



PRAJ TO OFFER TECHNOLOGY FOR PRODUCTION OF HIGH ENERGY RENEWABLE AVIATION JET FUELS IN COLLABORATION WITH GEVO USA

Pune April 9, 2019 – Praj Industries announced today that it has signed a Construction License Agreement (CLA) with Gevo, Inc, USA dated 4th April 2019, to commercialize technology for the production of Isobutanol using sugary-based feedstocks, such as juice, syrup and molasses. Pursuant to the CLA, Praj will provide Engineering Procurement and Construction (EPC) services to 3rd parties using a process design package developed by Praj. This package uses Gevo's proprietary Isobutanol biocatalyst on sugary-based feedstock. Isobutanol derived from said proprietary process is high energy renewable intermediate product that finds application in Aviation and Racing cars.

To that effect, Praj also signed a Memorandum of Understanding (MOU) with Gevo Inc. to commercialize Gevo's renewable hydrocarbons products. This includes Gevo's renewable alcohol-to-jet fuel ("ATJ") and renewable isooctane, derived from Gevo's renewable Isobutanol.

Pramod Chaudhari, Executive Chairman of Praj, said, "The addition of Isobutanol technology to Praj's diverse product portfolio is a step in our endeavor towards smart biorefineries that facilitate sustainable decarbonization. This solution can be



offered both as a 'bolt-on' to an existing ethanol plant or as a Greenfield plant. We value our partnership with Gevo and believe that this technology will help the aviation industry fulfill their obligation of Green House Gas (GHG) reduction. " He added further that Praj will also pursue development of agri-biomass to Isobutanol as reinforcement of circular bio economy.

"Praj is a company that shares our vision of the utilization of renewable resources and renewable energy to decarbonize transportation fuels," said Patrick R. Gruber, Chief Executive Officer of Gevo. "With Gevo's technology and Praj's execution, ethanol can be substituted with isobutanol and drop-in gasoline. Gevo expects to leverage Praj's Enfinity technology to produce second generation drop-in hydrocarbons utilizing Gevo's existing technology that has already been proven. We expect to scale up quickly and be ready for the Indian market as early as 2020."

This CLA will allow Praj to leverage its extensive customer base to identify those interested in licensing Gevo's technology to produce Isobutanol utilizing the Sugary-based Feedstock. The partnership with Praj provides Gevo with access to markets outside of North America such as India, Southeast Asia, Australia, South America and parts of Europe.

In addition to the CLA, Praj and Gevo have also entered into a new Joint Development Agreement (JDA) dated 4th April 2019. This agreement is aimed at continuing joint development efforts to produce Isobutanol using agricultural residue such as bagasse, rice straw, wheat straw, corn stover, cotton stalk and empty fruit bunches. Both parties are nearing the completion of work to develop a process design package by using agricultural residue for production of Isobutanol. These 2nd generation agricultural residues are the lowest cost feedstocks in some markets and have the additional benefit of having a very low carbon footprint.





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 to produce chemical intermediate products for solvents, plastics, and building block chemicals. Learn more at our website: www.gevo.com

About Praj Industries Limited

Praj is a Bio energy process solutions provider with a diversified portfolio offering integrated solutions for bio-energy, high purity water, zero liquid discharge systems, critical process equipment & Skids systems and brewery plants. Praj is focussed upon providing sustainable decarbonizing solutions across the industrial spectrum through its state of the art R&D Centre – Matrix. Over three decades, Praj has been a trusted partner with over 750 references across 75 countries. Headquartered in India; Praj is listed on BSE and NSE. For more information, visit <u>www.praj.net</u>.

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