



Press Release

Shiseido, SEKISUI CHEMICAL, and Sumitomo Chemical to Collaborate in Building a Circular Economy for Plastic Cosmetics Containers

Shiseido Company, Limited (“Shiseido”), SEKISUI CHEMICAL CO., LTD. (“SEKISUI CHEMICAL”), and Sumitomo Chemical Co., Ltd. (“Sumitomo Chemical”) will start a joint initiative to establish a circular economy for plastic cosmetics containers, in which used cosmetics plastic containers are collected, converted to resources and materials without sorting, and recycled back into plastic cosmetics containers.

Cosmetics containers are made from a wide variety of plastics as their importance is placed on protection of contents, ease of use, and design. Therefore, sorting cosmetic containers for recycling is difficult, posing a significant challenge in recycling them into plastic resources. To solve this issue, Shiseido, SEKISUI CHEMICAL, and Sumitomo Chemical have agreed to work together to build a new system to collect used plastic cosmetics containers and recycle them back into new cosmetics containers, leveraging their respective expertise.

Shiseido will introduce a new scheme to collect plastic cosmetics containers through retail stores and use recycled polyolefin*¹ for its cosmetics containers. SEKISUI CHEMICAL will utilize the “BR ethanol technology*²” to convert used plastics into ethanol, a raw material for plastics, by turning combustible waste into gas without sorting, and converting the gas into ethanol using microbes. Meanwhile, Sumitomo Chemical will manufacture ethylene*³ from that ethanol by using a technology for converting renewable ethanol into ethylene, and produce, from the ethylene, polyolefin products with quality equivalent to conventional polyolefin using fossil resources.

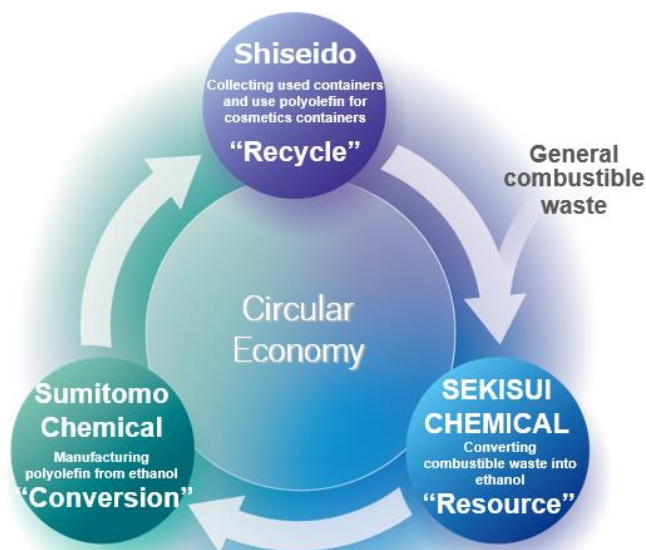
The three companies will advance this cross-sectoral alliance, while also calling on related industries and companies to join in the effort, and strive to create a circular economy.

*¹ Polyolefin: A generic term for certain types of plastics (synthetic resins), such as polyethylene and polypropylene

*² BR ethanol technology: A technology that gasifies combustible waste accumulated at waste disposal facilities without sorting and converts the gas into ethanol using microbes without application of heat or pressure. BR stands for biorefinery.

https://www.sekisuichechemical.com/news/2017/1363956_38399.html

*³ Ethylene: A raw material for synthetic resins such as polyethylene and for organic compounds.



<Reference>

Efforts of three companies to establish a circular economy

Shiseido has been working to create technologies and business models that reduce environmental impact and realize a circular economy rather than a disposable economy, based on the idea of “Praise the virtues of the Earth, which nurtures new life and brings forth significant values”^{*4}, which is the origin of the company name. Utilizing its extensive networks of contacts with consumers and business partners, the company will establish a new scheme to collect used plastic cosmetics containers through retail stores, and promote the reuse of recycled polyolefin for cosmetics containers, applying its expertise in cosmetics container designing, and R&D activities. Going forward, the company will call for other companies in the cosmetics industry to participate in this project, aiming to realize a circular economy for plastic cosmetics containers. ^{*4} Part of the Chinese classic Yi Jing, the Book of Changes from the Four Books and Five Classics of Confucianism. “Praise the virtues of the Earth, which nurtures new life and brings forth significant values”. Developing Sustainable Products: <https://corp.shiseido.com/en/sustainability/env/>



SEKISUI CHEMICAL has developed “BR ethanol technology” that turns combustible waste into gas without the need for sorting and converts the gas into ethanol using microbes. In April 2022, the company began testing at its demonstration plant newly constructed in Kuji City, Iwate Prefecture, Japan, with the aim of commercializing this technology. Furthermore, the company has launched a new brand “UNISONTM” for the biorefinery business that converts municipal/industrial waste into resources, including this technology, and will aim to create a new resource recycling social system with the participation of a wide range of stakeholders as partners.

Launch of New Waste to Resources Biorefinery Business Brand “UNISONTM”

News Release https://www.sekisuichemical.com/news/2022/1375968_38754.html



Sumitomo Chemical established a new pilot facility to manufacture ethylene using renewable ethanol as a raw material at its Chiba Works (Ichihara, Chiba, Japan) in April 2022. As a part of commercialization efforts, the company will also work to produce, from renewable ethanol-based ethylene, polyolefin products with quality equivalent to conventional polyolefin, leveraging its R&D and process engineering capabilities. In addition, the company will promote its “Meguri[®]” brand for plastic products manufactured using recycling technology and work together with various stakeholders to contribute to creating of a circular economy.

Sumitomo Chemical Completes Construction of Pilot Facility to Produce Renewable Ethanol-Based Ethylene for Environmentally Sustainable Polyolefin

News Release <https://www.sumitomo-chem.co.jp/english/news/detail/20220411e.html>

