

FOR IMMEDIATE RELEASE

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Kao Releases Progress Reports on its ESG Strategy—the Kirei Lifestyle Plan

TOKYO, June 23, 2021 — Kao Corporation, a Japan-based Group whose brand portfolio includes *Attack*, *Bioré*, *Goldwell*, *Jergens*, *John Frieda*, *Kanebo*, *Laurier*, *Merries*, and *Molton Brown*, released progress reports on its ESG (Environmental, Social and Governance) strategy, the Kirei Lifestyle Plan, which was first announced in April 2019. Details of its progress is released in the “Kao Sustainability Data Book Kirei Lifestyle Plan Progress Report 2021.” It is available in English on Kao’s website from today.

Kao Sustainability Data Book Kirei Lifestyle Plan Progress Report 2021

<https://www.kao.com/global/en/sustainability/pdf/>



Over the past 130 years, Kao has worked to help consumers lead fulfilling lifestyles. For instance, in 2018, Kao outlined its solution with regards to the social issue of plastic packaging with “Our Philosophy and Action on Plastic Packaging.” In April 2019, Kao established the “Kirei Lifestyle Plan,” which is an ESG strategy that includes 19 leadership actions to achieve a sustainable and desirable way of living. The Japanese word ‘kirei’ describes something that is both clean and beautiful. For Kao, Kirei not only encapsulates appearance, but also attitude—to create beauty for oneself, other people, and for the world around us. In September, Kao announced its Innovation in Reduction and Innovation in Recycling initiatives to promote plastic resource circulation in society. In collaboration with local and national governments, enterprises, universities, as well as many individuals, Kao is implementing initiatives in line with the Kirei Lifestyle Plan, details of which can be found below. In addition, the Kao Group Mid-term Plan 2025 (K25) proclaims “Sustainability as the Only Path” as its vision. By contributing to an enriched sustainable world and growing its

businesses through proactive engagement in ESG activities and investment, the Kao Group aims to be an essential company in the future.

One of the notable medium- to long-term targets for Kao's "Responsibly Sourced Raw Materials" initiative is the utilization of 100% certified-sustainable palm oil for consumer products and industrial purposes by 2025. Moreover, Kao has announced its intention to complete traceability confirmation for palm oil smallholders by 2025. This new goal reflects Kao's continuing promotion of activities for sustainable raw materials procurement.

Kao's ESG efforts have been recognized and validated by several external bodies. The CDP, a leading international NPO, gave Kao its highest evaluation with their inclusion on the A List, based on a global survey of business enterprises. Kao was recognized for their initiatives concerning climate change, forest and water security, Kao was also included on the Dow Jones Sustainability World Index for the seventh consecutive year, which is among the world's most renowned socially responsible investment (SRI) indices. Furthermore, Kao was selected for inclusion in the World's Most Ethical Companies[®] 2021 list by U.S. think tank Ethisphere Institute. This marks the 15th consecutive year for inclusion on the list, an achievement that is a KPI for executive officer compensation at Kao.

- Kao Rated Triple A by CDP for Global Environmental Leadership
<https://www.kao.com/global/en/news/sustainability/2020/20201209-002/>
- Kao Named to the Dow Jones Sustainability World Index for Seventh Consecutive Year
<https://www.kao.com/global/en/news/sustainability/2020/20201120-001/>
- Kao Included in the World's Most Ethical Companies[®] List for a Record 15th Consecutive Year
<https://www.kao.com/global/en/news/sustainability/2021/20210224-001/>

To mark the release of the Kirei Lifestyle Plan Progress Report, Dave Muenz, Executive Officer in charge of Kao's ESG Division, notes that: "2020 was a challenging year with the entire organization adapting to the myriad of changes triggered by the COVID-19 pandemic. However, this did not hinder but rather accelerated our commitment to ESG. Kao rapidly responded to the urgent need for hygiene products across its markets, including substantially increasing our production capabilities of hand sanitizers in Japan by thirtyfold. Our efforts to minimize plastic waste saw the launch of *MyKirei by KAO* in the US with our innovative thin air-in-film packaging. Addressing climate change continues to be one of our top priorities, and Kao will pursue its RE100 and CO₂ reduction goals aligned to SBTi 1.5 degrees scenario in order to achieve our ambitious targets of Carbon Zero by 2040 and Carbon Negative by 2050. As the company works its way into the first year of our mid-term business strategy—K25—, the Kirei Lifestyle Plan will continue to form our ESG strategy and serve as the cornerstone of making Kao an indispensable partner of a sustainable society and the people that we provide for."

Key Leadership Actions in the Kirei Lifestyle Plan

Sustainable Lifestyle Promotion

Kao is enabling people to live more sustainable lifestyles through information, services, and products that save precious resources such as energy and water.

● Use 100% recycled plastic for its bottles in Japan

In April 2021, Kao began using 100% recycled plastic (PET) packaging* for its new range of *Attack ZERO* laundry detergent products. Kao intends to switch over to using 100% recycled PET for household and personal care packaging by 2025 in Japan.

This activity will also contribute to Kao's leadership action of Zero Waste.

* Excluding colorants, label film, pumps, and caps.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2021/20210331-002/>



Purpose Driven Brands

Every Kao brand will have a purpose that offers solutions to social issues within the communities or societies it touches.

● Launches *MyKirei by KAO*, a brand embodying the Kirei Lifestyle

In April 2020, Kao began sales of *MyKirei by KAO* in the U.S.—a brand that embodies the Kirei Lifestyle. The brand's shampoo, conditioner, and hand wash were offered for the first time in “Air in Film Bottle” technology. By inserting air in the outer layer of film material, the packaging expands to stand on its own, reducing plastic usage by 50%.

This activity will also contribute to Kao's leadership actions of Zero Waste and Sustainable Lifestyle Promotion.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2020/20200407-001/>



●e'quipe launches *athletia* brand with “clean beauty” approach

In February 2020, e'quipe, a Kao Group company, launched its *athletia* brand. The brand targets anyone with an active lifestyle, regardless of age or gender. The brand incorporates a “clean beauty” approach, with regards to its raw materials and ingredients.

This activity will also contribute to Kao's leadership actions of Zero Waste and Sustainable Lifestyle Promotion.

➤ To learn more, please visit:

<https://www.eqp.co.jp/eng/info191127/>



Transformative Innovation

Pursue Essential Research to unleash breakthrough innovations that help realize more sustainable lifestyles by solving social issues and easing people's pains.

●C-HPC—an award-winning environmentally friendly material

C-HPC (cationic hydroxypropyl cellulose) is a polymer that, when added to hair care products such as shampoo, stabilizes and thereby augments the amount of foam, disperses oils such as silicone uniformly, makes hair easier to style, and absorbs sebum, which reduces hair adhesion. Kao has developed and put into practice this polymer for over 15 years now, after it spent years developing a production process that creates a small environmental impact. It is environmentally friendly as it is derived from cellulose—a plant-based material—rather than petroleum, and when utilized, does not contribute to CO₂ emissions. Moreover, since it is inedible, it offers the advantage that its production does not compete with that of foodstuffs. These research results have been recognized by specialist organizations, and received two awards during 2020. These were the KCS Award in Environmental Technology from The Kinki Chemical Society in Japan, and an award from The Cellulose Society of Japan.

●Offering LUNAFLEX composite high-performance resin

Kao successfully modified biomass-derived cellulose nanofiber (CNF) and blended it with resins for various applications. Advantages include increased strength and dimensional stability (decreased thermal expansion rate) even in small amounts. In June 2020, Kao began offering this modified CNF-formulated high-performance resin as the LUNAFLEX series, which can be customized for specific purposes. This material is used to make carbon fiber reinforced plastic, various paints, adhesives, and fabricated materials for electronic components. Improvements in physical properties gained by blending modified CNF contribute greatly to reduced resin usage. This enables downsizing and weight reduction, and contributes to efficient resource utilization.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/rd/2020/20200625-001/>

●Hay bacillus-based protein production technology moves toward infectious disease applications

In October 2020, Kao began research into the application of protein production technology that uses the hay bacillus (a species of bacteria closely related to fermented beans) to the production of proteins for measures with effectiveness against infectious disease, such as antibodies. The production of VHH antibodies was done in collaboration with Kao, Kitasato University, and Epsilon Molecular Engineering Co., Ltd., and is capable of neutralizing the novel coronavirus. In addition, Kao succeeded in mass-producing proteins and has been developing new drugs for malaria with the international non-profit organization PATH, and the University of Massachusetts Medical School (UMMS) as part of an initiative spearheaded by the Global Health Innovative Technology (GHIT) Fund.

Responsibly Sourced Raw Materials

Kao is sourcing raw materials in a way that protects natural resources, the environment, and human rights through supply chain traceability and collaboration with suppliers.

●Launches program to help palm oil smallholders in Indonesia

In October 2020, three leading companies in the palm oil industry—Kao, Apical Group, which is engaged in oil production and sales, and Asian Agri, a plantation company—announced the launch of the SMILE (Smallholder Inclusion for better Livelihood & Empowerment) program, aimed at building a sustainable palm oil supply chain. The program is helping Indonesian palm oil smallholders enhance productivity and acquire sustainability certification for their palm oil. This activity will also contribute to Kao's leadership action of Respecting Human Rights.



➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2020/20201014-001/>

Decarbonization

We will work toward the goal of reducing CO2 emissions to zero by 2040, and becoming carbon negative by 2050 to combat global warming. Kao aims to reduce emissions in our own business activities, as well as offer more sustainable products to our customers and consumers that reduce their carbon footprint. Through technologies such as carbon fixation, we will continue to take an active role in reducing global warming through innovation, and offer products and services that contribute to realizing a decarbonized society.

●New decarbonization targets aim to make Kao carbon zero by 2040 and carbon negative by 2050

In May 2021, Kao established new targets aimed at realizing its goal of creating a decarbonized society. The new targets aim to achieve carbon zero status by 2040 and carbon negative status by 2050. To achieve these targets, Kao acquired 2.0°C target certification from the Science-based Targets initiative (SBTi) in 2019, and have changed its target in accordance with the SBTi 1.5°C target. In addition, Kao has signed up



to the “Business Ambition for 1.5°C” corporate pledge, launched by the UN Global Compact, the SBTi, and We Mean Business, to encourage enterprises to set science-based targets aimed at limiting global temperature rise to 1.5°C. In addition, Kao has joined RE100, an international initiative encouraging enterprises to commit to 100% renewable electricity.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2021/20210519-001/>

●Transitioning to 100% purchased renewable electric power to accelerate decarbonization

To reduce greenhouse gas emissions, Kao has been installing solar power generating facilities for its own use, and promoting the use of renewable energy sources for electric power it purchases. Kao’s goal was to transition to 100% renewable electric power in Japan by 2025 and globally by 2030. However, in April 2021, to accelerate decarbonization, the company announced its decision to move the target



years forward to 2023 for Japan, and 2025 globally. Kao’s production bases for its consumer products in the U.S. and Europe has already reached a renewable energy ratio of 100% that the company purchases.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2021/20210415-001/>

●Kao and Lion begin collaboration on smart logistics initiative

In December 2020, Kao and Lion Corporation began participating in the Smart Logistics Service project, part of the Strategic Innovation Promotion Program (SIP) led by Japan’s Cabinet Office to promote establishment of new logistics platforms. The companies have initiated two-way transportation between their respective operating sites, aimed at optimizing their overall supply chains and reducing CO₂ emissions.

➤ To learn more, please visit:

Zero Waste

Besides reducing the usage of raw materials and plastic as far as is possible while ensuring that product users can use the products properly, we are also promoting the reuse and recycling of used packaging and unused materials and products, and working actively to promote a resource-circulating society.

●Collaboration with Lion on recycling initiatives

In September 2020, Kao announced that it would be collaborating with Lion Corporation, one of Japan's leading consumer products companies, on film packaging recycling, raising recycling awareness, and innovative recycling technologies. Since 2015, Kao has been implementing the RecyCreation



upcycling project to generate new system and lifestyle solutions for the realization of plastic resource circulation in society. It is also working together with local residents and partner firms to implement field testing for used refill packs so that they can be processed into recycled plastic. This activity will also contribute to Kao's leadership action of Sustainable Lifestyle Promotion.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2020/20200929-002/>

<https://www.kao.com/global/en/news/sustainability/2020/20201124-001/>

●First use of highly durable asphalt modifier from waste PET

In January 2021, NEWTLAC 5000, an asphalt modifier made from discarded PET waste materials through Kao's proprietary processing, was used for the first time to pave a drugstore parking lot in Japan. In March 2021, it was used in the resurfacing of a city road in central Japan.



NEWTLAC 5000 promotes the use of waste PET, and adding this material to asphalt pavement in a proportion of only 1% makes it five times more durable. Moreover, enhancing pavement strength reduces the amount of dust produced by the pavement.

This activity will also contribute to Kao's leadership actions of Decarbonization and Air & Water Pollution Prevention.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/rd/2021/20210205-002/>

●Conducting tests with Kyoto University to recycle used diapers

In January 2021, Kao and Kyoto University began verification testing a system that recycles disposable diapers. Through this field testing, in collaboration with Saijo City, in western Japan, Kao and Kyoto University will be contributing toward reducing CO₂ emissions through the conversion of used disposable diapers into carbon material.

This activity will also contribute to Kao's leadership action of Decarbonization.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2021/20210114-001/>

●Participating in a recycling project of single-use plastic

Since September 2020, Kao has been engaged in a plastic recycling project launched by the Tokyo Metropolitan Government. The project involves cross-industry cooperation with other business enterprises and NPOs, with the aim of realizing a recycling system that turns the majority of packaging back into a similar product as the original.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2020/20200902-001/>

●*Molton Brown* starts refillable program for hand wash

In August 2020, *Molton Brown*—a luxury British fragrance brand known for its bath and body products—announced its Hand Refill collection with a glass bottle that can be regularly replenished. The plastic used to manufacture a single refill pouch is 80% less than that used for two of the standard 300ml bottles, and will cut single-use plastic and the amount of plastic waste.



This activity will also contribute to Kao's leadership action of Sustainable Lifestyle Promotion.

➤ To learn more, please visit:

<https://www.kao.com/global/en/sustainability/topics/sustainability-20200803-001/>

●“Raku-raku Switch” helps save on plastic use

Launched in Japan in September 2020, *Bioré u The Body—Body Lotion for Wet Skin* is the first product to use Kao's new “Raku-raku Switch,” which uses around 50% less plastic than conventional pump bottles. This device attaches to a refill pack made of plastic film, and allows liquid to be dispensed directly from the package.

This activity will also contribute to Kao's leadership action of Sustainable Lifestyle Promotion.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2020/20200826-001/>



●Cooperation agreement with Wakayama City to implement the SDGs

In October 2020, Kao signed a cooperation agreement with Wakayama City, in western Japan, for the implementation of the United Nations' Sustainable Development Goals (SDGs) within their local community. As part of the agreement, we are conducting a survey of marine plastic waste that is washed ashore on the coast of Wakayama City. Discussions are underway regarding how to recycle this waste plastic for use in the manufacturing of tables and chairs, and for use in the production of a road strengthening agent.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2020/20201021-001/>

Water Conservation

Kao is reducing water use across all of its businesses by adopting water-efficient formulations and production methods.

●Nationwide cleanliness and water-saving initiatives in collaboration with China's Ministry of Ecology and Environment

In September 2020, Kao (China) Holding Co., Ltd., a China-based group company of Kao Corporation, began promoting "China's Nationwide Cleanliness and Water-saving Initiatives" in collaboration with the Center for Environmental Education and Communications of China's Ministry of Ecology and Environment. The joint activity, which is



entering its ninth year, seeks to promote sustainable social development by raising awareness of the importance of environmental protection among university students and the general public under the campaign slogan: "Save 10,000 liters of water annually per household." The campaign sub-theme was "Youth Initiatives for Cleanliness and Beauty." Environmental protection promotion ideas were sought online from universities across China, and activities were supported.

➤ To learn more, please visit:

<https://www.kao.com/global/en/news/sustainability/2020/20200918-001/>

Air & Water Pollution Prevention

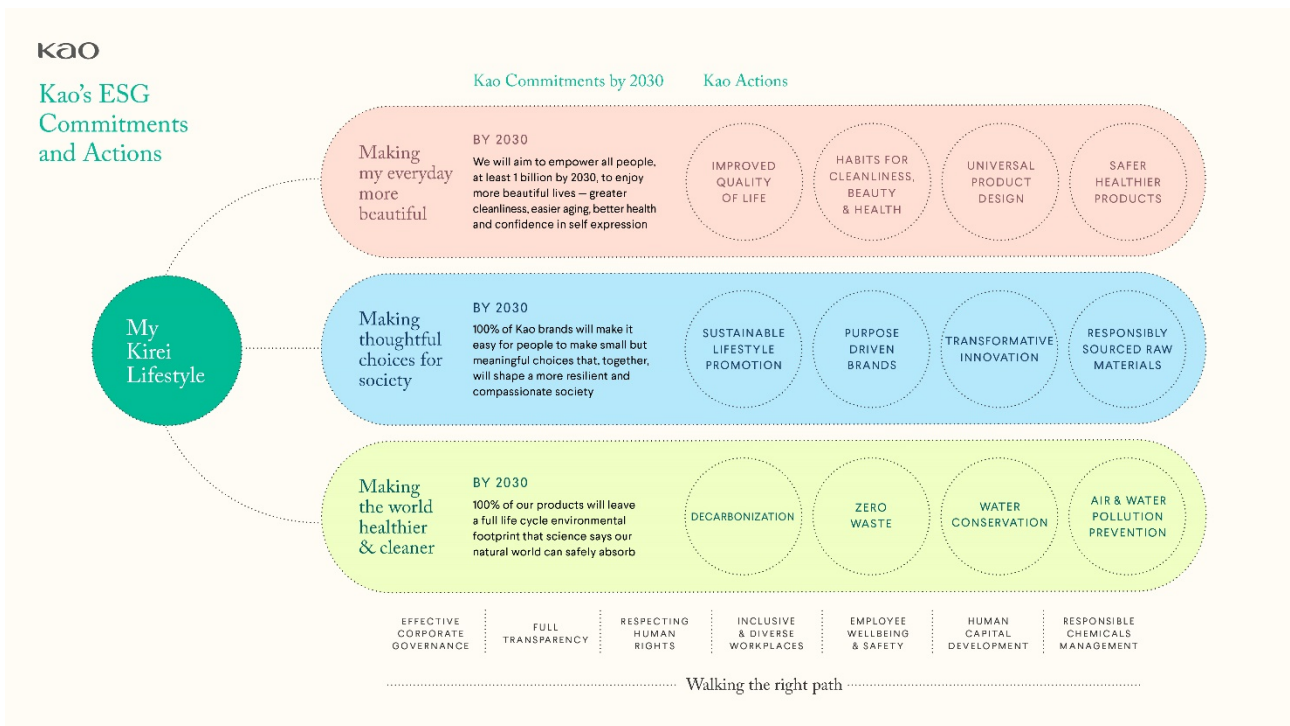
Protect human health and the natural environment by preventing pollution of water and air through the manufacture or use of our products.

●Development of alkali-free *Smash* commercial detergent contributes to water pollution prevention

In September 2020, Kao Professional Services developed *Smash*, a detergent suited for kitchen oil stains. Alkali detergents used in restaurant kitchens to remove stubborn oil stains are highly effective compared to neutral detergents. However, to prevent water pollution, the detergent pH must be adjusted to neutral before it is discarded. *Smash* is equally effective compared to alkali detergents, but can be used safely thanks to its neutral formula. It is also gentle on cooking utensils and equipment, and contributes to water pollution prevention.



■Kao's ESG Strategy Kirei Lifestyle Plan



About the Kirei Lifestyle Plan

Over the past 130 years, Kao has worked to improve people’s lives and help them realize more sustainable lifestyles—a Kirei Lifestyle. The Japanese word ‘kirei’ describes something that is clean, well-ordered and beautiful, all at the same time. In the Kirei Lifestyle Plan, Kao lays out its ESG (Environmental, Social and Governance) strategy that is designed to deliver this vision of a gentler and more sustainable way of living. By 2030, Kao aims to empower at least 1 billion people, to enjoy more beautiful lives and have 100% of its products leave a full lifecycle environmental footprint that science says our natural world can safely absorb.

For more information please click <https://www.kao.com/global/en/sustainability/>

About Kao

Kao creates high-value-added products that enrich the lives of consumers around the world. Through its portfolio of over 20 leading brands such as *Attack*, *Bioré*, *Goldwell*, *Jergens*, *John Frieda*, *Kanebo*, *Laurier*, *Merries*, and *Molton Brown*, Kao is part of the everyday lives of people in Asia, Oceania, North America, and Europe. Combined with its chemical division, which contributes to a wide range of industries, Kao generates about 1,400 billion yen in annual sales. Kao employs about 33,000 people worldwide and has 130 years of history in innovation. Please visit the Kao Group website for updated information.

<https://www.kao.com/global/en/>

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<Related Information>

■Kao Sustainability Data Book Kirei Lifestyle Plan Progress Report 2021

<https://www.kao.com/global/en/sustainability/pdf/>

■Kao launches new ESG Strategy “Kirei Lifestyle Plan” to support consumer lifestyle changes

<https://www.kao.com/global/en/news/sustainability/2019/20190422-001/>

■Kao’s New Challenges for the Future: Accelerating Purposeful Business Commitment with ESG

<https://www.kao.com/global/en/news/business-finance/2019/20190926-001/>

■Our Philosophy & Action on Plastic Packaging

<https://www.kao.com/global/en/sustainability/topics-you-care-about/eco-friendly-products-plastic-packaging/>