

June 30, 2020

Toyobo, 11 other companies jointly launch R Plus Japan, Ltd. to recycle used plastics

Toyobo Co., Ltd. and 11 other companies forming a plastic value chain have jointly established a new company called R Plus Japan, Ltd. (“R Plus Japan”, hereafter), which will facilitate the recycling of used plastics to help solve plastics-associated problems and create a more sustainable society. R Plus Japan, which started operating in June, is headed by President Tsunehiko Yokoi and located in Minato-ku, Tokyo.

The 11 companies are: Suntory MONOZUKURI Expert Ltd.; Rengo Co., Ltd.; Toyo Seikan Group Holdings, Ltd.; J&T Recycling Corporation; Asahi Group Holdings, Ltd.; Iwatani Corporation; Dai Nippon Printing Co., Ltd.; Toppan Printing Co., Ltd.; Fuji Seal International, Inc.; Hokkai Can Co., Ltd.; Yoshino Kogyosho Co., Ltd. R Plus Japan will continue seeking additional investors, and companies such as Sumitomo Chemical Company, Ltd. are currently considering joining.



Toyobo Group has provided many products and technologies to help solve social problems since its inception, based on its corporate philosophy “Jun-Ri-Soku-Yu” (Adhering to reason leads to prosperity) that embodied the spirit advocated by its founder Eiichi Shibusawa. The group is determined to create a more sustainable society by developing products and technologies that reduce society’s impact on the environment. For example, Toyobo has raised the proportion of recycled resin and plant-derived raw materials in its main plastic products and manufactured and sold highly functional bioplastics.

Toyobo has long admired a technology U.S. biochemical venture company Anellotech, Inc. developed to make raw materials for polyester from wood. Since 2017, Toyobo has been involved in a project in which Anellotech, the Suntory Group and other companies in Japan and elsewhere are developing polyethylene terephthalate (PET) bottles made entirely of plant-derived materials. Application of this groundbreaking technology likely will pave the way for effectively recycling used plastics and the increased cyclical use of plastics.

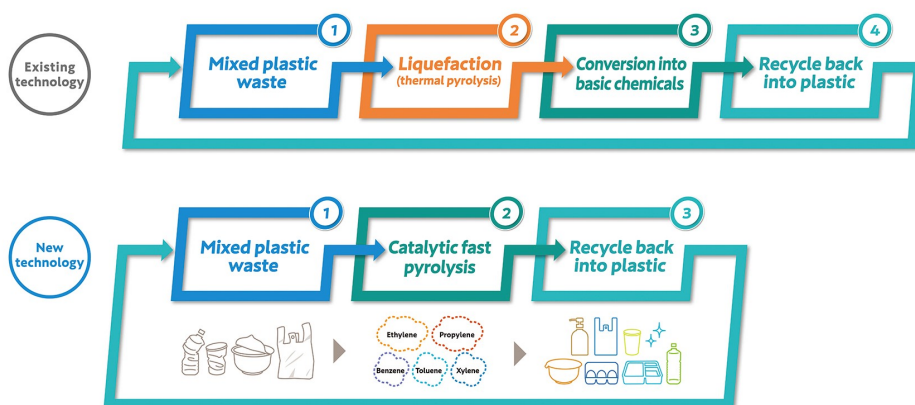
Recycling used plastics

In Japan, plastics other than PET bottles are most reportedly end up being incinerated^{*1}. The latest technology involves decomposing PET bottles and other plastic products directly to basic chemicals, such as benzene, toluene, xylene, ethylene and propylene. This approach is called chemical recycling^{*2}.

The technology simplifies the recycling process, compared with the conventional method that requires a liquefaction process. This technology is expected to reduce carbon dioxide emissions and the amount of energy required during the process. Widespread use of this technology could facilitate effective and increased recycling of used plastics.

*1 Includes thermal recovery (use of heat energy), in which heat energy generated during incineration is collected and used for power generation and heat supply.

*2 Used plastics are recycled after compositional conversion via chemical reactions, instead of recycling them as they are.



R Plus Japan will promote the research and development of eco-friendly, effective plastic recycling technology together with Anellotech. The company aims to commercialize this technology in 2027 to help solve common global challenges associated with used plastics. This process will include collaboration across industries, such as with companies that sort collected plastics; producers of monomers, polymers, packaging films and containers; trading companies; and beverage makers.

New company outline

Company name: R Plus Japan, Ltd.

Date of commencement of business: June 5, 2020

Headquarters: 2-3-3, Daiba, Minato-ku, Tokyo, Japan

Representative: Tsunehiko Yokoi (President & CEO)

Business: Expanding development of recycling technology for used plastics

About Anellotech Inc.

Established in 2008, Anellotech is a biochemical venture firm headquartered in Pearl River, N.Y. It has a research and development arm in the same location. It is developing a technology to make benzene, toluene and xylene with non-food plants that have the same functionalities as those refined from petroleum.

Toyobo Group's corporate social responsibility (CSR) activities:

<https://www.toyobo-global.com/sustainability/>

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