

FOR IMMEDIATE RELEASE

September 29, 2021

Kao Announces Its Participation in the Kobe Plastic Next: Joining Forces to Recycle Refill Packs, a Project Aimed at Horizontal Recycling of Refill Packs

On October 1, 2021, Kao Corporation will participate in Kobe Plastic Next: Joining Forces to Recycle Refill Packs. In this project, retailers, consumer products manufacturers and recyclers (resource recycling business operators) collaborate with the city of Kobe to recycle used refill packs of household and personal care items, aiming to achieve circularity in society.

The city of Kobe will encourage every resident of Kobe to recycle used refill packs from detergents and shampoo products, etc. by dropping them off in collection boxes placed in 75 locations at retail outlets throughout the city. By leveraging “return trip operations” from retail outlets and cooperation of existing waste collection operators, used refill packs can be collected effectively with minimum environmental impact. Recyclers and manufacturers together will work to achieve horizontal recycling to film-type packaging from the collected refill packs, as well as turn them into recycled products that are useful in daily life. Kobe and 16 companies and organizations will be collaborating to realize circularity of resources. The project aims to set an example to help promote similar activities across Japan.

Please see the Kobe Plastic Next press release for more information.

(<https://kobeplasticnext.jp/pdf/press-tsumekaepackrecycle-eng210929.pdf>)



Kobe Plastic Next
Joining Forces to Recycle Refill Packs

To address the current major social issue of plastic waste, Kao has significantly reduced the amount of plastic it uses since the 1990s, by making packaging smaller and more compact by concentrating products, and developing and expanding the use of refill packs and reusable parts.

Furthermore, Kao has been promoting RecyCreation from 2015. RecyCreation combines the concepts of recycle and creation, and aims to create new value by recycling used refill packs into more enjoyable and better items, using technologies, knowledge and ideas.



Throwing it away after use. We want to change this common practice.

RecyCreation activities involve recycling used refill packs that are collected locally into versatile blocks called *Okaeri-blocks* in collaboration with consumers using household and personal care items, various local governments, NPOs and enterprises. Kao will be launching the same scheme within the Kobe project and promote community development using *Okaeri-blocks* with the city's residents.



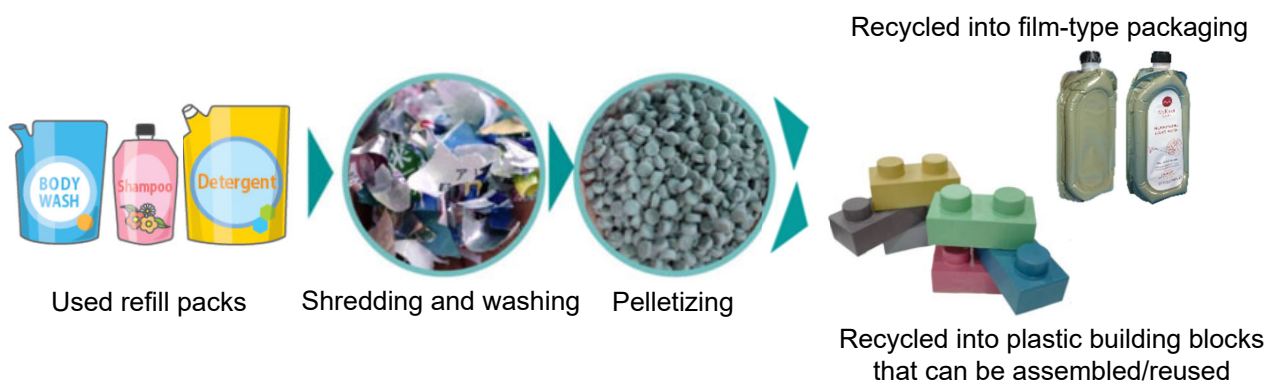
(Kamakura City) Enoshima Electric Railway produced with *Okaeri-blocks*



(Kitami City) Curling stone being produced with *Okaeri-blocks* at a size that's 100 times larger

Kao also launched a collaboration with Lion Corporation in September 2020, in which a recycling field test was started at the Hikifune Store of Ito-Yokado Co., Ltd. in November. The latest Kobe project in which Kao is taking part is an initiative that came into shape as a result of wider cooperation led by CLOMA (Japan Clean Ocean Material Alliance). The alliance was established to accelerate innovation with public-private partnerships to resolve the marine plastic waste issue.

Through collaboration with partners, Kao aims to effectively collect used refill packs and realize horizontal recycling for reuse in film-type packaging.



■Aiming at Horizontal Recycling of Refill Packs

Refill packs can significantly reduce the amount of plastic used compared to rigid containers and are made from composite materials with many layers rather than a single raw material, such as PET bottles, in order to protect its contents from heat, moisture and ultraviolet rays with a thin film. In doing so, the different varieties of recycled ingredients make inhomogeneous plastic, which is difficult to reuse in film-type packaging under present circumstances.

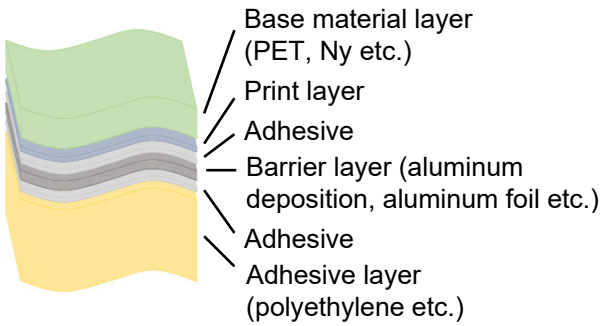
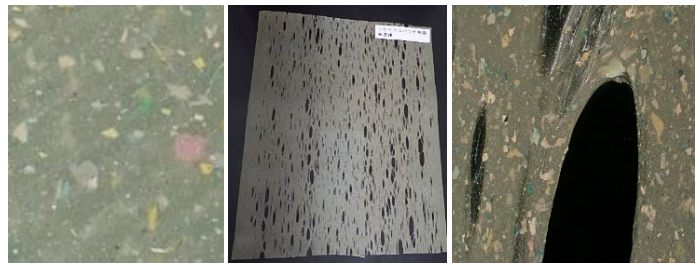


Image of film cross-section



Inhomogeneous recycled film

Kao aims to improve the rate of recycling and achieve horizontal recycling by developing and verifying recycling technology at its pilot plant for film packaging recycling set up at Wakayama Research Laboratories in June 2021. The plant will examine effective processes for separation and collection from consumers and easier-to-recycle packaging designs.



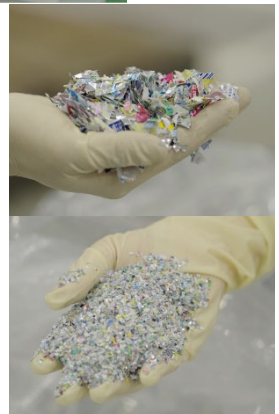
Collected used refill packs



Metal detector



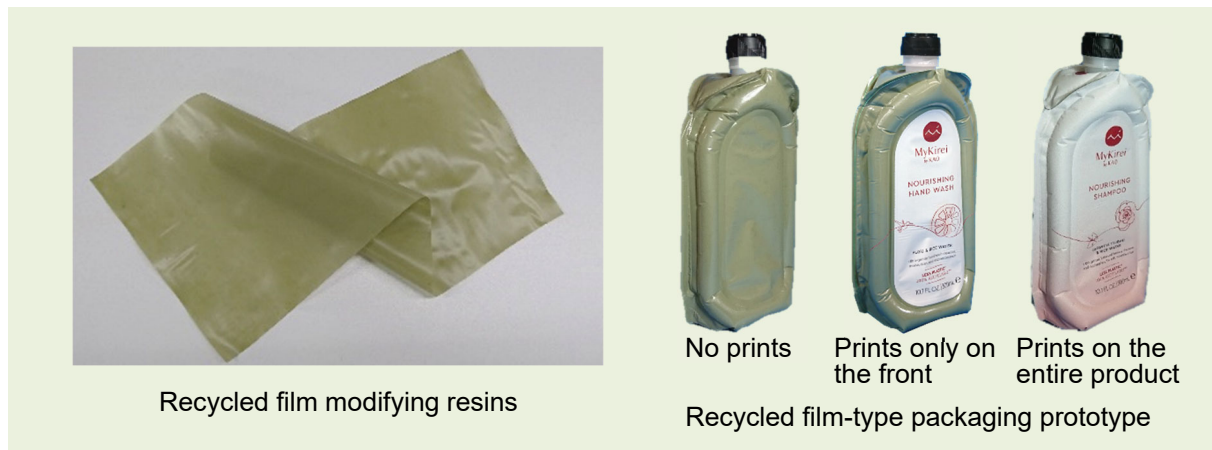
Shredding and washing machine
Pulverizer



Inflation molding machine



Screw extruder



The Kao Group’s duty as an enterprise offering products used in daily life is to work actively to reduce the environmental impact of its products throughout their overall lifecycle. In April 2019, Kao established its ESG strategy, the Kirei Lifestyle Plan, which includes 19 leadership action themes. The Kao Group is strengthening initiatives to benefit the environment and society.

With the goal of zero waste, Kao plans to implement and disseminate recycled film-type packaging through this initiative, making the world healthier and cleaner.

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>

2020-11-24

Kao and Lion Begin Collaboration on Recycling Field Testing

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

2020-09-29

Working Toward Resource Circulation for Plastic Packaging Kao and Lion Begin Collaboration on RecyCreation Activities

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

2021-06-23

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

<https://www.kao.com/global/en/news/sustainability/2021/20210623-001/>

2020-04-23

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

<https://www.kao.com/global/en/news/sustainability/2020/20200423-001/>

2019-09-26

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/>

2019-04-22

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

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

The ‘RecyCreation’ initiative

<https://www.kao.com/global/en/sustainability/eco-approach/waste-disposal/recycreation/>

Our Philosophy & Action on Plastic Packaging

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

Sustainability

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