



Gevo Announces Breakthrough Development of Renewable Isoprene, a Key Chemical Building Block for Producing Rubber and Rubber Products

January 28, 2019

Potentially price competitive with petroleum-based isoprene, made with 100% renewable carbon

ENGLEWOOD, Colo., Jan. 28, 2019 (GLOBE NEWSWIRE) -- **Gevo, Inc. (NASDAQ: GEVO)**, a leading renewable fuels and chemicals manufacturer, announced today that it has developed a proprietary, breakthrough catalytic process that transforms low-cost commercially available, or even waste by-product, renewable alcohols into renewable isoprene that would be expected to compete head-to-head on price with natural and petroleum-based chemical equivalents while reducing CO2 emissions.

Isoprene is predominantly used in the production of synthetic-based rubber. The market for isoprene is estimated to be approximately \$4 Billion USD by 2025, growing at a compound annual growth rate of 7% or greater driven by growth in the automotive sector.

Gevo recently developed a chemical-based catalytic process to convert low-value "fusel oils," a mixture of alcohols that are byproducts from fermentation processes such as ethanol production, into renewable isoprene. Fusel oils from the ethanol industry alone equate to about 2.5 million tons of potential bio-based waste feedstock.

"Renewable, low-carbon, low-cost isoprene has been pursued by a lot of companies over the years without commercial success. Fermentation processes were always deemed to be too expensive to make isoprene directly. As it turns out, our catalytic chemistry team and engineers figured out how to make low-cost, renewable isoprene suitable for the market using a chemical catalyst that we apply to fusel oils, a mixed, renewable alcohol stream that is produced as a by-product or even as a waste during large industrial fermentations such as those in the ethanol industry. Our team was able to translate what we learned while developing renewable, sustainable jet fuel and isooctane, to enable other viable alcoholic feedstocks. I give credit to our catalytic chemistry team, led by Jonathan Smith, for this breakthrough. We expect to pursue a licensing strategy with this technology. Potential licensees could be ethanol producers that want to improve the profitability of their facilities, chemical plants that simply want cost competitive low-carbon isoprene, or even standalone businesses. This is the first time in my 30 years in this industry where I have seen what I believe to be a viable route to fully renewable, low-cost isoprene. I look forward to seeing this one get commercially developed. It looks as if this technology could address a large current unmet need in the marketplace and make money," said Dr. Patrick Gruber, Chief Executive Officer of Gevo.

About Gevo

Gevo is a next generation "low-carbon" fuel company focused on the development and commercialization of renewable alternatives to petroleum-based products. Low-carbon fuels reduce the carbon intensity, or the level of greenhouse gas emissions, compared to standard fossil-based fuels across their lifecycle. The most common low-carbon fuels are renewable fuels. Gevo is focused on the development and production of mainstream fuels like gasoline and jet fuel using renewable feedstocks that have the potential to lower greenhouse gas emissions at a meaningful scale and enhance agricultural production, including food and other related products. In addition to serving the low-carbon fuel markets, through Gevo's technology, Gevo can also serve markets for the production of chemical intermediate products for solvents, plastics, and building block chemicals. Learn more at our website: www.gevo.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, statements related to Gevo's technology to produce isoprene, Gevo's cost to make isoprene, the demand for renewable isoprene, the market for isoprene, including the size and growth of the market in the future, and other statements that are not purely statements of historical fact. These forward-looking statements are made on the basis of 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, 2017, as amended, 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.

Investor and Media Contact

Shawn M. Severson
Integra Investor Relations
+1 415-226-7747
gevo@integra-ir.com

Source: Gevo, Inc.