

Green chemical maker LanzaTech to go public via merger

Company hopes to avoid pitfalls of other materials firms that listed on the stock market via SPAC deals
by Michael McCoy
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LanzaTech is the latest green chemical company to announce plans to go public by merging with a special purpose acquisition company, or SPAC. The deal, with AMCI Acquisition Corp. II, will inject some \$275 million into LanzaTech's coffers and value it at about \$2.2 billion.

LanzaTech was formed in 2005 to convert carbon-containing waste gases into chemicals. Its CEO since 2010 has been Jennifer Holmgren, a chemist who previously worked at Honeywell UOP for 23 years. Since its founding, LanzaTech has raised over \$500 million from venture investors including ArcelorMittal, BASF, and Indian Oil.

The Illinois-based company's core technology turns emissions from steel mills and other industrial operations into chemicals via microbial fermentation. Its most advanced process converts carbon monoxide to ethanol, but the firm has also made chemicals such as acetone and isopropyl alcohol at pilot scale, Holmgren says. Likewise, she says, the process can be applied to carbon dioxide if hydrogen is present as a microbial energy source.

To date, the technology has been commercialized in two facilities—a steel mill and a ferroalloy plant—operated by China's Shougang Group. Seven other facilities are under construction, including a \$200 million plant in Belgium that will capture CO from an ArcelorMittal steel mill. Overall, LanzaTech says, its partners have invested \$800 million in facilities deploying the technology.

LanzaTech also has partnerships with companies like L'Oreal, Coty, and Unilever to make packaging and ingredients for consumer products using captured and recycled carbon emissions as raw materials.

LanzaTech joins three other green materials companies that went public through SPAC mergers in 2020 and 2021. Danimer Scientific makes the biodegradable polymer polyhydroxyalkanoate, PureCycle is building polypropylene recycling plants, and Origin Materials converts wood into precursors for the packaging polymer polyethylene terephthalate.

Materials-oriented SPACs have been marked by high-profile struggles and stock price underperformance, says Anthony Schiavo, research director at the consulting firm Lux Research, in an email.

Following their stock market launches, Danimer and PureCycle were targeted by short sellers that issued broadsides against their technology and growth prospects, seeking to induce stock prices to fall. And their stock prices have indeed fallen. Danimer, for example, trades at about \$4 per share, down from a high of almost \$58 a little over a year ago.

Despite that track record, LanzaTech's SPAC is likely to succeed, Schiavo says, in part because the company is more commercially mature and has stronger partnerships than many of its contemporaries.

Holmgren witnessed the SPAC merger rage of 2020 and 2021, but she says such a deal still makes sense for LanzaTech because of the expertise of AMCI, the industrial investment firm sponsoring the SPAC. "We're getting quite a bit of knowledge," she says. "AMCI is a company that really understands the steel sector, the heavy industry/mining sector."

And LanzaTech is distinguished by what Geoff Trukenbrod, its chief financial officer, described on a conference call as the company's "capital-light" model. Whereas Danimer, PureCycle, and Origin are building their own facilities, LanzaTech licenses its technology to partner companies that build the fermentation plants themselves. LanzaTech makes money by providing engineering and start-up services and, later, consumables like microbes and media.

The firm estimates that revenues will be \$65 million this year and \$178 million in 2023. By 2026, LanzaTech expects to have revenues of close to \$1 billion and more than \$400 million in earnings before taxes.

Holmgren says the journey since she joined the company in 2010 has been long but ultimately satisfying. "Most people don't appreciate what it takes to commercialize a disruptive technology in this sector," she says. "We have the opportunity to show how exponential growth happens after you build and commission plants. We are at the inflection point."

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Important Information About the Business Combination and Where to Find It

The proposed business combination (the “Business Combination”) between AMCI and LanzaTech NZ, Inc. (“LanzaTech”) will be submitted to stockholders of AMCI for their consideration. AMCI intends to file a registration statement on Form S-4 (the “Registration Statement”) with the SEC that will include both a prospectus with respect to the combined company’s securities to be issued in connection with the Business Combination and a proxy statement to be distributed to AMCI’s stockholders in connection with AMCI’s solicitation of proxies for the vote by its stockholders in connection with the Business Combination and other matters as described in the Registration Statement. **AMCI urges its investors, stockholders and other interested persons to read, when available, the preliminary proxy statement/prospectus and any amendments thereto and the definitive proxy statement/prospectus, as well as other documents filed by AMCI with the SEC because these documents will contain important information about AMCI, LanzaTech and the Business Combination.** After the Registration Statement is declared effective, AMCI will mail the definitive proxy statement/prospectus to its stockholders as of a record date to be established for voting on the Business Combination. Stockholders will also be able to obtain a copy of the Registration Statement, including the preliminary and definitive proxy statement/prospectus, once available, as well as other documents filed with the SEC regarding the Business Combination and other documents filed by AMCI with the SEC, without charge, at the SEC’s website located at www.sec.gov or by directing a request to: AMCI Acquisition Corp. II, 600 Steamboat Road, Greenwich, CT 06830.

Participants in the Solicitation

AMCI and LanzaTech and their respective directors and executive officers may be considered participants in the solicitation of proxies with respect to the Business Combination described in this press release under the rules of the SEC. Information about the directors and executive officers of AMCI is set forth in AMCI’s final prospectus relating to its initial public offering filed with the SEC on August 4, 2021 (the “AMCI IPO Prospectus”). Information regarding the persons who may, under the rules of the SEC, be deemed participants in the solicitation of AMCI stockholders in connection with the Business Combination will be set forth in the proxy statement/prospectus when it becomes available. Stockholders, potential investors and other interested persons should read the proxy statement/prospectus carefully when it becomes available before making any voting or investment decisions. These documents can be obtained free of charge from the sources indicated above.

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This communication includes forward-looking statements regarding, among other things, the plans, strategies and prospects, both business and financial, of AMCI and LanzaTech. These statements are based on the beliefs and assumptions of the management of AMCI and LanzaTech. Although AMCI and LanzaTech believe that their respective plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, neither AMCI nor LanzaTech can assure you that either 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,” or “intends” or similar expressions. The forward-looking statements are based on projections prepared by, and are the responsibility of, AMCI’s or LanzaTech’s management. These forward-looking statements are not guarantees of future performance, conditions or results, and involve a number of known and unknown risks, uncertainties, assumptions and other important factors, many of which are outside the control of the parties, that could cause actual results or outcomes to differ materially from those discussed in the forward-looking statements. Important factors that may affect actual results or outcomes include, among others, factors relating to the Business Combination, including the parties’ ability to meet the closing conditions of the Business Combination, the uncertainty of the projected financial information with respect to LanzaTech; the level of AMCI stockholder redemptions, if any, the ability to realize the benefits expected from the Business Combination; and the ability to list and maintain such listing of the combined company’s securities following the Business Combination; factors relating to the business, operations and financial performance of LanzaTech, including with respect to LanzaTech’s development activities, industry partnerships and intellectual property rights; and other factors, such as market opportunities for the combined company, AMCI’s or the combined company’s ability to raise financing in the future and the impacts of COVID-19 on the combined company’s business; and those factors discussed under the heading “Risk Factors” in the AMCI IPO Prospectus, AMCI’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2021, and other documents of AMCI filed, or to be filed, with the SEC. New risk factors emerge from time to time and it is not possible to predict all such risk factors, nor can AMCI or LanzaTech assess the impact of all such risk factors on the businesses of AMCI and LanzaTech prior to the Business Combination, and the combined company following the Business Combination, or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. Forward-looking statements are not guarantees of performance. You should not put undue reliance on these statements, which speak only as of the date hereof. All forward-looking statements attributable to AMCI or LanzaTech or persons acting on their behalf are expressly qualified in their entirety by the foregoing cautionary statements. AMCI and LanzaTech prior to the Business Combination, and the combined company following the Business Combination, undertake no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

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