CBI Startup – Terragia secures \$6M to develop cost-competitive, low-carbon biofuel technology

Background

- Terragia uses engineered thermophilic bacteria to break down cellulosic biomass and convert it into ethanol and other chemical products. The company's technology avoids key features responsible for the high cost of conventional cellulosic biofuel production by one-step "consolidated" bioprocessing (CBP) without added enzymes and leveraging mechanical disruption during fermentation (i.e., "cotreatment") in lieu of expensive thermochemical pretreatment.
- CBP technology development is supported by funding from the U.S. Department of Energy's Center for Bioenergy Innovation, by partnerships with Dartmouth College and the University of Campinas supported by the the Sao Paulo Research Foundation, and by grants to Terragia from the United States Department of Agriculture and the National Science Foundation.

Approach

- Founded in 2022, Terragia Biofuel is a technology startup aiming to develop and deploy technology that produces sustainable liquid fuels from cellulosic biomass.
- Terregia Biofuel believes that ethanol is an inherently advantageous fuel intermediate for blending or upgrading into hydrocarbons.

Results

• Terragia Biofuel, a technology startup aiming to drive the next generation of biofuels, announced it has raised a \$6 million seed round led by Engine Ventures and Energy Impact Partners (EIP). The company will use the capital to commercialize its novel biology-based approach to converting cellulosic biomass into ethanol and other products, expand its employee headcount, and initiate partnerships with major biofuel producers.

Significance

• "Terragia has an exciting opportunity to succeed where others in the cellulosic biofuel industry have not. The company's technology provides a radically different approach that uses biology to reduce the high costs and scale of conventional cellulosic biofuel production," stated Katie Rae, CEO and Managing Partner of Engine Ventures.

For more information, visit https://terragiabiofuel.com/. and https://cbi.ornl.gov/terragia-secures-6m-to-develop-cost-competitive-low-carbon-biofuel-technology/







Lee Lynd, CTO (left), Kristin Brief, CEO, and Chris Herring, VP of Technology Development

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