

Denka Affiliate Toyo Styrene to Start a Business for Chemical Recycling of Polystyrene Resins

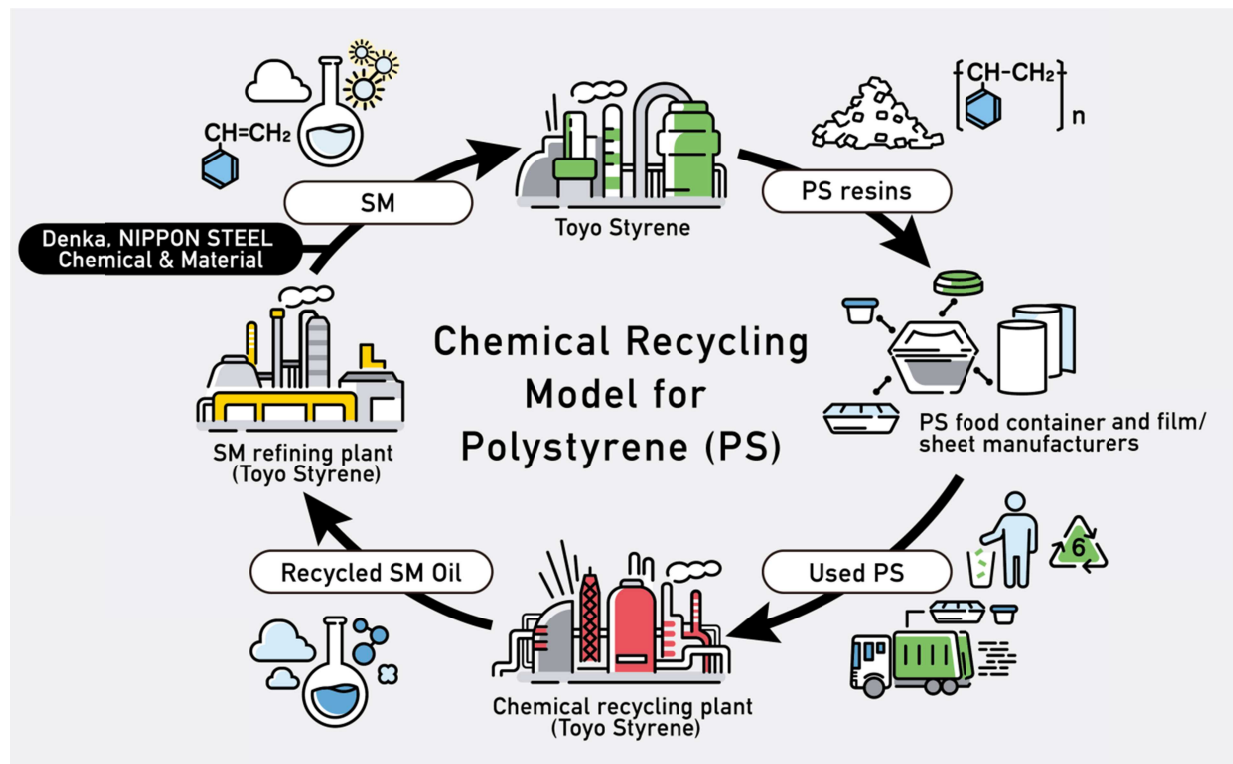
Denka Company Limited (headquarters: Chuo-ku, Tokyo; president: Manabu Yamamoto; hereinafter, “Denka”) announces that Toyo Styrene Co., Ltd. (headquarters: Minato-ku, Tokyo; president: Sanshiro Matsushita; hereinafter “Toyo Styrene”), which is one of Denka’s equity-method affiliates, signed a Japanese market-based technology license agreement with Agilyx, Inc. (headquarters: Portland, Oregon, U.S.; CEO: Joseph Vaillancourt), a global plastic recycling company, to establish a business for the chemical recycling of used polystyrene (PS). Toyo Styrene will start the detailed examination for the construction of a demonstration facility (annual processing capacity: approx. 3,000 tons) to pyrolytically decompose used PS and generate the raw material, styrene monomers (SM), in Denka’s Chiba Plant (Ichihara, Chiba), and aims to begin operation at the end of fiscal 2021.

While plastic is indispensable in our society and daily lives, it has created prominent challenges, such as the adverse impact on ecosystems from the release of used plastic into the oceans and the increase of greenhouse gases due to the use of petroleum-derived raw materials, which are now globally critical issues. Denka Group also actively engages in global environmental conservation activities. As the responsibility of a chemical manufacturer handling plastic, Denka Group is under strict management to minimize environmental impact and strives for persistent technological innovations to conserve natural resources and energy. The conventional plastic recycling method, which involves material recycling by grinding and re-melting used plastic and molding it into products, has partial limitations, especially for use in food-related containers. The method used in this project employs the chemical recycling method which exploits the property of styrene-based resins that exhibits easy pyrolysis from polymers to monomers, and is innovative in terms of no limitation in application of polystyrene produced from recycled styrene monomers. Furthermore, this method will make it possible to halve CO₂ emissions, in comparison with regular production methods.

Denka will fully support Toyo Styrene’s chemical recycling business and work collaboratively with governmental agencies and related organizations.

With the goal of creating a sustainable society, Denka Group continues to actively engage in global environmental conservation and protection through its development of new products and technologies.

[Reference: Diagram of the Chemical Recycling Model for Polystyrene]



[For Inquiries about This Press Release from Media]

Corporate Communications Dept. Tel : +81-3-5290-5511