted company that acts with integrity
Resource efficiency <ul style="list-style-type: none"> • Use a high degree of biomass • Reduce plastics use • Reduce water consumption • Promote recycling Climate change <ul style="list-style-type: none"> • Lower CO₂ emissions in company operations • Reduce lifecycle CO₂ emissions and maximize reduction contributions • Engage with various stakeholders in environmental conservation Chemical substances <ul style="list-style-type: none"> • Minimize the impacts of chemical substances on human health and the environment throughout the product lifecycle • Conduct risk communication about chemical substances with stakeholders 	Cleanliness and hygiene <ul style="list-style-type: none"> • Teach children good hygiene habits • Educate and support eating establishments, hospitals, schools, and other facilities in relation to hygiene management Health and aging <ul style="list-style-type: none"> • Develop product designs that are easy for everyone to use • Provide information and education for health maintenance and disease prevention • Develop and offer products and services that support senior living Gender equality <ul style="list-style-type: none"> • Offer products and services that make housework easy for diverse groups of people • Support women to have self-confidence at all life stages 	Integrity <ul style="list-style-type: none"> • Ensure compliance with laws, regulations, and rules • Conduct sustainable and responsible procurement Human rights <ul style="list-style-type: none"> • Improve human rights due diligence and expand its scope • Support improvements to human rights conditions related to our business Diversity and inclusion <ul style="list-style-type: none"> • Human capital and organizational development • Diverse and efficient work patterns • Employee diversity • Employee health, occupational safety and health

Kao Sustainability Statement 102-29,102-46

Specifying the main themes

We have specified nine main themes to address based on changes in conditions inside and outside Kao and in social issues.

1. Our awareness of social conditions

In 2015, the United Nations General Assembly adopted the SDGs. The international community has agreed to the SDGs as guideposts for realization of the sustainable world with a target year of 2030. The SDGs represent social issues that require the efforts of the international community as a whole to resolve.

2. Kao Group Mid-term Plan 2020 (K20)

We began implementing K20, our mid-term management plan, in 2017. K20 states “The Kao Group aims to establish a global presence by combining sustained ‘profitable growth’ and ‘contributions to the sustainability of the world’ by resolving social issues and providing social contribution activities through its business operations.”

3. Analysis of the issues

We have specified the social issues that we will work toward resolving from a multifaceted analysis including social changes, our business plans, and the expectations and requests of our stakeholders.

In our analysis, we created a list of approximately 70 issues based on social issues presented in various international guidelines and frameworks, including ISO 26000 (guidance on social responsibility), the GRI (Global Reporting Initiative), and the SDGs. Based on the possibility of the Kao Group to contribute to resolving the issue, the effects on our business, and our strengths, we narrowed down this list to 30 issues.

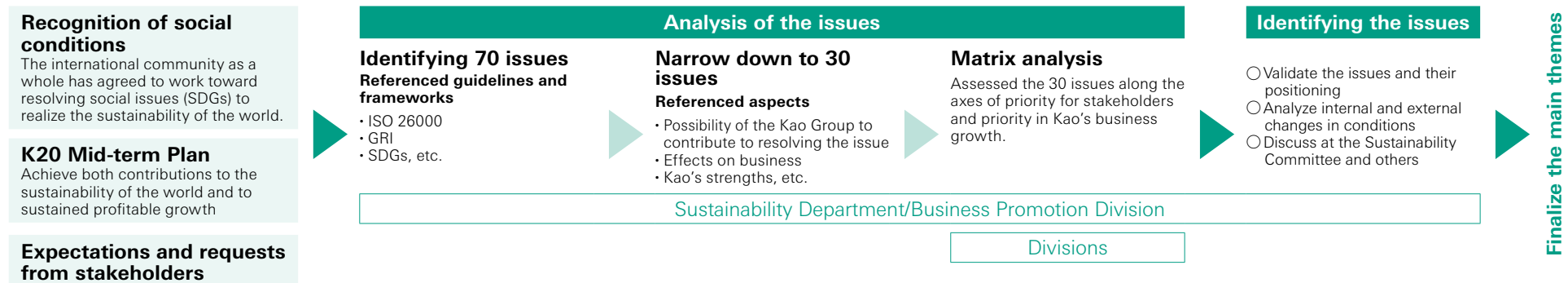
We then held discussions with a broad range of internal divisions and departments including

business divisions, Corporate Strategy, R&D, Procurement, and Sales to input the issues around the axes of 1) priority for stakeholders and 2) priority in Kao’s business growth, in the context of business growth and risk management as well as environmental and social considerations.

4. Identifying the issues: Selecting nine themes

Through validating the issues and their positioning, followed by analysis of the changing conditions inside and outside Kao and discussions at the Sustainability Committee and other venues, we specified three social issues in each of the three key areas as main themes.

Process of selecting the main themes



Conservation

Community

Corporate Culture

Governance

Kao Sustainability Statement 102-47

In the area of Conservation, we have specified the themes of **resource efficiency**, aiming to effectively use natural resources, recycle containers, and reduce waste; **climate change**, involving reducing greenhouse gas emissions; and **chemical substances**, to fulfill our responsibility as a company that handles chemical substances.

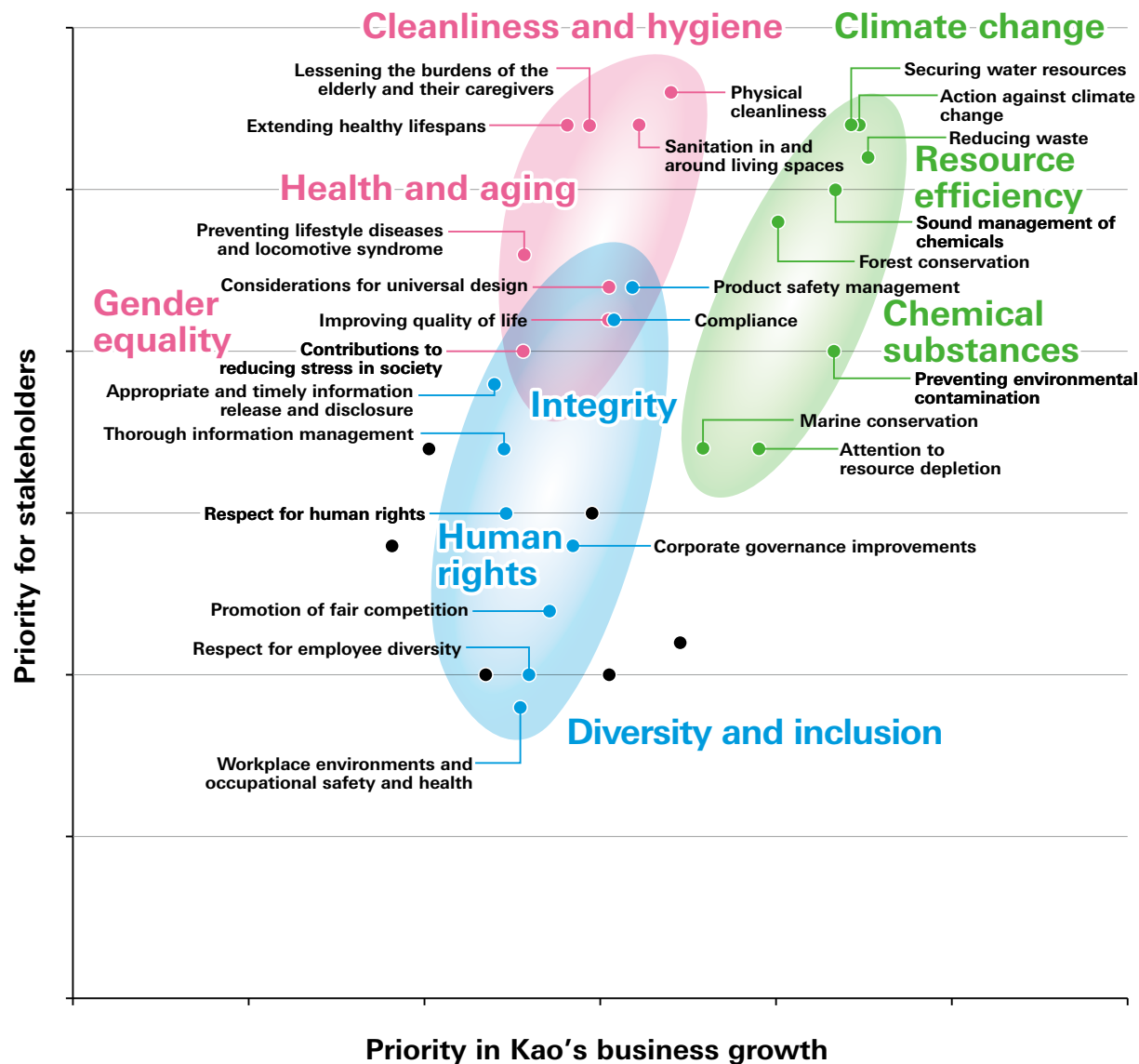
In the area of Community, we have specified the themes of **cleanliness and hygiene**, one of the origins of the Kao Group symbolized by *Kao Sekken* (Kao soap) launched in 1890; **health and aging**, to support daily good health for people worldwide; and **gender equality**, to contribute to resolving gender disparities.

In our Corporate Culture, we have specified the themes of **integrity**, one of the core values of the Kao Way; **human rights**, to fulfill our responsibility to respect the human rights of stakeholders through all of our business activities; and **diversity and inclusion**, to provide venues where diverse employees can exercise their own abilities to the fullest.



→ Study on returns to Kao's stakeholders 2017
<http://www.kao.com/content/dam/sites/kao/www-kao-com/global/en/sustainability/pdf/study-on-returns.pdf>
 *Scheduled for release in June 2018

Matrix of Materiality



Conservation

Community

Corporate Culture

Governance

Kao Sustainability Statement 102-18,102-19,102-20,102-26

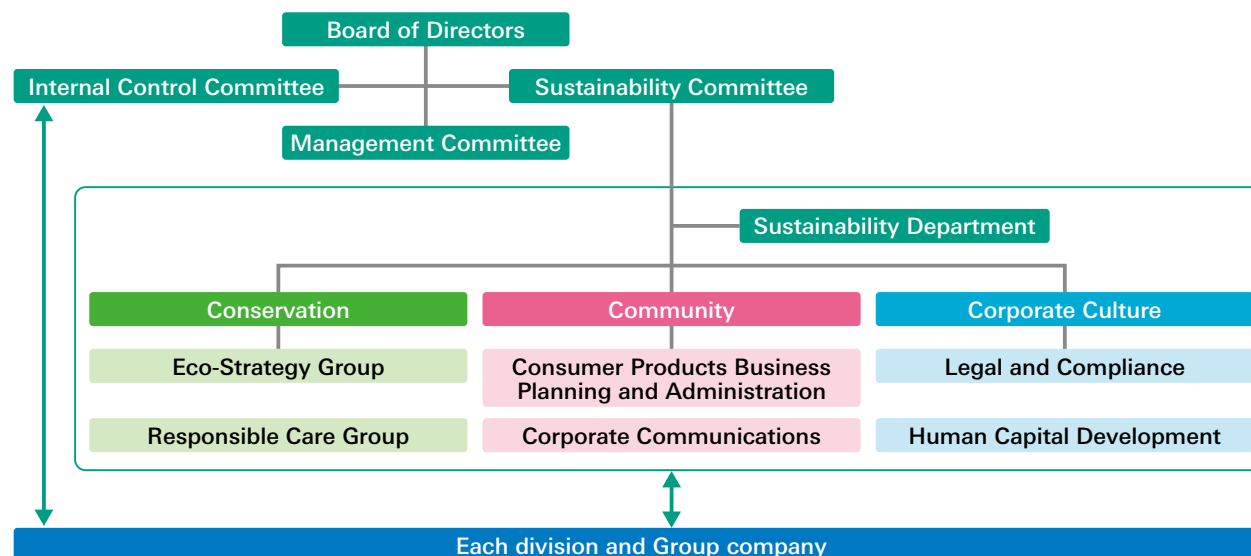
Sustainability Promotion Framework

We have established the Sustainability Committee, chaired by the President and CEO, to set the direction of and execute the Kao Group's sustainability activities. The Committee improve the promotion framework and formulates and revises the strategic programs as necessary, as well as regularly evaluates the programs to improve the Kao Group's activities as a whole.

The Sustainability Committee met four times in 2017, in January, April, July, and November. In addition to three members who are Representative Directors, the Committee members includes respective Executive Officers in charge of the R&D, Supply Chain Management, Human Capital Development, Product Quality Management, International Business Management, Accounting and Finance, Corporate Communications, and Corporate Strategy divisions. In the meetings, they deliberated on the optimum sustainability policy, strategy, and activities for the Kao Group.

The divisions engaged in the three key areas take responsibility for setting the targets and conducting the PDCA (plan-do-check-act) cycle to manage activities companywide.

Sustainability Promotion Framework



Conservation

Community

Corporate Culture

Governance

Kao Sustainability Statement 404-2

Awareness-raising for employees

Awareness-raising for employees

To develop activities based on the Kao Sustainability Statement, all Group members need to fully understand the thinking behind it. Therefore, we have been conducting educational activities for employees using various approaches since 2013, when we announced the Kao Sustainability Statement.

Since 2013, we have published information on the company intranet system to promote understanding of the Kao Sustainability Statement.

Four times a year, we release a Sustainability Relay Essay on the intranet, written by a leader of a division that details their thinking toward sustainability. We also release Sustainability Tips every month, which introduce social trends and initiatives by Kao and other companies in an easy-to-understand format.

Starting from 2015, this information, originally in Japanese, has also been published in English on the intranet for Kao Group companies outside Japan, and we are continuing to implement information-sharing with the aim of building solid foundations for the promotion of sustainability activities.

Awareness-raising through trainings organized by the Human Capital Division

Employees need to have an understanding of Kao's approach to sustainability as they go about their daily work. Based on this belief, training programs organized by the Human Capital Division include units on sustainability.

From 2014, we have held sustainability sessions in trainings for top management members stationed overseas. As of 2017, 13 members of management have participated in the one-on-one sessions.

From 2016, we are holding a sustainability session in the new employee training and in the career training programs for employees hired mid-career. A total of 498 employees beginning to work at Kao Group companies in Japan in April participated in the session during the new employee training in 2017. Mid-career hire trainings are held twice a year and had participants of 32 in September 2017 and 47 in February 2018.

Content covering our approach to sustainability is also included in the global orientation program for employees joining Kao Group companies outside Japan.

Internal publications

Our in-house magazine for all Kao Group members, KAO FAMILY, is published four times a year in both English and Japanese. It features a series of articles aimed at deepening employees' understanding of the Kao Sustainability Statement.

A special feature in the 2013 issue just after the Statement was announced described the background to developing the Statement as well as details of its content. Articles have been published regularly since 2014, and examples of specific activities are introduced, in 2017 as well.



Articles in our in-house magazine KAO FAMILY

Conservation

Community

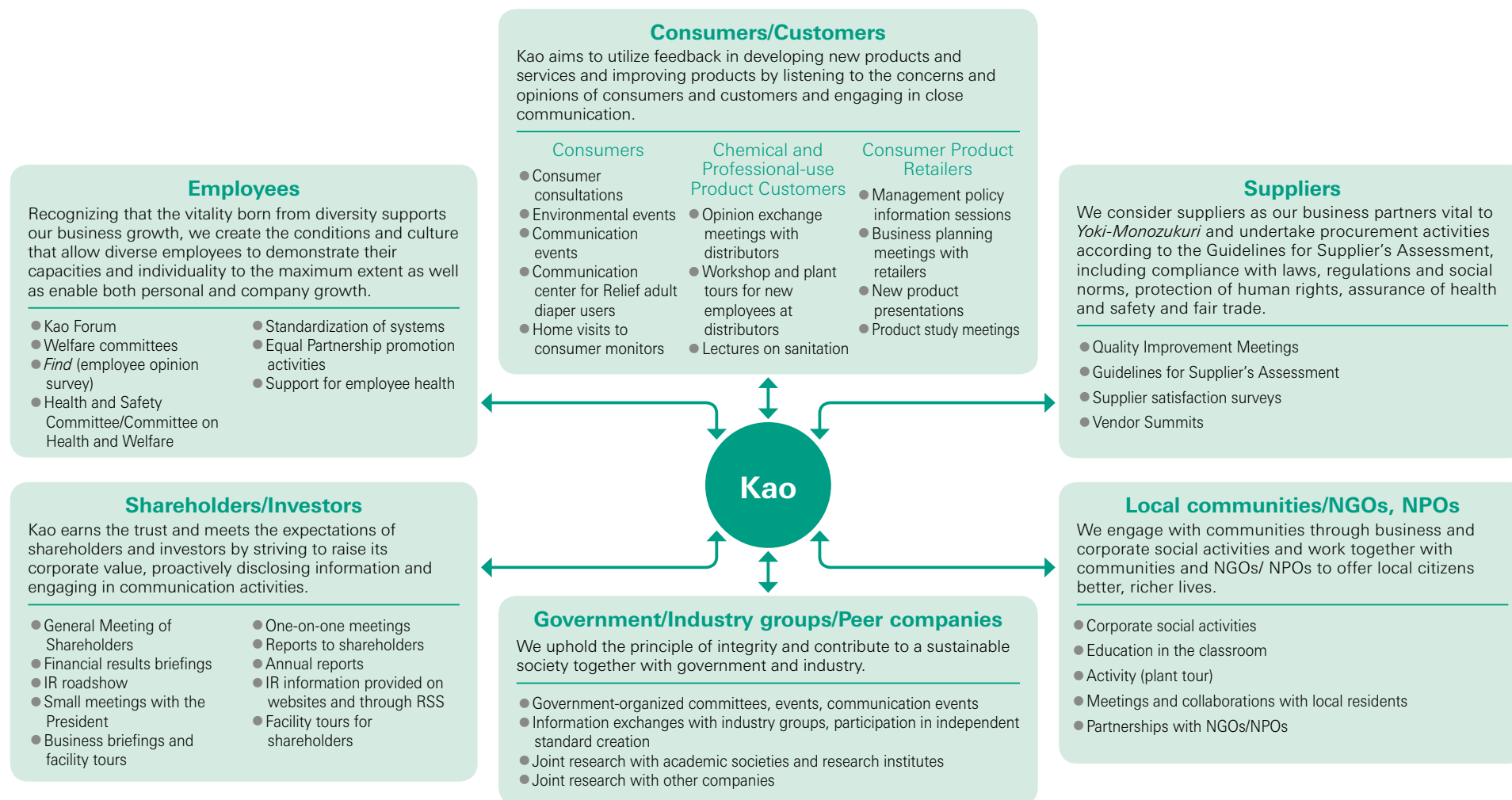
Corporate Culture

Governance

Kao Sustainability Statement 102-40,102-43

Stakeholder communication

At Kao, we gain in-depth understanding of the expectations of society through dialogue with stakeholders, and incorporate these expectations into our activities and targets.



Conservation

Community

Corporate Culture

Governance

Major Sustainability Indicators 103-2,103-3

We have defined our sustainability indicators as follows and are conducting activities accordingly.

Conservation

Materiality	Vision	Items	Results				Targets	Results	Targets	SDGs*7
			2013	2014	2015	2016	2017		2020	
Conservation	Minimize environmental impact from our business activities and contribute to the realization of the One Planet Living vision for environmental sustainability									
	Reduction rate for CO ₂ emissions*1									
	Scope 1 and 2		▲27%	▲28%	▲29%	▲30%	▲31%	▲31%	▲35%	12 13
	Across the lifecycle		▲14%	▲15%	▲17%	▲14%	—	▲14%	—	
	Japan, across the lifecycle		▲18%	▲16%	▲17%	▲16%	—	▲15%	▲35%	
	Reduction rate for water usage*1									
	All Kao Group plants and offices		▲33%	▲38%	▲43%	▲42%	▲38%	▲43%	▲40%	6 12
	Across the lifecycle		▲16%	▲18%	▲21%	▲17%	—	▲19%	—	
	Consumer products in Japan, during product use		▲22%	▲22%	▲24%	▲22%	—	▲24%	▲30%	
	Reduction rate for waste production*1									
	All Kao Group plants and offices		▲28%	▲27%	▲27%	▲25%	▲31%	▲25%	▲33%	12
	Percentage of sales from products displaying the “eco together ” logo*2		25%	27%	28%	29%	—	29%	—	6 9 12 13
	Procurement of sustainable palm oil*3		—	—	PKO*3 Completed traceability to the mills*4	PKO*3 Completed traceability to the mills	PO*3 Traceability to the mills	PO*3 Completed traceability to the mills to 97%	Traceability to the plantations	15
	Procurement rate for sustainable paper and pulp*5		—	—	96%	99%	—	99.8%	100%	15
	Promote further environmental activities by engaging in environmental communication with society									
Cumulative number of participants in environmental communication*6 (thousands of people)		—	240	460	690	820	910	1,000	12	
Aim to contribute to the realization of a sustainable society by promoting sound chemical management through Strategic Approach to International Chemicals Management (SAICM) activities										
Number of released safety summaries for Kao priority risk assessment substances		—	—	7 (Total 7)	3 (Total 10)	3 (Total 13)	3 (Total 13)	Total 20	3 12	
Number of released GPS safety summaries for chemical products		18 (Total 30)	47 (Total 77)	12 (Total 89)	18 (Total 107)	16 (Total 123)	18 (Total 125)	Total 150	3 12	

*1 Per unit (of sales), relative to FY2005.

*2 Consumer products in Japan; sales rate of products that meet the criteria for “eco together” certification
“eco together” certification:
<http://www.kao.com/global/en/sustainability/environment/statement-policy/eco-friendly-products/eco-together-logo/>

*3 Progress of activities to trace the palm oil used by the Kao Group back to the plantations;
PKO: palm kernel oil, PO: palm oil.

*4 As of the end of 2015, we were unable to establish the traceability of some of the derivatives that we had no choice but to purchase from other companies.

*5 Procurement rate of recycled and sustainable paper and pulp, packaging materials and office paper used by the Kao Group.

*6 Cumulative number of participants in educational programs, factory tours, environmental events, etc., since 2014.

*7 The goals to which the Kao Group can contribute among 17 Sustainable Development Goals.

Major Sustainability Indicators 103-2,103-3

Community

Materiality	Vision	Items	Results				Targets	Results	Targets	SDGs
			2013	2014	2015	2016	2017		2020	
Health	Improve and prevent obesity and lifestyle diseases by contributing to the creation of a society conducive to a healthy life									
	Number of participants in health educational programs* ⁸ (thousands of people)	—	1,610	2,610	2,310	2,900	2,920	—	3	
Hygiene	Prevent the spread of infectious diseases by contributing to the creation of a society conducive to a hygienic life									
	Number of participants in the educational programs of hygiene habits* ⁹ (thousands of people)	—	6,110	7,520	7,610	10,000	8,670	12,000	3612	
Aging	Support the lifestyles of the elderly by contributing to the creation of a society conducive to healthy aging, both mentally and physically									
	Cumulative number of the products improved with Universal Design considerations* ¹⁰	1,303	2,066	2,876	3,585	—	4,666	—	12	
	Implementation rate of improvements with Universal Design considerations* ¹⁰	79%	80%	91%	71%	—	63%	—		
Partnerships with communities	Engage in social activities with local communities to contribute to an improved quality of life									
	Number of times information was provided to employees regarding volunteer activities	126	79	71	67	70	50	80	17	
	Educational activities for external parties provided through transmitted information	100	71	99	59	60	60	80		

*8 Number of participants in walking events and events for measuring visceral fat; QUPiO users.

QUPiO: A program aimed at providing support for health promotion and preventive, lifestyle improvement measures based on knowledge obtained from joint research undertaken with the University of Tokyo using a database of health checkup data for one million people that covers an extended period of time.

*9 Number of participants in the educational programs for infant care, hand and hair washing, laundry and cleaning, and menstrual hygiene (including the delivery of educational samples and tools) in Japan and the rest of Asia.

*10 Products improved with Universal Design considerations represent products improved from considerations including accessibility, safety and usability.

The implementation rate of improvements is the percentage of products improved with Universal Design considerations among all new and improved product items. The data until 2015 covers Japan, the data for 2016 covers Japan and the Americas, and the data for 2017 covers Japan, the Americas and Europe (not including salons and Molton Brown Ltd.).

Corporate Culture

Materiality	Vision	Items	Results				Targets	Results	Targets	SDGs
			2013	2014	2015	2016	2017		2020	
Integrity	Instillment of integrity throughout the entire Kao Group									
	BCG test rate	86.5%	87.2%	96.4%	97.5%	100%	97.1%	100%	16	
	Number of serious compliance violations* ¹¹	0	0	0	0	0	0	0		
Diversity and inclusion	Maximize employee potential through diversity and inclusion									
	Percentage of female managers	27.7%	27.6%	27.5%	25.4%* ¹²	—	25.1%	30%* ¹³	5	
	Percentage of female managers (Japan)	10.5%	10.1%	10.4%	13.1%* ¹²	—	14.6%	15%* ¹³	5	
	Cumulative attendance rate for manager training on diversity and increasing management capabilities (Japan)	—	—	—	8.2%	100%	55.7%	200%* ¹⁴	10	
Employee health and safe workplaces	Improvement of health literacy and safety awareness among employees									
	Total participants for health promotion programs	—	—	—	31,885	32,900	36,259	35,900	8	
	Lost time accident frequency rate* ¹⁵	0.74* ¹⁶	0.54	0.61	0.67	Less than 0.26	0.55	Less than 0.10	8	

*11 Serious compliance violations relating to the Kao Group's operations are internally defined and managed within the Kao Group.

*12 The definition of "manager" was revised in 2016 following the promotion of integrated Group management.

*13 Not established as targets for 2020, but targets to be quickly realized as future milestones.

*14 Cumulative attendance rate for manager trainings since 2016.

*15 Number of persons dead or seriously injured in occupational accidents per million hours worked (including only accidents involving at least one lost work day and also the loss of a part of the body or a bodily function).

*16 Global production and R&D divisions.

2017 Our initiatives

Conservation..... 18

Community 75

Corporate Culture 116

Governance 175

External recognition 211

Independent assurance report 213

GRI Standards table 214

ISO 26000 table 221

Indexes for survey 223

2017 Our initiatives

Conservation

Initiatives for the environment	19
CO ₂	27
Water	36
Chemical substances management.....	43
Biodiversity.....	55
Waste	60
Packaging	66
Product lifecycle and environmental impact	71
Environmental accounting	73

Initiatives for the environment 102-12,103-1

Kao's approach

Our initiatives

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 CO₂, 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.

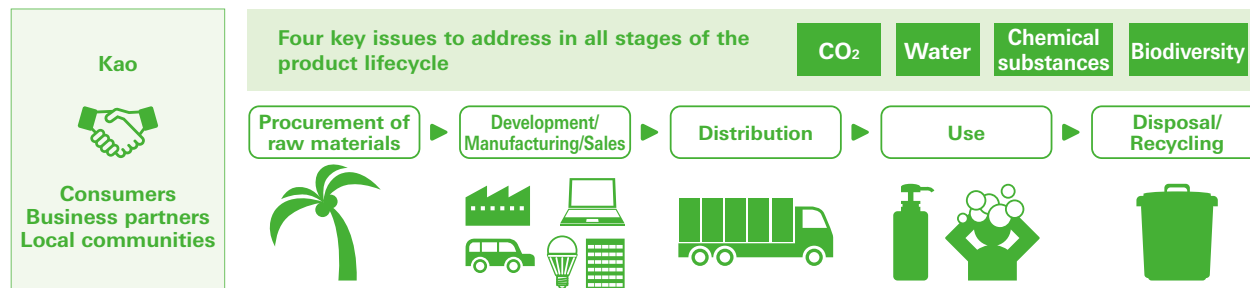


→ **Environmental Statement: Medium-term Objectives**
<http://www.kao.com/global/en/sustainability/environment/statement-policy/statement/medium-term-objectives/>

Contributions to the SDGs



Four key issues



Conservation

Community

Corporate Culture

Governance

Initiatives for the environment 103-1,103-2,103-3,404-2

Kao's approach

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.



→ p. 121 Corporate Culture > Integrity

Conservation

Community

Corporate Culture

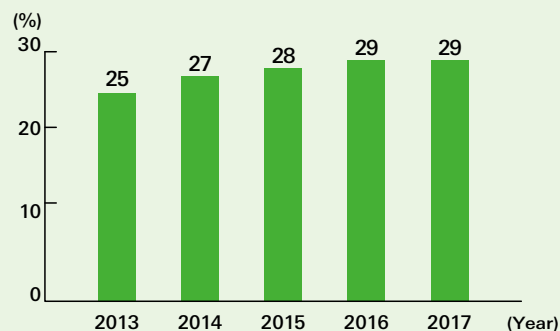
Governance

Initiatives for the environment 417-1

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)



→ “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* 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



→ 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>

Kao's approach

Our initiatives

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 CO₂ 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.



→ 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.

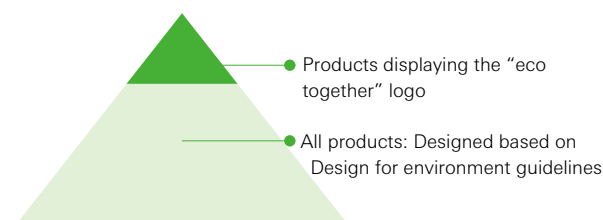
1. Design for environment guidelines

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 CO₂ 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 CO₂ 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 CO₂ 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

Initiatives for the environment 413-1

Kao's approach

Our initiatives

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.

Conservation

Community

Corporate Culture

Governance

Initiatives for the environment 203-1,413-1

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 (CEEC), 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.

Kao’s approach

Our initiatives

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

Conservation

Community

Corporate Culture

Governance

Initiatives for the environment 413-1

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



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

Kao's approach

In the Paris Agreement adopted in 2015, citizens of the Earth agreed to work together toward the goal of keeping the global rise in temperature to below 2°C above pre-industrial levels. As a citizen of the Earth, we at Kao are conducting activities together with our business partners and consumers to reduce CO₂ emissions at all stages of the product lifecycle.

Kao's creating value to address social issues

The year 2017 was the second-hottest year on NASA's record since record-keeping began, and there were many reports of damage caused by extreme weather.

Managing the risks associated with climate change is a critical management issue for Kao. We see the increase in natural disasters as a result of climate change as well as compliance with related regulations as potential risks. Work stoppages and the inability to procure raw materials due to natural disasters result in business opportunity loss, while compliance with regulations results in negative financial impact from the increases in costs and investments. At the same time, however, these conditions also represent business opportunities. Through our business activities, we believe that we can contribute to reducing CO₂ emissions, a main cause of global warming.

At Kao, we recognize the following as risks and opportunities and are incorporating them into our strategy for our business activities.

Risks and opportunities from regulations

Some national and regional regulations and public policies impact companies' business activities, including energy-efficiency standards, carbon tax schemes and emissions trading systems. Others directly impact products, including the carbon footprint

of the product to be displayed in labeling. We consider these types of regulations and policies themselves to be a risk to our business continuity and growth.

To comply with these regulations, we are expanding our business through various activities conducted by Kao Group companies in each country and region, including offering products that contribute to saving energy. We have also introduced a system to calculate the environmental impact of our products.

Risks and opportunities from physical impacts

The effects of climate change are now becoming apparent. These include longer periods of high temperatures during summer due to global warming, and more intense typhoons and hurricanes and extremes in rainfall due to climate change. Adapting to these changes in nature and the resulting unavoidable disasters represent risks to our business operations.

Meanwhile, we also believe that physical impacts are associated with multiple opportunities. For example, longer periods of high temperatures during summer and extremes in rainfall mean higher demand for products consumed when it is hot and water-saving products. In this way, we aim to expand business by offering products in countries and regions to meet these emerging needs.

Other risks and opportunities

Insufficient efforts to mitigate climate change is

a risk to business continuity and growth. This risk encompasses such aspects as difficulty in entering markets for environmentally friendly products and inability to gain the trust of various stakeholders. On the other hand, continuously offering higher value environmentally friendly products and expanding the market facilitates business expansion. Proactive information disclosure leads to increased trust from various stakeholders and contributes to business expansion in the medium and long term.

Risks and opportunities

	Risks	Opportunities
Regulations	<ul style="list-style-type: none"> Taxation and regulations related to CO₂ emissions Setting of energy-efficiency standards Trading systems for greenhouse gas emissions Carbon footprint labeling programs for products 	<ul style="list-style-type: none"> Offering products that contribute to reducing CO₂ emissions and meeting energy-efficiency regulations Cost reductions from energy savings
Physical impacts	<ul style="list-style-type: none"> Work stoppages caused by natural disasters Inability to procure raw materials due to natural disasters Increased costs for installing and operating facilities in preparation for extreme weather and natural disasters 	<ul style="list-style-type: none"> Offering products that are in higher demand due to hotter temperatures Offering products to meet needs at natural disasters
Others	<ul style="list-style-type: none"> Damage to reputation from insufficient response to climate change or insufficient information disclosure 	<ul style="list-style-type: none"> Increased credibility from proactive response to climate change and proactive information disclosure

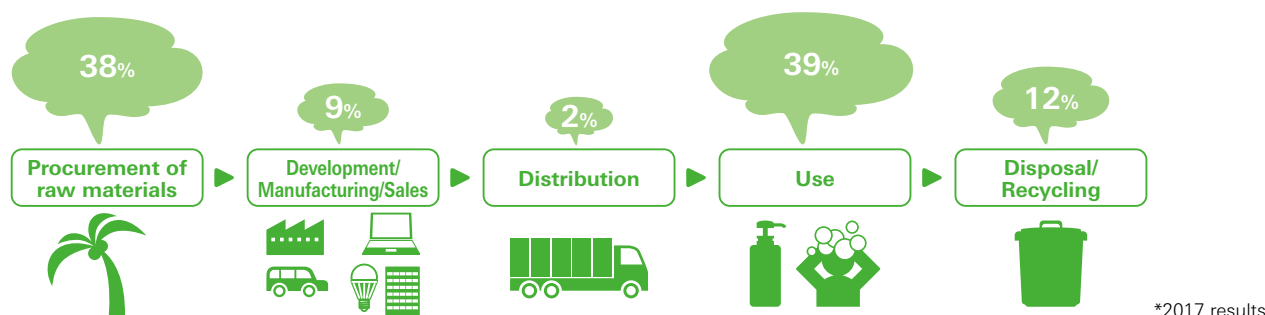
Contributions to the SDGs



Policies

We at Kao are working together with our business partners and consumers to introduce and develop technologies to reduce CO₂ emissions at each stage of the product lifecycle.

Ratio of CO₂ emissions at each stage of the Kao product lifecycle



The use stage accounts for the largest ratio at 39%, with the raw materials procurement stage accounting for the second-largest ratio at 38%. The ratio of direct CO₂ emissions from facilities such as Kao plants accounts for a relatively small 9%, and it is notable that the volume of emissions that are not direct emissions accounts for the larger ratio. The reason why we announced in the Kao Environmental Statement our commitment to contribute to environmental conservation at all stages of the product lifecycle in 2009 was that we gained this results of our analysis.

CO₂ in the use stage is emitted, for example, for laundry detergent when the washing machine uses electricity, and for shampoo and dish detergent when hot water is used during the products use. We offer laundry detergent that reduces the number of required rinse cycles, and shampoo and dish detergent that reduce hot water use, as ways to reduce the amount of CO₂ emitted in the use stage.

To reduce CO₂ emissions in the next-largest raw materials procurement stage, we are taking steps including optimizing the amount and frequency of raw materials deliveries and selecting raw materials with lower CO₂ emissions on a unit basis.

To reduce CO₂ emissions in the disposal and recycling stage, we are taking steps including reducing packaging and other materials that become waste after use by the consumer, and using biomass materials that do not contribute to the global warming when incinerated.

To reduce CO₂ emissions in the manufacturing and sales stages, we are taking steps including reducing the amount of energy consumed, using cleaner energy, and reducing leaks of refrigerants and other greenhouse gases. To reduce CO₂ emissions in the distribution stage, we are taking steps including making products more compact, improving shipping efficiency, shortening shipping distances, and switching to modes of transport with lower CO₂ emissions.

Kao's approach

Our initiatives

Framework

Activities that produce CO₂ and other emissions across the entire product lifecycle are managed under our Responsible Care (RC) promotion system.

Various Kao divisions and stakeholders are involved in these activities corresponding to the product lifecycle stage (table below).

For example, in the manufacturing stage, the SCM Division holds the Energy-Saving Working Group Meeting, manages the progress of energy-saving activities at plants, and internally rolls out new technologies. We are also building a system that horizontally connects divisions in order to strengthen coordination among each lifecycle stage. In the Eco Action SCM Meeting, all divisions that manage the stages of raw materials procurement, manufacturing and distribution meet together to share information and discuss cooperation with the aim of total optimization.

Using a database that centrally manages environmental data, Kao ensures data reliability, standardizes work tasks, and increases task efficiency to facilitate conducting activities with targeted outcomes.

Managing divisions and relevant stakeholders by product lifecycle stage

Product lifecycle stage	Managing divisions at Kao	Relevant stakeholders
Raw materials procurement	R&D Division Procurement Division	Suppliers Contract manufacturers
Development/Manufacturing/Sales	Marketing Division, R&D Division, SCM Division, Sales Division	Local communities Retailers
Distribution	SCM Division, Logistics Division	Distribution companies Retailers
Use	R&D Division	Consumers
Disposal/Recycling	R&D Division	Government/ Treatment and service providers

Mid- to long-term targets and performance

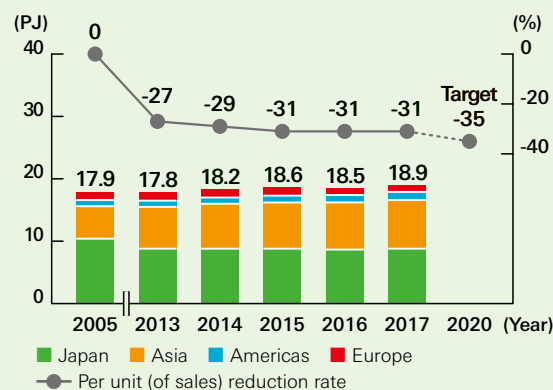
In 2013, we set the 2020 reduction targets for energy consumption and greenhouse gas emissions pertaining to all Kao Group sites and have aimed to achieve a standard reduction of 1% each year. In 2009, we set the 2020 reduction targets for CO₂ emissions pertaining to the entire product lifecycle for the Kao Group in Japan, based on the national reduction targets set by the Japanese government at the time.

Targets for energy and greenhouse gas emissions

Index	Scope	2017 targets	2018 targets	2020 targets
Energy consumption	All Kao Group sites	32% reduction	33% reduction	35% reduction
GHG emissions		31% reduction	32% reduction	35% reduction
CO ₂ emissions	Across the entire product lifecycle for the Kao Group in Japan	—	—	35% reduction

Performance in 2017

Energy consumption (all sites)

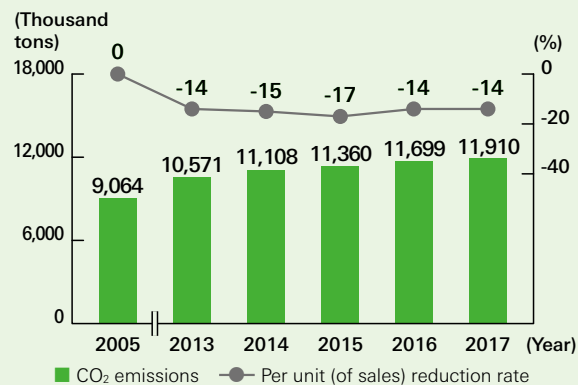


*Boundary: All Kao Group sites including company cars.

*Assurance provided for energy consumption figures.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

CO₂ emissions across the entire product lifecycle (Kao Group)

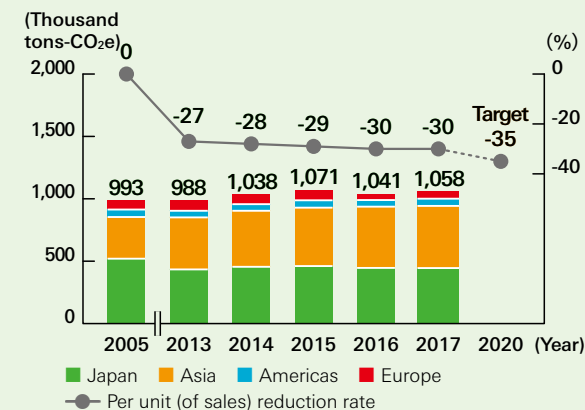


**"CO₂ emissions across the entire product lifecycle" is calculated as the combined total for the amount of lifecycle CO₂ emissions of individual products sold within and outside Japan, multiplied by their annual sales quantity. Among the lifecycle, the estimated emissions from the manufacturing and distribution processes are substituted by the actual emissions from these processes. However, this amount does not include emissions related to the use and disposal of chemical products.

*Assurance provided for CO₂ emissions figures and per unit (of sales) reduction rates.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

GHG emissions (all sites)



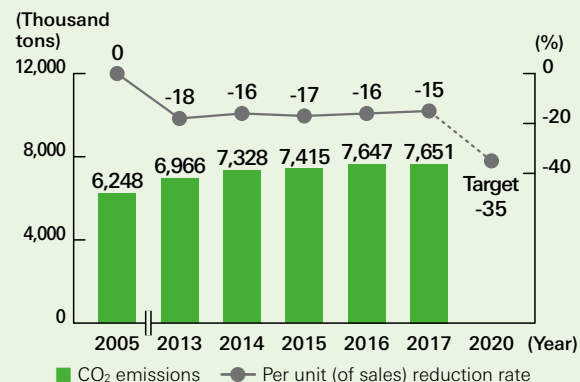
*Boundary: All Kao Group sites including company cars.

*Gases included: The seven GHGs specified by the Kyoto Protocol (only CO₂ for sites outside Japan)

*Assurance provided for GHG emissions figures.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

CO₂ emissions across the entire product lifecycle (Kao Group in Japan)



***CO₂ emissions across the entire product lifecycle** is calculated as the combined total for the amount of lifecycle CO₂ emissions of individual products sold within and outside Japan, multiplied by their annual sales quantity. Among the lifecycle, the estimated emissions from the manufacturing and distribution processes are substituted by the actual emissions from these processes. However, this amount does not include emissions related to the use and disposal of chemical products.

*Assurance provided for CO₂ emissions figures and per unit (of sales) reduction rates.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

Scope 1 CO₂ emissions volumes (Thousand tons-CO₂e)

	2015	2016	2017
Japan	276	272	271
Asia	286	291	290
Americas	37	39	43
Europe	68	47	49
Total	667	649	653

Scope 2 CO₂ emissions volumes (Thousand tons-CO₂e)

	2015	2016	2017
Japan	185	169	173
Asia	181	200	208
Americas	22	14*1	14
Europe	17	8	9
Total	405	391	405

*Emission volumes by scope conform to the Greenhouse Gas Protocol initiative.

Scope 1: GHG emissions emitted directly by the company/ organization

Scope 2: Indirect GHG emissions from purchased electricity, heat, etc.

*Emission factors

Scope 1: In principle, uses factors defined in the Act on Promotion of Global Warming Countermeasures.

Scope 2: In principle, uses the specific factors of the country's laws or regulations. When the specific factor cannot be obtained, the country-based factor released by the International Energy Agency (IEA) is used.

*1: In 2016, figures are affected by a revision to the electricity emission factor (year-on-year reduction of 9 thousand t-CO₂e).

Purchase volumes for electricity, steam, etc. (terajoules)

	2015	2016	2017
Electricity	7,447	7,272	7,648
Heat	0	0	0
Steam	88	132	140
Cooling	0	0	0

*Electricity is calculated as the calorific value of the primary energy (at the receiving end in Japan, generating end outside Japan).

Consumption volumes by fuel type (terajoules)

	2015	2016	2017
Natural gas	9,204	8,915	9,047
Diesel oil	1,282	1,375	1,383
Gasoline	153	162	149
Other	123	111	128
Waste vegetable oil (heat recovery)	555	517	486

Scope 3 CO₂ emissions volumes (Thousand tons-CO₂e)

	2015	2016	2017
1. Purchased goods and services*1	2,037	4,134	4,496
2. Capital goods	252	262	239
3. Fuel- and energy-related activities (not included in scope 1 or scope 2)	27	22	29
4. Upstream transportation and distribution*1	95	242	253
5. Waste generated in operations*1	24	47	58
6. Business travel	4	4	4
7. Employee commuting*1	13	18	18
8. Upstream leased assets	0	0	0
9. Downstream transportation and distribution*1	59	94	97
10. Processing of sold products	100	113	119
11. Use of sold products*1	3,715	4,965	4,687
12. End-of-life treatment of sold products*1	1,106	1,317	1,415
13. Downstream leased assets	0	0	0
14. Franchises	0	0	0
15. Investments	8	7	8
Total	7,450	11,225	11,423

*Kao focuses on the categories of 1, 3, 4, 5, 11 and 12 related to site activities to save energy and reduce waste materials, as well as on the product lifecycle.

*1 The boundary was extended from the Kao Group in Japan to the Kao Group from 2016.

CO₂ emissions across the entire product lifecycle increased by 211 thousand tons-CO₂ over the previous year, and the per unit (of sales) reduction rate remained unchanged at 14% (2005 baseline). CO₂ emissions across the entire product lifecycle in Japan increased by 4 thousand tons-CO₂ over the previous year, and the per unit (of sales) reduction rate deteriorated by 1 point to 15% (2005 baseline).

Per unit energy consumption at all Kao Group sites remained unchanged from the previous year at 31% and per unit greenhouse gas emissions also stayed the same at 30%. We did not achieve the reduction targets of 32% and 31%, respectively. One factor was an increase in production of products that consume a lot

of energy.

We offer a wide selection of household products such as water-saving products that reduce CO₂ emissions during the use stage, and also provide various industrial-use products that can reduce CO₂ emissions during the use stage. The volume of CO₂ emissions in the use and subsequent stages for industrial-use products falls under the scope of our business partners' final products, and therefore the amount is not added to the figures for lifecycle CO₂ emissions listed on p. 29. Including these reduction contributions, the volume of contributed lifecycle CO₂ emission reductions was 3,884 thousand tons*.

The challenge is to reduce the volume of lifecycle CO₂ emissions. We will further expand our range of products that reduce hot water and power consumption in the use stage, which contributes a large portion of total lifecycle emissions, and take steps such as reducing the amount of raw materials used and switching raw materials to those made from renewable sources.

*Value is calculated as the volume of reduced lifecycle CO₂ emissions of the Kao product in Japan, compared with the standard product as of 2005. The scope includes industrial-use products and household products.

Collaboration with stakeholders

We are taking steps to reduce CO₂ emissions in collaboration with various stakeholders at each lifecycle stage.



→ p. 28 Kao's approach: Managing divisions and relevant stakeholders by product lifecycle stage

- We provide our efforts to the Green Value Chain Platform operated by the Japanese Ministry of the Environment in order for other companies to use as a reference in calculating supply chain emissions.

- We are a member of the LCA Working Group organized by the Japan Chemical Industry Association (JCIA). At part of its activities, a case of our carbon lifecycle analysis (c-LCA) was disclosed publicly to communicate contributions to CO₂ reductions from the use of chemical products.

- We are participating in the Supply Chain Program conducted by the CDP and request our suppliers to report regarding CO₂ reduction activities. We feedback the results of our evaluations of their activities to the suppliers.

- We are collaborating with packaging suppliers to develop packaging that contributes to CO₂ reductions.

- Efforts at the distribution stage



→ p. 34 Our initiatives > Efforts in distribution

Our initiatives

Efforts in raw materials procurement

Suppliers Contract manufacturers

- In 2009, we became the first Japanese company to participate in the Carbon Disclosure Project (CDP) Supply Chain Program. In 2017, we began evaluating the data on CO₂ reduction activities reported by suppliers and provided the results of our evaluations back to the suppliers.



→ p. 134 Corporate Culture > Sustainable and responsible procurement

- In collaboration with suppliers, we are reducing CO₂ emissions from the manufacture of packaging by using renewable and recycled resins and thinner cardboard.
- By optimizing the volume and frequency of raw materials deliveries, we are reducing CO₂ emissions in the transport of raw materials.
- With the cooperation of suppliers, we are collecting data on CO₂ emissions produced in the procurement and processing of raw materials. This not only improves the accuracy of our CO₂ emissions calculations, but also allows us to offer various support to suppliers by gaining an understanding of CO₂ emissions volumes at their sites, which can then be reflected in lifecycle CO₂ emissions reductions of Kao products.

Efforts in development, manufacturing and sales

Local communities Retailers

Efforts in the development stage

When deciding to launch new and improved products, we verify that the products satisfy environmental standards. At the same time, we evaluate CO₂ emissions across the entire lifecycle. The results of these evaluations are used not only to determine product launches, but are also incorporated in future product development.

Kao products with small environmental impact display the “eco together” logo. Our rigorous certification standards require products to reduce lifecycle CO₂ emissions compared with comparable standard products and clear at least one of the certification criteria that we have set.

Efforts in manufacturing (plants, offices, logistics centers)

Despite the following activities, scope 1 and scope 2 CO₂ emissions volumes at Kao have increased by 6.0 thousand tons and 12.9 thousand tons, respectively, year on year.

1. Efforts to reduce energy consumption

- Introduction of high-efficiency equipment, efficient operation of equipment
- Continuing from the previous year, equipment such as chillers, air conditioners and compressors were replaced with Best Practice Technologies (BPT) equipment in 2017. A gas cogeneration system was additionally installed in the Kao Indonesia Chemicals plant.

Through optimized control using multiple units of air conditioners and compressors, we are more efficiently operating equipment corresponding to fluctuating demand.

In addition, we are switching lights to LED around the world. Plants, logistics centers and offices in Japan have switched 86% of their lights to LED in total, which reduces CO₂ emissions by approximately 4.0 thousand tons annually. Affiliated companies outside Japan are also proactively switching to LED lights.

• Eliminating wasted energy

As in the previous year, in 2017 we continued to take steps to find areas with wasted energy, reduce energy use to the minimum required and use unused energy in other processes. For example, Kao Industrial (Thailand) has contributed to saving energy by reusing high-temperature waste heat from a reactor in its boiler.

Aiming to improve the efficiency of steam use, we are continuing to strengthen our steam trap maintenance and increase the amount of steam we recover. We are also actively implementing improvement activities at sites to reduce the amount of required energy, including lowering the set temperature of tanks and shortening operating times.

Eliminating wasteful use of energy at offices is another activity. Some of the steps we are taking include turning off unnecessary lights, using person sensors to automatically turn lights on and off, optimizing air conditioner temperature settings and encouraging people to take the stairs to reduce unnecessary elevator use.

We undertook 204 of energy-saving activities at Japanese plants and offices in 2017, resulting in approximately 7,558 tons of CO₂ reductions and 379 million yen of cost reductions for the year.

2. Efforts to use cleaner energy

• Clean-burning fuel

Gas fuel, especially natural gas, is the cleanest fossil fuel. We use natural gas at all plants outfitted with the necessary infrastructure. Our plants do not use any coal.

• Use of renewable energy

Kao-owned facilities, such as Kao Corporation's Wakayama Research Laboratories building and the Atsugi Logistics Center, have begun installing solar power generation panels (total electricity generation of 459 MWh). In 2017, we studied installation of a solar photovoltaic power system on a new building at our Ehime Plant and plan to put the system into operation in 2018.

Kao companies in Europe have also begun purchasing renewable energy. Four subsidiaries including Kao Chemicals GmbH in Germany and Molton Brown in the UK have converted all purchased power to renewable energy sources (30.3 GWh). Using this power from renewable energy has



Solar photovoltaic panel installed on the roof of the Logistics Center

Kao's approach

Our initiatives

reduced CO₂ emissions by 15.4 thousand tons.

• Use of power with low GHG emission factors
To reduce the CO₂ emissions of the purchased power we use, we take GHG emission factors into consideration when selecting power suppliers.

3. Reducing the volume of leaked refrigerants and other greenhouse gases

Air conditioners and chillers used in manufacturing are charged with fluorocarbon that has extremely high global warming potential (GWP). To reduce the volume of fluorocarbon leaks from equipment, we have been strengthening our regular equipment inspections.

In addition, we are switching newly installed chillers to those that use low-GWP refrigerant. We installed three systems that use low-GWP refrigerant in Japan.

These systems use R-1233zd(E), an HFO refrigerant, which is readily broken down in the atmosphere. Compared with R-134a, an HFC that is the standard refrigerant for chillers and has a GWP of 1,300, R-1233zd(E) has a GWP of 1, the same as CO₂, and offers excellent performance.

Efforts in distribution

Distribution companies Retailers

1. Increase shipment volumes per shipment

We are proactively making adjustments including improving loading efficiency, changing product sizes and using larger vehicles.

2. Shorten shipping distances

We are continuing to look at ways to revise shipping routes, optimize manufacturing plants and shift which logistics center is used.

3. Use cleaner shipping methods

We are pursuing steps such as switching from truck to shipping methods such as rail and ship, which have lower CO₂ emissions (modal shift).

4. Improve loading ratios

Having trucks return from their shipping destination with a load, instead of returning empty after unloading, i.e., improving the loading ratio, contributes to improving energy efficiency and CO₂ emissions in shipping. Together with AEON Global SCM Co., Ltd., a consolidated subsidiary of AEON Co., Ltd., which handles logistics, we have adopted a trailer relay transportation system in which drivers switch the trailers they are hauling at a relay point midway between the delivery and return points of the Tokyo metropolitan area and the Chubu region. This is the first such collaboration between companies of different industries in Japan.



Containers featuring a design with the corporate colors of AEON and Kao publicize this initiative

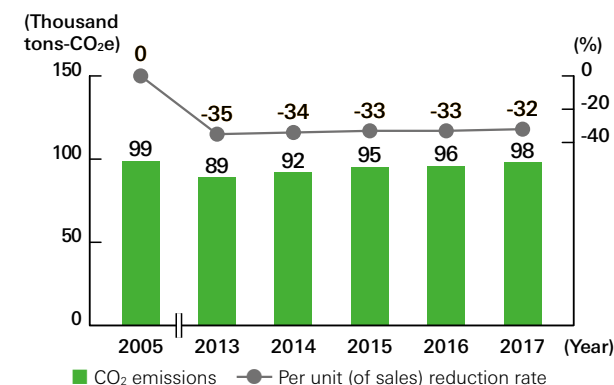
5. Visually map shipping energy and CO₂ emissions outside Japan

In 2017, we made preparations to begin calculating shipping energy and CO₂ emissions outside Japan starting in 2018, including developing a calculation tool and holding informational sessions in Tokyo to explain how to make calculations to affiliated companies. Currently, we calculate and report CO₂ emissions for shipping outside Japan using estimates. In 2019, we plan to report volumes based on actual shipping data.



→ p. 71, Conservation > Product lifecycle and environmental impact

CO₂ emission during distribution (Japan)



*Boundary: Kao Corporation and Kanebo Cosmetics Inc.

*Assurance provided for CO₂ emissions.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

CO₂ emissions during distribution in Japan were 98 thousand tons-CO₂e in 2017, a 32% reduction (per unit of sales, 2005 baseline). One of the main reasons for this result was the increase in the sales share of products that have a large volume relative to their weight.

Efforts during use

Consumers and others

We offer a wide selection of products that reduce CO₂ emissions during the use stage.

Some of these leading products include concentrated laundry detergents that only require one rinse cycle, and shampoo, body wash and dish detergent that reduce the amount of hot water required for rinsing.

One example of a product that has reduced lifecycle CO₂ emissions is *Ultra Attack Neo* laundry detergent, which reduces lifecycle CO₂ emissions per laundry load by approximately 22%. This product was the first proposed laundry detergent to require only one rinse cycle and has changed how consumers do laundry, so much that now washing machines come with a button to select a single rinse cycle as a standard feature. This product requires only one rinse cycle and is 2.5 times more compact than existing standard detergents. Laundry detergents that require only one rinse cycle are offered in Japan, China, Hong Kong, Malaysia, Singapore and Australia.

Another novel product we offer is shampoo that can reduce the electricity used to dry hair with a hair dryer. This shampoo prevents tangles of hair, making it easier for heated air from the hair dryer to penetrate hair and shorten the drying time.

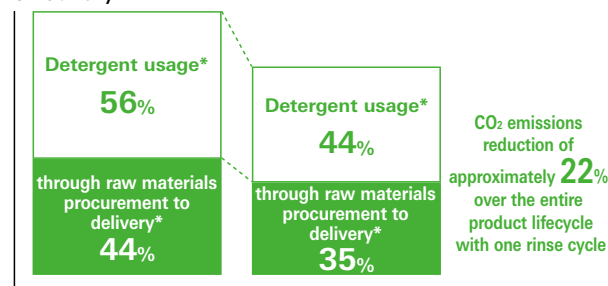
We also offer a wide selection of products for industry that allow customers to reduce their CO₂ emissions during the use stage. These include a

toner with low-temperature fixing, which reduces the photocopier's power consumption, washing and rinsing agents that can wash and rinse steel plates at low temperature to reduce CO₂ emissions from fuel consumption, a water-based precision substrate cleanser that replaces fluorocarbon-based cleansers, an additive for coating material that helps improve fuel economy by reducing the coating weight of wire harnesses for automobiles, and an additive essential to improving dispersion of a required material for fuel-efficient tires to demonstrate their performance.



→ p. 98, Community > Communication with corporate customers (Chemical Business)

Comparison of CO₂ emissions from detergent used per load of laundry



Existing standard Kao liquid detergent
(Product container: Refill pack= 2:8)

Ultra Attack Neo
(Product container: Refill pack= 2:8)

*Includes some waste and recycling.

(Under conditions of using a fully automatic washing machine (8-kg capacity), 4 kg of laundry, and a water volume of 47 l. When using two rinse cycles, the total water volume is 130 l and electricity use is 67 Wh. When using one rinse cycle, the total water volume is 102 l and electricity use is 52 Wh. CO₂ emissions of Kao's existing standard liquid detergent is set as 100.)

Kao's approach

Our initiatives

Efforts in disposal and recycling

Government/treatment and service providers

There are two main types of CO₂ emissions in the disposal and recycling stage. One type is the CO₂ emitted as materials and ingredients made from petroleum degrade when packaging, diapers and other materials disposed of by consumers after use are incinerated, or when wastewater containing cleansing and other agents is treated. The other type is CO₂ emitted from using energy required to operate incinerating and recycling equipment and wastewater treatment facilities.

We are working to reduce the raw materials used in packaging and diapers as well as cleansing agents to reduce these CO₂ emissions. We are also using biomass and bioplastics. The CO₂ emitted when these materials degrade is not deemed to contribute to global warming.



→ p. 66, Conservation > Packaging

Kao's approach

Water is essential to Kao's business activities. In manufacturing, water is used not only as a raw material in liquid cleaning products but also for heating, cooling and cleaning purposes. Consumers also need to use water when using our products. In addition, the water that is used in plants and homes is returned to river and ocean environments as wastewater after receiving wastewater treatment. We are therefore taking steps including managing the water quality of wastewater at our plants and developing products whose wastewater has small impact on the environment.

Kao's creating value to address social issues

Water is necessary to life for all plants and animals on Earth. Drought and conflicts over water are already becoming problems in some regions and are projected to become increasingly severe due to future population growth and global warming.

It is our duty to ensure that the world has enough available water by reducing water consumption related to our business activities. Work stoppages and the inability to procure raw materials due to natural disasters result in business opportunity loss, while compliance with regulations results in negative financial impact from the increases in costs and investments. At the same time, our activities to reduce water consumption are opportunities to contribute to resolving social issues and to realizing our mission.

At Kao, we recognize the following as risks and opportunities pertaining to water and are incorporating them into our strategy for our business activities.

Risks and opportunities from regulations

Some national and regional regulations and public policies, such as those limiting water intake and regulating wastewater, impact our manufacturing business activities. Others impact products, such as limits on water consumption volumes during product use and the water footprint of products to be displayed in labeling. We consider these types of regulations and policies to be a risk to our business continuity and growth.

To comply with these regulations, we began taking steps to reduce water consumption at our plants from an early stage and offer water-saving products in countries and regions to expand our business. We have also introduced a system to calculate the environmental impacts of our products.

Risks and opportunities from physical impacts

The declining amount of available water per person, partially due to growing urban populations and droughts caused by extremes in rainfall associated with climate change, has emerged as a problem. Stronger hurricanes and typhoons and other unavoidable natural disasters such as floods and storm surges from extreme rainfall due to climate change are

risks to our business operations.

Meanwhile, we also believe that the physical impacts are associated with numerous opportunities especially in the Consumer Business. For example, water-saving products address the decline in available water. We aim to expand business by offering products in countries and regions to meet these emerging needs.

Other risks and opportunities

We believe that offering products that minimize water pollution from wastewater after product use, and efforts to address the above water risks, are indispensable to our business continuity and growth. If these efforts are insufficient, we may have difficulty in entering markets for environmentally friendly products and not be able to gain the trust of various stakeholders.

On the other hand, continuously offering higher value environmentally friendly products and expanding the markets facilitates our business expansion. Proactive information disclosure leads to increase in trust from various stakeholders and contributes to business expansion.

Risks and opportunities

	Risks	Opportunities
Regulations	<ul style="list-style-type: none"> Water intake restrictions Wastewater regulations Product labelling programs for water-related environmental performance 	<ul style="list-style-type: none"> Offering products that contribute to conserving water and complying with wastewater regulations Cost reductions from conserving water and improving wastewater quality
Physical impacts	<ul style="list-style-type: none"> Work stoppages caused by natural disasters Inability to procure raw materials due to natural disasters Increased expenses for installing and operating facilities in preparation for extreme weather and natural disasters 	<ul style="list-style-type: none"> Offering water-saving products that are in higher demand due to drought Offering water-saving products to meet needs at natural disasters
Others	<ul style="list-style-type: none"> Damage to reputation from insufficient conservation of water resources or insufficient information disclosure 	<ul style="list-style-type: none"> Increased credibility from proactive response to water resource conservation and proactive information disclosure

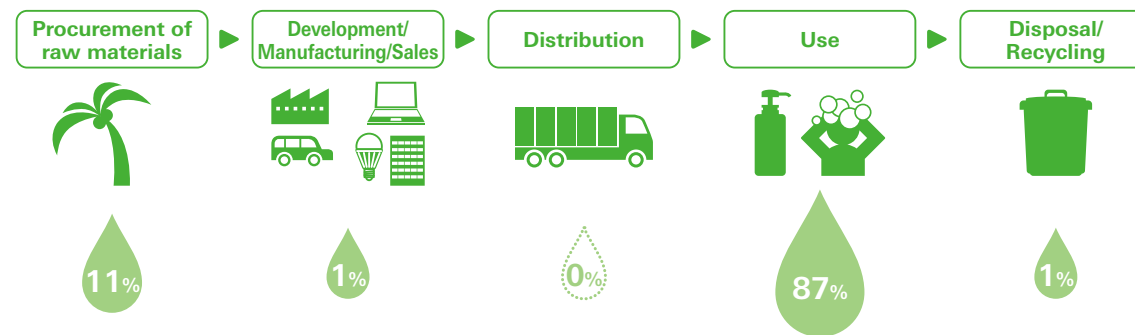
Contributions to the SDGs



Policies

We at Kao are working together with our business partners and consumers to introduce and develop technologies to conserve water and water quality at each stage of the product lifecycle.

Ratio of water consumed at each stage of Kao products' lifecycle



*2017 results

The use stage accounts for the largest ratio of water consumption at 87%. Notably, almost all water consumption in the product lifecycle occurs in the use stage. This is because Kao offers many products for cleaning purposes that require water during use. As with CO₂ emissions, in 2009 we announced in the Kao Environmental Statement our commitment to contribute to environmental conservation at all stages of the product lifecycle. This was based on the results of our analysis at the time.

Our main efforts to reduce water consumption in the use stage, where most consumption occurs, is offering water-saving products. Using our technological capabilities to develop cleaning agents, we are developing water-saving products and offering them in various fields globally. Our approach is typified by finding solutions to wide-ranging social issues through our expertise in *essential research*.

Water used in the raw materials procurement

stage, which accounts for 11% of total lifecycle water consumption, represents water used at suppliers' plants. For this reason, making efforts together with our suppliers is vital.

The ratio of water used in the development, manufacturing and sales stages is small at 1%, but our plants still have some impact on the communities in which they are located. We have long conducted water conservation activities at our plants, and as far back as the early 1980s, we had realized and operated a closed-loop system for water at our Kyushu Plant. Each of our plants also currently sets water conservation targets and conducts activities accordingly.

We also proactively undertake wastewater management at each stage. We manage wastewater quality in the manufacturing stage. We offer products whose wastewater from product use has small impact at the disposal stage to reduce the environmental impact of household wastewater and help prevent water quality contamination.

Efforts with suppliers

We evaluate the water risks of suppliers, which represent a large business risk, using tools such as Aqueduct from the WRI*. For suppliers whose water risks are higher than our set standard, we conduct surveys and gather information about their water consumption and management conditions through the CDP's supply chain program. This also represents an opportunity to reduce water consumption and promote water management at suppliers.

*WRI

World Resources Institute.

A U.S.-based policy center that researches problems related to natural resources and the environment and conducts activities together with government and private groups and environmental experts.

Efforts at plants

At plants, we use water as a product ingredient as well as to clean and cool equipment. We set targets to reduce water consumption at each plant and are working to reduce consumption and increase recycling based on the 3R's (Reduce, Reuse, and Recycle).

We are also installing wastewater treatment technologies. Our Wakayama Plant in Japan has conducted a demonstration experiment of industrial wastewater treatment technology that uses tubifex worms developed by the Industrial Technology Center of Wakayama Prefecture. It was verified that the technology can reduce pollutants emitted from a treatment center by as much as 80%. We also seek out external technologies to introduce in our plants and are working to reduce waste materials and cut costs.

Survey of water risks

We regularly conduct water risk assessments at plants using the WRI's Aqueduct tool and internal information. When opening new plants, we also examine the long-term feasibility of using the water resources and the wastewater impacts.

Initiatives to prevent water pollution

We have installed and conduct high-level maintenance and management of wastewater treatment facilities at many plants. After properly treating plant wastewater, it is discharged outside the plant. We monitor the quality of the discharged water based on laws and regulations as well as agreements with nearby local governments.

Surveys of groundwater and soil contamination

In light of our history of chemical substance use, every year we voluntarily measure the levels of substances regulated by environmental standards in the groundwater within plant premises.

Compliance with environmental legislation

We manage facilities and operate pollution prevention control systems to comply with various environmental laws and regulations including for plant wastewater and waste. We conduct high-level maintenance and management to comply with regulations that are becoming more rigorous year after year.

Efforts in products

We are working to develop products whose wastewater after product use has small impact on water environments. In addition, we are conducting surveys and research on river contamination in cooperation with experts and industry associations.

Kao's approach

Our initiatives

Framework

Activities related to water consumption across the entire lifecycle are managed under our Responsible Care (RC) promotion system.

Various Kao divisions and stakeholders are involved in these activities, corresponding to each product lifecycle stage (table below).

For example, in the manufacturing stage, the SCM Division holds the Environment Working Group Meeting with environmental staff at all plants, manages the progress of environmental activities at plants, and internally rolls out new technologies. We are also building a system that horizontally connects divisions in order to strengthen coordination between lifecycle stages. In the Eco Action SCM Meeting, all divisions that manage the stages of raw materials procurement, manufacturing and distribution meet together to share information and discuss cooperation with the aim of total optimization.

Using a database that centrally manages environmental data, Kao ensures data reliability, standardizes work tasks, and increases task efficiency to facilitate conducting activities with targeted outcomes.

Managing divisions and relevant stakeholders by product lifecycle stage

Product lifecycle stage	Managing divisions at Kao	Relevant stakeholders
Raw materials procurement	R&D Division Procurement Division	Suppliers Contract manufacturers
Development/Manufacturing/Sales	Marketing Division, R&D Division, SCM Division, Sales Division	Local communities Retailers
Distribution	SCM Division, Logistics Division	Distribution companies Retailers
Use	R&D Division	Consumers
Disposal/Recycling	R&D Division	Government/ Treatment and service providers

Mid- to long-term targets and performance

We set the 2020 reduction targets for water consumption for all Kao Group sites in 2013 and have aimed to achieve a 1% reduction each year.

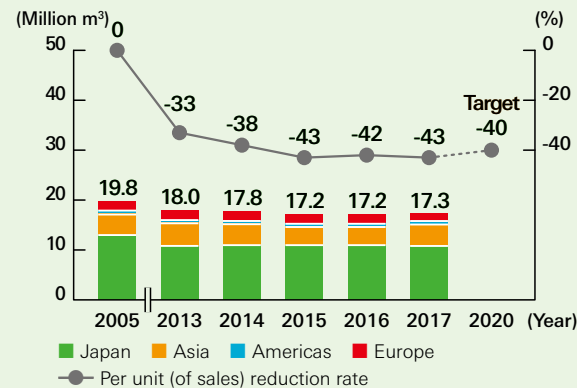
We set the 2020 reduction targets for water consumption during the product use stage for the Kao Group in Japan in 2009.

Targets for water consumption

Index	Scope	2017 targets	2018 targets	2020 targets
Water consumption	All Kao Group sites	38% reduction	39% reduction	40% reduction
	During consumer product use for the Kao Group in Japan	—	—	30% reduction

Performance in 2017

Water consumption (withdrawal) (all sites)

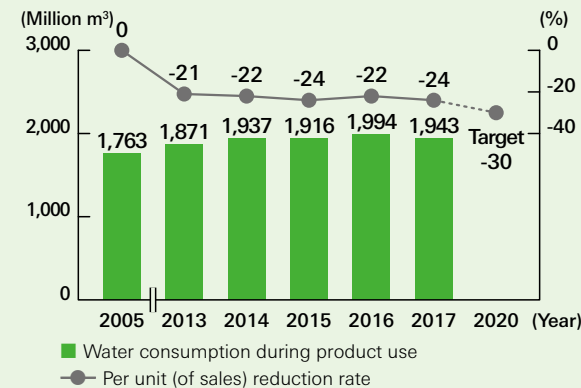


*Boundary: Through 2014, all Kao Group production sites as well as non-production sites within Japan. For 2015, includes some non-production sites outside Japan, and from 2016 onwards, includes all non-production sites outside Japan.

*Assurance provided for water consumption (withdrawal).

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

Water consumption during product use (Kao Group in Japan)

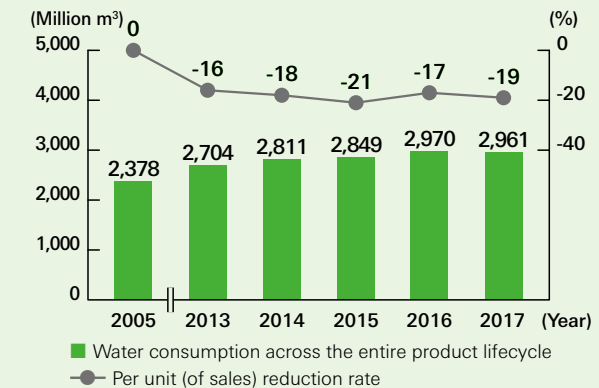


*Water consumption during product use is calculated by multiplying the water consumption per unit of a product, mainly for consumer products in Japan, by the annual sales quantity of the product, and then adding all the results for these products together.

*Assurance provided for water consumption and per unit (of sales) reduction rates.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

Water consumption across the entire product lifecycle (Kao Group)

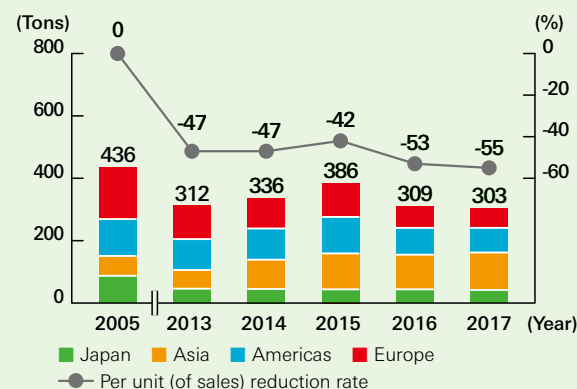


**Water consumption across the entire product lifecycle" is calculated as the combined total for the amount of lifecycle water consumption of individual products sold within and outside Japan, multiplied by their annual sales quantity. Among the lifecycle, the estimated water consumption during the manufacturing and distribution processes is substituted by the actual use during these processes. This amount includes water used for procurement in regard to chemical products but does not include water used in the use and disposal of such products.

*Assurance provided for water consumption and per unit (of sales) reduction rates.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

COD pollution load (all production sites)



*The amount of COD pollution load for wastewater entering sewer systems takes into account the removal rate from sewer systems.
 *Assurance provided for COD pollution load.
 *Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

Water withdrawal amount by source (Million m³)

	2015	2016	2017
Surface water	0	0	0
Brackish water/seawater	0	0	0
Rainwater	0	0	0
Groundwater (renewable)	4.7	4.9	5.0
Groundwater (not renewable)	0	0	0
Oil-contaminated water/process water	0	0	0
City water	12.5	12.3	12.2
Wastewater from other organizations	0	0.1	0.1

*Boundary: Through 2014, all Kao Group production sites as well as non-production sites within Japan. For 2015, includes some non-production sites outside Japan, and from 2016 onwards, includes all non-production sites outside Japan.

Wastewater discharge by destination (Million m³)

	2015	2016	2017
Rivers/lakes	2.0	2.1	2.3
Brackish water/seawater	6.3	6.0	5.8
Groundwater	0	0	0
Sewage system	2.7	2.7	2.8
Wastewater to other organizations	0	0	0

*Boundary: Through 2014, all Kao Group production sites as well as non-production sites within Japan. For 2015, includes some non-production sites outside Japan, and from 2016 onwards, includes all non-production sites outside Japan.

Our water consumption (all sites) came to 17.3 million m³, an improvement of 1 point in the reduction rate over the previous year to 43%, taking 2005 as the baseline year. We achieved our 2017 target of a 38% reduction and have achieved our 2020 target of a 40% reduction, continuing from the previous year. In addition, water consumption at manufacturing sites with water intake risks came to 3.6 million m³.

Our water consumption across the entire lifecycle of products (Kao Group) and during product use (Kao Group in Japan) fell to 9 million m³ and 52 million m³, respectively. The per unit of sales reduction rates both improved 2 points to a 19% reduction and a 24% reduction, respectively. Enhancement of the water-conservation performance of our washing-up liquid products contributed to these improvements in water consumption.

Our COD pollution load decreased 7 tons over the previous year, and the per unit of sales reduction rate improved 2 points.

The challenge is to reduce water consumption during the use stage. We are working to further expand our water-saving products.

Collaboration with stakeholders

- We participate in the CDP supply chain program and conduct surveys and gather information about water consumption and management conditions at suppliers whose water risks are higher than our set standard.
- The water conservation campaign that we continue to conduct in cooperation with the Chinese government was held for the sixth consecutive year in 2017. We expanded the areas of activity and conducted awareness-raising for water conservation at 53 universities in China in this year's campaign.

Our initiatives

Efforts in raw materials procurement

Suppliers Contract manufacturers

We participate in the CDP supply chain program and conduct surveys and gather information about water consumption and management conditions at suppliers whose water risks are higher than our set standard.

Efforts in development, manufacturing and sales

Local communities Retailers

We use water as a product ingredient as well as to clean and cool equipment in plants. We set targets to reduce water consumption at each plant and are working to reduce consumption and increase recycling based on the 3R's (Reduce, Reuse and Recycling).

In terms of reducing consumption, multiple plants including Kao Chemicals GmbH in Germany conduct efforts to increase the number of times that water is reused for boilers and for cooling to reduce their water consumption.

Efforts to reuse water include collecting rainwater and using it to water green spaces at the Sumida Office, Kao Chemical Corporation Shanghai and Fatty Chemical (Malaysia).

We are also promoting recycling efforts to treat and reuse water at many plants, such as recovering steam after use and treating and reusing water that has been used in production processes.

As a result of conducting risk assessments on water stress at production sites, we discovered new risks at six sites. We are currently conducting detailed risk assessments at each site and considering what future actions are required.

Kao Chemical Corporation Shanghai reduces its water consumption for the manufacturing of some products by reusing water from reaction processes of other products. Kao Vietnam introduced a spray technique for washing and sanitizing tanks, resulting in reducing its use of water and steam in this process as well as reducing overall water and energy consumption and CO₂ emissions. Kao Industrial (Thailand) returns cooling water overflow to a cooling water pool to help eliminate unnecessary water consumption.

Surveys of groundwater and soil contamination

The Wakayama Plant, Sumida Office, Sakata Plant, Kawasaki Plant, Tochigi Plant and Odawara Office have independently conducted groundwater and soil contamination surveys and confirmed that all measurement indicators are below the quantifiable lower limit.

Compliance with environmental legislation

In 2017, there were 11 incidents of violations of environmental laws and regulations, resulting in fines of 699 thousand yen. There were three incidents of violations relating to the Water Pollution Prevention Act at Kao in Japan, one violation relating to drum waste storage at Kao Corporation (Spain), one incident of delayed reporting to the authorities at Kao USA, five violations of wastewater standards and one incident of a delayed waste filter inspection at Kao Specialties Americas. There was a violation at Kao USA under the same circumstances as last year, and many violations at Kao Specialties Americas. Kao is implementing measures to prevent recurrences at each plant.

Compliance status with environmental laws and regulations

Category	Unit	2015	2016	2017
Number of violations*1	incidents	1	3	11
Of which, number of leaks	incidents	0	0	0
Total fines*2	1,000 yen	0	2,590	699
Of which, number of leaks	1,000 yen	0	0	0

*1 All incidents detected by authorities during the reporting period.

*2 Fines paid during the reporting period.

Efforts during use

Consumers and others

Efforts in the Consumer Products Business

We are conducting a wide range of efforts, as water consumption in the use stage accounts for almost all water consumption across the entire lifecycle. Our leading efforts are offering water-saving products and communicating how to use them.

Since launching *Attack Neo* laundry detergent, which requires only one rinse cycle, in Japan in 2009, we have expanded the supply areas. Currently we provide such water-saving laundry detergent in Japan, China, Hong Kong, Malaysia, Singapore and Australia.

We offer *Merit Shampoo*, which since 2010 has been able to reduce the amount of water required for rinsing by 20% over the existing product, *CuCute* dishwashing detergent, which since 2014 has been able to reduce the amount of water required for rinsing by 20%, and *Bath Magiclean* bathroom cleaning liquid, which since 2015 has been able to reduce the amount of water required for rinsing by 10%. These are some of the examples of the wide selection of water-saving products.

We also communicate ways to save water to consumers using a variety of approaches. For example, we have developed eco shampoo techniques to use less water when shampooing hair and we communicate these to consumers. Communicating ways to conserve water while offering water-saving products truly embodies “eco together,” the slogan of the Kao Environmental Statement.

Efforts in the Chemical Business

Visco Top is a cement additive in the Chemical Business that can prevent cement from dispersing into surrounding rivers, seas and other water sources when used in construction projects taking place near water. *Visco Top* is also being used in work to remove contaminated water at the Fukushima Daiichi Nuclear Power Plant.

In 2017, *Visco Top* received the 49th JCIA Technology Award sponsored by the Japan Chemical Industry Association (JCIA), which is given to an innovative scientific technology or product that has substantially contributed to the improvement of the environment.



→ p. 101 Community > Communication with corporate customers (Chemical Business) / Topic: Water-based inkjet ink and high-performance specialty thickener *Visco Top* receive award

We will continue to offer water-saving products and products with lower impacts on water environments.

Kao's approach

Our initiatives

Efforts for wastewater after product use

Government/treatment and service providers

In product development, we incorporate considerations for impacts on the water environments of discharged water after product use. More specifically, we have investigated the biodegradability of raw materials that may be discharged into the environment and their impacts on common aquatic organisms using river water and activated sludge used at wastewater treatment plants. Through this investigation, we are actively promoting the development and use of raw materials with reduced environmental impact.

In addition, we are focusing on understanding the situation of water environments after product use and we are conducting our own field surveys on an ongoing basis, such as environmental monitoring of river water. To respond to globalization, we are conducting monitoring and working with experts to develop mathematical models that predict the concentration of chemical substances in rivers, aiming to conduct business with consideration for the local environment in countries outside Japan.

Furthermore, cooperating with the Japan Soap and Detergent Association (JSDA), we have conducted environmental monitoring of four major surfactants in urban river systems (7 sites from 4 rivers, 4 measurements/year) for the past 19 years in order to assess environmental risk on aquatic ecosystems. In the surveys conducted so far, the results show that these surfactants have consistently low risks to aquatic organisms.

Kao's approach

Kao is actively engaged in sound chemical management by using science-based risk assessment and risk management procedures in order to use and produce chemicals in ways that minimize their significant adverse effects on human health and the environment. This management conforms to the Strategic Approach to International Chemicals Management (SAICM) across the product lifecycle from development and production to use and disposal, aiming to contribute to the realization of a sustainable society.

Kao's creating value to address social issues

Member countries at the World Summit on Sustainable Development (WSSD) held in 2002 adopted the international WSSD 2020 goals, which include the goal of sound chemical management, "aiming to achieve, by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment, using transparent, science-based risk assessment procedures and risk management procedures, taking into account the precautionary approach." Toward this goal, at the first International Conference on Chemicals Management (ICCM) held in 2006, member countries established the Strategic Approach to International Chemicals Management (SAICM), consisting of a High-Level Declaration, Overarching Policy Strategy and Global Plan of Action, which was approved by the United Nations Environment Programme (UNEP).

We handle many types of chemical substances from raw materials to final products, and we have always strived to soundly manage the chemical substances that we use and manufacture. In 2001, we established our own **Comprehensive Management System for Chemical Substances** to soundly manage chemical substances, including

quality management of raw materials and products, compliance with laws and regulations in each country, and safety assurance. Based on the global trend of more rigorous management of chemical substances, including adoption of SAICM, we set medium-term objectives including "active implementation of SAICM to promote sound chemical management" in the Kao Environmental Statement released in 2009. In 2012, we established the **SAICM Promotion Committee** to achieve effective implementation of SAICM.

Through our SAICM promotion activities, we are engaged in the sound management of chemical substances across the product lifecycle from development and production to use and disposal, aiming to contribute to the realization of a sustainable society.

Contributions to the SDGs



Policies

We handle a wide range of chemical substances from consumer to industrial products, and have always engaged in thorough chemical management. In addition, we are promoting and strengthening management of chemical substances based on the internationally established SAICM in order to use chemical substances more safely and soundly. We formulated our **SAICM Promotion Policy** in 2013. It defines our company-wide management policy for chemical substances and forms the basis of our management of chemical substances.

SAICM Promotion Policy

1. Development and Use of Safer and More Valuable Chemicals, and the Development of Manufacturing Processes with Less Environmental Impact
2. Chemicals Management throughout the Entire Life Cycle of Chemicals based on Scientific Risk Assessment
3. Compliance with Laws and Regulations on Chemicals and Voluntary Standards, and the Promotion of International Cooperation and Collaboration
4. Promotion of Risk Communications with Stakeholders



→ SAICM Promotion Policy
<http://www.kao.com/global/en/sustainability/environment/statement-policy/statement/saicm-policy/>

Framework

To achieve accelerated implementation of initiatives for SAICM, we established the SAICM Promotion Committee in 2012 under the Sustainability Committee chaired by the President and CEO. The SAICM Promotion Committee is comprised of top-level management in the Product Quality Management Division, Chemical Business Division, R&D Division, SCM Division and Corporate Strategy Division.

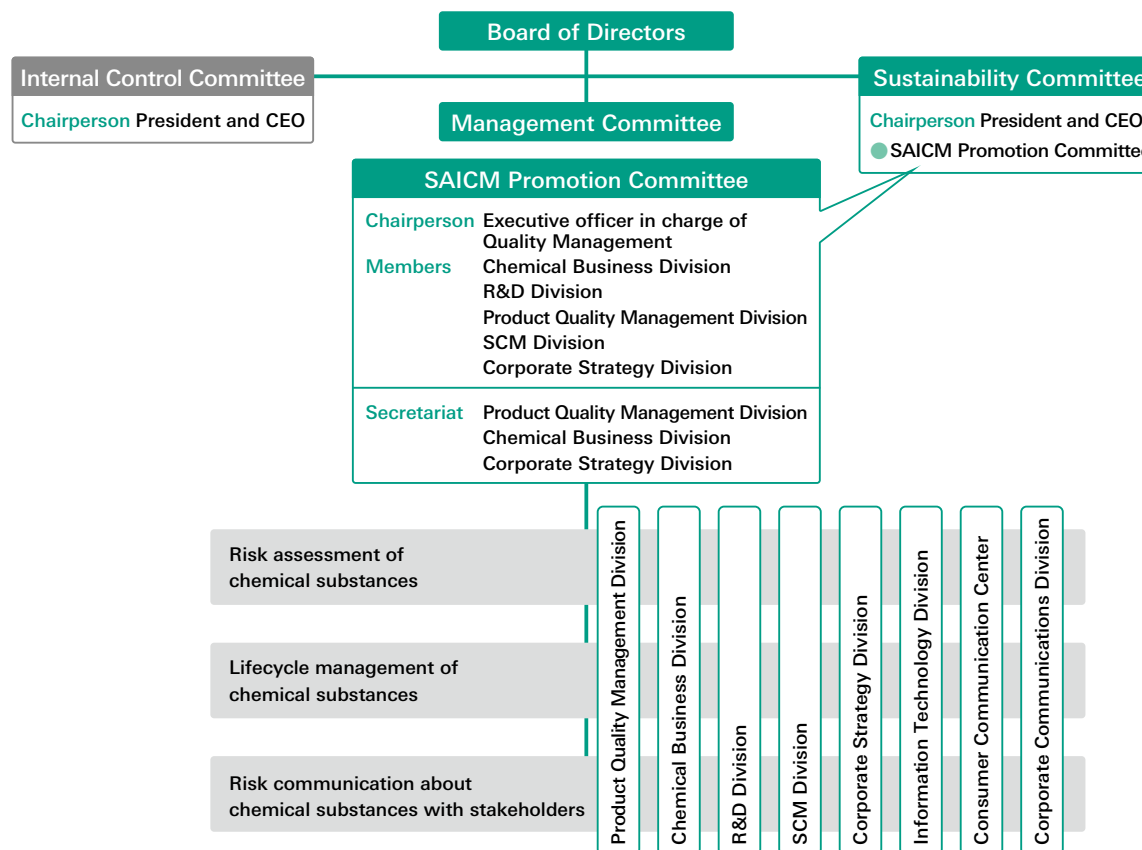
The three major SAICM promotion activities at the SAICM Promotion Committee are:

1. Risk assessment of chemical substances
2. Lifecycle management of chemical substances
3. Risk communication about chemical substances with stakeholders

We have established and are implementing projects for each of these activities under the committee.

Under the Responsible Care promotion system, we are also promoting activities to reduce emissions of volatile organic compounds (VOCs) and other substances subject to the PRTR system.

SAICM Promotion Framework



* As of December 2017.



→ p. 185 Governance > Responsible care activities/Framework

Comprehensive Management System for Chemical Substances

To ensure the safety and assurance of consumer and industrial products, in 2001 we created the Comprehensive Management System for Chemical Substances, which gives uniform Kao Group codes (Master Index) to individual products and raw materials. The system breaks down and registers raw materials by their constituent ingredients. This enables to immediately verify, for each product, which raw materials are used and their quality, safety, anti-bacterial grade, regulatory and other information. If a problem with a raw material arises, or if risk from a new substance of concern emerges, the extent of the effect can be immediately identified so that appropriate action can be taken.

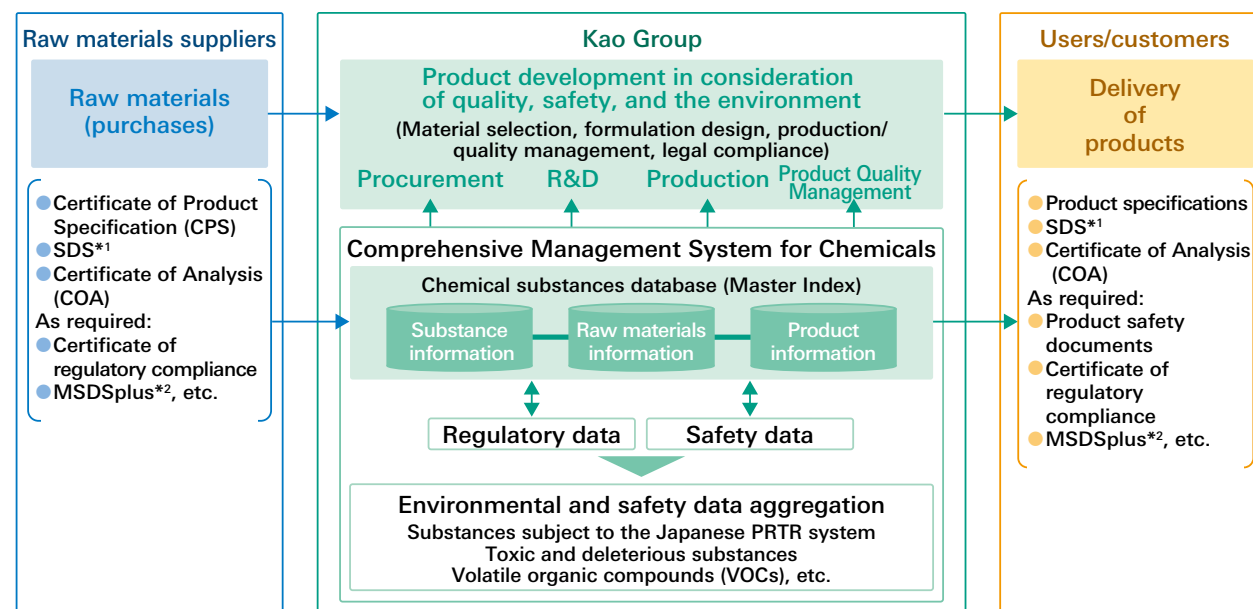
In 2017, we substantially expanded the features of the system. This has achieved a reliable and sound integrated management for chemical substances that will facilitate even stronger compliance.

With the Consumer Products Business, which encompasses a wide range of product fields, and the Chemical Business based in materials development, we handle a large number of chemical substances as the Kao Group. To comply with various legal and environmental regulations in an increasingly globalized and borderless world, we have created our own criteria for categories including Banned Substances, Reduction Targeted Substances and

Caution in Handling Substances. The criteria serve as control gates when registering substances in the database.

Based on integrated management by members with specialized expertise, data collected in the Comprehensive Management System for Chemical Substances are shared among Kao Group divisions. We are actively engaged in sound chemical management on a company-wide basis.

Kao Comprehensive Management System for Chemical Substances



*1 SDS

Safety Data Sheet. Document providing information to ensure safe and appropriate handling of chemicals, such as names of substances contained in the product, information about potential hazards and handling precautions.

*2 MSDSplus

Data sheet applied to specific types of chemical substances.

Chemical substances management 404-2

Kao's approach

Our initiatives

Education and promotion

We publish the details of our SAICM promotion activities and safety summaries of Kao priority assessment substances for which we have conducted a risk assessment. We then release this information on the Kao and Kao Chemicals websites to communicate it inside and outside Kao.

The SCM Division has created educational programs for current and new employees and internal transfers, which are structured by field of specialization and level of experience. The curriculum includes information on the risks and hazards of chemical substances.

We also provide education and information to researchers and employees at Kao and partner companies involved in development of consumer products, chemical products and base materials. We hold informational sessions on chemical substances management each year. In 2017, 274 people participated in these sessions.

Collaboration with stakeholders

To deepen understanding about social trends and stakeholder demands to companies concerning chemical substances management, and to obtain feedback on our SAICM promotion activities, we regularly invite outside experts to give presentations and exchange opinions in meetings of the SAICM Promotion Committee. We held these presentations and opinion exchanges in 2017 as well.

In addition, we are an active participant in the Japan Initiative of Product Stewardship (JIPS*), a voluntary initiative aimed at strengthening management of chemical substances based on the product stewardship advocated by the International Council of Chemical Associations (ICCA). The Japan Chemical Industry Association has been implementing the initiative since 2009, and it reflects an effort by the chemical industry to make a major contribution toward SAICM.

We also cooperate with government initiatives together with countries in Asia for the management of chemical substances and actively participate in opinion exchanges with government authorities inside and outside Japan.

*JIPS

A voluntary initiative based on Global Product Strategy (GPS) principles for enhancing global management of chemical substances promoted by the International Council of Chemical Associations (ICCA) in response to the adoption of SAICM.

Conservation

Community

Corporate Culture

Governance

Mid- to long-term targets and performance

Mid- to long-term targets We have set the following mid- to long-term targets aiming to realize a sustainable society.

1. Risk assessment of chemical substances

We select Kao priority assessment substances taking into consideration factors such as the quantity manufactured and used, the exposure amount for people and the environment, and priority in our corporate activities. We have set the following targets for conducting these risk assessments and engaging in sound chemical management.

- Conduct risk assessments for the Kao priority assessment substances (19 categories) by 2020 and continue this activity after 2020.

*GPS Safety Summary

A document providing a summary of chemical substance safety information as reference for the general public. Besides information about physical and chemical properties, this document also addresses the usage and processing requirements for sound risk management and outlines risk management measures. It is also used to disseminate information to downstream users.

2. Lifecycle management of chemical substances

We have set the following targets at workplaces where chemical substances are handled to prevent adverse health impacts on workers.

- Conduct risk assessments and implement corresponding measures at workplaces where chemical substances are handled by 2020, and continue to conduct risk assessments for new chemical substances and implement corresponding measures after 2020.

3. Risk communication about chemical substances with stakeholders

We have set the following targets for communicating safety information throughout the supply chain for chemical products that we manufacture and use, and for ensuring safety, sound use and the ability to take necessary action pertaining to chemical substances.

- Release the safety summaries for 20 substances for Kao priority risk assessment substances by 2020 and continue this activity after 2020.
- Release GPS Safety Summaries* for 150 chemical products by 2020 and continue this activity after 2020.

Performance in 2017

The SAICM Promotion Committee set the following project targets for 2017 and conducted activities accordingly.

1. Risk assessment of chemical substances

- Conduct risk assessments and create risk assessment reports for Kao priority assessment substances in line with the medium-term plan.
- Build the foundation of a lifecycle management system for chemical substances.

2. Lifecycle management of chemical substances

- Plan and implement risk reduction measures based on risk assessments at workplaces where chemical substances are handled.
- GHS* hazardous labeling at workplaces where chemical substances are handled.

*GHS

Globally Harmonized System of Classification and Labelling of Chemicals.

3. Risk communication about chemical substances with stakeholders

- Publicly release the deliverables of SAICM promotion activities results.
- Study communication with stakeholders.



→ p. 48-49 Our initiatives: >
Risk assessment of chemical substances/
Lifecycle management of chemical
substances/Risk communication about
chemical substances with stakeholders

- To address issues related to legal compliance for chemical substances, the safety of chemical substances and the environment, we have strengthened our compliance with legal regulations globally for chemical products, the activities we conduct for sound chemical management throughout the supply chain by providing information on chemical products, and our import and export management of chemical products.

- We continued to conduct emissions management of substances subject to the Japanese PRTR system and VOCs as well as initiatives to prevent air pollution.

Our initiatives

Risk assessment of chemical substances

1. Conduct risk assessments and create risk assessment reports for Kao priority assessment substances in line with the medium-term plan

In 2017, we completed risk assessments for Kao priority assessment substances in three categories scheduled in 2017 (cumulative total of 15 categories) according to the medium-term plan, and compiled the results in risk assessment reports. Risk was within a tolerable level for all three categories.

2. Build the foundation of a lifecycle management system for chemical substances

We are studying how to build the foundation for a more advanced lifecycle management system for chemical substances based on the Comprehensive Management System for Chemical Substances, with a focus on building a global volume tracking management system for chemical substances and rebuilding the Safety Data Sheets (SDS) creation and management system.

Lifecycle management of chemical substances

1. Plan and implement risk reduction measures based on risk assessments at workplaces where chemical substances are handled

We conduct risk assessments at workplaces where chemical substances are handled using the combination between the qualitative risk assessment method (the conventional control banding method^{*1}) and the quantitative method with ECETOC TRA^{*2} tool which has been identified by the EU's REACH^{*3} regulation as a preferred approach for risk assessment.

The amended Industrial Safety and Health Act in Japan went into force in June 2016. According to this law, we are continuing to conduct risk assessments and adopt risk mitigation measures for working procedures which have newly adopted or changed.

In 2017, we began studying how to incorporate risk assessments into the product development process to ensure that risk assessments of new working procedures are conducted.

For existing working procedures, we have decided the highest risk rank in each manufacturing area and have begun implementing corresponding risk mitigation measures.

2. GHS hazardous labeling at workplaces where chemical substances are handled

To ensure that workers can check the hazards for chemical substances before handled, since 2016 we have displayed GHS labels at sampling, filling and other workplace areas inside plants that handle chemical substances. We completed labeling at two of nine plants in Japan by 2017. We will continue the labeling program to cover all other plants in Japan.

^{*1} Control banding method

A method of assessing the risks of health hazards associated with chemical substances. This is the method for managing chemical substances designed by the International Labour Organization (ILO) that incorporates simple and practical risk assessment methods and it is intended to protect the health of workers in small and medium-sized companies in developing countries from hazardous chemicals. For each process that requires handling of hazardous chemicals, risks are ranked into four levels according to three components: the hazardousness of the chemical, its form (volatility/risk of becoming airborne), and the amount being handled. In addition to indicating general management items to be implemented in each category, this tool also makes it possible to indicate more specific items to be implemented with regards to other general work tasks.

^{*2} ECETOC TRA (European Centre for Ecotoxicology and Toxicology of Chemicals Targeted Risk Assessment).

A risk assessment tool used in REACH, the EU system for registering chemical substances. Able to obtain the risk determination as well as risk management direction.

^{*3} REACH

Registration, Evaluation, Authorization and Restriction of Chemicals (EU system).

Risk communication about chemical substances with stakeholders

1. Public disclosure of SAICM promotion activities results

We compile the results of risk assessments we conduct as safety summaries and publicly disclose them.

In 2017, we additionally released safety summaries for three chemicals for Kao priority assessment substances (cumulative total of 13 summaries). Moreover, we released 18 GPS Safety Summaries for Kao chemical products (cumulative total of 125 summaries).



→ GPS Safety Summary
<http://chemical.kao.com/global/products/gps/>

In 2017, we received the JIPS award from the Chemicals Management Committee of the Japan Chemical Industry Association in recognition of having disclosed the most GPS Safety Summaries of any company in 2016 and demonstrated excellence in JIPS initiatives.



p. 52 Our initiatives: Providing information on chemical products for sound chemical management/Topic: Kao Corporation's Chemical Business unit receives JIPS Award

2. Study communication with stakeholders

We have begun face-to-face communication activities with stakeholders.

In 2017, we held the Secrets of Useful Everyday Products events as part of the 17th Kanagawa Science Summer, a series of science-related events for children held in Kanagawa Prefecture, for the purpose of creating understanding for the following.

- Chemical products used in our daily life are made by leveraging the various properties of chemical substances.
- Chemical substances can have adverse impacts on human health and the environment if used improperly.
- Kao evaluates dose and response of each chemical substances and confirm these substances do not have concerned effects on human health and the environment during the product lifecycles.

Over two days, 100 parent and child participants learned about the properties and functions of ingredients in body wash by doing science experiments. "I learned that Kao is taking care of the product impacts on human health and the Earth's environment. Now I want to think about the amounts we use and how we use them," commented a participant. We created understanding for the importance of risk management by having people experience the utility of chemical substances through real science experiments using everyday materials and communicating in easy-to-understand language.

Through various activities, we will continue to build understanding for chemical substances and raise awareness for the importance of risk management.



→ For details of communication with raw materials suppliers and corporate customers, refer to p. 51 Our initiatives: Providing information on chemical products for sound chemical management

Approach to issues of chemical substances related to legal compliance safety and the environment

Global compliance with chemical regulations

The Kao Group is registering the chemical substances contained in the Kao products manufactured outside Japan and in the other Kao products directly and indirectly exported outside Japan according to the quantities and hazard levels, based on the chemical regulations of the relevant countries.

Europe

In the EU, REACH (European regulations on chemical substances) requires registration of all chemical substances manufactured or imported in quantities of one ton or more per year. With close cooperation, Kao Chemicals Europe (KCE) and Kao has prioritized substances for registration each year and conducted registration.

We have identified all substances required for registration and 87% of the substances were completed the registration by the end of 2017. We plan to finish registration of all substances without delay by the final registration deadline at the end of May 2018.

Americas

In the United States, the TSCA*¹ was amended in June 2016. There are no major changes in the notification process for new chemical substances. We are taking corresponding actions for tightened assessment of new chemical substances and ensure the required submissions.

The inventory notification rule went into effect in August 2017 based on the amended TSCA. Conforming to this rule, we will conduct the notifications by the 2018 deadline for chemical substances manufactured and imported to the United States during the time period defined.

Asia (China, South Korea, Taiwan, Thailand, Vietnam)

China and other countries and regions in Asia are also moving quickly to make registration mandatory for products corresponding to new chemical substances and hazardous chemical products. As the Kao Group, we are working together with local Kao companies to submit the relevant notifications before manufacture or import of these products.

Since 2010, the Provisions on Environmental Administration of New Chemical Substances (also known as China REACH) in China has required registration of newly manufactured and imported chemical substances. Registration of products containing hazardous chemicals is also becoming more rigorous under the other Law. In cooperation with local Kao companies in China including Kao (China) Holding, we completed registration before manufacture or import of the target substances. In 2018, we will monitor enactment of related new legislation and amendments of the current law and share this information with the relevant divisions to comply with the legal regulations without delay. As for the hazardous chemical products whose expiration dates are nearing in 2018 and beyond, we have started to update registrations in cooperation with local Kao companies in China.

In South Korea, after the Act on the Registration and Evaluation of Chemicals (K-REACH)*² came into force in 2014, we took actions to comply with the legal requirements, including registering and reporting quantities for new and existing chemical substances. Through our South Korean agent, we are participating in two consortiums on existing chemical substances subject to registration and taking actions accordingly for the registration deadline of June 2018. Currently (as of December 2017), a partial amendment of K-REACH has been announced and is expected to require re-registration of all existing chemical substances manufactured and imported in quantities of one ton or more per year (similar to the EU's REACH). We will monitor the situation and take actions as needed.

In Taiwan, following the Toxic Chemical Substance Control Act we have calculated the total quantities every two months and submitted reports for chemical substances manufactured or imported in excess of 100 kg per year in cooperation with Kao Taiwan. For the draft of phase one existing chemical substances subject to registration announced at the end of 2017, we plan to take actions as needed in cooperation with Kao Taiwan and the Chemical Business Division.

In Thailand, the government announced the preparation of an existing chemical substances inventory and registration system for new chemical substances in August 2015. The registration system for new chemical substances does not yet have a timeline. For the existing chemical substances inventory, we continue to submit notifications in cooperation with Kao Industrial (Thailand). We have created a list of the required products and completed preliminary notifications almost on schedule, mainly for products that we have a record of handling. We will continue to monitor announcements on the registration system for new chemical substances and the existing chemical substances inventory, and plan to prepare notifications and take the appropriate steps for existing products and chemical substances as our secondary response.

Vietnam is preparing an existing chemical substances inventory based on its Law on Chemicals. A draft inventory was announced in March 2017 and subsequent additional announcements are scheduled. We are planning additional notifications in cooperation with Kao Vietnam.

In addition, we are taking the requisite steps to comply with laws on the manufacture, import and use of chemical substances in Indonesia, Malaysia, the Philippines and Singapore.

*1 TSCA
Toxic Substance Control Act of the United States.

*2 The Act on the Registration and Evaluation of Chemicals (K-REACH)
The Act on the Registration and Evaluation of Chemicals of South Korea.

Providing information on chemical products for sound chemical management

Kao communicates safety information for chemical products to ensure safety related to chemical substances throughout the supply chain and to ensure that the chemical substances are used appropriately and any necessary actions are taken.

1. GHS-compliant SDS and product labeling

We issue GHS-compliant SDS for chemical products in countries that have introduced GHS as well as GHS-compliant product labeling.

For the Chemical Business including at Kao Japan and Asian affiliates, we have created GHS-compliant SDS and product labels as well as conducting integrated management using the Comprehensive Management System for Chemical Substances since 2008.

In 2017, we continue to use GHS labeling for products marketed in countries and regions that have introduced GHS (Japan, EU, U.S., Taiwan, South Korea, China, Singapore, Thailand, Indonesia, Vietnam and Malaysia) from our plants in Japan and Asia. We have also begun studying labeling corresponding to the export destination when we export products from our European plants to Asia.

In 2018, we will continue to monitor trends in countries that have introduced GHS and promote creation and issuance of SDS and product labeling to facilitate global trade.

2. Providing and obtaining information on chemicals in products

To comply with increasingly stringent regulations in various countries as well as industry standards, we proactively manage the chemical substances contained in chemical products (management of products containing chemical substances). We are a founding member of JAMP*1 and efficiently manage and communicate information on products containing chemical substances on an ongoing basis using the standardized form provided by JAMP.

Examples of MSDSplus output (left) and chemSHERPA output (right) for a Kao chemical product

In January 2017, a revised version of MSDSplus was issued (Substances List Ver. 4.070). We distributed this version to customers via sales distributors and disclosed it on the Kao chemical website. Similarly, we have prepared the most up-to-date versions of MSDSplus for products of Asian affiliates and released them in English and Chinese on the affiliates' websites.

Chemical substances management 103-1,103-2,103-3

Kao's approach

Our initiatives

Meanwhile, a new information communication scheme for products containing chemical substances called chemSHERPA^{*2}, led the development by the Japanese Ministry of Economy, Trade and Industry (METI) has been handled its operation by JAMP since April 2016. In September 2017, we led the industry in switching to the revised version of chemSHERPA-CI^{*3} (Substance List Ver. 1.04.00). We have published the current chemSHERPA-CI on our websites in Japanese, English and Chinese, and we have also voluntarily distributed it to customers via sales distributors.

We will continue to cooperate with the relevant internal and external divisions and groups and actively engage in initiatives to promote improvements and to strengthen management of products containing chemical substances in the supply chain.

3. Disclosure of risk information on chemical substances (GPS Safety Summaries)

We are an active participant in the Japan Initiative of Product Stewardship (JIPS), a voluntary initiative aimed at strengthening management of chemical substances through product stewardship advocated by the International Council of Chemical Associations (ICCA). The Japan Chemical Industry Association has been implementing the initiative since 2009, which constitutes an effort by the chemical industry to make a major contribution toward SAICM. To this end, we have been actively engaging in communication related to chemical substances with customers.

We have always been proactive in providing SDS, chemSHERPA and eSDS^{*4} for European disclosure of chemical products as part of our chemical substance communications. In recent years, we have proactively made GPS Safety Summaries available on the Kao Chemicals website and ICCA's GPS Chemicals Portal

to outline, in an easy-to-understand manner, hazard information and information on product risks. We consider publication of GPS Safety Summaries an important element of risk communication on chemical substances with stakeholders, which constitutes part of our SAICM promotion activities.



→ GPS Safety Summary
 • Kao Chemical website
<http://chemical.kao.com/global/products/gps/>
 • ICCA's GPS Chemicals Portal
<http://icca.cefic.org/en/Home/Global-Product-Strategy/global-product-strategy/chemical-information-search/?t=ByCompanyName&v=kao&ft=ByCompanyName&fv=kao>

As the results of risk assessment, in 2017 we published safety summaries on the Kao Chemicals website for Kao priority assessment substances. We prepared 18 GPS Safety Summaries in Japanese and English for chemical products related to these substances and released them on the Kao Chemicals website and ICCA's GPS Chemicals Portal. We also prepared and published two GPS Safety Summaries for products with REACH registration. With this, the Kao Group has published a total of 125 GPS Safety Summaries globally, the most of any company in Japan since last year.

In 2018, we will continue to publish GPS Safety Summaries and engage in risk communication with customers and with the wider society on a global basis.

^{*1} JAMP

Joint Article Management Promotion-consortium.

^{*2} chemSHERPA

A new scheme that facilitates sharing information on chemical substances in products across the entire supply chain to address broadening regulations and appropriately manage chemical

substances contained in products on an ongoing basis.

→ chemSHERPA website

<https://chemsherpa.net/chemSHERPA/english/>

^{*3} chemSHERPA-CI

A chemical product data form sheet for communicating information on specified chemical substances corresponding to MSDSplus.

^{*4} eSDS

An extended Safety Data Sheet (SDS). Adds risk appraisal and risk management content to the conventional SDS.



p. 98 Community > Communication with corporate customers (Chemical Business)



Kao Corporation's Chemical Business unit receives JIPS Award

In February 2017, Kao Corporation's Chemical Business unit received the JIPS Award.

The JIPS Award was established by the Chemicals Management Committee of the Japan Chemical Industry Association (JCIA) in 2017 to recognize companies that have demonstrated excellence in voluntary GPS/JIPS activities for chemicals management throughout the supply chain.

We received this award in recognition of having released the most GPS Safety Summaries of any company in 2016 and of our proactive pursuit of chemical substance management.

During the acceptance speech at the awards ceremony, the senior manager of business implementation, Chemical Business Unit, described our disclosure plans at affiliated companies in Japan, Asia, Europe and the Americas.



Awards ceremony

Conservation

Community

Corporate Culture

Governance

Chemical substances management 305-7

Strengthening export and import management of chemical products

As the Chemical Business globalizes at an increasingly fast pace, the need to introduce a system for import and export management has risen sharply. This includes the need to automatically check legal regulations during importing and exporting at Kao companies related to the Chemical Business, and requests from inside and outside Kao to strengthen our system of checks in order to comply with legal regulations.

We have been making preparations aiming to introduce a new import and export management system at all Kao companies related to the Chemical Business by 2018. We, however, introduced the system at Kao companies related to the Chemical Business in the United States in 2016, based on the described needs. We followed this by completing introduction of the system at companies related to the Chemical Business in Europe and Asia in 2017 (total of 11 countries) and have begun system operations.

Activities relating to legal compliance in Japan

1. Compliance with the Chemical Substances Control Law

The Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Chemical Substances Control Law) mandates reporting on product quantities by usage application. We continued to survey detailed usage information on chemical products in 2017 with the cooperation of sales distributors and we are maintaining the most up-to-date information.

To provide information to customers and sales distributors for the Priority Assessment Chemical Substances that were added under the law in 2017, we revised the SDS for the target chemical products.

In 2018, we will continue to survey and update usage information on chemical products with the cooperation of sales distributors and to provide information on the Priority Assessment Chemical Substances for the target chemical products.

2. Compliance with the Industrial Safety and Health Act

For the substances with mandated labeling and notification added under the Industrial Safety and Health Act, which was amended in 2017, we revised the SDS for the target chemical products and provided the SDS to the relevant customers and sales distributors. In 2018, we will continue to take steps to comply with the substances added to the Industrial Safety and Health Act.

Kao's approach

Our initiatives

Emission Management of Chemicals

Monitoring and controlling emissions of chemical substances subject to the Japanese PRTR system

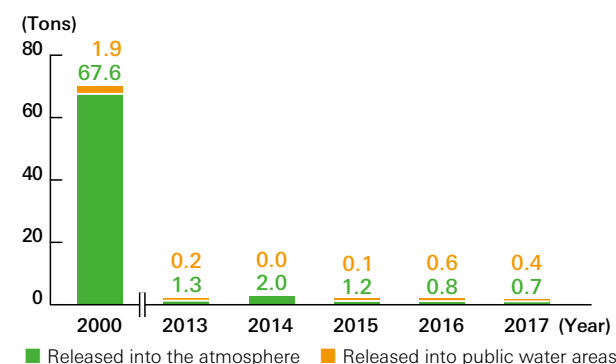
We began activities by setting the voluntary target of annual emissions of one ton or less for each substance from each plant in FY 2000. We achieved this target in FY 2002. Since then, we have continued to achieve this voluntary target, excluding leaks of fluorinated gases and similar emissions.

The number of chemical substances subject to the Japanese PRTR system of which Kao handled over one ton in 2017 was 75, and the total discharge of such substances into the atmosphere and public water areas was 1.1 tons. In addition, we are voluntarily monitoring and controlling releases and transfers (in the same way as would be done for chemical substances subject to PRTR) of chemical substances that the Japan Chemical Industry Association has specified as being subject to voluntary surveys.



→ For details, refer to List of Emissions of Substances Subject to PRTR System
<http://www.kao.com/global/en/sustainability/environment/activity-data/chemical-management/>

Total emissions of chemical substances subject to the PRTR system



Conservation

Community

Corporate Culture


Governance

Chemical substances management 305-7

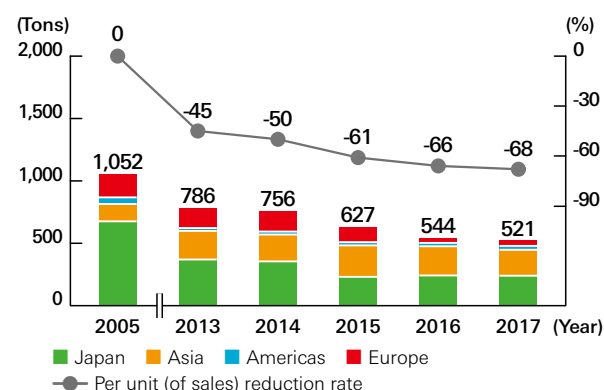
Management of volatile organic compounds (VOC) emissions

Although Kao has no facilities subject to the VOC emission regulations provided in the Air Pollution Control Act, we work to voluntarily cut VOC emissions.

For the 100 VOC substances defined in the notice of the Director General of the Environmental Management Bureau, Ministry of the Environment, we set voluntary targets on the annual atmospheric emissions volume from each plant for each substance (5 tons or less in 2005, 3 tons or less in 2009, 1 ton or less in 2010), conducted emission reduction activities and accomplished our targets. We are managing VOC emissions with the current target of maintaining our activities.

The Kao Group in Japan handled 34 types of VOCs in quantities over 1 ton in 2017, with total emissions into the atmosphere of 9 tons .

NOx emissions 

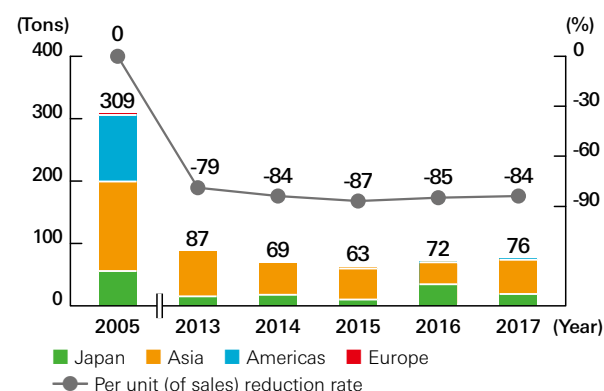


*Boundary: All Kao Group production sites.

*Assurance provided for NOx emission figures.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

SOx emissions



*Boundary: All Kao Group production sites.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

Kao's approach

Our initiatives

Efforts during use

Efforts in the Chemical Business



→ p. 101 Community > Communication with corporate customers (Chemical Business)/Our initiatives: Kao products that contribute to the conservation of the environment globally



→ p. 101 Community > Communication with corporate customers (Chemical Business)/Our initiatives: Topic "Water-based inkjet ink and high-performance specialty thickener *Visco Top* receive award"

Conservation

Community

Corporate Culture

Governance

Kao's approach

Our business is made possible by the many benefits of biodiversity across the entire product lifecycle. Biodiversity conservation is becoming a global-scale issue, and we are working through both our business activities and social contribution activities to reduce the impacts of our business on biodiversity and to sustainably use the benefits of biodiversity without exhausting them.

Kao's creating value to address social issues

Palm oil, paper and pulp are the main raw ingredients for many of our products.

Palm oil especially is associated with serious social issues, including destruction of forests where palm oil is produced and violations of the human rights of local residents.

We take these problems seriously and have set specific targets for purchasing certified products and to ensure traceability back to the source. We are conducting activities accordingly to achieve these targets.

By doing this, we are working to procure sustainable raw materials without resulting deforestation and human rights violations.

Contributions to the SDGs



Policies

Based on risk analysis relating to the biodiversity of our business activities, in 2011 we drafted the Basic Policies on Conservation of Biodiversity, which consists of seven policies: 1) Identify the relationship between our business activities and biodiversity, 2) Reduce the impacts of our business activities on biodiversity, 3) Develop innovative technologies, 4) Comply with relevant international agreements, 5) Make efforts to conserve local ecosystems in the vicinity of our business activities, 6) Raise awareness of biodiversity among all employees and 7) Pursue cooperation with external stakeholders.

We publish the details of our action policies and introduce specific activities on our website.



→ Basic Policies on Conservation of Biodiversity and Action policies and examples for each item in the basic policies
<http://www.kao.com/global/en/sustainability/environment/statement-policy/statement/biodiversity-policy/>

Framework

To ensure company-wide progress on biodiversity conservation activities in the medium to long term, we manage our policies, targets, plans and activities related to biodiversity under the Responsible Care framework.



→ P.185 Governance > Responsible care activities/Framework

Education and promotion

From 2011, when we defined our Basic Policies on Conservation of Biodiversity, to 2012, we conducted e-learning courses for all employees of the Kao Group in Japan.

Since 2013, we have conducted environmental education each year that includes biodiversity topics for new employees.

Outside Japan, we are conducting awareness-raising activities on biodiversity through such venues as the annual Global RC Meeting.

We have also begun company-wide green space conservation activities giving consideration to biodiversity. We aspire to deepen understanding for biodiversity among all employees through their participation in these activities.

Mid- to long-term targets and performance

2020 mid-term targets

We strive to protect biodiversity through responsible raw materials procurement and other measures.

In raw materials procurement, detailed 2020 objectives are set for the main raw materials of palm oil, paper and pulp.



→ p. 134 Corporate Culture > Sustainable and responsible procurement

2018 targets

We have set the following as our Responsible Care targets related to biodiversity.

1. Promote sustainable raw materials procurement

We are steadily implementing measures to achieve our 2020 targets.

2. Promote business and social contribution activities with consideration for local biodiversity

Assessments of biodiversity protection at sites:
We have introduced globally shared indicators for biodiversity assessments for the purpose of understanding the current level of biodiversity protection activities at all Kao Group sites with plants, identifying areas that require future improvement, and defining activity objectives and plans.

3. Reduce use of copy paper

Create awareness and understanding for ways to reduce paper use, manage the progress toward targets and promote reduced paper use.

4. Green procurement

Create awareness and understanding for green procurement, manage the progress toward targets and promote green procurement.

Performance in 2017

1.Promote sustainable raw materials procurement



→ p. 134 Corporate Culture > Sustainable and responsible procurement

2.Promote business and social contribution activities with consideration for local biodiversity

Biodiversity conservation activities at each site

• Wakayama Plant

The Wakayama Plant received the highest level of five assessment ranks in the Social and Environmental Green Evaluation System (SEGES) certified by the Organization for Landscape and Urban Green Infrastructure.

We produced the educational "Suiken Dike Story" book to teach fourth-grade students at elementary schools in Wakayama City about the history and environment of Wakayama Prefecture through the Suiken Dike initiative. We donated 4,000 copies of the book to Wakayama City.

Wakayama Plant has participated in the Company Forest program sponsored by Wakayama Prefecture since 2007, and as part of this program, conducted activities such as tree planting and clearing undergrowth.

The area where Wakayama Plant conducted these activities has grown into a healthy mountainous forest, so the plant has entered into a new agreement with the town of Kimino in Wakayama Prefecture and has begun conducting activities there.



→ p. 59 Our initiatives: Environmental conservation activities at Wakayama Plant

• Kashima Plant

In the Employees' Forest, hands-on nature-themed environmental classes are held for local residents and the families of employees.

Among other events designed to raise environmental awareness, "forest artist" craft workshops were held for children to make crafts using their imagination and things like fruit from the trees and fallen leaves.

The plant's educational activities on the environment using the topic of CO₂ reductions from afforestation activities in the Employees' Forest were recognized in the Cool Earth Ibaraki Contest 2017 and received the Grand Prix Award.

• Kawasaki Plant

The plant is located in a waterfront industrial area in Kawasaki City, and, nevertheless, the green space on the plant grounds has been highly praised by outside groups as one of the only large green spaces in the area.

In 2017, an outside organization of experts conducted a biological survey and verified that many organisms live in this habitat, including a species of swallowtail butterfly.

The plant is now studying green space management methods that give consideration to biodiversity.

Kao Creating Forests for Everyone program

In March 2017, Kao designated a total of 21 groups, comprising 11 groups involved in forest creation and 10 groups involved in environmental education, as recipients of fiscal 2016 subsidies.

To date, a cumulative total of 432 groups have received support through the program, with 320,000 citizens participating in the activities.

FURUSATO Environment Conservation Project in Northern Thailand

In the five years from 2012 to 2016, we reached our goal of

planting 42,500 trees on 35 ha of land.

While contributing to the reforestation of northern Thailand, the project also raised awareness among local residents for creating sustainable forests and their leadership in deciding how to use and coexist with the created forest.

The first phase of the project has finished, and through the second phase of the project, we plan to follow up on the reforest to create employment and obtain relevant technologies for local residents.

Employee volunteers in Post Tsunami Monitoring Project

In 2017, 10 employees went to local areas to support fieldwork.

The data obtained in the fieldwork are used in restoration plans that take biodiversity into consideration and for conservation of species.

Sending teachers to fieldwork projects through the Kao Earthwatch Teachers' Fellowship

A total of 10 teachers participated in five projects in 2017.

The teachers take back the experiences they gained in the fieldwork to their schools and communities to use in environmental education.

In November, we held a reporting session with teachers from this fiscal year and past years to share information on environmental education they conducted.

To date, 148 teachers have participated in 75 projects.



→ Corporate Citizenship Activities Report
<http://www.kao.com/global/en/sustainability/society/social-reports/>

Collaboration with stakeholders

- We regularly receive advice from outside consultants on sustainability-related topics including biodiversity across all of our business and social contribution activities to ensure ongoing integrity in our activities.
- We have participated in the Japan Business Initiative for Biodiversity (JBIB) since its inception in 2008. We engage in a diverse range of activities in the JBIB in cooperation with companies in other industries, including holding events and research on how companies can contribute to biodiversity conservation.
- At our sites inside and outside Japan, we advance biodiversity conservation activities in cooperation with various stakeholders, including government agencies, local governments, academic institutions, NPOs and NGOs, to promote business and social contribution activities that give consideration to local biodiversity.

Conservation
Community
Corporate Culture
Governance

Our initiatives

Environmental conservation activities at Wakayama Plant

Conservation of storm surge pine grove

A pine grove and dike stretching for approximately 3 km was created in Wakayama City at the beginning of the Edo Period (1603-1868) for the purpose of protecting local homes and agriculture from storm surges. Part of this structure is the Suiken Dike, which has been designated a historical site of Wakayama Prefecture.

This pine grove traverses the grounds of Wakayama Plant for 1 km running north to south, and the plant has made efforts to conserve the pine grove for many years.



Wakayama Plant and pine grove traversing its ground



Pine grove conservation zone at Wakayama Plant

Since 2011, Wakayama Plant has served as a biodiversity model plant leading other plants, creating green spaces as well as managing and using land with consideration for biodiversity, focusing mainly on the pine grove.

A promenade has been constructed in the pine grove conservation zone, awareness-raising among employees

and communication with the public in cooperation with the Kao Eco-Lab Museum on the plant's grounds are the plant's effective activities.

In 2017, with the desire to teach local children about the wisdom and ingenuity of the people who long ago build the Suiken Dike, as well as current conservation activities, we created the educational "Suiken Dike Story." This children's book, created in cooperation with former Wakayama City elementary school teachers and the Wakayama City Board of Education, educates readers about the local history and environment.

This book is designed for the fourth-grade students of the entire Wakayama City, and 4,000 copies were donated to Wakayama City.



Ceremony to present "Suiken Dike Story" held at the Wakayama City Hall

Employees participating in the Company Forests program

The plant employees actively participate in a range of environmental conservation activities conducted locally, including forest conservation and cleanups.

For example, the plant have participated in the Company Forests program sponsored by Wakayama Prefecture since 2007. Many employees have provided hands to help plant approximately 700 trees native to the overgrown mountainous forest, and have since cleared undergrowth each year.

The area where the plant employees have conducted these activities has grown into a healthy mountainous forest, and a new activity area of was added in 2017. The range of the activities is expanding to preparing the land for tree planting.

In a comprehensive assessment of these activities, Wakayama Plant received the highest rank of Superlative Stage in a five-rank assessment of developing green areas in SEGES*, certified by the Organization for Landscape and Urban Green Infrastructure.



Employees clear unnecessary undergrowth at the Kao Forest Oishi

*SEGES

Social and Environmental Green Evaluation System. Objectively evaluates excellent initiatives for conserving corporate green spaces, which contribute to society and the environment through activities to protect and develop green spaces.

Understanding relationships between business and biodiversity

We comprehensively assess the environmental impacts of our products using various assessment methods including LIME, which quantifies environmental impacts in an integrated manner.



→ p. 22 Conservation > Initiatives for the environment/Product design with environmental considerations—Environmental impact assessments of products using the LCA framework

Kao's approach

We are working to reduce the waste generated at our plants and offices, increase recycling and reduce the amount of waste requiring final disposal. We are also striving to reduce the amount of product packaging, diapers and other waste thrown away after consumers use our products. To verify that the waste generated at our plants and offices is properly disposed of, we visit waste treatment service providers and conduct site audits.

Kao's creating value to address social issues

The increasing amount of generated waste is becoming a global issue. In addition, in areas where the infrastructure for waste treatment systems is not sufficiently developed, there are cases of waste causing damage to human health and environmental pollution due to being dumped or insufficiently treated at disposal facilities.

We not only produce waste at our plants and offices, we also offer products that become waste after consumers use them. We therefore have a responsibility to address social issues relating to waste.

We believe that reducing the waste come as a consequences is the highest priority. This is because doing so also facilitates conserving energy and resources that are used in product manufacturing, reducing CO₂ emissions from energy consumption, and biodiversity conservation from reducing use of biomass raw materials. We are working to develop technologies aimed at resolving this issue of reducing waste. For example, by reducing the weight of packaging and developing the technologies required for refill packs, we are contributing to reducing waste from households.

By making the waste produced at households possible to be recycled to a maximum extent, we are contributing to the creation of a society conserving natural resources and cyclic society. Recycling requires the cooperation of the wider society. Waste produced by households is collected, treated and recycled by public agencies and other external groups. In Japan and Taiwan, we recycle packaging by contracting outside vendors based on packaging recycling laws.

In recent years, various impacts caused by waste in the ocean attract more attentions. It is considered that improperly dumped waste flows out to the ocean and become ocean waste. To resolve this problem, we must as a society build waste collection and recycling systems and reduce packaging from product suppliers. We are contributing to resolving problems in cooperation with the wider society by working to reduce packaging, through efforts such as increasing the use of refill packs.

Contributions to the SDGs



Policies

Reducing waste from business activities

We are reducing the amount of waste generated at our plants and offices, and we are reusing and recycling waste and other materials inside and outside the company. We have set reduction targets for how much waste we generate and are working group-wide to achieve them.

In our plants, we are reducing loss of raw materials and product. For example, for liquid products, wastewater sludge is produced from cleaning the mixing and storage tanks at the production facility when the product produced is switched. For sheet-type products, a portion of the sheet material is left unused when the material is switched out. We study ways to reduce loss on an ongoing basis, according to the type of loss that occurs. We then implement improvements to reduce waste.

We ensure that generated waste is thoroughly separated so that it can be recycled, and, in cooperation with contracted waste treatment providers, we select the most appropriate recycling method. We monitor the amount of waste recycled and sent for final disposal along with the amount of waste generated to improve how waste is treated overall.

Reducing the volume of packaging

To reduce the amount of packaging used, we are reducing the amount of resin used in packaging and making packaging more compact, for example by

making contents more concentrated, and offering refill products. These activities are in accordance with the ISO 18600 series standards for packaging and the environment.



→ p. 66 Conservation > Packaging

Reducing the amount of product materials used

We offer products such as diapers and cleaning sheets that themselves become waste after consumer use. While ensuring product performance, we develop technologies to reduce the amount of materials used and contribute to reducing waste.

Preventing illegal dumping of waste

When contracting waste treatment service providers to dispose of waste generated at our plants and offices, there is a risk of illegal dumping. To reduce this risk, we regularly visit the service providers to verify that the contracted waste is being disposed appropriately.

The Kao Group in Japan has created a database containing information including the contracts with waste treatment service providers and the results obtained in surveys of appropriate waste treatment to verify prevention of illegal dumping. This system is also connected to the Electronic Manifest System for preventing illegal dumping, which together ensure prevention of illegal dumping.

Kao's approach

Our initiatives

Proper storage and treatment of PCB waste

Polychlorinated biphenyls (PCBs) were formerly used in insulating oil, such as in transformers and ballasts, but they have low degradability and therefore pose a risk to human health and to creating hazards in living environments. We appropriately store and treat PCB-containing waste according to the Waste Management and Public Cleansing Law and the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes, until its disposal is contracted to a service provider.

Framework

Activities related to waste issues are managed under our Responsible Care (RC) promotion system. The SCM Division holds the Environment Working Group Meeting with environmental staff at all plants, manages progress relating to activities regarding waste at plants, and internally develops Best Practices.

Site inspections of waste treatment service providers are conducted systematically in cooperation with the SCM Division, Procurement Division, Logistics Division, Information Technology Division, Sales Division and related companies.

Data reliability is ensured by using a database that centrally manages environmental data, and work tasks are standardized and made more efficient to adequately conduct activities with targeted outcomes.

Mid- to long-term targets and performance

Mid- to long-term targets

In 2013, we set the 2020 reduction targets for waste and other unwanted materials generated at all Kao Group sites and have aimed to achieve a standard reduction of 0.5% each year. The target percentage of final disposal at all Kao Group sites in Japan has been increased in phases. We began with the target of 0.5% or lower in 2004, then 0.2% or lower in 2007 and 0.1% or lower since 2010.

Waste-related targets

Index	Scope	2017 targets	2018 targets	2020 targets
Generated waste and other unwanted materials* ¹	All Kao Group sites	31% reduction	32% reduction	33% reduction
Final disposal ratio* ²	All Kao Group sites in Japan	0.1% or lower	0.1% or lower	0.1% or lower

*1 Per unit of sales (2005 baseline).

*2 Ratio destined for final landfill disposal to the amount of generated waste.

Performance in 2017

1. Amount of generated waste and other unwanted materials

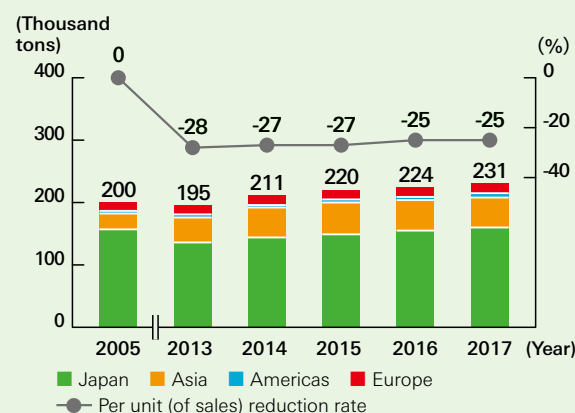
Due to increased production volumes and added production lines in 2017, the amount of generated waste and other unwanted materials increased by 7 thousand tons compared to the previous year, with the same reduction rate of 25% as the previous year (per unit of sales), which underreached our target of a 31% reduction. We will continue to strengthen our activities to reduce generated waste and other unwanted materials.

Of the generated waste, 19 thousand tons was hazardous waste. No hazardous waste was transported internationally under the Basel Convention. Waste reused or recycled* came to 214 thousand tons ☒, a recycling rate of 92%.

We maintained our target of a 0.1% or lower final disposal ratio for waste. We have achieved our target of zero emissions for the 13th consecutive year since the target was set (final disposal ratio to generated waste for all Kao Group worksites in Japan).

*Includes thermal recycling (heat recovery)

Amount of generated waste and other unwanted materials ☒ (all sites)



*Boundary: Through 2014, all Kao Group production sites, as well as non-production sites in Japan. From 2015 onwards, also includes some non-production sites outside Japan.

*Assurance provided for amount of generated waste and other unwanted materials.

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

In 2017, while we saw an improving trend in the amount of generated waste, reducing the gap with our 2020 target is a challenge and we will continue conducting activities to reduce waste.

2. Inspection of waste treatment facilities

In 2017, we conducted inspections of 212 waste treatment sites with the cooperation of 170 waste treatment companies (Japan). As a result, no waste treatment companies were found to be in non-compliance with our evaluation standards.

3. Proper storage and treatment of PCBs

In 2017, we treated 42 waste items containing high levels of PCBs and one waste item containing low levels of PCBs. We are currently storing PCBs at Wakayama, Kawasaki, Odawara and KCMK Kumamoto (Japan).

Waste

Collaboration with stakeholders

Introducing cases at seminars and lectures on waste

In Japan, there have been reported that many incidents occur at waste treatment companies, which are caused by not providing sufficient information on the chemical substances to the contractor when contracting the waste treatment.

Therefore, we present cases at various seminars regarding waste with the aims of spreading our knowledge about past successful cases of improving communication with waste treatment companies, and identifying points of improvement in how we communicate information.

We cooperate with local governments' waste services. In 2017, our company activities were introduced as a model case at a seminar for worksite waste managers held in Sumida Ward, Tokyo. We are contributing to improving regional waste treatment activities through activities with local governments.

Thanks to these activities, there were again no incidents involving waste contracted for disposal from Kao in 2017.

Stakeholder Cooperation in the Hair Salon Business

In the Hair Salon Business, we have developed dispenser-type hair color products, which reduce chemical waste materials by approximately 25% compared with tube-type hair color products.

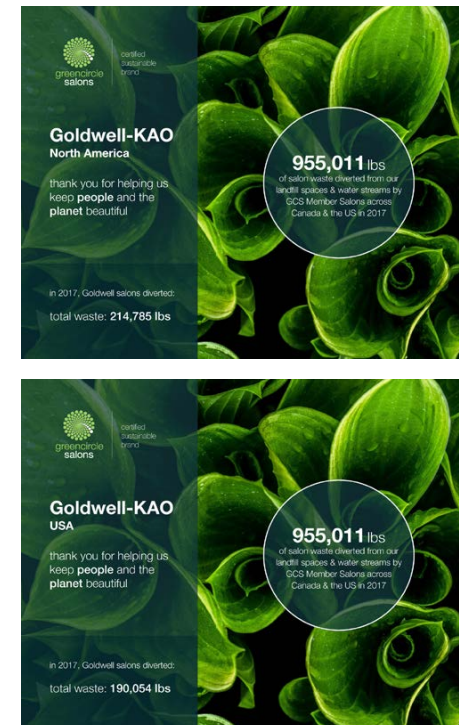
In addition, we have been partnering with Green Circle Salons, Inc.* since 2012 in Canada and since 2016 in the United States to take back and recycle containers, paper, and chemical waste materials including coloring agents.

These recycling activities have succeeded in reducing waste generated after using Kao's products from affiliated salons in the North American region by 184 tons in 2017 compared with the previous year.

*Green Circle Salons, Inc.
<https://www.greencirclesalons.ca/>

Kao's approach

Our initiatives



Certified waste reduction by Green Circle Salons, Inc.

Conservation

Community

Corporate Culture

Governance

Our initiatives

Promoting efforts to reduce waste (reducing the amount generated and promoting reuse and recycling)

Efforts in raw materials procurement

We use recycled materials in some products to contribute to reducing waste. We use recycled polyethylene terephthalate (PET) resin in *Quickle Wiper* floor cleaning sheets, recycled polypropylene (PP) resin in the measuring spoon for *Attack* powder-type laundry detergent, and recycled PET resin in shampoo and other containers sold in Taiwan.

To reduce waste generated at Kao plants, we are adjusting the volume and frequency of raw materials deliveries from external suppliers.

Efforts in development, manufacturing and sales

Enhancing recycling

In 2017, Kao USA established and begun operations a new sorting facility for recycling. There is an area set aside for storing separated waste, and a berth (space) for loading dedicated trucks. This enables a higher level of recycling activities.

In addition, Kao USA created the Kao Zero Team, which encourages waste reduction company-wide. The team's activities help increase awareness among employees and include sorting waste at offices and eliminating use of paper cups.

Reducing wastewater sludge

We handle a large number of liquid products, and reducing the sludge produced from treating concentrated wastewater generated in the process of cleaning tanks is a major issue.

Kao Industrial (Thailand) treats wastewater using separate wastewater treatment facilities according to the COD concentration of the wastewater, which has successfully reduced the amount of sludge produced and contributes to reducing waste.

Recycling sanitary product materials

We have sanitary product plants in various countries. Materials that cannot ultimately be turned into products are generated in production, and we are recycling these leftover materials at plants.

One example of this is recycling the ends of diaper and feminine product materials to be turned into plastic pallets. We began test operation of this system at Kao plants in 2016, with cooperation from research laboratories and related divisions using the strengths of our matrix management. We are verifying the strength and other properties of the pallets aiming for future practical use.

Reducing the amount of boxes used

To contribute to reducing the volume of generated waste at retailers, we are working with the understanding and cooperation of retailers to reduce the amount of boxes used in the delivery of products.

Efforts in use

Efforts in the Consumer Products Business

We continue to reduce the raw materials used in packaging that becomes waste after product use by customers.



→ p. 66 Conservation > Packaging

We actively support awareness-raising activities by introducing successful cases at Kao of implementing the 3R's in packaging to packaging manufacturers and other companies in the same business fields through the Japan Soap and Detergent Association, the Plastic Packaging Recycling Council and the Paper Packaging Recycling Council.

Efforts in the Chemical Business

Combining molded pulp-shaping technology and high-temperature materials technology, our paper-based runner channel for casting uses recycled paper as its raw material. This reduces the volume of raw materials used to one-tenth and post-use waste to one-sixteenth of comparable products.

In recognition of contributions to chemicals that are gentle to people and the environment and support the development of a sustainable society, we received the Minister of Economy, Trade and Industry Award in the 16th Green Sustainable Chemistry (GSC) Awards.



→ News release

Kao's "Lightweight, Fire-resistant Paper Runner Channel for Use in Casting Manufacture" has received the Minister of Economy, Trade and Industry Award in the 16th Green Sustainable Chemistry (GSC) Awards

<http://www.kao.com/jp/corporate/news/2017/20170628-001/> (Japanese)

Kao's approach

Our initiatives



Kao Industrial (Thailand) receives commendation for its waste treatment activities

Kao Industrial (Thailand) was certified as Platinum, the highest level in the Best Waste Management Award, by the Industrial Estate Authority of Thailand. This award is based on the auditing results of the Industrial Estate Authority of Thailand in recognition of excellent treatment methods and activities that results in waste reduction and resource reuse and recycling.



Kao Industrial (Thailand) receiving an audit



Awards ceremony

Kao's approach

Packaging serves an important role and function as part of our products, protecting contents and preserving quality during transport and providing a wide range of information to consumers using the products. As part of our "eco together" activities, we are promoting environmentally conscious packaging.

Kao's creating value to address social issues

According to the results of a survey on the use and discharge of packaging waste materials by the Ministry of the Environment (FY 2016), packaging waste accounts for approximately 55% of household waste in Japan, which speaks to the need to make packaging more environmentally friendly.

We are working to develop packaging technologies with less environmental impact, aiming to establish sustainable patterns of production and consumption in society.

Contributions to the SDGs



Policies

We are working to reduce the environmental impact imposed by packaging with technology development from the perspective of the 4R's: Reduce, Renewable, Reuse, and Recycle. In terms of Reduce, our main initiatives are to make bottles thinner and make other packaging lighter weight. We are working to reducing the amount of packaging materials used by making products smaller, such as by concentrating products to make them more compact.

Our Renewable initiatives include converting petroleum-based resins to bioplastics derived from renewable plant sources, such as polylactic acid and bio-polyethylene.

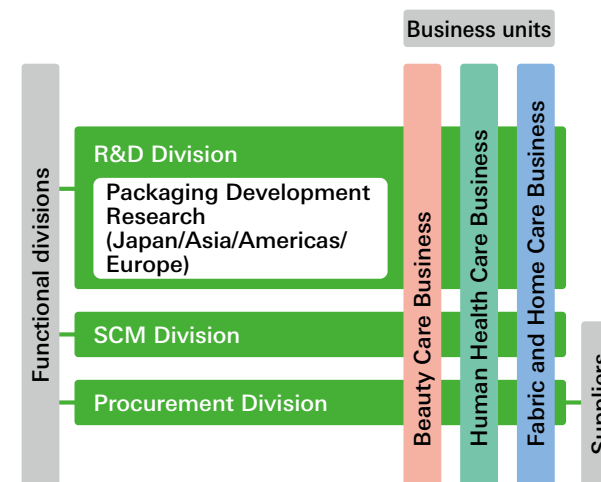
Initiatives for Reuse include proactive development of refill and replacement products to allow reuse of original packaging.

Finally, Recycle initiatives involve proactive efforts to introduce and use recycled materials, including recycled paper and resin.

Framework

These efforts are led by Packaging Development Research and promoted in cooperation with SCM Division members, related divisions, suppliers and other partners.

Packaging Development and Promotion Framework



*Organization names as of December 2017.

Education and promotion

To promote activities and understanding internally, Packaging Development Research holds packaging review meetings when new and improved products are launched. Members from relevant divisions including business units, the SCM Division and the Consumer Communication Center evaluate the environmental performance of the packaging. In 2017, we held packaging review meetings 70 times in Japan. We are also holding similar meetings at Kao Group companies outside Japan.

Collaboration with stakeholders

We participated in the 2017 Packaging Diet Campaign sponsored by a group of nine prefectures and cities in Japan, which promotes reducing the amount of waste and supports companies working to reduce packaging. To reduce packaging waste from households, the campaign introduces companies' efforts to slim down their packaging and the products involved, and encourages consumers to reduce their packaging waste. We have participated in the campaign every year since 2010.

Mid- to long-term targets and performance

Main initiatives

- Promote development of packaging that takes environmental impact into consideration
- Promote the 4R's in packaging

2018 targets

- Promote the use of environmentally-friendly packaging suited to the needs of the future
- Realize the efficient utilization of recycled plastic



Performance in 2017

Reduce

- The amount of resin used for the refill pack of the *Fragrance Newbeads Gel Spout Pouch 1.46 kg* was reduced by approximately 6%, by optimizing the height of the refill pouch without changing the volume
- The amount of paper used in the production of *Segreta Airy Styling Oil* was reduced by approximately 33%, by adopting heat shrink technology for the mounting paper board*
- Reduced the weight of the *Newbeads 850 g* cardboard carton by 5.6%

Renewable

- Blended 35% bio-polyethylene in the *CuCute Large Refill (7 Refills) Bottle*

Reuse

- The amount of plastic used for the packaging of *CuCute CLEAR Foam Spray* was reduced by 23% by introducing a new replacement bottle
- Adopted the Raku-raku Eco Pack Refill for the *Biore u* refill pouch
- Launched e-commerce online sales of *Smart Holders*, which directly hold Raku-raku Eco Pack Refill for use without using for refill

Recycle

- Adopted recycled PET in the packaging for *Quickle Wiper Wet Sheets*
- Blended 10% recycled PET in the shampoo and conditioner bottles for *Merit PYUAN* and *Essential Smart Style*

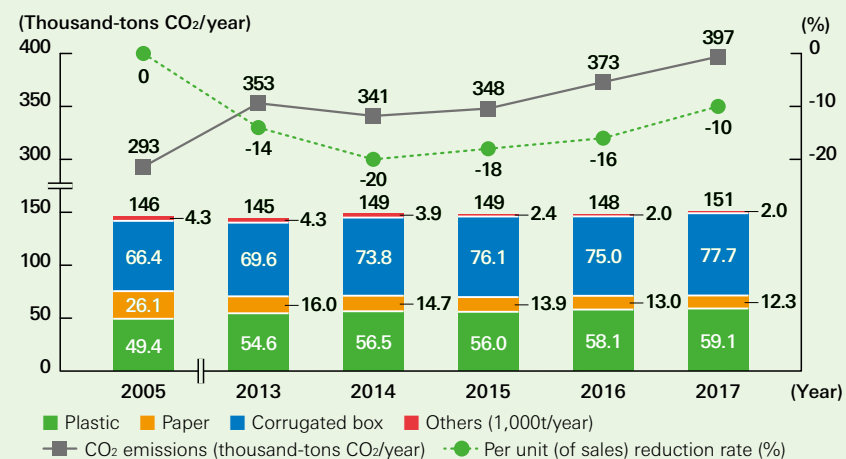
*Heat shrink technology for mounting paper board

Packaging that tightly wraps products in a film that shrinks when heat is applied and attaches the film to mounting paper board. Has excellent environmental performance with less use of resin and paper compared with the standard packaging used for molded plastic products (the blister pack).



→ More information on our new refill packaging and *Smart Holders* can be found at: p. 6 The Future of Packaging for a Comfortable and Eco-friendly Life

Volume of packaging materials used



*Boundary: Kao Corporation

*Per unit of sales is calculated based on Japanese standards up to fiscal 2015, and on International Financial Reporting Standards (IFRS) from fiscal 2016.

Our initiatives

Reduce: Reducing packaging materials

We are reducing the volume of the packaging materials we use through efforts including making bottles thinner and products more compact concentration. Reducing packaging materials reduces costs at the same time as it reduces environmental impact.

In 2017, there were 27 cases of reducing costs for packaging materials, which also reduced environmental impact. In total, these cases reduced annual CO₂ emissions by approximately 813 tons and saved approximately 120 million yen.

Renewable: Switching to renewable raw materials

In 2012, we began to switch petroleum-based plastic to bio-plastic that are renewable and have small environmental impact. The raw materials contained in introduced refill pouch at that time was changed about 10% by packaging weight from petroleum-based polyethylene to bio-polyethylene. The bio-polyethylene is made from renewable ethanol obtained by fermenting the waste residue remaining after producing sugar from intentionally cultivated sugar cane. This plastic has attracted attention due to its low environmental impact. The CO₂ emitted when the plastic is incinerated is considered as zero.

In the label for *Healthya Green Tea 350 ml* bottles, we adopted a shrink film containing more than 50% polylactic acid (PLA) made from corn.

In 2017, we newly switched to using bio-polyethylene for 35% of the *CuCute Large Refill (7 Refills) Bottle* by packaging weight. This can reduce the packaging's CO₂ emissions by about 25% over the previous packaging.

We will continue switching packaging materials to renewables such as bio-polyethylene and polylactic acid.



Large refill bottles that switched to using 35% bio-polyethylene by weight

Reuse: Promoting refill and replacement products

Since we introduced our first refill product in 1991, their number has continued to grow, and as of December 2017 the number of refill and replacement products reached 289. We have also continued to make improvements to these refill products according to bottle size, the viscosity of the contents and so on to make refilling easier for the consumer.

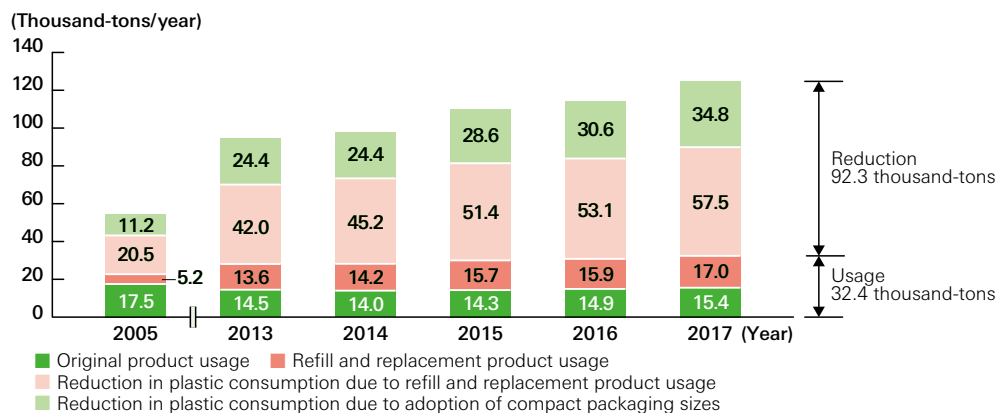
Since 1997, the ratio of refill products to unit sales has rapidly increased, and is currently at more than 80% (based on the number of units). For example, the refill ratio for fabric softener and fabric bleach now stands at more than 90%. All of the refill and replacement products sold in 2017 represent a reduction in plastic use of more than 58,000 tons compared to original packaging (products in plastic packaging), and slightly more than 90,000 tons when the effect of making products more compact is taken into account.

Based on this ongoing technology development incorporating the 4R's, the total amount of resin reduction since 2009, when the Kao Environmental Statement was released, is approximately 590,000 tons.

In 2017, we developed a new refill pack, Raku-raku Eco Pack Refill, that is both environmentally friendly and easy to use, and adopted it for various shampoo and conditioner products as well as *Biore U* body soap.

The Chemical Business Division is conducting a program to reuse sold product packaging (take back system) to reduce their environmental impact. In 2017, we collected and reused 18,130 one-ton packaging (IBC packaging) used by customer companies.

Usage and reduction volume of plastic in refill and replacement product categories



Recycle: Introducing recycled materials

We actively introduce and use recycled materials such as recycled paper and recycled resin. We have been using recycled paper in the carton boxes and instructional inserts of many products since the 1960s, including powder-type laundry detergent. The measuring spoon for *Attack* laundry detergent developed in 1987 uses 100% recycled resin. This has resulted in an annual CO₂ emissions reduction of approximately 2,800 tons.

The dry sheet fiber and wet sheet fiber used in the *Quickle Wiper* floor cleaning tool launched in 1994 use 100% recycled PET material. This represents an annual CO₂ emissions reduction of approximately 1,400 tons.

In 2017, we began using 80% recycled PET by weight in the PET resin blend for the *Quickle Wiper Wet Sheets* packaging.



Quickle Wiper Wet Sheets packaging with 80% recycled PET by weight in the PET resin blend

Product lifecycle and environmental impact

301-1,302-1,305-1,305-2,
305-3,305-7,306-1,306-2

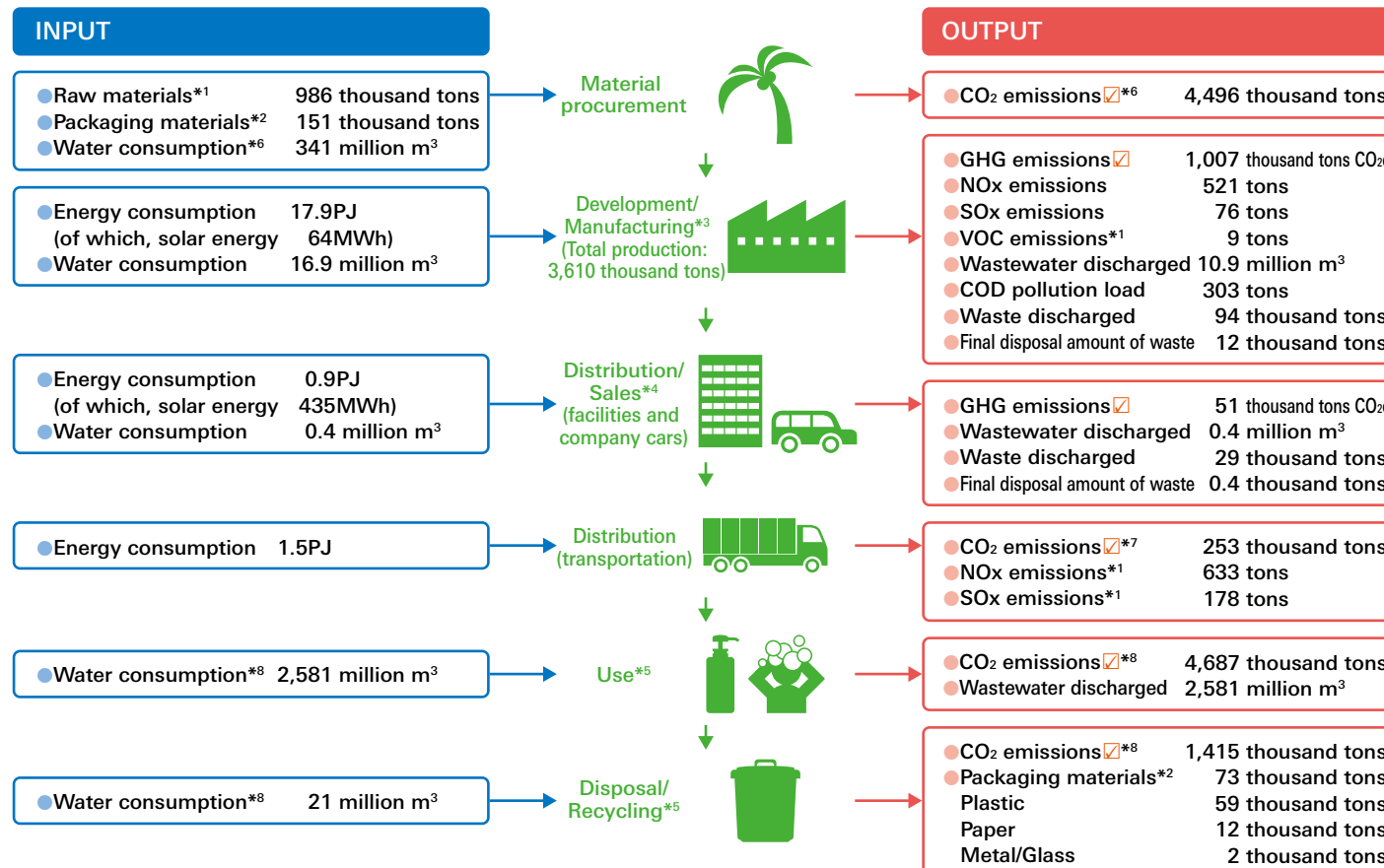
Kao's approach

Our initiatives

Kao's approach

Kao is pursuing efficient resource utilization across the product lifecycle, as well as technologies to achieve further resource and energy savings.

2017 business operations and environmental impact



Boundary of calculations

- *1 Kao Group in Japan
- *2 Kao Corporation
- *3 All production sites
- *4 All non-production sites (including training facilities, company dormitories, etc.)
- *5 Consumer products
- *6 Calculated by multiplying the per unit CO₂ emissions and water usage in the raw materials production stage (excluding Kao Group manufacturing processes) by the annual sales number of consumer and industrial products in 2017.
- *7 Consumer products and industrial products. Figures for Japan are calculated based on the Energy Conservation Act. Figures for outside Japan are calculated multiplying the per unit CO₂ emissions during transport (calculated based on figures for Japan) by the quantity sold in each country and the estimated domestic transport distance in each country.
- *8 Calculated by multiplying the per unit CO₂ emissions and water usage during use or per unit CO₂ emissions and water usage during disposal by the annual sales number of consumer products in 2017.

Conservation

Community

Corporate Culture

Governance

Product lifecycle and environmental impact

301-1,302-1,305-1,305-2,
305-3,305-7,306-1,306-2

Kao's approach

Our initiatives

INPUT

●Raw materials

The amount of raw materials directly used to manufacture products (excluding packaging materials and fuel)

●Packaging materials

The amount of packaging used for products sold (including corrugated box)

●Energy consumption [product development/manufacturing]

Total amount of energy consumed at manufacturing sites

●Energy consumption [distribution/sales (facilities and company cars)]

The amount of energy consumed at non-production sites and by vehicles (used for sales activities)

●Energy consumption [transportation]

The amount of energy consumed during transportation of consumer products (from plants to distribution bases), industrial products, raw materials, etc.

●Water consumption

Industrial water, municipal water, underground water, rainwater consumed

OUTPUT

●GHG emissions

Total amount of greenhouse gas emissions from sites (seven GHGs defined in the Kyoto Protocol) (in CO₂ equivalent, Scope 1+2)

●CO₂ emissions

The amount of CO₂ emitted from manufacturing raw materials, consuming energy and decomposition of ingredients

●Wastewater discharged

The amount of wastewater discharged at production sites and consumer product use stages

●COD pollution load

The amount of COD pollution load in wastewater

●Waste discharged and final disposal amount of waste

Of the waste generated from sites, the amount that is sold or entrusted as waste or recyclable materials to waste treatment companies, and the amount of waste for final disposal

●Packaging materials

Total amount of packaging materials (excluding corrugated box) used for products sold

●VOC emissions

Total amount of VOCs (volatile organic compounds) emitted into the atmosphere from production sites

●NO_x emissions

Total amount of NO_x emissions from smoke-and-soot-emitting facilities and transportation

●SO_x emissions

Total amount of SO_x emissions from smoke-and-soot-emitting facilities and transportation

Conservation

Community

Corporate Culture

Governance

Kao's approach

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

2017 environmental accounting report

- 1 The aggregation methods we use 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.
- 2 Boundary: Kao Corporation, Kao Group companies in Japan and Kao Group companies outside Japan with production sites.
- 3 See Product lifecycle and environmental impact for environmental conservation results (numerical results).



→ p. 71 Conservation > Product lifecycle and environmental impact

Environmental conservation costs (categories corresponding to business activities)

(Unit: millions of yen)

			Inside Japan		Outside Japan	
Categories		Key activities	Investment	Cost*	Investment	Cost*
(1) Business area costs			1,493	3,844	1,362	3,407
Breakdown	①Pollution prevention	Air pollution prevention, water contamination prevention	264	1,442	635	1,277
	②Global environmental conservation	Energy conservation	880	582	296	743
	③Resource circulation	Resource conservation, waste processing and disposal	349	1,820	431	1,387
(2) Upstream/downstream costs		Plant and equipment for eco-conscious products, packaging recycling	579	2,618	0	77
(3) Administration costs		Acquisition and maintenance of EMS certification, environmental publicity, tree planting within worksites	4	2,031	0	261
(4) R&D costs		Eco-conscious R&D	2,402	4,399	1	113
(5) Social activity costs		Nature and environmental conservation and tree-planting activities outside worksites, donations	7	134	14	11
(6) Environmental remediation costs			0	0	0	11
Total			4,485	13,026	1,377	3,880

Environmental conservation costs (categories corresponding to areas of environmental conservation measures) (Unit: millions of yen)

Categories	Key activities	Inside Japan		Outside Japan	
		Investment	Cost*	Investment	Cost*
①Cost related to global warming measures	Energy conservation	880	582	236	357
②Cost related to ozone layer protection measures	Switch to CFC alternatives	0	0	58	366
③Cost related to air quality conservation measures	Air pollution prevention, dust pollution prevention, malodor prevention	13	457	149	470
④Cost related to noise and vibration measures	Noise prevention	0	4	15	42
⑤Cost related to environmental conservation measures for aquatic, ground, and geologic environments	Water contamination prevention	251	981	472	755
⑥Cost related to waste and recycling measures	Resource conservation, industrial waste volume reductions, recycling	928	4,438	431	1,460
⑦Cost related to measures to reduce chemical risks and emissions	R&D on products and production	2,402	4,399	1	112
⑧Cost related to nature and environmental conservation	Nature and environmental conservation and tree-planting activities outside worksites, donations	7	133	15	77
⑨Other costs	Acquisition and maintenance of EMS certification, environmental publicity, tree-planting activities within worksites	4	2,032	0	241
Total		4,485	13,026	1,377	3,880

* Cost includes depreciation costs.

Economic effect associated with environmental conservation activities*1

(Unit: millions of yen)

Details of benefits		Inside Japan	Outside Japan
		Amount	Amount
Revenue	Sales value of valuable resources and fixed assets	539	231
Cost reductions*2	Reduction in costs through energy conservation	143	98
	Reduction in costs through resource conservation	873	1,432
	Reduction in operation costs (maintenance costs, etc. of eco-conscious equipment)	57	646
Total		1,612	2,407

*1 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.

*2 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.

2017 Our initiatives

Community

Product quality management	76
Universal Design	82
Communication with consumers	88
Communication with corporate customers	
Consumer Products Business	94
Chemical Business	98
Professional Service Business	103
Corporate citizenship activities	108

Kao's approach

As stated in the mission of Kao Group, we implement wholehearted *Yoki-Monozukuri* from a consumer and customer-driven perspective for the satisfaction and enrichment of the lives of people globally. In addition, we are striving to achieve high level of product safety for human and environment and pursuit continuous improvement in product quality at all stages of R&D, production, distribution and sales, while maintaining steadfastly a consumer- and customer-driven perspective in order to contribute to the sustainability of society.

Kao's creating value to address social issues

At the Kao Group, we are committed to delivering revolutionary products to satisfy the heart's desires of our customers, through exhaustive exploration of fundamental research and technology, product development and consumer needs. We will furthermore enhance development of products to solve social issues, such as the environment, health, aging and hygiene.

We also promote visualization of product quality management activities and communications of those activities with all stakeholders. Moreover, we facilitate changes for solving social issues through *Yoki-Monozukuri* based on trust and cooperation.

Policies

The foundation of the Kao Group's quality management activities is Kao's wholehearted commitment to consumer- and customer-driven *Yoki-Monozukuri* as expressed in the Group mission, the Kao Way. We have implemented consumer- and customer-driven quality management activities with the participation of all employees, in all phases from raw material procurement to R&D, production, distribution and sales.

Basic Policy for Quality Management Activities

- Consumers/customers decide on the quality of the products
- Providing products that users want to continue using
- Ensuring safe usage for consumers/customers
- Legal compliance
- Transparency and accountability

Product quality management 103-1,103-2,103-3

Kao's approach

Our initiatives

Framework

At the Kao Group, we have established a company-wide quality management system that involves all employees at all stages from product development to post sales, that is from R&D, marketing, production, distribution to sales in continuous improvement activities.

Before product launch, we adopt gate control to maintain the quality and to verify the evidence comprehensively at searching, development, commercialization and production stages, thus sufficiently ensuring our safety and quality standards.

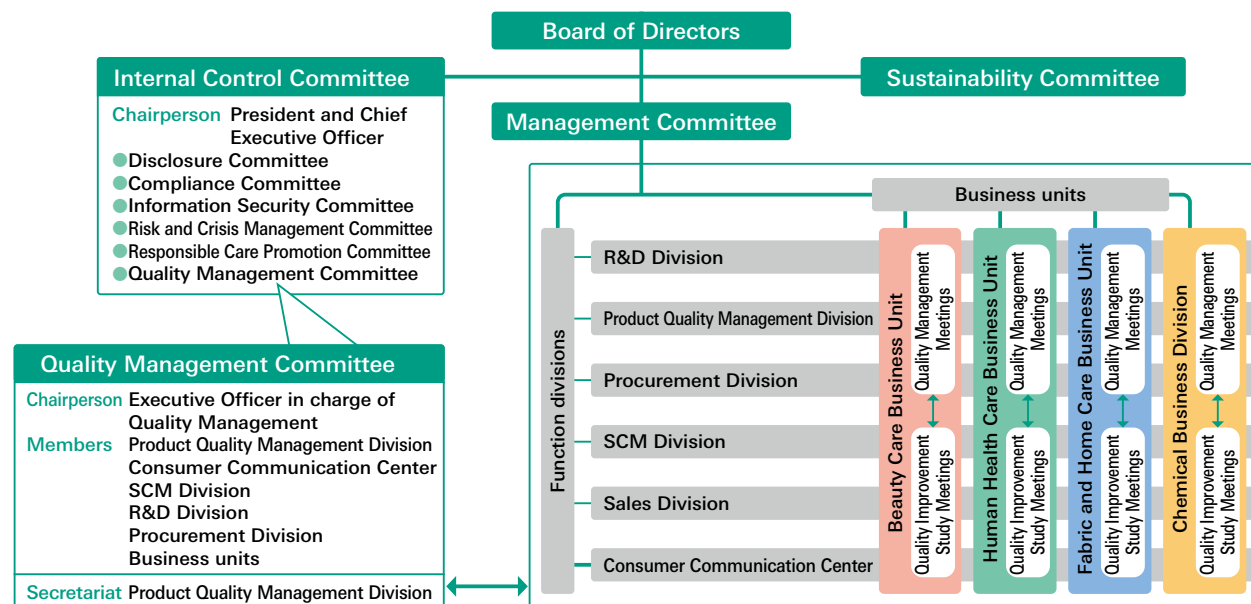
After product launch, we promote company-wide activities in pursuit of continuous product improvement and the sincere receipt of consumer and customer feedback. In these ways, we strive to be highly transparent with the public and to always fulfill our social responsibilities. In these ways, the Kao Group strives to achieve *Yoki-Monozukuri* every day. Nevertheless, the possibility of product quality issues occurring from unforeseen problems and accidents is not negligible. For this reason, we have set the Kao Group Emergency and Serious Issue Response System. The Kao Group companies both within and outside Japan respond to risk events based on this system.

Meanwhile, we also maintain a corporate governance system including internal control systems and hold the Quality Management Committee, which is a sub-body of the Internal

Control Committee with the President and CEO serving as a chairperson. At the Quality Management Committee, we confirm the efficacy and reliability group-wide quality management activities. Following the policies decided by Quality Management Committee, we hold Quality Management Meetings at respective business field level, confirm the quality management activities policy, product quality issues, and the progress of our quality management activities.

Furthermore, representatives of relevant divisions (business, manufacturing, research, consumer communications, product quality management, etc.) attend monthly Quality Improvement Study Meetings to improve products, information and services, based on consumer feedback. We will deploy these quality management activities globally. These group-wide activities are coordinated and promoted by the Product Quality Management Division.

Product Quality Management System



* As of December 2017.

Conservation

Community

Corporate Culture

Governance

Education and promotion

Through training and education, we make efforts to ensure that the Kao Way and the Kao Business Conduct Guidelines, which are fundamentals to quality management activities of the Kao Group, permeate all employees.

Moreover, we provide various education and awareness-raising initiatives as a part of our quality management activities. Quality Improvement Study Meetings ensure permeation of Kao quality management activities policy, including those outside Japan. At our manufacturing divisions, we raise awareness of consumer- and customer-driven product quality improvements through our unique QC circle activities, which use the number of consumer contacts as an index.

In addition, we actively educate employees on the matters of Good Manufacturing Practices (GMP) and various ISO standards. We present annual quality management awards for excellent activities to foster employee's motivation.

We have quality management meetings with contract manufacturers and raw materials suppliers as interconnected activities for consumer-driven quality improvement.

We will cooperate with more business partners for developing consumer-driven quality management activities.

Mid- to long-term targets and performance

Mid- to long-term targets

Kao Group has stipulated the following mid- to long-term targets regarding our quality management activities.

1. Strive for world-leading levels of product quality through our committed consumer- and customer-driven approach, applying our collective capabilities, and making full use of the Kao Group's assets.
2. Thoroughly instill integrity and deepen high-level and responsible risk management.
3. Take a strategic approach to globalization and informationization, and establish a quality management system that can accommodate e-commerce and new business domains.

Performance in 2017

We enhanced our quality management system to accommodate to such a change in the consumer goods market as cross-border expansion of product distribution by e-commerce and inbound tourism consumption.

Enhancement of services for Chinese customers

Kao has provided a subsidiary in China with examples of inquiries regarding the products, which are exported from Japan, to improve communication with customer. In 2017, Kao put up more information of the products available on cross-border e-commerce for Chinese customers.

Providing information on dangerous goods for air transport (dangerous goods classified by the UN)

In response to increased inquiries from our customers regarding transportation of purchased products to overseas, we began to release the information on the products classified as UN dangerous goods on Kao website in October 2017. It includes the information to deal with luggage and air cargo.



→ p. 92 Community > Communication with consumers / Providing information on the Kao website

Product quality management

Collaboration with Stakeholders

Making good use of customer feedback in *Yoki-Monozukuri*

We use customer feedback to improve our products and information and services of Kao Group by promptly sharing this feedback through the Kao ECHO System.



→ p. 89 Community > Communication with consumers / Framework

Actively engaged in industry initiatives

Kao Group actively participates in industry association around the world and works in international efforts on harmonization with national standards of product quality and safety, setting new standards and test methods, and management of chemical substances. By doing so, we strive to provide reliable products to customers around the world.

Kao's approach

Our initiatives

Conservation

Community

Corporate Culture

Governance

Our initiatives

Company-wide consumer- and customer-driven quality management activities

In order to quickly and widely deliver our cosmetics and other products to customers around the world, we are developing information systems that support product development, such as the regulatory check in each country. In 2017, we introduced this system to the Asia region.

We accumulate customer feedback in Kao ECHO System, which is our core information system for effective customer communication and consumer-oriented product development for realizing *Yoki-Monozukuri*. In 2017, we updated this ECHO system which is to consolidate customer feedback to the Kao Group all over the world.

We will continue to take advantage of the ECHO system to strengthen our quality improvement activities globally. We earnestly utilize customer feedback for product improvement. In the case of new *Blaune Hair Mascara*, we put feedback on the previous *Blaune Point Cover* into the improvement of formulation and container design. The container was reengineered not to be easily knocked down, spilled and splashed over.

In 2017, Japan Hair Color Industry Association revised a part of voluntary standards for cautionary statement on allergies. Accordingly we added supplementary instruction on package label and inserted instruction.



→ p. 89 Community > Communication with consumers / Framework

Verifying quality management activities through audits and self-checks

Furthermore, the Kao group companies in Japan, Asia, Americas and Europe maintain ISO 9001 and the GMP certification. Besides, we conduct external and internal audits, self-check for contract manufactures and raw material suppliers, and quality meetings.

In 2017, the implementation status of external audits to group companies in Japan, Asia, Americas and Europe during the previous year was reported in the Quality Management Committee.



→ Certification Status of ISO and Other Standards
<http://www.kao.com/global/en/sustainability/environment/activity-data/certification/>

In order to formulate audit areas from a broad perspective, we have leaders from relevant divisions participate in the Quality Audit Promotion Meeting. The audit area in 2017 decided by this Promotion Meeting was customer feedback collection in Asian countries. We have confirmed that customer feedback is properly handled and registered in overseas subsidiaries.

Product recall over the last 3 years*

Year	2015	2016	2017
Cases	0	0	0

*Product recall from consumers and the market with the company's announcement

Product quality management 416-1,416-2

Safety management across the product lifecycle

At the Kao Group, we ensure high level of product safety and quality so that our products can be used safely, securely and comfortably, through company-wide safety management following product launch in addition to each stage of R&D, commercialization of products, manufacturing and sales.

As to raw materials selection at the product development stage and product ingredients after product launch, we regularly collect information on legislation and safety inside and outside Japan. We take necessary measures by evaluating multifaceted perspectives from a wide scope of information from within the industry, and from NGOs/NPOs and others, taking into consideration scientific perspectives and social concerns.

In addition, we earnestly listen to all consumer feedback following product launch, confirm their specifics, and implement precise safety checks and safety management in collaboration with a network that includes medical professionals and governmental authorities.

We exchange the information with Kao Group supervisors in Europe, Americas, Asia to utilize the voice of consumers which received around the world, and facilitate improvements to our overall level of product safety from a global perspective.

Regarding our household products, cosmetics, and food products, we set safety standards aiming to ensure a high level of safety. This is because consumer's safety is always the highest priority.

The Kao Group established new product safety standard regarding our cosmetics in April 2014. Based on our standards prior to that, we have developed a much wider range of databases, wider use of tests and more detailed safety inspections.



→ Kao Safety Standards for Household Products
<http://www.kao.com/global/en/sustainability/safety-quality/kao-quality/houseware-quality/>

→ Kao Safety Standards for Cosmetic Products
<http://www.kao.com/global/en/sustainability/safety-quality/kao-quality/cosmetics-quality/>

→ Kao Safety Standards for Food Products
<http://www.kao.com/global/en/sustainability/safety-quality/kao-quality/food-quality/>

Kao's policy on animal testing

Global society is taking steps towards the abolition of animal testing and the Kao Group supports such endeavor.

In our development of cosmetics, we do not and will not conduct animal testing nor do we outsource this task to anyone.*1

For products other than cosmetics, our policy is to not conduct animal testing unless it cannot be avoided due to lack of availability of alternative methods, regulatory requirements or other similar reasons.*2

Ensuring the safety of our products is our utmost

Kao's approach

Our initiatives

priority and, in this regard, we have established and observe the Kao Group safety standards. In accordance with such standards, Kao widely collects safety data, makes use of its safety information database that contains the knowledge accumulated over many years and adopts alternative methods to animal testing as much as possible. After ensuring product safety through the above, we conduct further testing of the product in actual usage settings.

We have been working on the development of alternative methods to animal testing since the late 1980s. We believe that alternative methods should be official test methods that can be used globally. In this regard, Kao is actively working with research institutions globally for the development of alternative methods to be adopted as international guidelines. We are also a member of the project to develop alternative methods to animal testing of Cosmetics Europe. We will continue to proactively work on the development of alternative methods to animal testing in cooperation with industry associations, other companies and other related third parties globally.

*1 This excludes instances where we need to respond to societal expectations to evidence the safety of a product or when required to do so by government agencies in particular countries.

*2 If testing on animals is unavoidable, we keep such testing to a minimum following the principles of animal welfare of the 3Rs (Replacement, Reduction and Refinement).



→ Kao's Policy on Animal Testing
<http://www.kao.com/global/en/sustainability/safety-quality/animal-testing-policy/>

Kao's approach

While promoting the development of “user-friendly products” that are easy and safe to use for as many people as possible, we also aim to contribute to “social inclusion” through our products, fostering relationships between individuals and between individuals and society. Additionally, Kao strives for access to information, meeting the diverse needs of consumers.

Kao's creating value to address social issues

Recently, changes in demographic composition and lifestyles such as an aging society, more active participation by women in the workforce and other aspects of society, and more men participating in housework and childrearing, make consumer needs more diverse. In light of these circumstances, we aim to continually improve our products and services, based on consumer needs, so that anyone, from first-time Kao products' users to seniors who have been loyal Kao customers for many years, can enjoy a stress-free experience throughout every stage from the initial process of accessing product information, to purchase, use and disposal of our products.

Contributions to the SDGs



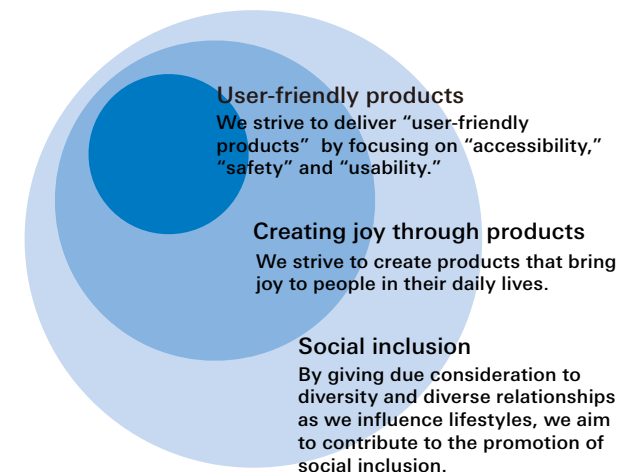
Policies

We at Kao strive to provide products and services imbued with user consideration and care, in line with our Universal Design (UD) Guidelines approach: “user-friendly products,” “creating joy through products,” and “social inclusion.” Our aim is for people of all age groups from infants to elderly people to use our products, so that we can play a greater role in fostering relationships between individuals, and between individuals and society.

Through sharing and spreading our UD Guidelines among all of our employees, who provide products to people of diverse values and cultures, we aim to further develop our business operations both within Japan and around the world, and create synergy.

In providing all people with products that are easy to use, we recognize a need to respond to diversity, and believe this helps us achieve the most basic philosophy of the SDGs, which is to “leave no one behind.”

Kao Universal Design Guidelines

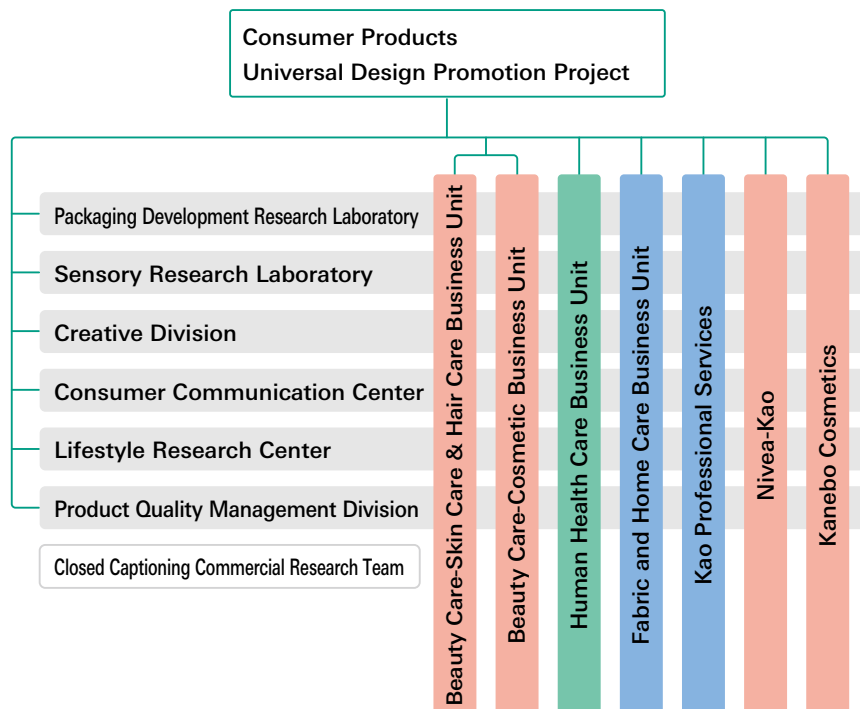


Framework

Under Kao UD Guidelines, our Consumer Communication Center, which features a customer consultation window that directly deals with customer requests and feedback, functions as a secretariat. Through our UD Promotion Project, the participants in which include related

departments and representative members of Kao Group companies within Japan, we strive to share improvement case examples among each of our divisions, and continuously improve products and information and services with our UD viewpoints.

Universal Design Promotion Project System



* As of December 2017.

Kao's approach

Our initiatives

Education and promotion

Workshops for Promoting Empathy with Elderly People

We hold Workshops for Development of Empathy with Elderly People, with the aim of helping our employees develop a greater sense of empathy with, and understanding of senior citizens. Staged using a mock single-family home, employees use equipment that gives them a virtual experience of what it is like for a person requiring Level 1 Nursing Care to perform daily activities such as housework.

By performing home living activities over half a day, employees are able to develop a better understanding of what it is like to be a senior citizen with any physical constraints. By actually using our products, participants are able to find issues relating to their usability and accessibility.

● Total of 98 employees participated in 9 workshops

Collaboration with stakeholders

- We engage in periodic information sharing with the Accessible Design Foundation of Japan.
- We continue to collaborate on Home Life, a voice-based magazine published by the Japan Braille Library.
- We participated in the development of a new product safety icons for the Japan Soap and Detergent Association.
- We offer support through the Kao Heart Pocket Club (Japan Blind Football Association NPO, etc.)

Mid- to long-term targets and performance

We promote the development of products that take diversity into account, as well as the development of related information.

Main initiatives

1. Continuous improvement of products from a UD perspective
2. Spreading information and making shopfronts best utilizing a UD perspective
3. Expanding *Yoki-Monozukuri* overseas under a UD perspective
4. Working to spread closed captioning TV commercials within Japan
 - Aiming to complete trial broadcastings in multi-sponsored programs
5. External UD awareness-raising activities

Continuing awareness activities outside the company (Education in the classroom <UD lesson>, lectures, seminars, etc.)

Performance in 2017

1. Continued improvement of products from a UD perspective

- Improvement implementation rate of new products and improved products, from a UD perspective
Japan: 82%, 791 items
Europe and the Americas: 39 %, 290 items
- Adopting Raku-raku Eco Pack Refill
In 2017, we also adopted and sold the pack for our body wash line.

2. External UD awareness-raising activities

- Holding a UD lesson for elementary school children (once)
- Holding a Seminar (once) and Events (three times)
- Holding special events introducing products useful for cancer patients in daily life (twice)

3. Initiatives to aid people with visual impairments

- Our employee volunteers narrated and provided lifestyle information for *Home Life*, a voice-based magazine published by the Japan Braille Library for its members (December)
- We introduced our products at the 49th Kyushu Blind Women's Leadership Workshop (July)

4. Working to spread closed captioning TV commercials within Japan

We have been promoting the airing of closed captioning TV commercials in regular broadcasts since 2011. So far, around 1,700 commercials (including commercials on the website) featuring closed captioning have been produced. Commercials that have not been broadcast on TV have been made available on the website.



→ Kao's Official YouTube channel
Commercials with closed captioning are available for viewing
<https://www.youtube.com/user/KaoJapan/>

Our initiatives

Expanding Raku-raku Eco Pack Refill

Starting with *Essential* products in January 2016, we introduced a Raku-raku Eco Pack Refill making even highly viscous products like shampoo and conditioner easy to refill, sequentially launching other shampoo and conditioner refill items.

Launch of body wash line

In response to a customer's voice that spillage always occurs when using body wash refills, and requests for refill packs similar to those for our shampoo lines, in July 2017 we released body wash refills (*Biore u* series) with the new refill packs.

When refilling, to prevent accidental mixing of our shampoos, conditioners and body washes, we changed the color of the caps on each product, and devised product identification methods such as notches for our shampoo caps and lines for our body wash caps that are easy to understand for people with visual impairments.

The *Smart Holder*, easier to use and friendlier to the environment

Furthermore, we have introduced the *Smart Holder*, which directly holds our Raku-raku Eco Pack Refill for use without refilling container for some of our products (as of April 2018). By inserting a refill pack directly into the holder, the pack can be used as a

hygienic replacement container until it is used up.

The *Smart Holder* allows refill packs to be easily replaced, and with repeated use, decreases the amount resin used for containers. We are working to make the *Smart Holder* available for more items in the future.



Raku-raku Eco Pack Refill, making products distinguishable by cap color and notches



→ More information on our new refill packaging and *Smart Holders* can be found at: p. 6 The Future of Packaging for a Comfortable and Eco-friendly Life



Raku-raku Eco Pack Refill and other products received a WorldStar Award

Our Raku-raku Eco Pack Refill was awarded a WorldStar Award at part of a packaging contest held in Düsseldorf, Germany by the World Packaging Organization (WPO).

The WorldStar Awards is the world's most prestigious packaging contest, having been held annually since 1970.



Product development personnel with joy by receiving the prestigious award

Universal Design

CuCute CLEAR Foam Spray, widely supported for reducing housework burdens

CuCute CLEAR Foam Spray, first launched in September 2016, is a new type of dishwashing detergent with a powerful foam spray that removes dish residue that is hard to wash with a sponge.

After its launch, we received a great deal of feedback from our customers with comments such as: “The spray’s foam is very powerful, even reaching between crevices. My child enjoys using it and now actively takes out the lunch box for me;” “It’s convenient for washing nursing care cups with straws” and “it’s easy to use because it doesn’t need a sponge.”

Moreover, we received favorable feedback from people experiencing inconveniences from illness such as: “Although anticancer drug treatment have worsened the condition of my nails and fingers, I’m able to wash dishes with this. Because I had been unable to perform everyday tasks after I became sick up until now, I felt depressed by this inconvenience. So when I first used the spray I almost cried;” “My daughter who became partially paralyzed due to a cerebral hemorrhage was able to wash dishes with this product using only her left hand. I’m now able to ask her to help me with the dishes. This has made us very happy.”



Just spray and rinse with CuCute CLEAR Foam Spray to remove residue from dishes

Kao products introduced at the 49th Kyushu Blind Women’s Leadership Workshop

At the 49th Kyushu Blind Women’s Leadership Workshop held in Nagasaki Prefecture on July 30, 2017, we introduced products and universal design concepts for the people with visual impairments, such as consumer products with braille labels and products useful in the event of a disaster, as part of a theme to “improve daily life.”

Additionally, participants used environmentally friendly and simple to use new refill packaging to refill shampoos that were often prone to spillage.

During this hands-on new refill packaging session, participants voiced their thoughts such as, “Until now, sometimes refilling would lead to spills, and this was unfortunate, but these are very easy to use,” and when introducing our products useful in the event of a disaster, “These body wipe sheets are very convenient. I want use.”

During the workshop, participants shared stories of their experiences during the Kumamoto earthquake disaster and exchanged thoughts regarding disaster prevention.

Kao’s approach

Our initiatives

All of us were able to feel a new sense of appreciation toward a desire to make products that can stay closer besides people even in an event of emergency, as stated in “social inclusion” of our UD Guidelines.



Participants confirm the line display on our body wash cap during the refill trial

Conservation

Community

Corporate Culture

Governance

Contributing to the development of new safety icons for consumer products

The Japan Soap and Detergent Association (JSDA), to make warnings more effective and easier to understand for consumers, developed new safety icons (10 types) for consumer products and published in June 2017. Employees from the Product Quality Management Division, Fabric and Home Care Business Unit, R&D Division, Consumer Communication Center, and other departments from our company participated in Safety Labeling Working Group established within the Japan Soap and Detergent Association in 2014 (with Kao Corporation as a leader), contributing to the development.

These new safety icons, which are under consideration for overseas expansion, were designed based on ISO 3864-3: 2012 (Design principles for graphical symbols for use in safety signs) and JIS S 0101: 2000, and conforming to JIS S 0102: 2000 (Testing Procedure for Graphical Warning Symbols for Consumers), passed the consumer comprehension and visibility test, making it easy for consumers to identify and understand.

Regarding its use, application, etc. the Japan Soap and Detergent Association established a voluntary standard (guideline). Likewise, these icons were adopted by Japan Detergent and Bleach Safety Advisory Council, who also established and published a voluntary standard.

We will also sequentially apply these safety icons to labels on our consumer products released from 2018. And we will make efforts for consumers to become more familiar with them by a variety of campaigns.

Newly developed JSDA safety icons *The following warning statements are examples

Prohibition



Keep away from children



Keep away from eyes



Do not ingest



Do not change container to store contents



Do not mix with other products

Mandatory Action



Rinse hands thoroughly after use



Wear protective gloves



Wear protective gloves and a mask



Use only in a well-ventilated area



Rinse eyes thoroughly with water

Kao's approach

Kao continue to use close, in-depth communication with consumers to ensure that customers' feedback can be utilized effectively to enhance *Yoki-Monozukuri* and the services that we offer, while providing essential lifestyle information to consumers of all ages. In aging populations, steadily increasing levels of digitalization, and continuing globalization, the question of how best to interact with consumers has become a vitally important issue when deciding on consumer communication strategies. Kao adopts a forward-looking response to changes in our consumers' living environments and the accelerating digitalization of communication methods, and we will continue to proactively develop new measures in this area.

Kao's creating value to address social issues

The changes taking place in society are very much reflected in our communication with consumers. For example, the number of inquiries about our products from senior citizens has steadily increased. At the same time, the use of social networking services (SNS) for communication purposes has become increasingly common, particularly among younger people, and a wide range of information is now being exchanged via SNS. In addition, the increase over the past few years in consumption by foreign tourists visiting Japan is having a new impact on society.

In this kind of society, it is easy for information gaps to emerge between consumers and business enterprises; it becomes more and more difficult for consumers to make reasoned decisions based on their own knowledge.

We believe that by endeavoring to provide consumers with fair, accurate and easily understood information, we can help consumers engage in ethical, environmentally friendly consumption behavior.

At our consumer consultation desk inside our

Consumer Communication Center, we take feedback from our consumers seriously in support of *Yoki-Monozukuri* from a consumer-driven point of view. In order to provide service to everyone, we set up a consultation desk for sign language, taking into account with people with hearing impairments. For people with visual impairments, we have added descriptive text to the images and tables in our product catalog on the Kao website that can be read audibly with speech reading software.

To facilitate communication with a wide range of consumers, we are working to diversify the channels through which we communicate with consumers, by strengthening active support using SNS (Yahoo! Chiebukuro), among other ways.

Contributions to the SDGs



Policies

The Consumer Communication Center serves as our contact point with consumers, to not only respond helpfully to specific comments and requests

submitted by consumers in an accurate, quick and courteous manner, but also to gain a well-developed understanding of actual usage situations through our customer's concerns and lifestyle habits, and of feelings as a person.

Declaration of Consumer-orientation

In January 2017, we announced Declaration of Consumer-orientation. Under the Kao Group philosophy, the Kao Way, we will promote our top management's commitments to all of our employees, ensuring corporate governance as well as achieving customer satisfaction. Moreover, with all of our employees taking part in *Yoki-Monozukuri* to provide products and brands useful to the sustainability of society, we take customer feedback seriously, utilizing it to improve our products and services, and proclaim that we will provide information from the point of view of our customers in addition to actively engaging with customers.



→ Declaration of Consumer-orientation
<http://www.kao.com/jp/corporate/sustainability/declaration/customer-first/> (Japanese)

Framework

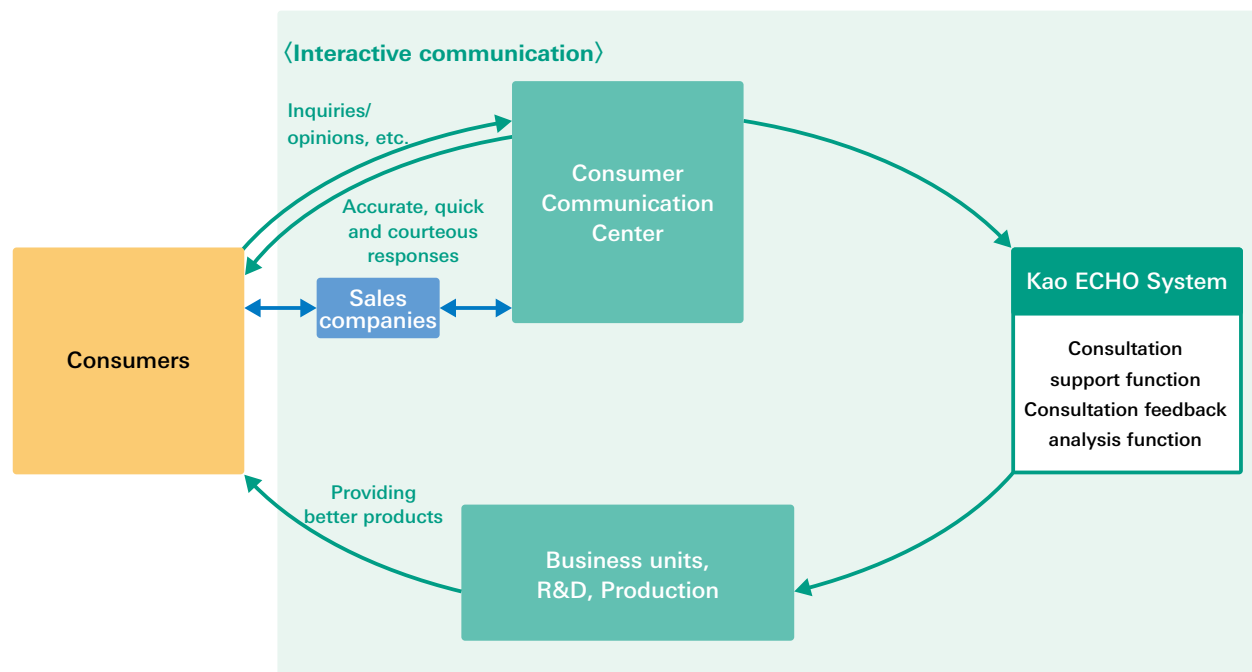
We developed the Kao ECHO System database in 1978. This system, which has been upgraded since then, serves as a bridge for effective communication between consumers and us, and provides a foundation for our entire company to share and utilize consumer feedback.

The database stores a wide range of information on all Kao products, ranging from basic product information, including product improvement history, to daily lifestyle related information. By accessing this information, staff at the Consumer Communication

Center can respond to inquiries from consumers in a prompt and appropriate manner. In addition, while taking suitable measures to protect personal information, the system compiles a list of all consumer inquiries received each day and makes this data available to all divisions.

Related divisions are able to make effective use of this system by analyzing inquiry trends by product category, using these results in product development, marketing and quality improvement activities, and so on.

Framework to reflect consumer feedback in products



Education and promotion

- To further enhance our capability to respond to consumer inquiries, besides implementing periodic assessments of our consumer inquiry response ability, we also work actively to create training opportunities by, for example, arranging for external instructors to provide training for employees, and by encouraging employees to make use of external training providers.
- In order to better understand our consumers' viewpoints, we hold training sessions in each division, in order to put them toward business use. In 2017, following in continuation from the SCM Division of the previous year, we held training sessions in our Functional Division and Sales Division, among other departments worked together in customer correspondence. Employees that underwent the training realized that daily consultation at the window is a form of catch ball to get to the heart of customer matters, and that by hearing customers' real voices, they were able to better grasp their feelings and thoughts, as well as events occurring in their real lives.
- To help ensure appropriate, timely response to consumer inquiries based on the Kao Way, we carefully monitor consumer communication activities in countries throughout Asia, using the daily exchange of information by means of e-mails and telephone calls, as well as regular web conference meetings, to share consumer communication response processes and criteria.
- Once a year, we hold a conference that brings together staff from all over Asia responsible for consumer communication. Besides deepening their understanding of the Kao Group policy for consumer communication, this annual meeting also contributes to them provide opportunities for the enhancement of consumer communication skills, and facilitates the implementation of activities that are global in scope, by providing a venue for the lateral sharing of information about consumer communication content and *Yoki-Monozukuri* in different countries.

Mid- to long-term targets and performance

Mid- to long-term targets

While collaborating closely with our partner companies, we are striving to enhance the overall level of our advantageous consumer- and customer-driven approach and of the capabilities of frontline operations (*genba*) and our total strength, which together constitute an integrated system, so as to accelerate the implementation of our business strategy. To this end, we are committed to the continuing exchange of information with consumers in our role as a trusted

partner for consumers, and will provide consumers with optimal solutions for their problems, wherever and whenever they need our help.

By promoting effective communication with consumers, we can identify risks at an early stage and take appropriate, timely action to deal with them, while also using the collection and analysis of customer feedback to invigorate the Kao Group's *Yoki-Monozukuri*.

Main initiatives related to consumer communication

1. Answering consumer inquiries by means such as telephone or e-mail
2. Providing practical information on our website
3. Providing active support for questions posted via SNS (Yahoo! Chiebukuro)
4. Exchanging information with consumer groups and with government agencies responsible for consumer affairs
5. Implementation of exchange activities involving consumer-oriented events

Performance in 2017

1. Answering consumer inquiries by means such as telephone or e-mail (Global)

Working together in 2017, Kao Corporation, Nivea-Kao Co., Ltd., and Kanebo Cosmetics Inc. answered around 220,000 consumer inquiries received via telephone and e-mail in Japan (equivalent to 99% of the previous year's total). In Japan, there has been an increase in inquiries from the elderly regarding product differences and usage, especially from older men, reflecting Japan's aging society. People aged 60 or above now account for around 40% of all inquiries received.

Outside Japan, we make effective use of the Global ECHO System to ensure effective implementation of our quality management activities.

2. Providing practical information on the Kao website (Japan)

Product information for our products can be viewed online on the Kao website using the online Kao product catalog. Our product catalog website displays not only product images and details of the product features, but also basic information displayed on product packaging labels, including product components, acidity/alkalinity, usage, and other important notice. Information for all regular Kao products sold in Japan can now be viewed online.

3. Providing active support for questions posted via SNS (Japan)

On Yahoo! Chiebukuro (Japan's largest knowledgesharing community service), under the username "kao_official," Kao Official Support began providing answers to consumers' questions posted to the service beginning July 2015. In 2017, an estimated total 2,200 questions were answered. One of the key features of social media is that questions and responses stay on the feed and can be read not only by the person who made the original query, but also by many others with similar issues, thereby contributing to the wider dissemination of accurate information.

Collaboration with stakeholders

Exchanging information with consumer groups and with government agencies responsible for consumer affairs

We have invited consumer group members to visit our plants and museums, and encouraged sharing of ideas.

Implementation of exchange activities involving consumer-oriented events

We continue to participate in Children's Day for Visiting Kasumigaseki and the Sumida Consumer Lifestyles Exhibition, in response to requests from governmental agencies, and we offer a wide range of information.

Evaluating communication with consumers

To verify whether our communication with consumers is satisfactory, we implement regular consumer surveys regarding our consumer communication.

In 2017, we asked consumers to assess the quality of how we answered inquiries by either telephone or e-mail, and their level of satisfaction. The results showed that around 90% of consumers were satisfied with our answers.

We will be using the evaluation comments that we received from consumers to realize further improvements in our handling of customer inquiries, and we will be working to achieve even higher levels of customer satisfaction.

Our initiatives

Providing information on the Kao website

All regular product information displayed on Kao's website

Our product catalog website takes strides to not only display product images and product feature details, but also basic information shown on product packaging labels, including product components, acidity/alkalinity, usage and other important points. Information for all regular Kao products sold in Japan can now be viewed online.

To accompany the display of product packaging label information, text has been added to images to make it possible for people with visual impairments to listen to the information using speech reading software.

Providing information on dangerous goods for air transport (dangerous goods classified by the UN)

Inquiries such as "I'd like to send this item to a friend or acquaintance overseas, but is that okay?" regarding overseas transport via aircraft have increased. In 2017, we posted the "Warning When Sending the Product by Air" online so that consumers can confirm necessary information when shipping Kao products overseas.

We posted the "Warning When Sending the Product by Air" in correspondence with dangerous goods for air transport (dangerous goods classified by the United Nations), and we display more details and contact information when clicked the link.

Example on our product catalog website (Japanese only)

ビオレ UV ささらブライトミルク SPF50+



毛穴・凹凸・くすみもカバーするUVミルク。
強力紫外線から肌をしっかり守り、日やけによるシミ・ソバカスを防ぎます。
汗・水に強いスーパーウォータープルーフタイプ。(80分間にわたる耐水試験で確認済み)
紫外線カット効果が長続きします。
透明UVカットパウダー(超微粒子酸化亜鉛)配合。白くなりません。
ヒアルロン酸(保湿成分)配合。日差しや冷房で乾燥しがちな肌にうるおいを与えます。
さらさらパウダー配合。汗をかいても素肌さらさら。光補正パウダー配合で肌色を明るく整えて、肌の凹凸や毛穴・くすみをカバー。
化粧下地効果で化粧くずれを防ぎます。
落とすときは、メイク落としなどでよく洗ってください。

- ◆SPF50+ / PA++++
- ◆無香料

【日やけ止め(顔用)】

30ml

- ▼製品特長
- ▼成分・使い方・ご注意など
- ▼紫外線防止剤の種類
- ▼製品を航空便で送る際のご注意

Warning When Sending the Product by Air

製品を航空便で送る際のご注意

- 本品は、航空法で定める航空危険物に該当します。
- 輸送業者(郵便局など)に発送を依頼する場合は、この製品が航空危険物に該当することをお伝えください。
- 輸送業者から、製品に関する詳しい情報を求められた場合は、花王 消費者相談室まで、お問い合わせください。
メール: お問い合わせフォーム
お電話: 0120-165-692
受付時間 9:00~17:00 (土曜・日曜・祝日を除く)



➔ Inquiry "I'd like to send this item by air, but does it fall under the dangerous goods for air transport category?"
http://www.kao.com/jp/soudan/topics/topics_103.html
(Japanese)

Participation in the operation of the Welcome Baby Project—Diaper Vending Machine

Through our products, we help solve various problems that consumers have. In addition, we actively work with local communities, administrative agencies, and NGOs/NPOs to solve problems that we cannot approach directly through our business.

Comachiplus is a specified nonprofit organization that suggests various businesses in order to create a society where childbirth is welcomed and child-raising is not done alone. In a workshop organized by Comachiplus which brought together people raising children, local governments and companies, those raising children offered comments that, "It would be convenient if it were possible to, instead of buying a whole pack at a store, purchase a small amount of disposable diapers from a vending machine for when we forget one." So, Comachiplus started a project to sell disposable *Merries* children's diapers with drinks by using Tokyo Kirin Beverage Service Corporation vending machines. Our related departments worked with Comachiplus to install this vending machine at a diaper changing area in a store in Totsuka Ward, Yokohama City.

Putting two of each *Merries* medium and large nappy pants diapers in together, we set out a plastic bag for used diapers, and this effort was generated from listening to voices of those involved in child care. News about the set-up of this vending machine was quickly picked up by media outlets and garnered many reactions. We have also received requests to install this type of vending machines in other areas.

Creation of pattern language* that compiles tricks for balancing childcare and work

We study each consumers' thoughts and lifestyles, engaging in consumer research in an effort to catch any signs of change as soon as possible.

From an interview conducted with working women between 20 and 30 years of age, we felt that despite their desire to keep working, many women were afraid that they could not meet the expectations of their peers, and had given up trying to find a balance between their work and private lives. In order to support being able to work in their own way, we created *Ways of Everyday World-Making: Living well while Working and Parenting* with pattern language, through joint research with Keio University's Iba Laboratory. It compiles tricks for balancing childcare and work into 34 short phrases, and we conduct workshops using this pattern language within and outside our company.

In addition to participating the Japan Society of Home Economics's annual convention as well as the 2017 PURPLSOC World Conference held in Austria, we have also presented at seminars for job seekers at HelloWork in Ryugasaki, Ibaraki Prefecture.

Reflecting on working lifestyles, along with providing opportunities to find positive work hints for tomorrow, we would like to hear voices from working people and think with consumers about how to better improve "working lifestyles" for tomorrow.

Ways of Everyday World-Making: Living well while Working and Parenting can be downloaded from our Lifestyle Research Center's Lifestyle Research website.



→ Lifestyle Research Center's Lifestyle Research website
<http://www.kao.co.jp/lifei/> (Japanese)



Ways of Everyday World-Making: Living well while Working and Parenting

*Pattern language

The method of knowledge application advocated by architect Christopher Alexander. It describes practical knowledge on how to best solve problems arising in certain situations.

In our Consumer Products Business, Chemical Business and Professional Service Business, Kao engages in in-depth communication with corporate customers; this communication helps Kao to improve existing products, develop new products, and enhance service quality.

Kao's approach

Kao Group Customer Marketing Co., Ltd. (KCMK) functions as the sales company for the Kao Group, and in tandem with retailers, delivers consumers Kao products and the value we provide. We possess expert knowledge of consumers and retailers which are our customers, and we strive to earn the trust and support of both consumers and retailers by aiming "the No. 1 company in customer satisfaction."

Kao's creating value to address social issues

KCMK views such social changes, to be responded promptly, as the emergence and spread of new retailing models such as e-commerce, the diversification of consumer lifestyles and shopping options, the rise in environmental awareness and health-consciousness, and the aging of the population.

We aim to not only respond to these changes, but also to predict future changes and respond to them in advance.

Policies

Kao implements measures aimed at stimulating the emergence of new market segments and revitalizing existing markets. Besides the implementation of various types of surveys and research to develop a clear picture of consumers' purchasing attitudes and purchasing behavior, and the adoption of a consumer-focused perspective in the development of sales floor and planning activities. We also make proactive efforts to learn about retailers' strategies and problems to be solved so as to build stronger relationships of trust with them, and submit customized, integrated proposals that incorporate measures to improve the efficiency of the supply chain.

Contributions to the SDGs

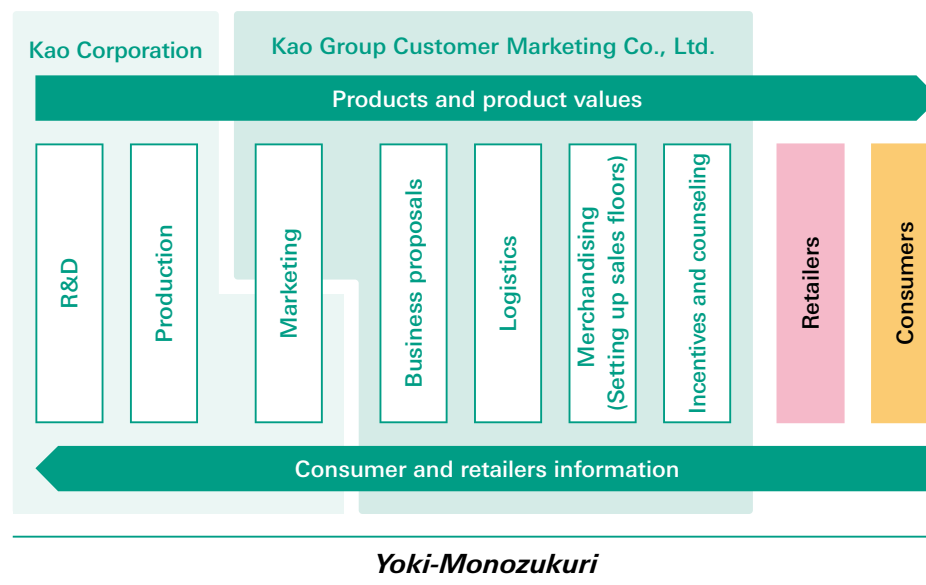


Framework

By making the entire process, from R&D through to the delivery of finished products into the consumer's hands, one that is seamless and integrated, we have been able to perfect a system in which the information available to us is unmatched, in terms of quality, quantity or relay response, by competitors.

Our *Yoki-Monozukuri* is not considered complete until the product has been delivered to the consumer, and until the consumer has used the product and been satisfied with it. To help ensure that at sales floors, linking Kao products with consumers, the value Kao products is effectively communicated to consumers, KCMK provide, KCMK provides retailers with suggestions, tailored to the characteristics and needs of each retailer, regarding displays, in-store demonstrations, promotional methods, incentives/counseling methods, etc., and promotes implementation of these suggestions through collaboration with retailers.

Consumer Products Business— communication framework



Education and promotion

Sales floor proposals education and promotion based on a customer-focused perspective

KCMK has a dedicated division focused on research into consumer-focused sales floor configurations and the development of a scientific approach to promotional methods, together with the establishment of related know-how. Moreover, this established know-how has been developed into standardized materials and IT tools, which are proactively utilized when offering proposals to retailers.

Fostering the creation of shopper-friendly in-store displays

Kao Field Marketing Co., Ltd. (KFM) was established in 2001 for the purpose of providing retailers follow-up and sales promotion services for daily necessities and cosmetics. KFM employs a large number of personnel in the implementation of these activities. Besides the rapid and precise implementation of in-store displays that enable shoppers to “easily find what they are looking for, easily pick it up and conveniently purchase it,” KFM staff also aims to communicate the special features and appeal of Kao products to consumers who are unsure of which product to choose.

To facilitate these efforts, KFM carries out detailed trainings to help personnel learn how to arrange Kao products and design in-store displays to suit today's constantly changing consumer needs, and in order to achieve continued skill-enhancement, tests (including both written and practical tests) are held twice a year.

Education to maximize customer satisfaction with our cosmetics

Beauty advisors who come into direct contact with consumers in retail stores undergo regular training on counseling skills and product knowledge, enabling them to maximize customer satisfaction through providing counseling from a consumer-focused perspective.

Furthermore, to further highlight the vision of each brand, *Kanebo Cosmetics* and *Sofina*, and more clearly communicate their own uniqueness and value, Kanebo Beauty Counseling Co., Ltd. (KBC) and Sofina Beauty Counseling Co., Ltd. (SBC) were established in January 2018.

Mid- to long-term targets and performance

Looking ahead to 2020, we aim to be “the No.1 company in customer satisfaction” by enhancing the overall level of the proposals we provide to retailers, through integrating the sales functions of Kao and Kanebo Cosmetics, implementing sales floor proposals and communication from a consumer-focused perspective, and sharing and disseminating sales floor arrangement know-how in perspective of consumer in Asia.

Performance in 2017

1. Enhancement of proposals for retailers through integration of Kao and Kanebo Cosmetics sales functions

In order to enhance the overall level of proposals for retailers, starting from 2016, we further integrated the sales functions of Kao and Kanebo Cosmetics into KCMK. In 2017, we integrated eight branch offices of Kao and Kanebo Cosmetics sales functions nationwide, preparing for the integration of all branches in 2018.

2. Sales floor proposals and communication from a consumer-focused perspective

Focusing on consumer consumption behavior shifting from the consumption of goods to experience-based intangible consumption, in addition to offering traditional lifestyle sales floor proposals, we made proposals for a Trial & Travel Counter centered on consumer experiences and seasonal events and developed a product display that appeals to customers' five senses. By exchanging views with retailers, the sales floors are evolving for the better.

3. Expanding retail support activity in Asia

- When it comes to cross-border e-commerce, we are promoting strategic initiatives, such as active proposal-making for major retailers in each country's marketplace, strengthening retail systems, and more.
- Focusing on global retailers trend, viewing such changing needs including differentiating products with the sale of limited items, and omni-channelization as opportunities, and working closely between retail organizations in each country and the Japanese head office, we are conducting global proposal activities.
- We have begun building a global retail personnel training program system. From January 2018, we began implementing an exchange program* in each country.

*A human resource development program that provides employees with the opportunity to learn about differences in sales activity in each region by switching work places for a certain period of time.

Collaboration with stakeholders

Manufacturing, Distribution and Retail Joint Forum

The Manufacturing, Distribution and Retail Joint Forum is established with the aim of realizing improvements in supply chain management, enhancing industrial competitiveness, and contributing to the enrichment of citizen's lifestyles, by fostering closer integration between firms in the consumer goods manufacturing, distribution and wholesaling, and retailing sectors. (Sponsors: The Distribution Systems Research Institute (DSRI) and the Distribution Economics Institute of Japan). As the Kao Group, we have been participating in the forum since its establishment in 2011, proactively offering our views.

In 2017, we served as chairman of the “Multilingual Product Information Feasibility Study Project,” considering multilingual product information displays for non-Japanese visitors and residents. For this project, we began developing a data pool of product information to develop an application to display product information in multiple languages, by scanning the product's barcode at shop fronts using a smart phone. Additionally, Chinese customers visiting Japan used this application in actual stores, followed by answering a questionnaire that we reported the results of at the general meeting held in July.



→ Manufacturing, Distribution and Retail Joint Forum
[http://www.dsri.jp/forum/index.html\(Japanese\)](http://www.dsri.jp/forum/index.html(Japanese))

Our initiatives

Biannual spring and fall Collaboration Fair

KCMK holds the Collaboration Fair, where we invite domestic and overseas retailers to experience and get a feel for our products, most new, and gain a greater understanding of their value. Until now, it had only been held in Tokyo during spring, but in 2017 we also held it in the fall, setting up a venue in Osaka.

Approximately 2,000 customers visited both the Collaboration Fair held during spring in May, and during fall in November. Following trial usage of our products that incorporate Kao's highly effective and original technologies, at the Fair, we received many understandings and empathetic responses toward our group's unified proposal power.



Attack Neo Antibacterial EX series demonstration



Collaboration Fair 2017

Kao's approach

Kao aims to make a positive contribution to society by creating eco-chemical products that provide real value, and by sharing the benefits from this reduced environmental impact with our customers.

Kao's creating value to address social issues

As a result of population increase and economic growth, environmental pollution is steadily becoming a more serious problem throughout the world, and environmental problems are particularly becoming serious in emerging economies. In response to these issues, reducing the environmental impact of business activities has emerged as an important concept for the chemical industry. We are focusing on reducing the environmental impact both at our own product manufacturing operations and related to the use of our chemical products by our corporate customers.

Emphasizing the two axes of Green Innovation and Eco Technological Solutions, we are contributing to the sustainability of society through technology innovation by implementing measures to reduce environmental impact.

Green Innovation

Green Innovation involves creating materials that are competitive yet have a low environmental impact.

More specifically, we draw on our strengths and carry out global investment to increase our offerings of natural fats and oils derivatives with high added value. In addition, we will further cultivate the upstream and downstream domains for these derivatives.

For example, we are making use of non-edible raw materials in an effort to resolve the significant social issue of food shortages. We are also focusing on downstream raw material development, one of our areas of expertise, that uses biomass materials in place of fossil materials.

Eco Technological Solutions

We ascertain customer needs and issues from the perspective of reducing environmental impact, and provide solutions that boost customer value through groundbreaking product development.

Product examples

- *Lunajet* water-based inkjet ink
- Low-temperature fixing toner
- *Visco Top* high-performance specialty thickener



→ p. 101 Our initiatives: Kao products that contribute to the conservation of the environment globally

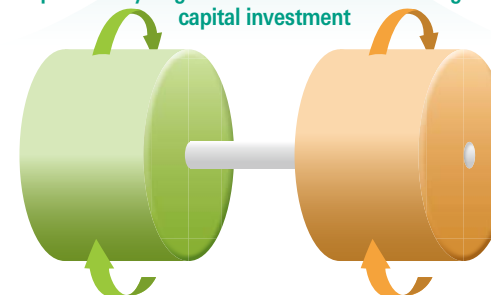
Contributions to the SDGs



Green Innovation and Eco Technological Solutions

Contribute to a sustainable society through technological innovations

Establish "green innovation" and "eco technological solutions" as the two wheels of the Chemical Business, drawing on core technologies while actively conducting M&A transactions involving technologies that complement and produce synergies with these core technologies and capital investment



Green innovation

- Shift to in-house production for raw materials that represent Kao strengths
- Boost competitiveness to expand globally

Eco technological solutions

- Ascertain customer needs and resolve issues
- Develop groundbreaking new products

Policies

By selling eco-chemical products, we contribute to the sustainability of society through technology innovation.

We continue to enhance *Yoki-Monozukuri*, contributing to a reduction in environmental impact in many industry sectors. We are working to increase the rate of environmental value-enhancing products on a global scale. To realize this vision, besides strengthening the relationships of trust that exist between Kao, our customers, and the market, we are also building connections with enterprises and industry associations across a wide range of industries, implementing measures that will enable us to contribute to the sustainability of society through technology innovation.

Framework

1. Systems to support development and production of eco-chemical products

- We maximize utilization of core technologies, such as nano-interface control, polymer function control, and precision conversion of oils and fats, through essential analysis based on research into fundamental technologies that can help demonstrate the structure of substances and phenomena.
- Construction of a global production system that takes reduction of environmental impact into account.

2. System to support the worldwide sale of eco-chemical products

- Sales within Japan: the sales system that use sales distributors with a high level of expertise and realize close communication with our customers.
- Business operation system outside Japan: the network that enables production and sales bases deployed in key countries to operate effectively.
- Global business support system through strengthening global chemical substance management and import/export management, based on close collaboration with the Product Quality Management Division.

Education and promotion

Internal training

- All Chemical Business managers are made aware of our Chemical Business Vision, decided at our semiannual Chemical Business Meetings.
- All Chemical Business managers are made aware of environment-related information (including ISO 14001).
- Compliance with local chemical substance laws and regulations by affiliates outside Japan is strengthened through global Responsible Care (RC) activities.
- Environmental education is implemented for new employees, and awareness-raising activities are conducted for chemical product sales distributors.

For distributors

- chemSHERPA explanation sessions: 30 companies, 74 employees
- New sales distributor employee training sessions: 20 companies, 79 employees
- Sales distributor manager meetings: 11 companies, 22 employees
- Information-exchange conferences with sales distributors: 11 companies, approx. 50 employees

Mid- to long-term targets and performance

We position chemical products that can reduce the environmental impact at the manufacturing stage and at the use stage as "eco-chemical products." In the future, we will promote Green Innovation and Eco Technological Solutions, aiming to raise eco-chemical products' ratio of all Chemical Business products to over 80%.

Performance in 2017

- Development of a VOC-less water-based inkjet ink for developing film packages with less impact on the environment.
- Expansion of our business with products in the fields of civil engineering and road construction that reduce environmental impact and ensure longevity.

Collaboration with stakeholders

Business partners

- In order to strengthen collaboration with companies in Southeast Asia (including suppliers of raw materials for oils and fats) to facilitate promotion of our Green Innovation, we held discussions with related companies to clarify our approach.

- We are looking for new partners to assist in the promotion of Eco Technological Solutions.
- We conduct regular exchanges of information with sales distributors within Japan and affiliated companies outside Japan, in regard to laws and regulations on chemical substances (both within and outside Japan) and other eco-related information.

Government agencies

- We are a member of the Network for Strategic Response on International Chemical Management, whose management board includes representatives of Japan's Ministry of the Environment, Ministry of Economy, Trade and Industry (METI) and Ministry of Health, Labour and Welfare (MHLW), among others. As a member of this network, we participate in exchange and dialogue in relation to international chemical management strategic response several times a year with other companies, organizations, and government agencies in Japan and with government agencies and industry organizations outside Japan.

Industry organizations

- We attend monthly working group conferences by the Global Product Strategy (GPS)/Japan Initiative of Product Stewardship (JIPS) Promotion Council organized by the Japan Chemical Industry Association (JCIA), and contributes to the implementation of GPS activities and the issuing of GPS Safety Summaries. In 2017 we gave a lecture for the Japan Chemical Industry Association's JIPS

Grand Prize Award, in addition to a lecture at the Chemical Management Seminar.

- We participate in monthly management committee and technical committee meetings of the Joint Article Management Promotion-consortium (JAMP), contributing to the operation and revision of the industry standard formats that are used for disclosure of information regarding chemicals in products (MSDSplus and chemSHERPA). During JAMP's general meeting in June, our corporate executive officer was appointed as JAMP chairperson.
- We attend the regular meetings of the Japan Surfactant Industry Association and the Japan Cosmetic Suppliers Association, contributing to a variety of activities and seminars, including those related to chemical substance management regulations.



→ p. 43 Conservation > Chemical substances management

International initiatives

- We are working to strengthen our cooperation with organizations both within and outside Japan, in order to promote sustainability activities, such as the Roundtable on Sustainable Palm Oil (RSPO).



→ p. 134 Corporate culture > Sustainable and responsible procurement

Our initiatives

Kao products that contribute to the conservation of the environment globally

Lunajet water-based inkjet ink

During further applications of the pigment nano-dispersion technology that we had developed thus far, we successfully developed the world's first water-based inkjet ink for use in printing on soft packaging film substrate that features a VOC-free design* with a low environmental impact. It is now possible for us to provide soft packaging film-printed material that combines high quality with a low environmental impact. We also confirmed that this water-based inkjet ink technology can be applied to water-based gravure-printing ink.

Low-temperature fixing toner

More than half of the electric power used by office photocopiers is consumed in generating heat energy to melt the toner. To reduce the environmental impact of copiers and printers, it is important to develop toner binders that can be melted and fixed at lower temperatures. Our polyester resin toner binder was developed to meet these requirements. Unlike conventional toners, our new toner uses a polyester resin binder, which can melt at temperatures more than 30°C lower than conventional toners. This toner is highly effective in affixing to paper, and it enables both high-speed printing and energy conservation.

Visco Top high-performance specialty thickener

When undertaking civil engineering work near water (for example, on riverbanks or on the coast), it is vitally important

that measures are taken to protect the water from being contaminated, so as to prevent environmental pollution and deterioration in water quality. In the case of bridge pier construction for long bridges or suspension bridges that cross ocean straits, because the piers are actually built in the riverwater or seawater, special underwater concrete that has high viscosity and is resistant to washout is used. Furthermore, when construction is undertaken near underground watercourses, care must be taken not to contaminate the underground water. For work in this kind of water-related environment, the use of additives to increase the viscosity of inorganic materials such as grouting materials and concrete can enhance underwater anti-washout performance.

We have developed *Visco Top*, a high-performance specialty thickener that provides unprecedented viscosity for grouting materials and concrete, and makes it possible to undertake construction work without causing harm to the riverine or ocean environment. *Visco Top* was used in the removal of high concentration contaminated water from trenches at the Fukushima Daiichi Nuclear Power Plant.

* VOC-free design

"VOC-free" is defined as emitting less than 700 ppmC (in carbon conversion terms) of volatile organic compounds (VOC) during the printing process.

VOC (volatile organic compounds): VOC is a collective term for organic compounds that are volatile and are transformed into gaseous form in the atmosphere. In Japan, VOC emissions are regulated by the revised Air Pollution Control Act.

Topic Water-based inkjet ink and high-performance specialty thickener *Visco Top* receive award

With the purpose of contributing to the improvement of science and technology and the development of industry within Japan, the National Invention Award of the Japan Institute of Invention and Innovation honors inventions warranting a great deal of merit. We were awarded the Invention Award for our *Lunajet* water-based inkjet ink at the National Invention Awards in 2017.

The JCIA Technical Award is a program that honors the creation of science technology and products that are innovative and superior, and that greatly contribute to the development of society as a whole as well as improving the environment. The Special Technical Award is awarded to creative products and technologies that contribute to the advancement of science and technology. Our *Visco Top* high-performance specialty thickener was awarded the Special Technical Award at the 49th JCIA Technical Awards.



National Invention Awards



JCIA Technical Award Ceremony

Cooperation with sales distributors

In recent years, the role of our distributors has expanded and become more and more important. Their role includes compliance with domestic and international regulations on chemical substances, appropriate management of chemical substances contained in our products through the entire supply chain, compliance with import and export regulations (GHS), as well as adjusting delivery schedules with customers when ordering and correspondence for earthquakes and other natural disasters.

We offer various venues for information exchange to major distributors related to our Chemical Business.

In 2017, we held our biennial Sales Distributors' New Employee Training Conference for sales distributor's new hires at our Wakayama Complex. We set up lectures on Chemical Business and products, ordering, and relevant laws and regulations, with 79 people from 20 companies in attendance. Additionally, in two-days program, we offered other abundant content, including observations of production site and laboratory, as

well as Eco-Lab Museum.

In October, we held a Management Meeting for executives at our Sumida worksite.

From the end of November to December, we visited Chemical Business sales distributor managers to exchange information about the latest trends in chemical product-related laws and regulations within and outside Japan, and about the role of sales distributors within the supply chain.

With particular regard to communication forms about information on chemical substances contained in our products, we were ahead of the industry when it made the switch from MSDSplus to chemSHERPA in September 2017, and prior to this switch, we held briefing sessions for our sales distributors in Osaka and Tokyo in March. After the switch, we made the forms available not only on our website, but also on our extranet which connects our sales distributors and us, striving to actively disclose information.

In the future, we will continue to use these activities to foster close communication with distributors.

Kao's approach

Our initiatives



Sales distributors' new employees training session



chemSHERPA explanation session

Kao's approach

Kao Professional Services Co., Ltd. (KPS) aims to deliver cleanliness & sanitation services for all professional needs that provide safety and security while also helping create enhanced value for client companies. We provide total support for workplace hygiene management in the food services industry, medical and nursing care facilities, and other sectors.

Kao's creating value to address social issues

How to handle food poisoning incidents and infectious diseases, such as influenza and noroviruses, remains a significant problem for society.

As one of the world's first hyper-aging societies, it is now necessary that Japan implement measures to enhance the quality of life (QOL) of senior citizens requiring care, and to support the carers who look after them.

KPS is contributing to the resolution of these social issues by providing a combination of products (hard), product use suggestions and health seminars (soft products).

Contributions to the SDGs



Policies

KPS aims to provide total solutions for hygiene management issues by not only developing and supplying effective products that meet customers' needs and that are environmentally friendly, but also offering Cleanliness & Sanitation Operation Systems that are tailored to individual customers' circumstances.

In the Food Services sector (including restaurant operation and food processing), KPS aims to create safe, secure, and comfortable environments through comprehensive hygiene management.

In the Medical Support & Care Services sector (including hospitals and nursing-care facilities), KPS strives to reduce the risk of hazards through expert infection control, and offer an environment for gentler nursing care through a combination of products based on our skin care technology and our adult incontinence diapers.

In the Recreation Services sector (including hotel and ryokan operations), KPS strives for total comfort through cleanliness, and the ultimate in hospitality through quality guest care.

Framework

Professional Service Business promotion framework



Education and promotion

KPS recognizes the need to cultivate in-house human talent capable of proposing total solutions for tackling issues that affect our customers and society as a whole, and to contribute toward the resolution of such issues. Based on this recognition, every year we hold innovative solution development training programs.

In each field, specific topics are identified, such as Basics of Washing and Bacteria Removal/ Elimination, Hand Hygiene, Environmental Sanitation, HACCP*, and Continence and Senior Citizen Skin Care, etc. Training content in relation to these topics is tailored to employee work experience since joining KPS, with the aim of spreading solution development knowhow and skills more widely within the company, in addition the enhancement of overall capability.

Besides basic training for employees who have joined KPS within the past year, we also hold practical training for the third- and the fourth-year employees on an annual basis. In 2017, 30 employees underwent basic training, and 40 employees underwent practical training. In total, approximately 60 employees participated in basic and practical training between 2016 and 2017.

* HACCP (Hazard Analysis and Critical Control Point) is a food hygiene management method issued by the Codex Alimentarius Commission, which was established jointly by the UN's Food and Agriculture Organization (FAO) and the World Health Organization (WHO).

Mid- to long-term targets and performance

KPS aims to provide thoroughly professional service, by proposing integrated solutions to customers' problems covering every stage, from the initial identification of problems at customers' individual business locations, until problem resolution.

With the aim of solving sanitation- and hygiene-related social issues, KPS has set its own targets of "taking measures to build environments in which people can live safely in variety of living situations outside the home," and "using Kao's unique R&D capabilities and technology to create new value through sanitation and hygiene."

Main initiatives

1. Provision of total solution systems for hygiene management
2. Activities to provide support for medical and nursing care professionals in the areas of infection control management and continence care



Performance in 2017

1. Provision of total solution systems for hygiene management

In addition to our provision of total solution systems for hygiene management, KPS have held 170 hygiene workshops. (372 times in total from 2016 to 2017) Participants included a wide range of industrial workers, chefs and nutritionists from restaurants, hotels, grocery stores, food and prepared food factories, and so on.

2,030 nurses, certified care workers and other medical and care professionals from 805 hospitals, nursing-care facilities, medical facilities and so on have attended these activities.



→ p. 106 Our initiatives: Provision of total solution systems for hygiene management

→ p. 107 Our initiatives: Activities to provide support for medical and nursing care professionals in the areas of infection control management and continence care

2. Activities to provide support for medical and nursing care professionals in the areas of infection control management and continence care

Working group activities have been held a total of 103 times in 34 different areas. A total of approximately

Collaboration with stakeholders

With the aim of strengthening infection control management and continence care, KPS has been collaborating with wholesalers and distributors in the medical sector to hold Skin and Continence Care Seminars.

The aim of these seminars is to provide Wound, Ostomy and Continence (WOC) nurses the opportunity to learn about types of continence products (adult continence diapers, etc.) and skin care products that they may not be familiar with, and help them to develop a more in-depth understanding of these areas, thereby helping nurses and carers to implement their work more effectively.

In 2017, around 70 nurses attended our seminars. Between 2016 and 2017, seminars were held in 14 different prefectures in Japan.

In the future we aim to hold seminars in all prefectures by "touring seminars" in each prefecture every year, building and maintaining contact with WOC nurses nationwide.

Conservation
Community
Corporate Culture
Governance

Our initiatives

Food Services

Provision of total solution systems for hygiene management

In the Food Services sector, KPS implements measures to enhance hygiene management and food poisoning prevention.

KPS provide total solutions that integrate products and usage methods with operational proposals (hard + soft products), in addition to education, and implement these total solution proposals through close collaboration with client customers.

KPS works together with customers to build new hygiene management systems using the following three steps:

1. Exploring fundamental issues that are directly linked to food poisoning

KPS visits customers' worksites to identify fundamental issues that are directly connected to food poisoning, including personal hygiene, food hygiene, cleaning and disinfecting of machinery and equipment and environmental sanitation.

For example, by examining how kitchens are laid out (kitchens are divided into a polluted work area, a clean work area and a quasi-polluted work area), how employees circulate within the kitchen (which relates to cross-contamination), and how food material cross-contamination prevention and temperature management are implemented, we are able to identify issues that could potentially lead to food hygiene incidents.

We also examine whether there are any issues that, while

unlikely to lead directly to food poisoning, could affect the appearance of the facility, such as the methods used to clean glass surfaces, tables, etc.

2. Proposing solutions for resolving identified issues

At KPS, we suggest specific usage and management methods, as well as procedures for tackling the issues that affect our customers, indicating clearly which products and methods should be used to implement cleaning and disinfection effectively. We try out the suggested methods on-site and verify their effectiveness (on-site tests and checks).

KPS makes any necessary changes to products or methods, and on-site testing is performed repeatedly until the best possible results are achieved. In these ways, we use the PDCA (plan, do, check, act) cycle to establish our solutions.

3. Providing operation manuals and holding food hygiene workshops

To ensure that the solution content tailored to the needs of the individual worksite and the test-validated methods can be implemented on-site consistently as standard operating procedures, KPS provides illustrated, easy-to-understand manuals. In addition, by holding food hygiene seminars for the people who will actually be performing the work, we promote ongoing improvements to the overall level of food hygiene.



Example of a Cleanliness and Sanitation Manual



On-site verification and issue identification in a kitchen facility

Number of food hygiene workshops held each year

Year	No. of workshops	No. of workshops in total (since January 2012)
2013	207	381
2014	195	576
2015	219	795
2016	202	997
2017	170	1,167

Medical Support & Care Services

Activities to provide support for medical and nursing care professionals in the areas of infection control management and continence care

In the Medical Support & Care Services sector, KPS implements activities to support personnel engaged in infection control and continence care provision in hospitals and nursing-care facilities. One of these activities is the Japanese Society for Infection Prevention and Control "Saizen" Best Practices of which KPS acts as the secretariat. Working group activities and seminars are held with the aim of enhancing infection control and continence care provision in hospitals and nursing-care facilities.

Infection Control Best Practices is a method for improving infection control by implementing risk analysis of key aspects of the infection prevention methods specified in medical and nursing care facility standard procedures, then using scientifically based decision-making strategies to compile written procedures and checklists that can then be put into practice.

The working group activities involve examination of Infection Control Best Practices method for different types of hospitals and nursing-care facilities through focusing on individual topics such as "Continence Care, Adult Diaper Changing, etc." and "Environmental Readiness, Hospital Ward and Living Room Cleaning."

In research meetings, working group activities were held on 103 occasions in 34 areas during 2017. A total of 2,025 nurses, certified care workers, and other medical and care professionals from 805 hospitals and nursing care facilities attended these activities.

Working group activities

	Areas	No. of workshops	No. of participating institutions	No. of participants
2013	17	51	583	1,472
2014	30	90	801	2,008
2015	30	89	770	1,900
2016	32	96	813	2,047
2017	34	103	805	2,025



Infection Control Best Practices research meeting (working group) seminar overview

Medical Support & Care Services

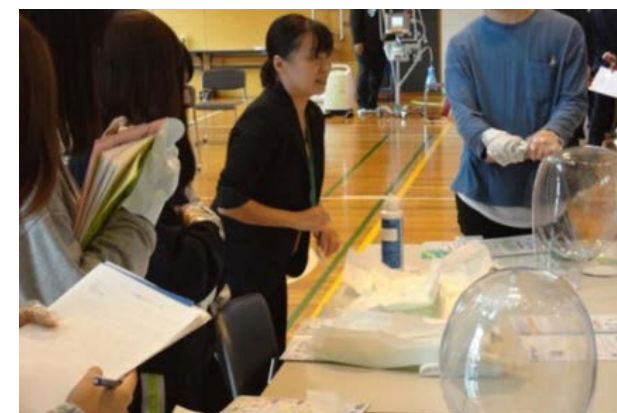
Lectures and hands-on exercise support at nursing colleges and vocational schools

KPS also provides lectures at nursing colleges and vocational schools (dispatching lecturers), hands-on training and activity support in the Medical Support and Care Service fields.

Among these activities, in 2017 we once again supported the Home Nursing-care Theory—Hands-on Training Workshop at the Japanese Red Cross Akita College of Nursing. On this particular date, we began with the theme of "skin care

for the elderly," giving lectures on points that should be noted on the characteristics of aging skin as well as skincare and continence care. After that, as part of a hands-on exercise, participants actually got a feel for adult diaper products, experienced water absorption, and tested out how the diapers go on. Also, as a foundation for preventing infection, participants recognized the importance of hand hygiene (using a black light to see what remained on the hands) and were given explanations on how to properly use alcohol-based handrub.

All second-year students (around 120 students in total) attended. We received feedback from students that, "Being able to experience new products hands-on and gaining the knowledge that diaper products are made with consideration of both nursing care patients and workers was a helpful resource toward our future work." Teachers also gave us the feedback that, "Through engaging with companies, students learn while gaining a better understanding of diversity. Since this university is a place for nurturing people who contribute to society, we are very grateful to have a place to experience this hands-on."



Adult diaper product hands-on training session overview

Kao's approach

As part of our effort to enrich lives and contribute to the sustainability of society, Kao has adopted the concept of "creating an environment and developing human capital to nurture the next generation," emphasizing the three domains of Environment, Education and Community upon which we concentrate our corporate citizenship activities. When it comes to issues that cannot be directly approached through business, we are working in tandem

with local communities and NGOs/NPOs with a long-term perspective. Kao also sets up employee participation activities aimed at creating a connection to society and a place where employees can learn, along with Support for the Arts activities in order to further the development of the culture at the foundation of *Yoki-Monozukuri*. We also implement various activities through The Kao Foundation for Arts and Sciences.

Kao's creating value to address social issues

Besides contributing to the sustainability of society through our *Yoki-Monozukuri*, we also contribute to society on a broader scale as a good corporate citizen through our activities that are based on the United Nations' Sustainable Development Goals (SDGs), which are aimed at helping solve social issues global in scope, such as poverty, shortages of educational resources, and other issues that cannot be tackled through business activities, with the aim of making it possible for people everywhere to enjoy happy, fulfilling lives.

Using our resources and strengths, we offer educational support such as the establishment of correct lifestyle habits for children, based on hygiene and cleanliness, nurturing human capital leading the future of science and technology, and so on.

Furthermore, we aim to build a better society with diverse communities and provide support related to solving social issues that occur in each community, contributing to the stimulation of society.

Additionally, through our Support of the Arts activities, and activities implemented by The Kao Foundation for Arts and Sciences, we provide support for the ongoing development of culture, which is the foundation for *Yoki-Monozukuri*.

Through these activities, we aim to make an even greater contribution to society while also contributing to our business operations.

Contributions to the SDGs



Policies

Corporate citizenship activity guidelines

- Conduct activities that play a role in nurturing the next generation.
- Conduct activities aimed at contributing to the development of regional communities and culture.
- Conduct activities that protect and nurture the environment to promote a sustainable society.
- Conduct activities that promote a barrier-free society as a form of social support.
- Conduct activities that make effective use of Kao's resources.
- Create an atmosphere in which every employee can participate in social activities as a good citizen.



→ Overview of Corporate Citizenship Activities
<http://www.kao.com/global/en/sustainability/society/approach/>

Corporate citizenship activities 103-1,103-2,404-2

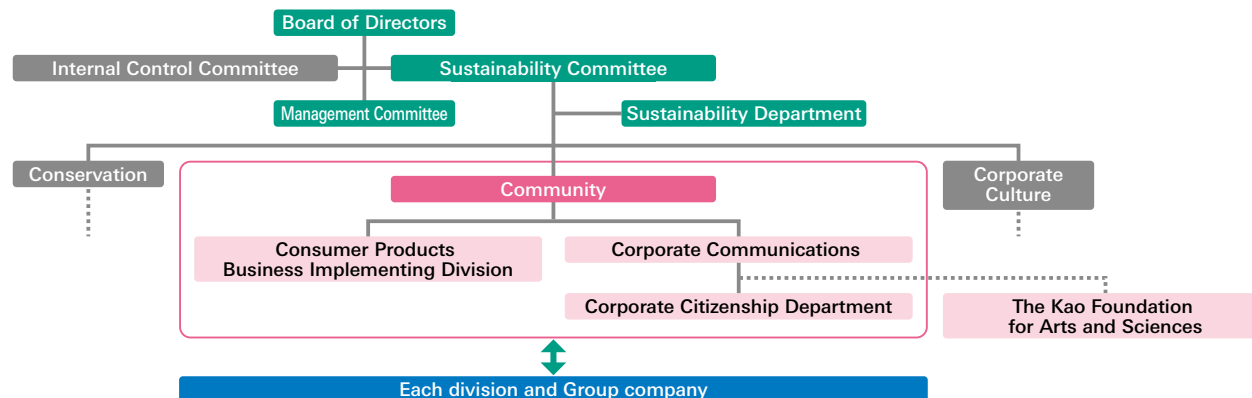
Overview of corporate citizenship activities

Theme	Creating an Environment and Developing Human Resources to Nurture the Next Generation		
Key domains (Programs)	Environment	Education	Community
	<ul style="list-style-type: none">●Kao Creating Forests for Everyone●“FURUSATO” Environment Conservation Project in Northern Thailand	<ul style="list-style-type: none">●Kao Earthwatch Teachers’ Fellowship●Supporting science education/ Education programs	<ul style="list-style-type: none">●Kao Family Concert●Kao Social Entrepreneurship Schools
Employee participation activities	Kao Heart Pocket Club, Pink Ribbon Campaign		
Support of the Arts	Tokyo Music Competition, New National Theatre Tokyo Special Corporate Supporters Group, sponsorship for ballet and large-scale art exhibitions		
The Kao Foundation for Arts and Sciences			

Framework

Focusing on Community, one of our key areas set in the Sustainability Statement, we are working to promote efforts in cooperation with relevant departments, mainly the Consumer Products Business Implementing Division, Corporate Communications, and Corporate Citizenship Department, and group companies within and outside Japan.

Implementation framework for corporate citizenship activities



Kao's approach

Our initiatives

Education and promotion

We endeavor to enhance understanding of our activities by communicating information on a wide scale, both within and outside of Kao.

Internally, we use our company intranet system and employee training sessions to share case studies, while also creating opportunities for employees to participate in relevant activities.

Externally, we make use of brochures describing our activities and of our company websites, to inform stakeholders about our activities and about events that we have organized.

Conservation

Community

Corporate Culture

Governance

Mid- to long-term targets and performance

Mid- to long-term targets

We aim to contribute to the development of communities throughout the world through social activities targeting people and themes that cannot be addressed effectively through our business activities. By encouraging our employees all over the world to volunteer to participate in corporate citizenship activities, we seek to form a connection with society and encourage personal growth in our employees, applying this to their work.

1. Instilling good lifestyle habits in children:

Project to improve school sanitation in Vietnam: Target to support 35,000 students at 60 schools over a five-year period between 2016 and 2020.

2. Nurturing human capital that will lead the development of science and technology in the future:

JSEC: Supporting a maximum of nine high school students at three schools every year.

3. Community participation and problem solving support:

Kao Social Entrepreneurship Schools: Support for three organizations every year.

4. Promoting the participation of Kao employees in social activities

Performance in 2017

Implemented a corporate citizenship activity program

1. Instilling good lifestyle habits in children

- ①Project to improve school sanitation in Vietnam (in cooperation with UNICEF).
- Improvements made to toilets and sanitation facilities for approximately 5,000 people in 18 elementary schools across An Giang Province.
- Training with approximately 170 voluntary instructors and community leaders.

②Hand washing awareness

- Japan
- Hand washing class: Education given to around 7,040 children and students in 99 schools across 36 prefectures.
- (We visited a total of 10,834 students in 145 schools across 37 prefectures, and since 2009, a cumulative

total of around 103,000 students have taken our classes.)

- 572 Kao employees participated in these activities.
- 2,155 supplies donated (3,188 in total).
- 5 training sessions held for educational professionals.

●Taiwan, Indonesia and Thailand

- Hand washing awareness for 65,909 children

③First menstrual education

- First menstruation sets were distributed to elementary and junior high school girls, approximately 763,200 in Japan and approx. 530,300 outside Japan.

2. Nurturing people who will lead future science and technology development

- ①Supporting an independent research contest (JSEC) for science and technology
- Invited the winning JSEC 2017 schools for a study tour (March).
- As special sponsors of the JSEC 2018 presented the Kao Award and the Kao Special Incentive Award to seven students from three high schools (December).

②Signed a cooperative agreement for industry-academia collaboration with the Tokyo University of Science

- ③Held Science Quest, an interactive event by researches, in collaboration with the National Museum of Emerging Science and Innovation (twice)

3. Community participation and problem solving support

- ①Family Concerts at the worksite areas (Japan)
 - Concerts were held in Sakata City in Yamagata Prefecture, Mashiko-machi in Tochigi Prefecture, Wakayama City in Wakayama Prefecture, and Saijo City in Ehime Prefecture.
- ②Kao Social Entrepreneurship Schools (Japan)
 - Three organizations were chosen to receive support. Providing opportunities for business growth.
 - A meeting to exchange views with Kao employees was held for the purpose of presenting reports on results achieved by groups Kao supported in 2016, and of supporting kick off of groups received our support in 2017.
- ③Disaster relief and recovery support activities (Global)
 - Monetary and emergency supply donations made to Northern Kyushu following heavy rain disaster (Fukuoka Prefecture, Oita Prefecture and Asakura City, Central Community Chest of Japan, Hita City).
 - Disaster relief and donations offered following Hurricane Harvey in the U.S. (The American Red Cross).
 - Donated products to temporary housing residents in Kumamoto Prefecture.

4. Promoting the participation of Kao employees in social activities

- ①Kao Heart Pocket Club (Japan)
 - Decided what types of support to be provided at regular and ad interim meetings held by the Heart Pocket Club.
 - The Heart Pocket Club implemented local support, giving support to groups involved in community activities in Tochigi, Wakayama and Ibaraki prefectures where Kao worksites are located.
 - The Heart Pocket Club also donated funds through the Mirai Pocket Fund, which supports larger-scale activities.
- ②Pink Ribbon Campaign (Global)
 - Between October–November, awareness-raising activities were conducted by our beauty advisors at cosmetics counseling corners, etc. in nine different countries and regions.
 - Information offered through a special website.
 - Made donations matched according to the number of items purchased.
 - Support for communicative events: Pink Ribbon Walk (Tokyo), Pink Ribbon Plaza (Osaka).
 - Company employees wear Pink Ribbon badges, with information relayed through our intranet system.
 - Employee involvement-based donation program. Photo donation

Spreading information within and outside the company

For internal

- Providing activity summaries and information related to employee participation activities via Kao's intranet, etc. (50 items)
- Including an explanation about Kao's corporate citizenship activities into our initial training for new employees, with 285 new employees in attendance.
- Employee participation volunteer planning: Kao employees engage in volunteering in areas affected by the Great East Japan Earthquake of 2011 with activity presentation meetings and volunteering activities, volunteering activities carried out through the Kao Heart Pocket Club (a donation organization composed of Kao Group employees), and local contribution activities carried out by individual Kao worksites, etc.

For external

- 60 items of information have been distributed via our company website and Facebook.



→ Corporate Citizenship Activities Report
<http://www.kao.com/global/en/sustainability/society/social-reports/>

→ Sustainability section of the Kao website
 > Measures to Contribute to Society
<http://www.kao.com/global/en/sustainability/society/>

Collaboration with stakeholders

Our corporate citizenship activities are implemented in collaboration with many different stakeholders, including NGOs and NPOs. By ensuring opportunities to exchange information regularly with operational partners in key corporate citizenship projects, we are able to monitor program implementation status and

make improvements where necessary.

Meanwhile, we receive regular activity reports from the NPOs and other organizations whose activities we support. By helping to give a deeper understanding of social issues that represent the background of these activities, and of the social

impact that these activities provide, these reports assist in contributing to the realization of our vision of enriching people's lives.

Periodically exchanging information and listening to feedback on site allows us to brush up programs that follow workplace needs and society's movement.

Our initiatives

Project to improve school sanitation in Vietnam

As part of our mid-term business strategy, Kao is seeking to expand the scope of our business activities in Asia.

One of the countries in which we are working to grow our business is Vietnam. However, because of the significant income gap, there are many people in Vietnam who we cannot reach through our business activities. Sanitation and hygiene conditions in Vietnam's rural and mountainous districts, and districts with large ethnic minority populations, tend to be unsatisfactory, with chronic diarrhea and other diseases causing problems to children's health and impeding their development. As a means of supporting the lives of these people, since 2016, we have supported school sanitation project activities through the United Nations Children's Fund (UNICEF).

2017 performance

In 2016, education about hygiene was taught at six local communities and ten schools, around 3,000 children, spanning three districts in An Giang Province. Following these education seminars, 18 schools had toilet and sanitation facility renovations conducted in 2017, contributing to learning environments where children can feel safe about going to the toilets. Additionally, we have trained approximately 170 teachers, volunteer instructors and community leaders.

Children spread hygiene awareness, which they learned at school to their families and communities, providing the opportunity to place a new toilet in a home where there was no toilet previously. Our activities have encouraged statements made by An Giang Province to eradicate open defecation in more than 140 villages there.

Future initiatives

In 2018, we are planning to support 22 new schools, as well as faculty and staff training to manage sustainable hygiene promotion activities.



Practicing how to wash hands the right way with children



Learning through illustrations and games about the right way to wash hands

Message from UNICEF Vietnam



Nguyen Thanh Hien
Water and Sanitation, Hygiene
Specialist
United Nations Children's Fund
Viet Nam Country Office

In the past decade, Viet Nam has achieved impressive economic growth, with an average rate of nearly six per cent per year. The changes in the economy have led to considerable improvement in the lives of women and children. However, Viet Nam's 26 million children are not benefiting equally from this new prosperity. Gaps between the rich and the poor, between gender, and between ethnic Kinh majority and the country's many minority populations are clear.

Such inequity is clearly reflected in water and sanitation, as poorer citizens are not privy to services that correspond with this remarkable development. Many people still practice open defecation or use unhygienic latrines. People consume water from unprotected sources; and consume water that doesn't meet the quality standards. An impact evaluation carried out in 2014 showed that only 13 percent of people practiced hand washing with soap at key moments, and this figure was even lower in poor or ethnic minority households.

More than 80 per cent of schools in Viet Nam has water and sanitation facilities. However, functionality

and use of these services are questionable. Especially facilities in the hard-to-reach, remote rural areas do not work properly. Absence of these facilities also stands as an obstruction to promote hand washing and sanitary behaviors among the children. The non-functional facilities further pose challenge to the privacy of girl-children.

UNICEF, together with the central Vietnamese government, is working strengthen efforts to improve water and sanitation conditions in schools, as well as eliminate open defecation across the country.

With support from Kao, UNICEF has supported An Giang, a Mekong River Delta province focused on improving water and sanitation (WASH) conditions at schools and promoting hygiene among in communities since 2016.

During the past two years, renovations have been made for WASH facilities in 18 schools, which were in poor condition. Training on operation and maintenance of WASH facilities and education on hygiene were provided to 170 teachers of 40 schools.

They are now guiding their students on using the facilities properly and hand washing with soap. Under supervision of these trained teachers, a children's hygiene promotion team was established at the school. The team has helped monitor and promote their peers' WASH practices in school.

This aims to help children form healthy habits at school. These habits are then introduced by children into their homes and community.

Kao funding has also helped to stop open defecation among communities in An Giang Province.

As of the end of 2017, 140 villages with a population of 220,000 were verified as being Open Defecation Free (ODF), following the Vietnamese Ministry of Health's criteria.

The local authorities of An Giang Province highly appreciate Kao's support in improving the sanitation in both school and community environments.

Models of An Giang WASH in schools and ODF villages have been replicated in other provinces UNICEF is focusing on.

In 2018, the intervention will spread to Dien Bien, a northern mountainous province of Viet Nam, where most of the population is made up of ethnic minorities. It is estimated that over 70 per cent of Dien Bien's population does not have access to sanitation facilities. We have plans to reach 35,000 children at 60 schools over a five-year period between 2016 and 2020.

We'd like to express our sincere gratitude to Kao for its contribution.

JSEC Sponsorship to help support science education for senior high school students

Kao believes that the foundation of *Yoki-Monozukuri* is born from cutting-edge innovations created by science and technology, and in order to contribute to a brighter future, we support fostering young science researchers. As part of this, we sponsor the Japan Science & Engineering Challenge (JSEC), which is organized by the Asahi Shimbun Company and TV Asahi Corporation. and a contest of independent science and engineering research targeting high school and technology college students nationwide, with the goal of supporting and nurturing young researchers.

Each year we present the Kao Award and Kao Special Incentive Award to congratulate excellent work. The review process for selection of the award-winners is carried by our researchers based on a reading of the participants' papers and presentations.

Top JSEC prize-winners are qualified to enter the Intel International Science and Engineering Fair (Intel ISEF) in the U.S.

Also, we invited these award-winning schools to participate in our study tour, during which students have opportunities to visit our facilities and engage in discussions with our researchers, thereby providing support for senior high school students' education and career planning.

2017 performance

The Kao Award and Kao Special Incentive Award were presented at JSEC 2017

- The Kao Award:
Verification of Lens Equations for "Secondary real images" and Application of the Simple eye of an Insect
Norika Narimatsu, Ayaka Kosai, Akiho Takata (Kumamoto Prefectural Uto Senior High School)
- The Kao Special Incentive Award:
"Devices for the Survival of *Ventricaria ventricosa*, Gigantic Single-celled Organisms"
Nanako Okabe (Yokohama Municipal Yokohama Science Frontier High School)
Discovery of the mysterious pit (organ) from a uniquely gregarious plant bug species—novel ecological and morphological findings for *Ernestinus kasumi* designated as vulnerable rank in Nagasaki Red List
Nanako Ikeda, Karin Motomura, Akihiro Tagawa (Nagasaki Prefectural Nagasaki Nishi High School)

Intel ISEF 2017 Excellence Award, Special Award Recipients

The JSEC 2016 Kao Award and Kao Special Incentive Award winners were selected to represent Japan at Intel ISEF 2017, where Kotaro Tabuchi of Nanzan Boys' Senior High School received the Engineering Mechanics department's Grand Award second prize, and Aya Nobe, Norika Kondo, and Sachiko Fukuzawa all of Nagasaki Prefectural

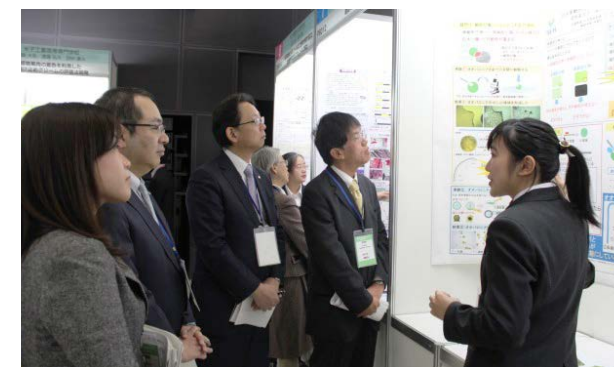
Nagasaki Nishi High School won a Special Award as the Acoustical Society of America's honorable mention. (May 2017)

Study tours

We organized a study tour for the prize-winning students from Nanzan Boys' High School, who won the Kao Award, and Nagasaki Nishi High School, as well as students from Yokohama Science Frontier High School who won the Kao Special Incentive Award at JSEC 2016. The study tour provided students with opportunities to engage in discussions with our researchers. (March 2017)

Future projects

We intend to arrange a study tour for the prize-winning schools from JSEC 2017, and to provide special sponsorship for JSEC 2018.



Our researchers listening to passionate presentations of high school students during the final round of judging

Corporate citizenship activities

Kao's approach

Our initiatives

Expansion of first menstrual education support activities for elementary and junior high school girls

Since first launching sanitary products in 1978, we have offered first menstrual education to girls beginning menstruation as well as families and elementary schools for more than 30 years.

1. Global distribution activities of Kao's first menstrual education set

Our first menstrual education set contains an awareness booklet which briefly covers menstruation and bodily changes, and sample sanitary products in a pouch, distributed free of charge.

We have expanded this activity to other Asian countries and regions, and are in the process of putting other various menstrual education programs into practice in collaboration with local elementary and junior high schools and NGOs.

In 2017, we began cooperative efforts with the Japanese Association of School Health, and in order to make better use of our learning materials and sanitary products for our first menstrual education set, we have expanded our activity with the aim of distributing it to 20,000 schools nationwide. As a result, the number of sets distributed has increased significantly from 2016, but due to limited announcement and time, we were only able to reach 60 percent of our target.

During FY 2018, we plan increase the number of announcements we make and begin to accept requests by fax, aiming to reach 20,000 schools.

2. Informational website in Japan

In Japan, we have managed an information website since 2003, providing easy-to-understand explanations about how the body changes during puberty and about menstruation, from a vast collection of information gathered from doctors and experts.



Laurier first menstrual education set



Kao Laurier website
[http://www.kao.co.jp/laurier/karada/\(Japanese\)](http://www.kao.co.jp/laurier/karada/(Japanese))

Conservation

Community

Corporate Culture

Governance

2017 Our initiatives

Corporate Culture

For realization of the Kao Corporate Philosophy	117
Integrity	121
Human rights.....	130
Sustainable and responsible procurement	134
Overall vision for human capital development	143
Human capital development	145
Diversity and inclusion	148
Dialogue with employees.....	155
Health	158
Occupational safety	165
Process safety and disaster prevention	170

Kao's approach

The Kao Way embodies our corporate philosophy and is the foundation of the business activities of the Kao Group. As our cornerstone, the Kao Way provides consistency to Group activities, from the formulation of mid- to long-term business plans to each individual business decision that we make in our day-to-day operations. Kao Group companies and members share the Kao Way not merely as a manual or set of rules but as a foundation from which we are able to determine both the value of our work and the concerns that we face.

Kao's creating value to address social issues

Since its establishment, Kao has been aiming to enrich the lives of people around the world and contribute to society through our core value of *Yoki-Monozukuri*. *Yoki-Monozukuri* embraces issues such as whether high quality is being maintained; whether the value of products measures up to their price; and whether sufficient care is being paid to the environment. At the same time, the meaning of *Yoki-Monozukuri* has evolved to include responding to the various social issues which arise as times change.

As a company aiming both to achieve profitable growth and contribute to the sustainability of the world, we will continue to deliver new value by constantly examining and refining the meaning of *Yoki-Monozukuri* with not only the continuous growth of our business but also sustainability in mind.

Contributions to the SDGs



Policies

To apply the Kao Way in practice, it is important to understand the connection between the abstract concepts of our corporate philosophy and our daily work. To help achieve this, we emphasize workshops implemented at the workplace level. By discussing the fulfillments and occasional frustrations we share with our coworkers, using the Kao Way as our shared foundation, we will deepen our understanding of our corporate philosophy and of our work, identifying potential points for improvement. These workshops also help to create an organizational culture of openness and mutual respect.

As opposed to being implemented in a rigid and uniform style across the entire Kao Group, workshops are coordinated independently and autonomously to align with the various business or organizational management issues relevant to each division and Group company, using as a base the programs provided by the Kao Way coordinating office at Kao's Head Office.

We also use the Kao Way as a common language to achieve smooth communication between the

Head Office and subsidiaries and Group companies outside Japan.

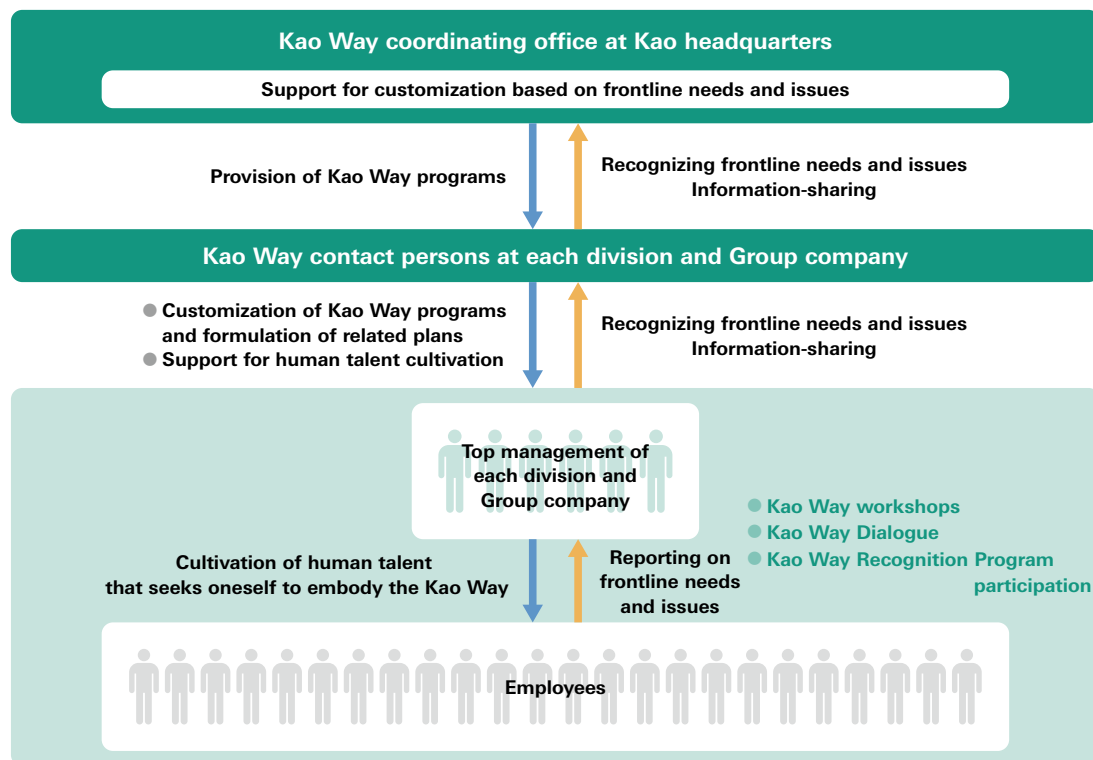
Framework

Kao's Guidelines for Human Capital Development note that human capital management by line managers is of fundamental importance for the Group. Managers at all levels have a key role to play in human capital development, and the cultivation of human capital that shares the values of the Kao Way and that is able to implement the values in their own work is of great importance.

In accordance with this policy, the main owners of Kao Way activities are the management lines for each division and Group company.

The Kao Way coordinating office support those activities by maintaining a network with Kao Way contact persons at each division and Group company who support these activities.

Framework for promoting Kao Way activities



Education and promotion

We also conduct training seminars aimed at new employees, both within and outside Japan, to introduce the Kao Way. In 2017, we conducted such training for 1,216 persons for the Group as a whole, representing 100% of new employees.

For realization of the Kao Corporate Philosophy 103-1,103-2,103-3

Kao's approach

Our initiatives

Mid- to long-term targets and performance

Main targets

We focus on the cultivation of leadership based on the Kao Way.

Leadership based on the Kao Way specifically refers to the following types of behavior:

- **Taking the initiative to set a good example for others in the knowledge that you are responsible for putting the Kao Way into practice.**
- **Being able to express the Kao Way in your own words based on your experiences.**

- **Being able to explain the background and purpose of your decision-making based on the Kao Way.**
- **Habitually referring back to the Kao Way in your mind when confronted with major challenges.**

We are aiming to cultivate leaders capable of developing the talents of their teams and building a corporate culture bursting with energy to pass on to the next generation.

Performance in 2017

- In Japan, we continued to implement the Kao Way Dialogue program and corresponding programs aimed at leaders, introduced in 2014.
- Outside Japan, we implemented the same program in Singapore, Indonesia and Thailand.
- To honor teams and individuals which have put the Kao Way into practice in an exemplary fashion, we

implement the Kao Way Recognition Program at their respective workplaces.

In 2017 this was implemented in two divisions in Japan and 12 companies outside Japan with the number of persons receiving commendations totaling 784.

Conservation

Community

Corporate Culture

Governance

Our initiatives

Identifying issues through dialogue

In 2017, we continued to implement the Kao Way Dialogue program, which aims to develop leadership based on the Kao Way, in Japan while also implementing the program at three Group companies in Singapore, Indonesia and Thailand.

The Kao Way Dialogue program involves bringing together organization members who are engaged in the same type of work to discuss workplace issues and the outlook for the future on the basis of the values represented by integrity, *Yoki-Monozokuri* and Innovation, which are the three core elements of the Kao Way. Besides providing an opportunity to rethink the work that keeps employees busy in their day-to-day operations, the Kao Way Dialogue program is also intended to help employees "reset" their feelings and cultivate renewed vitality that will help them move forward into the future.

Through this series of dialogue activities, a group of key themes that are common to all divisions and Group companies have emerged, including the need to cultivate an open corporate culture and maintain the right balance between long-term vision and short-term results.

In the future, we will continue to explore and intensify activities aimed at addressing these topics by making effective use of the Kao Way.

Realizing the Kao Way for the future

The mission embodied by the Kao Way is to strive for the wholehearted satisfaction and enrichment of the lives of people globally. We developed a new program called the Kao Way Future Session, developed based on a conceptual query; what is a satisfying and enriching life? doesn't it start by asking what happiness means to each of our individual employees?

'What will the future look like, and how is society changing?' and 'how are the Kao Group and the work and lives of our employees changing?' In this program, as we look ahead to the future, we discuss about what is the best way of practicing the Kao Way in terms of what kind of happiness we should be working for and for whom.

We anticipate that through this processes we will bring new ideas and perspectives to Kao's business activities and thus contribute to innovation. Going forward, we plan to implement this program by bringing members of different divisions without regard to their seniority or job content.



Implementation of the Kao Way Dialogue program in different countries within the Asia region (Singapore)



Personnel from different divisions participating in the Kao Way Future Session

Kao's approach

Kao, in aiming for continuous growth and to become "a company with a global presence," operates lawfully and ethically, conducting its business activities in good faith and integrity while responding to changes in society. Kao will strive to foster a compliance mind-set in all Group employees, and the further improvement of the corporate culture, through such activities as continuous education and training in regard to the Kao Business Conduct Guidelines (BCG), and appropriate responses to communications received via the compliance hotlines.

Kao's creating value to address social issues

To reduce the potential of operational risks and ensure fair-minded dealings, we are endeavoring to realize the commitment to the principle of integrity which forms the basis of our business activities, while furthering initiatives regarding priority issues such as anti-bribery, the protection of human rights and avoiding conflicts of interest.

Contributions to the SDGs



Policies

At Kao, we uphold the principle of integrity, passed down from our founder, as one of the core values of our corporate philosophy, the Kao Way. Integrity means to behave lawfully and ethically and conduct fair and honest business activities. We regard integrity as the starting point of compliance and promotes it as a foundation for earning the respect and trust of all stakeholders.

Identifying mid- to long-term issues and exploring corresponding initiatives

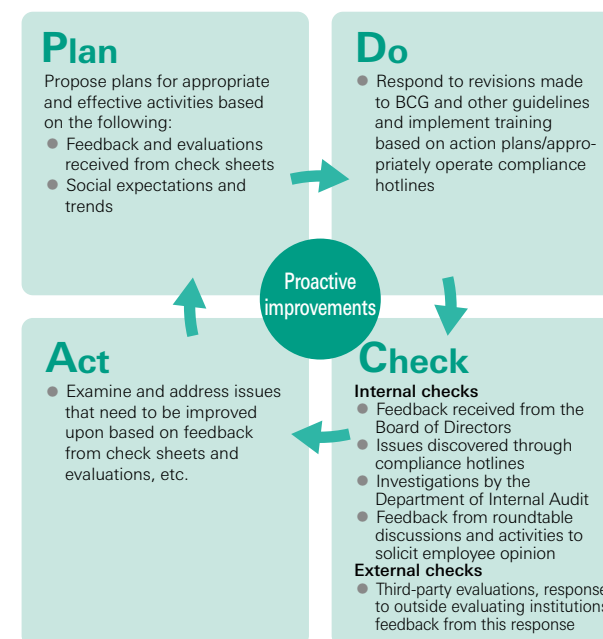
We conduct compliance promotion activities based on mid- to long-term and annual activity plans, including:

1. Regular revision of the Kao Business Conduct Guidelines (BCG) and other internal compliance-related guidelines.
2. Implementation of compliance education activities.
3. Improvement and operation of compliance hotlines.

We verify the validity and appropriateness of current activities when formulating the activity plans for the following year. To facilitate promotion of effective compliance activities, this verification process each year includes collecting the opinions of staff involved in compliance in company divisions as well as other

employees (activities that involve listening to employees' opinions and compliance roundtables). We also regularly receive advice not only from an external consulting firm after evaluation of our compliance framework but also from external evaluation companies after submission of our answers to their questionnaires.

PDCA cycle for compliance activities



Framework

We have established the Compliance Committee, chaired by the Representative Director and Senior Managing Executive Officer, and comprised of representatives of relevant divisions and affiliates.

The Compliance Committee implements the following once every six months:

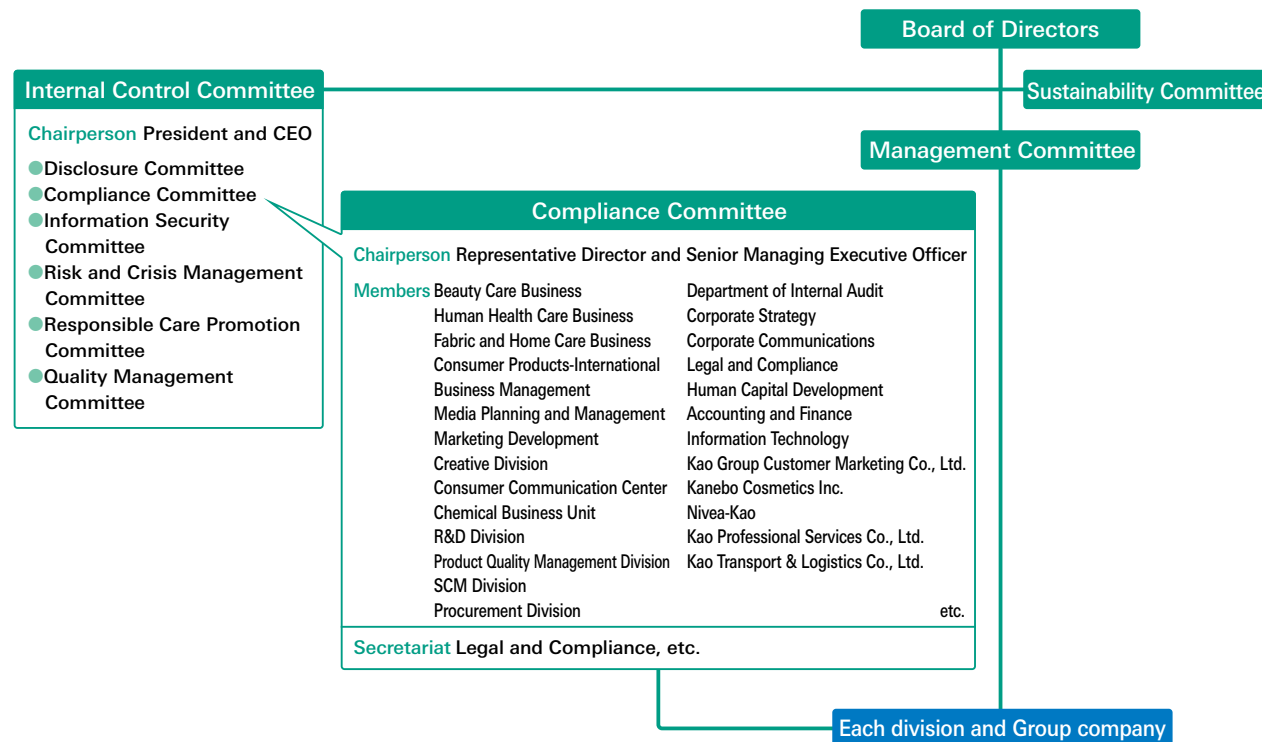
1. Discusses the establishment and revision of the Kao Business Conduct Guidelines (BCG) and other internal compliance-related guidelines.
2. Discusses the holding of educational and awareness-raising activities to promote the spread and establishment of corporate ethics both inside and outside Japan.
3. Monitors the operation of the compliance hotlines and the responses to communications received via the compliance hotlines.

The Committee also reports on other important matters such as revisions of rules and regulations, etc., and provides an overview of activities and makes proposals to the Board of Directors as appropriate in the form of an annual report.

The Compliance Committee has also installed a secretariat. At the secretariat meeting held each month, members of the secretariat review and discuss the status of responses to inquiries made to hotlines both within and outside Japan. They also consider new approaches to promoting compliance and draft plans to provide compliance education promotion activities.

In addition, Kao monitors and evaluates these activities and continues to improve them using the PDCA (plan, do, check, act) cycle.

Compliance promotion framework



*Organization names as of December 2017.

Auditing and monitoring framework

We conduct auditing and monitoring of compliance through the internal audit and the monitoring of activities in a variety of formats.

Annual confirmation

Once a year, confirmation is performed of the current status of the submission of reports to the Compliance Committee regarding matters pertinent to the Guidelines for Avoiding Conflicts of Interest and Anti-Bribery Guidelines, with respect to company officers and employees both inside and outside Japan.

In addition, the utilization status of anti-bribery checklists used when selecting new cross-border distributors or renewing contracts with existing cross-border distributors is verified annually.

Internal audit

A regular internal audit is conducted for all companies and divisions of the Kao Group, which includes verifying conduct on compliance-related issues based on guidelines related to entertaining and gift-giving.

Activities listening to employee's opinions

The Compliance Committee Secretariat creates opportunities for dialogue with employees of Kao Group companies inside and outside Japan when visiting them to conduct seminars and on other occasions. Comments concerning current compliance activities are received, along with, requests and proposals for improvements.

Employee opinion survey

The Kao Group monitors the status of compliance awareness among employees through the company-wide opinion survey *Find*, which is conducted every other year.

A survey was also conducted in 2016 (within Japan) and 2017 (outside Japan) on specific behaviors, awareness and level of permeation regarding compliance activities.

Self-check exercises at seminars

Participants in compliance seminars for mid-career employees completed self-check exercises on their compliance awareness. In 2017, a total of 46 employees participated in these exercises.



→ p. 141 Corporate Culture > Sustainable and responsible procurement / Conducting the supplier satisfaction survey

Mid- to long-term targets and performance

Mid- to long-term targets

1. Continuous enhancement of BCG educational and awareness-raising activities
2. Appropriate operation of the compliance hotlines
3. Identify issues and explore and implement improvement measures based on social and internal expectations and other activities for monitoring and measuring effectiveness

2018 targets

- Enhancement of framework for compliance with laws and regulations to reduce serious compliance risks
- Reviewing the need for revision of the BCG for 2019
- Continuity of compliance education and training
Particular emphasis on embracing the idea of thoroughly instilling integrity
- Improvement of responses to communications received via compliance hotlines
- Continued activities that involve listening to employees' opinions

Performance in 2017

1. Continuous enhancement of BCG educational and awareness-raising activities

Deployment of the BCG based on social expectations

The Kao Business Conduct Guideline Casebook, which outlines key points to note regarding BCG and presents case studies of BCG implementation, was revised in 2017. The 26 case studies (including common case studies inside and outside Japan) were reviewed, and were presented in an easy-to-understand format supported by illustrations.

BCG permeation strategies

① Educational activities for employees

To deepen employee understanding of the BCG and other compliance-related rules and regulations, we hold classroom-based training for new employees, newly

appointed managers, managers working in Japan, and Group company employees (including managers) outside Japan. In addition, an annual BCG refresher test is held to check knowledge of BCG content.

For 2017, specific targets were set for the following three items. The results achieved are outlined below:

Targets and Results of BCG permeation measure

BCG permeation measures	Targets	Results
BCG refresher test	100%	97.1% (completed 36,270/37,363 targets)
Compliance training for Kao executives working in Japan	Targets (cumulative) for 2018: 100%	72.2% (completed 1,182/1,637 targets)
Training for managers working outside Japan	Targets (cumulative) for 2019: 100%	34.0% (completed 474/1,393 targets)

② Implementation of Compliance Awareness Month



→ p. 126 Our initiatives: Implementation of Compliance Awareness Month

2. Appropriate operation of the compliance hotlines



→ p. 127 Our initiatives: Establishment and operation of the compliance hotlines

Performance in 2017

3. Identify issues and explore and implement improvement measures based on social and internal expectations and other activities for monitoring and measuring effectiveness

Annual confirmation

Outside Japan, the Compliance Committee conducted annual confirmations of the submission of reports under the Guidelines for Avoiding Conflicts of Interest and the Anti-Bribery Guidelines. In Japan, annual confirmation of the compliance activities including the divisions and entities that have no compliance committee member was performed.

Employee opinion survey

A survey on specific compliance behaviors and compliance awareness (comprising six questions), which was conducted in 2016 for employees of Group

companies in Japan, and conducted in 2017, for employees of Group companies outside Japan. As a result of the survey, we were able to confirm the status of helpcard and BCG booklet retention by employees of various functions, reliability of the compliance hotline, and atmosphere (easiness of communication) of their own organizations, and we implemented necessary remediation measures. We will continue to take advantage of opportunities such as revision of the BCG to assess employee perception on a periodic basis in the future.

Activities that involve listening to employee's opinions

Opportunities for dialogue with employees from 16 departments and entities, including Group companies inside and outside Japan, were arranged, and we collected employee opinions with regard to existing

initiatives, proposals for new initiatives, and other issues.

Compliance promotion activities based on third-party evaluations

We reexamined our mid- to long-term activity plans, and continued to implement activities aimed at enhancing the permeation of compliance awareness, in order to improve evaluations from external consultants of our compliance program from the previous year.

Our challenges were confirmed and these were reflected in annual plan for 2018, following completion of questionnaires from third-party evaluation bodies including RobecoSAM, a survey and analysis company for the Dow Jones Sustainability Indices (DJSI) in which Kao participates every year, as well as the Ethisphere Institute.

Collaboration with stakeholders

- In June 2017, at the request of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), the Executive Officer of the Legal and Compliance Division gave a lecture on the Kao Group's compliance activities at an expert meeting held to consider strategies for ensuring thorough implementation of compliance requirements in relation to re-employment.
- The Executive Officer of the Legal and Compliance Division gave a lecture on the role of top management at a meeting to discuss compliance promotion initiatives in companies doing business in Japan (including foreign-owned enterprises) during an Executive Roundtable in Tokyo hosted by the Ethisphere Institute, a U.S. corporate ethics think tank, in November 2017.

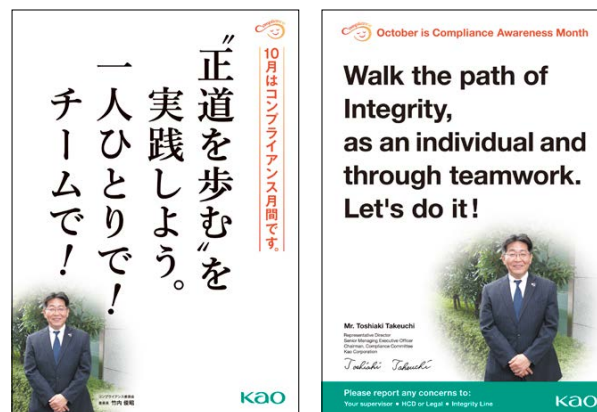
Our initiatives

Implementation of Compliance Awareness Month

At Kao, we have designated every October as Compliance Awareness Month, with the aim of encouraging employees to view compliance as something that is directly relevant to all of them. During Compliance Awareness Month, various activities are held to foster effective permeation of compliance awareness. Compliance Awareness Month was first held in Japan in 2015. In 2016, the scope of implementation was expanded to include countries outside Japan.

During Compliance Awareness Month in 2017, a message from the Compliance Committee chairman was disseminated via the company intranet and/or displayed as posters. Compliance messages were also created by regional presidents and presidents of individual companies. In addition, case studies were administered, and BCG refresher tests were administered to check knowledge of the BCG. Compliance logo stickers were distributed to those employees who completed the test as certificates of completion.

Comments from employees included: "Employees were really impressed to see messages drafted by their president!" and "While we should always act with integrity, I like to have a chance to reflect on Compliance once a year and hope this will be continued."



The Compliance Awareness Month poster is designed and displayed in 19 languages

Revision of the BCG Casebook and deployment of other compliance-related rules

The Kao Business Conduct Guidelines (BCG), which serves as Kao's corporate code of conduct, has been adopted by all Kao Group companies throughout the world. In addition, the Kao Business Conduct Guidelines Casebook, which covers possible scenarios relating to the BCG in Q&A format, has been compiled in Japanese, English and 17 other languages.

Reflecting the approach embodied by the BCG, we prohibit giving and receiving of bribes regardless of the identity of the other party and ban facilitation payments in the Kao Anti-Bribery Guidelines. We also prohibit the making of political donations in the BCG and in Kao's Donation Guidelines. Moreover, the Kao Anti-Bribery Guidelines, which refer the approval procedures for giving and receiving of entertainment and gifts and notification procedures relating to the invitation of government officials, have been adopted for each region and company including Kao Group companies outside Japan.

Besides the measures noted above, we have also proceeded with the adoption at Kao Group companies both inside and outside Japan of

the Kao Guidelines for Avoiding Conflicts of Interest, which requires approval or notification corresponding to specific situations in which there is a risk of a conflict of interest through competition, transactions, loans, personal investments etc. with the Kao Group.

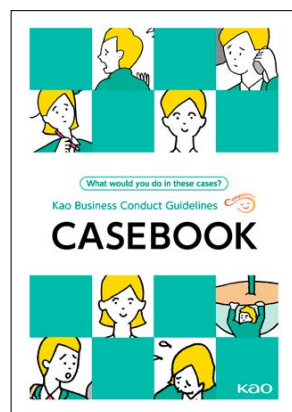
The following measures were also implemented in 2017:

1. Revision of the BCG Casebook (in July 2017).

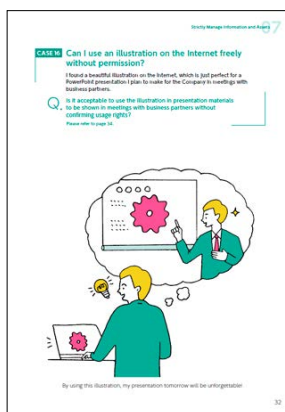
The main content of the revisions was as follows:

- ①26 cases were revised or replaced to reflect situations that are more realistic and relatable.
- ②Introduction of fictitious characters that make an appearance throughout the BCG Casebook as well as colorful illustrations, making the book more enjoyable to read.

These were compiled in Japanese, English and 17 other languages, and distributed to individual Kao Group companies.



The Kao Business Conduct Guideline Casebook



2. An Anti-Bribery Checklist has been rolled out to be used when selecting an intermediary or an agent or when renewing a contract with them. This is in addition to the Anti-Bribery Checklist for Distributor Selection. Practical utilization of the Checklist for verifying circumstances in particular situations has already begun.

3. It was verified that no political contributions were made in 2017.

Establishment and operation of the compliance hotlines

Kao Group operational policy

Depending on the needs of each country and region, Kao Group companies have established and operate either both internal and external compliance hotlines or only external hotlines.

In operating the hotlines, after properly confirming the caller's needs, companies take steps to respect the individual's privacy, strive to the maximum extent possible to ensure that callers suffer no disadvantage as a result of their good-faith consultation, and receive the caller's consent when a third party needs to be involved. Anonymous inquiries are accepted, but callers are encouraged to identify themselves to facilitate proper investigation.

In 2017, there were 285 calls to the hotlines of the Kao Group, including companies outside Japan. About 80% of the calls were of a minor nature, which were ultimately resolved or closed through responses from the secretariat or in face-to-face consultations with the caller. The remaining 20%

were resolved by measures such as warnings to the relevant persons based on investigations of the matters in question in face-to-face consultations with the relevant persons. There were 10 cases which resulted in disciplinary action which resulted in termination of employment.

Of these, there was one case that was serious enough to affect the company's business operations (For more details, see "Response to compliance violations, and violations in 2017" on the next page). In response to the above, measures have been taken to strengthen follow-up of the handling of consultation cases, and adjustments have been made to the implementation systems.

Further breakdown of the reports reveals that items related to harassment, including sexual harassment, abuse of authority and bullying, represented roughly 30% of the total, while items falling outside of the scope of compliance issues, including those related to miscommunication at workplaces, working conditions and employment, represented around 40%. Together, these two categories comprised approximately 70% of calls. There was no particular correlation observed between the types of reports and the department, business function or location.

Kao Group in Japan

Kao Group companies in Japan have established internal compliance hotlines operated by members of the Compliance Committee secretariat and external hotlines operated by outside lawyers and clinical psychologists. Internal hotlines and external hotlines operated by the lawyers accept reports and consultation not only from Kao employees but also from related parties including business partners.

Kao Group outside Japan

All Kao Group companies outside Japan have established and operate external compliance hotlines operated by an outside service provider, and the majority have also established internal compliance hotlines in which the company's HR manager or other representative handles inquiries.

The Integrity Lines, which are external compliance hotlines, have been successively set up at Kao Group companies in countries outside Japan and are available in the caller's own language 24 hours a day, 365 days a year.

In 2017, a new hotline was set up for a chemical company in Europe which joined the group.



Poster for the Integrity Line at Kao Chimigraf

Response to compliance violations, and violations in 2017

We uphold a principle of disclosing violations of laws and regulations that occur in relation to the Kao Group's business operations.*

*However, in cases where there are legal or contractual confidentiality obligations, a risk of negatively impacting the public interest, the need to take privacy into consideration or other similar limiting factors, the violation may not be made public.

With respect to the Kao Group's business operations in 2017, some aspects of cosmetics production at the Odawara Plant were found not to be in conformity with the requirements of Japan's Fire Service Act, and the production operations in question were halted. The situation has already been remedied in accordance with guidance received from the relevant authorities. Product quality and safety were not affected. Information about this incident was made public in a News Release issued on September 28, 2017.

There were a total of 10 cases globally which resulted in persons leaving their positions (including resignation under instruction). These included cases involving fraudulent behavior such as theft and embezzlement, sexual harassment, serious traffic violations, and other offenses. There were cases at Group companies outside Japan involving embezzlement of company assets by multiple employees that necessitated a renewed effort to thoroughly implement compliance activities. All other cases were at the level of individual employees, and none was serious enough to cause any major harm to the company's business operation.

In response to these cases, efforts have been made to thoroughly permeate the principle of integrity, through the dissemination of messages from top management aimed at preventing recurrence and through internal educational activities.

Kao's approach

Our initiatives

Measures aimed at ensuring full compliance in daily work

We assign employees trained as "laws and regulations experts" to monitor trends in enforcement and amendments to laws and regulations related to its business, and to share the necessary information with the internal relevant persons and educate them as needed with in-house workshops.

In addition, various internal rules that are useful in putting the BCG into practice are available on the intranet system at Kao Group in Japan.

Laws and regulations revised in 2017 for which laws and regulations experts conducted relevant activities

- Act on Safety Assurance and Quality Improvement of Feeds
- Agricultural Chemicals Control Act, etc.

Number of laws for which laws and regulations experts have been appointed and the number of internal regulations registered as of the end of December 2017

Number of laws for which laws and regulations experts have been appointed*: 342 laws in total, with 71 laws and regulations experts

Number of internal regulations registered: 450

*Appointment of laws and regulations experts

Each division independently appoints laws and regulations experts for specified laws and regulations.

Twelve consecutive years on the World's Most Ethical Companies list

In February 2018, Kao was named to the list of the World's Most Ethical Companies 2018 by the U.S. think-tank Ethisphere Institute. We have been on this list for 12 straight years, since the award's inception in 2007. We are the only Japanese company, and the only manufacturer of fast-moving consumer goods and chemicals, to be honored in all 12 years.

Selection of companies for the list is based on the evaluation of five factors:

- ① Corporate Ethics and Compliance Program;
- ② Corporate Citizenship and Responsibility;
- ③ Culture of Ethics;
- ④ Governance; and
- ⑤ Leadership, Innovation and Reputation.

This recognition reflects the fact that the spirit of integrity as passed down from our founder continues to be implemented by all Kao Group members in day-to-day operations through practice of the Kao Way and the BCG.



Awards ceremony

Kao's approach

We have formulated the Kao Human Rights Policy, which is based on the United Nations (UN) Guiding Principles on Business and Human Rights, and we are implementing measures aimed at fostering respect for human rights in every aspect of our *Yoki-Monozukuri* processes.

Kao's creating value to address social issues

As the globalization of corporate activities advances and the supply chain expands, human rights risks are increasing.

We implement a range of measures that embody respect for human rights in accordance with international standards and in collaboration with a diverse range of stakeholders, to promote the achievement of the Kao Way mission, which is "to strive for the wholehearted satisfaction and enrichment of the lives of people globally and to contribute to the sustainability of the world."

Contributions to the SDGs



Policies

In 2015, we formulated and announced the Kao Human Rights Policy, which stipulates that we respect international norms relating to human rights, such as the International Bill of Human Rights, and that we will conduct human rights due diligence and implement human rights education for employees, working diligently to fulfill our responsibilities in regard to respecting human rights in every aspect of our operations.

The Kao Business Conduct Guidelines (BCG), which regulate conduct to ensure the realization of the Kao Way, clearly stipulate respect for human rights and the prohibition of child labor, human trafficking and all other forms of forced labor. In the supply chain also, our Policies for Procurement stipulate the need for purchasing operations to embody respect for human rights, and to contribute to the fulfillment of our corporate social responsibility. In addition, the Guidelines for Supplier's Assessment include suppliers' fulfillment of their corporate social responsibility as an assessment item, and notes that suppliers are required to take measures to prevent forced labor, child labor and other illegal labor practices.

In 2005, we declared our support for the UN Global Compact, which defines ten principles in the four areas of human rights, labor, the environment and anti-corruption.



- Kao Human Rights Policy
<http://www.kao.com/global/en/sustainability/approach/issues-solve/humanrights/kao-humanrights/>
- Kao Business Conduct Guidelines
<http://www.kao.com/global/en/about/policies/compliance/business-conduct-guideline/>
- Policies for Procurement
<http://www.kao.com/global/en/sustainability/procurement/policy/>
- Guidelines for Supplier's Assessment
<http://www.kao.com/global/en/sustainability/procurement/supplier-guidelines/>

Framework

Reflecting the multi-faceted nature of human rights issues, we implement human rights-related measures by having the Human Capital Development Division, the Sustainability Department, the Compliance Promotion Office, the Procurement Division and other divisions play a central role, liaising with relevant departments and with Group companies, and submitting progress reports to the Sustainability Committee.

The Sustainability Department functions as the secretariat for matters relating to human rights due diligence within the Kao Group, implementing relevant measures in collaboration with the Human Capital Development Division and the Compliance Promotion Office. To ensure that Kao employees are able to report and consult on compliance-related issues when necessary, an internal and/or external compliance hotline has been established in each Kao Group company.



→ p. 127 Corporate Culture > Integrity:
Establishment and operation of the compliance
hotlines

With regard to human rights-related measures targeting the supply chain, the Procurement Division, which is our point of contact for communication with suppliers, plays the central role here, encouraging suppliers to take appropriate steps.

Education and promotion

We hold workshops throughout the world to deepen understanding of the Kao BCG, which sets out our approach to ensuring respect for human rights among employees in all Kao Group companies. We also implement classroom-based training for newly recruited employees and for newly appointed managers, as well as an annual refresher test that all employees are required to take once a year.

In Japan, each December is designated as Human Rights Awareness Month, and awareness-raising activities are implemented using newsletters, posters, etc. In addition, our internal Guidelines for Preventing Sexual Harassment are posted on the company intranet, and a system has been put in place for the establishment of internal and external harassment consultation hotlines for use by Kao employees.

Respect for human rights in advertising

We have implemented educational activities to ensure that personnel involved in the production of advertisements, product packaging, etc. are aware of human rights perspectives that apply to advertising.

Mid- to long-term targets and performance

We are using human rights due diligence and awareness-raising activities to deepen understanding of stakeholders' human rights. We will continue to identify, prevent and mitigate human rights-related risks in our business activities.

Performance in 2017

Implementation of human rights due diligence both at Kao and in the supply chain

Internal

- A survey of Kao Group companies was conducted using the Human Rights Checklist (the response rate for target companies was 100%).
- A survey of Kao Group production sites (41 plants in total) was conducted using the Sedex*¹ Self-assessment Questionnaire (the response rate for target production sites was 100%).
- In 2015, the "Act to make provision about slavery, servitude and forced or compulsory labour and about human trafficking, including provision for the protection of victims; to make provision for an Independent Anti-slavery Commissioner; and for connected purposes" (the "Modern Slavery Act 2015")*², was enacted and came into effect in 2015 in the U.K. A statement noting the measures taken by the Kao Group in relation to the Act has been posted on the Kao website.

*1 Sedex (Supplier Ethical Data Exchange)

A large-scale global platform for the sharing and verification of information relating to labor standards, health and safety, environmental protection and business practices, aimed at promoting the adoption and maintenance of ethical business practices in global supply chains.

*2 Modern Slavery Act 2015

The Act requires for-profit groups and companies conducting business activities in the United Kingdom whose annual

sales exceed a certain scale to produce and release annual statements about measures enacted to ensure that slave labor and human trafficking offenses have not been committed.



→ **Modern Slavery Act Statement**
<http://www.kao.com/global/en/sustainability/approach/issues-solve/humanrights/modern-slavery-act-statement/>

Supply chain

- In June 2017, we revised the Guidelines for Supplier's Assessment, requiring suppliers to demonstrate the same level of concern for human rights and the environment that Kao shows. The revisions made clear that Kao would be making effective use of Sedex to verify compliance with the Guidelines for Supplier's Assessment.
- As in the previous year, suppliers were encouraged to register with Sedex. The number of sites for which access rights with Kao have been established is 908.

Human rights awareness-raising activities

Dissemination of information to support human rights awareness-raising

Besides sharing awareness-raising materials with those personnel responsible for filling out risk surveys

in relation to the Kao Group's internal Human Rights Due Diligence process, within Japan we have also put in place a framework to facilitate self-checking in relation to verification of the human rights perspective of statements made in advertisements, product packaging, etc. Awareness-raising has been implemented with respect to a total of 279 employees who are working in related function divisions or in units that are involved with the production of advertisements.

Awareness-raising activities during Human Rights Awareness Month

In December 2017, during Human Rights Awareness Month, posters and newsletters were distributed for awareness-raising purposes. The newsletters covered various human rights-related themes and Kao's consultation hotlines.

Efforts to promote employees' understanding of LGBT issues

As part of our efforts to promote diversity and inclusion (D&I), we have continued to implement the dissemination of various types of information relating to LGBT issues in line with our D&I policy.



→ p. 148 Corporate Culture > Diversity and inclusion

Our initiatives

Human rights due diligence process

We are making the following efforts to investigate and identify human rights risks involving the Kao Group.

1. Efforts in the Kao Group

Every year, we perform a risk assessment targeting all Kao business locations throughout the world. With respect to production sites, we make effective use of Sedex, a global corporate ethics information sharing platform. For other Kao Group companies besides the production sites, a Human Rights Checklist was compiled, which these companies are required to complete.

In 2017, a total of 41 production sites completed the Sedex Self-Assessment Questionnaire. For other Kao Group companies, a total of 56 Kao Group companies completed and returned the Human Rights Checklist. In both cases, there was a 100% completion and return rate. The results obtained did not show any human rights related risk at Kao production sites or Kao Group companies. There are therefore no cases of improvements being implemented as a result of human rights due diligence.

2. Efforts in the supply chain

We make use of a variety of opportunities and methods to communicate with suppliers, endeavoring to ensure that suppliers understand our policies and ethical standards.

In 2012, new clauses relating to concern for the

environment and for human rights were added to the master agreements that we sign with suppliers. In principle, this master agreement is used when signing contracts with new suppliers or renewing existing contracts.

Since 2008, suppliers have been required to perform self-assessment of their conformity with the Guidelines for Supplier's Assessment, which we then monitor. In the case of suppliers whose self-assessment shows that they fail to meet the required standards, our personnel visit the supplier so that the supplier can share information about the problems, and so that we can collaborate on achieving improvements.

Since joining Sedex in 2014, we have held presentations to explain Sedex to suppliers, and we continue to request that suppliers join Sedex, respond to Sedex questionnaires, and set up data access rights. The number of sites for which data access rights have been established worldwide so far is 908.



→ p. 134 Corporate Culture > Sustainable and responsible procurement

Engaging with stakeholders in regard to human rights

We participated in the Stakeholder Engagement Program organized by Caux Round Table Japan (CRT

Japan), which was held five sessions between June 1 and July 13, 2017. The Program provided an opportunity to hear suggestions from human rights experts and human rights related NGOs and NPOs. Through discussions with other companies in different industries, we were able to examine how companies should go about identifying the issues that they need to address in regard to the relationship between business and human rights, and how to implement corporate activities while paying due attention to human rights. On the basis of these discussions, Human Rights Issues by Sector, version 6, was issued.

Prior to the implementation of the Program in Japan, we attended a workshop held in Kuala Lumpur, Malaysia on May 24, 2017 that was jointly organized by CRT Japan and UN Global Compact (UNGC) Malaysia. At this workshop, we answered questions from NGOs, and engaged in discussion regarding the types of issues that business enterprises should prioritize, and what kind of responses to these issues are possible. We also engaged in dialog with small-scale agricultural producers engaged in palm oil production. On September 14, 2017, we engaged in dialog with the participants of the workshops referred to above, and with human rights experts from leading organizations both within and outside Japan. We reported on the content of the discussions during the workshops and on the insights we had gained, and we took part in a proactive exchange of views and ideas with the human rights experts.

Kao's approach

Kao conducts fair and impartial procurement activities based on legal and ethical principles. While aiming to contribute to the realization of a society with sustainable development, we fulfill our corporate responsibilities with consideration for resource protection, environmental conservation, safety and human rights.

Kao's creating value to address social issues

We pursue sustainable and responsible procurement activities to fulfill our corporate social responsibility while maintaining standards of fairness, compliance and ethics, and social responsibility conforming to our Policies for Procurement.

In procurement transactions, we provide opportunities for fair competition based on practical standards, comply with laws and uphold ethical standards in all countries in which we do business.

Aiming to contribute to realizing a society with sustainable development, we are fulfilling our corporate social responsibility with extensive environmental considerations including resource conservation, global warming prevention and biodiversity preservation, as well as social considerations including safety, sanitation, labor conditions and human rights.



→ Policies for Procurement
<http://www.kao.com/global/en/sustainability/procurement/policy/>

Contributions to the SDGs



Policies

We have formulated Guidelines for Supplier's Assessment and Guidelines for Sustainable Procurement of Raw Materials to facilitate the practical implementation of procurement activities in accordance with our Policies for Procurement.

We conduct procurement activities based on our Guidelines for Supplier's Assessment, which position suppliers as an essential partner in *Yoki-Monozukuri*. In our procurement activities, we give priority to those suppliers that place importance on social responsibilities, including compliance with laws, regulations and social norms, protection of human rights, assurance of health and safety and fair trade, and to those suppliers that collaborate fully on environmental issues such as the environmental management system that we consider to be important. We also give priority to procurement of raw materials and packaging that give due consideration to environmental concerns.

Our standard contract with suppliers clarifies provisions concerning the aforementioned issues including the environment, human rights and labor.

We are also pursuing sustainable procurement based on the Guidelines for Sustainable Procurement of Raw Materials, which takes into account environmental problems including global warming and the loss of biodiversity as well as resource constraints, human rights and other pertinent issues.

In addition, we recognize that our business depends on natural capital, and we commit to zero deforestation at the source in our procurement of raw materials including palm oil and paper. Over the medium and long term, we will be taking measures to reduce the amount of raw materials that needs to be used, and other measures to switch over to the use of non-food biomass sources such as algae, striving to promote sustainable and responsible procurement that gives due consideration to the ethical issues that have been thrown into relief by the process of globalization.



→ Guidelines for Supplier's Assessment
<http://www.kao.com/global/en/sustainability/procurement/supplier-guidelines/>
→ Guidelines for Sustainable Procurement of Raw Materials
<http://www.kao.com/global/en/sustainability/procurement/raw-materials-guidelines/>

Framework

The Procurement Division formulates strategy to conduct sustainable and responsible procurement. It has set up the Sustainability Group in the Planning Division and the Sustainable and Responsible Procurement Panel.

Under this strategy, the Raw Materials Division and the Packaging Materials Division conduct procurement in accordance with the Guidelines for Sustainable Procurement of Raw Materials. Meanwhile, the Indirect Materials & Services Division conducts green purchasing of office and other supplies, and the Machinery & Equipment Division is introducing environmentally friendly equipment and fixtures.

Education and promotion

Employee training and awareness-raising (Japan)

We have educated our new Procurement Division employees in our basic approach to procurement, which includes fairness and equity, adherence to laws and ethics, and social responsibility. Through such training, we strive to encourage our employees to understand global social issues such as human rights and labor, which are fundamental to ISO 26000 and the United Nations Global Compact (UNGC) principles.

In 2017, seven employees newly assigned to the Procurement Division received education in our basic approach to procurement.

Promoting certification testing (Japan)

With the aim of educating all Procurement Division employees in the relationship between business operations, society and the environment and of encouraging them to modify their behavior accordingly, starting from 2012 Procurement Division employees have been encouraged to take the Certification Test for Environmental Specialists® (Eco Test®*1). In addition, starting from 2015, we have encouraged Procurement Division employees to take the Examination of Compliance Proficiency for Practical Business (ECPBP®)*2.

In 2017, the pass rates for these two examinations for Procurement Division employees were 71% for the Eco Test, and 64% for the ECPBP.

Global Procurement Meeting (Global)

The Global Procurement Meeting, which is attended by procurement managers from Kao affiliates, is held once a year. The Meeting provides a venue for education and verification regarding the Kao Group's procurement policy and sustainable, responsible procurement.

*1 Eco Test

This test Promotes an environmentally and economically sustainable society. The Eco Test has been administered by the Tokyo Chamber of Commerce and Industry since 2006.

*2 ECPBP®

This test views compliance as fulfilling social expectations which lies behind laws and regulations, and it Aims to cultivate compliance skills that embody an awareness of the social expectations that underpin compliance-related laws and regulations, and a systematic understanding of the laws and regulations that are particularly important for business enterprises. The ECPBP was launched in 2005 by Japan's Certify Competence Examination Committee.

Mid- to long-term targets and performance

Mid- to long-term targets

1. Promoting the sustainable procurement of raw materials

Procurement of certified raw materials

With the aim of realizing zero deforestation, we are promoting the switch to procuring palm oil, paper and pulp from sustainable sources by 2020.

With regard to procurement of palm oil and palm kernel oil, besides joining the RSPO*¹ and promoting the obtainment of SCCS*² certification and the procurement of certified sustainable palm oil, we are also taking measures to ensure back-to-the-source traceability of all palm oil and palm kernel oil that the company purchases by 2020. As of the end of 2015, we had completed traceability confirmation of the respective mills. However, as there are still some cases of derivative products purchased from suppliers where the mill that produced the original raw material cannot be confirmed, we will continue to undertake further confirmation work, and will also purchase RSPO-certified materials as a supplementary measure.

Regarding procurement of paper and pulp, we are aiming to ensure that, by 2020, all paper, pulp and packaging materials used in Kao products, and all paper used in Kao offices, are either recycled paper or paper from a sustainable source. In particular, in the case of pulp, by 2020 we aim to purchase only pulp that has traceability back to the area where the timber was logged.

Sustainable sourcing of natural plant resources

Responding to growing awareness of the scarcity of natural plant resources and the problems relating to resource capture, we are promoting natural plant resource procurement that reflects ABS*³ concerns. We are also continuing with initiatives to diversify sourcing routes and to convert natural plants to artificially cultivated materials, giving due consideration to the natural environment and the community in the producing areas.

2. Human rights initiatives

We established the Kao Human Rights Policy in 2015 to address various risks associated with human rights issues. In addition to our own activities, we also request that the activities of our suppliers respect human rights based on the Guidelines for Supplier's Assessment as part of our policy of human rights due diligence, and we conduct the due diligence.

To conduct this risk assessment, in 2014 we joined Sedex, a platform for sharing information on ethical practices by global companies. We have been also encouraging our suppliers to join Sedex. By 2020, we aim to achieve a 70% rate of Sedex participation (for suppliers in Japan, on a purchasing value basis).

Starting from 2017, we have also implemented supplier risk assessment using Sedex.

3. Green procurement

With regard to purchasing of indirect materials such as stationery and office supplies, in line with the Ministry of the Environment's calls to implement green procurement, we have formulated Green Procurement Standards, which give priority to purchasing environmentally conscious products.

We are also pursuing the introduction of environmentally friendly equipment and fixtures such as LED lighting, and signing contracts with electric power companies that have low CO₂ emissions coefficients.

*1 RSPO (Roundtable on Sustainable Palm Oil)

A roundtable group to promote the production and use of sustainable palm oil.

<http://www.rspo.org/>

*2 SCCS (Supply Chain Certification System)

A supply chain system created for the purpose of producing, selling and delivering products to customers using sustainable palm oil harvested at plantations certified by the RSPO that meet rigorous standards for biodiversity preservation.

*3 ABS (Access and Benefit Sharing)

ABS is one of the goals of the Convention on Biological Diversity (CBD). It relates to the fair and equitable sharing of the benefits derived from the exploration, development and use of genetic resources in relation to the issue of the capture of the bio-resources (genetic resources) of producer nations (which are generally developing nations) by advanced nations and multinational corporations.

Performance in 2017

1. Promoting the sustainable procurement of raw materials

Procurement of certified raw materials

- Palm oil and palm kernel oil procurement
- Paper and pulp procurement



→ p. 138 Our initiatives: Initiatives toward sustainable procurement of palm oil and palm kernel oil

→ p. 139 Our initiatives: Initiatives toward sustainable procurement of paper and pulp

Sustainable sourcing of natural plant resources

Glycyrrhizinate derivatives used in cosmetics and quasi-drug products are produced from glycyrrhiza (licorice root), a leguminous plant. Starting from 2016, we have been switching from wild glycyrrhiza to glycyrrhizinate derivatives produced from cultivated glycyrrhiza in specified plantations to achieve biodiversity preservation and sustainable use.

2. Human rights initiatives



→ p. 140 Our initiatives: Partnering with our suppliers/Sedex (Human rights initiatives)

3. Green procurement

The percentage of our total procurement conforming to the Green Procurement Standards in 2017 was 84%.

Collaboration with stakeholders

Sustainable procurement

We are promoting sustainable procurement in two ways: the purchasing of palm oil and paper and pulp products certified as sustainably procured, and confirming traceability. We have begun procurement of certified palm oil and certified paper by requesting that our suppliers in Japan obtain certifications.

To confirm traceability, we are conducting verifications and risk assessments by third-party organizations on information of the raw materials supply chain.

Partnering with our suppliers

We are strengthening coordination with our suppliers through various initiatives including Sedex, vendor summits, quality improvement meetings, CSR self-assessment monitoring, and the CDP Supply Chain Program, as we develop our global procurement activities.



→ p. 140 Our initiatives: Partnering with our suppliers

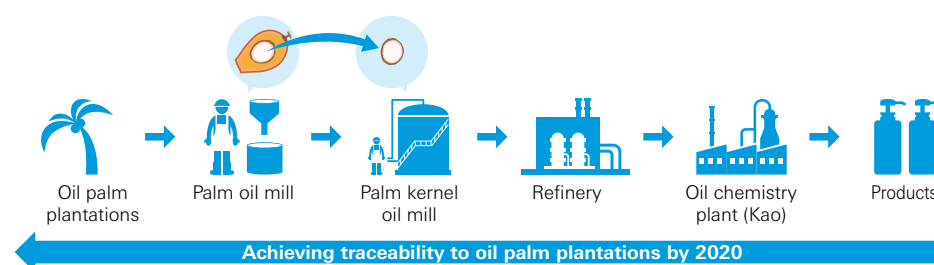
Our initiatives

Initiatives toward sustainable procurement of palm oil and palm kernel oil

We implement sustainable raw materials procurement with respect to palm oil and palm kernel oil, which are key raw materials for Kao, in accordance with our Guidelines for Sustainable Procurement of Raw Materials.

We are also an RSPO member, and are working to create a traceable supply chain for palm oil.

Palm oil and palm kernel oil procurement



Sustainable Palm Oil Procurement Guidelines targets and 2017 performance

In the procurement of palm oil and palm kernel oil, we have committed to considerations relating to biodiversity conservation and support for zero deforestation, and have set four goals toward realization.

Targets	2017 results
① By the end of 2015, purchase only sustainable palm oil traceable to the mill for use in Kao Group consumer products.	Confirmation of traceability to the palm kernel oil mill based on supplier (refinery) information: 100% Verification of the above mentioned supplier information by third-party organizations: 2 suppliers
② By 2020, adequately confirm zero deforestation at the source through cooperation with plantations, suppliers (mills and refineries) and third-party organizations. In addition, we will not take part in procurement activities that use high conservation value (HCV) forests, high carbon stock (HCS) forests or peatlands.	Implementation of risk assessments conducted by third-party organizations for mills with respect to which traceability has been confirmed: Palm kernel oil mills forming part of the supply chain of 4 suppliers (a total of approximately 900 mills) On-site surveys of palm oil mills that require monitoring: 1 mill
③ By 2020, purchase only sustainably sourced palm oil that is traceable to the plantation for use in Kao Group consumer products.	Confirmation of traceability to the palm oil mill based on supplier information: Approximately 97% completed in purchased volume Palm kernel oil mill verification by third-party organizations: 7 mills that are representative of palm kernel oil mills in their respective regions Utilization of the Bluenumber initiative for traceability verification: For details, refer to p. 140 Partnering with our suppliers
④ By 2020, work to obtain RSPO SCCS certification of Kao Group manufacturing sites in order to build a traceable supply chain for the group.	Number of RSPO SCCS certifications obtained: We have obtained RSPO SCCS certification for 28 sites globally

Goal① and Goal③ results for the past five years

Items	Results					Targets		
	2013	2014	2015	2016	2017	2018	2019	2020
Progress of activities to trace the palm kernel oil and palm oil used by the group back to the plantation	Palm kernel oil mills	—	—	Traceability verification completed	Verification is ongoing	Verification is ongoing	Verification is ongoing	Verification is ongoing
	Palm oil mills	—	—	Traceability verification not yet completed	Traceability verification not yet completed	Traceability verification not yet completed	Traceability verification completed	Verification is ongoing
	Oil palm plantations	—	—	Traceability verification not yet completed	Traceability verification not yet completed	Traceability verification not yet completed	Traceability verification not yet completed	Traceability verification completed

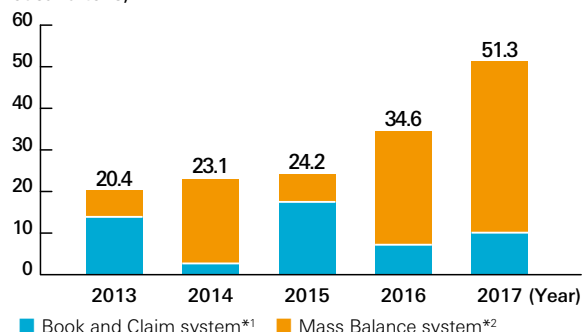
Sustainable and responsible procurement 308-2,414-2

Kao's approach

Our initiatives

Kao Group certified palm oil purchases

(Thousand tons)



* Total of palm oil, palm kernel oil and their derivatives for consumer products.

* Some data have been revised, and figures for 2016 have been changed.

Response to suspension of RSPO certification for the IOI Group

In response to the suspension of palm oil supplier IOI Group's RSPO certification in 2016, we halted purchasing from IOI and asked them to implement improvements. In 2017, after verifying through face-to-face meetings etc. that steps were being taken to realize improvements, negotiations aimed at the recommencement of purchasing continued.

*1 Book and Claim system

RSPO-certified palm oil credit trading system. By purchasing "certification credits" issued in proportion to the amount of palm oil produced and registered by plantations certified by the RSPO, users of palm oil are considered to have purchased the amount of certified palm oil corresponding to the amount of credits. This system encourages plantations to produce certified oil.

*2 Mass Balance system

A certification system that permits mixing of RSPO-certified palm oil with non-certified palm oil.

Initiatives toward sustainable procurement of paper and pulp

We are pursuing procurement of sustainable paper and pulp raw materials based on our Guidelines for Sustainable Procurement of Raw Materials.

Regarding the adoption of FSC-certified paper, we began using the paper for Kao product containers and packaging in 2013. Starting with the shrink-packaging paper used for Kao's portable *Resesh* products, we have since expanded this program to include the boxes used for hair color products, heating sheets which give off steam bath additives, toothpaste, etc., and paper packaging for cosmetics products. In addition, in 2016 we became the first company in Japan to start using FSC-certified corrugated paper. In July 2017, we began using FSC-certified paper for both the main packaging and cover for powder laundry detergent products (including *Attack* and *Newbeads*).

Sustainable Pulp and Paper Procurement Guidelines targets and 2017 performance

We have committed to considerations for biodiversity preservation and zero deforestation in paper and pulp procurement.

Targets	2017 results
By 2020, we will purchase only recycled paper and paper produced with due consideration for sustainability for the paper and pulp used in Kao Group products, packaging materials and office paper. When using pulp other than waste pulp (virgin pulp), we will purchase only pulp that is traceable to the source, and confirm zero deforestation at producers of wood materials through cooperation with suppliers and third-party organizations.	Traceable paper and pulp: 99.8% (including procurement of certified product)
	In July 2017, we began using FSC-certified paper for both the main packaging and cover for powder laundry detergent products (including <i>Attack</i> and <i>Newbeads</i>).

Conservation

Community

Corporate Culture

Governance

Partnering with our suppliers

Sedex (Human rights initiatives)

We joined Sedex, a platform for sharing information on the ethical practices of global companies, in 2014 to identify areas of potential risk in human rights due diligence and to develop globally standardized methods of supplier monitoring. We are continuing to encourage our suppliers to join Sedex as well, and to fill out the Sedex questionnaires and establish data access rights. The number of sites for which data access rights have been established worldwide as of the end of 2017 is 908. Within Japan, data access rights have been established for 408 sites, which represents 65% of overall procurement value.

We have also begun using Sedex for supplier risk assessment. Of the more than 90% of suppliers who have completed and returned the questionnaire, those classified as high-risk accounted for 0.4%. With respect to these suppliers, besides implementing detailed risk verification, we ask the suppliers in question to implement remedial measures where necessary.

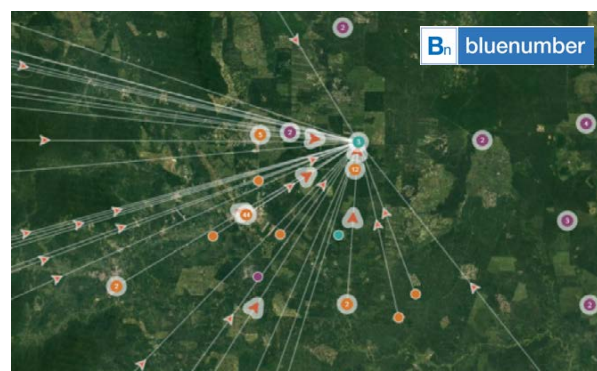
Participation in the Bluenumber Initiative

In July 2017, we joined the Bluenumber* Initiative, with the aim of helping to ensure traceability and transparency with respect to palm oil procurement. Bluenumber is a framework for realizing traceability of agricultural products on a global scale. With regard to palm oil, the registration of information relating to oil palm plantations, palm oil mills, palm kernel oil mills and palm oil refineries, as well as the characteristics of their workers, the production locations, the

products, and the details of the production activities, can be utilized effectively to confirm traceability.

*Bluenumber

The Bluenumber Initiative was launched at the U.N. Sustainable Development Summit on September 29, 2015. The aim of the initiative is to promote the participation of workers, producers and inhabitants of rural communities in the digital economy. Bluenumber has offices in New York, Kuala Lumpur, Tokyo and Dhaka.



Registration status of mills participating in the Bluenumber Initiative (sample image)

Guidelines for Supplier's Assessment compliance status

We have established the Guidelines for Supplier's Assessment, which define initiatives in such areas as the environment, safety, conformance with laws and social norms, and human rights and labor problems. We are monitoring self-assessments of the status of adherence to the Guidelines. These self-assessments involve confirmation of corporate social responsibility items such as compliance, human rights, business practices, etc., as well as confirmation of items relating to environmental

protection, such as environmental policies, environmental objectives, various categories of environmental management etc., addressing issues that include environmental pollution (including atmospheric pollution, water pollution, etc.). We visit suppliers who do not meet the standards, share with them the issues that need addressing, and conduct improvement measures.

In June 2017, we revised the Guidelines for Supplier's Assessment, requiring suppliers to demonstrate the same level of concern for human rights and the environment that Kao shows. The revisions made clear that we would be making effective use of Sedex to verify suppliers' compliance with the Guidelines for Supplier's Assessment.

Social aspect: Number of suppliers monitored and percentage meeting CSR Procurement Standards

	Suppliers to Kao Corporation	Suppliers to the Asian Kao Group
2013	883 (99%)	726 (98%)
2014	906 (99%)	823 (98%)
2015	1,168 (96%)	994 (98%)
2016	1,602 (92%)	1,166 (98%)
2017	1,705 (92%)	1,198 (98%)

Environmental aspect: Number of supplier plants monitored and percentage meeting CSR Procurement Standards

	Suppliers to Kao Corporation	Suppliers to the Asian Kao Group
2013	818 (99.5%)	541 (98%)
2014	879 (99%)	608 (97%)
2015	1,254 (97%)	750 (97%)
2016	1,616 (94%)	838 (97%)
2017	1,689 (94%)	842 (96%)

Implementation of vendor summit

We hold vendor summits to provide a venue for sharing information and exchanging opinions with suppliers within and outside Japan. Each year, a specific theme is chosen for the vendor summits, and we seek to foster communication in regard to that theme.

At the Japan vendor summit in 2017, we reported on the results obtained in the 2016 Supplier Satisfaction Survey. We also asked suppliers to actively cooperate with the CDP Supply Chain Program*¹, which is an initiative for sustainable and responsible procurement, and to join Sedex. In 2016, we began to present awards to suppliers for excellence in the areas of Quality, Cost, Delivery, Information Sharing, and Company Management and Sustainability.

At the 2017 vendor summit, Mr. Adachi Naoki of Response Ability Inc. gave an address entitled "Sustainable Procurement as a Management Issue" on the significance of sustainable procurement measures, and on the kinds of measures that firms will be expected to implement in the future.

Number of companies that participated in the vendor summit (Unit: firms)

	Held in Japan	Held outside Japan	Total
2013	184	151	335
2014	183	233	416
2015	214	285	499
2016	246	279	525
2017	245	258	503

CDP Supply Chain Program

We recognize risks associated with sustainable development based on resource constraints, loss of biodiversity, global warming and other environmental problems, and are working to sustainably procure raw materials. These initiatives need to be managed across the entire supply chain. With regard to climate change and water, we are participating in the CDP Supply Chain Program*¹ and asking our key suppliers to disclose relevant information. In 2017, the supplier response rate was 74% in regard to climate change, and 65% in regard to water resource usage.

In regard to forest resources, we are conducting risk assessments by providing information to the CDP Forest Program.*²

*1 CDP (Carbon Disclosure Project) Supply Chain Program
CDP is an international NPO (with its headquarters in London) that is sponsored by institutional investors. CDP implements various activities to encourage business enterprises, etc. to disclose information relating to climate change, water resource use and forest resource use. The CDP Supply Chain Program is an initiative in which participating enterprises ask the firms that make up their supply chain to disclose information relating to climate change and water resource use via the CDP platform.

*2 CDP Forest Program
A CDP initiative in which enterprises are asked to disclose information regarding forest resource management and usage status, etc.

Conducting the supplier satisfaction survey

We conduct supplier satisfaction surveys every three years in order to ensure that procurement activities are carried out fairly and equitably. Most recently, we conducted a supplier satisfaction survey in 2016 and received valuable feedback from suppliers on topics including vendor selection, quality, ordering, service and communication, which helped us to identify key issues.

The Procurement Division is working to spread awareness of the Kao Compliance Hotlines, and is endeavoring to foster the exchange of views with production-related divisions regarding order placement, and to clarify survey targets.

Sustainable and responsible procurement

Kao's approach

Our initiatives

Roundtable meeting with NGOs and institutional investors

On September 19, 2017, Kao held a roundtable discussion meeting regarding sustainable and responsible procurement, attended by representatives of NGO CSR Review Forum—Japan* and the asset management division of institutional investor Resona Bank.

This was the first time that we had held a roundtable meeting of this kind together with NGOs and institutional investors. From Kao, responsible persons for Procurement Division, Investor Relations and Sustainability attended the meeting. For about two hours, the participants engaged in meaningful discussion by sharing the environmental and social issues relating to procurement and Kao's activities to address these issues.



A lively exchange of views and ideas at the roundtable meeting

* CSR Review Forum—Japan

The CSR Review Forum is an NPO established as an alliance bringing together with several civic organizations (NGOs and consumer organizations, etc.) addressing social issues at the cutting edge, and individuals associated therein, which seeks to pursue the sustainable society.

<http://www.csr-review.jp/> (Japanese)



Tomohiko Yamaguchi

Joint Representative, CSR Review Forum—Japan

CSR Review Forum — Japan and institutional investor Resona Bank have engaged in discussions aimed at intensifying stakeholder engagement through dialog undertaken as a team by NGOs/NPOs and institutional investors. The first topic that we have sought to address together is palm oil. While working to develop a better understanding of the current situation in palm oil producing countries, we have engaged in a three-way dialog with Kao, with

the aim of learning about the measures that Kao has taken, which put it in the forefront of the industry.

Kao has set itself some high targets in its sustainable procurement activities, and is working steadily to achieve these targets through effective management. In regard to palm oil, we were able to develop a thorough understanding of the entirety of the supply chain, from oil palm plantations through to chemical plants. The most significant result achieved at the meeting was that institutional investor Resona Bank was able to acquire an in-depth understanding of palm oil related issues.

In terms of palm oil procurement, I would like to express my sincere admiration for the fact that Kao is aiming to purchase only sustainably sourced palm oil that is traceable to the plantation for use

in Kao Group consumer products by 2020, while having also decided to purchase only socially- and environmentally-friendly palm oil. At the same time, it can readily be imagined that high procurement costs could constitute a serious barrier for the palm oil to be used in industrial products and, if Kao were able to provide concrete figures and supporting explanations, this could help consumers to develop a better understanding of the issues. As a manufacturer of many products to be used in everyday lives, such as shampoo and detergents, Kao has the ability to appeal directly to consumers as a whole. I hope that, while continuing with its sustainable procurement initiatives, Kao can also continue to undertake awareness-raising activities targeting consumers.

Conservation

Community

Corporate Culture

Governance

Kao's approach

Employees are a company's most important asset. Kao strives to create an environment and corporate culture in which both individuals and the company can grow together through maximizing each employee's potential and making a positive contribution to society.

Kao's creating value to address social issues

In order to promote work-style reforms, which is a social issue of great importance to Japan, we are expanding our support measures in relation to childcare, nursing care and long-term care needs, and we are implementing measures to promote active cultivation of female employees, expand the continued employment and active utilization of older employees, who have already passed retirement age promote more flexible work styles, and reduce the incidence of long working hours by enhancing efficiency and changing attitudes.

Furthermore, reflecting our awareness of the fact that employees' health represents not only a key foundation of each employee's life but also an important asset for the company and a fundamental source of corporate growth, we are providing active support to encourage employees to look after their own health properly.

In addition, we are strengthening and promoting, on a global basis, measures to cultivate human talent that can make a wide-ranging positive contribution to society through corporate activity. We are therefore making a global effort to promote diversity and inclusion (D&I) so that all employees are able to demonstrate their different characteristics and capabilities to the maximum possible extent.

Contributions to the SDGs



Policies

The efforts of each and every employee to pursue individual achievements by exercising his or her own abilities and characteristics to the utmost can contribute to the success of the employer. Based on this concept, we aim to create such an environment and corporate culture.

To this end, we have defined this policy as the Guidelines for Human Capital Development and have made clear what constitutes an Ideal Organization and Ideal Human Capital. With the objective of achieving this policy, we provide various opportunities and support for employees to develop their skills and capabilities within Kao's line management framework in accordance with their own level of motivation and organizational goals.

Guidelines for Human Capital Development

Continuously improve overall efficiency based on creative and innovative activities aimed at the sustainable growth of the Kao Group through *Yoki-Monozukuri*.

(Pursuit of efficiency)

Provide a work environment where each individual's dignity is respected, and which makes full use of employees' autonomy and diversity, since the enthusiasm of all employees to display their boundless wisdom is the wellspring of creation and innovation.

(Respect for human dignity)

Integrate organizational efforts and individual efforts through creative and innovative activities so as to achieve evolution for all. Make efforts to improve policies in order to offer all individuals freedom to display wisdom, and to enable combined individual efforts to lead the Kao Group to further prosperity.

(Efforts aimed at integration)

Vision of human capital development

Ideal organization

We are committed to building organizations that are characterized by openness and frankness so as to encourage people to pursue innovation, by empowerment characterized by greater transparency, and by organizational management based on the Kao Way. We also endeavor to actualize organizations in which the entire Kao Group operates harmoniously based on the concept of an "organically functional organization" that flexibly and quickly adapts to environmental change.

Ideal human capital

1. People with consistent willingness to take on challenges
Challenge & Change
2. People with high expertise
Professional Capabilities
3. People with a global perspective
Global Perspective
4. People with the team spirit needed to achieve superior performance
Communication & Collaboration
5. People with strong ethics
Integrity

Framework

To promote activities within the Kao Group in accordance with the Guidelines for Human Capital Development, we have introduced a framework that is shared and utilized globally. For example, we manage labor costs and make use of human capital information via a global human capital information system. We also improve our organizational capabilities through the employee opinion survey *Find* and bolster our human capital management and development through the establishment of job rank, evaluation and training systems and compensation policies that are shared globally.

Under our matrix management structures, we pursue these activities in cooperation with the human capital development divisions of each Group company, both within and outside Japan. Furthermore, we have set up human affairs functions within major divisions in Japan while also establishing on-site career coordinators who oversee the nurturing of each employee and provide assistance in career development.

Human capital development 102-12,103-1,103-2,404-2

Kao's approach

Our initiatives

Kao's approach

The ultimate goal of human capital development is to unlock the latent potential that every individual employee possesses. Kao's workforce is characterized by a high degree of diversity. By helping all employees to take on work that is tailored to their individual capabilities and that challenges them and helps them to grow, Kao will be able to demonstrate even higher levels of creativity in the future.

Kao's creating value to address social issues

By the year 2030, the group aims to have established itself as a business group with a global presence. The key to realizing this vision is Challenge & Change. As an enterprise that genuinely cares about how consumers feel, we view the cultivation of human talent that is capable of responding to changes in society in the environment in which the group operates, and that is capable of operating effectively on the global stage, as a key issue.

Contributions to the SDGs



Policies

While continuing to promote the strengthening of our business operations, we are also working to cultivate leaders who embody the behavior and values that are the source of Kao's strength, and who represent a repository of wisdom. We are also striving to promote career development for every employee in every organization within the Kao Group, aiming to provide attractive opportunities for cultivation and growth.

In addition, we are endeavoring, on a global level, to motivate employees to develop their capabilities and careers, with support from the company, and to find, nurture and promote across the group as a whole those employees with motivation and skills, ultimately leveraging their maximum potential.

Framework

Kao Group Global Common Training Program and Specialist Programs

		Marketing	Sales	SCM	R&D	Information Systems
SMP Level	Global Leadership Development Program II					
	Global Top Management					
	Revised Training for Promotion to G3 Level					
MP Level	Global Leadership Development Program I		BLDP Advanced		Specialist Programs Managers and Supervisors Forum	Stage 3 Integrated IT Training
	Managing Human Performance Program (MHPP)		BLDP Basic Sales	SC Leadership Training		Stage 2 Methodology Training (Application) Applied Application Training Applied Technology Training
LS Level	Training Program for International Assignment	"Marketing University" (Master Level) "Marketing University" (Basic Level)	Exchange Program	SCM Training • Global Techno-school • Global Engineer School • "High Pressure Academy" • "Anti-microbial Technology Academy" • Quality On-the-job Training (OJT) • SHIC	Science Basics Academy	Stage 1 Methodology Training (Basic) Basic Application Training Basic Technology Training
	Business Skills Facilitation, negotiation, project management	Marketing Fundamentals II	AC Training Key Account Management Excellence			
S Level	Kao Way Integrity	Marketing Fundamentals I	Introductory Training Field Sales Excellence	<i>Monozukuri</i> Skills Transmission C	"Freshman Forum"	Specialist IT Training for New Employees
	New Employee Orientation					

SMP Level: Senior management/senior professional level
MP Level: Management/professional level
LS Level: Leading staff level
S Level: Staff level

Conservation

Community

Corporate Culture

Governance

Mid- to long-term targets and performance

Main targets

1. Training program to cultivate self-directed learning and the ability to guide change

Global leader cultivation

- In cultivating future leaders who can drive our global business development, we collaborate with world-renowned international business schools to implement intensive training. Besides working to enhance trainees' management skills, there is also a concerted effort to build human networks and to embody and disseminate the values associated with Kao's *Yoki-Monozukuri*.

Providing employees with diversified cultivation support

- In-house trainers are cultivated at individual Kao business locations around the world, working with speed and attention to detail to ensure that all employees absorb the Kao Way and Kao's emphasis on integrity.
- By expanding opportunities for cross-industry exchange when employees are reaching milestones in their careers, and building networks to expand employees' perspectives, we provide stimulus for intellectually creative activity.

- We also make effective use of new learning tools such as e-learning and other Internet-enabled tools for language learning, etc. besides creating new learning environments in this way, we also actively support employees' own self-directed learning efforts.
- In Japan, recognizing the growing importance of career development that takes into account the work styles appropriate for employees who wish to continue working after the age of 60, we are implementing programs such as the Life Plan Seminar for middle-aged and older employees.

2. Fair and transparent evaluation and career development support

Fair and transparent evaluation

- We clearly state the roles and responsibilities of our employees, and endeavor to fairly evaluate their performance on a regular basis and appropriately reflect achievements in rewards and compensation on a global basis. (Since January 2013, we have standardized our performance management system with affiliates in Japan, Europe, the Americas, and parts of Asia, and have put into full-scale operation

infrastructure to facilitate fair and transparent evaluations using common metrics.)

Career development support

- We have been formulating and implementing integrated career development plans and new employment policies, with the aim of realizing systematic recruitment, assignment and cultivation for the group as a whole.
- We are promoting individual career development throughout the group for all employees regardless of which Group company they are employed by and regardless of the type of employment, and are building an environment in which all employees have the opportunity to challenge themselves while working toward the achievement of forward-looking goals. (In November 2013, we also rolled out our Self Education & Development Scheme (SeEDS), which aims to support individual skills and career development, and we are moving to successively deploy and operate this scheme at Group companies in each country.)

Performance in 2017

Establishment of the new knowledge creation division

We have spun off the Career Development Division's education and training functions and its counseling functions to create an independent Learning & Development Division, with the aim of further strengthening the development and effective utilization of human capital, which is our most important asset.

To enable every Kao employee to unleash and combine their "wisdom" (in the sense of the innate ability to pursue essence of things and to create new value, which everyone possesses) and generate an organizational creative innovation, the Learning & Development Division has undertaken following:

- ① Strengthening our general training program (including leadership development, intensification of training in specialist areas, and transmitting the Kao Way.)
- ② Cultivating an ethos that emphasizes self-directed learning, and creating opportunities for exchange and fusion in relation to external knowhow.
- ③ Strengthening the counseling function so that every individual employee can develop their capabilities and work with enthusiasm and drive.

Through these measures, we will be promoting the cultivation of human capital that is "capable of change, and of guiding change," to support the implementation of the Kao Group Mid-term Plan 2020 (K20.)

Training program to cultivate self-directed learning and the ability to guide change

Global leader cultivation

The Global Leadership Development Program has been implemented as a global program common to all Group companies, in which members selected from individual Kao Group companies study Kao's challenges from a broader perspective and make proposals to top management.

The Program had 37 participants in 2017 (17 from Kao Group companies outside Japan, and 20 from Kao Group companies inside Japan). Since 2016, we have been working to strengthen cultivation of the next generation of leaders, by incorporating participation in business school open lectures focused on specific topics and individual presentations, etc.

In addition, we have implemented the roll-out of the Managing Human Performance Program (MHPP) in each country across the globe to strengthen line management capabilities.

In 2017, a total of 220 employees (166 male employees and 54 female employees) underwent MHPP training in Japan. Implementation of the revised MHPP program has been launched in Kao Group companies outside Japan since 2017, to foster closer coordination and collaboration throughout the group and strengthen management.

Each of these programs has received high evaluations from participants.

Providing employees with diversified cultivation support

Starting from 2017, we have implemented a new 50+ Career Seminar for employees who have reached the age of 50 (starting with Kao Corporation), in addition to the existing Life Career Design Seminar for employees who have reached the age of 45 and the Life Plan Seminar for employees in their late 50s.

Average training hours per employee in 2017 (consolidated): 13.0 hours

Expenditure on education and training per employee (consolidated)

	2015	2016	2017
Expenditure on education and training	69,000 yen	66,000 yen	58,000 yen

Kao's approach

Kao believes that the vitality that derives from diversity can create new value for society. Reflecting this attitude, Kao aims to create an organizational environment that accepts the diverse personalities and values of individual employees, and in which all employees are able to demonstrate their passion and capabilities to the maximum possible extent.

Kao's creating value to address social issues

The promotion of Diversity & Inclusion (D&I) not only helps to underpin the exercise of creativity and innovative thinking by employees, it also serves to strengthen the organization's ability to cope with risk, and constitutes a key aspect of Kao's mid-term organizational development and human capital development planning.

Contributions to the SDGs



Policies

We put in place the corporate ethos and frameworks needed to enable employees to demonstrate their enthusiasm and capabilities to the maximum extent. Taking as a foundation the relationship of trust that has been formed through smooth communication between management and employees, we are working to create an environment in which employees can focus on their work with peace

of mind, and an ethos and environment in which employees of all kinds feel that they are rewarded for doing their utmost, regardless of each employee's personal attributes.

Through these efforts, we aim to realize a virtuous circle of organizational and personal growth.

Framework

Matters relating to D&I promotion strategy etc. for the Kao Group as a whole are discussed by the Human Capital Development Committee, consisting of executive officers. To ensure the dissemination and effective implementation of D&I promotion in day-to-day management, Human Capital Development Meetings and D&I Awareness Activity Meetings are held, realizing the sharing of information, exchange of ideas, and discussion, on a broad scale.

Individual Kao Group companies and divisions formulate and implement D&I Promotion Plans based on analysis of the current situation, with the aim of ensuring continuous improvement.

The D&I Awareness Activity Meetings, which are attended by Employee Welfare Committee secretariat managers from nine Kao Corporation

business locations and six major Group companies, undertake the dissemination of information regarding the D&I Awareness Months that are held five times a year, report on the holding of special events in response to employee requests, and share information about the latest D&I-related topics, etc.

The Meetings outlined above also introduce new topics to one another, to facilitate multi-layered D&I promotion.

Education and promotion

Recognizing that managers have a particularly important role to play in the realization and dissemination of D&I, we have begun implementing Diversity Management Training Sessions for managers in Japan since 2016. The aim is for every Kao manager to have attended at least two of these training sessions by 2019.

Diversity and inclusion 103-1,103-2,103-3,404-2

Kao's approach

Our initiatives

Mid- to long-term targets and performance

Within Japan, we will continue to implement measures aimed at creating an environment and corporate ethos that encourage all employees to enthusiastically play an active role in the company, regardless of gender, disabilities, or whether they have childcare, nursing care or other family responsibilities.

Up until now, individual Group companies in each country have implemented various measures of their own. However, in the future, we will promote the establishment of a unified framework across the whole group, including Group companies outside Japan.

Through these measures, we aim to build an organization that respects and actualizes every individual employee, regardless of that employee's personal attributes, thereby realizing a virtuous circle of organizational and personal growth.

Performance in 2017

Review was undertaken aimed at putting in place a framework for further strengthening of D&I throughout the group as a whole.

While focusing the most attention on Japan, which has the largest number of Kao employees and many issues that need addressing, we have also engaged in discussions with overseas personnel managers regarding unified measures for Group companies outside Japan that take account of the differences in organizational issues and culture.

At Kao Group Customer Marketing Co., Ltd. (KCMK), which is mainly responsible for the selling of Kao products, the scope of activities has been expanded to include not only sales personnel but also beauty advisors, with the implementation of measures aimed at providing support for the promotion of women's participation and advancement in the workplace, employee career development, and work-life balance.

Collaboration with stakeholders

- In 2010, we signed the Women's Empowerment Principles, which are international guidelines for women's participation in society based on UN Women and the UN Global Compact.
- We have given case study presentations as part of seminars and other initiatives organized by government agencies and NPOs, etc., with the aim of fostering the promotion of D&I throughout society.

Main case study presentations in 2017

- Bureau of Industrial and Labor Affairs, Tokyo Metropolitan Government, "Website for Providing Support to Help Workers in Tokyo Balance Care and Work Responsibilities."
- The 19th Annual Meeting of the Japan Society for Health Care Management.
- "Work Style Reform" promotion measures implemented by the Bureau of Industrial and Labor Affairs, Tokyo Metropolitan Government.
- "Seminar to Promote Women's Activities that Lead to Corporate Growth," organized by the National Women's Education Center.
- Kao employees participated in the "Integrated Seminar on the Provision of Support to Help Employees Balance Work and Childcare Responsibilities" which was organized by the Ministry of Health, Labour and Welfare (MHLW) and held over the period from June 2017 to March 2018, to share their experience of practical implementation within a business enterprise.

- Kao Peony Co., Ltd. has been providing support to help people with disabilities secure employment, including arranging workplace visits and workplace training opportunities for students from special needs schools. The company has also collaborated with an NPO engaged in providing employment-related support for people with disabilities to establish an employment skills training facility within the company's head office located in Kayaba-cho of Chuo ward in Tokyo.

Conservation

Community

Corporate Culture

Governance

Our initiatives

Support for the active diverse human capital

- Based on the results of surveys on D&I implementation status in individual overseas countries in which we operate, which were conducted in 2016, we continued internal discussion and exchange of views in 2017 regarding issues that we should focus on, both within and outside Japan.
- Kao Corporation has held the Diversity Management Training Session for Managers (basic edition) on 35 occasions (with a total of 1,781 trainees participating in 2017). For those managers who had not been able to attend the Training Session, the e-learning with same content is provided in 2018.
- KCMK also had held the Diversity Management Training Session for Managers (basic edition) on 19 occasions (with a total of 660 trainees participating in 2017). In addition, as part of efforts to provide career support for beauty advisors, KCMK held career development seminars for younger beauty advisors as well as leader development seminars.
- Besides developing new career opportunities to enable senior employees to continue to remain active and make a contribution after reaching retirement age by utilizing their experience and specialist expertise, either within Kao or elsewhere, we have also established a new Senior Career Consultation Service.
- In order to promote a better understanding of LGBT issues among Kao employees, the lectures at individual worksites have been introduced since 2015, and one lecture was held in 2017 (at the Kawasaki Plant, with 68 people participating). These lectures have been held at five worksites, with a cumulative total of 300 people participating. In Kao's in-house newsletter for employees of Kao Group companies within Japan, besides publishing interviews with LGBT employees, we announced a consultation services regarding LGBT and the commencement of recruitment of ALLYs.*

* ALLY:
Employees who may not necessarily be LGBT themselves, but who understand the issues that LGBT employees are facing and who wish to provide support.

Number of Kao Group employees (regular employees)

	Total (persons)	Male (persons)	Female (persons)	Female employees as percentage of total (%)
Total	33,560	16,970	16,590	49.4
Japan	22,211	10,812	11,399	51.3
Asia and Oceania (excluding Japan)	7,191	3,957	3,234	45.0
Europe and the Americas	4,158	2,201	1,957	47.1

Status of regular employees (Kao Corporation)

	2015	2016	2017
Regular employees (persons)	6,970	7,195	7,332
Male	5,414	5,568	5,631
Female	1,556	1,627	1,701
Female employee ratio as percentage of total (%)	22.3	22.6	23.2
Female manager ratio as percentage of total (%)	8.7	14.0	15.5
Female managers (persons)	90	336	381
Female executive officers ratio as percentage of total (%)	8.8	8.8	8.6
Female executive officers (persons)	3	3	3
Average age (years)	41.7	41.2	41.0
Male	42.6	42.0	41.7
Female	38.6	38.5	38.6
Average length of employment (years)	18.5	18.3	17.4
Male	19.8	19.4	18.4
Female	14.1	14.5	13.9
Number of recent graduates hired (persons)	264	283	269
Male	195	214	196
Female	69	69	73
Employee turnover (%)	0.7	0.5	0.6

Status of female employees in the Kao Group

		2015	2016	2017
Female employees				
Global	Percentage (%)	52.5	49.2	49.4
	No. of employees (persons)	17,340	16,332	16,590
Japan	Percentage (%)	54.8	50.6	51.3
	No. of employees (persons)	12,120	11,130	11,399
Female managers				
Global	Percentage (%)	27.5	25.4	25.1
	No. of employees (persons)	1,301	1,700	1,618
Japan	Percentage (%)	10.4	13.1	14.6
	No. of employees (persons)	335	573	648
Female executive officers				
Global	Percentage (%)	6.5	6.7	7.7
	No. of employees (persons)	11	11	14
Japan	Percentage (%)	3.1	4.1	4.5
	No. of employees (persons)	4	5	6

* The definition of "managers" was revised in 2016 in line with Kao's promotion of unified Group-wide operation.

* The figure of "Female executive officers as percentage of total" covers executive officers of major Kao Group companies (52 companies in 2017).

Number of re-employment after retirement (Kao Corporation)

	2015	2016	2017
Number of employees who reached retirement age*	125	104	93
Of which, Number of employees re-employed after retirement	94	86	73
Percentage	75.2%	82.3%	78.5%

* Number of employees who reached retirement age
= Number of retired employees + Number of re-employment after retirement

Promoting better understanding of disability, and promoting the employment of persons with disabilities

We position support for people with disabilities as an important part of our D&I efforts, and have formulated a basic policy of "Striving for a society where people with and without disabilities work and live together, we create workplace environments for employees with disabilities that make life easier for them and foster a sense of pride in one's work."

Besides having prepared our "Disabled Persons Employment Manual," which is intended to help strengthen employees' understanding of disability, and our "Communication Support Guidelines" for people with hearing disabilities, we have also assigned Vocational Life Consultants for Persons with Disabilities to sites throughout Japan to serve as a contact point that can help to arrange suitable accommodation for different types of disability.

Measures implemented at regular workplaces

- We held an Employees with Disabilities Support Meeting in February 2017 to help Vocational Life Consultants for Persons with Disabilities upgrade their skills and strengthen the overall support system for persons with disabilities.
- September has been designated as "Disability Understanding Promotion Month"; in September 2017, various awareness-raising activities were conducted, including the sharing of information by the Employee Welfare Committee and the issuing of newsletters.

Measures implemented at special subsidiaries

Kao Peony Co., Ltd. was established as a special subsidiary in October 2005, with the goal of encouraging hiring of persons with disabilities.

The company comprises a Production Department, which mainly undertakes the sorting and packaging of cosmetics products and other personal care products, and the newly-established Office Support Department (created in July 2017), which undertakes accounts monitoring processing work for the group.

As of January 2018, a total of 27 employees work at Kao Peony, including 20 with intellectual disabilities.



Kao Peony Co., Ltd. Production Department employees carrying out sorting and packaging operations

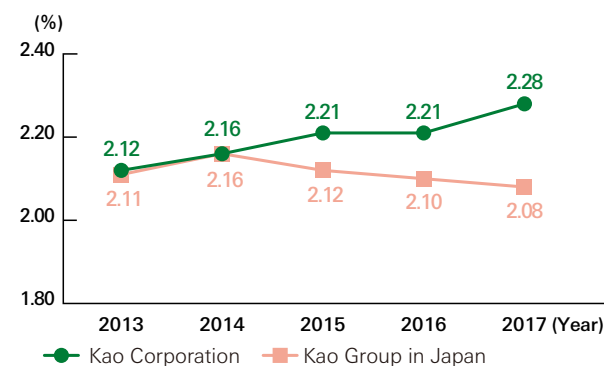


Employees of Kao Peony's newly-established Office Support Department (which was established in July 2017) undertaking accounts monitoring processing work.

Kao Group employment rate of person with disabilities

Currently, persons with disabilities account for 2.08% of the total workforce of the Kao Group within Japan, exceeding the statutory minimum rate of 2.0% (as of June 2017).

Kao Group employment rate of person with disabilities*



(As of June 1, 2017)

* Scope: 12 domestic affiliates that are required to employ people with disabilities (Kao Corporation, Kao Group Customer Marketing Co., Ltd., Kao Customer Marketing Co., Ltd., Kao Field Marketing Co., Ltd., Kao Professional Services Co., Ltd., Kao Sanitary Products Ehime Co., Ltd., Kao Logistics Co., Ltd., Kao Business Associe Co., Ltd., Kanebo Cosmetics Inc., e'quipe, LTD., Kao Cosmetic Products Odawara Co., Ltd. and special subsidiary Kao Peony Co., Ltd.).

Diversity and inclusion

Realization of diversified work style

Projects implemented in 2017

With the aim of making it possible for diverse employees to maximize their potential in different workplaces, and to realize flexible work styles, we have begun efforts to promote the effective utilization of existing personnel systems and to implement pilot projects aimed at fostering active participation of diverse employees in workplaces where shift work is in operation.

With regard to existing personnel systems, we have recognized the importance of cultivating a corporate ethos that is more conducive to active participation, and we have organized several seminars on themes including childcare, nursing care and family care.

2017 performance

- In the past, Kao employees who needed to take leave to provide nursing care or long-term care for family members were able to make use of a special leave system that allowed them to take such leave from their own sick leave allowance. However, we have now established an independent system of Special Nursing Care and Family Care Leave. (starting in January 2017)
- We have extended the length of the period during which employees can make use of the shortened working hours and flexible working hours for employees with nursing care or family care responsibilities. (starting in January 2017)

- In our production sites, with respect to paper processing production lines* where the physical effort required by the work is particularly high, we have made improvements to equipment and adjustments to working methods in order to realize “production lines that anyone can operate,” including women and senior citizens. Initially, we have focused on operation of these lines by female operatives.

In particular, at the Sakata Plant, we have put in place a shift work system that involves only female operatives. We are currently engaged in identifying problems that female operatives face, and developing solutions to remedy these issues. Discussions are underway with the aim of expanding the scope of this project to include senior citizens in the future.

- We have held “Thinking About Work Styles in an Era of Diversity” seminars for employees of Group companies in Japan. Fourteen sites were linked up for teleconferencing, with over 300 personnel (including managers) participating.

* These production lines are located at Kao’s Sakata Plant, Tochigi Plant and Tochigi Plant, and at Kao Sanitary Products Ehime.

Main systems for supporting work-life balance

Support for balancing work and child-care responsibilities

- Holding of F&M (Father & Mother) Meetings (discussion meetings, seminars, etc. for male and female employees with children)
- Seminars for employees returning from child-care leave (Tatsuno-oshigoto Seminar)
Note: It is recommended that employees’ partners also attend the seminar.
- Provision of an on-site day care facility (Merries Garden)
- Pre- and post-child-care leave interviews.
- Child-care leave reports
- e-Learning for managers (“Work and Life Balance Management”)

Support for balancing work and family care responsibilities

- Holding of family care seminars
- Provision of family care handbooks
- Establishment of an external family care consultation service

General work-life balance measures

- Encouragement of employees to make full use of relevant allowances and services
- Awareness-raising activities for managers, including manager training sessions, lectures, etc.
- Dissemination of awareness-raising newsletters
- Provision of the Work and Life Balance Guidebook

Main systems for supporting diversified work styles (Kao Corporation)

Main systems	Content	
	Childcare related	Nursing care and family care related
Leave	In principle, childcare leave can be taken until the first April 30th following the child's first birthday. Paid leave is provided for the first five days after the commencement of childcare leave.	Nursing care and family care leave can be taken for a maximum period of one year. During the period in which nursing care and family care leave is permitted, such leave can be taken in a maximum of three blocks of time.
Reduced working hours and staggered working hours	This is available until the child finishes the third year of elementary school. Either specified working hours can be reduced by up to two hours per day, or the specified time for starting work or finishing work can be adjusted.	Provision for reduced working hours and staggered working hours, and provision for working either three days a week or a half-day five days a week, can be utilized for a period of up to three years. Alternatively, this benefit can be taken in up to two blocks of time within the three-year period. Either specified working hours can be reduced by up to two hours per day, or the specified time for starting work or finishing work can be adjusted.
Working a 3-day week or working only half-days	In principle, this can be implemented, on the request of the company until the first April 30th following the child's first birthday. Employees can either work three days a week, or work a half day five days a week.	Provision for reduced working hours and staggered working hours, and provision for working either three days a week or a half-day five days a week, can be utilized for a period of up to three years. Alternatively, this benefit can be taken in up to two blocks of time within the three-year period. Employees can either work three days a week, or work a half day five days a week.
Restriction on extra working hours	Up until the first April 30th following the child's enrollment in elementary school as a first grader, the employee can request either limits or exemption to perform work outside normal working hours, work on holidays, or work late at night.	Employees who have family members requiring nursing care or family care for a period of more than two weeks can request either limits or exemption to perform work outside normal working hours, work on holidays, or work late at night either.
Working at home	In cases where an employee is working a half-day each day in order to fulfil childcare responsibilities, the employee has the option of working at home.	In cases where an employee is working a half-day each day in order to fulfil nursing care or family care responsibilities, the employee has the option of working at home.
Special leave for nursing care and family care	Special leave is available for employees who need to fulfill nursing care or family care responsibilities (up to a maximum of either 40 days a year or 20 days a year).	Special leave is available for employees who need to fulfill nursing care or family care responsibilities (up to a maximum of either 40 days a year or 20 days a year). This leave can be taken in increments of either one-day, half-day, or hours.

Main systems	Content	
	In common	
Flextime system	With the exception of some shift workers, flextime is applied to all employees, regardless of grounds. The times for the start of work and end of work will be set within a flextime range of 07:00 - 20:00. No "core time period" will be set.	
Hourly leave system	Annual paid leave can be taken in hourly increments up to a maximum of five day-equivalents within any one-year period, regardless of grounds.	
Family leave for overseas assignments	Where an employee's spouse is be on an overseas assignment and the employee wishes to accompany the spouse, a period of leave of at least one year and no more than two years can be taken.	
Special leave for personal injury or sickness	Special leave is available for employees who participate in volunteering activities approved by the company (up to a maximum of 5 days a year). This leave can be taken in increments of either one-day or half-day.	
Special leave for volunteering activities	Special leave is available for employees who participate in volunteering activities approved by the company (up to a maximum of 5 days a year). This leave can be taken in increments of either one-day or half-day.	
Refreshment leave	This leave is granted to employees who have completed 10, 20, 30 or 40 years of service with the company (up to a maximum of 5 days a year).	

Employment systems utilization status (Kao Corporation)

Employment system	2017	Unit
Average hours worked outside regular working hours (per month)	19.5	(Hours)
Average days of paid vacation taken	13.7	(Days)
Average paid vacation utilization rate	72.8	(%)
Average hours of leave taken in hourly increments	1.73	(Hours)
No. of employees taking child-care leave (male)	101	(Persons)
No. of employees taking child-care leave (female)	90	(Persons)
No. of employees taking reduced working hours or staggered working hours to meet childcare responsibilities (male)	11	(Persons)
No. of employees taking reduced working hours or staggered working hours to meet childcare responsibilities (female)	85	(Persons)
No. of employees taking nursing care or family care leave (male)	2	(Persons)
No. of employees taking nursing care or family care leave (female)	2	(Persons)
No. of employees taking reduced working hours or staggered working hours to meet nursing care or family care responsibilities (male)	1	(Persons)
No. of employees taking reduced working hours or staggered working hours to meet nursing care or family care responsibilities (female)	0	(Persons)
No. of employees taking family leave for overseas assignments (male)	0	(Persons)
No. of employees taking family leave for overseas assignments (female)	6	(Persons)
Average number of days of special leave for volunteering activities taken	0.9	(Days)
Total number of employees taking special leave for volunteering activities	7	(Persons)

Kao is awarded Platinum Kurumin certification

In May 2016, Kao Corporation was awarded Platinum Kurumin Certification for creating a supportive workplace for employees with children, in accordance with the provisions of the Act for Measures to Support the Development of the Next Generation.



Platinum Kurumin



Kao Sanitary Products Ehime Co., Ltd. is visited by the Director of the Ehime Labor Bureau in recognition of its status as a "Best Practice Enterprise"

On November 8, 2017, the Director made visit to Kao Sanitary Products Ehime Co., Ltd. as part of the Ehime Labor Bureau's "Overwork Elimination Campaign." This visit was part of a program whereby the Directors of prefectural Labor Bureaus visit business enterprises that have been working actively to implement work style reform by reducing working hours, etc., so that details of the specific measures adopted can be widely publicized, thereby helping to eliminate overwork.

During this workplace visit, Kao Sanitary Products Ehime managers gave presentations on the work style reform that the company is implementing to reduce working hours, and the activities being implemented to improve employee health. There was also an exchange of views and ideas regarding work-life balance.

This visit represented a marvelous opportunity for publicizing the workplace goals that have been adopted, and for enabling outsiders to see how the management of the finishing work time etc. actually works in practice, as well as providing visibility for the company's other activities.

Initiatives at Kao Sanitary Products Ehime Co., Ltd.

Communication

- Dissemination of messages to employees that embody company representatives' vision regarding work style reform.
- Implementation of exchange of views and ideas between younger employees and managers through the use of "cross-talk meetings" etc., with the aim of "building good relationships with colleagues through mutual understanding and mutual influence."

Action taken to reduce working hours

- Announcing numerical targets for working hours at the level of individual workplace groups and implementing effective management to realize these targets.
- Setting of "No Overtime Days" in line with individual schedules, and ensuring that these are effectively implemented.
- Reducing the length of meetings and adjusting the frequency of meetings and the personnel required to attend, along with the setting and effective implementation of "No Meeting Periods."



Reporting on the activities implemented at Kao Sanitary Products Ehime Co., Ltd. to the Director of the Ehime Labor Bureau.



Introducing the actual action targets set in the workplace

Kao's approach

Kao strives to develop good workplace environments on the basis of the recognition that favorable relationships and communication with employees are one of the most important aspects of the corporate culture. In addition to creating various opportunities for dialogue with employees, we conduct employee opinion surveys periodically.

Kao's creating value to address social issues

We eliminate authoritarian approaches and places great importance on a corporate culture in which top management and employees collaboratively work together to achieve business goals.

In order to build favorable labor relations, we provide opportunities for sharing and discussion with employee representatives with regard to our current situation and policies as well as measures for human capital development.

Contributions to the SDGs



Policies

We strive to foster understanding between top management and employees by facilitating opportunities for mutual talks, with the objective of developing unity throughout the Kao Group and enhancing employee motivation. We promote mutual understanding between senior management and employees by providing opportunities for the exchange of opinions and views whereby the senior management explains priority issues such as the company's current situation, policies and human capital development to employees as well as responding to their questions. In addition, we establish an understanding of the genuine concerns and opinions of employees through actively conducting exchanges of opinions which then feed into ongoing measures to develop human capital and improve the workplace environment, among other undertakings.

We also conduct employee opinion surveys periodically to realize the goal of creating a "Great place to work." We then confirm the respective strengths and areas where improvement is needed of each organization by visualizing the organizational status using numerical data. Subsequently, we identify our challenges based on analyses of these results, and set and implement effective action plans. In these ways, Kao endeavors to consolidate the RPDCA cycle*

to improve its organization and workplaces.

* RPDCA cycle

This adds "Research" (which equates to "analysis of the current situation") to the PDCA cycle for operational improvement. Doing so has allowed us to strengthen our ability to respond to changing circumstances.

Framework

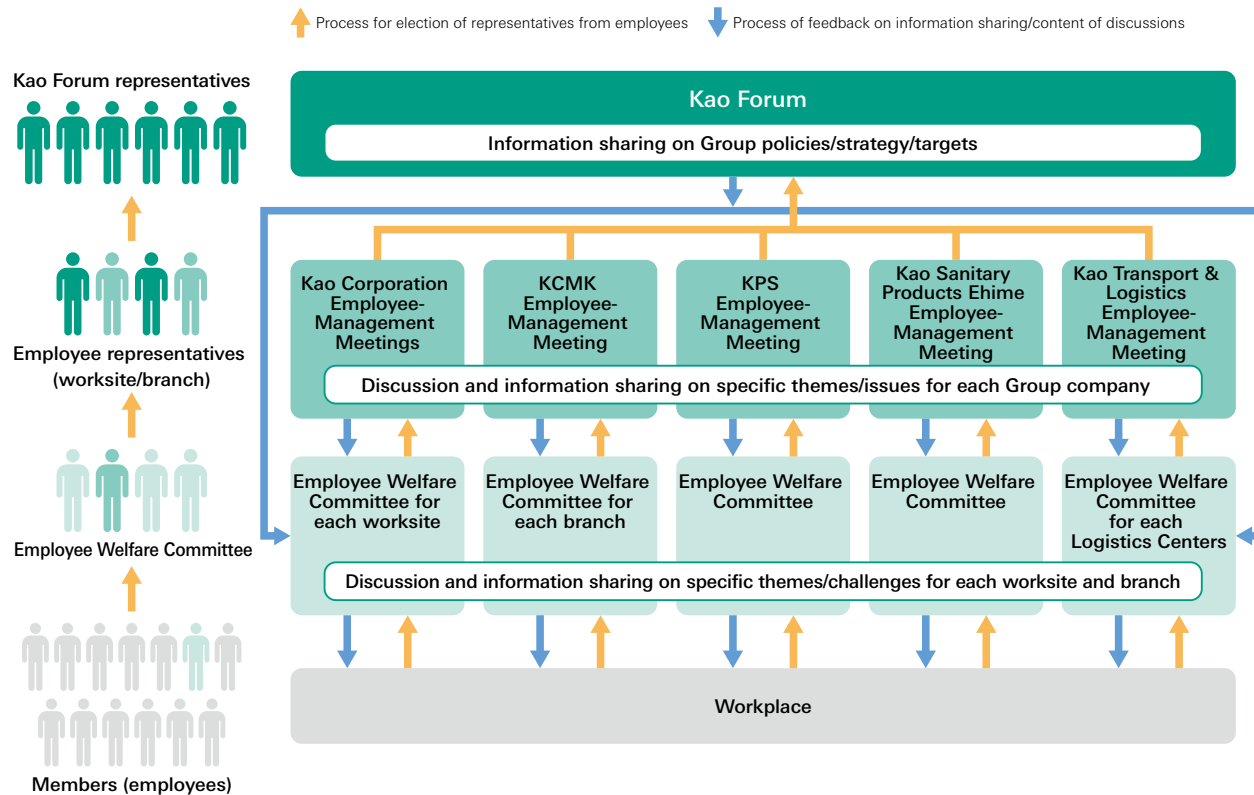
Platforms for regular dialogue with employees include Employee Welfare Committees at each worksite and branch, Employee-Management Meetings at every Group company, and the Kao Forum for the group as a whole. Employee representatives from Kao Corporation, Kao Group Customer Marketing Co., Ltd. (KCMK), Kao Customer Marketing Co., Ltd. (CMK), Kao Professional Services Co., Ltd. (KPS), Kao Transport & Logistics Co., Ltd., and Kao Sanitary Products Ehime Co., Ltd. participate in the Kao Forum. Meetings of the Employee Welfare Committee are conducted monthly, and the Employee-Management Meetings and Kao Forum are conducted twice a year. Continuous mutual information sharing on the content of the discussions and information shared at each meetings is implemented for all employees through the employee representatives and Employee Welfare Committees.

Dialogue with employees 102-44,103-1, 103-2,103-3

Kao's approach

Our initiatives

Employee dialogue structure



Mid- to long-term targets and performance

Enhance and consolidate the RPDCA cycle toward regular implementation of employee opinion surveys and organizational improvements.

Performance in 2017

- We implemented action plans that were formulated on the basis of the results obtained in the *Find* 2016 employee opinion survey.
- In January and July 2017, Employee-Management Meetings and the Kao Forum were conducted in each Kao Group company. The Kao European Forum was conducted in the European region in May 2017, with 19 employee participating as regional representatives.

At the Kao Forum, where employee representatives from different Kao Group companies are brought together, a total of 29 employee representatives participated: 15 from Kao Corporation, 10 from KCMK, two from KPS, one from Kao Sanitary Products Ehime, and one from Kao Transport & Logistics. Questions were fielded from employee representatives, which included mid-term management strategy, questions regarding the orientation of respective business areas, product development and deployment of sales measures, and work style reform, etc. Many opinions were received from employee representatives, including: "My sense of belonging to the Kao Group has increased" and "I learned more about our direction and approaches, which will serve as a useful guide for the future."

Conservation

Community

Corporate Culture

Governance

Our initiatives

Implementation of the *Find* employee opinion survey, and drafting of action plans

The *Find* employee opinion survey is implemented regularly, once every two years. In the first year, the focus is on survey implementation, results analysis and development of action plans. In the second year, the action plans are put into practice. The implementation results are then verified in the next *Find* survey, thus ensuring the effective implementation of the RPDCA cycle.

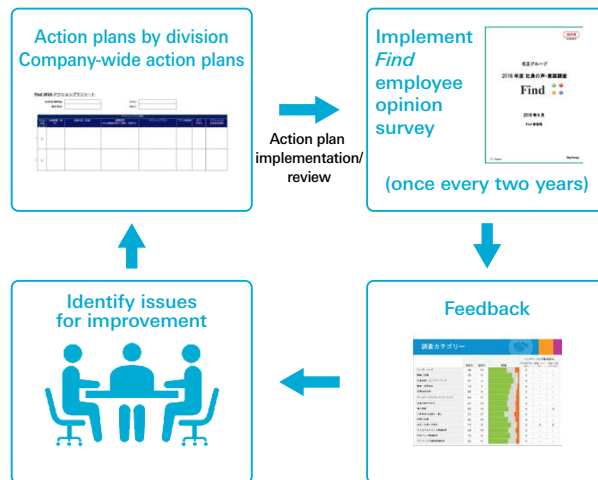
In 2017, the group as a whole worked together

to implement the action plans formulated on the basis of the survey results obtained in the 2016 *Find* survey. Taking as the basic approach the company-wide action plan that aims to “Achieve K20, foster a culture in which each employee can create changes and in which the company and the employees jointly tackle challenges,” all Kao employees took a proactive stance toward the implementation of the action plans that had been formulated on the basis of existing issues in each company or division, and

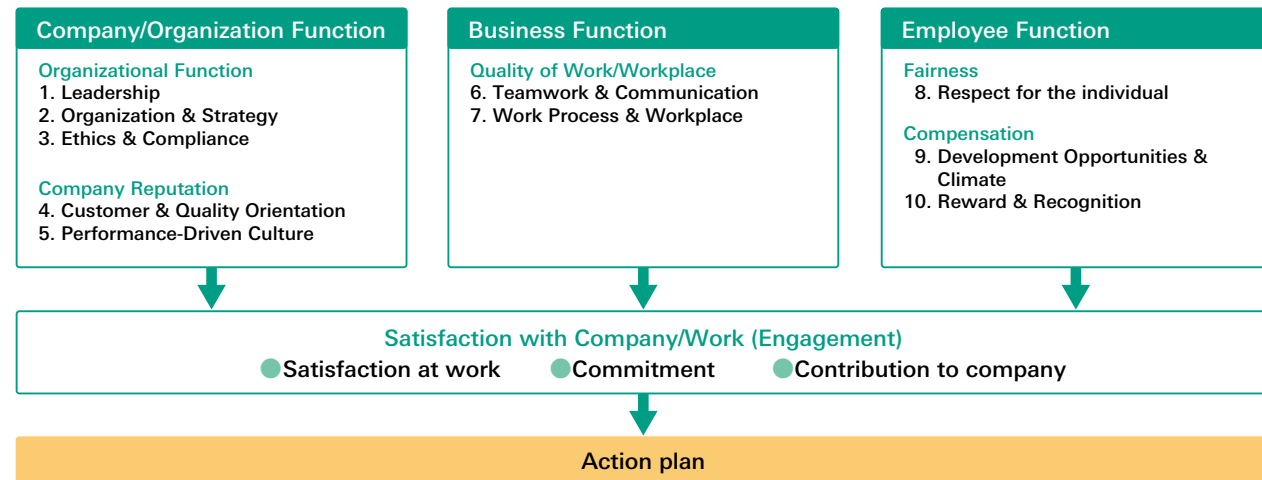
after discussion with frontline employees. We have regularly confirmed progress status among the companies and employees, to ensure that action plans were put into effect properly.

The 9th *Find* employee opinion survey is scheduled to be implemented in 2018. All Kao employees will be working to strengthen the Kao Group's organizational capabilities by focusing even more closely on action plan formulation and implementation.

RPDCA to improve organizational capacities



Find employee opinion survey questionnaire items



Kao's approach

Good health is a fundamental requisite for employees to be able to get the most out of each day, both at work and in their personal lives. We understand that we can develop our business and contribute to society only if our employees and their families have healthy lives. As disseminated the Kao Group Health Declaration in 2008 to both inside and outside Group companies, we are committed to Health and Productivity Management by actively implementing support programs for health and healthy lifestyle of employees and their families, which form the foundation of human resource utilization.

Kao's creating value to address social issues

At Kao, we aim to improve our corporate activities by helping to increase the number of healthy employees and family members, and by creating lively and spirited workplaces. We will achieve this by supporting the health of employees and their families in cooperation with the Kao Health Insurance Society.

We continue to endeavor to limit excessive increases in medical expenses through preventive initiatives including the promotion of lifestyle improvements and active implementation of various health guidance measures.

We are focusing our efforts on the control of long working hours through promotion of modulated work styles and mental health training for managers from the perspective of promoting pleasant workplaces.

Furthermore, the health promotion programs for Kao employees are also made available for external use and are being deployed in the promotion of health in local communities and other workplaces. We hope that the initiatives at Kao will have a positive influence on local communities and society as a whole, and will lead to increased lifespans and a healthier society.

Contributions to the SDGs



Policies

The Kao Health Declaration

To spend every day in lively good health

We aim to become a company which inspires engagement with the promotion of healthy bodies and minds alongside our customers while helping to realize healthy and enriched lives through the creation of lively and spirited workplaces

Cultivation of employees with high health literacy

We are working to make our health promotion activities more visible, engaging in Health and Productivity Management using the PDCA cycle to increase employee health, with the aim of increasing the number of employees with high health literacy.

We consider employees with high health literacy as the following employees:

1. Reviews and improves lifestyle independently, based on health check-up results.
2. Consults with private physicians in regard to health check-up results as needed rather than just consulting occupational physicians.
3. Maintains awareness of their mental health, and confers with appropriate professionals as needed.

Five health promotion initiatives

Rather than merely fulfilling the minimum requirements for health management that we are required to meet as a company, we implement health promotion in line with the five core themes below. Health promotion refers to the independent maintenance and improvement of employee's own health.

1. Lifestyle diseases
2. Mental health care
3. Smoking cessation
4. Cancer
5. Women's health

Framework

Increasing the visibility of the Health Promotion Management System

As part of this initiative to increase visibility, we have, since 2009, provided 18 health consultation rooms nationwide with a statistical summary of health data not specified individually (medical interviews, health check-ups, occupations, diseases, etc.).

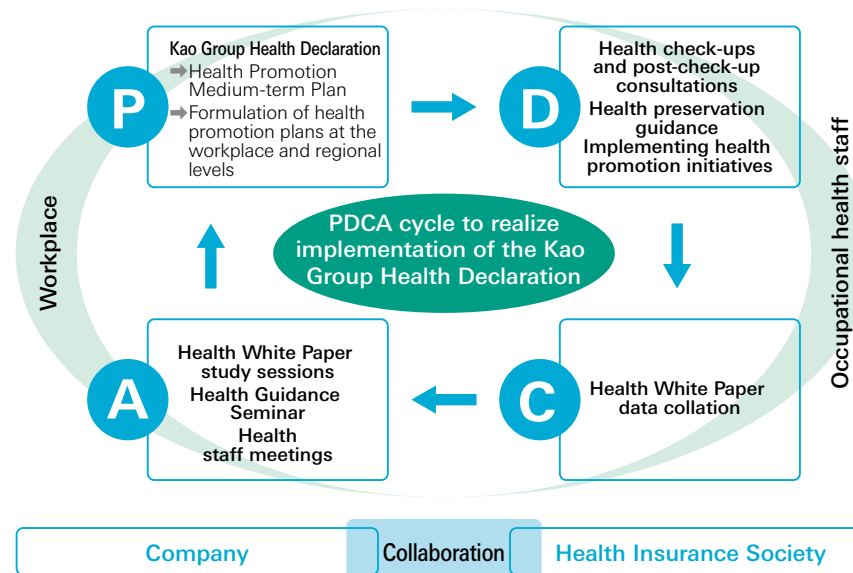
Each health consultation room then drafts and implements a health services plan based on the health data for their respective regions.

Since 2009, we have held annual White Paper on Health Seminars so that employees in charge of Human resource and General Affairs and occupational health nurses can learn together methods of analyzing the various types of health data and of formulating measures.

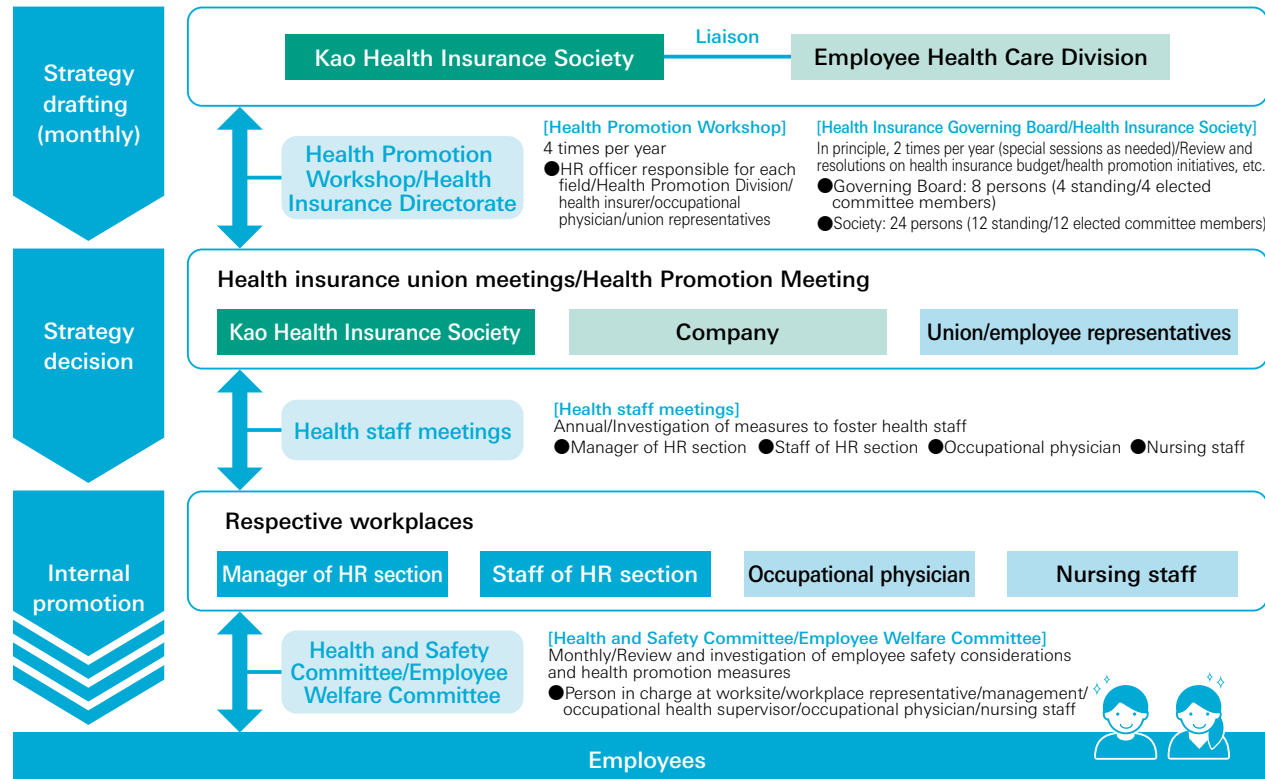
Systematization of the health promotion framework

Health promotion strategy planning is implemented in an integrated manner between Kao and the Health Insurance Society, with discussions conducted in regular monthly meetings. Major strategies are finalized at a company-wide Health Promotion Committee meeting after consideration by working groups and, the committee members of the Kao Health Insurance Society with employee representatives. The promotional strategy is implemented at each worksite and Group company by the manager and staff of the HR section along with occupational physicians and nursing staff.

Health Promotion Management System



Health promotion framework



Kao's approach

Our initiatives

Education and Promotion

For employees

- The Kao Group Health Declaration is distributed to all employees with proclamations on Health and Productivity Management also being disseminated. These include President-issued directives for: Promotion of Health and Productivity Management in the group as a whole, with employee health as the foundation for Group growth; as well as The President will set and put into practice health targets. Individual employees are encouraged to set their health targets for the year and put these into practice.
- Various on-site campaigns, seminars and health promotion activities are deployed in line with the five core initiatives.

Deployment of company-wide health promotion activities

Content	2017 results
Health Declaration	15,704 participants (of which, 445 new participants)
Spring Walking Campaign	4,590 participants (including family members)
Smoking-Cessation Campaign	273 participants
Provision of health information by such means as bulletins and posters	Twice a year, reaching around 28,169 people

Deployment of health promotion activities at all worksites (planning of events/seminars/campaigns)

Content	2017 results
Lifestyle disease-related: exercise and nutrition seminars, strength tests, health fairs, lectures by occupational health practitioners, etc.	Held 136 times, with a total of 16,480 participants
Women's health: women's seminars, change-of-life seminars, turning 30 milestone course, dietary improvement seminars	Held 19 times, with a total of 2,863 participants
Mental health care: mental health courses, mental health training seminars for beauty advisors, new employees, and newly promoted employees	Held 11 times, with a total of 1,769 participants

Cultivation of health staff

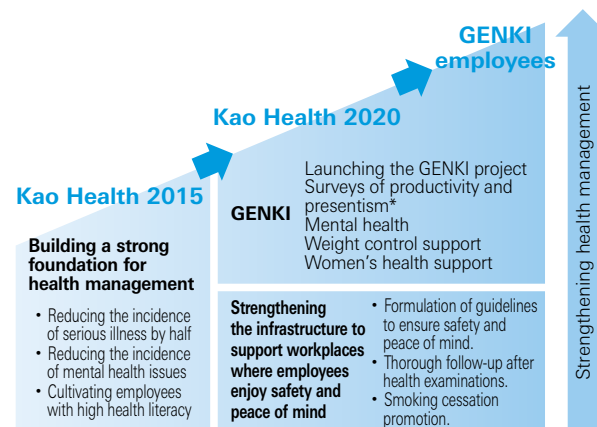
- Annual health staff meetings were held to build consensus with regard to strategies and facilitate sharing of information. Managers and staff of HR sections, along with occupational physicians and nursing staff, attend the meetings.
- We implemented White Paper on Health Seminars to provide an opportunity to learn about how to understand health data and the formulation of occupational health plans, as well as holding Health Insurance Instruction Feedback Sessions aimed at improving health instruction by nursing staff.

Mid- to long-term targets

Kao Health 2020

In 2017, we formulated the Kao Health 2020 mid-term health-related plan. This plan aims to cultivate GENKI (“Healthy”) employees by further enhancing health management.

Kao Health 2020



Aiming to achieve a further enhancement of health management by cultivating healthy employees who are capable of leading change, and strengthening the infrastructure to support workplaces where employees enjoy safety and peace of mind

* Presentism

Coming to work while sick or ill, and having reduced working competency and productivity as a result.

Kao's approach

Our initiatives

Performance in 2017

Employee health promotion status

Item	2017 results
Percentage of employees undergoing periodic health examinations	100%
Percentage of employees who underwent follow-up examinations	84%
Percentage of employees who eat breakfast at least three times a week	24.3%
Percentage of employees who exercise at least once a week	42.4%
Percentage of employees who get adequate sleep	64.0%
Percentage of employees who do not smoke	75.8%
Percentage of employees who are at risk of developing metabolic syndrome	Male employees: 30.9%; Female employees: 6.4% (in 2016: male employees 31%, female employees 6%)
Percentage of employees receiving specific health guidance	Male employees: 19.1%; Female employees: 6.9% (in 2016: male employees 19.0%, female employees 6.9%)
Specific health guidance implementation rate	60.5% (figure for 2016)

Conservation

Community

Corporate Culture

Governance

Collaboration with stakeholders

The influence of Kao's health services on local communities and society as a whole

The effective health services developed at Kao are also made available to workplaces other than Kao's own, as well as to local communities. These are being put to use in tackling social health challenges such as metabolic syndrome and locomotive syndrome.

For example, we provide visceral fat measurement services and related lifestyle improvement advice in local communities and workplaces. In 2017, these services were provided at a total of approximately 100 locations and used by around 13,000 people.

- Visceral fat visualization station (visceral fat measurement sessions organized in collaboration with the Japan Obesity Prevention Society): External 27 sessions with a total of approximately 5,600 people participating.
- Lifestyle diagnostic meetings: implemented externally at 55 locations, and internally at 25 locations (with a total of around 7,100 participants).

We have also been working to spread awareness of the Smart WASHOKU dietary method for eating well without increasing visceral fat.

- Workshops for public health nurses, nutritionists and other professionals: 5 external sessions implemented, with 130 people participating.
- Serving of Smart WASHOKU in employee canteens: implemented internally at 8 locations, and externally at 2 locations.

As part of a program to encourage physical activity and strengthen communication, we have distributed Kao's unique HocoTouch pedometer devices and hold Basic Walking Capabilities Testing Sessions to provide detailed analysis of walking "quality."

- HocoTouch: 260 devices installed in 13 contracted locations (with a total of around 14,000 participants).
- Basic Walking Capabilities Testing Sessions (implemented internally at 2 locations, with around 120 participants).

Health insurer information exchange with other corporations

With regard to health insurer information exchange with other corporations, we implement information exchange at meetings and seminars hosted by the General Incorporated Payer's Association for Better Healthcare (PAB), identifying and discussing issues relating to health insurance, and exchanging ideas through the presentation of case studies of improvement efforts, etc. The results achieved through this exchange of information are presented and reported on at PAB's Annual Conference.

Health level improvement status of Web-QUPIO* (health management support tool) user

Comparison of changes in the Body Mass Index (BMI) of users and non-users (including both Kao employees and employees of other companies) of Web-QUPIO showed that users recording the daily weight and lifestyle challenges saw a reduction in BMI over those who never logged in. In particular, there was a conspicuous difference in the BMI ≥ 25 (obesity group) values.

* QUPIO

This provides support for health promotion and prevention of, lifestyle disease based on a database of health checkup data for one million people that covers an extended period of time and knowledge obtained from joint research undertaken with the University of Tokyo.

Our initiatives

Launching the GENKI project

We launched the GENKI project to help employees and their family members stay healthy, as part of the implementation of our Mid-term Plan 2020 (K20). GENKI involves the provision of health management solutions that make effective use of the group's healthcare knowhow, technologies and products to our employees and their families.

Events and activities

Smart WASHOKU

Smart WASHOKU is a dietary method developed by Kao for eating well without increasing the visceral fat. Rather than focusing on the overall quantity of food consumed, the Smart WASHOKU approach emphasizes three key points - ①the ratio of protein to fat; ②the ratio of dietary fiber to sugar; ③the ratio of Omega 3 to fat - to provide a diet that enables people to consume plenty of amount while still keeping their visceral fat level down.

- Smart WASHOKU was provided as a lunch menu at employee canteens at 7 worksites in Japan.
- Occupational physicians and nursing staff attended Smart WASHOKU master-classes. 37 personnel have received Smart WASHOKU master-classes. 37 personnel have been awarded Smart WASHOKU Master certification. This certification will be used in future health guidance and health education activities targeting Kao personnel.
- Provided of Smart WASHOKU booklets to 1,083 personnel. Activities will be implemented so that Kao employees can also learn about the Smart WASHOKU approach.



Smart WASHOKU is provided as a lunch menu at employee canteens

Visceral Fat & Lifestyle Checkup

Visceral Fat & Lifestyle Checkup help employees to find out how much visceral fat they have, which in turn can help them to make improvements to their lifestyle in the future.

- Visceral Fat & Lifestyle Checkup was held at 22 locations in Japan, with 1,108 participants.

HocoTouch Pedometer Gait Measurement

We hold Gait Measurement at which analysis of how employees walk makes it possible to gauge their "walking age" and their future living functions risk. We also rent out the HocoTouch pedometer device, a unique device developed by Kao, which can stimulate improvements in daily living habits.

- Gait Measurements were held at 4 workplaces in Japan. 890 people took part in the walking testing.
- HocoTouch devices were rented out for use at 30 workplaces by 4,135 personnel. A total of 2,773 people continued to use the devices, of which 42% achieved Rank A walking speed.

Health-related events using *Healthya*

We are working to encourage wider participation in sport- and health-related events at workplaces in Japan. Event participants will be presented with a free bottle of *Healthya*.

- At 70 workplaces, there were a total of 70 events at which 6,699 people participated.

Campaigns and promotional activities

We implement company-wide health-related campaigns aimed at fostering the development of a healthy workplace ethos.

Weight-loss challenge

This campaign encouraged employees to try to lose 2kg in weight over the 42-day period between February 1 and March 14 (except employees with a BMI of less than 19).

- A total of 1,702 employees took part (representing a participation rate of 7.6%), of which 506 (29.7% of participants) succeeded in losing at least 2kg.
- During the campaign, Smart WASHOKU booklets were distributed to 872 personnel who requested. Smart WASHOKU lifestyle implementation promotion.

Healthya Walking Challenge

This campaign encouraged employees to walk every day and drink a bottle of Kao's *Healthya* every day over the 91-day period between April 1 and June 30.

- A total of 3,593 employees took part (representing a participation rate of 13.2%), of which 29.5% succeeded in losing weight, and 84.5% reported that they had gotten into the habit of walking.

Your Weight Reduction Challenge (for employees who received specific health guidance in 2016)

This campaign encouraged employees to try to lose weight over a 42-day period two months prior to their annual health examination.

- This has been implemented 5 times, with 439 employees participating, of which 59 achieved significant weight-loss results.

Women's health support

We work to help prevent health issues that particularly affect women, and we have put in place consultation programs to help women obtain advice about health concerns.

- The SUKOYAKA Women's News newsletter was distributed to all female employees in October.
- A women's health consultation service has been established.
- Healthcare-related products were provided on the basis of symptoms noted at the health consultation office to help women who were suffering from general malaise.

Survey on productivity and presentism

- A survey was implemented to examine the key factors behind employee performance and behind presentism.
- We have followed up on the factors leading to presentism that can bring a negative impact on productivity and considering appropriate response strategies.

Mental health care

We employ stress checks and follow-ups, and encourage consultations, to promote more preventive mental health measures.

We have also begun implementation of measures to improve the workplace environment based on stress check group analysis.

We have multiple consultation desks (including external EAPs [employee assistance programs], internal counselors, health consultation rooms for each worksite and subsidiary, etc.) that offer a range of consultation services. We also systematically implement training such as self-care training and training aimed at managers.

Mental health care projects implemented in 2017

Item	2017 results
Stress checks	97.4% of employees underwent stress checks
High stress rate	0.9% reduction
Stress check group analysis indicator seminars	Held 3 times
Training for managers	Held 16 times
Self-care training	Held 7 times
External EAP usage rate (number of usage/ number of target employees)	5.6%
Consultations with internal counselors (focused on career interviews)	11,008 people

Strengthening the infrastructure to support workplaces where employees enjoy safety and peace of mind

We are implementing several measures aimed at strengthening the health management framework and realizing workplaces where employees can enjoy safety and peace of mind.

Smoking cessation promotion

On the basis of the Kao Group Smoking-cessation Initiatives policy which was disseminated within the group in May 2016, we announced a new initiative that will prohibit smoking during work hours starting from January 2018.

- We held subcommittee meetings at each worksite to receive employee input in relation to the no smoking during work hours initiative.
- We held lectures in preparation for the implementation of the no smoking during work hours initiative.
- The Kao Group Smoking-Cessation Campaign was implemented in January and May 2017. A total of 273 employees participated (of which 114 succeeded in stopping smoking) (the number of participants increased by 112% compared to the previous year.)
- Kao Health Insurance Society-subsidized smoking-cessation treatment was provided for 47 people.
- Five smoking cessation videos were distributed via the company intranet.
- A total of eight different smoking-cessation posters were displayed.
- Smoking-cessation sessions were held at each worksite.



No smoking during work hours campaign poster

Kao's approach

Kao stipulates basic occupational safety and health criteria to maintain a workplace environment in which all employees can work with peace of mind. We also implement various activities to ensure the safety and health of all employees.

Kao's creating value to address social issues

Kao has defined an activities policy for occupational safety and health as part of the Kao Responsible Care Policy to address the necessity to prevent occupational accidents, and for health promotion. We strive to ensure the safety and health of our employees by focusing on and implementing activities in the areas of risk assessment for operations/machinery and chemical substances, and by the consistent implementation of and follow-up for medical checks, as well as mental health measures.

Contributions to the SDGs



Policies

Activities to ensure occupational safety and health are clearly stipulated in the Kao Responsible Care Policy. This is a policy to "Create a pleasant working environment and improve employees' health while eradicating occupational accidents, and reducing latent risks." Accordingly, when occupational accidents occur, we carefully investigate the accident or disaster, and identify and analyze the causes. The

results of the analysis are shared throughout the group to help prevent similar accidents from occurring again in the future, thereby protecting our employees while maintaining safe and stable operations.



→ 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

Kao implements education, drafting educational plans related to occupational safety and health for employees and temporary workers at all workplaces. We also ensure that health and safety training is conducted for new hires or reassigned personnel at the location of deployment. As part of these activities, we list up the necessary operations for special education and ensure

that the necessary training is implemented.

By implementing education, we are able to share information relating to safety and health in the workplace, and are able to undertake activities aimed at the achievement of safety and health targets.

We also publish an annual safety message from the President and a safety poster, to improve awareness of safety issues.



→ p. 171 Corporate Culture > Process Safety and disaster prevention/Education and promotion

Collaboration with stakeholders

To ensure subcontractors' safety, we also hold safety and disaster prevention events at manufacturing and research premises and logistics bases. We also promote collaborative safety activities, sharing safety information such as occupational accident case studies and countermeasures within the Kao Group with subcontractors on a monthly basis.

The Kao Logistics Division also holds monthly safety and quality meetings with transportation contractors. We also hold annual information-sharing meetings with transportation contractors and arrange for them to collaborate in our activities to eliminate work-related traffic accidents.

Mid- to long-term targets and performance

Main targets

We aim to become a company which meets top-level global standards for health and safety by 2020.

We have set a target of achieving the complete elimination of deaths and serious lost time accidents, and a target for reducing the lost time accident frequency rate (to below 0.10), and we also aim to completely eliminate 100% negligence accidents causing bodily injury in relation to work-related traffic accidents by 2020, for both employees and subcontractors.

2017 targets and performance

We implemented activities from the two perspectives of "Eradication of occupational accidents" and "Creating a pleasant working environment and improving employees' health."

Specific activities to eradicate occupational accidents have focused on equipment and operational risk assessment for existing facilities. We have also promoted improvements using near-miss incident proposals, risk assessment and incoming safety inspections in advance of operation of newly-installed equipment, and equipment safety measures and the prevention of equipment-related incidents by ensuring thorough awareness of and compliance with rules. Activities have also focused on measures to prevent slip and fall accidents

involving stairs, etc., and work-related traffic accidents, etc.

In the area of creating a pleasant working environment and improving employees' health, we have strengthened management of the working environment, ensuring effective implementation and follow-up of health check-ups, undertaking health promotion activities, stress check, and implementing risk assessment for chemical substances.

In addition, at the Health and Safety Committee meetings that are regularly held in each workplace, we report on activity plans as well as giving performance reports and disseminate this information to employees.

2017 Targets and performance (Kao Group)

Item	Indicator	Scope	2015	2016	2017	
			Results	Results	Target	Results
Occupational accidents	Death and serious lost time accidents* ¹ (persons)	Including both regular employees and temporary workers (Kao Group)	0	0	0	1
		Breakdown				
		Japan	0	0	—	1
		Asia	0	0	—	0
		Americas	0	0	—	0
		Europe	0	0	—	0
		Subcontractors (Kao Group)	0	0	0	0
		Breakdown				
		Japan	0	0	—	0
		Asia	0	0	—	0
		Americas	0	0	—	0
		Europe	0	0	—	0
	Lost time accidents frequency rate* ²	Including both regular employees and temporary workers (Kao Group) <input checked="" type="checkbox"/>	0.61	0.67	0.26 or less	0.55
		Breakdown				
		Japan	0.30	0.47	—	0.36
		Asia	1.10	0.31	—	0.34
		Americas	3.61	3.20	—	3.57
		Europe	2.53	4.12	—	2.79
		Including both regular employees and temporary workers (Reference: Member companies of Japan Chemical Industry Association)	0.29	0.35	—	—
		Subcontractors (Kao Group) <input checked="" type="checkbox"/>	0.82	0.56	0.26 or less	0.41
		Breakdown				
		Japan	0.40	0.65	—	0.55
		Asia	1.12	0.13	—	0.10
		Americas	0.00	0.00	—	0.00
		Europe	4.30	5.81	—	4.21
		Subcontractors (Reference: Member companies of Japan Chemical Industry Association)	0.50	0.54	—	—

*1 Serious lost time accidents: Accidents in which there is a continued loss of physical function after treatment for the injury has been completed (with a loss of physical function of Level 5 or higher.)

*2 Lost time accident frequency rate: Number of persons dead or seriously injured in occupational accidents per million hours worked (including only accidents involving at least one lost work day and also the loss of a part of the body or a bodily function.)

2017 Targets and performance (Kao Group)

Item	Indicator	Scope	2015	2016	2017	
			Results	Results	Target	Results
Occupational accidents	Total accident frequency rate*3	Including both regular employees and temporary workers (Kao Group)	2.03	1.96	1.34 or less	1.87
		Breakdown				
		Japan	1.63	1.93	—	1.70
		Asia	1.69	0.80	—	1.02
		Americas	7.23	4.79	—	5.95
		Europe	7.59	6.33	—	6.15
		Subcontractors (Kao Group)	2.18	1.32	0.81 or less	1.18
		Breakdown				
		Japan	2.09	1.49	—	1.18
		Asia	2.23	0.77	—	0.71
	Severity rate*4	Americas	0.00	0.00	—	0.00
		Europe	4.30	7.75	—	12.62
		Including both regular employees and temporary workers (Kao Group)	0.01	0.02	—	0.10
		Breakdown				
		Japan	0.01	0.01	—	0.13
		Asia	0.02	0.01	—	0.01
		Americas	0.09	0.10	—	0.08
		Europe	0.02	0.06	—	0.04
		Including both regular employees and temporary workers (Reference: Member companies of Japan Chemical Industry Association)	0.01	0.01	—	—
		Subcontractors (Kao Group)	0.01	0.03	—	0.01
		Breakdown				
		Japan	0.01	0.05	—	0.02
		Asia	0.01	0.01	—	0.00
		Americas	0.00	0.00	—	0.00
		Europe	0.10	0.05	—	0.06
		Subcontractors (Reference: Member companies of Japan Chemical Industry Association)	0.14	0.10	—	—
Traffic accidents	100% negligence accidents causing bodily injury (no. of accidents)	Sales and logistics (Japan)	14	24	0	11
	Accidents other than 0% negligence accidents per 100 vehicles*5		7.75	7.10	5.5 or less	7.64

*3 Total accident frequency rate:

Number of persons injured in occupational accidents (including accidents without lost work days) per million hours worked

*4 Severity rate: Number of lost days/ total working hours × 1,000

*5 Accidents other than 0% negligence accidents per 100 vehicles: Number of traffic accidents other than 0% negligence / No. of vehicles in fleet × 100

Targets for 2018

We are working to prevent the occurrence of accidents and disasters, with the 2018 targets for the entire Kao Group.

The targets for traffic accidents other than 0% negligence per 100 vehicles will also be set once we have a clearer grasp of the current situation in Kao's sites outside Japan.

Targets for 2018 (Kao Group)

Item	Scope	Indicator	2018 targets
Occupational accidents	Regular employees and temporary workers	Death and serious lost time accidents*1 (persons)	0
		Lost time accidents frequency rate*2	0.20 or less
		Total accident frequency rate*3	1.08 or less
	Subcontractor employees	Death and serious lost time accidents*1 (persons)	0
		Lost time accidents frequency rate*2	0.20 or less
		Total accident frequency rate*3	0.74 or less
Traffic accidents	Sales and logistics	100% negligence accidents causing bodily injury (no. of accidents)	0
		Accidents other than 0% negligence accidents per 100 vehicles*4	—

*1 Serious lost time accidents: Accidents in which there is a continued loss of physical function after treatment for the injury has been completed (with a loss of physical function of Level 5 or higher.)

*2 Lost time accident frequency rate: Number of persons dead or seriously injured in occupational accidents per million hours worked (including only accidents involving at least one lost work day and also the loss of a part of the body or a bodily function.)

*3 Total accident frequency rate: Number of persons injured in occupational accidents (including accidents without lost work days) per million hours worked

*4 Accidents other than 0% negligence accidents per 100 vehicles: Number of traffic accidents other than 0% negligence / No. of vehicles in fleet × 100

Our initiatives

Status of occupational accident occurrences

In 2017, there was one death of temporary worker from a work-related accident involving employees, temporary workers or subcontractors.

While taking delivery of raw materials at a production site, inadequate communication between the driver and operatives and failure to implement proper confirmation led to an operative becoming caught under the trailer wheels. To prevent the reoccurrence of this type of serious accident, we have made changes to operational procedures and operations manuals, and have strengthened training and on-site patrols by managers.

A total of 160 employees including temporary workers were involved in accidents across the group, of whom 47 persons with lost work days as a result (this figure includes one death.)

The most common types of accident were slip and fall accidents due to carelessness and lack of confirmation (53 employees), accidents getting caught in machines (20 employees), and accidents involving reactional action (19 employees). Measures are being promoted with an emphasis on slip and fall accidents, due to such accidents having the highest incidence rate.

As regards occupational accidents involving subcontractors, the number of persons affected was 26 of which 9 suffered injuries resulting in lost time.

Risk assessments of chemical substances

As many kinds of chemical substances are handled at Kao manufacturing locations, the risk of environmental pollution is not negligible. With this in mind, we take measures to complete evaluations on the impacts on people and the environment of existing facilities, and to reduce these risks. In addition, we conduct a priori evaluations of impacts on people and the environment when expanding and reconstructing facilities.

Within Japan, in 2017 risk assessment was implemented with respect to 27 additional substances that have been brought within the scope of coverage of the Industrial Safety and Health Act.

These measures have been implemented in response to the U.N.'s Strategic Approach to International Chemicals Management (SAICM) initiative.

Expansion of the "no accidents with lost work days award system" improving safety awareness

In 2016, the "no accidents with lost work days award system," which had previously been limited to plants in Japan, was expanded to include plants outside Japan, in order to further improve safety awareness. In 2017, three plants in Japan and two plants outside Japan received awards.

"No accidents with lost work days awards" presented in 2017

Region	Company / Plant	Stage
Japan	Kao Corporation Fuji Plant	Stage 2 (5 years)
	Kao Corporation Wakayama Plant	Stage 2 (5.4 million hours)
	Kao Corporation Tochigi Plant	Stage 5 (15 years)
China	Kao (Hefei) Co., Ltd.	Stage 2 (5 years)
	Kao Corporation Shanghai	Stage 1 (3 years)

Award criteria

Stage	Award criteria
1	3 years
2	5 years or 5.4 million hours
3	7 years or 8.1 million hours
4	10 years or 12.2 million hours
5	15 years or 18.3 million hours
6	25 years or 30.0 million hours



No accidents with lost work days memorial trophy



(Left) The award ceremony for the presentation of the Stage 5 award to Kao Corporation Tochigi Plant.



(Right) China: The award ceremony for the presentation of the Stage 2 award to Kao (Hefei) Co., Ltd.

Occupational safety

Creating a pleasant working environment for employees

We strive to create a pleasant working environment in all workplaces, and we conduct periodic working environment measurement and implement improvement and maintenance to ensure compliance with each country's workplace environment standards.

Sharing safety messages globally

With the aim of raising safety awareness worldwide, in 2017 the safety messages on the poster used in Japan were translated into 11 local languages with the assistance of our overseas work-sites. Safety posters featuring the company president were deployed in sites both within and outside Japan, and safety messages were shared globally.



Safety posters featuring the company president were deployed in 11 different local languages (from left, the Japanese, English, Thai, and Simplified Chinese versions)

Kao's approach

Our initiatives

The Kao Corporation Tochigi Plant receives Category 5 Accident-free Certification from the Ministry of Health, Labour and Welfare (MHLW)

Having maintained a record of zero accidents involving death or lost work days for a total of 15.2 million hours (over the period from September 1, 2002 to June 28, 2017), Kao Corporation's Tochigi Plant was awarded Category 5 Accident-free Certification from the Ministry of Health, Labour and Welfare (MHLW) on October 19, 2017.

Following the establishment of the Health and Safety Promotion Coordination Meeting under the Tochigi Plant's Health and Safety Committee, activities are implemented through multiple groups, with a coordinated approach that covers the whole plant, including both regular employees and temporary workers, and involve all personnel participating in health and safety activities. The four main activities implemented were as follows: ①The establishment of a proposal system covering safety proposals, reporting of near-miss incidents etc., and the building of a plant ethos that respects safety rules; ②Implementation of risk assessment from an operation and machinery usage perspective; ③Effective utilization of pre-implementation checklists covering preparatory work and operation content etc. before implementing infrequent operations; ④Implementation of safety education for all employees on a three-year cycle and provision of safety education using accident prevention videos etc. for new employees and reassigned employees. The award is the result of 15 years of steady implementation of these health and safety activities.

In the future, the Tochigi Plant will continue to implement health and safety activities aimed at achieving zero accidents and injuries, and strive to achieve 25 years of accident-free operation.



The Tochigi Plant's Category 5 Accident-free Certification

Conservation

Community

Corporate Culture

Governance

Kao's approach

Kao implements process safety and disaster prevention activities with the aim of ensuring the safety of employees and maintenance of safe, stable operations, stipulating matters relating to prevention of accidents, emergency response and strengthened security. Through these activities, we aim to completely eliminate accidents.

Kao's creating value to address social issues

As Kao has several large-scale plants, its process safety and disaster prevention needs have been heightened in the current reality of successive accidents at the chemical plants, and the many natural disasters that have occurred recently.

To ensure the safety of local residents, our employees, and others, we will strive to reduce the risk of accidents by ensuring rigorous process safety audits and drills and regular implementation of disaster prevention drills, alongside continuous consideration of appropriate and timely responses when accidents do occur.

Contributions to the SDGs



Policies

Activities to ensure process safety and disaster prevention are clearly stipulated in the Kao Responsible Care Policy. This is a policy to "Prevent fires, explosions and leakages involving chemical substances, with due attention to factors such as natural disasters and strengthened security, and responses involving necessary facilities and regular drills to instill disaster preparedness while maintaining safe and stable operations." We are endeavoring to prevent accidents and disasters in accordance with this policy.

Framework

Our daily activities for process safety and disaster prevention are conducted as part of the Responsible Care promotion system. In particular, we have built a framework to keep track of accidents or disasters when they occur, through our global emergency reporting network. In addition, when a large-scale disaster such as a major earthquake occurs, we will establish an Emergency Response Team Organization headed by the President. Together as a Group, our initial response places top priority on the safeguarding of human life as we implement measures including our Business Continuity Plan (BCP)*.

* Business Continuity Plan (BCP)

A plan for continuing key corporate activities through procedures to decide in advance which operations and functions should be continued, and which methods should be applied to continue activities, assuming various situations that cause the interruption and/or shutdown of business activities due to various events and the factors behind their occurrence.



→ p. 184 Governance > Responsible Care Activities

Education and promotion

Kao implements process safety and disaster prevention education through various programs, to ensure that we deliver in perpetuity on our global commitment to *Yoki-Monozukuri*. By recreating incidents such as technical glitches and hazardous situations at our Monozukuri Training Center, we can ensure that the necessary knowledge and skills are passed on to younger staff members at our production sites.

Promising leaders of the next generation within and outside Japan receive eight months of training to learn about production technology and the spirit of *Yoki-Monozukuri* at Kao's Global Techno School in the Wakayama Plant. This training includes process safety and disaster prevention.

In addition, an annual disaster prevention message is posted, and an earthquake and disaster prevention handbook is published to improve disaster awareness. We are also endeavoring to ensure that the efficacy of past drills is not weakened by the passage of time, by designating a Safety Day on days when accidents occurred in the past.



→ p. 186 Governance > Responsible Care Activities > Education and promotion



→ p. 145 Corporate Culture > Human capital development

Collaboration with stakeholders

- Kao regularly implements joint drills with, for example, fire stations and local corporations, in order to keep any damage caused by accidents and disasters which occur to the bare minimum. We are endeavoring to improve the overall level of our disaster prevention activities.
- We jointly implement drills in recognition of the possibility of terrorist attacks in cooperation with local police for our production sites overseas, on an as-needed basis.

Smart Process Safety Case Studies Collection

The Smart Process Safety Case Studies Collection (published by the Industrial Safety Division of Japan's Ministry of Economy, Trade and Industry), which presents case studies of firms that are at the forefront of efforts to develop "smart" industrial process safety, included a case study of the plant operation optimization support system adopted by Kao Corporation's Wakayama Plant.

This system, which aims to optimize expenditure on utilities, has realized a 1.2% improvement compared to the situation before the new system was adopted. Every morning, meetings are held at which the disparities between the optimal equipment operation recommended by the system and actual operation by plant operatives are discussed. By getting younger employees to think about the reasons for the disparities, and asking more experienced employees to share their views, these meetings provide an effective opportunity for

raising the overall level of operator skill and passing on skills to new generations of employees.

In the future, deployment of this system will be expanded to include other plants, and we will be working to realize centralized data management.



Smart Process Safety Case Studies Collection

Mid- to long-term targets and performance

Mid- to long-term targets

We actively strive to realize the goal of complete elimination of on-site fires, explosions, leakages and logistics-related leakage accidents.



Targets and performance

In 2017, we implemented Change Management*, risk assessments of chemical facilities, regular inspections, and enhanced patrols, for maintenance of safe, stable operations, to eradicate process safety accidents. In addition, detailed implementation specs and plans were also drafted for respective divisions with the targets of enriching disaster prevention drills and enhancing security.

In 2018, we will continue activities directed toward our targets of completely eliminating on-site fires and accidents related to explosion, leakage, and logistics-related leakage accidents.

* Change Management

Management activities anticipating and accommodating risks before changes are implemented, along with preventive measures for issues such as failure, defects, and accidents.

Targets and results

Item	Scope	Indicator	2016	2017		2018
			Results	Target	Results	Target
Accidents	Kao Group	Fires, explosions, leakages, etc. (no. of accidents)	3	0	6	0
		Logistics-related leakage* (no. of accidents)	0	0	0	0

* Logistics-related leakage

Accidents involving leakage while products, etc. are being transported

Below is an overview of accidents in 2017.

There were no leakages (on-site) or logistics-related leakages in 2017.

Type of accidents	Small-scale fires: 5 cases	Explosions: 1 case
Overview of accident	<ul style="list-style-type: none"> A fire that started in a garbage collection container. A fire that started in residual hot oil. A fire that started in wood material due to hot air leakage caused by inadequate covering. A fire that started during deactivation treatment of chemicals on which research was being performed. A fire that started near a constant-temperature refrigeration unit in a research laboratory. 	<p>The tank had been almost completely emptied out for cleaning purposes when an explosion occurred, followed by flames (No one was injured, although the windows of a neighboring company did suffer some damage to the glass).</p> <p>Presumed cause: Sediment that had built up in the tank was condensed by evaporation when the tank was emptied, leading to a sudden rise in temperature to spontaneous combustion that caused the explosion and fire.</p>
Countermeasures being taken	We are working to implement thorough management of our rules for dealing with waste reagents, as well as operations processes and construction work.	Based on the presumed cause, we overhauled our procedures for cleaning the inside of waste tanks and striving to prevent recurrence.

Our initiatives

Emergency response drills to prepare for large-scale disasters

Besides implementing fire response training and emergency evacuation training at the level of individual workplaces, the group also conducts training on a company-wide basis to prepare for large-scale disasters.

Training in the use of the system for reporting the safety of Kao employees

In 2017, company-wide training was held over two days in March as in previous years and for a one-day (24-hour) period in September, on inputting data into the employee safety confirmation system for use in confirming the safety of all Kao Group employees. In both training instances, the successful data inputting rate was 100%. A 100% score has now been achieved seven times in a row since September 2014. We will continue to implement this type of training in the future.

Company-wide earthquake scenario reporting and communication training

Recognizing the possibility of damage to the Kao Head Office from a major earthquake in the Tokyo metropolitan area, the group is consolidating its organizational units for disaster response in Eastern Japan and Western Japan.

In May 2017, we implemented drills in the Tohoku and Hokkaido regions premised on a major earthquake on the Sanriku coast, and in November we implemented drills premised on a major earthquake with its epicenter directly under the Tokyo metropolitan area.

For the 2017 drills, it was assumed that the earthquakes occurred while employees were at home on the weekend or at night. With respect to the main organizational units for disaster response, the contact methods used were reviewed, with the adoption of new contact methods (using IP wireless technology.)

During these drills, disaster sites transmitted timely information about human safety and property damage status by means of a meeting system utilizing satellite phones and Kao's internal disaster response bulletin board and website, and necessary responses were implemented based on the data from organizational units for disaster response. The content of drills is being reviewed on an ongoing basis in light of the lessons learned from past training drills.

Emergency evacuation drills based on the scenario that a plant tour is taking place when the disaster occurs

The nine Kao plants in Japan that provide plant tours have prepared protective hoods for use by plant visitors in the event that an earthquake occurs while a plant tour is underway. These plants also implement emergency evacuation drills, with employees taking on the role of plant visitors, to ensure that in the event of an emergency visitors can be taken swiftly to a safe place.

In the future, we will continue to incorporate drills based on a variety of different scenarios during a plant tour into our annual training plan.



Implementing an emergency evacuation drill with employees taking on the role of plant visitors.



→ p. 191 Governance > Risk and crisis management

Disaster prevention audits

In 2017, the scope of implementation of disaster prevention audits was expanded from eight plants in six countries to ten plants in eight countries, with the addition of the U.S. and Mexico plants. Audits were implemented at five plants in 2017, in the U.S., Mexico, Malaysia, Indonesia and the Philippines. Disaster prevention audits cover the state of implementation of disaster prevention operations, and the improvements made to address safety and disaster prevention issues. When issues are identified during audits, appropriate measures are taken to respond to these issues.

Initiatives including the implementation of audits by having dispatched auditors from particular plants to other plants are also continued so that we can improve the levels of safety and disaster prevention at each plant through audit.

Strengthening process safety and disaster prevention

The SCM Division is working to strengthen chemical equipment risk management by identifying latent risks and implementing suitable measures in response, as well as continuing to promote earthquake response measures.

In 2017, latent risks were again identified by means of chemical equipment safety assessments and we continue to implement measures to prevent fires involving low-flashpoint substances, dust explosions, and spontaneous combustion, measures to ensure the safety of equipment used for polymerization and exothermic reactions and to strengthen the change management of equipment. With regard to earthquake response measures, we have promoted the implementation of seismic resistance diagnostics and reinforcement for both buildings and equipment stands, liquefaction prevention measures, and measures to strengthen protection against tsunamis.

High-pressure gas safety inspection, auditing and verification

The Wakayama Plant has been designated an Accredited Safety Inspection Executor* pursuant to the High Pressure Gas Safety Act. In 2017, a safety audit was implemented by the Safety Management Division in August and a safety inspection under the direction of the President, who also serves as head of safety management, was implemented in October. We were able to confirm that there were no issues with regards to process safety activities.

The high-pressure gas equipment at other Kao sites has safety inspection performed by external inspection bodies. Safety audit and safety verification are carried out in-house, and a serious effort is being made to ensure safe equipment operation.



High-pressure gas safety inspection at the Wakayama Plant

* Accredited Safety Inspection Executor

It is a company or organization authorized by the Minister of Economy, Trade and Industry to perform self-inspection, either while equipment is in operation or while it is out of operation, to verify whether the safety of specified items of equipment conforms to the relevant technical standards pursuant to the High Pressure Gas Safety Act.

2017 Our initiatives

Governance

Corporate governance	176
Responsible care activities	184
Risk and crisis management	191
Information disclosure	195
Information security	200
IP protection and utilization.....	207

Corporate governance

Basic approach

Kao (hereinafter, “Kao” or “the Company”)’s vision by 2030 is to become a company with a global presence. In addition to financial strategies and initiatives that focus on financial results, non-financial strategies and initiatives should be strengthened and work in concert with their financial counterparts to allow a company to grow sustainably.

Kao has announced that it recognizes ESG initiatives as an investment for the future, not as a cost, and is promoting them accordingly. Kao considers good corporate governance as a prerequisite and a driving force for strongly promoting the achievement of ESG-related goals. Kao’s basic stance on measures related to corporate governance is to set up and operate a management structure and an internal control system, implement necessary measures in a timely fashion, and achieve accountability so that Kao can swiftly respond to changes, realize efficient management that is sound, fair, and highly transparent, and continuously increase corporate value. Kao views accomplishing such tasks as one of its most important management issues. Kao has been actively engaging in activities to listen to stakeholders’ voices and, based on input from stakeholders and social trends, it conducts reviews of its corporate governance and implements the necessary measures and improvements, as needed, in an appropriate manner.

Corporate governance structure

Kao has chosen to be a company with an Audit & Supervisory Board. The Audit & Supervisory Board Members do not possess voting rights at meetings of the Board of Directors. Kao believes that this allows these members to objectively audit the decisions made by the Board of Directors and the business execution of individual Directors without being bound by past decisions and adopting an overly conservative approach.

To better ensure transparency and fairness in the processes for determining Director appointment and compensation, Kao has voluntarily established the Committee for the Examination of the Nominees for the Members of the Board of Directors, composed solely of Outside Directors and Outside Audit & Supervisory Board Members, and the Compensation Advisory Committee, made up of Outside Directors, Outside Audit & Supervisory Board Members, and Representative Directors.

Kao’s Board of Directors maintains a high level of objectivity, with three of its seven members being independent Outside Directors. At the same time, the Board of Directors is supported by organizations that oversee auditing duties as well as compensation and nomination examinations, thereby realizing a high level of effectiveness. In these ways, Kao has in place a framework for supervising and auditing its management.

Kao’s approach

Our initiatives

History of initiatives for enhancing corporate governance

2002	<ul style="list-style-type: none"> Introduced the Executive Officer system Introduced the Outside Director system
2003	<ul style="list-style-type: none"> Established the Committee for the Examination of the Nominees for the Chairman of the Board and the President and Chief Executive Officer and the Compensation Advisory Committee
2010	<ul style="list-style-type: none"> Established Standards for Independence of Outside Directors/Outside Audit & Supervisory Board Members of Kao Corporation
2012	<ul style="list-style-type: none"> Added one Outside Director, for a total of three Reduced the number of Directors from 15 to 10 Shortened Directors’ term of office to one year
2013	<ul style="list-style-type: none"> Added one Outside Audit & Supervisory Board Member, for a total of three
2014	<ul style="list-style-type: none"> Made the number of Inside Directors and Outside Directors the same Appointed an independent Outside Director as Chairman of the Board of Directors
2015	<ul style="list-style-type: none"> Commenced evaluation of the effectiveness of the Board of Directors
2016	<ul style="list-style-type: none"> Commenced evaluation of the effectiveness of the Audit & Supervisory Board Added one Inside Director, for a total of four

Corporate governance structure

Corporate organization	Company with an Audit & Supervisory Board
Number of Directors (number of whom are independent Outside Directors)	Seven (three)
Number of Audit & Supervisory Board Members (number of whom are independent Outside Audit & Supervisory Board Members)	Five (three)
Directors’ term of office	One year
Adoption of Executive Officer system	Yes
Institution for delegation of Board of Directors’ authority	Management Committee, etc.
Institution for voluntary consultation with the Board of Directors	Committee for the Examination of the Nominees for the Members of the Board of Directors, Compensation Advisory Committee
Accounting Auditor	Deloitte Touche Tohmatsu LLC

Ensuring transparency and fairness

Board of Directors

Kao's Board of Directors has secured a balance among knowledge, experience, and skills and a sufficient level of diversity to appropriately carry out the formulation of business strategies and other measures as well as supervise specific business execution. Outside Directors are nominated with emphasis on diverse experience, their knowledge, and a high level of insight obtained from such experience that cannot be obtained from Inside Directors alone. Examples include global experience, experience in managing a company that provides products and services in a different industry from that of Kao, and consulting or academic experience. In addition, Kao makes efforts to enhance the effectiveness of discussions at Board of Directors' meetings in such ways as having Executive Officers in charge of accounting and human affairs who are not Directors attend these meetings.

To promote sustainable growth and medium-to-long-term increases in corporate value, Kao deliberates from various perspectives, including evaluation of risks, and determines the medium-to-long-term direction of management toward business strategies. Furthermore, Kao supervises whether or not its business strategies are being executed appropriately in various ways through reports by the Inside Directors on the status of progress of these strategies and issues preventing their achievement and response to such issues, as well as through evaluation by Outside Directors and Outside Audit & Supervisory Board Members from their diverse perspectives. Moreover, Kao draws sharp distinctions between risks through the establishment of internal control and risk control systems. In these ways, Kao has created an environment that allows for a more proactive style of management.

Also, Kao has introduced an Executive Officer system that places Executive Officers in charge of each division, thereby promoting the separation of supervisory functions and execution functions. Additionally, the Board of Directors largely delegates execution authority to the Management Committee, which is mainly composed of members with the position of Managing Executive Officer or higher. Through these means, Kao is working to accelerate decision making and business execution.

Evaluation of the effectiveness of the Board of Directors

On at least an annual basis, an evaluation is conducted at a meeting of the Board of Directors in order to make improvements aimed at enhancing the effectiveness of the Board of Directors. Based on the idea that the roles and responsibilities of the Board of Directors must be shared by the entire Board, Kao believes that it is important for all members who participate in meetings of the Board of Directors, including Audit & Supervisory Board Members, to express their own opinions and evaluate those opinions by engaging in free and open discussions. Evaluation of the Board of Directors is therefore currently conducted through self-assessment by the participating members of Board meetings without using an outside third party.

For the FY2017 evaluation, prior to the exchange of opinions for self-assessment at the meeting of the Board of Directors held in January 2018, a survey of the seven members of the Board of Directors and the five members of the Audit & Supervisory Board was conducted. Feedback on the results was then provided before the meeting, during which evaluation of the effectiveness of the Board and an exchange of opinions were conducted. Details of the evaluation are as follows.

1. Efforts to address issues pointed out in the FY2016 evaluation of the effectiveness of the Board of Directors

- In addition to utilizing global human resources, there is a need to accelerate the process for securing diverse human resources that can respond to the major changes in consumer purchasing models and retail distribution models.
- One of the Kao Group's strengths was deemed to be the implementation of speedy organizational management throughout the entire Group, which is made possible by the sharing of the Kao Way. However, in the process of promoting diversity in human resources, there is a need to consider how Kao will balance this strength with diversity promotion.

- Direct and indirect subsidiaries, including those overseas, as well as companies and employees that have become new members of the Kao Group, are not readily visible to management. Accordingly, for such companies there is a need to further enhance internal control systems and work to instill an even stronger awareness of compliance.

2. Expectations of the Board of Directors in the Corporate Governance Code

(1) Discussing the broad direction of corporate strategy; (2) Establishing an environment that supports the appropriate risk-taking by senior management; (3) Carrying out highly effective oversight of Directors and management from an independent and objective standpoint; (4) Establishing appropriate internal control and risk management systems for handling complaints and undertaking financial reporting, and monitoring whether such systems operate effectively; and (5) Engaging in constructive and appropriate dialogue with shareholders and other investors.

3. General operation of meetings of the Board of Directors (proceedings, agendas, reports, materials, discussions, etc.)

Materials are distributed before Board of Directors' meetings are held. When necessary, the Board of Directors' secretariat provides thorough explanation of meeting agendas. Explanations are kept to no more than half of the planned time for the entire Board meeting to ensure that adequate time is available for questions and discussions.

4. Future issues for the Board of Directors

There is a need to further discuss matters pertaining to human resource strategy, which should work to respond to the global expansion of Kao's business and the rapid changes in the business environment, and business strategy that includes nonfinancial activities (ESG activities). Furthermore, it is important to not only establish internal control systems but also to continue to monitor these systems to ensure that they operate in an appropriate manner.

Audit & Supervisory Board

For Outside Audit & Supervisory Board Members, Kao has appointed certified public accountants and a lawyer to its Audit & Supervisory Board, all of whom have a high level of expertise and abundant experience and knowledge regarding auditing. Supported by internal information gathering by the full-time Inside Audit & Supervisory Board Members, Audit & Supervisory Board Members are able to engage in objective and meaningful discussion and perform highly effective audits.

Audit & Supervisory Board Members hold regular meetings with the Representative Directors to exchange opinions and attend important meetings, such as meetings of the Board of Directors and the Management Committee. In addition to meetings with the audit & supervisory board members of domestic Group companies, the Audit & Supervisory Board Members hold meetings with internal auditing divisions and the Accounting Auditor to exchange information as well as conduct interviews with each internal division and Kao's subsidiaries on a regular basis and additionally when necessary. Furthermore, at meetings of the Board of Directors, the Audit & Supervisory Board Members provide observations related to the legality and validity of Kao's business and accounting practices. They also offer a wide range of advice to Kao's management, including advice on strategic management direction.

Evaluation of the effectiveness of the Audit & Supervisory Board

The Audit & Supervisory Board conducts an evaluation of its auditing effectiveness once a year as well.

At the Audit & Supervisory Board meeting held in February 2018, all Audit & Supervisory Board Members expressed their opinions on the activities of the Audit & Supervisory Board in FY2017. The attendees engaged in discussions based on those opinions and made their evaluations accordingly. In addition, reports were made to the Board of Directors on the following matters.

1. General overview

- In addition to regular meetings to exchange opinions between Audit & Supervisory Board Members and Representative Directors, regular meetings to exchange opinions with Outside Directors were established.
- To deepen cooperation with Kao's Accounting Auditor, global meetings with the accounting firm of Kao's Accounting Auditor were held regularly and, when necessary, opinions were exchanged with accountants of overseas subsidiaries on an individual basis.
- Cooperation with the Department of Internal Audit continued to deepen, leading to improvement in the precision and efficiency of audits.
- A tripartite auditing framework was gradually established, thereby enabling effective cooperation.

2. Future issues for the Audit & Supervisory Board

To facilitate Group-wide control, the Audit & Supervisory Board intends to increase opportunities for communication with audit & supervisory board members of Group companies in Japan. In addition, to properly understand information pertaining to overseas Group companies, the Audit & Supervisory Board will strengthen cooperation with internal auditing divisions, starting with the Department of Internal Audit.

Committee for the Examination of the Nominees for the Members of the Board of Directors and Compensation Advisory Committee

To ensure fairness and transparency in decisions regarding the appointment and compensation of Kao's members of the Board and Executive Officers, Kao has voluntarily established the Committee for the Examination of the Nominees for the Members of the Board of Directors and the Compensation Advisory Committee.

The Committee for the Examination of the Nominees for the Members of the Board of Directors comprises three independent Outside Directors and three independent Outside Audit & Supervisory Board Members. The committee submits its opinions regarding nominees for company President and Directors proposed by the Board of Directors. In addition to examining the appropriateness of Director nominees, it discusses size, composition, and diversity of the Board of Directors as well as the qualities required for the President and Chief Executive Officer and members of the Board. The committee also reports the results of these examinations and deliberations to the Board of Directors.

The Compensation Advisory Committee is composed of three Representative Directors, three independent Outside Directors, and three independent Outside Audit & Supervisory Board Members. The committee offers its opinions on compensation proposals from Kao as well as on compensation systems and levels of members of the Board and Executive Officers.

Attending members for Meetings of the Board of Directors, the Audit & Supervisory Board, and other Committees

Classification	Name	Meeting of the Board of Directors	Audit & Supervisory Board Meeting	Committee for the Examination of the Nominees for the Members of the Board of Directors	Compensation Advisory Committee
Members of the Board	Michitaka Sawada	○			○
	Katsuhiko Yoshida	○			○
	Toshiaki Takeuchi	○			○
	Yoshihiro Hasebe	○			
	Sonosuke Kadonaga Outside /Independent	◎		◎	◎
	Masayuki Oku Outside /Independent	○		○	○
	Osamu Shinobe Outside /Independent	○		○	○
Audit & Supervisory Board Members	Toshiharu Numata	○	◎		
	Katsuya Fujii	○	○		
	Toraki Inoue Outside /Independent	○	○	○	○
	Hideki Amano Outside /Independent	○	○	○	○
	Nobuhiro Oka Outside /Independent	○	○	○	○

◎Indicates Chairman of the Board or specified committee

○Indicates attending member

Independent Outside Directors and Independent Outside Audit & Supervisory Board Members

Kao uses a structure with the appropriate number of independent Outside Directors and independent Outside Audit & Supervisory Board Members who satisfy the “Standards for Independence of Outside Directors/Outside Audit & Supervisory Board Members of Kao Corporation” (hereinafter, the “Standards for Independence”) to provide a check on the status of deliberations of the Board of Directors from an objective perspective independent of Kao’s management so that its judgment is not biased toward the logic of persons inside the Company.

Three of Kao’s seven Directors are Outside Directors and three of its five Audit & Supervisory Board Members are Outside Members. All of these members fulfill the Standards for Independence.

Under its current structure, Kao has appointed an independent Outside Director as Chairman of the Board of Directors as part of a policy to further enhance the Board’s neutrality and independence.

To promote discussions from diverse perspectives, independent Outside Directors and Outside Audit & Supervisory Board Members hold meetings exclusively for independent Outside Members on their own initiative at intermissions of meetings of the Board of Directors or by setting

up separate opportunities to exchange information and share awareness of issues related to Kao’s management and the activities of the Board of Directors, the development of future senior management, and other matters.



→ Standards for Independence of Outside Directors/Outside Audit & Supervisory Board Members

http://www.kao.com/content/dam/sites/kao/www-kao-com/global/en/about/pdf/governance_002.pdf

Dialogue with shareholders

In order to improve its corporate value, Kao considers it important to communicate with shareholders and other stakeholders, thereby gaining better understanding of mutual views and positions, and taking appropriate measures based on this understanding. Kao will develop a structure to promote constructive communication with shareholders, and create opportunities to communicate with individual shareholders and domestic and foreign institutional investors. In communication with shareholders, the members of management participate to the extent possible in order to reflect the opinions and other comments expressed by the shareholders in management appropriately.

Company briefings for shareholders

In addition to the plant tours it conducts yearly, Kao held a company briefing for the first time in Osaka in August 2017, which targeted shareholders who were unable to attend the General Meeting of Shareholders held in Tokyo.

At the briefing, President and Chief Executive Officer Michitaka Sawada provided explanations on the Company’s performance in FY2017, the concepts incorporated in Kao Group Mid-term Plan K20, and efforts to evolve and expand Kao’s Essential Research. After he concluded his discussion, Mr. Sawada fielded questions from those in attendance.

Facility tours and company briefings in Japan in 2017

Location	Times held	Number of participants
Kawasaki Plant tour (Kanagawa)	4	161
Kao Museum tour (Tokyo)	6	224
Kao Eco-Lab Museum tour (Wakayama)	2	78
Company briefing (Osaka)	1	85

Compensation system for Directors and Executive Officers aimed at increasing awareness of improving corporate value

Kao's compensation system for members of the Board, Audit & Supervisory Board Members, and Executive Officers is aimed at (1) securing and retaining diverse and excellent personnel to establish and improve competitive advantages; (2) promoting prioritized measures for lasting increases in corporate value; and (3) sharing interests in common with shareholders.

Starting in FY2017, Kao has introduced a performance-based share incentive plan for its members of the Board of Directors (excluding Outside Directors) and Executive Officers. Serving as a highly transparent and objective remuneration system that is closely linked to Company performance, the performance-based share incentive plan aims to increase awareness of contributing to improvement in Kao's financial performance and corporate value over the medium to long term.

Compensation system for Directors, Audit & Supervisory Board Members, and Executive Officers

(i) Base salary

A base salary is paid as fixed monthly remuneration in an amount determined in accordance with duties as a member of the Board or Executive Officer and rank.

(ii) Bonus as short-term incentive compensation

When the full bonus payment rate is paid, the bonus is set at 50% of the base salary for the President and Chief Executive Officer, 40% of the base salary for Executive Officers with titles other than the Chief Executive Officer, and 30% of the base salary for other Executive Officers. The bonus payment rate is set within a range of 0% to 200%, depending on the degree of achievement of

targets for net sales and income (gross profit less selling, general and administrative expenses), the degree of their improvement from the previous year, and the degree of achievement of the target for Economic Value Added (EVA®), Kao's main management indicator, which takes into account capital cost.

(iii) Performance-based share incentive plan as long-term incentive compensation

Within a four-year target period from FY2017 to FY2020, the period covered by the current mid-term plan, Kao shares, etc., are delivered to the members of the Board (excluding Outside Directors) and Executive Officers in accordance with the degree of mid-term plan target achievement. This incentive plan has two parts: a performance-based part in which Kao shares, etc., are delivered in accordance with the degree of mid-term plan target achievement, and a fixed part in which a certain number of Kao shares, etc., are delivered annually. The performance-based part of the system provides an impetus for achieving the targets of Kao's mid-term plan and increases the link between performance and compensation over the medium to long term. The fixed part of the system strengthens shared interest with Kao's shareholders by promoting the holding of shares by members of the Board (excluding Outside Directors) and Executive Officers. The performance-based part accounts for 70% of shares delivered, with the fixed part accounting for 30%. When the performance-based coefficient for the performance-based part of the system is at 100%, the yearly share remuneration amount is set at nearly 40% to 50% of the base salary.

To ensure the objectiveness and transparency of the decision-making process, the compensation system and compensation standards for members of the Board and Executive Officers are examined by the Compensation Advisory Committee and determined by the Board of Directors. The Compensation Advisory Committee comprises the Chairman of the Board of Directors as well as all of the Company's Representative Directors. In addition, the committee includes all of the Company's Outside Directors and Outside Audit & Supervisory Board Members. As such, over half of the committee's members are independent.

Compensation for Kao's independent Outside Directors consists solely of a fixed monthly salary and does not include the bonus as short-term incentive compensation nor the performance-based share incentive plan as long-term incentive compensation.

Compensation of Audit & Supervisory Board Members also consists solely of a fixed monthly salary, and compensation standards are determined at meetings of the Audit & Supervisory Board.

Compensation standards for the members of the Board, Executive Officers, and Audit & Supervisory Board Members are determined each year after ascertaining standards at other major manufacturers of similar size, industry category, and business type to Kao using officer compensation survey data from an external survey organization.

Kao does not have a system for providing retirement benefits to Directors or Audit & Supervisory Board Members.

Compensation paid to Members of the Board and Audit & Supervisory Board Members in FY2017

Members of the Board	Eight, 501 million yen (Outside Directors: four, 60 million yen)
Audit & Supervisory Board Members	Seven, 78 million yen (Outside Members: four, 30 million yen)

Notes: 1. The above numbers of Directors/Audit & Supervisory Board Members include one Outside Director, one Audit & Supervisory Board Member, and one Outside Audit & Supervisory Board Member who resigned at the conclusion of the 111th Annual General Meeting of Shareholders held on March 21, 2017.

2. The aggregate amounts of remuneration, etc., paid to members of the Board include the following amounts:

- (i) The amount paid as bonuses to members of the Board
145 million yen to four members of the Board
- (ii) The amount accounted for as the performance-based share incentive plan
105 million yen to four members of the Board

3. Maximum aggregate amounts of remuneration, etc., are as follows:

- (i) Maximum aggregate amounts of remuneration, etc., paid to members of the Board
An annual amount of 630 million yen
(resolved at the 101st Annual General Meeting of Shareholders held on June 28, 2007)
This amount includes an annual amount of 100 million yen for Outside Directors (resolved at the 110th Annual General Meeting of Shareholders held on March 25, 2016) but does not include remuneration paid to members of the Board who also serve as employees of the Company for their services as employees.
(For reference)
Based on a resolution adopted at the 111th Annual General Meeting of Shareholders held on March 21, 2017, Kao has introduced a performance-based share incentive plan for its members of the Board of Directors (excluding Outside Directors) and its Executive Officers, which shall be applicable separately from the maximum aggregate amount of remuneration, etc., for members of the Board. Under this plan, trust money of up to 1.85 billion yen is contributed concerning the fiscal years subject to Kao's mid-term plan (the initial period to be covered being from the fiscal year ended December 31, 2017, to the fiscal year ending December 31, 2020), and Kao shares are acquired through a trust and then delivered through the trust depending on factors such as the level of achievement of the mid-term plan's performance targets.
- (ii) Maximum aggregate amounts of remuneration, etc., paid to the Audit & Supervisory Board Members
An annual amount of 85 million yen
(resolved at the 78th Annual General Meeting of Shareholders held on June 29, 1984)

The aggregate amount of remuneration of members of the Board

Michitaka Sawada (member of the Board)	Aggregate amount of remuneration: 183 million yen (base salary of 81 million yen, bonus of 67 million yen, and performance-linked remuneration of 35 million yen)
---	---

Note: Only Director remuneration amounts totaling over 100 million yen are listed.

Promoting ESG activities

The Kao Sustainability Statement indicates the direction of Kao's ESG activities, and Kao is promoting the statement under a robust governance structure. Kao has established the Internal Control Committee and the Sustainability Committee, and the Company's Board of Directors monitor these committees to ensure that they are operating appropriately. Through the effective management of these committees, Kao will work to achieve its ESG-related goals.

Management Committee

The Board of Directors deliberates on and determines the direction of Kao's management, primarily in terms of business strategies. For the execution of such strategies, Kao delegates wide-ranging authority to the Management Committee, which is mainly composed of members with the position of Managing Executive Officer or higher who have experience in business execution as persons responsible for core businesses and functions. In doing so, Kao works to accelerate its decision making and management.

Sustainability Committee

Kao has established the Sustainability Committee with the aim of gaining the support and trust of all its stakeholders and contributing to the sustainability of the Company and society as a whole by having the committee determine the direction of Kao's sustainability activities and promote them accordingly.

Internal Control Committee

Kao has established the Internal Control Committee with the aim of determining the direction of the Group's internal control systems. Through this committee, Kao also aims for the cross-organizational integration of functions pertaining to compliance, risk management, internal audits, information disclosure, quality management, and environmental safety, in order to improve the accuracy of its financial reporting and quality of its business operations.

Strengthening Governance at Group Companies

Kao has delegated authority to each Group company with the aim of maintaining the transparency of management and securing appropriate and swift management at these companies. Kao also requires each Group company to make reports to its head office and has introduced a policy manual that determines items that need to be approved by the head office. Kao also regularly verifies whether or not each Group company is utilizing the policy manual in an appropriate manner.



→ Corporate governance
<http://www.kao.com/global/en/about/policies/corporate-governance/>

Topic Kao Selected as the Grand Prix Recipient for the Corporate Value Improvement Award

In January 2017, Kao was selected as the Grand Prix recipient of the 5th Corporate Value Improvement Award (FY 2016) announced by the Tokyo Stock Exchange, Inc. (TSE).

The Corporate Value Improvement Award was founded in 2012 to spread and promote management aimed at enhancing corporate value which is deemed desirable by TSE from the perspective of a market provider. Among listed companies on the TSE market (approximately 3,500 companies) are eligible for the award. The award is to honor listed companies with high corporate value and management practices deemed to contribute to the appeal of the TSE market, such as by improving corporate value through initiatives which consider capital cost and other investor concerns.

Kao received this award to acknowledge its management aimed at corporate value improvement incorporating EVA®, a concept used to measure true profit by factoring in the cost of invested capital. Continuous growth in EVA® is linked to increase corporate value, which means long-term profit not only for shareholders, but for all Kao Group stakeholders as well.



Ringling the bell at the award ceremony held at TSE

*EVA® (Economic Value Added)

A registered trademark of Stern Stewart & Co., EVA® is a financial performance metric that takes cost of capital into account, and which is closely related to a firm's corporate value.

Kao's approach

Kao vigorously implements Responsible Care activities, which are self-monitoring activities by companies engaged in the chemical industry, to ensure safety and environmental conservation in daily operation.

Kao's creating value to address social issues

The stable provision of products and ensuring the quality and safety of those products, along with the provision of a safe and hygienic working environment and the reduction of environmental impact from business activities, are important social responsibilities. These responsibilities must be fulfilled in our capacity as a chemicals manufacturer providing diverse materials, products and systems to wide-reaching industries, with bases both within and outside Japan.

Based on this principle, Kao has implemented Responsible Care (RC) activities to autonomously ensure aspects of environment, health and safety in the chemicals industry. We aspire to building trusting relationships with society and creating a sustainable society by pursuing these activities.

Contributions to the SDGs



Policies

Kao carefully safeguards individuals and the environment at every step of business, from product development to manufacturing, distribution, use, disposal and recycling, and part of its mission is to help bring about sustainability in society.

The Kao Group as a whole remains committed to the promotion of RC activities, participating in such activities since the 1995 establishment of the Japan Responsible Care Council. In 2008, then-President and CEO Motoki Ozaki signed a declaration of support for the RC Global Charter, and again in 2014 President and CEO Michitaka Sawada signed the revised RC Global Charter.

To achieve this objective, we have established the Kao Responsible Care Policy based on the basic pillars of RC activities*, that is self-monitoring efforts governing the environment, safety and health set out by the chemical industry. The Kao Group as a whole, including subcontractors, sets targets each year, and implements those activities based on an annual plan.

* Basic pillars of RC activities

Five objectives of environmental conservation, process safety and disaster prevention, occupational safety and health, chemical and product safety and distribution safety, and communication with society



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



→ p.165 Corporate Culture > Occupational safety

Framework

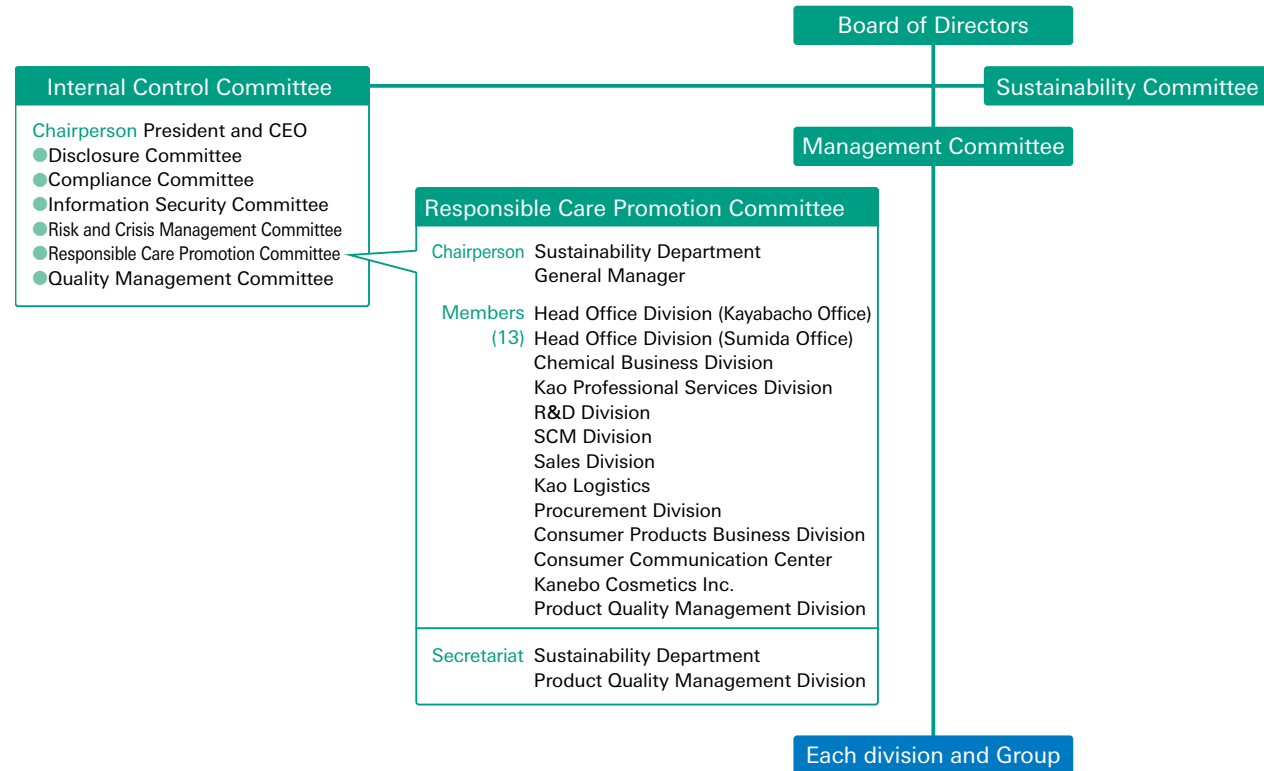
The Responsible Care Promotion Committee is positioned as one of the Internal Control Committees chaired by the President. The Responsible Care Promotion Committee is convened annually and chaired by the head of the Sustainability Department. It is composed of 14 members: representatives from four divisions, in addition to eight promotional divisions* within Japan, and the Quality Management Division staff. The RC Promotion Group of the Sustainability Department and Product Quality Management Division serve as the secretariat of the committee.

Each company involved in the Chemical Business in the Kao Group, including Kao Corporation, participates in planning at the chemical industry association in their respective countries to promote RC activities.

* Eight promotional divisions

Head Office Division (Kayabacho Office), Head Office Division (Sumida Office), Chemical Business Division, Kao Professional Services Division, R&D Division, SCM Division, Sales Division, Kao Logistics

Responsible Care Promotion Framework



*As of December 2017.

Responsible care activities 103-1,103-2,103-3,404-2

Education and promotion

The RC Promotion Committee Secretariat and RC promotion staff of the individual divisions in charge of RC promotion regularly provide RC education on the environmental conservation, occupational safety and health activities for Kao employees and the staff of its business partners.

In 2017, the RC Promotion Committee Secretariat carried out group training 50 times, reaching a total of 756 employees (26 times within Japan with 625 participants and 24 times outside Japan with 131 participants).

In 2015, the basic RC education program was provided for Kao Group employees in Japan, which was also implemented, thereafter, through the internet for about 1,700 recent graduates and employees hired mid-career.

Mid- to long-term targets

Kao is promoting day-to-day RC activities to become a top-level global corporation for safety and environmental criteria by 2020.

In order to achieve this, the company's voluntary numerical targets for safety and environment are set at the highest level, using those of other global chemical companies as a guide.

Performance in 2017

In 2017, Kao held the Kao Group RC Promotion Committee on September 19, the Global RC meetings on November 6 and 7, and the Japan RC Meeting on December 6.

In addition, the RC Promotion Committee Secretariat Audit was conducted between July and August at each Group company outside Japan and individual divisions in charge of RC promotion.



→ p.187 Our initiatives: Standardization of RC activities

→ p.189 Our initiatives: Implementation status of the RC Promotion Committee Secretariat Audit

Kao's approach

Our initiatives

Collaboration with stakeholders

Kao Group companies implement active exchanges with stakeholders and others as well as various other activities in line with one of the basic pillars of RC activities, namely communication with society.



→ p.108 Community > Corporate citizenship activities

Conservation

Community

Corporate Culture

Governance

Our initiatives

Standardization of RC activities

The eight promotional divisions within Japan and all affiliated companies outside Japan promote RC activities based on the Kao Responsible Care Targets set by the Kao Group RC Promotion Committee, through drafting activity plans aligned with various operational requirements, industries and business categories. Respective Kao Group companies confirm and refine the PDCA (plan-do-check-act) cycle of RC activities using this promotional framework.

At the Kao Group RC Promotion Committee held in September of each year, members discuss initiatives to clarify courses of action and strengthen the management system, and deliberate over the following year's numerical targets and activity targets based on the Kao Group's mid-term targets and the results of the RC Promotion Committee Secretariat Audit conducted in August.

At the Global RC Meeting held from October to November, the RC Promotion Committee Secretariat explains the Kao Group's mid-term targets and targets for the upcoming year, decided at the Kao Group RC Promotion Committee, and requests each

company to devise its respective targets and to plan for the upcoming year. Representatives from each company present the status of their RC activities and share information within the Kao Group.

At the Japan RC Meeting held in December, based on these numerical targets and activity targets for the Kao Group decided at the Kao Group RC Promotion Committee, RC Promotion Committee members of promotional divisions announced their respective division plan for the upcoming year, each of which the committee then discussed. The RC Promotion members convey the deliberation results to their respective divisions, relating the content in detail to their activity units in an effort to improve and enhance RC activities closely connected to each worksite.

The Kao Group RC Promotion Committee meeting was held on September 19, 2017. The RC Promotion Committee Secretariat announced the Kao Group's overall first-half results in relation to 2017 RC targets, and the results of the RC Promotion Committee Secretariat Audit. The promoting divisions also announced the current state of their promotion

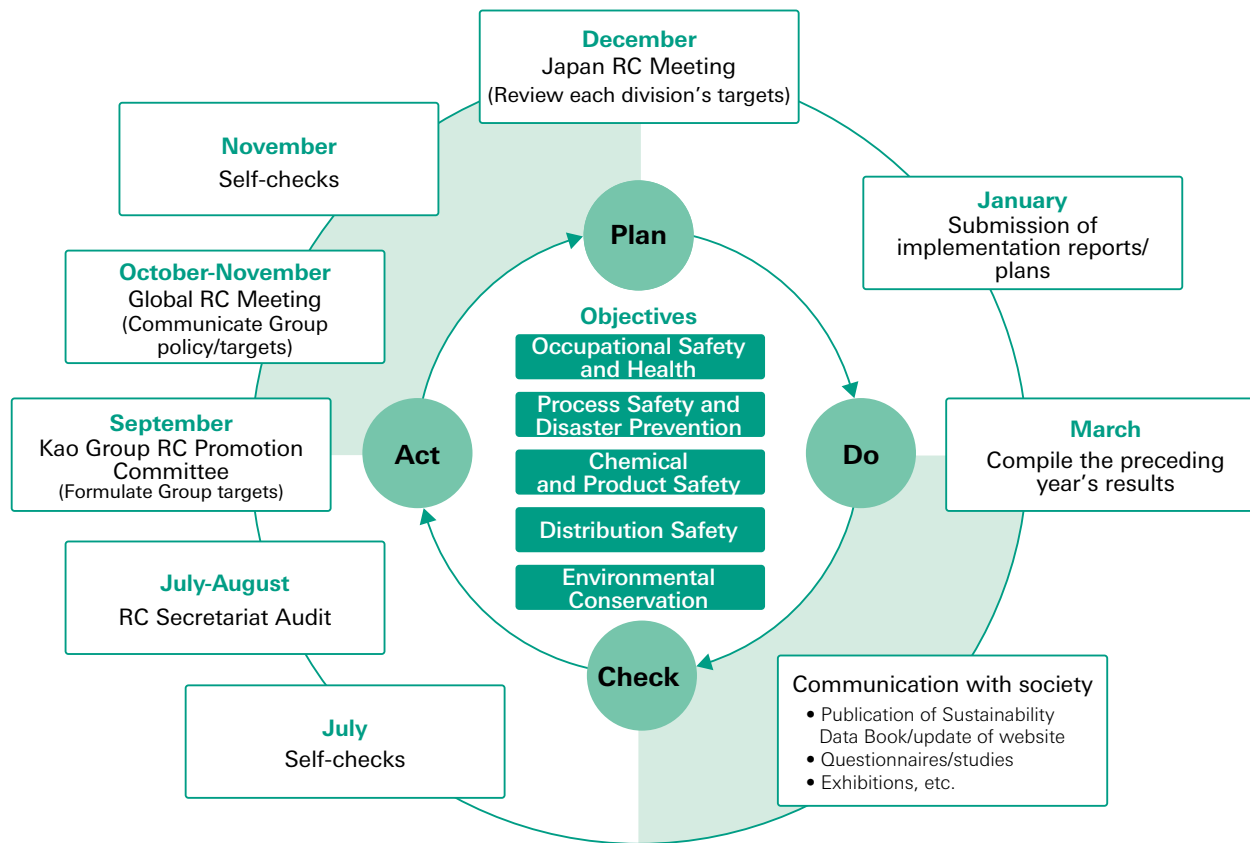
activities. Finally, the Kao Group's RC targets for 2018 were agreed upon for deliberation.

The Global RC Meeting was held at the Kayabacho Head Office on November 6 and 7, with attendance by 15 people from 12 affiliated companies outside Japan (13 the previous year). The meeting promoted understanding of Kao RC Policy and 2018 targets were confirmed. Participants were able to observe how RC activities and advice were implemented in other companies, analyze strengths and weaknesses, and share best practices, with the interactive communication leading to enhanced global RC activities. In 2017, the first group discussion was conducted to open dialogue on issues at each company and to share information.

At the Japan RC Meeting held on December 6, RC Promotion Committee member of promotional division announced their 2018 draft plans; the plans were then deliberated and approved. The RC Promotion Committee Secretariat then reported on the Group's 2017 environmental and safety record.

Responsible care activities 103-1,103-2,103-3

Annual cycle of RC activities



Kao's approach

Our initiatives

Utilization of environmental and safety database

Kao has developed the Environmental & Safety Data Management System (KANCHAN System)* to further reduce both environmental impact and occupational accidents.

The KANCHAN System automatically calculates Kao's total GHG emissions and the annual frequency and severity rate of occupational accidents, along with other data-based practical information used to reduce our environmental impact and eliminate occupational accidents.

We are planning to shift to a new system that will enable the effective sharing of environmental and safety data. In 2017, we discussed the details of the system with the Information Technology Division, aiming for a 2019 implementation.

* Environmental & Safety Data Management System (KANCHAN System)

Data shared among the Kao Group under this system includes those related to energy consumption, GHG emissions, soot and dust emissions, water consumption, wastewater discharged, wastewater concentration measurements, soil and groundwater measurements, amounts of handling, release and transfer of PRTR materials, waste generated and discharged, and final disposal of waste, occupational accident statistics, and traffic accident statistics.

Conservation

Community

Corporate Culture

Governance

Responsible care activities

Kao's approach

Our initiatives

Implementation status of the RC Promotion Committee Secretariat Audit

At Kao, individual divisions in charge of RC promotion conduct self-checks in July, and the audit team selected by the RC Promotion Committee Secretariat implements an audit of individual divisions in Japan in charge of RC promotion and affiliated companies outside of Japan in August to determine the progress of RC activities and challenges to be addressed.

These results are reported at the Kao Group RC Promotion Committee and Global RC Meeting held in each September and help formulate the next year's activity targets.

Between July and August, 2017, the RC Promotion Committee Secretariat Audit was conducted by using a checklist sheet at eight promotion divisions in Japan and 20 affiliated companies with plants outside Japan*, with consideration for the degree of

influence of the safety and environmental aspects. In addition to the existing checklist sheet, in 2017, a new checklist sheet that can evaluate the safety and environmental activities was used for the audit.

In Japan, in meetings with the promotion divisions, various situations were confirmed, such as the current state of compliance with regulatory requirements and criteria, progress in planning and achieving numerical targets. Outside Japan, the checklist sheet was sent to companies, and a paper audit was conducted of the response results. It has also been confirmed that all findings from the 2016 audit had been improved.

As a result of the 2017 RC Promotion Committee Secretariat Audit, all eight promotion divisions in Japan achieved the average evaluation score of

4.5 or higher, indicating that the RC promotion mechanism are being established. On the other hand, there were a number of findings on occupational safety, for which further monitoring and improvement have been requested. Outside Japan, more than half of the companies saw an improvement in the evaluation scores compared to those in 2016 (see table below).

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

Results of RC Promotion Committee Secretariat Audit (2017)

	SCM Division	R&D Division	Business divisions	Corporate divisions	Affiliated companies in Japan ^{*1}	Affiliated companies outside Japan ^{*2}
No. of questions	151	124	184	251	410	3,262
No. of items requiring further monitoring	2	4	2	8	8	—
Average evaluation score [5-point scale] ^{*3}	4.88 (4.87)	4.94 (4.96)	4.82 (4.73)	4.88 (4.38)	4.84 (4.51)	4.30 (4.16)

*1 Affiliated companies in Japan.

Kao Professional Services Co., Ltd., Kao Group Customer Marketing Co., Ltd., Kao Customer Marketing Co., Ltd., Kanebo Cosmetics Sales, Inc., Kao Transport & Logistics Co., Ltd.

*2 Affiliated companies outside Japan.

20 companies (13 in Asia, 7 in Europe and the Americas)

*3 () shows 2016 results.

Conservation

Community

Corporate Culture

Governance

Responsible care activities

Status of international management system certification

Kao has implemented an RC management system in all Kao Group, and furthermore, some plants have also received ISO 14001 certification, the global environmental standard, as well as OHSAS 18001 certification, the standard for occupational health and safety, in addition to further certification in respective countries.

Environmental certifications (ISO 14001, etc.)

The percentage of Kao plants which have received external certifications is 95% (based on total production volumes standard).

Certifications obtained at 15 individual plants in Japan and Asia have been integrated to standardize and upgrade operations. We will expand the scope of certified plants on an ongoing basis, while updating to the 2015 version and increasing the number of integrated plants.

Occupational health and safety certifications (OHSAS 18001, etc.)

The occupational health and safety management standard has been obtained at plants outside Japan, which face more work-related accidents

when compared to those in Japan and whose enhancement of labor management is being promoted. The percentage of Kao plants with the certification is 35% (based on total production volumes standard).

In order to standardize and upgrade operations, we are undertaking initiatives at five plants in Asia to integrate the certifications obtained at the individual plants. We will expand the scope of certified plants on an ongoing basis, while updating to ISO 45001 and increasing the number of integrated plants.

Product quality certifications (ISO 9001, etc.)

The percentage of Kao plants which have received external certification is 95% (based on total production volumes standard). We will continue to expand the scope of certified plants.

List of external obtained certifications



→ Certification Status of ISO and Other Standards
<http://www.kao.com/global/en/sustainability/environment/activity-data/certification/>

Kao's approach

Our initiatives



Wakayama Plant receives the Excellence Award at the Responsible Care Awards

Wakayama Plant received the Excellence Award of Responsible Care Awards from The Japan Chemical Industry Association (JCIA).

The award is aimed to commend work sites with outstanding achievements and contributions to the further development of responsible care activities.

The award went to the Safety Enhancement Project Team at Wakayama Plant in recognition of its initiatives for safe and sound operation focusing on three hazard source management systems (change control system, design know-why guidance and manuals for emergency) as safety enhancement measures at chemical plant facilities.



Awards ceremony

Conservation

Community

Corporate Culture

Governance

Kao's approach

Kao implements risk and crisis management that can respond both appropriately and swiftly to changes in the business environment, to minimize the damage and loss in the unlikely cases where risks become manifest and to prevent the manifestation of risks, on all fronts of business activity.

Kao's creating value to address social issues

The globalization of our business is increasing the complexity and uncertainty of the management environment. With the development of social media, the scale and speed of the impact on business activities when a risk becomes manifest is also on an upward trend.

In light of this situation, Kao has, since 2015, worked on the three following fronts to institute an appropriate management framework: expanding its risk management domains to include not only operational risks but also strategic risks, identifying corporate risks and introducing systems to manage such risks, and bolstering its response framework in the event of a crisis as well as improving crisis awareness. With these frameworks, we aspire towards risk and crisis management that can respond both appropriately and swiftly to changes in the business environment, and to continue providing quality products and services to our customers.

Major risks

- Delayed response to the changing needs of consumers and customers
- Occurrence of major quality issues and concerns over the safety and security of Kao products
- Hindrances to product supply due to natural disaster, spread of infectious diseases or accident
- Restrictions on business activities due to major law violations, regulation changes or additional regulations
- Leak of confidential or personal information, among others etc.

Contributions to the SDGs



Policies

Kao regards the potential negative impact on its management targets and business activities as a "risk" and the manifestation of such risk as a "crisis." Kao appropriately manages the various risks and crises that could occur throughout its overall business activities in accordance with the Kao Risk and Crisis Management Policy.

Risk and crisis management

Kao's approach

Our initiatives

Framework

At the Kao Group, the Risk and Crisis Management Committee, chaired by an executive officer in charge of risk and crisis management, establishes a system and operating plans for risk management. Each division, subsidiary, and affiliated company ascertains and evaluates risk based on these operating plans and conducts risk management by formulating and implementing appropriate countermeasures. Furthermore, the Management Committee has designated major management risks that would have a significant impact on the group's business as "corporate risks," and executive officers who are in charge of managing such risks formulate and implement the necessary countermeasures. In these ways, the Kao Group is strengthening its group-wide response to risk.

When a crisis occurs, Kao responds promptly by establishing an organization for countermeasures. This organization centers on the executive officer in charge of managing corporate risks as well as on personnel responsible for managing risk within company divisions and at subsidiaries and affiliates.

In addition, depending on the magnitude of the impact on the Kao Group as a whole, Kao also establishes a countermeasure headquarters with the President and CEO or executive officer as its general manager to minimize physical damages and financial losses. Management of the above-mentioned risks and crises is reported and discussed at the meetings of the Management Committee or the Board of Directors on a regular basis as well as whenever necessary.

Risk and crisis management framework



*As of December 2017.

Conservation

Community

Corporate Culture

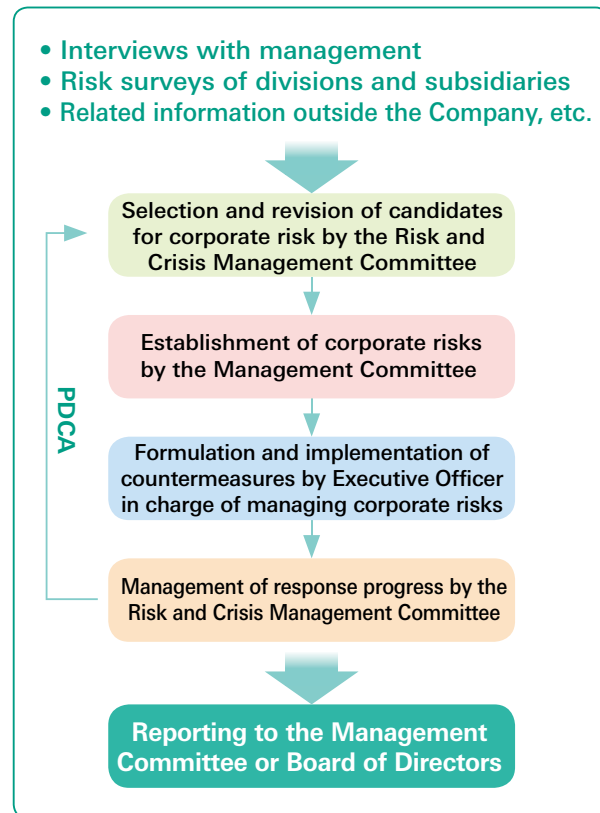
Governance

Risk and crisis management

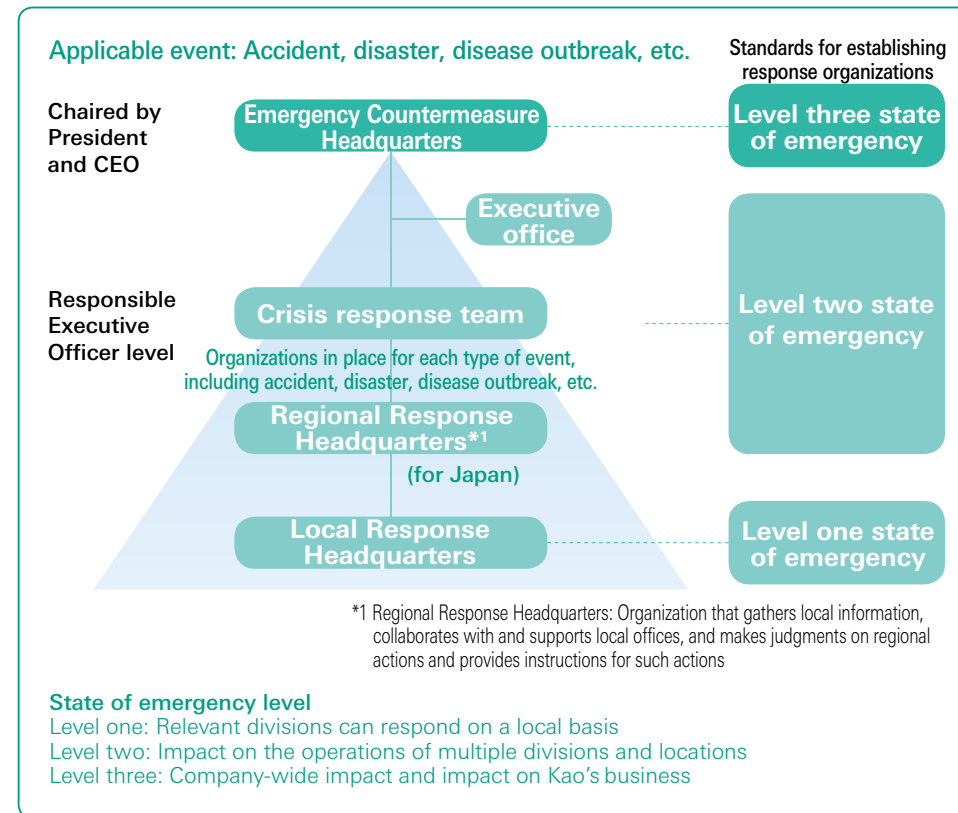
Kao's approach

Our initiatives

Management of corporate risk



Management framework during times of crisis (an example)*



*System to be followed in the event of a crisis.

Within the Kao Group, when a crisis occurs, the head of the crisis response team will evaluate the level of severity of the crisis on the basis of the potential impact on the Kao Group (designating the crisis as Level one, Level two or Level three depending on the severity of the accident, disaster, epidemic, etc. in question), and an appropriate organizational framework will be established for dealing with the crisis in accordance with the level of severity.

Conservation

Community

Corporate Culture

Governance

Risk and crisis management

Kao's approach

Our initiatives

Education and promotion

At each division, subsidiary and affiliated company, persons in charge of risk and crisis management are responsible for making the management framework for the major risks stipulated by the Risk and Crisis Management Committee widely known. Furthermore, risk surveys are conducted at each division, subsidiary and affiliated company to identify major risks and to promote the development and revision of countermeasures on a regular basis, allowing the framework to take root in each site.

We use our internal portal website to indicate the emergency contact and response framework for when a major risk manifests, as well as providing information on issues such as overseas safety, infectious illnesses and information security on a regular basis. In addition, we issue alerts as necessary to raise employee awareness and cultivate a crisis mindset.

At the same time, we conduct emergency response training, comprehensive disaster drills, safety confirmation drills, and external response drills for times of emergency in order to enhance response capacities at times of crisis.

These awareness-raising activities and trainings are implemented for both employees and managers, through which we identify the issues to be addressed and revise the contents in line with changes in the business environment so that we can improve our risk and crisis management capacities.

Mid- to long-term targets and performance

Promotion of superior-level risk and crisis management is required in implementing the Kao Group Mid-term Plan 2020 (K20).

To this end, we are practicing the responses to corporate risk and enhancement of risk response

in subsidiaries and affiliated companies outside Japan. We will also enhance response capacities at times of crisis, aspiring towards viable risk and crisis management.

Performance in 2017

In 2017, we focused on practicing the responses to corporate risk based on progress management of the Risk and Crisis Management Committee. Corporate risk includes risks which impact on management strategy as well as risks which impact on business continuity, such as natural disasters, including large-scale earthquakes or pandemics.

For corporate risks at subsidiaries and affiliated companies outside Japan, we have newly designated major risks and created the framework in which managers at each company promote the PDCA cycle to enhance responses to the risks.

For enhancing response capacities at times of crisis, we developed and revised the guideline and action plan of major risks including corporate risk, as well as informing employees and creating operational frameworks. Furthermore, we enhanced response capacities by implementing response drills at times of crisis, as well as improving our system to collect information and our capacity to analyze them.

As an awareness-raising activity, we use our internal portal website to raise employee awareness.

In particular, we post a monthly Crisis Management Bulletin on our internal portal website, with information on terrorism, large-scale earthquakes or pandemics, as well as precautions for use of social media. Through these activities, we aim not only to raise awareness of emerging risks, but also to facilitate an accurate understanding of risk and an appropriate, swift response when a crisis occurs.

Main training/drills in 2017

- Comprehensive disaster drills (implemented at major plants inside and outside Japan)
- Emergency response training presumed on a large scale earthquake (implemented twice in Japan)
- Safety confirmation drills presumed on a large-scale earthquake (implemented twice targeting all employees of the Kao Group in Japan)
- Emergency reporting training from overseas bases to Kao Head Office in Japan (implemented at 25 overseas bases)

Conservation

Community

Corporate Culture

Governance

Kao's approach

To earn the trust and support of society, Kao is committed to timely, accurate and fair disclosure of information to its shareholders, investors and all other stakeholders. Kao adheres strictly to the Japanese Corporation Law, the Financial Instruments and Exchange Law, regulations set down by Tokyo Stock Exchange, Inc., and other laws and regulations concerning disclosure. Kao discloses information promptly in accordance with these laws and regulations. In addition, Kao proactively discloses information of social relevance pertaining to the Kao Group.

Policies

Information disclosure

As for information disclosure, Kao's basic policy is to disclose information in a timely, accurate and fair manner in accordance with its Disclosure Guidelines. Kao discloses information which it is obligated to release publicly, based on the Securities Listing Regulations of the Tokyo Stock Exchange (TSE) in English and Japanese, through the online Timely Disclosure Network (TDnet)*. Kao also posts information useful to shareholders and investors on the Investor Relations section of Kao's website from the perspective of fair disclosure.

Kao will continue to reinforce strategic information disclosures, such as enhanced delivery of messages from top management and intensified dialogue with institutional investors to continuously improve its corporate value.



→ Investor Relations

<http://www.kao.com/global/en/investor-relations/>

→ Disclosure Guidelines

<http://www.kao.com/global/en/investor-relations/management-information/disclosure/>

Promoting dialogue with shareholders and institutional investors

In order to improve its corporate value, Kao considers it important to communicate with shareholders and other stakeholders, thereby gaining better understanding of mutual views and positions, and taking appropriate measures based on this understanding. Kao develops a framework to promote constructive communication with shareholders, and create opportunities to communicate with individual shareholders and domestic and foreign institutional investors. In communication with shareholders, the members of management participate to the extent possible in order to reflect the opinions of the shareholders and other matters in management appropriately.

Kao also discloses information to individual shareholders in an accurate and fair manner by improving Kao's website.

*TDnet (Timely Disclosure Network)

A service to distribute information on listed companies on a real time basis; operated by the Tokyo Stock Exchange.

Information disclosure

Kao's approach

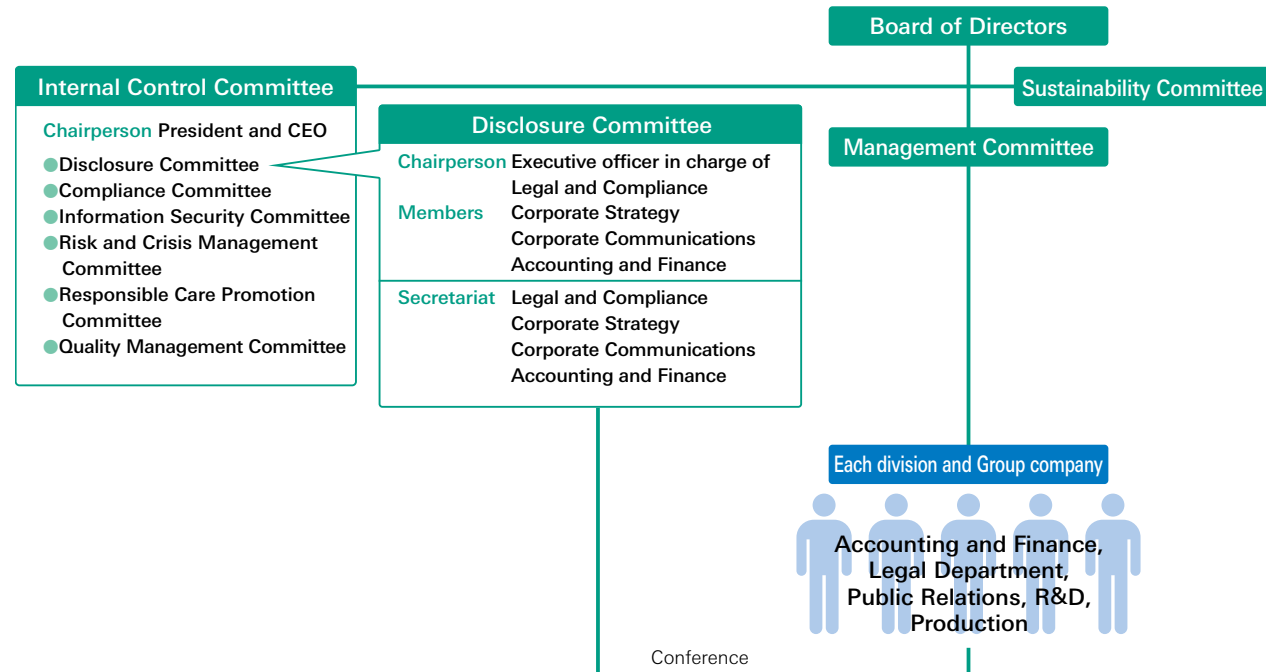
Our initiatives

Framework

Kao has established a system whereby the secretariat of the Disclosure Committee consolidates the management of material corporate information including all the decisions, occurrence of material facts and earnings information of the company and of the company's subsidiaries. The Disclosure Committee reviews whether certain material corporate information should be disclosed pursuant to the Securities Listing Regulations of TSE in consultation with relevant divisions such as Accounting & Finance, Legal, Public Relations, R&D and Production. If necessary, the committee decides the contents, time and methods of disclosure after getting approval from the President and CEO, or if the President and CEO is unavailable, one of the other Representative Directors or the Corporate Information Handling Officer registered at TSE.

In principle, the disclosure of material information is done by a Representative Director or its assignee through TDnet and, if necessary, through press conferences and news releases in accordance with the decision by the committee. The information registered at TDnet will also be promptly posted on the Kao website. The Public Relations Division manages the disclosed information.

Information disclosure framework



Conservation

Community

Corporate Culture

Governance

Education and promotion

In 2017, Kao conducted the e-learning course on insider trading regulations produced and supervised by Japan Exchange Group, with the aim of providing correct information with employees who are subject to the regulations and required to submit a prior notification.

Mid- to long-term targets and performance

Performance in 2017

1. Timely, accurate and fair disclosure

- Kao implemented disclosure using TDnet and by posting information on the Investor Relations section of the Kao website, as well as by holding press conferences and mailing out information when necessary.
- Kao submitted Corporate Governance Reports, detailing implementation status of the principles of the Corporate Governance Code formulated by the Tokyo Stock Exchange three times.

2. Strengthening dialogue with shareholders and investors

- Tours of Kao facilities for shareholders: 12 times
- Company briefing for shareholders: once
- Briefings to analysts and institutional investors: twice
- Meetings regarding the Environmental, Social and Governance (ESG) criteria: 21 times
- Governance roadshow (U.S.)
- Financial results briefings (on the same day of announcement of half-year and full-year financial results)
- IR roadshow (U.S., Europe and Asia)
- Small meetings with the President: twice
- One-on-one meetings with analysts and institutional investors: (about 310 times in Japan and overseas)
- Disclosure of information on corporate website
- Issuance of Reports to shareholders in Japanese (issued at the end of the first half of the fiscal year, and at the end of the fiscal year)
- Disclosure of Integrated Report
- Issuance of the Financial Report in English in PDF format on the corporate website

Our initiatives

Publicizing shareholder meetings and facilitating the exercise of voting rights

To provide shareholders with sufficient time to examine agenda items, Kao strives for the early dispatching of the convocation notice to the Annual General Meeting of Shareholders (AGM) every year. Furthermore, Kao posts the convocation notice on the online TDnet and on the corporate website ahead of sending the convocation notice. In addition, to provide prompt and fair information disclosure to foreign shareholders, who hold about half of its shares, a summarized English translation of the convocation notice is provided.

To encourage the exercise of voting rights, Kao uses electronic means for voting, including the Internet and an electronic voting platform operated by ICJ, Inc.

Kao works to enhance the contents of its convocation notices for the AGM by conducting regular revisions to proactively incorporate information considered conducive to appropriate judgments by shareholders, in addition to items required by law. Also, Kao provides institutional investors and others with explanations as necessary.

At the AGM, Kao provides shareholders with easy-to-understand explanations of the summary of the

business report, major issues and the medium- to long-term outlook using projected images and a thorough question-and-answer session. Kao also provides opportunities for shareholders who desire to make the acquaintance of Directors and Executive Officers to do so after the close of the AGM.

After the conclusion of the AGM, Kao also posts presentation materials used at the meeting and a summary of voting resolutions from the meeting in both Japanese and English on its website.

The 112th Annual General Meeting of Shareholders (Held in March 2018)

Total number of shareholders who attended: 2,027

Dialogue with individual shareholders

In 2017, Kao conducted tours of the Kao Museum, the Kawasaki Plant and the Kao Eco-Lab Museum (Wakayama) for shareholders over seven days in June, with a total of about 463 people attending.

After each approximately one-hour tour, Executive Officers explained Kao's performance, initiatives in 2017 and the Kao Group Mid-term Plan 2020 (K20) and shareholder returns, and responded to questions from participants. We received many favorable comments from participants in the tours, including, "I now have a clear understanding of Kao's vision and goals," and "I will use Kao's products to contribute to environmental activities."

In August, we also held our first company briefing for shareholders in Osaka. This session was intended to establish direct dialogue between our top management and shareholders who live in the areas far from Tokyo which is the venue of the Annual General Meeting held in Tokyo. We welcomed many participants, which made us realize the high level of interest of shareholders. In the session, the President explained our mid-term plan as well as our R&D activities, after which seven executive officers answered questions from participants. We received comments from participants, including, "It was a good opportunity to hear from the top

Information disclosure

management,” and “I found it informative to learn the scientific basis behind product development.”

We continue to incorporate such feedback as we plan and implement future events to bring higher satisfaction to shareholders.

Promoting dialogue with institutional investors

Conference calls for the first- and third-quarter financial results

In addition to the half-year and full-year financial results briefings, in 2017, we started the conference calls in the first and third quarter. Executive Officer in charge of Accounting and Finance and Vice President, Financial Controllers outlined the fiscal results followed by the question-and-answer session. Analysts and institutional investors have commented that these conference calls have provided an opportunity for two-way communication that has helped to give them a better understanding of the company, which in the past tended to rely mainly on disclosure via the corporate website.

Shortly after the conference, we provided the summary of the question-and-answer session both in Japanese and English from the perspective of fair disclosure, engaging in the wider dissemination of information.



→ Presentation materials of the financial results conference calls and summary of the question-and-answer session
<http://www.kao.com/global/en/investor-relations/library/presentations/>

Kao's approach

Our initiatives

Meetings focusing on ESG themes

At Kao, we held meetings with several institutional investors in Japan in which ideas were exchanged regarding the ESG criteria and information disclosure, with the participants on Kao's team comprised of Investor Relations, Legal Department and Sustainability Department. Kao views these meetings as providing an important opportunity to learn institutional investors' views directly. In 2017, our human rights initiatives, procurement of palm oil, and other initiatives were evaluated. We endeavor to use the feedback and ideas obtained at these meetings as a basis for further improvements to our ESG activities and disclosure, and for a further enhancement of dialogue.

Furthermore, the Executive Officer in charge of corporate governance visited institutional investors in the United States, to exchange ideas regarding Kao's corporate governance. By explaining Kao's approach to corporate governance and its governance systems in a face-to-face environment, we provided investors more in-depth understanding of the relevant issues, including the Audit & Supervisory Board that is unfamiliar to Western investors. On the other hand, we identified the issue that Japan specific systems such as Audit & Supervisory Board Members are not fully understood among investors outside Japan. In the future, we will work closely with the relevant external organizations to engage in the dissemination of information.

Conservation

Community

Corporate Culture

Governance

Kao's approach

The Kao Group has an Information Security Committee, the purpose of which is to protect information assets including confidential information (trade secrets) and personal information, as well as IT hardware, software and data, in accordance with Kao's Information Security Policy. Based on the committee's discussions, Kao has established an administrative system that aims to set internal rules and to see that internal controls are thoroughly implemented and rules are observed. Kao also carries out related awareness-raising activities for employees.

Kao's creating value to address social issues

By making active use of confidential information and personal information, companies are able to implement their business operations in such a way as to maximize their unique strengths. At the same time, information technology is used extensively across a wide range of business activities, from order processing and placement to sales booking, budget processes, R&D and production. It is therefore very important for companies to adopt measures to counter the threat of information leaks or cyber-attacks on their IT systems.

To prevent the unauthorized disclosure of information through criminal activity of company personnel, we strive to implement the Kao Way, our corporate philosophy, and endeavor to ensure that all employees are familiar with the Kao Business Conduct Guidelines (BCG), which constitute our code of conduct. This is supported by the dissemination of messages from senior management, effective monitoring, and awareness-raising activities (including strengthening awareness of the penalties for violating the Unfair Competition Prevention Act).

With regard to external criminal activity, we have been implementing technical and human-focused measures to guard against cyber-attacks, which have caused serious problems for society in recent years.

Contributions to the SDGs



Policies

We have formulated our Information Security Policy, Guidelines on Handling Trade Secrets, Guidelines on Handling Personal Information and IT Security Guidelines to ensure that business activities are carried out in accordance with the relevant laws and with the guidelines promulgated by government ministries, agencies and committees.

With regard to the protection of confidential information, to ensure that confidential information is able to receive full legal protection as trade secrets, we have drawn up relevant rules in accordance with the guidelines and handbooks, etc. issued by the Japanese Ministry of Economy, Trade and Industry (METI). We also implement management in accordance with these rules, and perform self-checks on a regular basis.

Personal information is also managed carefully in accordance with the guidelines formulated under the jurisdiction of the Personal Information Protection Committee, etc. When operations that involve the handling of personal information are outsourced, we implement careful management by requiring the companies in question to sign appropriate contracts or memorandums of understanding, and by implementing rigorous auditing procedures, etc. We also implement proper management of employees' personal information, in accordance with the guidelines formulated by the competent ministries, agencies and committees.

Framework

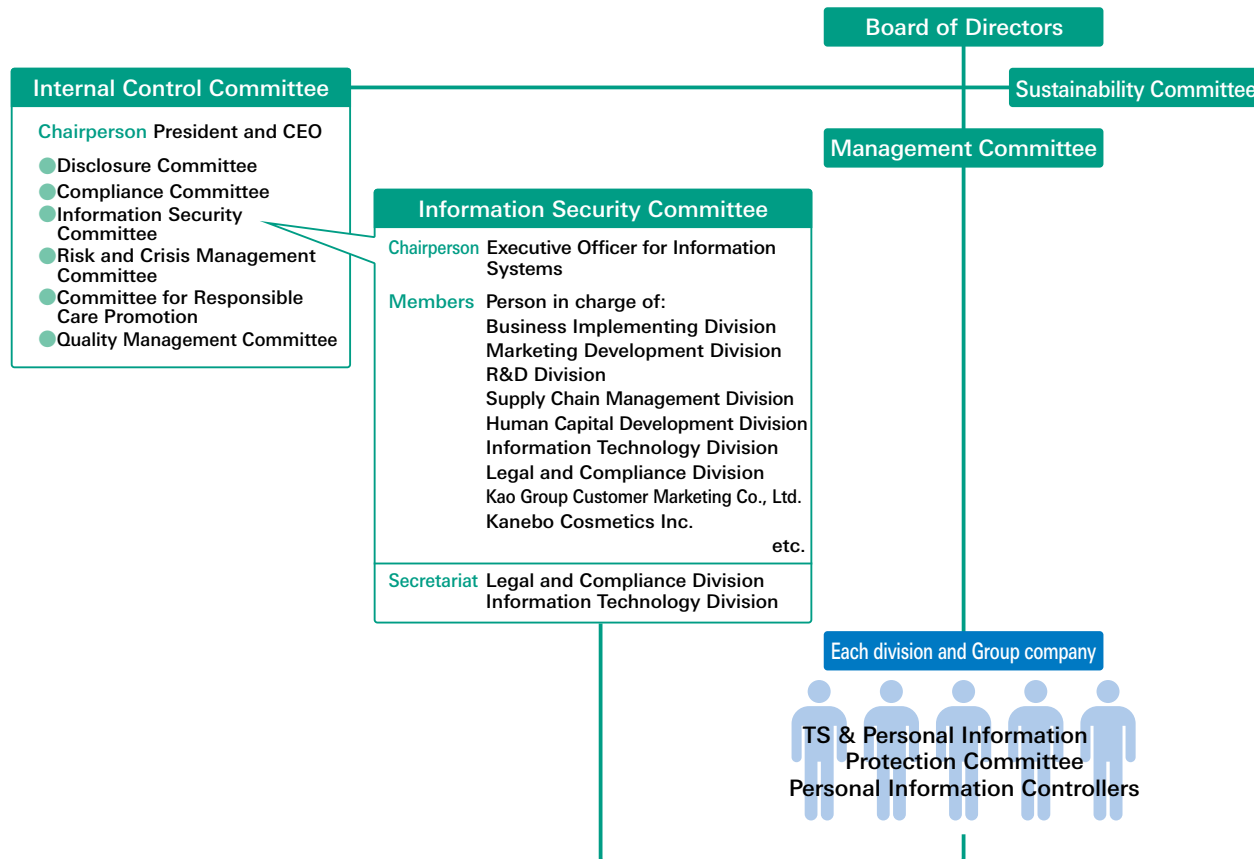
The "Protection of Confidential Information Handbook" published by METI in February 2016 specifies that management should take the lead in participating in internal system establishment, and that measures should be formulated from a variety of different perspectives, including those of intellectual property management, human resources and labor affairs, information security and compliance with laws and regulations. The handbook also emphasizes that confidential information exists in all departments within any given company.

We have appointed executive officers to serve as Chair and Vice-Chair of the Information Security Committee, and both the committee members and the staff of the committee's secretariat are drawn from many different divisions, including Human Capital Development, Information Technology, Marketing, Intellectual Property Management, Production and Engineering and Legal and Compliance. In this way, we benefit from a wide range of different perspectives when formulating internal rules, putting management systems in place, and implementing awareness-raising activities.

In addition, staff members from each division are selected to serve as members of the Trade Secret (TS) & Personal Information Protection Committee and as Personal Information Controllers. We continue to implement confidential information and personal information protection activities using the PDCA (plan-do-check-act) cycle, focusing in particular on awareness-raising activities and self-checks.

Information security

Information security management framework



*As of December 2017.

Kao's approach

Our initiatives

Education and promotion

Our basic approach to internal education involves having it conducted at the level of each individual division. In accordance with this approach, to ensure thorough promotion of the protection of confidential information and personal information, we arrange lectures given by external instructors for the members of the TS & Personal Information Protection Committee and for Personal Information Controllers, and awareness-raising activities are held to familiarize our staff with the latest trends. In addition, awareness-raising materials for education at the level of the individual divisions are provided to the members of the TS & Personal Information Protection Committee and Personal Information Controllers. Company-wide warnings and awareness-raising messages for all staff are sent via the company intranet portal site.

To evaluate the effectiveness of in-house education, checking is performed using self-checks. On the basis of the results obtained from these self-checks, any problems that may exist are identified, and improvement targets are set and improvement activities implemented.

Conservation

Community

Corporate Culture

Governance

Information security

Kao's approach

Our initiatives

Mid- to long-term targets and performance

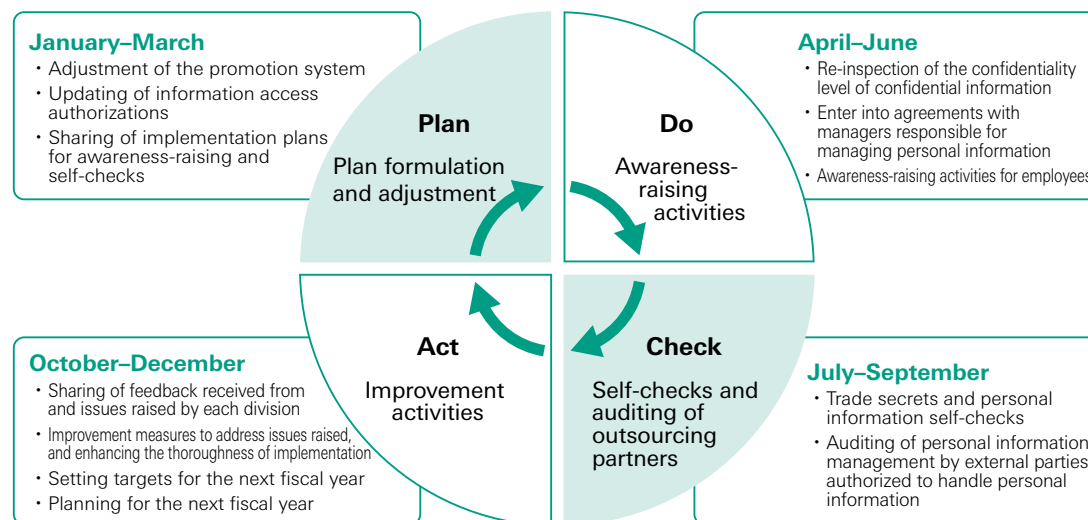
Within Japan, we are working to standardize the management cycle in relation to cyber-attack prevention measures, protection of confidential information and personal information, and information security with respect to the appropriate use of PCs, smartphones, networks, etc. The quarterly cycle is as follows:

First Quarter: Plan formulation and adjustment, Second Quarter: Awareness-raising activities, Third Quarter: Self-checks and auditing of outsourcing partners, Fourth Quarter: Improvement activities.

By implementing activities in accordance with this PDCA cycle, we are promoting a fundamental transformation aimed at preventing cyber-attacks and other incidents relating to confidential information or personal information. We are also putting in place an incident response framework and response processes that will enable us to respond appropriately if an incident does occur.

At the same time, we are providing support for the putting in place of rules and systems that comply with the requirements of local laws and regulations in other countries (including countries in Asia, the Americas, and Europe). Regarding our cyber-attack prevention strategy, we are aiming to realize a global improvement in our overall level of information security by implementing information security assessments, clarifying the current situation, identifying problems, and implementing improvements.

PDCA cycle for information security activities



Conservation

Community

Corporate Culture

Governance

Information security

Performance in 2017

The following activities were implemented in 2017 in relation to the information security management cycle.

First Quarter: Plan formulation and adjustment

- Revision of the Guidelines on Handling Personal Information (revised to take into account the revisions to the Personal Information Protection Act coming into effect on May 30, 2017)
- Updating of systems and information access authorizations
To ensure that activities can proceed smoothly under the new systems, in line with the changes in roles due to organizational restructuring and personnel changes, information access authorizations were set for 40 members of the TS & Personal Information Protection Committee, 47 Personal Information Controllers, and two Information Security Committee members.

Second Quarter: Awareness-raising activities

- Holding of presentations to introduce the revisions made to the Guidelines on Handling Personal Information (653 participants in total)
- Issuing of information security awareness-raising materials

Third Quarter: Self-checks and auditing of outsourcing partners

- Implementing self-checks using confidential information “self-patrols”
- Implementing self-checks using personal information “self-patrols”
- Implementation of paper audits of outsourcing partners undertaking work that relates to personal information

Fourth Quarter: Improvement activities

- Holding of the 24th TS & Personal Information Protection Promotion Meeting
Provision of feedback and setting of improvement targets in relation to confidential information and personal information incident reporting and “self-patrols” in 2017.
- Re-launching of “Security Assessments Outside Japan”

Kao's approach

Our initiatives

Collaboration with stakeholders

We contribute to the enhancement of information security in the chemical industry through our participation in the Security Information Management Subcommittee established by the Japan Chemical Industry Association (JCIA), an industry body whose members include chemical product manufacturers.

We also participate in two information-sharing networks that work to combat cyber-attacks: the Initiative for Cyber Security Information sharing Partnership of Japan (J-CSIP), which is directed by the Information technology Promotion Agency, Japan (IPA), and the National Police Agency's Cyber Intelligence Information Sharing Network. Starting in 2017, we are also participating in the JPCERT Coordination Center's “Early Warning Information” program. Through our participation in these information-sharing networks, besides obtaining information about software vulnerabilities and cyber-attacks, we are also able to disclose and share information about cyber-attacks that we have experienced, thereby contributing to the enhancement of cyber-attack prevention measures in Japan.

Conservation

Community

Corporate Culture

Governance

Our initiatives

First Quarter: Plan formulation and adjustment

Revision of the Guidelines on Handling Personal Information

Following the adoption of the “My Number” system in Japan in 2016, full-scale implementation of the revised Personal Information Protection Act began on May 30, 2017. In response to the revisions made to the Act, Kao announced revisions to our Guidelines on Handling Personal Information on March 14, 2017.

The main revisions included changes relating to the definition of personal information (which has been expanded to include not only name, gender, date of birth etc. but also other information that can be used to identify individuals, such as DNA, fingerprints, finger vein images, etc.), personal information that requires special care (including information relating to race, ethnic background, ideology, religious beliefs, medical history, criminal record, etc.), provision of information to third parties (record-keeping), and handling of anonymized information.

Handling of personal information leaks

Within Japan, starting in 2016 the handling of personal information leaks has been positioned as corporate risk. With the secretariat of the Information Security Committee playing a key role, we have established response systems and formulated response flow to be followed when an incident occurs. In this way, we have put in place a comprehensive response flow for handling personal information leaks that includes reports to the chairperson of the Information Security Committee. We have also implemented training using desktop simulations based on case studies of serious personal information leaks that occurred in the past.

In 2017, we performed training using desktop simulations with scenarios based on incidents that occurred within the Kao Group.

Second Quarter: Awareness-raising activities

Presentations regarding the revision of the Guidelines on Handling Personal Information

Following the approval of the revisions to Kao's Guidelines on Handling Personal Information internal rules on March 14, 2017, “Presentations Regarding the Revision of the Guidelines on Handling Personal Information” were held at those workplaces in Japan that have units involved in the handling of personal information.

A total of seven presentations were held: three at the Kayabacho office, two at the Sumida office, and one each at the Tochigi Plant and the Odawara Plant. Including those employees who participated via web-conferencing, a total of 653 employees attended these presentations. The presentations explained how the key revisions related to specific business situations. A large number of questions were raised during the presentations, making it possible to provide extensive explanations based on individual cases. Through the holding of these presentations, we were able to implement the preparations needed to comply with the revised Personal Information Protection Act.

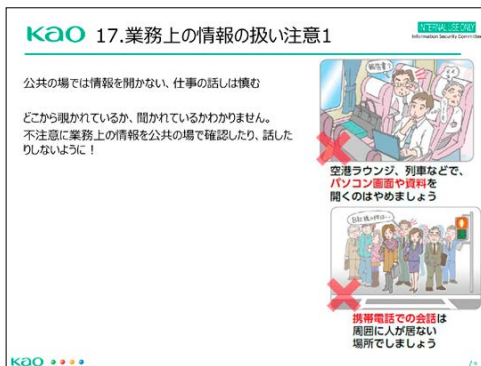
Information security

Second Quarter: Awareness-raising activities

Issuing of information security awareness-raising materials

In May 2017, we issued information security awareness-raising materials for use by Kao Group employees in Japan. The aim was to explain the points covered by Kao's information security-related rules – the Guidelines on Handling Trade Secrets, Guidelines on Handling Personal Information, and IT Security Guidelines – in an easy-to-understand way, so as to deepen employees' understanding of these rules. The materials include simple explanations on the left side, with easy-to-understand graphics etc. on the right side.

The materials have been made available on our intranet portal site, and members of the Trade Secret (TS) & Personal Information Protection Committee and Personal Information Controllers have been notified by e-mail of their availability, to facilitate the utilization of these materials in awareness-raising activities by each division.



Information security awareness-raising materials for employees

Third Quarter: Self-checks and auditing of outsourcing partners

Implementing self-checks using confidential information and personal information “self-patrols”

Accompanying the issuance of the information security awareness-raising materials, substantial revisions have been made to the suggested questions for confidential information and personal information “self-patrols.” The questions relating to verification of awareness-raising materials content have been revised to reflect how important it is that employees understand the materials and are able to put them into practice.

Implementation of paper audits of outsourcing partners whose work involves handling of personal information

When operations that involve the handling of personal information are outsourced, there is a responsibility to ensure effective management and oversight of the companies in question. The Kao Group in Japan implements management and oversight of outsourcing partners using annual paper audits, in accordance with the requirements of the Personal Information Protection Act. In 2017, we verified the status of personal information management by conducting paper audits of 162 outsourcing partners. Starting from 2017, we have also begun asking outsourcing partners to provide details of their own sub-contractors and the work

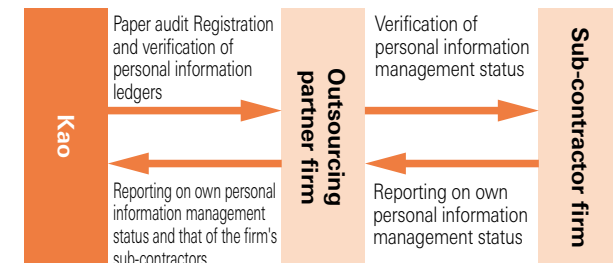
Kao's approach

Our initiatives

performed by these firms, so as to get a clearer picture of sub-contracting operations.

We are also strengthening management by continuing to register and verify the personal information ledgers that our outsourcing partners are required to maintain, as we have been doing since 2016.

Auditing of external parties authorized to handle personal information



Information security

Kao's approach

Our initiatives

Fourth Quarter: Improvement activities

Holding of the 24th TS & Personal Information Protection Promotion Meeting

The 24th TS & Personal Information Protection Promotion Meeting was held on November 14, 2017. The purpose of the Meeting was to use lectures by external experts to enable members of the Trade Secret (TS) & Personal Information Protection Committee and Personal Information Controllers to acquire new knowledge, to confirm the status of incidents occurring in 2017, to receive feedback on and identify issues relating to “self-patrols,” and to set improvement targets in relation to these issues.

Project launched in response to the EU's General Data Protection Regulation (GDPR)

Implementation of the European Union's General Data Protection Regulation (GDPR) is scheduled to begin on May 25, 2018. The GDPR regulates the handling and transfer of personal data, and is characterized by strict rules and penalties.

The Kao Group is responding to the introduction of the GDPR by promoting the formulation of project

frameworks by various divisions in relation to legal affairs, human capital development, information systems etc., with Kao Group companies in Europe playing a central role.

In principle, the GDPR restricts the transferring of personal data outside the European Economic Area (EEA). The Kao Group is responding to these requirements through the use of standard contractual clauses.

Response to China's Cyber Security Law (CSL)

China's new Cyber Security Law (CSL), which came into effect on June 1, 2017, requires that all personal data collected in China be stored within China, regardless of whether the data in question needs to be transferred across national boundaries. As the Kao Group preserves customer data – particularly in relation to our cosmetics business – we need to implement measures in response to the CSL. Since Kao's customer databases are located in Japan, we are establishing new databases in China. All customer data collected in China will be stored in these new databases. As the grace period for these measures extends only until December 31, 2018, we will need to complete these operations before the end of 2018.

Relaunching of “Security Assessments Outside Japan”

Up until the 2000s, the Kao Group implemented IT security assessments. As cyber-attacks have become increasingly rampant throughout the world in recent years, we have relaunched our security assessments outside Japan, as part of our efforts to strengthen the security measures of the Kao Group as a whole. We have compiled a checklist of 158 items to serve as a reference for external IT security assessments.

Conservation

Community

Corporate Culture

Governance

IP protection and utilization

Kao's approach

Our initiatives

Kao's approach

At Kao, we are endeavoring to protect Research and Development (R&D) outcomes and effectively utilize the rights derived from these outcomes through cooperation between our Intellectual Property Division and research institutes to realize "Business contributions through intellectual property (IP)."

Kao's creating value to address social issues

With the increasing globalization of R&D, it is more important than ever that IP-related activities be closely integrated between Kao Corporation and its Group companies both within and outside Japan. To meet this need, we are working to strengthen linkages with respect to IP-related activities.

In addition, we are strengthening our support functions for technical contracting to secure acceleration in the pace of open innovation based on our IP strategy.

Contributions to the SDGs



Policies

Kao conducts its business activities while protecting R&D results and naming representing brand image, etc., with industrial property rights, such as patents, design rights and trademarks, etc.

Kao also actively pursues the acquisition of rights in Asia, the Americas and Europe, while vigorously protecting itself against any infringements of its legal rights, both within and outside Japan. Recently, Kao has been pursuing measures against counterfeit products in Asia and other regions.

At the same time, we are strengthening our global efforts to respect and avoid infringing on the rights of other companies, through undertaking R&D in such a way as to avoid infringing upon them from the initial stages and reconfirming existing patents before new product launches by taking action as necessary.

Framework

We implement Group-wide management of business-related intellectual property rights through the coordinated activities of our Intellectual Property Division (under R&D) and our Brand Legal Management Department (under Legal & Compliance).

The Intellectual Property Division plays a key role by promoting strategic applications for patents and technology-based design rights, which are indicators of key company values, from the perspective of technology development capability, in a broad range of fields.

Brand Legal Management collaborates closely with business divisions, considering cost-effectiveness while submitting and managing applications for design-based design rights and trademark rights.

Conservation

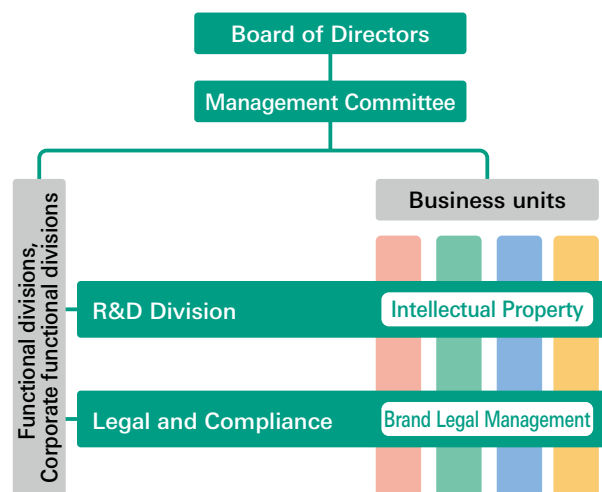
Community

Corporate Culture

Governance

IP protection and utilization

Industrial property rights management framework



*As of December 2017.

Education and promotion

We have implemented a wide range of IP education and training programs, with continual fine-tuning, for researchers aligned with, for example, their years of experience and roles, so that such researchers can play an active part in IP-related activities under their own initiative. In 2017, a total of around 750 researchers participated in IP education and training programs.

We also make effective use of an e-learning program to enhance the effectiveness of our educational activities; online learning has already been adopted as a tool for IP education and training by our researchers in Asia, the Americas and Europe.

Mid- to long-term targets and performance

Main targets

- Continue to build and strategically utilize our own patent portfolio, which has been optimized for both volume and quality
- Ensure effective and efficient prevention of third party IP-related incidents

Performance in 2017

The number of new patent applications in 2017 exceeded the previous year's total thanks to active development of new inventions. Income from patent licenses also increased year-on-year, as a result of active utilization of patent rights. We have achieved greater freedom of action in our business operations thanks to the transfer of patents, knowhow etc. from Collins Inkjet Corporation (now Kao Collins Inc.) and Chimigraf Holding, S.L. (now Kao Chimigraf).

Kao's approach

Our initiatives

Collaboration with stakeholders

We have created opportunities for direct dialogue with management levels in the Japan Patent Office and European Patent Office, as well as in patent offices in emerging economies, in order to allow us to maintain an accurate grasp of the latest trends in IP administration. In 2017, we engaged in an exchange of views with the Director-General of Indonesia's Directorate General of Intellectual Property (DGIP).

We have also created opportunities for direct dialogue with patent attorneys in major countries and regions (including Europe, the Americas, China, South Korea and Taiwan) and multiple emerging nations to deepen our understanding of global IP practice.

Conservation

Community

Corporate Culture

Governance

Our initiatives

Handling of Intellectual Property issues with other corporations

We regard Intellectual Property, including patents, as critical business assets, and are making efforts to effectively and strategically utilize such resources. In addition, in cases where IP issues with other corporations arise, we make efforts to resolve these issues through dialogue with those corporations when feasible, and through patent licensing where necessary.

Remuneration and incentives for employee inventions

The incentive system for employee inventions is intended to celebrate significant inventions by researchers from our company which contribute to our business operations. We give weight to the perspective that this will incentivize further inventions. Incentives include those awarded for patents utilized internally at Kao, which have led to excellent commercial outcomes, and license income incentives for patents which have produced significant income as a result of licensing to third parties.

We continued to implement incentive systems based on internal utilization of inventions and licensing income in 2017, marking the 18 consecutive since the launching of this system at Kao Corporation. Every year the President offers words of appreciation and encouragement at an awards ceremony for presentation of the incentives to the inventors.

Group companies outside Japan have continued to put in place their own incentive systems as well as the employee invention system needs to be implemented on a country-by-country basis.

Promotion of industrial property rights management

We consider that the securing of the outcomes of R&D at Group companies as industrial property rights is an important step in realizing our *Yoki-Monozukuri* globally and in responding to local consumers and client needs. For this reason, we actively provide platforms for exchange and mutual inspiration among employees with responsibility for IP at Kao Corporation and Group companies both within and outside Japan, while taking measures to execute related work duties collaboratively. We also focus our capacities to support IP-related activities at different localities, with an emphasis on IP education for researchers.

With the increase in the number of Group companies and the lively state of invention activity around the world, we are striving to ensure closer coordination between countries with respect to IP activities. In 2017, there were a large number of new patent applications from Group companies in five countries outside Japan.

IP protection and utilization

Response to the counterfeit goods problem in emerging nations

In regard to business expansion in emerging nations, the risk posed by the rapid diffusion of counterfeit goods increases for products which are well-received locally. It is thus very important to find appropriate countermeasures after having developed a clear picture of the current situation with regard to counterfeit goods. Some counterfeit goods are associated with safety concerns. In such cases it is not merely a question of protecting the brand value of the Kao product being counterfeited; it also becomes imperative that countermeasures to ensure the health and safety of local consumers are put in place.

China in particular could be described as a highly litigious society compared to Japan, as there are many more cases of IP-related litigation. There may thus be times when a resolute stance must be taken to address the issue of counterfeit goods in a lawsuit, depending on the particularities of the cases. As part of our measures against counterfeit goods, we have taken actions such as patent infringement litigations, each with a request for injunction and damage compensation against local manufacturers based on alleged infringement of Kao's patent rights at IP courts (courts specializing in IP) in Beijing and Shanghai.

In addition, to help prevent counterfeit goods from being imported, we have arranged for Kao personnel to act as instructors in Customs training sessions, teaching Customs personnel the key points to identify counterfeit items, and we have also been actively involved in seizure of imported counterfeit goods (border protection).

Kao's approach

Our initiatives

Management of trademarks and design rights

At Kao, the Brand Legal Management Department, which forms part of the Legal and Compliance Division, is in charge of trademark and design rights (some design rights are handled by the Intellectual Property Division under R&D). We conduct adequate availability searches for new names or designs in order not to infringe any rights of third parties. We also try to widen the scope of rights secured to maintain Kao's brand value.

Close collaboration with marketing teams is very important for our trademark activities in particular. For this reason, in addition to the Kao Corporation Head Office, we also have three offices in Europe and the U.S. for smooth communication with marketing teams worldwide. Furthermore, we manage the entire schedule of naming processes, from the beginning of name creation through trademark filing and decision of names, in order to ensure timely naming in synchronized with product development schedules.

We consolidate our system for the early elimination of counterfeit goods which have been on the rise in recent years. We cooperate with governmental authorities, e-commerce site managers, and peer companies in the industry, while we also reinforce our monitoring of markets including e-commerce sites.

Conservation

Community

Corporate Culture

Governance

External recognition

Kao's various initiatives which aim to contribute realization of a sustainable society have earned high recognition.

Conservation

Date of award	Group recognized	Awards/details	Sponsoring organization
2017/02	Kao Corporation	Received the Grand Prize at the Japan Chemical Industrial Association (JIPS) Award, which is to commend companies that demonstrated excellence in voluntary GPS/JIPS activities for chemicals management, for disclosure of the largest number of GPS Safety Summaries.	Japan Chemical Industry Association
2017/03	Wakayama Plant Kao Corporation	Received the highest level of five assessment ranks in the Private-sector Afforestation Category of the Social and Environmental Green Evaluation System (SEGES).	Organization for Landscape and Urban Green Infrastructure
2017/05	Kao Corporation	Received the 49th JCIA Technical Award for <i>Visco Top</i> , high-performance specialty thickener, as an innovative science technology and product that contributes to the development of society as well as improving the environment.	Japan Chemical Industry Association
2017/06	Kao Corporation	Awarded the Invention Award at the National Invention Awards in 2017 for the patent of <i>Lunajet</i> , water-based inkjet ink, in recognition of its high-definition printing on film and its potential for creating a new market for a sustainable society.	Japan Institute of Invention and Innovation
2017/07	Kao Corporation	Received the Ministry of Economy, Trade and Industry Award at the 16th Green Sustainable Chemistry (GSC) Awards for development of paper-based runner channel for casting in recognition of contributions to chemicals that are gentle for people and the environment and supporting the development of a sustainable society.	Japan Association for Chemical Innovation
2017/08	Kao Corporation	Received the 11th Kids Design Award for the experience-based environmental education programs for elementary school children and their parents, jointly developed and implemented by Kawasaki City and the Society for Sustainable Food & Life Styles, organized by the three parties of Kao, Ajinomoto and E-Square.	Kids Design Association
2017/08	Kao Industrial (Thailand)	Awarded the Eco Factory Award for achieving an over 80% score evaluated through 14 criteria.	Ministry of Industry of Thailand
2017/09	Kao Industrial (Thailand)	Received the Amata Best Waste Management Awards 2017 for achieving the highest platinum rank for waste management conforming to the IEAT (The Industrial Estate Authority of Thailand) standards.	Industrial Estate Authority of Thailand (IEAT)
2017/09	Kashima Plant, Kao Corporation	Received the Grand Prix Award at the Cool Earth Ibaraki Contest 2017 for revitalizing the forest's biological diversity on the ground through the Employees' Forest activity, as well as continuous afforestation efforts and environmental communication activities.	Environment Management Association of Ibaraki Prefecture (EMAI)
2017/11	Kawasaki Plant, Kao Corporation	Received the Excellence Award at the 6th Smart Lifestyle Awards for initiatives to reduce CO ₂ emissions based on the Carbon Challenge Kawasaki Eco Strategy.	Kawasaki City

Community

Date of award	Group recognized	Awards/details	Sponsoring organization
2017/01	Kao Corporation	Received the Excellence Award in the Excellent Daily Commodity Category at the Nikkei Marketing Journal (MJ) Awards 2016 for Raku-raku Eco Pack, highly evaluated as innovative packaging that realizes both user and environmental friendliness.	Nikkei Inc.
2017/03	Kao Corporation	The formula and certificate of analysis of <i>Kao Sekken</i> was designated as the 42nd Chemical Heritage in the 8th Chemical Heritage Listing for their value as information materials that tell the origin of the modern cosmetic industry.	The Chemical Society of Japan
2017/05	Kao Corporation	Received the WorldStar Awards for Raku-raku Eco Pack in recognition of the user and environmental friendliness, and for <i>Flair Fragrance</i> fabric softener in recognition of its excellence in quality, utility and design that is easy to refill.	World Packaging Organization
2017/08	Kao Corporation	Received the Cosmetic Packaging Category Award, Toiletry Packaging Category Award and Daily Commodity Packaging Category Award at the Japan Packaging Contest 2017 in recognition of their excellence in design, environmental friendliness, preservation and safety.	Japan Packaging Institute
2017/09	Kao Corporation	Awarded the Bronze Pentaward 2017 at the Pentaward 2017 for the design of the bottle for <i>Resesh Relax Linen</i> for fabric and air freshener, limited edition to LOHACO online shopping site, as having a story behind the product and providing a lifestyle proposal.	Pentaward

Conservation

Community

Corporate Culture

Governance

External recognition

Corporate Culture

Date of award	Group recognized	Awards/details	Sponsoring organization
2017/02	Kao Corporation	Selected as a Health & Productivity Stock as a company strategically working from a management perspective to manage the health of employees and others.	Ministry of Economy, Trade and Industry, The Tokyo Stock Exchange
2017/02	Kao Corporation	Certified as an Outstanding Health and Productivity Management Organization in the large enterprise category (White 500) for favorable evaluation of health promotion initiatives working together with insurers.	Ministry of Economy, Trade and Industry, Nippon Kenko Kaigi
2017/03	Kao Corporation	Selected to the World's Most Ethical Companies list in 2017 for 11 straight years, in recognition of excellence in standards and practices for corporate ethics, governance, social responsibility, citizenship activities and corporate culture.	Ethisphere Institute
2017/03	Kao Corporation	Obtained the highest rating in the DBJ Employee Health Management Rating for the second time in recognition of initiatives to promote employees' health using the PDCA cycle as well as the internal and external frameworks for improving health issues.	Development Bank of Japan (DBJ)
2017/05	Kao Corporation	Selected for 4th place in the comprehensive evaluation and 1st place in the diversity category in the 100 Best Companies Where Women Play Active Part by Nikkei Woman, in recognition of a pleasant workplace for many employees, not just for female employees.	Nikkei Woman, Nikkei Group
2017/08	Pilipinas Kao, Incorporated (Philippines)	Received the Volunteer Fire Brigade Company Award for the service of its volunteer fire company when a fire occurred at the neighboring areas of its plant.	Bureau of Fire Protection, Regional Headquarters-10, Cagayan de Oro City
2017/08	Kao (Hefei) Co., Ltd.	Received the 1st Hefei Economic and Technological Development Area Friendship Award in recognition of the great contribution to the development of the economic zone by promoting quality management techniques meeting Japanese standards, and the efforts of proactive human resource cultivation, since the commencement of the plant in 2012.	Bureau of Labor of Economic and Technical Development Zone of Hefei, Anhui, China
2017/10	Wakayama Plant, Kao Corporation	Received the Monozukuri Human Resource Development Award in the Good Factory Awards for high evaluation of the education system for cultivating global human talents and utilization of the system as an education hub of group companies outside Japan.	Japan Management Association
2017/10	Kao Transport & Logistics Co., Ltd.	Received the Incentive Award at the Logistics Awards 2017 for high evaluation of outcomes of productivity improvement and logistic cost reduction activities, resulting in the improvement of the employee working environment and business continuity.	Japan Institute of Logistics Systems

Governance

Date of award	Group recognized	Awards/details	Sponsoring organization
2017/01	Kao Corporation	Received the Grand Prize at the 5th Corporate Value Improvement Awards for efforts aimed at increasing corporate value by incorporating the perspective of investors, as an operating business that contributes to enhancing the appeal of the Tokyo Stock Exchange.	The Tokyo Stock Exchange
2017/02	Kao Corporation	Received the 2016 Corporate Governance of the Year Prize® in recognition of the effective utilization of corporate governance systems to reform the company in an innovative way, realizing healthy growth.	Japan Association of Corporate Directors
2017/05	Wakayama Plant, Kao Corporation	Awarded the Excellence Prize at the 11th Responsible Care Awards for high evaluation of initiatives for safe and sound operation focusing on hazard source management systems as safety enhancement measures at chemical plant facilities.	Japan Chemical Industry Association
2017/09	Kao Paper Manufacturing Fuji	Selected for 3rd place in the Male Indoor Fire Hydrant Category at the Fire Extinguishing Competition which aims to improve initial fire extinguishing techniques, raise awareness for fire protection, and establish voluntary disaster prevention schemes, in order to promote the prompt and punctual initial response to fires.	Fuji City, Shizuoka Prefecture, Japan
2017/10	Tochigi Plant, Kao Corporation	Awarded Category 5 Accident-free Certification from the Ministry of Health, Labour and Welfare (MHLW) for having maintained a record of zero accidents involving death or lost work one day or more for a total of 15.2 million hours (over the period between September 1, 2002 to June 28, 2017).	Ministry of Health, Labour and Welfare
2017/12	Kao Industrial (Thailand)	Received the Responsible Care Silver Award for achieving high scores in the RC self-checks that cover all evaluation items, as well as for continuous reports of KPI.	Responsible Care Management Committee of Thailand (RCMCT)

SRI indexes and evaluations

The latest statue on our SRI indexes can be found on our website.



→ SRI indexes and evaluations (updated as needed)
<http://www.kao.com/global/en/sustainability/recognition/>

Declaration to Society

Our Declaration to Society can be found on our website.



→ Declaration to Society
<http://www.kao.com/global/en/sustainability/declaration/>

Conservation

Community

Corporate Culture

Governance

Independent assurance report



Independent Assurance Report

To the President and CEO of Kao Corporation

We were engaged by Kao Corporation (the "Company") to undertake a limited assurance engagement of the environmental and social performance indicators marked with ☒ (the "Indicators") for the period from January 1, 2017 to December 31, 2017 included in its Sustainability Data Book 2018 (the "Data Book") for the fiscal year ended December 31, 2017.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Data Book.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information', the 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements' issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines for the Assurance of Sustainability Information' published by the Japanese Association of Assurance Organizations for Sustainability Information. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Data Book, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company's responsible personnel to obtain an understanding of its policy for preparing the Data Book and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and recalculating the Indicators.
- Visiting the Company's Ehime Plant and Kao Corporation Shanghai Co., Ltd. selected on the basis of a risk analysis.
- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Data Book are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Data Book.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
May 31, 2018

With the aim of ensuring more transparent disclosure of data relating to environmental protection and data relating to health and safety, KPMG AZSA Sustainability Co., Ltd. provides independent assurance for this data book. Indicators on which assurance is provided are marked with a [check ☒](#).

Scope of Assurance

In general, we report the activities of the Kao Group (Kao Corporation and its subsidiaries). Exceptions to this scope have been clearly stated as graph's annotations and in the text.

Assured data

Category	Data	Pages
CO ₂	Energy consumption (all sites)	P29
	CO ₂ emissions across the entire product lifecycle (Kao Group)	P29
	GHG emissions (all sites)	P29
	CO ₂ emissions across the entire product lifecycle (Kao Group in Japan)	P30
	Scope 1 CO ₂ emissions volumes (Thousand tons-CO ₂ e)	P30
	Scope 2 CO ₂ emissions volumes (Thousand tons-CO ₂ e)	P30
	Scope 3 CO ₂ emissions volumes (Thousand tons-CO ₂ e) *1,4,11,12	P30
Water	CO ₂ emission during distribution (Japan)	P34
	Water consumption (withdrawal) (all sites)	P39
	Water consumption during product use (Kao Group in Japan)	P39
	Water consumption across the entire product lifecycle (Kao Group)	P39
Chemical substances management	COD pollution load (all production sites)	P40
	VOCs emissions (Kao Group in Japan)	P54
Waste	NOx emissions	P54
	Amount of waste reused or recycled	P62
Product lifecycle and environmental impact	Amount of generated waste and other unwanted materials (all sites)	P62
	Output: Material procurement: CO ₂ emissions Output: Development/Manufacturing: GHG emissions Output: Distribution/Sales (facilities and company cars): GHG emissions Output: Distribution (product transportation) : CO ₂ emissions Output: Use : CO ₂ emissions Output: Disposal/Recycling: CO ₂ emissions	P71
Occupational safety	Lost time accidents frequency rate: Including both regular employees and temporary workers (Kao Group)	P166
	Lost time accidents frequency rate: Subcontractors (Kao Group)	P166

GRI standards table 102-55

This data book has been compiled with reference to the GRI Sustainability Reporting Standards.

General disclosures

100: Universal Standards				
GRI 102: General Disclosures 2016				
1. Organizational profile			Relevant Sections in Data Book	
	102-1	Name of the organization	● Kao Group Overview (external link)	—
	102-2	Activities, brands, products, and services	● Kao Group Fields of Business (external link)	—
	102-3	Location of headquarters	● Kao Group Overview (external link)	—
	102-4	Location of operations	● Kao Group Overview (external link)	—
	102-5	Ownership and legal form	● Kao Group Overview (external link)	—
	102-6	Markets served	● Global Locations (external link)	—
	102-7	Scale of the organization	● Kao Group Overview (external link)	—
	102-8	Information on employees and other workers	● Diversity and inclusion: Support for the active utilization of diverse human capital	P150
	102-9	Supply chain	—	—
	102-10	Significant changes to the organization and its supply chain	—	—
	102-11	Precautionary Principle or approach	● Kao Sustainability Statement: Our initiatives ● Chemical substances management: Kao's creating value to address social issues/Policies ● Chemical substances management: Comprehensive Management System for Chemical Substances ● Chemical substances management: Mid- to long-term targets and performance ● Communication with corporate customers (Chemical Business): Mid- to long-term targets and performance ● Process Safety and disaster prevention: Policies/Framework ● Process Safety and disaster prevention: Disaster prevention audits/ Strengthening process safety and disaster prevention ● Responsible care activities: Policies ● Information security: Policies/Framework	P9 P43 P45 P47 P100 P170 P174 P184 P200
	102-12	External initiatives	● Kao Sustainability Statement: Contributions to the Sustainable Development Goals ● "Kao's approach: Contribution to the SDGs" in each section	P9
	102-13	Membership of associations	—	—
2. Strategy				
	102-14	Statement from senior decision-maker	● CEO Message	P5
	102-15	Key impacts, risks, and opportunities	● Kao Sustainability Statement: Philosophy underlying our sustainability activities ● CO ₂ : Kao's creating value to address social issues ● Water: Kao's creating value to address social issues ● Chemical substances management: Comprehensive Management System for Chemical Substances ● Process Safety and disaster prevention: Policies/Framework ● Process Safety and disaster prevention: Our initiatives ● Risk and crisis management: Kao's approach	P8 P27 P36 P45 P170 P173-174 P191-193

Conservation

Community

Corporate Culture

Governance

GRI standards table 102-55

100: Universal Standards				
GRI 102: General Disclosures 2016				
3. Ethics and integrity			Relevant Sections in Data Book	
	102-16	Values, principles, standards, and norms of behavior	<ul style="list-style-type: none"> ● Kao Sustainability Statement: Philosophy underlying our sustainability activities ● For realization of the Kao Corporate Philosophy: Policies ● For realization of the Kao Corporate Philosophy: Our initiatives ● Integrity 	P8 P117 P120 P121-127
	102-17	Mechanisms for advice and concerns about ethics	<ul style="list-style-type: none"> ● Integrity: Framework/Mid- to long-term targets and performance ● Integrity: Establishment and operation of the compliance hotlines 	P122-125 P127-128
4. Governance				
	102-18	Governance structure	<ul style="list-style-type: none"> ● Kao Sustainability Statement: Sustainability Promotion Framework ● Corporate governance: Board of Directors ● Corporate governance: Promoting ESG activities 	P12 P177 P182
	102-19	Delegating authority	<ul style="list-style-type: none"> ● Kao Sustainability Statement: Sustainability Promotion Framework ● Corporate governance: Promoting ESG activities 	P12 P182
	102-20	Executive-level responsibility for economic, environmental, and social topics	<ul style="list-style-type: none"> ● Kao Sustainability Statement: Sustainability Promotion Framework ● Corporate governance: Promoting ESG activities 	P12 P182
	102-21	Consulting stakeholders on economic, environmental, and social topics	—	—
	102-22	Composition of the highest governance body and its committees	<ul style="list-style-type: none"> ● Corporate governance: Corporate governance Ensuring transparency and fairness 	P176-180
	102-23	Chair of the highest governance body	<ul style="list-style-type: none"> ● Corporate governance: Committee for the Examination of the Nominees for the Members of the Board of Directors and Compensation Advisory Committee/Independent Outside Directors and Independent Outside Audit & Supervisory Board Members 	P179-180
	102-24	Nominating and selecting the highest governance body	<ul style="list-style-type: none"> ● Corporate governance: Committee for the Examination of the Nominees for the Members of the Board of Directors and Compensation Advisory Committee 	P179
	102-25	Conflicts of interest	<ul style="list-style-type: none"> ● Integrity: Establishment and operation of the compliance hotlines ● Corporate governance: Audit & Supervisory Board 	P127 P178
	102-26	Role of highest governance body in setting purpose, values, and strategy	<ul style="list-style-type: none"> ● Kao Sustainability Statement: Sustainability Promotion Framework ● Corporate governance: Corporate Governance Structure/Board of Directors/Audit & Supervisory Board 	P12 P176-178
	102-27	Collective knowledge of highest governance body	—	—
	102-28	Evaluating the highest governance body's performance	<ul style="list-style-type: none"> ● Corporate governance: Evaluation of the effectiveness of the Board of Directors 	P177
	102-29	Identifying and managing economic, environmental, and social impacts	<ul style="list-style-type: none"> ● Kao Sustainability Statement: Specifying the main themes ● Risk and crisis management: Framework 	P10 P192-193
	102-30	Effectiveness of risk management processes	<ul style="list-style-type: none"> ● Risk and crisis management: Framework 	P192-193
	102-31	Review of economic, environmental, and social topics	—	—
	102-32	Highest governance body's role in sustainability reporting	—	—
	102-33	Communicating critical concerns	<ul style="list-style-type: none"> ● Risk and crisis management: Framework 	P192-193
	102-34	Nature and total number of critical concerns	<ul style="list-style-type: none"> ● Process Safety and disaster prevention: Disaster prevention audits 	P174 (Not applicable)
	102-35	Remuneration policies	<ul style="list-style-type: none"> ● Corporate governance: Compensation system for Directors and Executive Officers aimed at increasing awareness of improving corporate value 	P181-182
	102-36	Process for determining remuneration	<ul style="list-style-type: none"> ● Corporate governance: Compensation system for Directors and Executive Officers aimed at increasing awareness of improving corporate value 	P181-182
	102-37	Stakeholders' involvement in remuneration	<ul style="list-style-type: none"> ● Corporate governance: Compensation system for Directors and Executive Officers aimed at increasing awareness of improving corporate value 	P181-182
	102-38	Annual total compensation ratio	—	—
	102-39	Percentage increase in annual total compensation ratio	—	—

Conservation

Community

Corporate Culture

Governance

GRI standards table 102-55

100: Universal Standards				
GRI 102: General Disclosures 2016				
5. Stakeholder engagement			Relevant Sections in Data Book	
	102-40	List of stakeholder groups	● Kao Sustainability Statement: Stakeholder communication	P14
	102-41	Collective bargaining agreements	—	—
	102-42	Identifying and selecting stakeholders	—	—
	102-43	Approach to stakeholder engagement	● Kao Sustainability Statement: Stakeholder communication	P14
	102-44	Key topics and concerns raised	● Communication with consumers	P88-93
● Communication with corporate customers (Consumer Products Business): Mid- to long-term targets and performance			P96	
● Communication with corporate customers (Chemical Business): Mid- to long-term targets and performance			P100	
● Communication with corporate customers (Chemical Business): Cooperation with sales distributors			P102	
● Dialogue with employees			P155-157	
			● Information disclosure	P195-199
6. Reporting practice				
	102-45	Entities included in the consolidated financial statements	● Global Gateway (external link)	—
	102-46	Defining report content and topic Boundaries	● Kao Sustainability Statement: Specifying the main themes	P10
	102-47	List of material topics	● Kao Sustainability Statement: Matrix of Materiality	P11
	102-48	Restatements of information	● Editorial Policy	P4
	102-49	Changes in reporting	—	—
	102-50	Reporting period	● Editorial Policy	P4
	102-51	Date of most recent report	● Editorial Policy	P4
	102-52	Reporting cycle	● Editorial Policy	P4
	102-53	Contact point for questions regarding the report		Back cover
	102-54	Claims of reporting in accordance with the GRI Standards	— (This data book has been compiled with reference to the GRI Standards)	
	102-55	GRI content index	● GRI standards table	P214
	102-56	External assurance	● Editorial Policy	P4
			● Independent assurance report	P213
GRI 103: Management Approach 2016				
	103-1	Explanation of the material topic and its Boundary	● “Kao’s approach” in each section	
	103-2	The management approach and its components	● Major sustainability indicators ● “Kao’s approach” in each section	P15-16
	103-3	Evaluation of the management approach	● Major sustainability indicators ● “Kao’s approach” in each section	P15-16

Conservation

Community

Corporate Culture

Governance

GRI standards table 102-55

Materials

200: Economic topics					
Economic Performance			Relevant Sections in Data Book		Indicators on which third-party assurance is provided (✓)
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	—	—	
	201-2	Financial implications and other risks and opportunities due to climate change	● CO ₂ : Kao's creating value to address social issues	P27	
	201-3	Defined benefit plan obligations and other retirement plans	—	—	
	201-4	Financial assistance received from government	—	—	
Market Presence					
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	—	—	
	202-2	Proportion of senior management hired from the local community	—	—	
Indirect Economic Impacts					
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	● Initiatives for the environment ● Corporate citizenship activities	P25 P110-114	
	203-2	Significant indirect economic impacts	—	—	
Procurement Practices					
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	—	—	
Anti-corruption					
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	—	—	
	205-2	Communication and training about anti-corruption policies and procedures	● Integrity: Framework ● Integrity: Establishment and operation of the compliance hotlines	P122-123 P127	
	205-3	Confirmed incidents of corruption and actions taken	—	—	
Anti-competitive Behavior					
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	—	—	
300: Environmental topics					
Materials			Relevant Sections in Data Book		Indicators on which third-party assurance is provided (✓)
GRI 301: Materials 2016	301-1	Materials used by weight or volume	● Packaging: Performance in 2017 ● Product lifecycle and environmental impact	P68 P71-72	
	301-2	Recycled input materials used	● Waste: Promoting efforts to reduce waste (reducing the amount generated and promoting reuse and recycling) ● Packaging: Our initiatives	P64-65 P69-70	
	301-3	Reclaimed products and their packaging materials	● Packaging: Recycle: Introducing recycled materials	P70	
Energy					
GRI 302: Energy 2016	302-1	Energy consumption within the organization	● CO ₂ : Performance in 2017 ● Product lifecycle and environmental impact	P29 P71-72	✓
	302-2	Energy consumption outside of the organization	—	—	
	302-3	Energy intensity	● CO ₂ : Performance in 2017	P29	
	302-4	Reduction of energy consumption	● CO ₂ : Performance in 2017 ● CO ₂ : Eliminating wasted energy	P29-30 P33	
	302-5	Reductions in energy requirements of products and services	● CO ₂ : Performance in 2017	P29	

Conservation

Community

Corporate Culture

Governance

GRI standards table 102-55

300: Environmental topics					
Water			Relevant Sections in Data Book		Indicators on which third-party assurance is provided (✓)
GRI 303: Water 2016	303-1	Water withdrawal by source	● Water: Performance in 2017	P39-40	✓
	303-2	Water sources significantly affected by withdrawal of water	● Water: Policies	P37	
	303-3	Water recycled and reused	—	—	
Biodiversity					
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	● Biodiversity: Our initiatives	P59	
	304-2	Significant impacts of activities, products, and services on biodiversity	● Biodiversity: Kao's creating value to address social issues	P55	
	304-3	Habitats protected or restored	● Biodiversity: Our initiatives	P59	
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	—	—	
Emissions					
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	● CO ₂ : Scope 1 CO ₂ emissions volumes (Thousand tons-CO ₂ e) ● CO ₂ : Efforts in manufacturing (plants, offices, logistics centers) ● Product lifecycle and environmental impact	P30 P33 P71-72	✓ ✓
	305-2	Energy indirect (Scope 2) GHG emissions	● CO ₂ : Scope 2 CO ₂ emissions volumes (Thousand tons-CO ₂ e) ● CO ₂ : Efforts in manufacturing (plants, offices, logistics centers) ● Product lifecycle and environmental impact	P30 P33 P71-72	✓ ✓
	305-3	Other indirect (Scope 3) GHG emissions	● CO ₂ : Scope 3 CO ₂ emissions volumes (Thousand tons-CO ₂ e) ● CO ₂ : Efforts in distribution/Efforts during use/Efforts in disposal and recycling ● Product lifecycle and environmental impact	P30 P34-35 P71-72	✓ (1,4,11,12) ✓ ✓
	305-4	GHG emissions intensity	● CO ₂ : Performance in 2017 ● Packaging: Performance in 2017 ● Packaging: Reuse: Promoting refill and replacement products	P29-31 P68 P70	✓
	305-5	Reduction of GHG emissions	● CO ₂ : Performance in 2017 ● Packaging: Performance in 2017 ● Packaging: Our initiatives	P29-31 P68 P69-70	✓
	305-6	Emissions of ozone-depleting substances (ODS)	● CO ₂ : 3. Reducing the volume of leaked refrigerants and other greenhouse gases	P33	
	305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	● Chemical substances management: Emission Management of Chemicals ● Product lifecycle and environmental impact	P53-54 P71-72	✓
Effluents and Waste					
GRI 306: Effluents and Waste 2016	306-1	Water discharge by quality and destination	● Water: Performance in 2017 ● Product lifecycle and environmental impact	P40 P71-72	
	306-2	Waste by type and disposal method	● Waste: Performance in 2017 ● Product lifecycle and environmental impact	P62 P71-72	✓
	306-3	Significant spills	● Water: Compliance with environmental legislation	P41	
	306-4	Transport of hazardous waste	● Waste: Performance in 2017	P62	
	306-5	Water bodies affected by water discharges and/or runoff	● Water: Efforts in development, manufacturing and sales ● Water: Efforts for wastewater after product use	P41 P42	
Environmental Compliance					
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	● Water: Compliance with environmental legislation	P41	

Conservation

Community

Corporate Culture

Governance

GRI standards table 102-55

300: Environmental topics					
Supplier Environmental Assessment			Relevant Sections in Data Book		Indicators on which third-party assurance is provided (✓)
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	—	—	
	308-2	Negative environmental impacts in the supply chain and actions taken	<ul style="list-style-type: none"> ● CO₂: Efforts in raw materials procurement ● Water: Efforts in raw materials procurement ● Water: Efforts for wastewater after product use ● Waste: Efforts in raw materials procurement ● Packaging: Performance in 2017 ● Sustainable and responsible procurement 	P32 P41 P42 P64 P68 P134-141	
400: Social topics					
Employment			Relevant Sections in Data Book		Indicators on which third-party assurance is provided (✓)
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	● Diversity and inclusion: Support for the active utilization of diverse human capital	P150	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—	—	
	401-3	Parental leave	● Diversity and inclusion: Employment systems utilization status (Kao Corporation)	P153	
Labor/Management Relations					
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	—	—	
Occupational Health and Safety					
GRI 403: Occupational Health and Safety 2016	403-1	Workers representation in formal joint management-worker health and safety committees	—	—	
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	<ul style="list-style-type: none"> ● Occupational safety: Mid- to long-term targets and performance ● Process Safety and disaster prevention: Mid- to long-term targets and performance 	P166-168 P172	✓ (Partial data)
	403-3	Workers with high incidence or high risk of diseases related to their occupation	—	—	
	403-4	Health and safety topics covered in formal agreements with trade unions	—	—	
Training and Education					
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	● Human capital development: Performance in 2017	P147	
	404-2	Programs for upgrading employee skills and transition assistance programs	<ul style="list-style-type: none"> ● Kao Sustainability Statement: Awareness-raising for employees ● "Kao's approach: Education and promotion " in each section ● Human capital development ● Diversity and inclusion: Kao's approach 	P13 P145-147 P148-149	
	404-3	Percentage of employees receiving regular performance and career development reviews	—	—	
Diversity and Equal Opportunity					
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	● Diversity and inclusion: Support for the active utilization of diverse human capital	P150-151	
	405-2	Ratio of basic salary and remuneration of women to men	—	—	
Non-discrimination					
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	—	—	
Freedom of Association and Collective Bargaining					
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	—	—	
Child Labor					
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	—	—	
Forced or Compulsory Labor					
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	—	—	

Conservation

Community

Corporate Culture

Governance

GRI standards table 102-55

400: Social topics					
Security Practices			Relevant Sections in Data Book		Indicators on which third-party assurance is provided (✓)
GRI 410: Security Practices 2016	410-1	Security personnel trained in human rights policies or procedures	—	—	
Rights of Indigenous Peoples					
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	—	—	
Human Rights Assessment					
GRI 412: Human Rights Assessment 2016	412-1	Operations that have been subject to human rights reviews or impact assessments	● Human rights: Performance in 2017 ● Human rights: Human rights due diligence process	P132 P133	
	412-2	Employee training on human rights policies or procedures	● Integrity: Our initiatives ● Integrity: Performance in 2017	P126-128 P132	
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	● Integrity: Performance in 2017	P132	
Local Communities					
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	● Initiatives for the environment: Raising awareness among consumers (customers) in collaboration with various stakeholders	P23-26	
	413-2	Operations with significant actual and potential negative impacts on local communities	—	—	
Supplier Social Assessment					
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	—	—	
	414-2	Negative social impacts in the supply chain and actions taken	● Human rights: Human rights due diligence process ● Sustainable and responsible procurement	P133 P134-141	
Public Policy					
GRI 415: Public Policy 2016	415-1	Political contributions	● Integrity	P127 (Not applicable)	
Customer Health and Safety					
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	● Product quality management: Our initiatives ● Universal Design: Performance in 2017 ● Universal Design: Contributing to the development of new safety icons for consumer products ● Communication with corporate customers (Professional Service Business): Our initiatives	P80-81 P84 P87 P106-107	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	● Product quality management: Our initiatives	P80-81	
Marketing and Labeling					
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	● Initiatives for the environment: Performance in 2017 ● Initiatives for the environment: Product design with environmental considerations ● CO ₂ : Efforts in development, manufacturing and sales ● Universal Design: Performance in 2017 ● Universal Design: Expanding Raku-raku Eco Pack Refill ● Communication with consumers: Framework ● Communication with consumers: Mid- to long-term targets and performance ● Communication with consumers: Providing information on the Kao website	P21 P22 P32 P84 P85 P89 P90 P92	
	417-2	Incidents of non-compliance concerning product and service information and labeling	—	—	
	417-3	Incidents of non-compliance concerning marketing communications	—	—	
Customer Privacy					
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	—	—	
Socioeconomic Compliance					
GRI 419: Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	● Integrity: Response to compliance violations, and violations in 2017	P128 (Not applicable)	

Conservation

Community

Corporate Culture

Governance

ISO 26000 table

Core subjects and issues	Pages of the Sustainability Data Book 2018	
6.2 Organizational governance	<ul style="list-style-type: none"> ● CEO Message ● Kao Sustainability Statement ● Communication with consumers ● Communication with corporate customers ● Sustainable and responsible procurement ● Overall vision for human capital development ● Human capital development ● Governance 	P5 P8-14 P88-93 P94-107 P134-142 P143-144 P145-147 P175-210
6.3 Human rights	<ul style="list-style-type: none"> ● Human rights ● Kao Business Conduct Guidelines (external link) 	P130-133 —
6.3.3 Due diligence	<ul style="list-style-type: none"> ● Kao Sustainability Statement ● Integrity ● Human rights ● Sustainable and responsible procurement ● Diversity and inclusion 	P8-14 P121-129 P130-133 P134-142 P148-154
6.3.4 Human rights risk situations	<ul style="list-style-type: none"> ● Human rights ● Diversity and inclusion 	P130-133 P148-154
6.3.5 Avoidance of complicity	<ul style="list-style-type: none"> ● Human rights ● Sustainable and responsible procurement ● Diversity and inclusion 	P130-133 P134-142 P148-154
6.3.6 Resolving grievances	<ul style="list-style-type: none"> ● Integrity ● Communication with consumers 	P121-129 P88-93
6.3.7 Discrimination and vulnerable group	<ul style="list-style-type: none"> ● Corporate citizenship activities ● Diversity and inclusion 	P108-115 P148-154
6.3.8 Civil and political rights	<ul style="list-style-type: none"> ● Integrity ● Dialogue with employees 	P121-129 P155-157
6.3.9 Economic, social, and cultural rights	<ul style="list-style-type: none"> ● Corporate citizenship activities ● Integrity ● Diversity and inclusion 	P108-115 P121-129 P148-154
6.3.10 Fundamental principles and rights at work	<ul style="list-style-type: none"> ● Integrity ● Overall vision for human capital development ● Human capital development 	P121-129 P143-144 P145-147

Core subjects and issues	Pages of the Sustainability Data Book 2018	
6.4 Labour practices		
6.4.3 Employment and employment relationships	<ul style="list-style-type: none"> ● Integrity ● Diversity and inclusion 	P121-129 P148-154
6.4.4 Conditions of work and social protection	<ul style="list-style-type: none"> ● Dialogue with employees 	P155-157
6.4.5 Social dialogue	<ul style="list-style-type: none"> ● Dialogue with employees 	P155-157
6.4.6 Health and safety at work	<ul style="list-style-type: none"> ● Occupational safety ● Process Safety and disaster prevention ● Responsible care activities 	P165-169 P170-174 P184-190
6.4.7 Human development and training in the workplaces	<ul style="list-style-type: none"> ● Human capital development 	P145-147
6.5 The environment		
6.5.3 Prevention of pollution	<ul style="list-style-type: none"> ● Kao Sustainability Statement ● Initiatives for the environment ● Water ● Chemical substances management ● Waste 	P8-14 P19-26 P36-42 P43-54 P60-65
6.5.4 Sustainable resource use	<ul style="list-style-type: none"> ● Kao Sustainability Statement ● Initiatives for the environment ● Water ● Biodiversity ● Sustainable and responsible procurement 	P8-14 P19-26 P36-42 P55-59 P134-142
6.5.5 Climate change mitigation and adaptation	<ul style="list-style-type: none"> ● Kao Sustainability Statement ● Initiatives for the environment ● CO₂ 	P8-14 P19-26 P27-35
6.5.6 Protection of the environment, biodiversity and restoration of natural habitats	<ul style="list-style-type: none"> ● Kao Sustainability Statement ● Initiatives for the environment ● Biodiversity ● Sustainable and responsible procurement 	P8-14 P19-26 P55-59 P134-142

Conservation

Community

Corporate Culture

Governance

ISO 26000 table

Core subjects and issues	Pages of the Sustainability Data Book 2018	
6.6 Fair operating practices		
6.6.3 Anti-corruption	<ul style="list-style-type: none"> ● Integrity ● Corporate governance 	P121-129 P176-183
6.6.4 Responsible political involvement	<ul style="list-style-type: none"> ● Integrity 	P121-129
6.6.5 Fair competition	<ul style="list-style-type: none"> ● Integrity ● Corporate governance 	P121-129 P176-183
6.6.6 Promoting social responsibility in the value chain	<ul style="list-style-type: none"> ● Communication with consumers ● Communication with corporate customers ● Integrity ● Sustainable and responsible procurement ● Corporate governance 	P88-93 P94-107 P121-129 P134-142 P176-183
6.6.7 Respect for property rights	<ul style="list-style-type: none"> ● Integrity ● IP protection and utilization 	P121-129 P207-210
6.7 Consumer issues		
6.7.3 Fair marketing, factual and unbiased information and fair contractual practices	<ul style="list-style-type: none"> ● Communication with consumers ● Communication with corporate customers ● Sustainable and responsible procurement 	P88-93 P94-107 P134-142
6.7.4 Protecting consumers' health and safety	<ul style="list-style-type: none"> ● Product quality management ● Communication with consumers 	P76-81 P88-93
6.7.5 Sustainable consumption	<ul style="list-style-type: none"> ● The Future of Packaging for a Comfortable and Eco-friendly Life ● Conservation ● Packaging ● Communication with consumers ● Communication with corporate customers 	P6-7 P18-74 P66-70 P88-93 P94-107
6.7.6 Consumer service, support, and complaint and dispute resolution	<ul style="list-style-type: none"> ● Product quality management ● Communication with consumers 	P76-81 P88-93
6.7.7 Consumer data protection and privacy	<ul style="list-style-type: none"> ● Integrity ● Information security 	P121-129 P200-206

Core subjects and issues	Pages of the Sustainability Data Book 2018	
6.7.8 Access to essential services	<ul style="list-style-type: none"> ● Communication with consumers 	P88-93
6.7.9 Education and awareness	<ul style="list-style-type: none"> ● Initiatives for the environment ● Product quality management ● Communication with consumers ● Corporate citizenship activities 	P19-26 P76-81 P88-93 P108-115
6.8 Community involvement and development		
6.8.3 Community involvement	<ul style="list-style-type: none"> ● Kao Sustainability Statement ● Conservation ● Community ● Corporate Culture ● Initiatives for the environment ● Biodiversity 	P8-14 P18-74 P75-115 P116-174 P19-26 P55-59
6.8.4 Education and culture	<ul style="list-style-type: none"> ● Community ● Initiatives for the environment ● Biodiversity ● Corporate citizenship activities 	P75-115 P19-26 P55-59 P108-115
6.8.5 Employment creation and skills development	<ul style="list-style-type: none"> ● Communication with corporate customers 	P94-107
6.8.6 Technology development and access	<ul style="list-style-type: none"> ● Conservation ● Community 	P18-74 P75-115
6.8.7 Wealth and income creation	<ul style="list-style-type: none"> ● Community ● Corporate Culture 	P75-115 P116-174
6.8.8 Health	<ul style="list-style-type: none"> ● Corporate citizenship activities ● Health 	P108-115 P158-164
6.8.9 Social investment	<ul style="list-style-type: none"> ● Conservation ● Community ● Corporate Culture 	P18-74 P75-115 P116-174

Conservation

Community

Corporate Culture

Governance

Indexes for survey

Policies/guidelines/standards

Category	Policies/guidelines/standards	PDF
Kao Sustainability Statement	The Kao Way	P8
	Kao Sustainability Statement	P8
	Nine Main Themes and Contributions to the Sustainable Development Goals	P9
	Our initiatives which are being conducted for each of the nine main themes	P9
	Process of selecting the main themes	P10
	Matrix of Materiality	P11
Conservation	Four key issues	P19
	Environmental Statement: Medium-term Objectives (Link)	P19
	Basic Policies on Environmental Measures (Link)	P20
	Kao Environmental Statement (Link)	P20
	Design for environment guidelines	P22
	“eco together” logo display standards	P22
	CO ₂ : Risks and opportunities	P27
	Targets for energy and greenhouse gas emissions	P29
	Water: Risks and opportunities	P36-37
	Targets for water consumption	P39
	SAICM Promotion Policy	P43
	Basic Policies on Conservation of Biodiversity (Link)	P55
	Action policies and examples for each item in the Basic Policies on Conservation of Biodiversity (Link)	P55
	Waste-related targets	P62
	Basic Policy for Quality Management Activities	P76
	Kao Safety Standards for Household Products (Link)	P81
	Kao Safety Standards for Cosmetic Products (Link)	P81
	Kao Safety Standards for Food Products (Link)	P81
Community	Kao's Policy on Animal Testing	P81
	Kao Universal Design Guidelines	P82
	Declaration of Consumer-orientation	P88
	Corporate citizenship activity guidelines	P108
	Kao Human Rights Policy (Link)	P130
	Kao Business Conduct Guidelines (Link)	P130
Corporate Culture	Policies for Procurement (Link)	P130
	Guidelines for Supplier's Assessment (Link)	P130
	Modern Slavery Act Statement (Link)	P132
	Guidelines for Sustainable Procurement of Raw Materials (Link)	P134
	Sustainable Palm Oil Procurement Guidelines	P138
	Sustainable Pulp and Paper Procurement Guidelines	P139
	Guidelines for Human Capital Development	P144
	Vision of human capital development	P144
	Kao Group Health Declaration	P158
	Kao Health 2020	P161
	“No accidents with lost work days awards” award criteria	P168
Governance	Standards for Independence of Outside Directors/Outside Audit & Supervisory Board Members (Link)	P180
	Policy concerning the determination of the amount of compensation for Directors and Executive Officers	P181
	Kao Responsible Care Policy (Link)	P184
	Disclosure Guidelines (Link)	P195

Frameworks/systems

Category	Frameworks/systems	PDF
Kao Sustainability Statement	Sustainability Promotion Framework	P12
	Stakeholder communication	P14
Conservation	CO ₂ : Managing divisions and relevant stakeholders by product lifecycle stage	P28
	Water: Managing divisions and relevant stakeholders by product lifecycle stage	P38
	SAICM Promotion Framework	P44
	Kao Comprehensive Management System for Chemical Substances	P45
	Packaging Development and Promotion Framework	P66
	Product Quality Management System	P77
Community	Universal Design Promotion Project System	P83
	Framework to reflect consumer feedback in products	P89
	Consumer Products Business: Communication framework	P95
	Chemical Business: Green Innovation and Eco Technological Solutions	P98
	Professional Service Business: Promotion framework	P103
	Overview of corporate citizenship activities	P109
Corporate Culture	Implementation framework for corporate citizenship activities	P109
	Framework for promoting Kao Way activities	P118
	PDCA cycle for compliance activities	P121
	Compliance promotion framework	P122
	Kao Group Global Common Training Program and Specialist Programs	P145
	Main systems for supporting work-life balance	P152
	Main systems for supporting diversified work styles (Kao Corporation)	P153
	Employee dialogue structure	P156
	RPDCA to improve organizational capacities	P157
	Find employee opinion survey questionnaire items	P157
	Health Promotion Management System	P159
	Health promotion framework	P160
	Corporate governance structure	P176
	Attending members for Meetings of the Board of Directors, the Audit & Supervisory Board, and other Committees	P179
Governance	Responsible Care promotion framework	P185
	Annual cycle of Responsible Care activities	P188
	Risk and crisis management framework	P192
	Management of corporate risk	P193
	Management framework during times of crisis (an example)	P193
	Information disclosure management framework	P196
	Information security management framework	P200-201
	PDCA cycle for information security activities	P202
	Auditing of external parties authorized to handle personal information	P205
	Industrial property rights management framework	P208

Conservation

Community

Corporate Culture

Governance

Indexes for survey

Performance data

Category	Performance data	PDF
Major sustainability indicators	Conservation: Results and Targets	P15
	Community: Results and Targets	P16
	Corporate Culture: Results and Targets	P16
Conservation	Sales percentage of products displaying the “eco together” logo (Consumer products in Japan)	P21
	CDP evaluation	P21
	Ratio of CO ₂ emissions at each stage of the Kao product lifecycle	P28
	Energy consumption <input checked="" type="checkbox"/> (all sites)	P29
	CO ₂ emissions across the entire product lifecycle <input checked="" type="checkbox"/> (Kao Group)	P29
	GHG emissions <input checked="" type="checkbox"/> (all sites)	P29
	CO ₂ emissions across the entire product lifecycle <input checked="" type="checkbox"/> (Kao Group in Japan)	P30
	Scope 1 CO ₂ emissions volumes <input checked="" type="checkbox"/>	P30
	Scope 2 CO ₂ emissions volumes <input checked="" type="checkbox"/>	P30
	Purchase volumes for electricity, steam, etc.	P30
	Consumption volumes by fuel type	P30
	Scope 3 CO ₂ emissions volumes (<input checked="" type="checkbox"/> : 1,4,11,12)	P30
	CO ₂ emission during distribution <input checked="" type="checkbox"/> (Japan)	P34
	Comparison of CO ₂ emissions from detergent used per load of laundry	P35
	Ratio of water consumed at each stage of Kao products’ lifecycle	P37
	Water consumption (withdrawal) <input checked="" type="checkbox"/> (all sites)	P39
	Water consumption during product use <input checked="" type="checkbox"/> (Kao Group in Japan)	P39
	Water consumption across the entire product lifecycle <input checked="" type="checkbox"/> (Kao Group)	P39
	COD pollution load <input checked="" type="checkbox"/> (all production sites)	P40
	Water intake amount by source	P40
	Wastewater discharge by destination	P40
	Compliance status with environmental laws and regulations	P41
	Total emissions of chemical substances subject to the PRTR system	P53
	Amounts of handling and emissions of volatile organic compounds (VOC) <input checked="" type="checkbox"/>	P54
	NOx emissions <input checked="" type="checkbox"/>	P54
	SOx emissions	P54
	Amount of generated waste and other unwanted materials <input checked="" type="checkbox"/> (all sites)	P62
	Volume of packaging materials used	P68
	Usage and reduction volume of plastic in refill and replacement product	P70
	2017 business operations and environmental impact (<input checked="" type="checkbox"/> :partial data)	P71
	2017 environmental accounting report	P73-74
Community	Product recall over the last 3 years	P80
	Professional Service Business: Number of food hygiene workshops held each year	P106
	Professional Service Business: Working group activities	P107
Corporate Culture	Targets and Results of BCG permeation measures to employees	P124
	2017 Compliance violations (Kao Group)	P128
	Laws and regulations revised in 2017 for which laws and regulations experts conducted relevant activities	P128
	Number of laws for which laws and regulations experts have been appointed and the number of internal regulations registered as of the end of December 2017	P128
	Sustainable Palm Oil Procurement Guidelines targets and 2017 performance	P138
	Kao Group certified palm oil purchases	P139

Category	Performance data	PDF
Corporate Culture	Sustainable Pulp and Paper Procurement Guidelines targets and 2017 performance	P139
	Social aspect: Number of suppliers monitored and percentage meeting CSR Procurement Standards	P140
	Environmental aspect: Number of supplier plants monitored and percentage meeting CSR Procurement Standards	P140
	Number of companies that participated in the vendor summit	P141
	Average training hours per employee in 2017 (consolidated)	P147
	Expenditure on education and training per employee (consolidated)	P147
	Number of Kao Group employees (regular employees)	P150
	Status of regular employees (Kao Corporation)	P150
	Status of female employees in the Kao Group	P150
	Number of re-employment after retirement (Kao Corporation)	P150
	Kao Group employment rate of persons with disabilities	P151
	Employment systems utilization status (Kao Corporation)	P153
	Deployment of company-wide health promotion activities (2017 results)	P160
	Deployment of health promotion activities at all worksites (2017 results)	P160
	Employee health promotion status (2017 results)	P161
	Mental health care projects implemented in 2017	P164
	Occupational safety: 2017 Targets and performance (Kao Group) (<input checked="" type="checkbox"/> :partial data)	P166
	Occupational safety: Targets for 2018	P167
	“No accidents with lost work days awards” presented in 2017	P168
	Process Safety and disaster prevention: 2017 Targets and results (Kao Group)	P172
Governance	History of initiatives for enhancing corporate governance	P176
	Facility tours and company briefings in Japan in 2017	P180
	Compensation paid to Members of the Board and Audit & Supervisory Board Members in FY2017	P182
	Results of RC Promotion Committee Secretariat Audit (2017)	P189
	Status of international management system certification	P190
	Dialogue with shareholders and investors (2017)	P197
	Total number of shareholders who attended the 112th Annual General Meeting of Shareholders (held in March 2018)	P198
	External recognition (January–December 2017)	P211-212
External evaluation	SRI indexes and evaluations (Link)	P212

Conservation

Community

Corporate Culture

Governance



Enriching lives, in harmony with nature.

Kao Corporation

14-10, Nihonbashi Kayabacho 1-chome, Chuo-ku, Tokyo
103-8210, Japan

<http://www.kao.com>

Published June 2018