Gevo Enters Joint Development Agreement with LG Chem to Develop Bio-Propylene

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ENGLEWOOD, Colo., April 12, 2023 (GLOBE NEWSWIRE) -- Gevo, Inc. (NASDAQ: GEVO) and LG Chem, Ltd. (KRX: 051910), a leading global chemical company committed to producing sustainable products, announced today that they have entered into a joint development agreement (the "Agreement") to develop bio-propylene for renewable chemicals using Gevo's Ethanol-to-Olefins (ETO) technology.

Gevo's proprietary ETO technology can target carbon neutral or carbon negative drop-in replacements for traditional petroleum-based building blocks called olefins, including bio-propylene, that can be used for renewable chemicals or fuels including sustainable aviation fuel. These plant-based, renewable olefins would be derived from atmospheric CO_2 captured through photosynthesis and are expected to deliver the same performance in final products on the market today. Under the terms of the Agreement, Gevo will provide the core enabling technology it has developed for renewable olefins to be produced from low-carbon ethanol and together the parties will collaborate to accelerate the pilot research, technical scale-up, and commercialization of bio-propylene.

"We believe Gevo's ethanol to olefin's process can be more capital and energy efficient than existing technologies to make the renewable olefin intermediates used in the production of chemicals or fuels," said Gevo's Chief Carbon and Innovation Officer, Dr. Paul Bloom. "Our partnership with LG Chem is a great example of how we intend to accelerate development and commercialization of our ETO technology to enable renewable chemicals with our world class partner while Gevo plans to deploy the technology to lower the cost and carbon intensity for SAF and other drop-in fuels like renewable diesel."

"Our joint development agreement with Gevo helps LG Chem expand sustainable and eco-friendly future businesses by reinforcing our business portfolio centered on bio-based raw materials," said Noh Kug-lae, President of LG Chem's Petrochemical Business.

Bio-propylene can be used to replace fossil-based products as an eco-friendly raw material for various plastic products and is expected to play a pivotal role in the rapid growth of the bioplastic market and circular economy. Once commercialization is achieved, bio-propylene could be used as a drop-in replacement for use in automobile interiors and exteriors, flooring, and diapers to replace petroleum products with bio-based materials with a low or negative carbon footprint.

About Gevo
Gevo's mission is to transform renewable energy and carbon into energy-dense liquid hydrocarbons. These liquid hydrocarbons can be used for drop-in transportation fuels such as gasoline, jet fuel and diesel fuel, that when burned have potential to yield net-zero greenhouse gas emissions when measured across the full life cycle of the products. Gevo uses low-carbon renewable resource-based carbohydrates as raw materials, and is in an advanced state of developing renewable electricity and renewable natural gas for use in production processes, resulting in low-carbon fuels with substantially reduced carbon intensity (the level of greenhouse gas emissions compared to standard petroleum fossil-based fuels across their life cycle). Gevo's products perform as well or better than traditional fossil-based fuels in infrastructure and engines, but with substantially reduced greenhouse gas emissions. In addition to addressing the problems of fuels, Gevo's technology also enables certain plastics, such as polyester, to be made with more sustainable ingredients. Gevo's ability to penetrate the growing low-carbon fuels market depends on the price of oil and the value of abating carbon emissions that would otherwise increase greenhouse gas emissions. Gevo believes that its proven, patented technology enabling the use of a variety of low-carbon sustainable feedstocks to produce price-competitive low-carbon products such as gasoline components, jet fuel and diesel fuel yields the potential to generate project and corporate returns that justify the build-out of a multi-billion-dollar business. Gevo believes that the Argonne National Laboratory GREET model is the best available standard of scientific-based measurement for life cycle inventory or LCI.

About LG Chem
LG Chem is a leading global chemical company with a diversified business portfolio in the key areas of petrochemicals, advanced materials, and life sciences. The company manufactures a wide range of products from high-value added petrochemicals to renewable plastics, specializing in cutting-edge electronic and battery materials, as well as drugs and vaccines to deliver differentiated solutions for its customers. LG Chem is committed to reaching carbon-neutral growth by 2030 and net-zero emissions by 2050 by managing the impacts of climate change and making positive contributions to society through renewable energy and responsible supply chains. Headquartered in Seoul, Korea, LG Chem has multiple operation sites worldwide and generated consolidated revenue of KRW 51.9 trillion (USD 42.1 billion) in 2022. For more information, please visit www.lgchem.com.

Forward-Looking Statements
Certain statements in this press release may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements relate to a variety of matters, including, without limitation, Gevo's ETO technology, the Agreement with LG Chem, Ltd., whether the ETO technology will be commercialized, the benefits that might accrue as a result of the Agreement with Lg Chem, Ltd., and other statements that are not purely statements of historical fact. These forward-looking statements are made based on the current beliefs, expectations and assumptions of the management of Gevo and are subject to significant risks and uncertainty. Investors are cautioned not to place undue reliance on any such forward-looking statements. All such forward-looking statements speak only as of the date they are made, and Gevo undertakes no obligation to update or revise these statements, whether as a result of new information, future events or otherwise. Although Gevo believes that the expectations reflected in these forward-looking statements are reasonable, these statements involve many risks and uncertainties that may cause actual results to differ materially from what may be expressed or implied in these forward-looking statements. For a further discussion of risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of Gevo in general, see the risk disclosures in the Annual Report on Form 10-K of Gevo for the year ended December 31, 2022, and in subsequent reports on Forms 10-Q and 8-K and other filings made with the U.S. Securities and Exchange Commission by Gevo.

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