



LanzaTech and LanzaJet Introduce CirculAir™, a Revolutionary and Commercially Ready Solution to Convert Waste, Carbon, and Renewable Power to Sustainable Aviation Fuel

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End-to-end commercial sustainable fuels solution tested and derisked for large-scale deployment as eFuel, Power-to-Liquids, and Waste-to-Fuels is an industry-first, using Gas Fermentation to Ethanol and Alcohol-to-Jet as a leading Sustainable Aviation Fuels pathway

CHICAGO, June 27, 2024 (GLOBE NEWSWIRE) -- [LanzaTech Global, Inc.](#) (NASDAQ: LNZA), the carbon recycling company transforming waste carbon into sustainable fuels, chemicals, and materials, and [LanzaJet, Inc.](#), a leading sustainable fuels technology company and fuels producer, are launching CirculAir™, a new joint offering to convert waste, carbon, and renewable power into sustainable aviation fuel (SAF) and immediately accelerate decarbonization of the aviation industry globally. CirculAir is a breakthrough offering that provides an economical and commercialized alternative to Fischer-Tropsch technology to create eFuels, Power-to-Liquids (PtL), and Waste-to-Fuels leveraging the already ASTM-approved SAF production pathway that uses ethanol as the biointermediate and Alcohol-to-Jet (ATJ) technology to produce SAF and Renewable Diesel (RD).

CirculAir is a formalized joint offering and end-to-end technology solution that turns nearly any waste source including municipal solid waste (MSW), agricultural residues, carbon emissions from industrial and refining processes, carbon dioxide (CO₂) through direct air capture, and renewable power into SAF. CirculAir combines the groundbreaking technologies of LanzaTech and LanzaJet to form an efficient and economically compelling offering that provides the aviation industry with a solution to produce waste-based SAF on a global scale. CirculAir will combine LanzaTech and LanzaJet's technologies; first incorporating LanzaTech's novel gas fermentation technology to convert nearly any waste resource into CarbonSmart™ ethanol and then second, executing LanzaJet's Alcohol-to-Jet (ATJ) technology by taking the ethanol and converting it to drop-in SAF. The SAF made through this process is expected to reduce aviation emissions by at least 85% and can also produce carbon negative results, depending on the feedstock.

SAF is estimated to account for 65–70% of overall aviation emissions reduction to achieve net zero by 2050, making it a critical tool for this hard-to-abate industry; however, historic supply constraints, high costs, and technical barriers have made it difficult for the industry to default to SAF as the primary fuel source. CirculAir breaks down these barriers. The technology is able to turn a wide range of waste-based feedstocks into SAF, and it is being adopted by a range of customers across the globe. This widespread adoption is projected to accelerate the production and economies of scale necessary to bring down the global cost of SAF.

"CirculAir brings to market a revolutionary, integrated pathway to convert carbon and waste inventories across our global society as well as the ability to utilize emerging renewable power supply and CO₂ through direct air capture as an economical and commercially viable approach to creating SAF," said Jimmy Samartzis, CEO of LanzaJet. "Our relationship with LanzaTech is global, with work already underway on five continents. Combining the technologies of our respective companies into CirculAir is an industry-first opportunity to create a domestic SAF supply in any country by transforming waste sources or recycled carbon into SAF using our ASTM-approved ethanol-to-SAF pathway."

LanzaJet and LanzaTech, two independent companies, have a long history of collaborating to bring emerging technologies to market and scale nascent industries. The two companies currently maintain joint projects throughout the world, including Australia, New Zealand, the United Arab Emirates, and the United Kingdom.

"Over 100 billion gallons of fossil fuel-derived jet fuel are consumed each year—with our joint technology, we can turn that into 100 billion gallons of reliable jet fuel powered by recycled carbon," said Dr. Jennifer Holmgren, CEO of LanzaTech and Board Chair of LanzaJet. "In joining forces with CirculAir, LanzaTech and LanzaJet are making it clear that versatile, abundant waste carbon can give us what we need to help people travel and eliminate our dependence on fossil resources."

About LanzaTech

LanzaTech Global, Inc. (NASDAQ: LNZA) is the carbon recycling company transforming waste carbon into sustainable raw materials for everyday products. Using its biorecycling technology, LanzaTech captures carbon generated by energy-intensive industries at the source, preventing it from being emitted into the air. LanzaTech then gives that captured carbon a new life as a clean replacement for virgin fossil carbon in everything from household cleaners and clothing fibers to packaging and fuels. By partnering with companies across the global supply chain like ArcelorMittal, Zara, H&M Move, Coty, and On, LanzaTech is paving the way for a circular carbon economy. For more information about LanzaTech, visit <https://lanzatech.com>.

About LanzaJet

LanzaJet is a leading sustainable fuels technology company dedicated to accelerating the clean energy transition. As a Sustainable Aviation Fuel (SAF) technology provider and producer with patented ethanol-based alcohol-to-jet (ATJ) technology, LanzaJet is creating an opportunity for future generations by accelerating the deployment of SAF and other clean technologies critical to addressing the climate crisis and transforming the global economy. Further information is available at <https://www.lanzajet.com/>

Forward Looking Statements

This press release includes forward-looking statements regarding, among other things, the plans, strategies and prospects, both business and financial, of LanzaTech. These statements are based on the beliefs and assumptions of LanzaTech's management. Although LanzaTech believes that its plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, LanzaTech cannot assure you that it will achieve or realize these plans, intentions or expectations. Forward-looking statements are inherently subject to risks, uncertainties and assumptions. Generally, statements that are not historical facts, including statements concerning possible or assumed future actions, business strategies, events or results of operations, are forward-looking statements. These statements may be preceded by, followed by or include the words "believes," "estimates," "expects," "projects," "forecasts," "may," "will," "should," "seeks," "plans," "scheduled," "anticipates," "intends" or similar expressions. The forward-looking statements are based on projections prepared by, and are the responsibility of, LanzaTech's management. These

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