



## MEDIA RELEASE

### BYOGY PARTNERSHIPS RECEIVE \$3.7M FROM DOE

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Press Release: [Byogy Renewables, Inc.](#)

#### **Byogy Partnership with AVAPCO and Genomatica awarded \$3.7M to advance cellulosic drop-in renewable gasoline, jet fuel, diesel, and renewable co-products.**

Byogy Renewables is successfully driving forward their advanced alcohol-to-jet (ATJ) fuel process with the recent announcement of the US Department of Energy (DOE) awarding the partnership team with \$3.7 million to kick-off the development of an integrated commercial demonstration-scale biorefinery.

“Our project partnership with AVAPCO and Genomatica shows the fundamental need of connecting strategic technology-advanced companies to deliver a wide scope of renewable products that demonstrate the comparative of using the “whole barrel” of crude oil”, says CEO of Byogy Renewables, Kevin Weiss.

The fully integrated commercial demonstration facility will highlight the feedstock agnostic AVAPCO process producing low cost cellulosic sugars from woody biomass, and other waste products. The sugars will be used to produce, biochemicals, biomaterials, and ethanol that will be integrated with the Byogy process for the production of premium biofuels including premium renewable jet fuel. The Genomatica technology will produce bio-butanediol (BDO), a renewable product that can be used in everyday products such as athletic apparel, running shoes, electronics and automotive applications.

“With an industry struggling to commercialize, and a global mature sugar feedstock already fermenting, the ATJ platform is possibly the most promising pathway to produce substantial volumes for the aviation and heavy transport industries. ATJ process provides new market opportunities to the already mature ethanol and sugar industries by enabling the conversion of sugar-based feed stocks into premium ‘drop-in’ liquid biofuels that require no infrastructure modifications,” said Weiss.

In April 2016, ASTM adopted a global alternative aviation fuel specification based on the core ATJ process. This first phase ATJ specification is limited to an iso-butanol feedstock that is required to be used at small blends with petroleum based jet fuel. The Byogy team has perfected the next advanced phase of the ATJ classification to be able to use any form of alcohol, such as ethanol or butanol, to produce full replacement fuels including Military JP-5 and Diesel F-76 requiring no blending, and hence eliminating the blending logistic challenges that will certainly add both downstream cost and safety concerns.

As part of the Continuous Lower Energy, Emissions and Noise (CLEEN) program, the FAA, together with Rolls Royce and British Airways, funded a special project to identify and test fuel types that can be used as full replacement, standalone products in aviation infrastructure. The FAA realized the cost and safety challenges using various types of blending components that are consistent with the already adopted ASTM specifications of Gas To Liquids (GTL technologies), HEFA (plant oil processes), Direct Sugar to Hydrocarbon (DSHC) and the recent phase one Alcohol To Jet (ATJ-SPK). Out of over 90 companies applying for the program, Byogy was one of the four companies selected.

The CLEEN test results, in addition to extensive US Air Force testing, suggests that the Byogy fuel can have significant advantages over petroleum and other alternative fuels with better fuel burn efficiency, lower maintenance costs on infrastructure, lower freeze point, and higher energy density. All of these parameters identify the Byogy fuel as a “strategic fuel” that is expected to get more miles per gallon, less engine wear and tear, new higher air space opportunities, and the greatest carbon emission reduction of other blendstock type fuel products.

“The fact that the Byogy fuel, and its ATJ technology, was selected for this prestigious program, and now recognized by the DOE, is a significant milestone for both technology and commercialization validation,” said Weiss.

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**About Byogy Renewables, Inc.**

Byogy Renewables, headquartered in San Jose California with a subsidiary in Brazil and Australia, has developed a proprietary breakthrough catalytic platform, utilizing equipment and reaction steps already perfected at refinery scale, which converts any source of alcohol, butanol, into full replacement biofuels including NAPTHA, Gasoline, Jet Fuel, Diesel and Heating Oil that can be used in all existing infrastructure without modification or blending with petroleum fuels in order to meet specification.

For more information about this topic, please contact Byogy Renewables at (408)800-7704.

SOURCE: Byogy Renewables, Inc.