

UGI and Vertimass Enter Agreement to Produce Renewable Fuels in the U.S. and Europe

January 5, 2022

VALLEY FORGE, Pa.--(BUSINESS WIRE)--Jan. 5, 2022-- UGI Corporation (NYSE: UGI) announced today that it has entered into a 15-year agreement with California-based technology developer, Vertimass, to utilize their catalytic technology to produce renewable fuels from renewable-ethanol in the U.S. and Europe.

The agreement centers on the development of production facilities using Vertimass' catalytic technology to convert renewable ethanol into renewablepropane and sustainable aviation fuel (SAF). The technology enables flexible production of the renewable fuels to align with regional market demand. Up to 50% of the total production capacity from the facilities can be renewable-propane that will support UGI's ongoing efforts to provide innovative, low-carbon, sustainable energy solutions to its customers.

UGI expects to invest either solely, jointly with Vertimass or in partnership with third parties to build and operate multiple production facilities over the next 15 years in locations across the U.S. and Europe, significantly increasing the supply of renewable-propane and SAF. UGI anticipates a total investment of roughly \$500 million for the bolt-on production facilities over a 15-year period, including potential third party investment, with total production target from these aggregated facilities of approximately 1 billion gallons of combined renewable fuels per annum. The goal is to have the first production facility onstream in fiscal year 2024 with an annual production target of approximately 50 million gallons of combined renewable fuels.

Vertimass employs catalytic technology to convert renewable ethanol and other renewable alcohols into renewable hydrocarbon fuels that are compatible with the existing equipment and infrastructure. This technology can be bolted on to existing ethanol production facilities, optimizing GHG emissions reduction, and bringing further end product diversification to the existing ethanol producer. The introduction of such ethanol-based "bio-refineries" is an attractive proposition for skilled job development and the opportunity to further drive energy independence using local resources.

"This is another significant milestone in our commitment to providing renewable fuels to our customers," said Roger Perreault, President and Chief Executive Officer of UGI Corporation. "Our business development team continues to seek out innovative opportunities and I am delighted with our newly established partnership with Vertimass. We believe this partnership will deliver significant renewable LPG for our customers as well as bring investment opportunity to interested stakeholders."

Charles Wyman, Vertimass President and Chief Executive Officer, continued "Vertimass is extremely excited to work with UGI to commercialize our breakthrough technology. UGI and Vertimass have built strong relationships over the last year, which we believe will cement success." Bill Shopoff, Vertimass Chair, noted "Together we will take advantage of this unique low-cost technology to transform ethanol facilities and produce renewable fuels that will cover UGI's global footprint, as well as enable the production of SAF."

More About the Technology

Vertimass is developing a unique Consolidated Alcohol Deoxygenation and Oligomerization (CADO) technology to allow ethanol producers to 1) produce sustainable aviation fuel (SAF) and diesel blendstocks that are compatible with the current transportation fuel infrastructure as well as LPG (liquified petroleum gases, mainly propane and butane), 2) eliminate the ethanol "blend wall" by converting ethanol into fungible gasoline components for powering light duty vehicles, 3) produce intermediates used to make plastics and other higher value products, and 4) possibly debottleneck processes to increase throughput with little additional costs other than for feedstock. CADO completely converts wet ethanol (and other alcohols) into targeted hydrocarbons in a simple reactor system at moderate temperatures and near atmospheric pressure without adding hydrogen. Other benefits include the ability to lower plant water usage, reduce overall energy consumption, and drop GHG emissions to levels required for the Renewable Fuel Standard (RFS) Advanced Biofuel category.

Introduction to Renewable-LPG (Renewable Propane)

Renewable LPG, also known as renewable-propane, is chemically identical to today's fossil LPG (C ₃H₈) and therefore can be used with existing infrastructure. It has up to 80% lower carbon footprint than that of conventional LPG.

About UGI Corporation

UGI Corporation is a distributor and marketer of energy products and services. Through subsidiaries, UGI operates natural gas and electric utilities in Pennsylvania and West Virginia, distributes LPG both domestically (through AmeriGas) and internationally (through UGI International), manages midstream energy assets in Pennsylvania, Ohio, and West Virginia and electric generation assets in Pennsylvania, and engages in energy marketing, including renewable natural gas in the eastern region of the United States and California, and internationally in France, Belgium, the Netherlands and the UK.

Comprehensive information about UGI Corporation is available on the Internet at https://www.ugicorp.com.

About Vertimass

Vertimass LLC is based in Irvine, California. The mission of Vertimass LLC is to develop and widely license breakthrough technologies that substantially expand production of sustainable transportation fuels and chemicals that reduce greenhouse gas emissions and improve energy security and domestic economies. Commercialization of proprietary Vertimass technology can overcome the blend wall that currently impedes expansion of ethanol production from multiple sources of biomass and open up large new markets for aircraft and heavy-duty vehicle fuels and for chemicals not currently amenable to ethanol.

This is neither an offer to sell nor a solicitation of an offer to buy any security. Such an offer may only be made by means of an offering document that must accompany or precede this information. There is no assurance that this strategy will succeed to meet its objectives. An investment in this type of product involves a high degree of risk including loss of investment, and is illiquid with an uncertain illiquidity date. Securities offered through Shopoff Securities, Inc. Member FINRA/SIPC.

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Source: UGI Corporation