News Release

Kao Corporation



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Progress Report on Field Testing of Collecting Plastic Containers for Personal and Home Care Products Using a Local Government Collection Route

Aiming to Reduce Costs and Secure Sufficient Material to Recycle

From April 2023 to March 2024, Kao Corporation worked with general recycling business Nakadai Co. Ltd. to conduct field testing for recycling plastic packaging used for personal and home care products in the Japanese city of Satsumasendai, Kagoshima Prefecture. The one-year program, targeting approximately 1,300 households in the city, collected the packaging using the city's existing recycling route. Recycling of PET plastic beverage bottles via local government routes for recyclables is already well established, but this field-testing scheme for personal and home care product plastic containers is the first of its kind*. Several similar programs now in effect aim to find answers to the issues experienced in field testing of obtaining sufficient quantities of materials to recycle and reducing the cost of collection to set up a sustainable collection system. Field testing in Satsumasendai is being conducted as part of the Circular Park Kyushu project for a sustainable future and has been incorporated into the city's SDGs Innovation Trial Support Project. Results of field testing and prospects for the future are described below.

* According to Kao data as of April 2023.

News Release from April 2023

<u>Field Testing of a New Collection Scheme in Japan Using Local Government Collection Route to Achieve Horizontal Recycling of Plastic Containers for Personal and Home Care Products</u>





Used plastic containers left in a collection box (left) are stored at a city-owned collection point (right), from where Nakadai collects them once a week for quantity and quality analysis

Description of the Field Testing

Satsumasendai City currently collects recyclables (washed and dried plastic containers for personal and home care products, food packaging and colored food trays) once or twice a month. To facilitate participation, all plastic packaging for personal and home care products, with the exception of tubes, is collected and can be left at local collection points where consumers already drop off other recyclables.

Period	April 2023 to March 2024 (1 year)
Place	Satsumasendai City, Kagoshima Prefecture
Households	Approx. 1,000 households
targeted	
Items collected	Plastic containers for personal and home care products, e.g. laundry detergent,
	dishwashing liquid, bleach, bathtub cleaner, toilet cleaner, facial cleanser,
	shampoo and rinse, body shampoo, hand soap, air freshener, lotion, emulsion,
	beauty essence, beauty cream, toothbrushes, etc.
	* Product containers from manufacturers other than Kao will also be collected.
Target amount	Approx. 1,100kg (at the start of field testing)

Items Evaluated and Results Obtained

• Ensuring a stable, sufficient supply of containers as a source of materials

A total of 715kg of plastic containers was collected from 1,300 households.

• Ensuring quality of recyclables for re-use

Only 3% of the total packaging collected was deemed ineligible, and around 90% was high-quality material that had been washed and dried. It is expected that 98% of the material collected will be of acceptable quality suitable for recycling.

• Reducing collection costs to make the scheme sustainable

This field-testing scheme has been incorporated into Satsumasendai City's SDGs Innovation Trial Support Project, which is providing support in the form of coordination with personnel and making available more collection points. Collection costs are shouldered by Kao and Nakadai.

Participants' Comments

To identify issues with the collection scheme during the field-testing period and gain insights into what could increase motivation to take part, participants were asked to reply to a questionnaire. While respondents agreed that the scheme was valuable in terms of reducing the burden on the environment and making good use of resources, many of them found the requirement to sort, wash, dry and take used packaging to a collection point burdensome. In particular, since the packaging was only collected once every two weeks, respondents brought up the issue of needing to store the containers at home until collection time or felt that it was more convenient to be able to drop them off at supermarkets,

etc. any time, pointing to the need for improvement in this area.

Looking to the Future

With these field-testing results in mind, Kao and Circular Park Kyushu, working together with Satsumasendai City, will implement a new scheme for one year, from April 2024 to March 2025, reflecting the insights gained from the questionnaire. Under the new scheme, the plan is to use supermarkets in Satsumasendai as collection points for used packaging. Analysis work and other tasks, conducted so far by Nakadai, will be taken over by Circular Park Kyushu in conjunction with the start of operations by Circular Park Kyushu Co., Ltd. in Satsumasendai. Collection frequency, previously twice a month, will be greatly expanded, which is expected to increase the volume of used containers collected. Collection costs within the scheme as a whole will continue to be studied by the parties involved.

In April 2019, the Kao Group established the Kirei Lifestyle Plan, an ESG strategy. Since 2021, the Kao Group has been promoting the Kao Group Mid-term Plan with its vision of "protecting future lives" and "sustainability as the only path." This field testing for collecting plastic containers addresses one of the Kirei Lifestyle Plan's leadership actions of achieving "zero waste." Through this field testing, Kao will continue to examine recycling schemes to expand self-directed participation by stakeholders in each step of the recycling process, from sorting and collection to transport and recycling. The company aims to gain the understanding and support of consumers in particular as active participants in resource circularity, from product selection and use to sorting, collection and recycling of packaging. The Kao Group will continue to integrate its ESG strategy into its management practices, develop its business, provide better products and services for consumers and society, and work toward its purpose, "to realize a Kirei world in which all life lives in harmony."

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. The Kao Group established its ESG strategy, the Kirei Lifestyle Plan in April 2019, which is designed to deliver the 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.

Please visit the Kao sustainability website for more information.

^{*} This news release is a translation of a Japanese-language news release dated April 11, 2024.

About Kao

Kao creates high-value-added products and services that provide care and enrichment for the life of all people and the planet. 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 business, which contributes to a wide range of industries, Kao generates about 1,530 billion yen in annual sales. Kao employs about 34,300 people worldwide and has 137 years of history in innovation.

Please visit the Kao Group website for updated information.

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Related Information

Announcing a Roadmap for Reaching Plastic Packaging Net Zero Waste by 2040 and Negative Waste by 2050

Kao launches new ESG Strategy "Kirei Lifestyle Plan" to support consumer lifestyle changes
Kao's New Challenges for the Future: Accelerating Purposeful Business Commitment with ESG
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