

Kao's approach

Our business is made possible by the many benefits of biodiversity across the entire lifecycle. To prevent the loss of biodiversity on the planet, we strive to use those benefits sustainably to prevent exhausting them. We also work to reduce the impacts of our business on biodiversity and promote social activities that lead to the improvement of biodiversity.

Kao's creating value to address social issues

Social issues we are aware of

Based in biological diversity, nature provides a wealth of resources that support the infrastructure of human society. Yet, loss of biodiversity due to human activities has now become a problem across the globe. In the production and procurement of palm oil, paper, and pulp—raw materials used in many kinds of products—not only do irresponsible corporate activities cause environmental damage, marked by deforestation and the loss of biodiversity, but also serious social issues, such as human rights violations of local area residents and farm workers.

Another problem is the fact that the general public is not well informed that the biodiversity loss occurring globally today corresponds closely to our consumption activities. We recognize the vital importance of mainstreaming biodiversity concerns in stopping the loss of biodiversity—one of the Aichi Biodiversity Targets adopted at COP 10 in the Strategic Plan for Biodiversity 2011–2020.

Kao's creating value

With regard to palm oil, paper and pulp, which are the main raw materials essential to our business, we are setting specific targets for both purchasing certified

products and ensuring traceability to the place of origin—activities that contribute to achieving the SDGs. These actions will expand the production of raw materials in ways that do not involve deforestation or human rights violations. Rather, they will contribute to the formation of a sustainable society that maintains the benefits of biodiversity.

In addition, we are carrying out green space conservation activities at all Kao Group sites and plants to preserve biodiversity. Outside the company we engage in activities that promote biodiversity conservation in local communities and support biodiversity education provided by school teachers. We believe such efforts will contribute mainstreaming biodiversity concerns as employees become more aware of the importance of biodiversity and share this passion with their local communities.

Risks related to realization of our vision by 2030

The palm oil used as a raw material by Kao is also a food, while pulp and paper become transformed in innumerable ways for use in people's lives. With global population growth and economic development, the demand for palm oil, paper and pulp is growing worldwide. If we do not give consideration to sustainability, these resources will not last long, and an inability to procure raw materials will call our business survival into question.

Unless we are able to procure sustainable raw materials free of involvement with deforestation or human rights violations, there is a risk that our corporate reputation takes a hit, we lose society's trust and have difficulty continuing to do business.

Opportunities related to realization of our vision by 2030

We defined our Basic Policies on Conservation of Biodiversity in 2011, and declared our commitment to Zero Deforestation Declaration in 2014, taking a leadership role in biodiversity conservation. We are working to procure sustainable palm oil, paper and pulp for long-term business continuity. We are also working to develop substitutes for palm oil, for which demand will only continue to grow. Our focus is on microalgae, which are natural, high-yield sources of non-edible oil. At the same time, we are working to develop the oil production technology needed, with the goal of industrial production. These activities will contribute to the stable procurement of raw materials at low cost.

Contributions to the SDGs



Policies

In 2011 we drafted the Basic Policies on Conservation of Biodiversity based on risk analyses relating to risks to biodiversity in business conducted by relevant divisions within the company in 2010. These basic policies, which are reviewed annually, consist 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.



→ Basic policies on conservation of biodiversity and action policies and examples for each item in the basic policies
www.kao.com/global/en/sustainability/environment/statement-policy/statement/biodiversity-policy/

Framework

We define conservation of biodiversity as an area of environmental conservation in our Responsible Care activities. 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 Promotion Framework.



→ p. 196 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, about these policies, and about the importance of biological diversity, international trends and the significance of conservation efforts that we would be taking based on the policies. Since 2013, we have conducted environmental education each year that includes biodiversity topics for new employees. For employees outside of Japan, we are conducting awareness-raising activities on biodiversity through such venues as the annual Global RC Meeting held in Japan. We have also begun company-wide green space conservation activities that giving consideration to biodiversity. We aspire to deepen understanding of biodiversity among all employees through their active participation in these activities.

Collaboration with stakeholders

At our sites around the globe, 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.

We have participated in the Japan Business Initiative for Biodiversity (JBIB) since its inception in 2008. In recent years, we have become involved in running the organization. We engage in a diverse range of JBIB activities in cooperation with companies in other industries, including holding events such as JBIB Ikimono Days (a participatory event for monitoring living things), and doing research on how companies can contribute to biodiversity conservation.



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

Mid- to long-term targets and performance

2020 mid-term target

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.

Anticipated benefits from achieving mid- to long-term targets

Cost reductions or profit increase

Considerable costs are involved in procuring sustainable raw materials and green space conservation at company sites, but we consider these activities our social responsibility and necessary to make our business sustainable. We expect these activities to boost our reputation and give rise to direct and indirect financial benefits.

Impacts on society

We hope that the process to achieve our mid- to long-term targets leads to the preservation of forests at raw material procurement sites and respect for the human rights of local communities, allowing us to make progress toward achieving a sustainable society.

Targets for 2019

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

1. Promote sustainable raw materials procurement

We will achieve 100% sustainable procurement of palm oil, paper and pulp by 2020. This activity corresponds to our 2020 Zero Deforestation Declaration.

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

Based on the results of the biodiversity surveys of all Kao Group sites with plants conducted in 2018, each site will formulate an action plan and targets, and start implementing them in 2019.

3. Reduce use of copy paper

As an activity that all employees can participate in, we have started reducing the use of copy paper at the Kao Group in Japan. Our 2019 target is a 7% reduction in sheets printed per person compared to 2017.

4. Green procurement

We are promoting green procurement, which places priority on purchasing products with the least possible environmental impact. We have been taking action in this area based on Act on Promoting Green Procurement. We have set our 2019 target green purchasing rate in Japan at 95% or higher.

Performance in 2018

Performance

1. Promote the sustainable procurement of raw materials

In order to achieve our 2020 targets, we promoted confirmation of both zero deforestation in and traceability to the place of origin.



→ p. 139 Corporate Culture > Sustainable and responsible procurement

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

We introduced global biodiversity assessment criteria, and implemented biodiversity surveys for all global production sites.

3. Reduce use of copy paper

The number of sheets printed per person has been reduced by 10% compared to 2017 and has already achieved the 2019 target.

4. Green procurement

Our green procurement rate in Japan was 87%.

Reviews of performance

It is a great achievement that we now have a system in place to manage the progress of biodiversity activities at each site and in each division.

Our initiatives

Understanding relationships between business and biodiversity

Kao completed an ecological footprint assessment in 2013. The assessment found that the majority of the environmental impact from our business activities resulted from: carbon sinks, land on which oilseed crops were grown, cattle pastures, forests grown for pulp and paper, and fishing grounds affected by surfactants*.

* BIOCITY. 2013, 56, 82.

Reducing the impact of business on biodiversity

To reduce our impact on biodiversity, we are continually working to (1) reduce CO₂ emissions associated with business activities, (2) reduce the use of raw materials and (3) switch to raw materials with lower environmental impact.



→ p. 35 Conservation > CO₂

→ p. 139 Corporate Culture > Sustainable and responsible procurement

Technology development for valued use of the benefits of biodiversity

We are continuing to develop technologies that use natural, non-edible oil sources as alternatives to palm kernel oil, for which demand is expected to increase in the future. We are developing oil production technology that utilizes microalgae, which can be obtained in high-yields, as well as Bio IOS, which has made it possible to utilize biomass residue as an activator.

Compliance with international agreements

We are promoting business activities in accordance with international agreements and related national laws on biodiversity determined by the Convention on Biological Diversity and its contracting parties, Conference of the Parties.

Business activities with consideration for the local ecosystem

Introducing global biodiversity assessment criteria

In addition to the sustainable procurement of our main raw materials of palm oil, paper and pulp, we are committed to activities that take into account the local biodiversity at each of our business sites around the world.

While there are several certification systems in Japan that assess corporate activities aimed at conserving biodiversity, there are almost no such certification systems overseas, and a common global system of assessment has not yet been created. For that reason, we introduced our own biodiversity assessment criteria in 2017, based on the Guidelines for Sustainable Business Sites created by Japan Business Initiative for Biodiversity (JBIB), which is adopted to the Association for Business Innovation in harmony with Nature and Community (ABINC) certification, one of the Japan-based certification systems.

In 2018, we conducted an evaluation of all Kao Group sites with plants, and identified the current level of such activities at each site and clarified points for improvement. During the evaluation process, many excellent ideas and activities from each site emerged and were shared within the group. In 2019, based on the results of this evaluation, each site will formulate an action plan and targets and make plans to carry out specific activities.

Kawasaki Plant acquires third-party certification (Association for Business Innovation in harmony with Nature and Community® certification—ABINC certification)

The Kawasaki Plant, located in a corner of the Kawasaki Coastal Industrial Area, supplies our main products such as *Attack* and *Humming* to the Tokyo metropolitan area. There are very few green areas belonging to the town or businesses in this district.

When the Kawasaki Plant purchased nearby land and built a new plant in 2000, it piled up the excavated soil and transplanted the trees that were scattered around the site to create a green space about 7,000 m² in size. In the more than 15 years since then, as a result of maintaining the area in its natural state without interference, it grew into a natural woodland with a mix of plants and trees of varying heights. A walking path was put in to give employees a quiet, densely wooded area to relax in that one would never expect to see in a highly industrialized area.

To better conserve local biodiversity, the forest was thinned so that sunlight could penetrate, and the thinned wood was reused for chairs and “ecostacks” (wood piles for insects and other creatures). We planted flowers, fruit trees and plants that wild birds like, and set up birdhouses for wild birds and stone structures with crevices that could become hiding places for little creatures.

We then asked a company specializing in environmental research to conduct a biological survey, which confirmed the existence of 176 species of plants, 11 species of birds and 56 species of insects. Above all, everyone surprised that this urban oasis had become a habitat of the Chinese windmill in which grew patches of Dutchman’s pipe, the grass upon which the butterfly larvae feed. Currently, our

employees are playing a leading role in protecting the green space as a breeding ground for these creatures, rarely found in an urban setting.

These steady and thorough ongoing activities were recognized with the Kawasaki Plant acquiring in 2018 ABINC certification from the Association for Business Innovation in harmony with Nature and Community (ABINC).



Kawasaki Plant and green space.

Insects, birds and plants that inhabit the Kawasaki Plant grounds



Chinese windmill (adult)



Chinese windmill (larva) and Dutchman's pipe (feed grass)



Atractomorpha lata (grasshopper)



Common skimmer (dragonfly)



Japanese tit



Brown-eared bulbul



Skunkvine



Wax myrtle

Wakayama Plant participation in the Enterprise Forest Project

The Wakayama Plant has been participating in the Enterprise Forest Project organized by Wakayama Prefecture since 2007. Every year many employees and their families from the Wakayama Plant take part in such activities as planting local of species trees and weeding in a mountain forest area belonging to Kimino-cho, which is the source of the Kino River and the water used by the plant. Thanks to ten years of these activities, a healthy forest has been raised, and in 2017 we added a new activity site known as the Kao Forest Oishi.

As a new initiative in 2018, employees are raising seedlings at home to grow saplings such as Honshu maple and Japanese nutmeg that were collected in the activity area for the purpose of protecting the genes of local flora, and replanting those seedlings in the area. By November 2018 more than 100 people had participated in the afforestation activity.



Employees and others who participated in tree-planting at the Kao Forest Oishi.

Kashima Plant receives award at Low Carbon Cup 2018

Low Carbon Cup is a contest where students, citizens, companies, and local governments all over Japan present efforts they have taken toward achieving a low-carbon society. In 2018, 1,167 groups entered and 30 groups reached the finalist stage.

The Kashima Plant participated in Low Carbon Cup 2018 as a representative of Ibaraki Prefecture after having received the Grand Prix Award at Cool Earth Ibaraki Contest 2017, a conference for announcing global warming prevention activities engaged in by citizens and companies in Ibaraki Prefecture. We introduced “planned activities to create green spaces with a 50-year consideration of the future”—activities that have been going on since the plant was built in 1980. The plant’s steady efforts to revive a forest rich in biodiversity on sandy soil and tree-planting efforts to reduce carbon in the atmosphere were commended with an award.



Low Carbon Cup 2018.

Raising awareness among employees and sharing information

Participation in JBIB Ikimono Days at the Kawasaki Plant and Kashima Plant

Ikimono Days is a project sponsored by JBIB for participating companies to carry out animal and plant monitoring and afforestation activities in their company’s own green space and nearby green spaces with the aim of “mainstreaming biodiversity concerns”—set as one of the COP 10 Aichi Biodiversity Targets. Kao was involved in both running the project and its related activities, and the Kawasaki Plant and Kashima Plant participated in the event.

The Kawasaki Plant held an event in May primarily for new employees, but also including the plant manager and staff involved in environmental protection, with 41 people participating in total. On the day of the event, experts on biological research were invited in to give lectures on the importance of biodiversity and the significance of companies working to conserve biodiversity, after which we carried out a biological survey. The participants had the chance to experience for themselves what living creatures inhabited the green spaces they always saw in passing, such as the Japanese gecko, and from time to time they could be heard shouting about what they had found. It was a meaningful day, giving everyone an opportunity to think about biodiversity through the event.



Kawasaki plant employees listening to an expert’s explanation.

Tree-planting activities at the Kao (Taiwan) plant and participation in a seedling distribution event by a local NGO

On government-owned bare land in Hsinchu County, where the plant is located, 51 people from Kao (Taiwan) joined in planting 100 seedlings of trees native to Taiwan with the cooperation of experts. A total of more than 300 trees will be planted over the next three years. On the same day as the tree planting, 51 people from Kao (Taiwan) participated in a local NGO program to distribute 1,000 seedlings of plants native to Taiwan to tourists at nearby Hsinchu HSR Station.

These activities were featured in a total of 52 reports by 38 media outlets and became a big topic in Taiwan. Since then, we have been promoting various activities that promote biodiversity conservation, such as creating a composting system that uses local waste at the above-mentioned tree-planting sites.



Tree-planting activities



→ Kao (Taiwan) Biodiversity Conservation Activity Videos
www.youtube.com/watch?v=Hnj7YAvWY2M

www.youtube.com/watch?v=ZdgHVRBSrBQ&feature=youtu

Kao Corporation (Spain) (KCSA) produces materials for learning about biodiversity

In 2018, KCSA produced materials for learning about biodiversity based on the results of a biodiversity survey at its three plants. The materials are used effectively for explaining biodiversity to plant visitors and for raising awareness among employees.

Materials produced

- A detailed booklet on the plant's ecological network, non-native species, the water cycle, etc.
- A pamphlet that introduces highlights about the plant from the perspective of biodiversity.
- A poster with photographs of animals such as wild birds and insects that inhabit the plant grounds.



Employee volunteers in Post Tsunami Monitoring Project

In 2018, 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.

Collaboration with people outside the company

Kao Creating Forests for Everyone program

In March 2018, Kao designated a total of 15 groups, comprising 7 groups involved in forest creation and 8 groups involved in environmental education, as recipients of fiscal 2018 subsidies. To date, a cumulative total of 462 groups have received support through the program, with 410,000 citizens participating in the activities.

FURUSATO Environment Conservation Project in Northern Thailand

In the five years from 2012, 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. The second phase of the project began in April 2019 and will last for three years. During this time we plan to follow up on the reforestation to create employment and obtain relevant technologies for local residents.

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

A total of 10 teachers participated in five projects in 2018. 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, 158 teachers have participated in 80 projects.