

October 6, 2025

**Resonac to Expand Low-Carbon Ammonia Business
Using Chemical Recycling of Plastics
– Targeting 100% Used-Plastic-Derived Feedstock by 2030 –**

Resonac Corporation (President and CEO: Hidehito Takahashi, hereinafter referred to as “Resonac”) has decided to further decarbonize its ammonia business at the Kawasaki Plant (Kawasaki City, Kanagawa Prefecture) by using only hydrogen derived from used plastics as feedstock for ammonia production. The new facilities are scheduled to begin operation in April 2030.

This initiative was certified on September 30, 2025, as an eligible project for the “Support focusing on the price gap” program under the Act on Promotion of Supply and Utilization of Low-Carbon Hydrogen and its Derivatives for Smooth Transition to a Decarbonized Growth-Oriented Economic Structure, administered by the Ministry of Economy, Trade and Industry. The application for the support was jointly submitted with NIPPON SHOKUBAI CO., LTD. (President and CEO: Kazuhiro Noda), a major ammonia customer.

Currently, at the Kawasaki Plant, Resonac manufactures and sells ammonia using (1) hydrogen obtained by gasifying used plastics through chemical recycling (referred to as “Kawasaki Plastic Recycling (KPR)”) and (2) hydrogen obtained by reforming city gas. With this new initiative, Resonac aims to produce ammonia using only hydrogen derived from used plastics, thereby further decarbonizing its domestically produced ammonia. This will be achieved by developing and introducing new processes based on existing operations. In addition, since 2024, Resonac has begun demonstration experiments using not only used plastics but also used textiles as feedstock. By supplying acrylonitrile, an ammonia derivative, to fiber manufacturers and others, Resonac also aims to realize resource circulation for clothing.

By achieving 100% used-plastic-derived feedstock, Resonac will be able to supply high-value-added products with environmental benefits, including low-carbon and resource-circulating features, even for co-products such as carbon dioxide. This will strengthen Resonac’s business and enhance industrial competitiveness across the entire supply chain.

Resonac has promoted the KPR business for plastic chemical recycling since 2003. KPR is the world’s only gasification chemical plant that has maintained stable commercial operation over the long term. In 2023, Resonac obtained [ISCC PLUS certification for three products—hydrogen, ammonia, and acrylonitrile—partially derived from used plastics](#). Even after the introduction of this new initiative, Resonac will continue to obtain ISCC PLUS certification and supply sustainable products.



Kawasaki Plastic Recycling (KPR) Plant

The Resonac Group places sustainability at the core of its management and will continue to promote initiatives for a decarbonized and resource-circulating society through cross-industrial co-creation. By advancing technology, Resonac aims to achieve both further resource circulation and decarbonization.

[About the Plastic Chemical Recycling Business (KPR)]

KPR gasifies used plastics and other materials at high temperatures, breaking them down to the molecular level to produce hydrogen and carbon dioxide. The hydrogen, produced without fossil fuels, is mainly used as feedstock for ammonia within Resonac, which is then used in synthetic fibers, resins, chemical fertilizers, and as denitrification agents for thermal power plants. The carbon dioxide is not released into the atmosphere but is instead utilized by Resonac Gas Products, a group company, as raw material for dry ice and carbonated beverages. In 2022, the cumulative amount of processed plastics exceeded one million tons.

[About Resonac]

Resonac is a functional chemical company that produces and sells products related to semiconductor and electronic materials, mobility, innovation enabling materials, chemicals, etc. The Company has a wide variety of materials and advanced material technologies applicable to midstream to downstream of supply chains of various products. In January 2023, Showa Denko and former Hitachi Chemical merged into the Resonac. The trade name “RESONAC” was created as a combination of two English words, namely, the word of “RESONATE” and “C” as the first letter of CHEMISTRY. As a “co-creative chemical company,” Resonac aims to continue growing and enhance its corporate value through co-creation. The Company recorded net sales of about 1.4 trillion yen in 2024, and its overseas sales accounted for 56% of net sales. The Company has deployed production/sales bases in 24 countries and regions and continues operating its business globally (as of February 2025).

For detail, please refer to our Website.

Resonac Holdings Corporation: <https://www.resonac.com/>