



## **Shiseido Makes an Investment in R Plus Japan Ltd. ~Accelerating the promotion of used plastic recycling~**

Shiseido Company, Limited (“Shiseido”) will make an equity investment in R Plus Japan Limited (“R Plus Japan”) to engage in recycling used plastics towards realizing a sustainable world.

Shiseido has established three strategic actions: “Reducing Our Environmental Footprint”, “Developing Sustainable Products”, and “Promoting Sustainable and Responsible Procurement” to address environmental issues. The company is working together with various stakeholders across the entire value chain to promote initiatives to reduce environmental impact and use sustainable resources. In the area of “Developing Sustainable Products”, we are aiming to achieve 100% sustainable containers and packaging that are either “reusable”, “recyclable”, or “biodegradable” by 2025\*<sup>1</sup> based on the concept of the circular economy, and actively developing initiatives such as the use of “refillable/re-attachable” containers and in-store collection of used containers, etc. Going forward, we will cooperate with R Plus Japan and participating companies to promote the recycling of used plastics and contribute to the realization of a sustainable world as a member of the value chain related to plastic recycling in Japan.

\*<sup>1</sup> Regarding plastic containers

Driven by its corporate mission, BEAUTY INNOVATIONS FOR A BETTER WORLD, Shiseido will pursue the creation of a sustainable world in which people can enjoy a lifetime of happiness.

### **Initiatives in the joint venture business**

R Plus Japan promotes the development of efficient recycling technology for used plastics with less environmental impact in partnership with a U.S. biochemical venture company, Anellotech Inc.\*<sup>2</sup> In order to contribute to the resolution of plastic issues that are shared all over the world, R Plus Japan, together with Anellotech Inc., aim to bring the technology to practical use by 2027 through cross-industry collaboration including companies in sorting and processing of collected plastics, monomer manufacturing, polymer manufacturing, packaging container manufacturing, trading, and beverage and food manufacturing, etc.

\*<sup>2</sup> Anellotech Inc: A biochemical venture company founded in 2008 with its headquarters and R&D functions located in Pearl River, New York, U.S. The company owns the technology that produces benzene, toluene and xylene, which are bio-based and chemically identical to petroleum-derived counterparts.

### **Recycling technology for used plastics**

Many plastic packaging materials are unable to be recycled and are instead thrown away after a single use, often landfilled, incinerated\*<sup>3</sup>, or littered. Unlike the existing multi-step processes which first liquefies plastic waste back into low value “synthetic oil” intermediate products, Anellotech’s Plas-TCat chemical recycling\*<sup>4</sup> technology uses a one-step thermal-catalytic process. This process converts single-use plastics directly into basic chemicals such as benzene, toluene, xylenes (BTX), ethylene, and propylene, which can then be used to make new plastics. The technology’s process efficiency has the potential to significantly reduce CO<sub>2</sub> emissions and energy consumption. Once utilized across the industry, this technology will be able to more efficiently recycle single-use plastic, one of the world’s most urgent

