UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K/A
(Amendment No. 1)

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): March 28, 2023 (February 8, 2023)

LanzaTech Global, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**001-40282**	**92-2018969**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

8045 Lamon Avenue, Suite 400 Skokie, Illinois	60077
(Address of principal executive offices)	(Zip Code)

(847) 324-2400
(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communication pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencements communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbols	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	**LNZA**	**The Nasdaq Stock Market LLC**
Redeemable Warrants, each whole warrant exercisable for one share of Common Stock at an exercise price of $11.50	**LNZAW**	**The Nasdaq Stock Market LLC**

☒ Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

☐ If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Introductory Note

This Amendment No. 1 to the Current Report on Form 8-K of LanzaTech Global, Inc. ("New LanzaTech") originally filed by New LanzaTech on February 13, 2023 (such Current Report, the "Original Current Report") is being filed for the purpose of supplementing the historical financial statements and pro forma combined financial information provided under Items 9.01(a) and 9.01(b) in the Original Current Report to include the audited consolidated financial statements of each of AMCI Acquisition Corp. II, our predecessor company ("AMCI"), and LanzaTech NZ, Inc. ("Legacy LanzaTech"), as of December 31, 2022 and 2021 and for the years ended December 31, 2022 and 2021, and the related Management's Discussion and Analysis of Financial Condition and Results of Operations of AMCI and Legacy LanzaTech for the year ended December 31, 2022, and the unaudited pro forma condensed combined financial information of New LanzaTech for the year ended December 31, 2022. This Amendment No. 1 further amends the Original Current Report in order to reflect business updates and developments at New LanzaTech subsequent to the filing date of the Original Current Report, and to include disclosure under Item 8.01 to reflect the ratification of a "defective corporate act" within the meaning of Section 204 of the Delaware General Corporation Law.

The Business Combination

On February 8, 2023 (the "Closing Date"), AMCI, consummated the previously announced business combination (the "Business Combination") pursuant to the terms of the Agreement and Plan of Merger (the "Closing"), dated as of March 8, 2022 (as amended on December 7, 2022, the "Merger Agreement"), by and among AMCI, AMCI Merger Sub, Inc. ("Merger Sub") and Legacy LanzaTech. Pursuant to the Merger Agreement, on the Closing Date, (i) AMCI changed its name to "LanzaTech Global, Inc.", and (ii) Merger Sub merged with and into Legacy LanzaTech, with Legacy LanzaTech as the surviving company in the Business Combination. After giving effect to such Business Combination, Legacy LanzaTech became a wholly owned subsidiary of New LanzaTech.

Pursuant to the Merger Agreement, at the effective time of the Business Combination (the "Effective Time"), (i) each outstanding share of common stock of Legacy LanzaTech (the "Legacy LanzaTech common stock") was converted into the right to receive 4.374677 shares of common stock, par value $0.0001 per share, of New LanzaTech (the "Common Stock"); (ii) each warrant to purchase Legacy LanzaTech common stock that was outstanding and unexercised immediately prior to the Effective Time and would automatically be exercised or exchanged in full in accordance with its terms by virtue of the occurrence of the Business Combination, was automatically exercised or exchanged in full for the applicable shares of Legacy LanzaTech capital stock, and each such share of Legacy LanzaTech capital stock was treated as being issued and outstanding immediately prior to the Effective Time and was cancelled and converted into the right to receive the applicable shares of Common Stock; (iii) each warrant to purchase Legacy LanzaTech common stock that was outstanding and unexercised prior to the Effective Time and was not automatically exercised in full as described in clause (ii) was converted into a warrant to purchase shares of Common Stock, in which case (a) the number of shares underlying such New LanzaTech warrant was determined by multiplying the number of shares of Legacy LanzaTech capital stock subject to such warrant immediately prior to the Effective Time, by 4.374677 and (b) the per share exercise price of such New LanzaTech warrant was determined by dividing the per share exercise price of such Legacy LanzaTech warrant immediately prior to the Effective Time by 4.374677, except that in the case of a certain warrant issued by Legacy LanzaTech to ArcelorMittal XCarb S.à r.l on December 8, 2021, such exercise price is $10.00; and (iv) to the extent not converted in full immediately prior to the Effective Time, the Brookfield SAFE was assumed by New LanzaTech and is convertible into 5,000,000 shares of Common Stock. In addition, the accumulated dividends payable to the holders of Legacy LanzaTech preferred shares in connection with the share conversion based on the applicable conversion ratio at the Effective Time were settled by delivery of Common Stock.

Pursuant to the Merger Agreement, at the Effective Time, each Legacy LanzaTech option was converted into New LanzaTech options to purchase a number of shares of Common Stock (rounded down to the nearest whole share) equal to the product of (i) the number of Legacy LanzaTech common shares subject to such Legacy LanzaTech option multiplied by (ii) 4.374677. The exercise price of such New LanzaTech options is equal to the quotient of (a) the exercise price per share of such Legacy LanzaTech option in effect immediately prior to the Effective Time divided by (b) 4.374677 (and as so determined, this exercise price will be rounded up to the nearest full cent). Pursuant to the Merger Agreement, at the Effective Time, each Legacy LanzaTech RSA that was outstanding

immediately prior to the Effective Time was converted into a New LanzaTech RSA on the same terms and conditions as were applicable to such Legacy LanzaTech RSA immediately prior to the Effective Time, except that such New LanzaTech RSA will relate to a number of shares of Common Stock equal to the number of Legacy LanzaTech common shares subject to such Legacy LanzaTech RSA, multiplied by 4.374677.

The foregoing description of the Merger Agreement and the Business Combination does not purport to be complete and is qualified in its entirety by the full text of the Merger Agreement, a copy of which is attached hereto as Exhibit 2.1 and is incorporated herein by reference.

Subscription Agreements

In connection with the execution of the Merger Agreement, AMCI entered into subscription agreements (as amended on December 7, 2022, the "Initial Subscription Agreements") with the following institutional accredited investors (the "Initial PIPE Investors"): Activant Capital IV, LP; AMCI Group, LLC Series 35; BASF Venture Capital GmbH; Future Solutions Investments, LLC (a related party of Khosla Ventures); Guardians of New Zealand Superannuation; K One W One (No. 3) Ltd.; Mitsui & Co. Ltd.; Oxy Low Carbon Ventures, LLC; Primetals Technologies Austria GmbH; SHV Energy N.V.; and Trafigura US Holdings, Inc.

Pursuant to the Initial Subscription Agreements, the Initial PIPE Investors subscribed to purchase an aggregate of 12,500,000 shares of Class A common stock, par value $0.0001 per share, of AMCI ("Class A common stock") at a purchase price of $10.00 per share (the "Initial PIPE Investment"), for aggregate proceeds of approximately $125,000,000, which shares were issued immediately prior to the Effective Time. The Initial PIPE Investment includes 3,000,000 shares of Class A common stock issued to ArcelorMittal pursuant to the automatic conversion of the AM SAFE Note, as a result of which such shares are treated as part of the Private Placement. ArcelorMittal is considered a PIPE Investor (as defined below) and entered into an Initial Subscription Agreement with AMCI prior to the Closing.

Following the Initial PIPE Investments, AMCI entered into additional private placement subscription agreements as follows: (a) on October 18, 2022 AMCI entered into a subscription agreement with Puig International SA, which was amended on December 7, 2022; (b) on October 18, 2022 AMCI entered into a subscription agreement with Woodside Energy Technologies Pty, Ltd, which was amended on December 7, 2022; (c) on February 4, 2023 AMCI entered into an amendment to an existing subscription agreement with Oxy Low Carbon Ventures, LLC; (d) on February 6, 2023 AMCI entered into a subscription agreement with Pescadero Capital, LLC (collectively, the "Additional Subscription Agreements" and, together with the Initial Subscription Agreements, the "Subscription Agreements"). The institutional investors party to the Additional Subscription Agreements subscribed, in the aggregate, to purchase immediately prior to the Closing an aggregate of 6,000,000 shares of Class A common stock at a purchase price of $10.00 per share for aggregate additional proceeds of approximately $60,000,000, which shares were issued immediately prior to the Effective Time.

The foregoing description of the Subscription Agreements and the Private Placement does not purport to be complete and is qualified in its entirety by the full text of the forms of Subscription Agreements, copies of which are attached hereto as Exhibits 10.1,10.33, 10.39 and 10.40 and are incorporated herein by reference.

Forward Purchase Agreement

On February 3, 2023, AMCI, Legacy LanzaTech and ACM ARRT H LLC (the "Seller") entered into an agreement (the "Forward Purchase Agreement") for an over-the-counter Equity Prepaid Forward Transaction (the "Forward Purchase Transaction"). For purposes of the Forward Purchase Agreement, AMCI and Legacy LanzaTech are referred to as the "Counterparty" prior to and after the Business Combination, respectively. Pursuant to the terms of the Forward Purchase Agreement, the Seller may, but is not obligated to, purchase through a broker in the open market up to 10,000,000 Class A common shares, par value $0.0001 per share, of AMCI ("AMCI Shares") before the Closing from holders of AMCI Shares (other than AMCI), including from holders who have previously elected to redeem their AMCI Shares (such purchased AMCI Shares, and the successor shares following the Closing, the "Recycled Shares") in connection with the Business Combination pursuant to the redemption rights set forth in AMCI's Amended and Restated Certificate of Incorporation (such holders, "Redeeming Holders"). The aggregate total number of shares subject to the Forward Purchase Agreement (the "Number of Shares") will be the number of

shares set forth on the Pricing Date Notice (as defined in the Forward Purchase Agreement), but in no event more than 10,000,000 shares. The Number of Shares is subject to reduction following termination of the Forward Purchase Agreement with respect to the Recycled Shares as described under "Optional Early Termination" in the Forward Purchase Agreement. Unless in connection with an optional early termination, the Seller has agreed to hold the Recycled Shares in a bankruptcy remote special purpose vehicle for the benefit of the Counterparty. The Seller also may not beneficially own greater than 9.9% of the AMCI Shares on a post-combination basis.

The Forward Purchase Agreement provides that no later than the earlier of (a) one business day after the Closing and (b) the date any assets from AMCI's trust account are disbursed in connection with the Business Combination, the Seller will be paid directly, out of the funds held in AMCI's trust account, an amount (the "Prepayment Amount") equal to (x) the product of (i) the redemption price per share payable to investors who elected to redeem in connection with the Business Combination (the "Redemption Price") and (ii) the Number of Shares specified at the outset of the Forward Purchase Transaction (the "Prepayment Amount") less (y) an amount determined by the Counterparty of up to $2,500,000 (the "Prepayment Shortfall"), which will be retained in the Counterparty's trust account. As of February 3, 2023, $152,360,374 of investments and cash were held in the trust account.

The Counterparty has agreed to file a registration statement with the U.S. Securities and Exchange Commission (the "SEC") registering the resale of the Recycled Shares and the Share Consideration (as defined below) (the "Registration Statement") under the Securities Act of 1933, within 45 days following the request of the Seller, which will not be prior to the redemption deadline for the AMCI Shares or after the Maturity Date (as defined below). From time to time following the Closing and only after the effectiveness of the Registration Statement (the "Registration Statement Effective Date"), the Seller may, at its discretion, provide a shortfall sale notice to the Counterparty without a payment obligation to the Counterparty (the "Shortfall Sales") until such time as the aggregate amount indicated on such shortfall sale notices equals the Prepayment Shortfall. The Prepayment Shortfall will increase by $7,500,000 if the Counterparty fails to repay to the Seller the Prepayment Shortfall in full within 30 days from the Closing. For 30 days following the Closing, the Seller will not sell any Recycled Shares at a price below $10.00 per share. The Counterparty has agreed that it will not issue any shares, or securities or debt that is convertible, exercisable or exchangeable into shares until the gross proceeds indicated in the shortfall sales notices equal the Prepayment Shortfall, except under certain circumstances as further described in the Forward Purchase Agreement. The Seller in its sole discretion may request warrants of the Counterparty exercisable for shares in an amount equal to (i) 10,000,000 shares less (ii) (a) the number of Recycled Shares at the outset of the Forward Purchase Transaction plus (b) the number of shares indicated on the shortfall sale notice by the Seller that reduces the Prepayment Shortfall (the "Shortfall Warrants"). The Shortfall Warrants will have an exercise price equal to the Reset Price.

The Seller may also, at its discretion and at any time, provide a notice under "OET Sales." The Seller may deliver an OET notice and return to the Counterparty the product of the Reset Price and the number of shares listed on the OET notice. Following the Closing, the reset price (the "Reset Price") will initially be the per share Redemption Price; provided, however, that the Reset Price may be reduced to any lower price at which the Counterparty sells, issues or grants any shares or securities convertible or exchangeable into shares (other than grants or issuances under the Counterparty's equity compensation plans or shares underlying warrants issued in connection with the Business Combination), subject to certain exceptions.

The maturity date of the Forward Purchase Agreement will be the third anniversary of the Closing (the "Maturity Date"). Upon the occurrence of the Maturity Date, the Counterparty is obligated to pay to Seller an amount equal to the product of (1) (a) the lesser of the Maximum Number of Shares and 7,500,000 less (b) the number of Terminated Shares multiplied by (2) $2.00 (the "Maturity Consideration"). At the Maturity Date, the Counterparty will be entitled to deliver the Maturity Consideration to the Seller in cash or shares calculated based on the average daily VWAP Price over 30 trading days ending on the later of the Maturity Date and the date on which such shares are registered. The Maturity Date may be accelerated by Seller, at its discretion, if, among other termination events, following the Closing, the VWAP Price is below $2.00 per Share for any 50 trading days during a 60 consecutive trading day-period that ends during the first 90 days after the date of the Forward Purchase Agreement, and (2) $3.00 per share thereafter. In addition to the Prepayment Amount and the Maturity Consideration, on the Maturity Date, the Counterparty has agreed to pay to the Seller an amount equal to the product of (x) 500,000 and (y) the Redemption Price (the "Share Consideration")..

The Forward Purchase Agreement may be terminated by any of the parties thereto if any of the following events occur: (a) failure to consummate the Business Combination on or before the Termination Date (as defined in the Merger Agreement), as such Termination Date may be amended or extended from time to time, (b) termination of the Merger Agreement prior to the Closing, (c) the initial Pricing Date Notice provides for less than 4,000,000 AMCI Shares, or (d) the resale registration statement is not declared effective within 105 days of the registration request (each of such events, an "Additional Termination Event").

The Counterparty has agreed to indemnify and hold harmless the Seller, its affiliates, assignees and other parties described therein (the "Indemnified Parties") from and against all losses, claims, damages and liabilities under the Forward Purchase Agreement (excluding liabilities relating to the manner in which Seller sells any shares it owns) and reimburse the Indemnified Parties for their reasonable expenses incurred in connection with such liabilities, subject to certain exceptions described therein, and has agreed to contribute to any amounts required to be paid by any Indemnified Parties if such indemnification is unavailable or insufficient to hold such party harmless.

The Seller waived any redemption rights with respect to any Recycled Shares in connection with the Business Combination. Such waiver may reduce the number of AMCI Shares redeemed in connection with the Business Combination, and such reduction could alter the perception of the potential strength of the Business Combination. In connection with the Forward Purchase Agreement, the Seller assigned its rights, duties and obligations with respect to a portion of the shares purchased under the Forward Purchase Agreement to Vellar Opportunity Fund SPV LLC - Series 10 (which entity assumed all of the obligations and rights of ACM described above with respect to the portion of the shares so assigned). The Forward Purchase Agreement has been structured, and all activity in connection with such agreement has been undertaken, to comply with the requirements of all tender offer regulations applicable to the Business Combination, including Rule 14e-5 under the Securities Exchange Act of 1934.

The foregoing summary of the Forward Purchase Agreement is qualified in its entirety by reference to the text of the Forward Purchase Agreement, which is filed as Exhibit 10.38 hereto and is incorporated herein by reference.

Certain holders of Class B common shares, par value $0.0001 per share, of AMCI (the "Founder Shares") transferred a total of 1,250,000 Founder Shares to two investors in return for their agreement to either reverse their redemptions or purchase Recycled Shares, as applicable.

Shortfall Warrants

On March 27, 2023, we issued an aggregate of 2,073,486 Shortfall Warrants to ACM and 2,010,000 Shortfall Warrants to Vellar Opportunity Fund SPV LLC - Series 10 pursuant to the Forward Purchase Agreement, as further described in "— Forward Purchase Agreement." Each Shortfall Warrant entitles the registered holder to purchase one share of common stock at a price of $10.00 per share, subject to adjustment in the event that we sell, grant or otherwise issue common stock or common stock equivalents at an effective price less than the then current exercise price of the Shortfall Warrants, at any time commencing on March 27, 2023. Pursuant to the warrant agreement, a Shortfall Warrant holder may exercise its Shortfall Warrants only for a whole number of shares of common stock. This means that only a whole Shortfall Warrant may be exercised at any given time by a Shortfall Warrant holder. The Shortfall Warrants will expire on March 27, 2028 at 5:00 p.m., New York City time.

We are not obligated to deliver any shares of common stock pursuant to the exercise of a Shortfall Warrant and will have no obligation to settle such Shortfall Warrant exercise unless (i) a registration statement under the Securities Act with respect to the shares of common stock underlying the Shortfall Warrants is then effective, subject to satisfaction of our obligations described in "— Forward Purchase Agreement" with respect to registration, or (ii) either (a) the shares of common stock pursuant to the exercise of a Shortfall Warrant are eligible for resale by the holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Shortfall Warrants), and (b) otherwise by physical delivery of a certificate. In the event that these conditions are not satisfied with respect to a Shortfall Warrant, the holder of such Shortfall Warrant will not be entitled to exercise such Shortfall Warrant and such Shortfall Warrant may have no value and expire worthless. In no event will we be required to net cash settle any Shortfall Warrant.

A holder of a Shortfall Warrant may exercise such warrants on a "cashless basis." In such event, each holder would pay the exercise price by surrendering the Shortfall Warrants for that number of shares of common stock equal to

(A-B) (X) by (A), where: (A) is the volume-weighted average price of our common stock on the trading day immediately preceding the date of the applicable notice of exercise (subject to certain adjustments depending on the timing of the notice of exercise), (B) is the exercise price of the Shortfall Warrant, as adjusted; and (X) is the number of shares of common stock that would be issuable upon exercise of the Shortfall Warrant in accordance with its terms if such exercise were by means of a cash exercise.

Each Shortfall Warrant may be exercised in part or in full. If we fail for any reason to deliver to the holder the applicable shares before the required date, we must pay certain liquidated damages to the holder.

We have agreed to certain registration rights with regard to the Shortfall Warrants described in "— Forward Purchase Agreement."

The foregoing summary of the Forward Purchase Agreement is qualified in its entirety by reference to the text of the form of Shortfall Warrant, which is filed as Exhibit 10.38 hereto and is incorporated herein by reference.

Unless the context otherwise requires, "we," "us" and "our" refer to New LanzaTech. All references herein to the "Board" refer to the board of directors of New LanzaTech.

Item 1.01. Entry into a Material Definitive Agreement.

Indemnification Agreements

In connection with the consummation of the Business Combination, New LanzaTech entered into indemnification agreements with each of its directors and executive officers. These indemnification agreements provide the directors and executive officers with contractual rights to indemnification and the advancement of certain expenses incurred by each such director or executive officer in any action or proceeding arising out of his or her services as one of New LanzaTech's directors or executive officers.

The foregoing description of the indemnification agreements does not purport to be complete and is qualified in its entirety by the full text of the form of indemnification agreement, a copy of which is attached hereto as Exhibit 10.29 and is incorporated herein by reference.

Registration Rights Agreement

At the Effective Time, AMCI, AMCI Sponsor II LLC (the "Sponsor"), Legacy LanzaTech, and certain of the Legacy LanzaTech stockholders and AMCI stockholders entered into a Registration Rights Agreement (the "Registration Rights Agreement"), pursuant to which, among other things, such stockholders (i) were granted certain registration rights with respect to certain securities held by them, and (ii) are subject to certain restrictions on transfer with respect to their shares of New LanzaTech Common Stock and New LanzaTech warrants.

Such restrictions will end (i) with respect to the Sponsor and the holders of Class B common stock, on the earlier of (a) the date that is one year following the Closing, (b) such date upon which the closing price per share of New LanzaTech Common Stock equals or exceeds $12.00 per share for any 20 trading days within any 30-day trading period commencing at least 150 days after the Closing and (c) the date on which New LanzaTech completes a liquidation, merger, capital stock exchange, reorganization or other similar transaction after the Business Combination that results in all of New LanzaTech's stockholders having the right to exchange their shares of New LanzaTech Common Stock for cash, securities or other property, and (ii) with respect to the holders of shares of Legacy LanzaTech capital stock, on the date that is six months following the Closing.

The foregoing description of the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by the full text of the form of Registration Rights Agreement, a copy of which is filed herewith as Exhibit 10.3 and is incorporated herein by reference.

Lock-Up Agreements

At the Effective Time, certain Legacy LanzaTech directors, officers, and employees entered into a lock-up agreement (the "Lock-up Agreement") restricting their ability to transfer certain securities. The restrictions on

transfer for directors and officers will end on the earlier of (i) the date that is one year following the Closing, (ii) such date upon which the closing price per share of New LanzaTech Common Stock equals or exceeds $12.00 per share for any 20 trading days within any 30-day trading period commencing at least 150 days after the Closing and (iii) the date on which New LanzaTech completes a liquidation, merger, capital stock exchange, reorganization or other similar transaction after the Business Combination that results in all of New LanzaTech's stockholders having the right to exchange their shares of New LanzaTech Common Stock for cash, securities or other property. The restrictions on transfer for employees that are not directors or officers will end on the date that is six months following the Closing.

In addition, AMCI and the Sponsor and certain AMCI directors and officers (together the "AMCI Insiders") agreed to amend the Letter Agreement so that the Lock-Up Period (as defined in the Letter Agreement) applicable to the 3,750,000 shares of Class B common stock held by the AMCI Insiders will end on the earlier of (i) the date that is one year following the Closing Date, (ii) the date on which AMCI consummates a liquidation, merger, capital stock exchange or other similar transaction after the Closing that results in all of AMCI's stockholders having the right to exchange their common stock for cash, securities or other property, (iii) the valid termination of the Sponsor Support Agreement, and (iv) the date on which the volume weighted average closing sale price of the shares of New LanzaTech Common Stock is equal to or greater than $12.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) for any 20 trading days within any 30-trading day period commencing at least 150 days after the Closing Date.

The foregoing description of the Lock-Up Agreement does not purport to be complete and is qualified in its entirety by the full text of the form of Lock-up Agreement, a copy of which is filed herewith as Exhibit 10.4 and is incorporated herein by reference.

Item 2.01. Completion of Acquisition or Disposition of Assets.

Reference is made to the disclosure described in the "Introductory Note" of this Current Report on Form 8-K (this "Current Report"), which is incorporated herein by reference.

FORM 10 INFORMATION

Item 2.01(f) of Form 8-K states that if the predecessor registrant was a "shell company" (as such term is defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as AMCI was immediately before the Business Combination, then the registrant must disclose the information that would be required if the registrant were filing a general form for registration of securities on Form 10. As a result of the consummation of the Business Combination, and as discussed below in Item 5.06 of this Current Report, New LanzaTech has ceased to be a shell company. Accordingly, New LanzaTech is providing the information below that would be included in a Form 10 if New LanzaTech were to file a Form 10. Please note that the information provided below relates to New LanzaTech as the combined company after the consummation of the Business Combination, unless otherwise specifically indicated or the context otherwise requires.

Forward-Looking Statements

This Current Report contains statements that are forward-looking and as such are not historical facts. This includes, without limitation, statements regarding the financial position, business strategy and the plans and objectives of management for future operations. These statements constitute projections, forecasts and forward-looking statements, and are not guarantees of performance. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. When used in this Current Report, words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "possible," "potential," "predict," "project," "should," "strive," "would" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. When we discuss our strategies or plans, we are making projections, forecasts or forward-looking statements. Such statements are based on the beliefs of, as well as assumptions made by and information currently available to, our management.

Forward-looking statements in this Current Report may include, for example, statements about:

- our anticipated growth rate and market opportunities;
- our ability to maintain the listing of our securities on the Nasdaq Stock Market (“Nasdaq”);
- the potential liquidity and trading of our securities;
- our ability to raise financing in the future;
- our assessment of the competitive landscape;
- our ability to comply with laws and regulations applicable to our business;
- our ability to enter into, successfully maintain and manage relationships with industry partners;
- our receipt of substantial additional financing to fund our operations and complete the development and commercialization of our process technologies;
- the availability of governmental programs designed to incentivize the production and consumption of low-carbon fuels and carbon capture and utilization;
- our ability to adequately protect our intellectual property rights;
- our ability to attract, retain and motivate qualified personnel and to manage our growth effectively;
- our future financial performance and capital requirements;
- our ability to implement and maintain effective internal controls; and
- the impact of the COVID-19 pandemic on our business.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this Current Report.

These forward-looking statements are only predictions based on our current expectations and projections about future events and are subject to a number of risks, uncertainties and assumptions, including those described in “Risk Factors” and elsewhere in this Current Report. Moreover, we operate in a competitive industry, and new risks emerge from time to time. It is not possible for the management of New LanzaTech to predict all risks, nor can we assess the impact of all factors on our business 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 we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Current Report may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements in this Current Report.

The forward-looking statements included in this Current Report are made only as of the date hereof. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. New LanzaTech does not undertake any obligation to update publicly any forward-looking statements for any reason after the date of this Current Report to conform these statements to actual results or to changes in expectations, except as required by law.

You should read this Current Report and the documents that have been filed as exhibits hereto with the understanding that the actual future results, levels of activity, performance, events and circumstances of New LanzaTech may be materially different from what is expected.

Business

Business Overview

Founded in 2005 in New Zealand and headquartered today in Skokie, Illinois, we are a nature-based carbon refining company that transforms waste carbon into the chemical building blocks for consumer goods such as sustainable fuels, fabrics, and packaging that people use in their daily lives. Our goal is to reduce the need for virgin fossil fuels by challenging and striving to change the way the world uses carbon. We aim to accomplish this through the creation of a circular economy where carbon can be reused rather than wasted. Through technology and applications that are designed to touch multiple points of carbon use such as converting industrial, municipal, and agricultural waste into products, developing sustainable products to change the supply chain, and having systems to reuse the waste once consumers are done with the products, we believe we can offer a solution to help alleviate the global carbon crisis. Our economically viable and scalable technology is designed to enable emitters to reduce their environmental impact and potentially to replace materials made from virgin fossil resources with recycled carbon, supporting their climate goals, meeting mandated targets, and creating a more sustainable future.

Using our process technology, our partners launched the world's first commercial carbon refining plant in 2018 in China and have subsequently added two commercial plants operating in China. In addition to the three commercial operating plants in China, LanzaTech's partners in Canada and Japan are operating demonstration scale facilities respectively utilizing gasified forestry residues and gasified unsorted municipal solid waste. Both these demonstration scale plants completed commissioning and early start up in late 2022. LanzaTech has numerous commercial projects in construction, under development and in the pipeline globally. Our technology platform is designed to use a variety of waste feedstocks, from waste industrial gases to biomass residues and municipal solid waste. Our technology platform is designed to capitalize on the demand for sustainable fuels and chemicals, which can be used in multiple sectors such as aviation, automotive, textiles, home goods, consumer goods and others, to address the growing preference among major companies for environmentally conscious products and manufacturing processes. We believe LanzaTech's proven commercialized technology can enable global scale decarbonization and initiate a circular and climate positive carbon economy.

Gas fermentation is a robust form of carbon capture and transformation that enhances the value of waste streams and reduces environmental pollution. Additionally, our technology platform utilizes existing industrial land and recycled process water, further reducing the environmental impact of producing our low carbon ethanol on land and biodiversity. Gas fermentation is a key part of our technology offering and we license this capability to customers to develop their own gas fermentation facilities, accelerating the spread of our technology across a variety of feedstocks and geographies.

Our novel technology platform is like brewing, but instead of using yeast that eat sugar to make alcohol, our biocatalysts, or microbes, eat waste carbon to produce ethanol, ethanol derivatives, and ethanol co-products. Because our system is biological and can grow in dynamic environments and react in real-time to changing conditions, it is much more tolerant of variability in feedstock composition and supply than systems based on catalytic chemistry and is therefore highly customizable.

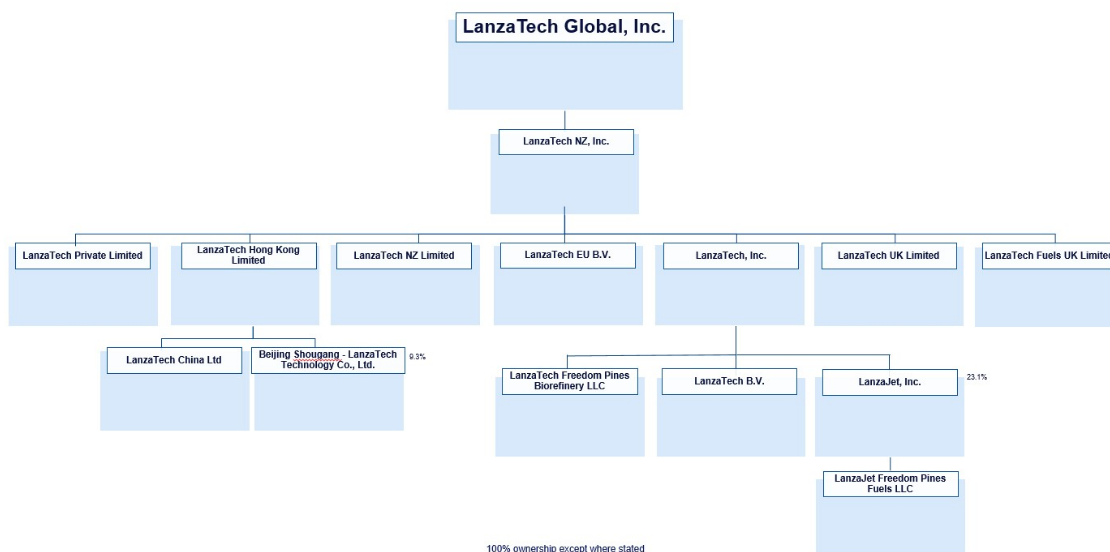
Our low carbon ethanol is being produced at commercial scale at three separate locations in China, with production of over 54 million gallons of fuel grade ethanol, resulting in the mitigation of over 275,000 tons of CO2 and keeping the equivalent of an estimated 25 million gallons of oil in the ground since May 2018. Used microorganisms from our commercial facilities are protein-rich and can be sold in China as animal feed.

We are also developing biocatalysts and processes to produce a vast suite of additional products utilizing novel biocatalysts, including acetone and isopropanol ("IPA") and important industrial solvents used in multiple applications including production of polymers from IPA. Products generated through the application of downstream catalytic chemistry of ethanol include SAF, sustainable diesel, ethylene, polyethylene, polyethylene terephthalate ("PET"), surfactants and glycols. Sustainable diesel can be blended with conventional diesel fuels as "drop in fuel" without any blending wall set by engine technology and offers reduced emissions, improving local air quality. Ethylene is widely used in the chemical industry, mostly for production of polyethylene, a plastic containing polymer chains of ethylene units in various chain lengths. Polyethylene is primarily used to make films and for

packaging applications. Ethylene glycol is another product that can be used for production of surfactants, a key ingredient for detergents and liquid soap production. Ethanol can be further converted to monoethylene glycol ("MEG"), an important precursor to PET for use in packaging and textiles applications.

In June 2020, we helped launch LanzaJet, a SAF company, and maintain approximately a 25% ownership stake in the business. LanzaJet has secured funding for a 10 million gallon commercial-scale production facility that we expect will begin producing SAF in 2023. We developed and scaled the production facility in Soperton, Georgia using our platform technology, which enables the conversion of ethanol to sustainable jet and diesel fuels, in collaboration with the Pacific Northwest National Lab and the U.S. Department of Energy. Using our platform technology, we have converted ethanol produced from steel mill emissions to SAF and have powered flights by Virgin Atlantic in 2018 and All Nippon Airways in 2019.

For a complete depiction of our organizational structure, please refer to the structure chart below.



We aim to maximize revenue through the selective deployment of both our licensing and co-development models. Our licensing model focuses on generating licensing, royalty, and services fees from our commercialization efforts, while our partners own and operate the gas fermentation plants. This capital-light model enables us to concurrently partner with a significant number of partners to build customer - owned gas fermentation facilities in parallel, accelerating the spread of our technology platform. Our licensing model typically generates stable, recurring revenues which we anticipate will compound as more customer plants are built and validated by our pipeline of customers. As a licensor and services provider, we structure our agreements to provide engineering and startup services and key components of the overall equipment package that are based on our proprietary designs and integrations. Once fully operational, recurring revenues are generated from royalties on the offtake, ongoing supply of microbes and media, as well as software, monitoring and analytics support. In certain more limited cases, we will act as co-developer on projects, allowing us to leverage our existing relationships and engineering and project development expertise in a financial sponsor role for select projects where we believe we can participate in the ownership, either directly or by arranging and deploying third-party capital, and operation of the gas fermentation plant. In the select instances where we will participate directly in the project ownership, we expect to be a minority investor in those projects' capital requirements, accounting for approximately 5% of the total capital. We believe that the co-development model has the potential to allow for the acceleration of the development and integration of new feedstocks and products while also allowing us to capture additional potential value from the individual project's performance. In each instance of co-development, we intend to license our technology directly to the project, which we expect will enable us to capture the same revenue streams of licensing, royalty, and services fees

generated through the licensing model with customer-owned facilities. To maximize revenue from each project, whether via licensing or co-development, we sell supplies and equipment to our projects and customers. Additionally, we provide advisory, research and engineering services to develop new chemicals, use new feedstocks, and advance new fermentation or synthetic biology capabilities.

Our management team has more than 150 years of combined research and development, engineering and scale up, operations, partnering and licensing experience in the energy industry. Our company was co-founded in 2005 by our advisor and former Chief Scientific Officer, Dr. Sean Simpson, and the late molecular biology expert, Dr. Richard Forster. Dr. Jennifer Holmgren, our Chief Executive Officer since 2010, has over 30 years of experience in the energy sector, including a proven track record in the development and commercialization of renewable jet fuel and chemical technologies. We are led by a diverse management team and board of directors with deep experience in leading energy companies and major financial institutions. We believe the expertise of our leadership team and the strength of our relationships within the industry are critical to our strategy as we continue to deploy our technology and expand our business.

Market Opportunity

Overview

GHG emissions are rampant in major economic areas across the globe. In Asia, the largest emitter of GHGs, approximately 10 billion metric tons of CO2 are emitted per year, with almost 30% of the global territorial fossil fuel CO2 emissions occurring in China alone. In the United States, approximately six billion metric tons of CO2 have been emitted annually for over 30 years. In Europe, nearly five billion metric tons of CO2 are emitted per year. GHGs from human activities are the most significant driver of observed climate change, which is taking on greater importance and urgency throughout the world.

In 2016, the Paris Agreement was signed by a consortium of countries committing to limit the increase of global average temperatures to 2°C or less compared to pre-industrial levels. Such initiatives have placed an increased emphasis on monitoring and mitigating the effects of climate change and generally promoting environmentally friendly behavior. In 2017, the International Energy Agency (“IEA”) estimated that an annual $3.5 trillion in energy-sector investments would be required through 2050 to achieve the 2°C target. In 2019, the European Union released the Green Deal Communication, a package of measures and policies ranging from ambitiously cutting emissions, to investing in cutting-edge research and innovation, to preserving Europe’s natural environment and achieving a carbon neutral economy by 2050. The roadmap includes a comprehensive plan to increase the European Union’s GHG reduction target for 2030 to at least 50% and toward 55% as compared to 1990, compared to the current target of 40%. In the United States, President Biden re-committed to the Paris Agreement, pledging 50-52% GHG reductions by 2030 compared to 2005 levels. In 2021, the U.S. Congress passed the Infrastructure Investment and Jobs Act, which included over $62 billion for the U.S. Department of Energy to use for clean energy technology deployment. In August 2021, President Biden signed the Inflation Reduction Act, which provided approximately $369 billion for clean energy deployment and climate change mitigation and adaptation.

Alongside potential government mandates for aviation and industrial emitters, regional governments, companies and investors have announced their own emissions and waste reduction targets. According to the RE100 initiative, nearly 350 global companies spanning a broad array of sectors have pledged to transition to 100% renewable electricity by 2050 with an average target date of 2030. Outside of the RE100, many more companies are facing consumer and shareholder pressure to increase their environmental disclosures and join the transition to cleaner energy sources. For example, the members of the International Air Transport Association, which includes nearly 300 airlines responsible for over 80% of the world’s air traffic, have committed to cut their emissions in half by 2050 compared to 2005 levels. In addition, in March 2021, Airlines for America, the industry trade organization representing the leading U.S. airlines, announced the commitment of its member carriers to work to achieve net-zero carbon emissions by 2050. The carriers also committed to work toward a rapid expansion of the production and deployment of commercially viable SAF, specifically to make two billion gallons of SAF available to U.S. aircraft operators in 2030.

We believe that carbon capture and transformation technologies will be used increasingly within industrial sectors of the economy as one of the primary methods to reduce GHG emissions and meet mandates and climate goals. The two options for dealing with captured carbon today are sequestering it in the ground, or carbon capture and sequestration ("CCS"), and recycling it into products, or carbon capture and utilization or transformation ("CCU" or "CCT").

We believe LanzaTech can provide a profitable pathway to solving an emitter's carbon problem. For example, today in Europe, a steel mill can pay penalties for their emissions, purchase offsets, or invest in a CCS facility and reduce their emissions at site under an Emissions Trading System. In each case, we believe the cost of the emissions, offsets or investment in a CCS facility are less cost effective than building a LanzaTech CCT facility to decrease carbon emissions.

While reducing the carbon intensity of fuels is important, it does not address the carbon contained in physical goods. Sustainability-marketed products grew 7.1 times faster than conventionally marketed products from 2015 to 2019. Further, eco-conscious customers now make up roughly 80% of a consumer market worth over $1.8 trillion. Many companies have already pledged to achieve carbon neutral or net zero carbon targets, with some aiming to achieve that target within the next decade.

Currently, we recycle carbon to produce ethanol that can be used for SAF production, the global addressable market for which is estimated at $180 billion. Our customers also operate our carbon refining technology in the single-cell protein market, estimated at $16 billion in 2019, because our process makes high protein biomass as a byproduct. Ethanol can also be converted to MEG and PET, with markets worth an estimated $28 billion for MEG and $44 billion for PET packaging at the end of 2021. We have a portfolio of existing recycled carbon and soon-to-be commercialized CarbonSmart products that we believe have the potential to penetrate more chemicals markets in the coming years as more commercial facilities begin operations. CarbonSmart is a concept where we see carbon waste transformed into many products that we use in our daily lives. Approximately two tons of CO2 are removed per ton of CarbonSmart product made.

Many of our customers and partners are brand owners who have made strong sustainability commitments and endeavor to connect their customers with low carbon products that do not compete with food production for feedstock, land, or water.

Overview of Ethanol Market

Ethanol can be used directly as fuel but can also serve as a feedstock to produce a broad range of products, including cosmetics and beauty products, hand hygiene products, paint, food additives, tires, children's toys, plastic products, rubber, clothing and upholstery. The United States is responsible for over half of ethanol production globally and has produced an average of nearly 15 billion gallons of ethanol annually since 2015, while the ethanol output for the rest of the world has increased by over 20% during the same period. Meanwhile, most governments have instituted caps on food-derived ethanol. The focus of most ethanol growth in the future is expected to be waste-based, non-food ethanol.

Overview of Fuel Market

In 2019, global fuel ethanol production reached 30 billion gallons. We believe the demand for renewable fuels and related infrastructure will rise substantially over the next decade driven by strong demand from both consumers and sustainability-focused suppliers. We also believe that the federal regulatory framework in the United States, including the Renewable Fuel standard, will drive production of ethanol for the liquid transportation fuel market. We believe the production of ethanol from recycled carbon, such as from industrial emissions, will also have a market in the European Union through the Renewable Energy Directive and at the state level in the United States with the California Low Carbon Fuel Standard. Other states in the Northeast United States, as well as Canada, have signaled they will institute such policies in the coming years.

Sustainable Aviation Fuel: Mandated global SAF demand is expected to hit 61 billion gallons per year by 2040. The Biden Administration has a goal of replacing all jet fuel with sustainable alternatives by 2050. The global market for aviation fuel is estimated to be nearly $250 billion by 2026. Airlines and aviation sector coalitions, including

companies addressing Scope 3 emissions are making corporate commitments to increase SAF use. To reach expected 2030 SAF demand, global SAF capacity must achieve an 87% CAGR.

Overview of Chemicals and Protein Markets

According to the IEA, the chemicals sector is the largest industrial consumer of both oil and gas. Petrochemical feedstock accounts for 12% of global oil demand, a share that is expected to increase because of increasing demand for plastics, fertilizers, and other products. With the growth in demand for petrochemical products, petrochemicals are expected to account for over a third of the growth in oil demand to 2030, and nearly half to 2050, ahead of trucks, aviation, and shipping. Petrochemicals are also poised to consume an additional 56 billion cubic meters of natural gas by 2030. Currently, organic chemicals are predominantly derived from fossil sources such as petroleum. These chemicals are used to produce a wide array of materials. More than 10 million barrels of oil are consumed daily to create these materials, releasing massive quantities of new carbon into the atmosphere in the process.

Protein demand is outpacing supply. Today's alternatives are dominated by crop-based feedstocks. It is currently estimated that the plant-based protein market will be valued at $162 billion in 2030 and would make up an estimated 7.7% of the global protein market.

Key Competitive Advantages

We believe the following combination of capabilities and strengths distinguishes us from our potential competitors.

Proven, Differentiated, Adaptable Proprietary Technology Platform. We are a leader in gas fermentation and have developed economically attractive, commercial-scale carbon recycling technology and end products. Our proprietary technology platform allows us to produce different products and chemicals from multiple feedstocks utilizing the same process at the same plant. Our biological system ensures stable performance despite fluctuating gas feedstock compositions, unlike thermocatalytic processes, which require consistent gas feedstock compositions.

New high-value chemical intermediates can be used to make materials such as acrylics, fibers, plastics and synthetic rubber and a wide variety of chemicals including alcohols, acids, esters, and ketones. LanzaTech has demonstrated this with several partners who have used chemical intermediates to make fabrics, packaging, detergent, cleaning agents and fragrances. This process can lock waste carbon into durable goods, creating a circular carbon economy where carbon is refined and re-used instead of emitted as harmful greenhouse gases.

We believe that our technology enables a circular carbon economy, which keeps carbon in the material cycle instead of allowing it to be emitted into the atmosphere as pollution. By locking carbon into chemical building blocks used to make every-day goods, we are reducing the need to extract virgin fossil resources to make the same products. We believe this could have a game changing impact on the chemical industry and its supply chain, shifting the way the industry considers commodity sourcing and supply.

Low Carbon, Enabling Technology. Our technology is designed for use across the supply chain, from emitters of waste carbon to those who want to develop products from waste carbon. Industrial emitters can implement LanzaTech's carbon capture solution onto their existing facility and derive revenue from used carbon. As an example, the first commercial facility in China to utilize our technology platform has sold over 40 million gallons of ethanol into the market, displacing fossil gasoline for road transport use, and avoiding the equivalent of over 200,000 tons of CO2 emissions at source. Our technology platform allows emitters to play a role in the circular carbon economy by generating products from waste carbon that would otherwise come from virgin fossil resources and selling these products to end users who want to reduce their environmental impact.

Our platform technology is highly customizable and we believe it will provide flexibility to respond to market demand. Through the use of synthetic biology, microorganisms can be engineered to produce different chemicals directly from gases using the same process and production hardware. By changing the microorganism in a commercial facility, we have developed the capability to switch the product focus of commercial plants within a matter of days. We believe this will enable production of different product targets in campaigns at the same commercial facility. We believe this capability will enable partners and customers to rapidly respond to fluctuating market conditions and maximize the value of their assets, by producing the highest value product at any given time.

Platform Validated Through Partnerships with Industry Leaders. We have demonstrated the commercial success of gas fermentation on feedstocks from a broad array of waste streams. Three commercial scale facilities in China utilizing steel off-gas and ferroalloy off-gas emission are currently being operated by entities in which the Shougang Joint Venture holds a controlling interest. In addition, another commercial scale facility in China, owned and constructed by the Shougang Joint Venture utilizing ferroalloy off-gas is in late-stage construction and is expected to begin operations in 2023. A commercial scale facility in Ghent, Belgium is in advanced stages of construction by our partner ArcelorMittal and is expected to start up in 2023. The pilot-scale plant in Japan developed with Sekisui has been producing ethanol from gasified municipal solid waste since 2017. Construction on a next scale 1/10th commercial sized facility with Sekisui was completed in April 2022 and the facility has begun operations. Additionally, a demonstration-scale facility in Alberta, Canada, with partner Suncor, utilizing waste-based feedstocks, including municipal waste and forestry-residues, has produced ethanol in test runs since July 2022, and has now begun full operations. A commercial plant using refinery off-gas feedstock, owned and operated by IndianOil, recently completed construction in early 2023, and full operations are expected later this year. Various other commercial projects using refinery off-gases, industrial and biorefinery CO_2, ferroalloy off-gases, gasified biomass, and gasified mixed plastic wastes are under development. We have worked with several partners on the integration of the gasification and gas fermentation processes to convert solid feedstocks to fermentation products, culminating in over 50,000 hours of pilot and demonstration scale operations on live synthesis gas (“syngas”) produced from gasification.

As a result of our ability to deliver a sustainable, economically advantaged solution to produce fuels chemicals and products using waste feedstocks, we have been able to attract key industry partners in our markets such as Mitsui, ArcelorMittal, Suncor, BASF, IndianOil, and Sinopec.

In 2020, the Shougang Joint Venture plant that has been using our technology platform on a commercial scale received Roundtable on Sustainable Biomaterials (“RSB”) certification. RSB certification is awarded to facilities that ensure the sustainability of their products and promote the health of their employee and the welfare of their local communities.

Strong Intellectual Property Position. As of March 15, 2023, we owned or had licensed rights to 1,307 granted patents and 590 pending patent applications across 141 patent families in the United States, Europe, Asia and additional jurisdictions, in addition to our trade secrets. These issued patents and pending patent applications cover not only the upstream (such as gasification and gas conditioning), gas fermentation, and downstream (such as product separations and catalytic conversions) production systems that we are developing or may pursue in the future, but also certain of the underlying technologies used to develop our systems. Our intellectual property portfolio contains patent families spanning the entire platform, from the feedstock to the gas fermentation to the product recovery.

The following chart summarizes the breadth of our IP portfolio:

Extensive Industry Experience. We have over 18 years of experience developing, testing, scaling, and optimizing gas fermentation and integrating gas fermentation with upstream and downstream technologies, culminating in the world's first commercial gas fermentation plant in 2018. Our management team brings over 150 years of combined research and development, engineering and scale up, operations, partnering and licensing experience in the energy industry.

Our Technology Platform

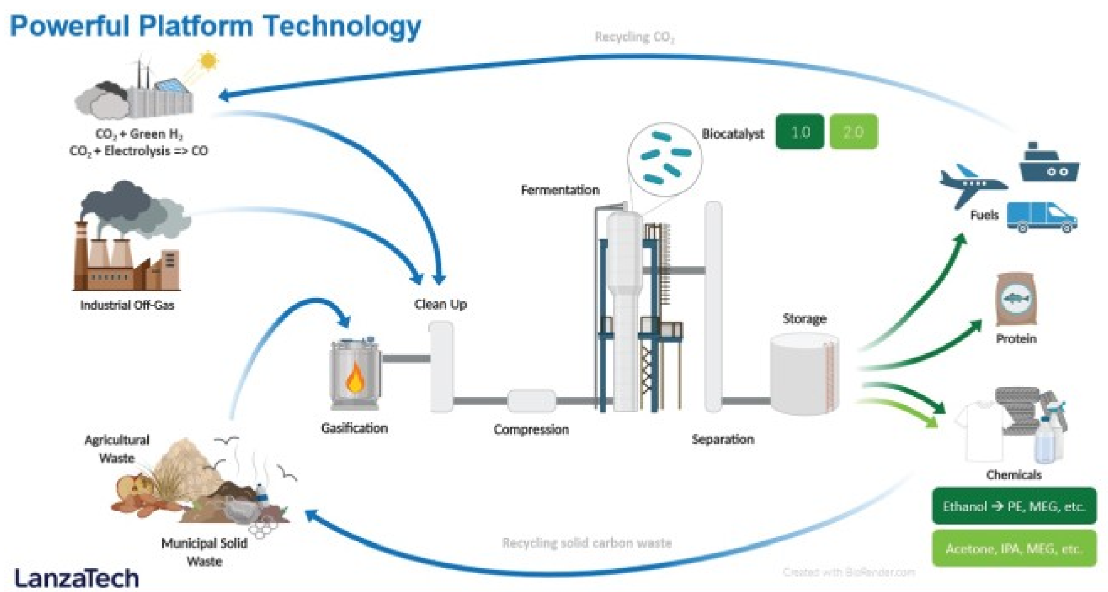
Overview

We have developed, scaled, and deployed an adaptable proprietary technology platform that integrates core gas fermentation with upstream processes, such as gasification and gas conditioning, and downstream processes, such as product separations and catalytic conversions.

Our technology platform is like brewing, but instead of using yeast that eat sugar to make alcohol, our biocatalysts, or microbes, eat waste carbon to make end products. Because our system is biological, and biological systems grow in dynamic environments and react in real time to changing conditions, it is much more tolerant of variability in feedstock composition and supply than systems based on catalytic chemistry and is, therefore, highly customizable.

Our technology platform can use feedstocks containing CO2, H2 and CO, including waste emissions from steel, oil refining, and ferroalloy industries, gasified municipal solid waste ("MSW"), agricultural wastes, and reformed biogas. We have demonstrated this with partners globally and have shown conversion of these input streams at various scales, including at three commercial facilities in China being operated by entities in which the Shougang Joint Venture holds a controlling interest using industrial emissions. Our commercial partners will be able to

combine our gas fermentation system with different engineered biocatalysts to produce different products, allowing them to leverage their existing capital investment and to calibrate production to market conditions.



Step 1: The process begins by receiving off-gas or waste gas streams comprising gases that contain various mixtures of CO, CO2 and H2, such as from steelmaking emissions or gasified waste.

Step 2: These gases are compressed, conditioned, and transferred into fermentation bioreactors containing LanzaTech's proprietary biocatalysts (microorganism) and a liquid media.

Step 3: The biocatalysts ferment the gases and, as part of their natural biology, they produce ethanol and other chemicals as a result of this fermentation. This is a continuous process that can run without shutting down for extended periods.

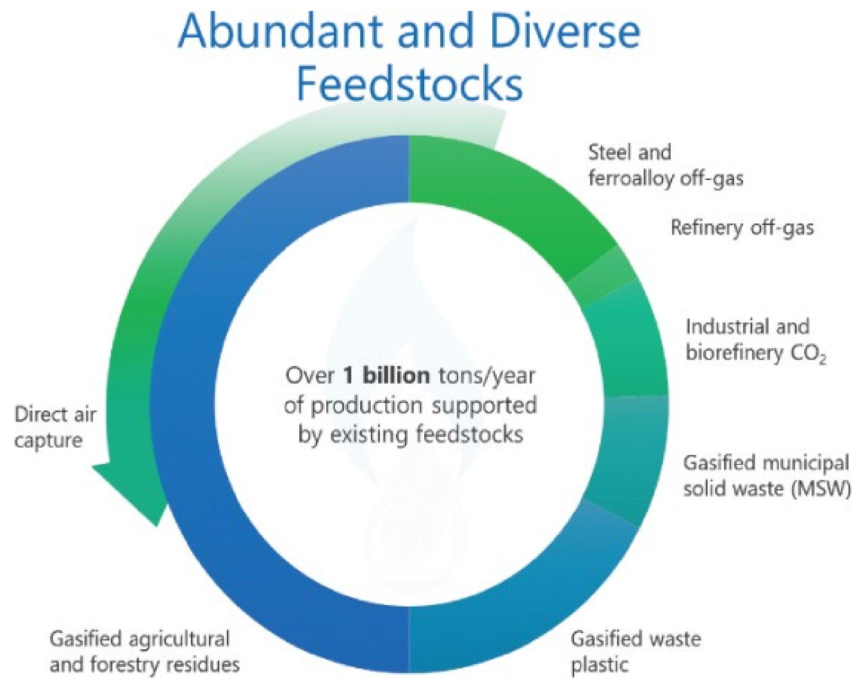
LanzaTech's Biocatalyst

Clostridium autoethanogenum is an Acetogen, a chemolithoautotrophic microorganism that uses certain gases for both carbon and energy. Acetogens naturally produce acetate, and a select subset of Acetogens, including *C. autoethanogenum*, natively synthesize ethanol. Acetogens are ubiquitous in anaerobic environments, such as soil, animal and human guts, sediments, the deep sea, and hot springs. For biotechnological applications, acetogenic clostridia are among the fastest growing acetogens and have been used industrially for more than 100 years.

Our technology platform relies on gas-consuming biocatalysts that use an ancient biological pathway known as the acetyl coenzyme-A biochemical pathway for autotrophic growth (the "Wood-Ljungdahl Pathway"). The Wood-Ljungdahl Pathway is the most energetically efficient carbon fixation pathway and enables our proprietary biocatalyst to transform the carbon and energy in gas streams into valuable products. In addition to being highly energy efficient, the Wood-Ljungdahl Pathway also allows high levels of dynamic flexibility in the composition of the gas streams (and therefore resources) that can be converted into valuable products. The pathway allows the LanzaTech process to use both CO_2 and CO as sources of carbon and H_2 and CO as sources of energy. The application of this pathway with this biocatalyst enables a significant range of sustainable, high volume, and globally available waste resources for commercial deployment and product manufacture.

Feedstock Diversity for Resilience

The current manufacture of essential goods results in an abundance of waste carbon in the form of polluting gases or solid wastes in the air, landfills, and waterways. The LanzaTech gas fermentation platform can utilize feedstocks ranging from CO to CO_2-rich waste streams, including industrial and refinery off-gas, reformed biogas, gasified biomass and MSW, and CO_2.



CO can provide both carbon and energy for our proprietary microbes. In contrast, CO2 only provides carbon, which means a source of chemical energy, H2, must be added for a CO2 conversion. In a CO-rich stream, the microbe can make the H2 it needs from water via a biological water gas shift reaction, creating CO waste streams of various compositions ideal for gas fermentation.

Waste carbon feedstocks generally have low cost, global availability with regional abundance, low carbon intensity, and are non-competitive with food production. If the entirety of the potential feedstocks could be accessed, up to 6.5 billion metric tons annually of gas fermentation products, primarily ethanol, could be produced.

Compared to other catalytic conversion processes, LanzaTech's gas fermentation process is uniquely tolerant to the inherent variability of waste gas composition, enabling a wide diversity of feedstocks and high variety of products. Upstream catalysis technology focuses on identification and removal of fermentation inhibitors before fermentation feedstock gases are introduced into the bioreactors. LanzaTech has developed and optimized its proprietary gas treatment system to remove more than four classes of fermentation inhibitors from the broad spectrum of feedstocks, gasified biomass to steel off-gasses, in a simple process that substantially decreases capital and operating expenses while providing increased flexibility.

Potential Feedstocks

The following feedstocks could be used with our platform technology:

Industrial Emissions

Steel, ferroalloy, or refinery off-gases are point-sourced. CO_2-rich off-gases, which are produced by the cement and sugar ethanol industries, can also be used to feed gas fermentation alongside a hydrogen source as explained in subsequent sections.

- Steel: Energy-intensive manufacturing processes, such as steel production, inevitably result in gaseous emissions, which cannot be stored and which are emitted by the steel maker. As an environmental liability rich in CO, these emissions are an ideal feedstock for our process. We have been working with these readily available, abundant gases since 2008.

- Ferroalloy: Ferroalloy gases are also rich in CO, making this another ideal emission source. We are developing projects using ferroalloy gases in target regions such as China, Norway and India.

- Refining: Certain refinery off-gases are ideal feedstocks for our process. A unique feature of processing refinery gases is that most of the carbon in the ethanol produced is derived directly from CO_2, rather than from CO. Oil and gas companies also have extensive experience producing and handling liquid fuels, gas processing, engineering, and chemical catalysis.

Solid Wastes and Reformed Landfill Gas

Biomass and agricultural residues offer the largest potential sources of feedstock for gasification. In contrast to other methods of converting biomass feedstocks into fuels, gasification and gas fermentation have the potential to utilize all carbon in the feedstock. This includes carbon contained in the natural polymer lignin, which is typically not accessible in current cellulosic biomass fermentation processes. Gasified non-recyclable MSW, mixed plastic waste, and reformed biogas such as landfill gas (“LFG”) are abundant waste streams that we believe are currently underutilized sources of carbon for conversion into CarbonSmart fuels, chemicals, and materials using our technology platform.

- Biomass: Biomass, such as agricultural and forestry residues, can be gasified into syngas. Syngas contains CO and H_2 and is well suited for our process. While higher in capital costs due to the addition of one or more gasifiers, these projects typically benefit from significant renewable policy incentives, and can be deployed as smaller modular systems.

- MSW and Refuse Derived Fuel (“RDF”): As with biomass, MSW and RDF can also be gasified into syngas for use in our process, which can accept unsorted waste, ideally with mechanically recyclable items removed. The current alternatives are landfilling or incineration, which are increasingly falling out of favor globally, and so waste management companies are seeking alternative sustainable solutions. These projects benefit from tipping fees, or fees generated by the disposal and processing of waste on a per ton basis, on the waste, and in certain locations, can be deployed as smaller modular systems.

- Reformed LFG: Only 32% of landfills in the United States collect methane, and the collection efficiency can range from 35% to 90% for modern landfills that do collect. As a result, landfills are responsible for more than 15% of the anthropogenic methane released in the U.S. Many landfills flare the LFG or operate older power generation units that emit large volumes of carcinogens and micro particles. LanzaTech believes it can utilize this gas stream. Capturing this feedstock for CarbonSmart materials has the potential to clean the air and improve human and environmental health surrounding landfills while reducing dependence on fresh fossil resources.

- As modern industries transition to more sustainable feedstocks, we believe industrial and refinery waste gases will ultimately transition as well. To enable this transition, LanzaTech is developing the ability to pivot to CO_2 from biorefineries and direct air capture (“DAC”) for continued, sustained, low carbon materials and fuels.

Future Proofing Feedstock Capability

CO_2 sourced from biorefineries, industrial emissions, and DAC technologies can be coupled with H_2 to produce products with extremely high carbon conversion efficiency of over 90% carbon utilization. Since H_2 can be produced from renewable power via water electrolysis ("green") or by steam methane reforming with carbon capture ("blue"), the carbon footprint of the products made will be a fraction of that relative to petroleum refining. As more hydrogen is present in the feedstock, more carbon is captured into the ethanol product. We believe CO_2 as a feedstock has the potential to disrupt the fuel and chemical supply chains by substituting CO_2 for conventional fossil resources. By developing and integrating these approaches, we believe our technology platform is positioned to take advantage of the expected continued price reductions and capacity increases for renewable electricity, maximizing utilization of CO_2 streams.

Integrating bioindustrial CO_2 and eventually DAC technologies with LanzaTech's gas fermentation platform creates an opportunity for renewable fuel production from low-cost CO_2 feedstock. Integrating with LanzaJet's Alcohol to Jet ("ATJ-SPK") process can produce SAF from each of ethanol derived from CO_2 and H_2 produced by water electrolysis. DAC CO_2 to SAF is estimated to have a 94% emissions reduction when compared to the fossil counterpart at 94 g-CO2e/MJ of ATJ-SPK.

Steel Industry Transition

LanzaTech's gas fermentation technology can utilize the evolving off-gases from iron and steelmaking processes through the transition from carbon to hydrogen feedstocks. The LanzaTech system can remain in place, utilizing existing assets at iron and steel mills to take advantage of available hydrogen, coupled with carbon from other on-site sources including electric arc furnaces, or further transition to gasification of waste carbon resources (solid waste or biomass) or utilize direct air capture. We believe that our early investments in GHG emission reduction technology positions us to continue to be a leader in carbon recycling in other hard-to-abate sectors.

Technology Platform Development

Throughout our 18-year history, LanzaTech has consistently developed and scaled innovative gas fermentation technology solutions and is now deploying them commercially. Our team has designed and developed equipment necessary to enable the biocatalyst that functions in a 3-liter benchtop reactor to operate equivalently in a 750,000-liter fermentation reactor.

LanzaTech's gas fermentation process has been demonstrated at four sites with 50,000 hours of operation in the field using steel mill waste gases plus another 50,000 hours of operating in the field integrating gasification, gas treatment and gas fermentation. The success of these 100,000 hours of experience at pilot and demonstration scales led to the May 2018 startup of the first operating commercial gas fermentation facility in the world, at the Jingtang Steel Mill in Caofeidian in Hebei Province, China. A second commercial plant, the Shoulang Jiyuan plant in Ningxia, China, of the same capacity and utilizing ferroalloy off-gas come online in April 2021. The third commercial plant, the Ningxia Binze plant in Ningxia, China, with an annual capacity of 60,000 tons and utilizing ferroalloy off-gas, came online in September 2022. Together these facilities have produced over 54 million gallons of fuel-grade ethanol and mitigated over 275,000 tons of CO_2. In addition to the three commercial plants operating in China, LanzaTech's partner in Canada is operating a demo-scale facility utilizing waste-based feedstocks like forestry residues and LanzaTech's partner in Japan is operating a $1/10^{th}$ commercial-scale facility utilizing gasified unsorted municipal solid waste as a feedstock. These demo and $1/10^{th}$ scale facilities completed construction in 2022 and recently began operations. There are 12 additional commercial plants being constructed or developed worldwide. Four of the 12 commercial plants are in construction and the remaining eight plants are in engineering phases. The 12 additional plants will use a mix of feedstocks including steel off-gas, ferroalloy off-gas, refinery off-gas, gasified biomass, gasified municipal solid waste, CO_2 and green H_2, and ethanol in instances where the plant will produce sustainable aviation fuel from the ATJ process.

LanzaTech is continuously developing and advancing its technology platform, and in late October 2022, announced that its next-generation bioreactor, currently utilized in a demonstration-scale facility in Alberta, Canada with partner Suncor, ran test campaigns for ethanol production on a wide range of waste-based feedstocks in 2022. This next generation bioreactor is expected to improve the economic viability of LanzaTech's integrated biorefinery offering. The demonstration-scale facility has produced ethanol in test runs since July 2022 and recently has begun full operations, converting waste-based feedstocks, including municipal waste and forestry-residues, into ethanol.

Applications of Our Technology Platform

Overview

Our technology platform enables companies around the world to generate revenue from transformed carbon in waste resources. Across the supply chain, we promote a CarbonSmart circular economy, where both resource providers and end users can choose to be carbon-efficient by recycling or "locking" carbon into new products rather than making them from new fossil resources. Current and proposed applications of our technology platform include ethanol products, which can serve as the chemical building blocks for consumer goods, such as household cleaners and sustainable fuels, including sustainable aviation fuel, as well as protein products, such as animal/fish feed and fertilizer. These applications are discussed further below.

To date we have partnered with several consumer-facing companies to demonstrate the market value of our CarbonSmart products. This includes leveraging our technology to make the chemical intermediates for the production of a new range of cleaning products, packaging for cosmetics, fibers for clothing, and as an input for fragrances. The ethanol used in these first CarbonSmart products originates in China at our commercial facilities, but we expect that over the longer term, the input ethanol will be made in our facilities across the globe.

Ethanol Products

Our customers and partners already have used our technology platform to produce ethanol, ethanol derivatives and ethanol co-products from steel mills, ferroalloy plants, and refineries, as well as gasified biomass and municipal waste.

To date, LanzaTech has produced over 1,000 metric tons of finished CarbonSmart products for consumer brands. Examples of CarbonSmart product launches are as follows:

- Purified ethanol in home cleaning products: LanzaTech's purified ethanol from steel mill off gas is utilized in a line of household cleaners.

- Purified ethanol in fine fragrances: High purity ethanol is one of the major ingredients in fine fragrances. LanzaTech's high purity ethanol will be used in one of the world's largest fragrance and beauty company's fragrance formulations.
- Ethanol as a feedstock for polyethylene production: LanzaTech ethanol was utilized for conversion to ethylene and then polyethylene, for use in manufacturing the world's first cosmetic bottle from steel mill emissions.
- Ethanol as a feedstock for surfactant production: LanzaTech's partner launched a line of laundry detergents utilizing CarbonSmart ethanol as input for surfactants production.
- Ethanol as a feedstock for polyester production: LanzaTech ethanol was utilized for conversion to ethylene and then monoethylene glycol (MEG) a building block for PET production. This was used to make yarns and fabric for lululemon and Zara apparel collections.

As of the date of this current report, 12 commercial-scale facilities are either under construction or in engineering utilizing our technology, as outlined in the graphic in the section titled "*Business — Market Opportunity — Overview*." The first commercial facility to use our technology was the Shougang Joint Venture in 2018, a joint venture between us and Shougang Group and TangMing formed in 2011. This gas fermentation plant was the world's first commercial facility to convert industrial emissions into sustainable ethanol. This plant has an annual production capacity of approximately 46,000 tons of ethanol.

Sustainable Aviation Fuel Products

Ethanol produced by us can be blended into road transport fuels or can be converted through the LanzaJet™ ATJ process to an ethanol-based ATJ-SPK and to sustainable diesel, both of which can be blended with their fossil equivalents. LanzaJet ATJ-SPK from our ethanol can demonstrate up to 80% GHG reduction compared to fossil alternatives depending on circumstances, including feedstock, geography and methodology. ATJ-SPK is qualified for use at up to a 50% blend level with conventional jet fuel for all commercial flights. This process is poised for commercial deployment. The process has a high potential jet yield of 90%.

Our first ATJ demonstration unit produced approximately 4,000 gallons of jet fuel and 600 gallons of diesel fuel. A portion of this fuel was used to power a commercial passenger 747-jet flight operated by Virgin Atlantic from Orlando, Florida to London, UK in 2018. The fuel was also used for a 2019 Trans-Pacific flight to deliver a new Boeing aircraft to All Nippon Airways in Tokyo from Everett, Washington.

We have designed our technology platform to convert ethanol to SAF, which is of strategic importance to airlines for meeting their commitments to reduce emissions.

LanzaJet

With the goal of accelerating commercialization of the ATJ process, we helped launch LanzaJet in June 2020 and became shareholders along with Suncor and Mitsui, with British Airways and Shell joining as shareholders in 2021. LanzaJet received financing from the Microsoft Climate Fund in 2022. We currently hold approximately a 25% stake in LanzaJet. Mitsui, Suncor, British Airways and Shell have committed to invest a total of up to $165 million. This initial facility is currently under construction in Soperton, Georgia and will have the capacity to produce 10 million gallons per year of SAF and renewable diesel from sustainable ethanol sources. In December 2022, installation of key equipment for the novel process technology that converts ethanol to drop-in replacement SAF began and construction at the facility is expected to be completed in 2023. Pursuant to the LanzaJet License Agreement, we granted to LanzaJet a perpetual, worldwide, non-transferrable, irrevocable, royalty-free, sublicensable, exclusive license to certain patents related to the conversion of ethanol to fuel. This license is exclusive including as to us. The primary waste biomass to be used for ethanol feedstocks is cellulosic wastes from sugar cane or other agricultural activities in Brazil. Additional, longer-term waste-based biomass-derived feedstocks for SAF include waste starch slurry from conventional fermentation and biogas derived from biomass degradation in landfills. Waste-based industrial off-gases can also be used to produce ethanol as a feedstock for the process.

This plant, located at the LanzaTech Freedom Pines Biorefinery in Soperton, Georgia, is also supported by participation from All Nippon Airways and a US Department of Energy grant of $14 million.

We anticipate deployment of numerous commercial ATJ facilities above the 10 million gallons per year capacity of the LanzaTech Freedom Pines Biorefinery. We are currently working with partners to confirm project locations and solidify the appropriate project structures. Locations for these facilities include Asia, mainland Europe, the United Kingdom, and the United States. We expect these facilities will be funded by LanzaJet shareholders as well as other sources, including government grants and loan guarantees depending on the project structure and partners, location, and other factors.

DRAGON

In September 2021, Project DRAGON (Decarbonising and Reimagining Aviation for the Goal of Net Zero) was formally initiated. This waste-to-SAF project received GBP £3.15 million in grant funding from the UK Secretary of State for Transport (the "UK Authority") Green Fuels Green Skies program and £1 million from Innovate UK as part of the South Wales Industrial Cluster deployment program. LanzaTech is responsible for front-end engineering design and associated project development activities for the UK Authority to achieve a final investment decision for both the LanzaTech Gas Fermentation unit and the adjacent LanzaJet ATJ unit in Port Talbot, South Wales, United Kingdom. These activities, further supported in December 2022 by a £24.9 million grant from the UK Authority's Advanced Fuels Fund, are underway with a view to achieving a final investment decision in 2024 and full operations in 2026-2027 to produce 100 million liters per year of SAF for two major UK airlines. Overall the project is expected to play a significant role in meeting the UK government's target of 10% SAF by 2030, as well as resulting in significant carbon emissions reductions compared to fossil kerosene, and to also reduce emissions of particulate matter and sulfur.

FLITE

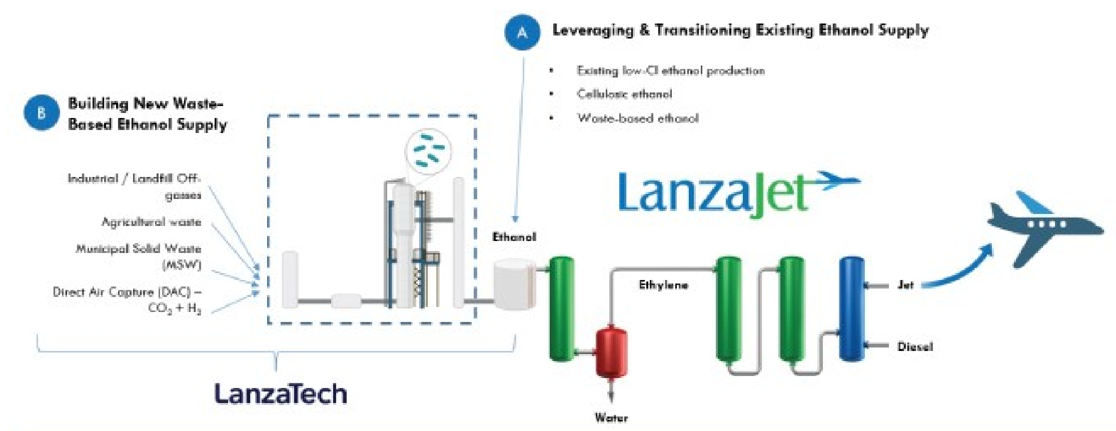
In December 2020, the Fuel via Low Carbon Integrated Technology from Ethanol, or FLITE, project was formally initiated. This project received EUR 20 million in grant funding from the EU Horizon 2020. LanzaTech is responsible for plant design, construction and operations using LanzaJet's ATJ technology. Project development has been initiated and we expect the FLITE facility to produce SAF using waste-based ethanol sourced from multiple European producers. In addition, the SAF expected to be produced at the facility is anticipated to result in a significant carbon emission reduction relative to fossil kerosene and to also reduce emissions of particulate matter and sulfur.

LanzaJet's ATJ technology is leveraging existing low-carbon intensity ethanol and is enabling a transition to new sources of waste-based ethanol.

Project LOTUS

In September 2021, SkyNRG Americas in partnership with LanzaTech was awarded $1 million in funding for Project LOTUS (**L**andfill **O**ff-gas **T**o **U**ltra-low carbon intensity **S**AF) to design, build, operate, and maintain a production facility that will convert raw LFG into SAF. The project is expected to leverage green hydrogen and LanzaTech's gas fermentation technology to convert LFG to ethanol at an operating landfill. The ethanol will be converted to SAF using the LanzaJet ATJ technology developed by LanzaTech and Pacific Northwest National Laboratory and subsequently licensed to LanzaJet. SkyNRG Americas has numerous contractual partners, including

Boeing and Alaska Airlines, who are committed to advancing use of the fuel in flight once it is produced through project LOTUS.



We believe Project LOTUS has the potential to provide a new U.S.-produced regional supply chain for producing SAF that meets international ASTM specifications while reducing methane emissions and improving air quality. The SAF is expected to be high quality, low soot forming, and sustainably derived, with the potential to reduce up to 110% of GHG emissions over traditional jet fuels. The $1 million in funding from the Department of Energy, awarded in September 2021, is expected to accelerate the commercial rollout of this SAF production path from LFG by reducing the technical and financial risks for future integrated commercial plants across the United States.

Protein Products

An additional application of our technology platform is the production of protein products. Microbial protein is composed of lysed, spent microbes from LanzaTech commercial facilities. These microbes contain proteins and other valuable nutrients and have performed the task of gas fermentation, have been extracted from the relevant commercial unit and are no longer viable. These materials can be extracted and used in numerous applications, including feed products for livestock and fish, fertilizers for agricultural applications, and protein extract-based products. LanzaTech's first commercial customer is currently selling residual microbial protein as a component in fish and livestock feed products. Many of these markets are large and diverse, with stakeholders actively seeking sustainable and nutritious inputs. We believe our technology offers improved overall plant economics and environmental performance.

Significant composition testing on LanzaTech microbial protein has already been completed and detailed materials characterizations have been developed. These tests have shown that LanzaTech microbial protein products contain very high protein content, typically exceeding 85 weight percent of the overall material mass. In addition, LanzaTech's microbial protein product for fertilizer and feed applications contains high concentrations of B vitamins and other minerals. These materials are beneficial in certain end-use applications such as animal feeds.

We believe that animal feed is the most profitable application for microbial protein. Fertilizer and biogas applications currently provide alternatives where feed applications are impractical. The nearest term applications for LanzaTech microbial protein include:

Animal/Fish Feed

Using LanzaTech microbial protein as a key ingredient in fish and animal feed represents a significant opportunity for LanzaTech. Global fishmeal production alone is six to seven million tons annually. Separation and drying of microbial protein for feed applications is similar to that of fertilizers, leading to potentially higher margins for LanzaTech and its customers. Studies have demonstrated that LanzaTech microbial protein is effective as a partial replacement for fish meal and corn gluten meal in Atlantic Salmon at levels up to 15 weight percent in the diet.

Nutrient digestibility and safety were demonstrated up to 30 weight percent in feed. Depending on region, regulatory approval may be required prior to marketing. Also, sufficient feed gas treatment is required for feed applications to ensure any detrimental gas contaminants do not enter the food chain.

Fertilizer

The global fertilizer market is roughly $150 billion and consists of approximately 187 million tons of materials sold annually. Fertilizer products draw widely different prices based on their compositions and availability. LanzaTech believes that its microbial protein has strong potential as a fertilizer that is easy to apply and low maintenance. Use as a fertilizer may require regional or local approval.

Biogas

In some markets, including the European Union, it is economically advantageous to anaerobically digest the residual microbial protein to produce biogas. This biogas can be used in a cogen unit to produce power, steam, and hot water for use in the industrial facility. In regions where there are strong government incentives promoting biogas production, this may be a profitable use of residual microbial protein.

Synthetic Biology and Chemical Products

Through our synthetic biology platform we can develop new microbes to produce additional chemical products.Our platform technology enables rapid scale-up of new microbes once they are developed. Beyond ethanol, we have demonstrated the ability to produce ethylene, isopropanol, and acetone directly from gases.

In 2022, LanzaTech demonstrated direct continuous production of ethylene from CO_2, creating a new non- fossil fuel pathway to this widely used commodity chemical. With a projected global market value of $170 billion by 2030, ethylene is widely used in the chemical industry, and its worldwide production capacity (estimated over 200 million tons per annum in 2021) is one of the largest of any chemical. Using oil or natural gas as feedstock, petrochemical plants use the cracking process to extract ethylene, which is then transformed into chemical compounds and plastics, which manufacturers use to produce many of the products used every day, including:

- Polyethylene (Plastics) – used to make food packaging, bottles, bags, and other plastics-based goods.
- Ethylene Oxide / Ethylene Glycol – can become polyester for textiles, as well as antifreeze for airplane engines and wings.
- Ethylene Dichloride – this, in turn, can become a vinyl product used in PVC pipes, siding, medical devices, and clothing.
- Styrene – synthetic rubber found in tires, as well as foam insulation.

LanzaTech has previously produced ethylene via the indirect ethanol pathway, taking ethanol produced from carbon emissions and then converting this ethanol to ethylene. This latest development bypasses the conversion step, making the process less energy intensive and more efficient. With this, LanzaTech estimates that the ability to directly produce ethylene from a waste feedstock will offer a lower cost and lower carbon product, which is anticipated to enable greater market penetration than via the indirect ethanol pathway.

LanzaTech is scaling up the process to make these molecules. We have provided high-purity fermentation products (e.g. ethanol) and upgraded products (e.g., PET) to over 20 customers. Because this capability is unique to gas fermenting microbes, we have several collaborations with end users targeting the production of new molecules.

LanzaTech has achieved the direct synthesis of over 50 target products, molecules spanning from two-carbon up to 20+ carbon molecules and varying functional classes. LanzaTech has also demonstrated control over stereospecificity of the molecules, as well as the production of entirely novel compounds that cannot be produced in nature. In addition, LanzaTech has identified over 500 pathways for the production of an extensive spectrum of molecules using our proprietary predictive microbial modelling capability. Computer modelling simulations confirm the feasibility of producing these molecules from gas while providing accurate projections of achievable yields and

therefore the economic case for each. Direct production of chemicals that today are produced via the ethanol conversion pathway, will make the process less energy intensive and more efficient. With this, LanzaTech estimates that the ability to directly produce chemicals from a waste feedstock will offer a lower cost and lower carbon product which will enable greater market penetration than via the indirect ethanol pathway.

We believe that our demonstrated ability to genetically modify our proprietary gas-fermenting microbe acetogen Clostridium autoethanogenum, is a competitive differentiator. While in recent years a number of rudimentary tools for gas fermenting organisms have been described in the public domain, these have low efficiency and are not amenable for use in high-throughput workflows. We have developed a complete suite of high-throughput capabilities essential for development of optimized production strains or application of iterative, machine learning-based screening strategies employed by the pharmaceutical or natural product industries. Specifically, we have assembled a fully automated strain fabrication facility capable of designing, engineering and delivering several thousand genetically re-programmed strains per month. This "*BioFab*" facility leverages the advanced computational biology, characterized libraries of genetic regulators, as well as tools and protocols to enable precise and predictable genetic re-programming of our proprietary gas-fermenting microbe. The combination of the capabilities and technologies that comprise the BioFab were developed in-house and are proprietary to us. Data from iterative cycles of design, construction, and analysis of engineered microbial strains within the BioFab is captured computationally and used to further refine our genetic modelling and strain design programs. Thus, over time these models and programs become increasingly accurate, minimizing the time required to deliver new commercial strains producing valuable chemical products.

We believe we can further expand our product portfolio through the industrial microbiology capabilities we have pioneered and use our technology to produce high-value chemical intermediates used to make materials such as acrylics, fibers, plastics, and synthetic rubber. In the future, once fully developed, we believe these new microbes will have the potential to be dropped into any existing industrial gas fermentation facility to make new products from established transformed carbon feedstocks, in many cases leading to carbon capture and sequestration in durable goods. We believe synthetic biology could enable the production of a wide variety of chemicals including alcohols, acids, esters, and ketones.

Competition

We compete in industries characterized by rapidly advancing technologies and a complex intellectual property landscape. We face competition from many different sources, including companies that enjoy competitive advantages over us, such as greater financial, research and development, manufacturing, personnel and marketing resources, greater brand recognition, and more experience and expertise.

While we do not believe we have any direct competitors, there are some companies with alignment in feedstock usage, products, synthetic biology, process design or commercial scale. While competing companies may be able to deliver some of these capabilities, we believe that no other company can currently deliver all of them in an integrated way.

These competitors may introduce competing products without our prior knowledge and without our ability to take preemptive measures in anticipation of their commercial launch. Competition may increase further as a result of greater availability of capital for investment and increased interest in our industry as more companies seek to facilitate the development of a carbon circular economy.

Intellectual Property

LanzaTech is a technology company which protects its intellectual property across an entire platform through a combination of trade secrets, confidential information, patents, trademarks, copyrights, nondisclosure agreements, material transfer agreements, employee agreements, and strong intellectual property and confidentiality clauses in collaboration and other agreements. We do not consider any individual patent, patent family or trademark to be material to our overall business.

Patents

As of March 15, 2023, we had owned or in-licensed 1,307 granted patents globally and 590 pending patent applications globally reflecting 141 patent families. We have filed patent applications continuously every year from 2007 to 2022, demonstrating continued innovation and establishing a steady patent estate viewed from a patent term perspective. As earlier filed patents reach their 20-year patent term, later filed patents remain enforceable thus providing a rolling patent estate of enforceable patents. Our patent estate is global in nature with patents or patent applications in over 50 individual countries and several pending applications in the International Patent System established by The Patent Cooperation Treaty.

Trade Secrets and Confidential Information

We have a large body of intellectual property that is maintained, not as patents, but as trade secrets and confidential information. Such intellectual property is protected by appropriate measures to maintain the secrecy and confidentiality of the intellectual property, including for example, contractual measures with confidentially and security obligations, physical security measures and digital security measures.

Trademarks

We maintain trademark rights and registrations in its name and brands in several global jurisdictions. Examples include “LanzaTech” and “CarbonSmart.”

Domains

We have registered a number of domain names for website used in our business. For example, we have registered the domain name for “LanzaTech.com.”

Intellectual Property Overview and Risks

Most of our intellectual property assets were developed and are owned solely by us, a few have been developed via collaboration, some of which are jointly owned with third parties, and a small number have been acquired or licensed from third parties. We expect that we will continue to make additional patent application filings and that we will continue to pursue opportunities to acquire and license additional intellectual property assets, technologies, platforms or products as developments arise or are identified.

Regardless, we cannot be certain that any of the patent filings or other intellectual property rights that we have pursued or obtained will provide the protection we seek. Our future commercial success depends, in part, on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business; defend and enforce our patents and other intellectual property; preserve the confidentiality of our trade secrets; and operate without infringing, misappropriating or violating the valid and enforceable patents and other intellectual property rights of third parties. Our ability to stop third parties from making, using, selling, offering to sell or importing our products may depend on the extent to which we have rights under valid and enforceable patents, trade secrets or other intellectual property rights that cover these activities. With respect to both our owned and licensed intellectual property, we cannot be sure that patents will issue with respect to any of the owned or licensed pending patent applications or with respect to any patent applications that we, our co-owners or our licensors may file in the future, nor can we be sure that any of our owned or licensed patents or any patents that may be issued in the future to us or our licensors will be commercially useful in protecting any products that we ultimately attempt to commercialize, or any method of making or using such products.

Under the “march-in” provisions of the Bayh-Dole Act, the government may have the right under limited circumstances to require us to grant exclusive, partially exclusive or non-exclusive rights to third parties under any intellectual property discovered through the government-funded programs. March-in rights can be triggered if the government determines that we have failed to work sufficiently towards achieving practical application of a technology or if action is necessary to alleviate health or safety needs, to meet requirements for public use specified by federal regulations or to give preference to U.S. industry. Specifically, certain of our granted and pending patents

that cover recombinant and other microorganisms, cell-free protein synthesis platforms, protein expression vectors, fermentative production pathways, and microbial and ethanol conversion pathways may be subject to march-in-rights. These patents account for less than one percent of our granted and pending patents.

Key Collaboration Agreements

License Agreement with Battelle Memorial Institute

In September 2018, we entered into a license agreement with Battelle, which was subsequently amended in January and April 2020 (as amended, the "Battelle License Agreement"). Under the Battelle License Agreement, Battelle granted to us an exclusive sublicensable commercial license to certain patents related to the conversion of ethanol to fuels (the "Battelle patent rights").

Under the Battelle License Agreement, we must meet certain development milestones, including producing and selling products and sublicensing the Battelle patent rights to others within certain timeframes. The agreement also requires that any products manufactured using the Battelle patent rights and sold within the United States will be substantially manufactured in the United States. Battelle retains the right to practice or license the Battelle patents to nonprofit institutions for research, development, or demonstration purposes. We licensed our rights and obligations under the Battelle License Agreement exclusively to LanzaJet. As such, we may only exercise these rights through a sublicense from LanzaJet.

In connection with our entry into the Battelle License Agreement, we paid an initial fee of $5,000 and agreed to pay Battelle a royalty of less than one percent of net sales of products involving the Battelle patent rights and a 10% royalty on all sublicense revenues and royalties. As of the date of this current report, we have not been required to make any royalty payments under the Battelle License Agreement.

The Battelle License Agreement remains effective until the last of the Battelle patent rights expires, is abandoned or is adjudicated invalid, unless the agreement is earlier terminated. The last of the Battelle patent rights are currently scheduled to expire in approximately October 2035. Battelle may terminate the agreement if we become insolvent or if we fail to meet certain reporting or payment requirements under the agreement. Battelle may also terminate the agreement or convert the license into a non-exclusive license if we fail to reach certain of the abovementioned development milestones within the applicable time periods. We may terminate the Battelle License Agreement upon 60 days' prior notice to Battelle, and either party may terminate the agreement if the other party breaches the agreement and fails to cure such breach after 60 days' notice. We agreed to indemnify Battelle against certain third-party claims related to the Battelle patents.

LanzaJet Agreements

LanzaJet Amended and Restated Investment Agreement

On April 1, 2021, we entered into an amended and restated investment agreement with LanzaJet, Mitsui, Suncor, British Airways and Shell. We refer to this agreement as the "LanzaJet Investment Agreement." The LanzaJet Investment Agreement was entered into in order to facilitate the production of SAF by designing, constructing and operating a demonstration facility located at the LanzaTech Freedom Pines Biorefinery in Soperton, Georgia (the "LanzaJet Freedom Pines Demonstration Facility"), and to determine the feasibility of developing additional potential facilities for commercial scale production of fuel.

Under the LanzaJet Investment Agreement, we received shares of common stock of LanzaJet ("LanzaJet shares"), in exchange for a license to our rights and obligations under the Battelle License Agreement (discussed further below under "— License Agreement with LanzaJet"). Pursuant to the LanzaJet Investment Agreement, Mitsui, Shell, British Airways and Suncor each contributed an initial cash investment in exchange for shares of common stock of LanzaJet.

Each of Mitsui, Shell, British Airways and Suncor agreed to make an additional cash investment following the achievement of certain development milestones relating to the demonstration facility, which payments we refer to as second tranche investments. If made, the second tranche investments would fund the development and operation of

commercial facilities by Mitsui, Shell, British Airways and Suncor, respectively. These commercial facilities would sublicense the relevant fuel production technology from LanzaJet. Upon the closing of each of the first three of these second tranche investments and no later than the sublicensing of the relevant facility, LanzaJet is required to issue additional LanzaJet shares to us. We currently hold approximately 25% of the outstanding shares of LanzaJet. Upon the issuance of additional shares to us in connection with the closing of each of the first three potential second tranche investments, we would hold approximately 40%, 50% and 57% of the outstanding shares of LanzaJet, respectively. Unless and until two second tranche investments are made and assuming none of the employee equity incentive pool is issued as shares, LanzaJet undertakes an initial public offering or a sale of LanzaJet occurs under certain circumstances, we would remain a minority shareholder of LanzaJet.

The LanzaJet Investment Agreement may be terminated by the mutual consent of the parties at any time or automatically as to the second tranche obligations of any party if LanzaJet has not called for such party to make a second tranche investment by December 31, 2025. Each party to the LanzaJet Investment Agreement agreed to indemnify the other parties for all claims arising from such party's breach of the agreement or from fraud, gross negligence, or willful misconduct with regard to the agreement.

License Agreement with LanzaJet

In May 2020, in connection with the LanzaJet Investment Agreement, we entered into the LanzaJet License Agreement. Under the LanzaJet License Agreement, we granted to LanzaJet a perpetual, worldwide, non-transferrable, irrevocable, royalty-free, sublicensable, exclusive license to all of our intellectual property rights under the Battelle License Agreement, as well as other intellectual property owned by us relating to the conversion of ethanol to fuels. LanzaJet assumed all of our obligations under the Battelle License Agreement, including development, reporting, royalty payment and sublicensing obligations. LanzaJet assumed all of our rights under the Battelle License Agreement except for our rights, in certain circumstances, to terminate the agreement, to amend the agreement or to assign our rights thereunder, provided that we may not exercise these rights without LanzaJet's prior consent.

The license granted by us to LanzaJet is exclusive, including as against us, with the exception of certain development projects we are undertaking in collaboration with the U.S. Department of Energy or pursuant to certain grants from the U.S. Department of Energy, for which LanzaJet granted us a worldwide, non- transferable, non-sublicensable, non-exclusive, royalty-free sublicense to the relevant intellectual property rights. LanzaJet also agreed to grant us a non-exclusive sublicense at most-favored nation pricing to fulfill certain pre-existing SAF obligations if we are unable to fulfill these obligations through other off-take agreements.

The LanzaJet License Agreement has an indefinite term. If LanzaJet fails to perform its obligations under the Battelle License Agreement, we may continue to perform our obligations under such agreement. LanzaJet may terminate the LanzaJet License Agreement immediately upon notice to us if a material portion of the licensed subject matter is determined by a court to be invalid. We may terminate the agreement upon 30 days' written notice if LanzaJet materially breaches the agreement and fails to cure after receiving notice of the breach. If certain commercial facility development milestones are not met under the LanzaJet Investment Agreement, we may terminate the LanzaJet License Agreement and after such termination, the agreement will survive solely with respect to the LanzaJet Freedom Pines Demonstration Facility. If the agreement is terminated for any other reason, LanzaJet's license will cease immediately but any sublicenses granted by LanzaJet prior to termination of the agreement will survive, subject to their terms. We and LanzaJet agreed to indemnify the other against certain third-party claims.

LanzaJet Amended and Restated Stockholders' Agreement

In connection with the LanzaJet Investment Agreement, on April 1, 2021, we entered into an amended and restated stockholders' agreement with LanzaJet, Shell, Mitsui, British Airways and Suncor (the "LanzaJet Stockholders' Agreement"). Under the LanzaJet Stockholders' Agreement, each party is required to hold and vote its shares of LanzaJet stock to ensure that LanzaJet's board of directors (the "LanzaJet board") is composed of eight directors: one designee from each of British Airways, Mitsui, Suncor and Shell, two LanzaTech designees (one of which will be the chairperson), LanzaJet's chief executive officer, and one independent director. Each party must hold a certain

number of shares of LanzaJet common stock in order to maintain their respective designated board seats. Pursuant to the agreement, if a party votes to remove its designated director from the LanzaJet board, the other parties must also vote in favor of removal. If a party fails to comply with its obligations under the second tranche investments provided for in the LanzaJet Investment Agreement, the other parties may vote to remove that party's designee, and such party will forfeit its designated LanzaJet board seat in exchange for the right to designate a non-voting observer to the LanzaJet board.

The agreement also provides that the parties must vote their shares in favor of a proposed change of control transaction and take all reasonable steps necessary to execute the transaction if it meets certain standards and is approved by us, the LanzaJet board, and any investor holding a certain number of LanzaJet shares.

The parties to the LanzaJet Stockholders' Agreement may not transfer their LanzaJet shares until 2026, except for permitted transfers to affiliates. LanzaJet has a right of first refusal with regard to all transfers of LanzaJet shares to third parties and if LanzaJet declines to exercise this right, the other parties to the agreement are entitled to a pro rata right of first refusal. We and the other parties will also have a pro rata right of first refusal with regard to new LanzaJet shares issued as well as a put right with respect to LanzaJet shares that we and such parties hold upon the occurrence of certain conditions. The LanzaJet Stockholders' Agreement also provides registration rights in connection with an initial public offering of or other registration of LanzaJet shares.

Each party to the LanzaJet Stockholders' Agreement agrees to indemnify the other parties for all claims arising from such party's breach of the agreement or from fraud, gross negligence, or willful misconduct with regard to the agreement. The LanzaJet Stockholders' Agreement will terminate either with the consent of all of the parties or upon an initial public offering of LanzaJet shares or a specified liquidation event.

LanzaJet Note Purchase Agreement

On November 9, 2022, we and the other LanzaJet shareholders entered into the LanzaJet Note Purchase Agreement, pursuant to which FPF, a wholly owned subsidiary of LanzaJet, will issue, from time to time, notes in an aggregate principal amount of up to $147.0 million (the "LanzaJet Notes"), comprised of approximately $113.5 million aggregate principal amount of 6.00% Senior Secured Notes due December 31, 2043 and $33.5 million aggregate principal amount of 6.00% Subordinated Secured Notes due December 31, 2043. We have committed to purchase $5.5 million of Subordinated Secured Notes in a funding expected to occur on May 1, 2023. The Senior Secured Notes are secured by a security interest over substantially all assets of FPF, and both the Senior Secured Notes and the Subordinated Secured Notes are secured by a security interest over all intellectual property owned or in-licensed by LanzaJet. LanzaJet also provides a guarantee of any costs and expenses required to complete the LanzaJet Freedom Pines Demonstration Facility and achieve commercial operation.

Each purchaser of LanzaJet Notes under the LanzaJet Note Purchase Agreement is also entitled to receive a warrant for the right to purchase 575 shares of common stock of LanzaJet for each $10,000 of LanzaJet Notes purchased by such purchaser (which, in the case of LanzaTech, will be equal to a right to purchase 316,250 shares of common stock of LanzaJet).

Under the LanzaJet Note Purchase Agreement, FPF must provide periodic progress reports and financial information to the noteholders, in addition to providing notice of certain significant events. Additionally, FPF is restricted from undertaking certain transactions or making certain restricted payments while the LanzaJet Notes are outstanding. The LanzaJet Note Purchase Agreement may be amended with the approval of FPF and all noteholders. Upon an event of default under the Note Purchase Agreement, each purchaser may accelerate its own LanzaJet Notes. Enforcement against the collateral securing the LanzaJet Notes requires the approval of certain holders as specified in the LanzaJet Notes. Under the LanzaJet Note Purchase Agreement, FPF has agreed to indemnify the noteholders for certain liabilities.

Mitsui Alliance Agreement

On February 15, 2022, we entered into an amended and restated collaboration agreement with Mitsui which was further amended on March 24, 2022 and October 2, 2022 (as amended, the "Mitsui Alliance Agreement"). Under the Mitsui Alliance Agreement, Mitsui must use commercially reasonable efforts to promote our gasification, waste-to-

ethanol and CarbonSmart technology and establish commercial facilities using this technology in Japan. In exchange, we agreed to exclusively promote and designate Mitsui as our preferred provider of investment and off-take services worldwide, as well as our preferred provider of engineering, procurement and construction services in Japan, subject to exceptions for certain of our existing commercial partnerships that allow us to recommend Brookfield as a provider of investment services in specified circumstances, including the Brookfield Framework Agreement. We and Mitsui agreed to share prospective customer information and to structure package offerings of our combined services through either a joint venture or royalty payment structure.

Under the Mitsui Alliance Agreement, we may not recommend any alternative provider of the aforementioned services without the advance written consent of Mitsui. In addition, we agreed to provide Mitsui with the right to first offer its services to any customer who requires or requests these services. We must obtain written consent from Mitsui before soliciting customers or marketing or recommending our waste-to-ethanol technology in Japan.

The Mitsui Alliance Agreement may be terminated by Mitsui without cause with three months' notice. The agreement may be terminated by us or Mitsui if the other party becomes insolvent or if the agreement is materially breached and the breaching party fails to cure within 30 days after receiving notice of the breach. We and Mitsui have agreed to indemnify each other against certain third-party claims.

Shougang Joint Venture

Articles of Association of Beijing Shougang LanzaTech Technology Co., Ltd

Through our subsidiary LanzaTech Hong Kong Limited, a limited liability company organized in Hong Kong, we hold approximately 9.3% of the outstanding shares of Beijing Shougang LanzaTech Technology Co., Ltd (the "Shougang Joint Venture") as a result of our contribution of certain intellectual property rights (see " — *Shougang Joint Venture License Agreement*" below). Our rights and responsibilities as a holder of such shares are set forth in the Shougang Joint Venture's Articles of Association,effective in November 2021. Because our shares were issued before an initial public offering of the Shougang Joint Venture, our shares may not be transferred within one year from the date on which the Shougang Joint Venture's shares are publicly listed. The Shougang Joint Venture has an indefinite duration.

At the general meeting of shareholders of the Shougang Joint Venture, shareholders have the authority to determine the Shougang Joint Venture's business plan, elect and replace directors, increase or decrease the registered capital of the Shougang Joint Venture, amend the Shougang Joint Venture, dissolve the Shougang Joint Venture, and approve certain transactions, among other functions. As a holder of more than 3% of the shares of the Shougang Joint Venture, we have the right to submit proposals to the Shougang Joint Venture at general meetings.

Except as otherwise provided, and in accordance with accounting provisions of the Shougang Joint Venture, when a distribution of Shougang Joint Venture profits is approved, the Shougang Joint Venture's after-tax profits are distributed in proportion to the shares held by shareholders. In the event of a liquidation, the Shougang Joint Venture's property must be distributed in proportion to the shares held by shareholders after liquidation expenses, wages of employees, statutory compensation, owed tax and Shougang Joint Venture debts are paid. If we object to a resolution on merger and division of the Shougang Joint Venture, we can request the Shougang Joint Venture acquire our shares.

Shougang Joint Venture Letter Agreement

On November 3, 2021, LanzaTech Hong Kong Limited entered into a side letter of agreement (the "Shougang Joint Venture Letter Agreement") with the Shougang Joint Venture and Mitsui. The Shougang Joint Venture Letter Agreement sets forth the parties' mutual understanding that if the Shougang Joint Venture decides not to pursue an initial public offering of its securities in China or if an initial public offering does not take place by the end of 2024, the Shougang Joint Venture will make commercially reasonable efforts and discuss in good faith with shareholders the possibility of restoring certain provisions from a previous version of the Shougang Joint Venture Articles, including provisions granting shareholders rights to financial records, board composition provisions, and provisions requiring unanimous consent of the board to make certain decisions.

Shougang Joint Venture License Agreement

On September 6, 2021, we entered into an Intellectual Property Rights License Agreement with the Shougang Joint Venture, which was subsequently amended in January 2022 (as amended, the "Shougang Joint Venture License Agreement"). Under the Shougang Joint Venture License Agreement, we granted the Shougang Joint Venture a license to certain of our intellectual property rights, including certain patented fermentation processes, alcohol production processes, novel bacteria and trademarks. The license we granted to the Shougang Joint Venture is a non-transferable (except with our written consent), exclusive, sublicensable commercial license under the licensed subject matter, to utilize gas fermentation technology to produce ethanol and by-products at commercial facilities in China. The Shougang Joint Venture may sublicense its rights to third-party contractors acting on its behalf, subject to certain conditions.

In consideration for the licenses we granted to the Shougang Joint Venture, the Shougang Joint Venture agreed to pay us a royalty on a graduated scale from 10% to 20% of all sublicensing revenues received by the Shougang Joint Venture in connection with the establishment and sublicensing of certain commercial facilities by the Shougang Joint Venture after the first commercial facility. As of the date of this current report, we have not received any royalty payments from the Shougang Joint Venture. Because our shareholding ratio in the Shougang Joint Venture has fallen below 10% due to a financing prior to the submission of an application by the Shougang Joint Venture for an initial public offering on a securities exchange in China, we have the right to request an adjustment to the royalty rates payable to us by the Shougang Joint Venture. This right will automatically terminate upon the submission of an application by the Shougang Joint Venture for an initial public offering on a securities exchange in China. If such application is subsequently terminated, our right to request an adjustment to the royalty rates will resume. The Shougang Joint Venture License Agreement provides that we will solely own all developed technology that results from, is based on, or uses the licensed subject matter in the operation of the Shougang Joint Venture, and all such technology will be subject to the license granted to the Shougang Joint Venture.

The Shougang Joint Venture has a right to cooperate with third parties regarding any commercial license under the licensed subject matter, subject to certain conditions. We agreed not to enter into any agreement with any third party preventing the Shougang Joint Venture's rights on the licensed subject matter in China. If the Shougang Joint Venture has not entered negotiations or signed an agreement with a third party for commencement of a project within a certain period of time, we will be free to engage with such third party ourselves.

Upon submission of an application by the Shougang Joint Venture for an initial public offering on a securities exchange in China, if we enter liquidation and as a result the Shougang Joint Venture License Agreement is terminated, the Shougang Joint Venture will be granted an option to call for an assignment of patents that are licensed pursuant to the agreement at that time, provided we first receive a written irrevocable, non-exclusive sublicense for the surviving term of such patents. If the Shougang Joint Venture's application for an initial public offering is revoked or otherwise terminated, this call option will automatically become void. If the Shougang Joint Venture's right to the licensed subject matter is prohibited or restricted by operation of United States export controls, the Shougang Joint Venture has the right to continue to use the licensed subject matter as provided in the agreement. In such event, so long as the Shougang Joint Venture's continued use of the licensed subject matter complies with the agreement, we agreed not to initiate patent infringement claims against the Shougang Joint Venture.

The Shougang Joint Venture License Agreement will continue until the earlier of (a) the date the final licensed intellectual property right expires or terminates, (b) the date the last commercial facility is permanently decommissioned and (c) termination of the agreement. The agreement will terminate automatically in the event that the Shougang Joint Venture dissolves or is liquidated, institutes or actively participates in any action, suit or proceeding to invalidate or limit the scope of the licensed subject matter, or breaches certain provisions of the agreement. We may terminate the Shougang Joint Venture License Agreement upon default by the Shougang Joint Venture if the Shougang Joint Venture does not remedy the default within 60 days. We agreed to indemnify the Shougang Joint Venture, its affiliates and their current and former representatives from claims resulting from our material breach of the representations and warranties of the Shougang Joint Venture License Agreement. We have the first right to enforce and defend against infringement of the intellectual property licensed under the Shougang Joint Venture License Agreement and to recover any monetary compensation awarded in any litigation proceedings.

If we fail to do so, the Shougang Joint Venture may enforce and defend the licensed intellectual property against infringement.

Letter Agreement with Sinopec

On April 12, 2021, we entered into a letter agreement with Sinopec and the Shougang Joint Venture (the "Sinopec Letter Agreement"). The parties to the Sinopec Letter Agreement agreed that the Shougang Joint Venture has exclusive rights to use our gas fermentation technology in commercial projects in China to produce fuel ethanol using steel mill and ferroalloy off-gas as described in the Shougang Joint Venture License Agreement. The Shougang Joint Venture agreed to notify Sinopec and us if it enters into a term sheet or equivalent preliminary agreement with respect to the use of our gas fermentation technology in commercial projects in China falling outside the scope of the Shougang Joint Venture License Agreement.

Sinopec and the Shougang Joint Venture have the right to cooperate with us on commercial projects outside the scope of the Shougang Joint Venture License Agreement and to provide technical and engineering services.

Grant Agreement with the European Climate, Infrastructure and Environment Executive Agency

Through our subsidiary LanzaTech BV, on October 7, 2020, we entered into a Grant Agreement (the "CINEA Grant Agreement") with the European Climate, Infrastructure and Environment Executive Agency (formerly the Innovation and Networks Executive Agency of the European Union) ("CINEA"), along with SkyNRG BV ("SkyNRG"), RSB Roundtable on Sustainable Biomaterials Assocation, E4tech (UK) Ltd and Fraunhofer Gesellschaft zur Forderung der Angewandten Forschung E.V. The CINEA Grant Agreement provides for the award of a grant from CINEA to the parties to the CINEA Grant Agreement to fund the "Fuel via Low Carbon Integrated Technology from Ethanol" program, which we refer to as the FLITE program, to expand the supply of low carbon jet fuel in Europe by designing, building, and demonstrating an innovative ethanol-based ATJ technology in an ATJ Advanced Production Unit. Pursuant to the CINEA Grant Agreement, LanzaTech is responsible for plant design, construction and operations using ATJ technology. The CINEA Grant Agreement contemplates that FLITE will occur for a period of 48 months ending on November 30, 2024.

The maximum grant amount under the CINEA Grant Agreement is EUR 20,000,000. The grant is applied to 100% of non-profit eligible costs and 70% of for-profit eligible costs. The estimated eligible costs of implementing the FLITE program are approximately EUR 54,500,000.

Pursuant to the CINEA Grant Agreement, we own any intellectual property generated as a result of our participation in the program. If we do not protect, exploit and disseminate such intellectual property rights, to the extent reasonable and possible, CINEA may assume ownership thereof.

The parties must compensate CINEA for any damage it sustains as a result of the parties' implementation of the FLITE program or because the FLITE program was not implemented in full compliance with the CINEA Grant Agreement.

The participation of a party may be terminated by the coordinator of the CINEA Grant Agreement, designated as SkyNRG, upon request of the concerned party or on behalf of the other parties, subject to certain notice requirements and based upon reasons that must be approved by CINEA. CINEA may independently terminate the CINEA Grant Agreement or the participation of one or more parties in certain enumerated situations, including a party's change in financial or organization situation likely to affect the program, substantial errors or serious breach of obligations under the agreement, systemic errors or fraud in other similar agreements, and force majeure.

The agreement may be amended by request of any of the parties subject to the procedural guidelines therein. The agreement may be terminated by the parties with cause, or without cause subject to a potential reduction of the grant amount.

Agreements with Sekisui Chemical Co., Ltd.

Memorandum of Understanding with Sekisui

On June 20, 2018 we entered into a Memorandum of Understanding with Sekisui with respect to the business of producing ethanol converted by microbes from syngas generated from municipal solid waste, industrial solid waste, and other waste materials (the “Sekisui MOU”).

Under the Sekisui MOU, we and Sekisui agreed to notify each other of any new projects or opportunities anywhere in the world relating to waste-to-ethanol production, to the extent legally permissible, and to inform relevant third parties of the other party’s intent to participate in such new projects. If Sekisui notifies us of a business project in Japan, we agreed not to grant or license our technology or provide media, microbes, or technical support to the project without Sekisui’s consent. Sekisui will manage developing and establishing appropriate structures related to the waste to ethanol production, collection of license fees, providing main and non-specialized technical support of operations, and media and microbe distribution following our manufacture thereof.

The Sekisui MOU expires on June 20, 2028, at which point we and Sekisui must engage in good faith discussions on whether to extend the term. We also must engage in good faith discussions to determine whether the Sekisui MOU should be terminated or amended if there is a substantial change for either party relating to the performance of or responsibility for waste to ethanol production, including changes in control or ownership of either party.

Sekisui Term Sheet

On February 21, 2020, we entered into a term sheet with Sekisui (the “Sekisui Term Sheet”) in connection with the development of a waste-to-ethanol commercial facility. The Sekisui Term Sheet addresses the provision of engineering services by LanzaTech to the future operator of the commercial facility, and the granting of a license by LanzaTech to Sekisui for certain information, technology and intellectual property necessary to design, operate, and maintain the fermentation processes, microbes, and ethanol by-products of the commercial facility. The Sekisui Term Sheet governs the terms of operation of the first commercial facility and any future facilities contemplated under the Sekisui Memorandum, including with respect to performance targets and guarantees and engineering fees.

Under the Sekisui Term Sheet, we are expected to provide, sell or distribute microbes and trace media for the operation of the commercial facility for a fixed fee, subject to mutually agreed price adjustments for future facilities. For any additional facility that is constructed in accordance with the terms of the Sekisui Memorandum, we would not provide trace media or microbes without Sekisui’s consent.

After a certain date, the fixed fee arrangement is expected to end and we expect to charge our standard price for the microbes and trace media. At that point, Sekisui may choose which type of microbes and trace media it would like to purchase from us, and we must carry stock of the same microbes sold to Sekisui for at least one year from the last delivery.

The entity operating the commercial facility is required to pay to us and Sekisui a license fee consisting of a percentage of gross sales of all products which utilize our licensed subject matter. Our portion of the licensing fee is a single-digit percentage of gross sales of all products which utilize our licensed subject matter. As of the date of this current report, we have not received any payments under the Sekisui Term Sheet. The provisions of the Sekisui Term Sheet relating to the license and supply of media and microbes continue in effect as long as the commercial facility is operating. Once in effect, we may terminate the license for uncured material breach, if the licensee becomes insolvent, or if there is a change of control or assignment without our consent.

Grant Agreement between LanzaTech UK Limited and UK Secretary of State for Transport

On December 12, 2022, LanzaTech UK Limited (“LanzaTech UK”), a wholly owned subsidiary of LanzaTech, was awarded a grant from the UK Authority in connection with Project DRAGON. The grant was awarded to fund LanzaTech UK’s front-end engineering design and associated project development activities for the UK Authority to achieve a final investment decision for a proposed facility in Port Talbot, South Wales, United Kingdom. The

proposed facility would use LanzaTech's process technology to convert a variety of waste sources into waste-based low-carbon ethanol. This ethanol would then be converted to SAF and diesel fuel using LanzaJet's ATJ technology.

Pursuant to the grant agreement between LanzaTech UK and the UK Authority (the "DRAGON Grant Agreement"), the UK Authority agreed to provide to LanzaTech UK up to £24,961,000 upon the achievement of certain milestones related to Project DRAGON. In return, LanzaTech UK agreed to provide regular progress reports, audit reports, and documentation of its expenses to the UK Authority. In the event that LanzaTech UK defaults on its obligations under the DRAGON Grant Agreement, the UK Authority may suspend payments under the agreement, reduce the amount of the grant, require LanzaTech UK to repay amounts paid under the grant with interest, or terminate the agreement. All intellectual property rights owned by each of the parties prior to the date of the DRAGON Grant Agreement or developed by either party during the period of the grant will remain the property of such party. However, any intellectual property rights developed in the course of the activities funded by the grant and included in LanzaTech's periodic progress reports to the UK Authority will belong to the UK Authority.

Either party may terminate the DRAGON Grant Agreement for convenience upon 28 days' written notice. Upon termination of the DRAGON Grant Agreement, LanzaTech UK must return any unspent funds issued under the grant and promptly prepare a plan to terminate funded activities. If the UK Authority terminates the agreement for convenience, it will be obligated to pay to LanzaTech UK a reasonable amount in respect of any activities completed in furtherance of Project DRAGON at the time of termination, but will not be liable for any expenses related to any transfer or termination of any of LanzaTech UK's employees engaged in activities related to Project DRAGON. The period for which the grant is awarded expires on March 31, 2025.

LanzaTech UK has agreed to indemnify and hold harmless the UK Authority and its representatives with respect to all actions, claims, charges, demands, losses and/or proceedings arising from or incurred by reason of the actions or omissions of LanzaTech UK in connection with Project DRAGON. To the extent permitted under applicable law, the UK Authority's liability to LanzaTech UK under the DRAGON Grant Agreement will be limited to its obligation to make payment of grant funds when due and payable.

Agreements with Brookfield

Brookfield Framework Agreement

On October 2, 2022 we entered into a framework agreement with BGTF LT Aggregator LP, an affiliate of Brookfield Asset Management Inc. ("*Brookfield*" and such agreement, the "Brookfield Framework Agreement"). Under the Brookfield Framework Agreement, we agreed to exclusively offer Brookfield the opportunity to acquire or invest in certain projects to construct commercial production facilities employing CCT technology in the U.S., the European Union, the United Kingdom, Canada or Mexico for which we are solely or jointly responsible for obtaining or providing equity financing, subject to certain exceptions. We agreed to present Brookfield with projects that over the term of the agreement require equity funding of at least $500,000,000 in the aggregate. With respect to projects acquired by Brookfield, we are entitled to a percentage of free cash flow generated by such projects determined in accordance with a hurdle-based return waterfall. Brookfield has no obligation under the Brookfield Framework Agreement to invest in any of the projects. Additionally, we agreed to recommend Brookfield to customers that, in our reasonable judgment, are likely to need third-party funding to develop, construct and own projects subject to the Brookfield Framework Agreement.

Brookfield's exclusivity will terminate upon the earliest of (a) the aggregate equity funding by Brookfield in projects acquired by Brookfield of at least $500,000,000, along with Brookfield's written notice that it will no longer maintain access to at least $500,000,000 to fund new projects, (b) Brookfield's rejection of a specified number of projects that otherwise meet certain criteria over a specified time period, and (c) October 2, 2027, which is the date the Brookfield Framework Agreement is set to terminate.

Brookfield SAFE

On October 2, 2022, concurrently with entry into the Brookfield Framework Agreement, we entered into a Simple Agreement for Future Equity with Brookfield (the "Brookfield SAFE"). Under the Brookfield SAFE, we agreed to issue to Brookfield the right to certain shares of Legacy LanzaTech's capital stock, in exchange for the payment of

$50,000,000 (the “Initial Purchase Amount”). Following the completion of the Business Combination, Brookfield may, at any time at its option, convert all or a portion of the Initial Purchase Amount less any amount that has already been converted or repaid (the “Purchase Amount”) into shares of the common stock. The number of shares into which the Purchase Amount and the Non-Repayable Amount (as defined below) are convertible is determined by dividing such amount by the price per share paid by the PIPE Investors ($10.00).

On the fifth anniversary of the Brookfield SAFE, we will repay in cash any remaining unconverted portion of the Initial Purchase Amount (the “Remaining Amount”), plus interest in the high single digits, compounded annually. For each $50,000,000 of aggregate equity funding required for qualifying projects acquired by Brookfield in accordance with the Brookfield Framework Agreement, the Remaining Amount would be reduced by $5,000,000 (such reduction, the “Non-Repayable Amount”). Equity funding for any one or more projects in excess of $50,000,000 in the aggregate will be counted towards the next $50,000,000 of equity funding required for qualifying projects.

We may be required to repay the Brookfield SAFE prior to the fifth anniversary if upon a conversion event, if we take certain actions that would cause us to be unable to satisfy our obligations under the Brookfield SAFE, including failure to provide for certain rights to Brookfield in an Equity Financing or taking any action that would reasonably be expected to cause the fair market value of LanzaTech to fall below $200,000,000. LanzaTech, Inc. provided a guarantee for LanzaTech to repay its obligations under the Brookfield SAFE, including any expenses incurred by Brookfield in enforcing or exercising its rights under such guarantee.

In the case of a liquidation or dissolution of LanzaTech, Brookfield would be entitled to receive a portion of the proceeds equal to the Purchase Amount plus interest in the high single digits, compounded annually, and such right would be on par with unsecured indebtedness of LanzaTech, and rank senior to any outstanding common stock, preferred stock and other SAFEs.

The Brookfield SAFE will automatically terminate following the earliest occurrence of (A) the Initial Purchase Amount having been fully repaid and/or converted and (B) the payment of amounts due to Brookfield in the event of a liquidation or dissolution of LanzaTech.

Brookfield Cooperation Letter Agreement

On October 2, 2022, in connection with our entry into the Brookfield Framework Agreement, we entered into a letter agreement with Suncor and Brookfield (the “Brookfield Cooperation Letter Agreement”). Under the Brookfield Cooperation Letter Agreement, we agreed to simultaneously notify Suncor upon the submission of any notice to Brookfield that a project is construction-ready under the Brookfield Framework Agreement for any equity investment opportunity in Canada or Colorado. For any of such investment opportunities Brookfield pursues, Brookfield has agreed under the Brookfield Cooperation Letter Agreement to grant Suncor the right to invest up to a certain percentage that lies between 15 – 25% of the required equity capital on economic terms at least as favorable as those granted to Brookfield and any other third-party investors.

Under the Brookfield Cooperation Letter Agreement, Suncor agreed to notify Brookfield of any projects using our technology that Suncor establishes which require equity capital from a third-party. Suncor has also agreed to consider any investment proposal presented to it by Brookfield pursuant to such notification prior to the execution of agreements with other third parties.

Letter Agreement with IndianOil

On December 4, 2017, we entered into a letter of agreement (the “IndianOil Letter Agreement”) with IndianOil. The IndianOil Letter Agreement sets forth a framework for the development of a plant utilizing our technology to produce ethanol from waste gas at IndianOil’s Panipat refinery in Haryana, India, as well as terms for future agreements for the development of additional plants by IndianOil or other third parties. In connection with the IndianOil Letter Agreement, we licensed to IndianOil certain technology used to produce ethanol from waste gas in exchange for royalties in the range of $13 to $14 per metric ton of ethanol, net of any applicable tax, by the first plant. For each additional plant developed by IndianOil, IndianOil has agreed to a royalty between $28 and $31 per metric ton of ethanol for a period of five years or alternatively, a lump sum license fee of $8 million for an ethanol

unit with a capacity of 40,000 metric tons per year, or on a proportionate basis predicated on the actual size of the future unit. As of the date of this current report, we have not received any royalty or lump sum license fees under the IndianOil Letter Agreement. IndianOil agreed to purchase design and engineering services, proprietary microbes and trace media mix from us to facilitate the construction and operation of the first IndianOil plant. Additionally, we agreed to provide IndianOil with terms for commercial deployment of our waste gas to ethanol process that are at least as favorable as those that we may grant to third parties (other than parties in which we have ownership or co-development projects we may undertake with third parties) in addition to an exclusivity period during which we have agreed to engage IndianOil as our engineering partner for commercial plants developed by third parties using the oil refinery technology we licensed to IndianOil. The IndianOil Letter Agreement terminates on December 4, 2027, unless earlier terminated by mutual agreement.

Suncor License Agreement

On October 6, 2020, we entered into a Master Licensing Agreement with Suncor, which was amended and supplemented on October 2, 2022 by the Brookfield Cooperation Letter Agreement (as amended, the "Suncor License Agreement"). Pursuant to the Suncor License Agreement we granted Suncor a worldwide, non-exclusive, license to certain of our intellectual property related to our gas fermentation technology, which is sub-licensable only to joint ventures affiliated with Suncor and transferable only with our consent.

This license is conditional on Suncor's fulfillment of certain obligations including the provision of financing, engineering, and other project support services reasonably required for us to accomplish certain developmental and funding targets. Suncor paid us an initial license fee of $5 million Canadian and has agreed to pay us a royalty of up to 10% of net revenue from excess ethanol produced at the first four commercial facilities developed under our joint development plans with Suncor above a certain daily quota and on all ethanol produced at additional facilities developed under our joint development plans with Suncor. Alternatively, Suncor may pay a one-time royalty fee for any licensed facility, which would be calculated based on the potential capacity of such facility. As of the date of this current report, we have not received any royalty payments under the Suncor License Agreement.

Pursuant to the Suncor License Agreement, we granted most favored customer pricing to Suncor with regard to our engineering services, supply of equipment and microbes, and royalties from commercial facilities. Additionally, we granted Suncor a right of first refusal with regard to any investment in or off-take from any future commercial gas fermentation plants in Canada and Colorado, other than investment opportunities offered to Brookfield or its affiliates under the Brookfield Framework Agreement which would be subject to the provisions of the Brookfield Framework Agreement described above.

The Suncor License Agreement may be terminated by agreement of both parties if either party becomes insolvent, commits a material breach and fails to remedy such breach within a certain timeframe or if no commercial facilities have been completed under our joint development plans by 2031. We may terminate the agreement if Suncor fails to make required payments under the Suncor License Agreement. Suncor may terminate the agreement for convenience upon 90 days' notice.

Government Regulation

Environmental Regulation

Our business and the businesses of the customers who license our technology are subject to various international, national, and regional laws and regulations relating to the production of renewable fuels, the protection of the environment and in support of the ethanol industry at large. These laws, their underlying regulatory requirements, and their enforcement, some of which are described below, impact our existing and potential business operations by imposing restrictions on our, our customers' and our partners':

- existing and proposed business operations or the need to install enhanced or additional pollution controls;
- need to obtain and comply with permits and authorizations;
- liability for exceeding applicable permit limits or legal requirements; and

- specifications related to the ethanol we market and produce.

GHG emissions are subject to environmental laws and regulations in the various jurisdictions in which we and our customers have operations. In the normal course of business, we and our customers and partners may be involved in legal proceedings under the Comprehensive Environmental Response, Compensation, and Liability Act, the Resource Conservation and Recovery Act, and similar environmental laws across the globe relating to the designation of certain sites for investigation or remediation with respect to environmental risks.

Some of our and our customers' operations are within jurisdictions that have or are developing regulatory regimes governing emissions of GHGs, including CO_2. These include existing coverage under the European Union Emission Trading System, the California cap and trade scheme, India's Performance, Achieve and Trade scheme, South Africa's Trade Exposure and Greenhouse Gas Benchmark Regulations, the Tokyo Cap-and-Trade Program, China's Emission Trading Scheme and any potential expansions of these policies or related policies. In addition, the EPA requires mandatory reporting of GHG emissions and is regulating GHG emissions for new construction and major modifications to existing facilities.

Increased public concern surrounding the emission of GHGs may result in more international, national, or regional requirements to reduce or mitigate the effects of GHG emissions. While carbon reduction legislation will support the business case for implementing carbon capture technology, we cannot predict the manner or extent to which such legislation may affect our customers and partners and ultimately help or harm our business.

Our business could be affected in the future by additional international, national, and regional regulation, pricing of GHG emissions or other climate change legislation, regulation, or agreements. It is difficult at this time to estimate the likelihood of passage, or predict the potential impact, of any additional legislation, regulations or agreements. Potential consequences of new obligations could include increased technology, transportation, material, and administrative costs and may require us to make additional investments in our operations. As we continue distributing our technology to our target markets, international, national, or regional government entities may seek to impose regulations or competitors may seek to influence regulations through lobbying efforts.

Fuel Ethanol Regulation

There are various governmental programs and policies across the world that affect the supply and demand for ethanol and to which a significant percentage of our customers and partners are sensitive. For instance, in the United States, the federal government mandates the use of a certain amount of renewable fuels under the Renewable Fuel Standard II, or RFS II, and the Environmental Protection Agency has the authority to take measures with respect to RFS II that can have the effect of increasing or decreasing the overall volume of ethanol in the U.S. Currently, LanzaTech-derived ethanol from industrial emissions does not qualify as a Renewable Identification Number generating fuel under the US RFS II program. Furthermore, the recent United States-Mexico-Canada Agreement maintains the duty-free access of U.S. agricultural commodities, including ethanol, into Canada and Mexico and may have the effect of increasing the trading volume of ethanol throughout North America more broadly. Comparable international, U.S. federal and state regulatory and trading policies will affect the supply of ethanol for potential customers and partners within our target markets.

Chemical Regulation

There are important regulatory issues related to approval of chemicals from new pathways and approvals for import and use of genetically modified microorganisms ("GMM"). While specific requirements differ by jurisdiction, there are common elements across countries and regions such as chemical safety in production and end-use; required testing and data; process characterization; and following proper notification procedures. While chemically identical to existing and regulated chemicals, governments often require similar approval processes for new production routes such as those prescribed by the US Toxic Substances Control Act and the EU Registration, Evaluation, Authorisation and Restriction of Chemicals program. Further, the import and use of GMM such as biocatalysts in chemical production is governed by many of these same, as well as additional, laws and regulations. So far, we have received approximately 20 approvals or exemptions for use of our biocatalysts in the USA, China, India, Canada, Austria, Belgium, and Japan. As each jurisdiction has their own unique requirements for approval, our overall strategy for approval has included the use of external experts and consultants to accelerate our approval processes.

Chemicals from new pathways is still an emerging area in legislation, where regulations are evolving to align with global best practices.

Our People & Culture

LanzaTech is a woman-led company. The core of who we are is based on a strong foundation of values. All team members are trained on how these fit into our day-to-day operations with our teammates and customers.

As of February 28, 2023, we had over 390 full-time equivalent employees working for LanzaTech in the United States, China, India, the United Kingdom, the European Union and New Zealand. None of our employees has engaged in any labor strikes. We have no collective bargaining agreements with our employees. We consider our relationship with our employees to be positive and have not experienced any major labor disputes.

Facilities

LanzaTech's global headquarters and R&D center are co-located at the Illinois Science + Technology Park research campus in Skokie, Illinois. The facility houses LanzaTech's state-of-the-art laboratories dedicated to synthetic biology, product synthesis, and analytics. In addition to its R&D center, the LanzaTech Freedom Pines Biorefinery located in Soperton, Georgia is used for scaling up and production. The site includes multiple >100 L gas fermentation systems emulating commercial designs and supporting laboratory facilities and is also the site of LanzaTech's scale up of the ATJ process.

Risk Factors

An investment in our equity securities involves a high degree of risk. Before you make a decision to buy our equity securities you should carefully consider the risks and uncertainties described below, together with all of the other information contained in this Current Report. If any of the events or developments described below were to occur, our business, prospects, operating results and financial condition could suffer materially, the trading price of our equity securities could decline and you could lose all or part of your investment. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

Risks Related to Our Business and Industry

Our business, results of operations and financial condition have been, and could continue to be, adversely affected by the COVID-19 pandemic.

The ongoing COVID-19 pandemic has impacted our business and we expect it to continue to do so. Governments and businesses have taken, and may continue to take, unprecedented measures in response to the COVID-19 pandemic. Such measures have included restrictions on travel and business operations, temporary closures of businesses, and quarantines and shelter-in-place orders. The COVID-19 pandemic has caused significant volatility and disruption in global financial markets.

The COVID-19 pandemic and the measures taken by many countries in response have had an adverse impact on, and could continue to adversely impact, our business, results of operations and financial condition. These actions include:

- disruption in demand for the products produced using our process technologies, which has resulted and may continue to result in a decline in the prices we and our industry partners have been able to charge for the sale of such products;
- effects on our industry partners' and potential industry partners' ability or willingness to invest in new technologies or to work with us;
- a slow-down in the construction of manufacturing facilities for our technology platform;
- delays in the delivery of the products produced using our process technologies;

- a reduction in government grants and related funding for research and development;
- limitations on our ability to operate our business as a result of federal, state or local regulations imposed as a result of COVID-19; and
- limitations on our industry partners' ability to conduct partnering activities in a timely manner.

We believe the aforementioned factors impact our revenues directly in instances where we participate in projects with industry partners under our co-development model, and indirectly in instances where we are party to licensing agreements with industry partners and collect lower royalty fees.

The full extent of the impact of the COVID-19 pandemic on our operational and current and future financial performance is currently uncertain and will depend on many factors outside our control, including, without limitation, the timing, extent, trajectory and duration of the pandemic, the availability of effective treatments and vaccines, the emergence, severity and spread of potential variants of the virus that causes COVID-19, the imposition of and compliance with protective public safety measures, and the impact of the pandemic on the global economy and on the demand for the products produced using our process technologies and our ability to maintain current and foster new relationships with our industry partners. We are continuing to monitor the situation and take appropriate actions in accordance with the recommendations and requirements of relevant authorities.

We have incurred losses and anticipate continuing to incur losses.

We have not achieved operating profitability in any quarter since our formation. Our net losses after tax were approximately $76.4 million for the twelve months ended December 31, 2022, and $46.7 million for the twelve months ended December 31, 2021. As of December 31, 2022, we had an accumulated deficit of $379.9 million. We anticipate that we will continue to incur losses until we can sufficiently commercialize our process technologies. We cannot guarantee when we will operate profitably, if ever. The profitability of products produced using our process technologies depends largely on manufacturing costs and the market prices of the products produced using our process technologies. In the case of the partners with which we have entered licensing agreements, the prices they are able to charge impact the royalty fees we derive from their revenues. We must sustain the relationships we have developed with our current partners and successfully establish relationships with new partners to which we can license our proprietary technologies or with whom we can co-develop plants, and we must continue to find ways to further enhance our technology platform and product portfolio. If we are unable to successfully take these steps, we may never operate profitably, and, even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future.

The success of our plant operations is significantly dependent upon the strong execution and operation of each project by the respective industry partner as we rely, and expect to continue to rely, heavily on industry partners to effect our growth strategy and to execute our business plan. Our failure to successfully maintain and manage these relationships and enter into new relationships could delay our anticipated timelines, prevent the successful development and commercialization of products produced using our process technologies, negatively impact our financial results and prevent us from achieving or sustaining profitability.

Our ability to successfully maintain and manage partnering arrangements and enter into new partnering arrangements are critical factors to the success of our business and growth. We rely, and expect to continue to rely, heavily on such arrangements. We have limited or no control over the amount or timing of resources that any third party commits to negotiating a partnering arrangement with us or, if negotiated and entered into, the timing or amount of resources that a third party will commit to our projects. Any third party with which we are in negotiations may experience a change of policy or priorities and may discontinue negotiations with us. Any of our industry partners may fail to perform their obligations as expected. These industry partners may breach or terminate their agreements with us or otherwise fail to conduct their partnering activities successfully and in a timely manner. Further, our industry partners may not develop commercially viable products in connection with our partnering arrangements or devote sufficient resources to the development, manufacture, marketing and sale of products produced using our process technologies. Moreover, disagreements with an industry partner could develop, and any such conflict could reduce our ability to enter into future partnering agreements and negatively impact our relationships with one or more existing industry partners. Any of these events could delay our anticipated timelines,

prevent the successful development and commercialization of products produced using our process technologies, negatively impact our financial results, and prevent us from ever achieving or sustaining profitability. These negative consequences could be augmented in the event that we are forced to seek replacement partners.

Our current and future partnering opportunities could be harmed if:

- we do not achieve our objectives under our arrangements in a timely manner, or at all;
- we disagree with our industry partners as to rights to intellectual property we jointly develop or that they must license from us, or as to their research programs or commercialization activities;
- we are unable to successfully manage multiple partnering arrangements occurring at the same time;
- applicable laws, regulations or state actors, domestic or foreign, impede our ability to enter into strategic arrangements;
- we develop processes or enter into additional partnering arrangements that conflict with the business objectives of our other arrangements;
- our industry partners become competitors of ours or enter into agreements with our competitors; or
- consolidation in our target markets limits the number of potential industry partners.

Additionally, because we have entered into exclusive arrangements with industry partners, other potential partners in our industry may choose to compete against us, rather than partner with us. This may limit our partnering opportunities and harm our business and prospects. Our business also could be negatively impacted if any of our industry partners undergoes a change of control or assigns the rights or obligations under any of our agreements. If any of our industry partners were to assign these agreements to our competitors or to a third party who is not willing to work with us on the same terms or commit the same resources as the current industry partner, our business and prospects could be adversely affected.

Even if we are successful in entering into strategic partnering arrangements, there are a number of different arrangements that we can pursue, and there are no assurances that we will select and negotiate the best arrangements for us and our stockholders.

We seek to commercialize our process technologies by pursuing licensing arrangements in some markets and seek arrangements to co-develop projects in others. Our business strategy is based on a wide variety of factors, including the size and competitive environment in each market, and our perceived ability to best monetize our proprietary technology. The types of arrangements we enter into with our industry partners will be significant in determining the amount of risk and control that we maintain with respect to the development and commercialization of products produced using our process technologies. The contractual arrangements with our industry partners will also determine the amount of capital we need to contribute to a particular project, as well as the revenue we may receive and the margins associated with any sale of products produced using our process technologies. We will need to analyze these issues properly and negotiate corresponding arrangements with our industry partners to efficiently balance the amount of risk we take, the level of control we maintain and the amount of revenues and margins we obtain with respect to the products produced using our process technologies. There are no assurances that we will select and negotiate the best arrangements for us and our stockholders. Failure to choose optimal arrangements could result in delays or failures in the commercial development of certain products produced using our process technologies, sub-optimal economic returns and capital commitments that negatively impact our business, and our ability to successfully pursue multiple opportunities in parallel.

We have entered into and anticipate entering into non-binding letters of intent, side letters, memoranda of understanding, term sheets and other arrangements with potential industry partners and cannot assure you that such arrangements will lead to definitive agreements. If we are unable to complete these arrangements in a timely manner and on terms favorable to us, our business will be adversely affected.

We have engaged in negotiations with a number of companies and have agreed to preliminary terms regarding the development and commercialization of certain products produced using our process technologies. We may be unable to negotiate final terms in a timely manner, or at all, and there is no guarantee that the terms of any final, definitive, binding agreement will be the same or similar to those currently contemplated in a preliminary agreement. Final terms may be less favorable to us than those set forth in the preliminary agreements. Delays in negotiating final, definitive, binding agreements could slow the development and commercialization of products produced using our process technologies. Failure to agree to final terms for the development and commercialization of such products could prevent us from growing our business, result in wasted resources and cause us to consume capital significantly faster than we currently anticipate.

We continue to face significant risks associated with our international expansion strategy.

We are continuing to seek new opportunities to produce and commercialize products using our process technologies outside the United States through entering into licensing and co-development arrangements with new and existing industry partners. Our international business operations are subject to a variety of risks, including:

- challenges associated with operating in diverse cultural and legal environments, including legal restrictions that impact our ability to enter into strategic partnering arrangements;
- the need to comply with a variety of U.S. laws applicable to the conduct of overseas operations, including export control laws and the Foreign Corrupt Practices Act and local law requirements;
- our ability, or reduced ability, to protect our intellectual property in certain countries;
- potential for longer sales cycles in certain countries;
- changes in or interpretations of foreign rules and regulations that may adversely affect our or our industry partners' ability to produce or sell products manufactured using our process technologies or repatriate profits to the United States;
- economic, political or social instability in foreign countries;
- changes in demand for products produced using our process technologies in international markets;
- the imposition of tariffs and other foreign taxes;
- the imposition of limitations on, or increase of, withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- limitations on the production or movement of genetically engineered products or processes and the production or sale of products or processes manufactured using genetically engineered products, into, out of and within foreign countries; and
- the availability of government subsidies or other incentives that benefit competitors in their local markets that are not available to us.

Our inability to overcome these obstacles could harm our business, financial condition and operating results. Even if we are successful in managing these obstacles, our industry partners internationally are subject to these same risks and may not be able to manage these obstacles effectively.

Construction of our or our partners' plants may not be completed in the expected timeframe or in a cost-effective manner. Any delays in the construction of plants could severely impact our business, financial condition, results of operations and prospects.

Our projected financial performance and results of operations depend on our ability and our partners' abilities to construct several commercial scale plants. With respect to these future plants, we and our partners also do not have agreements with engineering, procurement or construction firms. Consequently, we cannot predict on what terms such firms may agree to design and construct future plants.

If we and our partners are unable to construct these plants within the planned timeframes, in a cost-effective manner or at all due to a variety of factors, including, but not limited to, a failure to acquire or lease land on which to build plants, a stoppage of construction as a result of the COVID-19 pandemic, the imposition or heightening of sanctions or other economic or military measures in relation to the current Russia-Ukraine conflict, unexpected construction problems, permitting and other regulatory issues, severe weather, labor disputes, and issues with subcontractors or vendors, including payment disputes, our business, financial condition, results of operations and prospects could be severely impacted.

The construction and commission of any new project is dependent on a number of contingencies some of which are beyond our and our partners' control. There is a risk that significant unanticipated costs or delays could arise due to, among other things, errors or omissions, unanticipated or concealed project site conditions, including subsurface conditions and changes to such conditions, unforeseen technical issues or increases in plant and equipment costs, insufficiency of water supply and other utility infrastructure, or inadequate contractual arrangements. Should these or other significant unanticipated costs arise, this could have a material adverse impact on our business, financial condition, results of operations and prospects. No assurance can be given that construction will be completed on time or at all, or as to whether we and our partners will have sufficient funds available to complete construction.

Failure to continuously reduce operating and capital costs for our and our partners' facilities that deploy our process technologies may impact adoption of our process technologies and could severely impact our business, financial condition, results of operations and prospects.

As of the date of this current report, 12 commercial facilities are either in engineering or under construction utilizing our technology. We anticipate the deployment of numerous commercial facilities to accelerate the commercialization of our process. If we are unable to adequately reduce and control the operating and capital costs of our and our partners' facilities that deploy our process technologies, we will be unable to realize manufacturing volume and cost targets. We and our partners may have to significantly reduce our spending, delay or cancel our planned activities or substantially change our current business model. This could reduce the market adoption of our process technologies and products, damage our reputation with current or prospective industry partners and investors, and harm our business, financial condition, results of operations and prospects.

Maintenance, expansion and refurbishment of our and our partners' facilities, the construction of new facilities and the development and implementation of our new process technologies or new aspects of our existing process technologies involve significant risks.

Our facilities and our partners' facilities may require regular or periodic maintenance, upgrading, expansion, refurbishment or improvement. Any unexpected operational or mechanical failure, including failure associated with breakdowns and forced outages, could reduce the facilities' production capacity below expected levels, which would reduce our and our partners' production capabilities and ultimately our revenues. Unanticipated capital expenditures associated with maintaining, upgrading, expanding, repairing, refurbishing, or improving facilities may also reduce our profitability. Our facilities and our partners' facilities may also be subject to unanticipated damage as a result of natural disasters, terrorist attacks or other events.

If we or our partners make any major modifications to facilities, such modifications likely would result in substantial additional capital expenditures and could prolong the time necessary to bring the facility online. We or our partners may also choose to refurbish or upgrade facilities based on our assessment that such activity will provide adequate financial returns. However, such activities require time for development and capital expenditures before commencement of commercial operations, and key assumptions underpinning a decision to make such an

investment may prove incorrect, including assumptions regarding construction costs and timing, which could harm our business, financial condition, results of operations and cash flows.

The construction of new manufacturing facilities entails a number of risks and assumptions, including the ability to begin production within the cost and timeframe estimated and to attract a sufficient number of skilled workers to meet the needs of the new facility. Additionally, our and our partners' assessment of the projected benefits associated with the construction of new manufacturing facilities is subject to a number of estimates and assumptions, which in turn are subject to significant economic, competitive and other uncertainties that are beyond our control. If we or our partners experience delays or increased costs, our estimates and assumptions are incorrect, or other unforeseen events occur, our business, ability to supply our industry partners, financial condition, results of operations and cash flows could be adversely impacted.

Finally, we may not be successful or efficient in developing or implementing new processes technologies or new aspects of our existing process technologies. Innovation in production processes involves significant expense and carries inherent risks, including difficulties in designing and developing new process technologies, development and production timing delays, lower than anticipated manufacturing yields, and product defects. Disruptions in the production process can also result from errors, defects in materials, delays in obtaining or revising operating permits and licenses, returns of product from our industry partners, interruption in our supply of materials or resources, and disruptions at our or our partners' facilities due to accidents, maintenance issues, or unsafe working conditions, all of which could affect the timing of production ramps and yields. Production issues can lead to increased costs and may affect our and our partners' ability to meet product demand, which could adversely impact our business and results from operations.

Our commercial success may be influenced by the price of fossil feedstocks relative to the price of our waste-based feedstocks.

Our commercial success may be influenced by the cost of our and our partners' products produced using our process technologies relative to fossil feedstock-based products. The cost of fossil feedstock-based products is in part based on the price of fossil feedstocks, which are subject to historically fluctuating prices. If the price of waste-based feedstocks increases and/or the price of fossil feedstocks decreases, products produced using our process technologies may be less competitive relative to fossil feedstock-based products. A material decrease in the cost of conventional fossil feedstock-based products may require a reduction in the prices of products produced using our process technologies for them to remain attractive in the marketplace and may negatively impact our revenues.

Fluctuations in the prices of waste-based feedstocks used to manufacture the products produced using our process technologies may affect our or our industry partners' cost structure, gross margin and ability to compete.

The cost to produce the products we commercialize with our industry partners is highly dependent on the cost and usage of various waste-based feedstocks. The prices of many of these feedstocks are cyclical and volatile. An increase in the price of the waste-based feedstocks used to manufacture the products produced using our process technologies would likely change our or our industry partners' cost structure and impact our gross margin. At certain levels, waste-based feedstock prices may make the products produced using our process technologies uneconomical to manufacture.

Although there may be indices that show the pricing of the feedstock used for production that closely track to products produced using our process technologies, there are no assurances that these indices will be valid or, if valid, that current prices will not later change. In addition, we may underestimate the volume of feedstock required to operate at commercial scale. For example, although the feedstock usage quantities are based on predictable chemical reactions, the actual consumption required to produce SAF on a commercial scale may be greater, affecting production cost and impacting production volumes. We cannot control the cost of these feedstocks, and we could underestimate feedstock pricing and volume requirements. These uncertainties could affect our costs, or the costs of our industry partners, and our gross margin. Although we believe that our process technologies can operate on multiple feedstocks in the event that prices of specific feedstocks fluctuate, we have not tested this on a commercial scale and cannot guarantee that feedstocks are interchangeable without requiring significant alterations to our process technologies.

Declines in the prices of feedstocks our competitors use to produce their products could allow them to reduce the prices of their products, which could cause us or our industry partners to reduce the prices of the products produced using our process technologies. This could make it uneconomical for our partners to produce products using our process technologies.

The cost to produce the products our competitors and our industry partners' competitors are commercializing and attempting to commercialize is highly dependent on the cost and usage of various feedstocks. The cost to produce ethanol by our competitors is highly dependent on the prices of corn, sorghum, barley, sugar cane and sugar beets. The prices of many of these feedstocks are cyclical and volatile. Declines in the prices of the feedstocks our competitors use to produce their products could allow our competitors to reduce the prices of their products. This in turn could cause our industry partners to have to reduce the prices of any competing products that are commercialized using our process technologies, or make it uneconomical for our partners to produce products using our process technologies, which would reduce the revenues we generate in connection with our partners' sale of such products. Even the perception of future declines in the feedstocks our competitors utilize may adversely affect the prices our industry partners can obtain from our industry partners or prevent potential industry partners from entering into agreements to buy products produced using our process technologies.

If the availability of the waste-based feedstocks used in our process technologies declines or competition for them increases, we or our business partners may experience delayed or reduced production or be required to raise the prices of the products produced using our process technologies, either of which could reduce the demand for the products produced using our process technologies and our revenue.

The production of products using our process technologies will require large volumes of waste-based feedstocks. We cannot predict the future availability of any waste-based feedstock necessary to produce products using our process technologies. The supply of waste-based feedstocks might be impacted by a wide range of factors, including increased competition, weather conditions, natural disasters, droughts, floods, changes in the waste-producing industries, the imposition or heightening of sanctions or other economic or military measures in relation to the current Russia-Ukraine conflict, or government policies and subsidies. Declines in the availability of the waste-based feedstocks used to produce products using our process technologies could cause delays or reductions in production, increases in the prices of products produced using our process technologies, and reductions in demand for products produced using our process technologies, resulting in reduced revenue for us.

We compete in an industry characterized by rapidly advancing technologies, intense competition and a complex intellectual property landscape, and our failure to successfully compete with other companies in our industry may have a material adverse effect on our business, financial condition and results of operations and market share.

While we do not believe we have any direct competitors, there can be no assurance that we will not have direct competition in the future, that such competitors will not substantially increase the resources devoted to the development and marketing of their products and services that compete with us, or that new or existing competitors will not enter the market in which we are active.

We face substantial indirect competition from many different sources, including companies that enjoy competitive advantages over us, such as greater financial, research and development, manufacturing, personnel and marketing resources, greater brand recognition, stronger historical relationships with their customers and more experience and expertise in intellectual property rights and operating within certain international locations.

These competitors may introduce competing products without our prior knowledge and without our ability to take preemptive measures in anticipation of their commercial launch. Competition may increase further as a result of greater availability of capital for investment and increased interest in our industry as more companies seek to facilitate the development of a circular carbon economy. Our competitors may succeed in developing, acquiring or licensing on an exclusive or non-exclusive basis technologies that are more effective or less costly than those we have developed. Our failure to successfully compete may have a material adverse effect on our business, financial condition and results of operations and diminish our market share.

Technological innovation by others could render our technology and the products produced using our process technologies obsolete or uneconomical.

The fuel and chemical industries are characterized by rapid and significant technological change. Our success will depend on our ability to maintain a competitive position with respect to technological advances. Our technology and the products derived from our technology may be rendered obsolete or uneconomical by technological advances by others, more efficient and cost-effective products, or entirely different approaches developed by one or more of our competitors or other third parties. Though we plan to continue to expend significant resources to enhance our technology platform and processes, there are no assurances we will be able to keep pace with technological change.

Our financial results could vary significantly from quarter to quarter and are difficult to predict.

Our financial results could vary significantly from quarter to quarter because of a variety of factors, many of which are outside of our control and are difficult to predict. As a result, comparing our results of operations on a period-to-period basis may not be meaningful. In addition to the risk factors stated herein, other factors that could cause our quarterly results of operations to fluctuate include:

- achievement of, or failure to achieve, technology or product development milestones needed to allow us to enter identified markets on a timely and cost-effective basis;
- delays or greater than anticipated expenses associated with the scale-up and the commercialization of process technologies to produce new products;
- changes in the amount that we invest to develop, acquire or license new technologies and processes;
- our ability to successfully enter into partnering arrangements, and the terms of those relationships (including levels of related capital contributions);
- fluctuations in the prices or availability of the feedstocks required to produce products using our process technologies or those of our competitors;
- changes in the size and complexity of our organization, including our expanded operations as a public company;
- changes in general economic, industry and market conditions, both domestically and in our foreign markets;
- business interruptions, including disruptions in the production process at any facility where products produced using our process technologies are manufactured;
- departure of executives or other key management employees;
- changes in the needs for the products produced using our process technologies;
- the development of new competitive technologies or products by others and competitive pricing pressures;
- the timing, size and mix of sales to our industry partners for products produced using our process technologies;
- seasonal production and the sale of products produced using our process technologies; and
- changes in governmental, accounting and tax rules and regulations, environmental, health and safety requirements, and other rules and regulations.

Due to these and other factors, our financial results for any quarterly or annual period may not meet our expectations or the expectations of our investors and may not be meaningful indications of our future performance.

Our financial projections may differ materially from actual results.

Our financial projections are based on our estimates and assumptions concerning various factors which are subject to significant risks and uncertainties, many of which are beyond our control, and therefore actual results may differ materially. These estimates and assumptions include, among others: estimates of the total addressable market for products produced using our process technologies; assumptions regarding industry partner demand and performance under existing agreements and industry partner agreements currently under negotiation; estimates of the rate at which project starts can be achieved; assumptions regarding our ability to identify and convert new customers; estimates of our ability to retain and add capacity with existing customers; assumptions regarding our ability to negotiate and structure product offtake; estimates of the rate and timelines at which certain project development milestones can be achieved; assumptions regarding our ability to scale production to meet current and future demand; and assumptions regarding research, product development, product timelines, operational execution and demand. These estimates and assumptions are subject to various factors beyond our control, including, for example, changes in industry partner demand, changes in the supply of feedstock, increased construction costs for our plants, changes in the regulatory environment, the impact of global health crises (including the COVID-19 pandemic), the imposition or heightening of sanctions or other economic or military measures in relation to the current Russia-Ukraine conflict, and changes in our executive team. Notably, our financial projections reflect assumptions regarding contracts that are currently under negotiation with, as well as indications of interest from, potential industry partners who may withdraw at any time. Accordingly, our future financial condition and results of operations may differ materially from our projections and expectations. Our failure to achieve our projected results could harm the trading price of our securities and our financial position.

We may require substantial additional financing to fund our operations and complete the development and commercialization of the process technologies that produce each of our products or new aspects of our existing process technologies that produce each of our products, and we may not be able to do so on favorable terms.

Our operations have consumed substantial amounts of cash since inception, and we expect to substantially increase our spending, in particular, as we:

- enter into and engage in strategic partnering arrangements to produce products cost-effectively at acceptable quality levels and price points, including making capital contributions for the construction of certain plants;
- invest in developments with respect to our existing process technologies in order to increase their effectiveness or reduce related capital expenditures;
- expand our research and development efforts;
- grow our business organization;
- pursue select co-development opportunities;
- seek to identify additional market opportunities for the products produced using our process technologies; and
- pursue partnering arrangements.

We believe our existing cash and cash equivalents will be sufficient to fund our operations for at least 12 months from the date of this current report. However, changing circumstances may cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. Moreover, we and our industry partners may experience delays in the production of commercial quantities of products, in a manner that is cost-effective and at suitable quality levels, which would postpone our ability to generate revenue associated with the sale of such products. Securing additional financing could require a substantial amount of time and attention from our management and may divert a disproportionate amount of its attention away from our business activities, which may adversely affect our ability to conduct our day-to-day operations. In addition, we cannot guarantee that future financing will be available in sufficient amounts or

on terms acceptable to us, if at all. If we are unable to raise additional capital when required or on acceptable terms, we may be required to:

- delay or suspend some or all of our commercialization efforts;
- decrease or abandon some or all of our research and development efforts;
- decrease the financial resources dedicated to our partnering efforts, which may substantially postpone the development, manufacture, marketing or sale of existing and future products produced using our process technologies; and
- suspend the growth of our organization.

To raise additional funds to support our business operations, we may sell additional equity, or convertible debt securities, which would result in the issuance of additional shares of our capital stock and dilution to our stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we will be prevented from pursuing discovery, development and commercialization efforts and our ability to generate revenues and achieve or sustain profitability will be substantially harmed.

If we are unable to manage our growth and expand our operations successfully, our reputation and brand may be damaged and our business and results of operations may be harmed.

Over the past several years, we have experienced significant expansion of our business. We expect this growth to continue and accelerate in the future in connection with our commercialization efforts, expanded research and development activities, and as we transition to operating as a public company. Our ability to effectively manage our anticipated growth and expansion of our operations will require us to do, among other things, the following:

- enhance our operational, financial and management controls and infrastructure, human resource policies, and reporting systems and procedures;
- effectively scale our operations;
- successfully identify, recruit, hire, train, maintain, motivate and integrate additional employees;
- expand our facilities and equipment; and
- effectively manage and maintain our corporate culture.

These enhancements and improvements will require significant capital expenditures and allocation of valuable management and employee resources, and our growth will continue to place a strain on our operational, financial and management infrastructure. Our future financial performance and our ability to execute on our business plan will depend, in part, on our ability to effectively manage any future growth and expansion. There are no guarantees we will be able to do so in an efficient or timely manner, or at all. Our failure to effectively manage growth and expansion could have a material adverse effect on our business, results of operations, financial condition, prospects and reputation.

If we lose key personnel or are unable to attract, integrate and retain additional key personnel, it could harm our research and development efforts, delay the commercialization of the new process technologies or the new aspects of our existing process technologies, delay the launch of process technologies in our development pipeline and impair our ability to meet our business objectives.

Our business involves complex operations spanning a variety of disciplines and demanding a management team and employee workforce that is knowledgeable in the many areas necessary for our operations. The loss of any key member of our management team or key research and development or operational employees, or the failure to attract

and retain such employees, could prevent us from developing and commercializing new process technologies or the new aspects of our existing process technologies, delay the launch of process technologies in our development pipeline and impair our ability to meet our business objectives.

We may not be able to attract or retain qualified employees due to the intense competition for qualified personnel among technology-based businesses, or due to the scarcity of personnel with the qualifications or experience necessary for our business. Hiring, training and successfully integrating qualified personnel into our operations can be a lengthy and expensive process, and efforts to integrate such personnel may not be successful. The market for qualified personnel is very competitive because of the limited number of people available with the necessary technical skills and understanding of our technology, and given the number of companies in this industry seeking this type of personnel. If we are not able to attract, integrate and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to support our internal research and development programs. In particular, our production process development, process engineering, research and development, and plant operations programs are dependent on our ability to attract, integrate and retain highly skilled scientific, technical and operational personnel. Competition for such personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms, or at all. As we continue to expand our international operations, these personnel-related risks will increase and we will face additional geography-specific challenges, such as challenges hiring, training, and relocating employees to specific regions or countries and differing tax and regulatory regimes.

Even if we successfully develop process technologies that produce products meeting our industry partners' specifications, the adoption of such process technologies by our industry partners may be delayed or reduced, or our costs may increase, due to customer qualification, negative life cycle assessment or capital investment procedures.

Even if the products produced using our process technologies are produced at contractual or targeted specifications, as the case may be, we or our industry partners may face delays or reduced demand for such products related to current or future customer qualification trials that could take several months, complicated life cycle assessments, or capital investment procedures. For the products produced using our process technologies to be accepted, our industry partners may need to test and certify them for use in their processes and, in some cases, determine whether products that contain the products produced using our process technologies satisfy additional third-party specifications. We may need to demonstrate to our industry partners that the products produced using our process technologies do not contain impurities that cause such products to behave differently than their traditional equivalents in a way that impacts their end-product quality. Our industry partners, in turn, may need to validate the use of the products produced using our process technologies for third parties. Our products may require lengthy and complex life cycle assessments to evaluate the potential environmental impacts of the products through their entire life cycles, covering all relevant inputs from, and emissions into, the environment. Our industry partners' customers may need to engage in capital investment procedures to assess their abilities to invest in our products, which may result in those customers determining not to allocate their resources to purchasing our products. Meeting these suitability standards could be a time-consuming and expensive process, and our industry partners may invest substantial time and resources into such qualification efforts without ultimately securing approval by their customers. This could materially and adversely impact our revenues until customer qualification, positive life cycle assessment or capital investment procedures are achieved and maintained.

Failure of LanzaJet to complete its initial facility or failure of third parties to adopt the LanzaJet process in their commercial facilities for the production of SAF could result in us never owning a majority stake in LanzaJet and may severely impact our business, financial condition, results of operations and prospects.

Pursuant to the LanzaJet Investment Agreement, described in more detail in the section entitled "*Business — Key Collaboration Agreements — LanzaJet Agreements — LanzaJet Amended and Restated Investment Agreement*" of this current report, Mitsui, Suncor Energy Inc. ("Suncor"), British Airways PLC, a subsidiary of International Consolidated Airlines Group ("British Airways") and Shell Ventures LLC ("Shell") have committed to invest in LanzaJet a total of up to $120 million in second tranche investments upon the achievement of certain development milestones relating to an initial demonstration facility located at the LanzaTech Freedom Pines Biorefinery in Soperton, Georgia (the "Soperton facility"). Pursuant to the LanzaJet Investment Agreement, $45 million has

already been invested in setting up LanzaJet and in constructing the Soperton facility. Our partners have likewise agreed to determine the feasibility of developing additional potential facilities for the commercial scale production of alcohol-to-jet ("ATJ") fuel.

Although LanzaJet is currently working with the partners mentioned above to confirm project locations and solidify the appropriate project structures, and we are developing projects ourselves to construct and operate facilities that would use the LanzaJet process, there is no guarantee that these facilities will be completed or that third parties will adopt the LanzaJet process in their commercial facilities for the production of SAF. The failure of LanzaJet to complete its initial facility or of third parties to adopt the LanzaJet process in their commercial facilities could severely impact our business, financial condition, results of operations and prospects.

Furthermore, we currently have approximately a 25% voting interest in LanzaJet and are not currently able to make decisions on behalf of LanzaJet without support from other shareholders. We will remain a minority shareholder in LanzaJet unless we are issued shares pursuant to the LanzaJet Amended and Restated Investment Agreement upon the closing of at least two of the second tranche investments by any of Mitsui, Suncor, British Airways and Shell. The conditions for these second tranche investments include performance requirements at the Soperton facility, regulatory approvals, the negotiation of additional agreements and other conditions which are outside our control. These conditions have not been, and may never be, met. As such, we cannot guarantee when or whether we will become majority shareholders in, or exercise control over, LanzaJet at any time in the future.

LanzaJet has an exclusive license to some of our intellectual property related to SAF.

In connection with the LanzaJet Investment Agreement, we entered into an intellectual property and technology license agreement (the "LanzaJet License Agreement") with LanzaJet. Pursuant to the LanzaJet License Agreement, we granted to LanzaJet a perpetual, worldwide, non-transferrable, irrevocable, royalty-free, sublicensable, exclusive license to certain intellectual property related to the conversion of ethanol to fuel. This license is exclusive including as to us. With the exception of certain pre-existing SAF obligations and development projects for which we have already been granted sublicenses, we are unable to undertake new SAF production opportunities using the licensed intellectual property, or otherwise use such intellectual property for the conversion of ethanol to fuel, without the prior consent of LanzaJet while the LanzaJet License Agreement is in effect. We cannot guarantee that LanzaJet would grant such consent or otherwise agree to grant to us a license of intellectual property and our receipt thereof would depend on negotiations with our fellow shareholders of LanzaJet.

In connection with the LanzaJet Shareholder Loan described in more detail in the section of the Proxy Statement/Prospectus entitled "*Certain Relationships and Related Transactions, and Director Independence — Legacy LanzaTech Related Party Transactions — LanzaJet Shareholder Loan*" which is incorporated herein by reference, LanzaJet collaterally assigned its license from LanzaTech to secure the LanzaJet Freedom Pines Fuels LLC ("FPF") shareholder debt. In the event of a default by FPF, LanzaJet shareholders could prevent LanzaJet from funding FPF to cure its default and ultimately foreclose on LanzaJet's license.

Our and our industry partners' failure to accurately forecast demand for any product produced using our process technologies could result in an unexpected shortfall or surplus that could negatively affect our results of operations.

Because of the length of time it takes to develop and commercialize the products produced using our process technologies, we and our industry partners must make development and production decisions well in advance of commercial production and sale of such products. Our and our industry partners' ability to accurately forecast demand for any of the products produced using our process technologies that are commercialized can be adversely affected by a number of factors, many of which are outside of our control, including actions by our competitors, changes in market conditions, environmental factors and adverse weather conditions. A shortfall or surplus in the supply of products produced using our process technologies may reduce our revenues, damage our reputation and adversely affect industry partner relationships, which could harm our business, results of operations and financial condition.

Our success is highly dependent on our ability to maintain and efficiently utilize our technology platform, and to effectively identify potential products for which to develop and commercialize new process technologies, and problems related to our technology platform could harm our business and result in wasted research and development efforts.

We are highly dependent on our technology platform for the development and commercialization of products and new process technologies. If we experience challenges in our technology platform, such as problems with engineering new microbes, or if we encounter problems interpreting and analyzing data using our process technologies, our business and ability to compete may be harmed and our financial condition negatively affected.

We may not be successful in identifying new market opportunities and needs and developing our technology platform, or process technologies to produce products to meet those needs, which would limit our prospects and lead to greater dependency on the success of a smaller number of target products.

The success of our business model depends in part on our ability to identify new market opportunities and needs for our technology platform, or process technologies to produce products to meet those needs. The manufacturing technologies we research and develop are new and continuously changing and advancing. The products that are derived from these technologies may not be applicable or compatible with demands in existing or future markets. Furthermore, we may not be able to identify new opportunities as they arise for products since future applications of any given product may not be readily determinable, and we cannot reasonably estimate the size of any markets that may develop. If we are not able to successfully identify new market opportunities and needs and develop new technologies, processes or products to meet those needs beyond those we currently develop, we may be unable to expand our business and will therefore be highly dependent on the revenues related to the products that can currently be produced using our process technologies.

Our failure or the failure of our industry partners to realize expected economies of scale could limit our or our partners' ability to sell products produced using our process technologies at competitive prices, negatively impact our ability to enter into other strategic arrangements and the potential for other industry partners to adopt our process technologies, and materially and adversely affect our business and prospects.

We and our industry partners may be unable to realize expected economies of scale in connection with scale up and commercialization efforts. The failure to achieve these efficiencies or realize these expected benefits could negatively impact our or our industry partners' ability to sell products produced using our process technologies at competitive prices, negatively impact our ability to enter into other strategic arrangements and the potential for other industry partners to adopt our process technologies, and materially and adversely affect our business and prospects.

Our microbial protein products business, which allows for the extraction of spent microbes that contain protein and other valuable nutrients which can then be used in numerous applications, may not develop as currently expected.

Microbial protein is composed of spent microbes from LanzaTech commercial facilities. These microbes are comprised of proteins and other valuable nutrients and have performed the task of gas fermentation, have been extracted from the relevant commercial unit and are no longer viable. These materials can be isolated and used in numerous applications, including feed products for livestock and fish, fertilizers for agricultural applications, and protein extract-based products. While we believe many of these markets are large and diverse, with stakeholders actively seeking sustainable and nutritious inputs, we cannot be certain that these markets will materialize or that customers will purchase our protein products in sufficient quantities. With only one commercial customer that is currently selling residual microbial protein as a component in fish and livestock feed products, this business has a limited commercial history. Our protein products business may not develop to the extent currently expected, which may adversely affect our business and prospects.

Natural or man-made disasters, social, economic and political instability, and other similar events may significantly disrupt our and our industry partners' businesses, and negatively impact our results of operations and financial condition.

Our corporate headquarters are located in Skokie, Illinois and we work with industry partners in multiple other locations, including in China, Japan, India, Canada, Australia, Italy, Spain, UK, Netherlands and South Africa. These locations, in particular a number of our current and potential non-U.S. locations, may be subject to social, economic and political instability, such as social uprisings. Any of our or our industry partners' facilities may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes, tornadoes, hurricanes, wildfires, floods, tsunamis, nuclear disasters, acts of terrorism or other criminal activities, the imposition or heightening of sanctions or other economic or military measures in relation to the current Russia-Ukraine conflict, infectious disease outbreaks and power outages, which may render it difficult or impossible for us or our industry partners to operate our businesses for some period of time. Our and our industry partners' facilities would likely be costly to repair or replace, and any such efforts would likely require substantial time. Any disruptions in our or our industry partners' operations could negatively impact our business and results of operations, and harm our reputation. Our or our industry partners' disaster recovery plans may not be sufficient to address an actual disaster, in particular any events that negatively impact our or our industry partners' physical infrastructures. In addition, we and our industry partners may not carry sufficient business insurance to compensate for losses that may occur. Any such losses or damages could have a material adverse effect on our results of operations and financial condition, and success as an overall business.

Governmental programs designed to incentivize the production and consumption of low-carbon fuels and carbon capture and utilization, may be implemented in a way that does not include products produced using our novel technology platform and process technologies or could be repealed, curtailed or otherwise changed, which would have a material adverse effect on our business, results of operations and financial condition.

We and other participants in the biomass-based and low-carbon fuel industry rely on governmental programs requiring or incentivizing the production and consumption of fuels with lower carbon intensity than conventional fossil fuels and carbon capture and utilization. Biomass-based and low-carbon fuel has historically been more expensive to produce than petroleum-based fuel and these governmental programs support a market for biomass-based and low-carbon fuel that might not otherwise exist.

One of the most important of these programs is the Renewable Fuel Standard II ("RFS II"), a Federal law which requires that transportation fuels in the United States contain a minimum amount of renewable fuel. This program is administered by the Environmental Protection Agency ("EPA"). The EPA's authority includes setting annual minimum aggregate levels of consumption in four "nested" renewable fuel categories, including categories in which our fuel competes (including advanced biofuel, biomass-based diesel and cellulo biofuel). The parties obligated to comply with this renewable volume obligation ("RVO"), are petroleum refiners and petroleum fuel importers. The petroleum industry is strongly opposed to the RFS II program and can be expected to continue to press for changes both in the RFS II program itself and in the way that it is administered by the EPA. The EPA has not approved LanzaTech-derived ethanol from industrial emissions as a Renewable Identification Number ("RIN") generating fuel (i.e., a fuel that generates credits) under the RFS II program.

The United States Congress could repeal, curtail or otherwise change the RFS II program in a manner adverse to us, such as by excluding products produced using our novel technology platform and process technologies. Similarly, the EPA could curtail or otherwise change its administration of the RFS II program in a manner adverse to us, including by not increasing or even decreasing the RVO, by waiving compliance with the RVO or otherwise. Furthermore, judicial review of the EPA's actions, including any judicial decisions that the EPA failed to adequately evaluate the environmental impacts of RFS II, could create uncertainty in the administration of the RFS II program. In addition, while Congress specified RFS II volume requirements through 2022 (subject to adjustment in the rulemaking process), beginning in 2023 required volumes of renewable fuel will be largely at the discretion of the EPA (in coordination with the Secretary of Energy and Secretary of Agriculture), which must set the volumes after evaluating a set of particular statutory factors. We cannot predict what changes, if any, will be instituted or the impact of any changes on our business, although adverse changes could seriously harm our business, results of operations and financial condition.

The California Low Carbon Fuel Standard (“LCFS”), is another program that provides a strong incentive for production of renewable diesel and alternative jet fuel, and fuels produced through methods involving carbon capture and utilization. The LCFS could be repealed or amended in a manner that eliminates or reduces this incentive, or could be implemented in a way that excludes or negatively affects products produced using our novel technology platform, such as by assigning a lower carbon intensity to a fuel pathway produced using a competitor’s technology.

Additionally, while the efforts of other jurisdictions to mitigate climate change are expected to result in the adoption of similar programs as the RFS II program or LCFS, increasing stakeholder scrutiny of the greenhouse gas (“GHG”), reduction benefits attributable to low-carbon fuels production and consumption could dampen interest in the adoption of similar programs. While the products produced using our process technologies generally compare favorably with conventional low-carbon fuels, public sentiment against reliance upon low-carbon fuels or carbon capture and utilization as pathways to deep decarbonization could adversely affect our market opportunities.

Any decline in the value of carbon credits or other incentives associated with products produced using our process technologies could harm our results of operations, cash flow and financial condition.

The value of products produced using our process technologies may be dependent on the value of carbon credits, programs relating to low-carbon materials and products standards and other similar regulatory regimes or the implicit value of decarbonized materials. The value of these credits fluctuates based on market and regulatory forces outside of our control. There is a risk that the supply of low-carbon alternative materials and products outstrips demand, resulting in the value of carbon credits declining. Any such declines could mean that the economic benefits from our industry partners’ efforts to de-carbonize their operations might not be realized. Any decline in the value of carbon credits or other incentives associated with products produced using our process technologies could harm our results of operations, cash flow and financial condition. The value of carbon credits and other incentives may also be adversely effected by legislative, agency, or judicial determinations.

We expect to rely on a limited number of industry partners for a significant portion of our near-term revenue.

We currently have agreements with a limited number of industry partners, including Suncor, IndianOil Corporation Limited (“IndianOil”), Mitsui, Sekisui Chemical Co., Ltd. (“Sekisui”) and the Shougang Joint Venture, from which we expect to generate most of our revenues through the end of 2023. Entities in which the Shougang Joint Venture holds a controlling interest operate the three currently operating commercial scale facilities that produce low carbon ethanol using our process technology. In addition, a commercial scale facility is in advanced stages of construction by our partner ArcelorMittal. The facility is expected to begin commissioning in the coming months. The loss of one or more of our industry partners, a substantial reduction in the scope of their projects, their failure to exercise customer options, their unwillingness to extend contractual deadlines if we are unable to meet production requirements, their inability to perform under their contracts or a significant deterioration in their financial condition could harm our business, results of operations and financial condition. If we fail to perform under the terms of these agreements, the industry partners could seek to terminate these agreements or pursue damages against us, including liquidated damages in certain instances, which could harm our business.

We and our industry partners are subject to extensive international, national and subnational laws and regulations, and any changes in relevant laws or regulations, or failure to comply with these laws and regulations, could have a material adverse effect on our business and could substantially hinder our and our partners’ ability to manufacture and commercialize products produced using our process technologies.

We and our industry partners are subject to extensive international, national and subnational laws and regulations relating to the production of renewable fuels, the protection of the environment and in support of the ethanol industry at large. These laws, their regulatory requirements and their implementation and enforcement impact our existing and potential business operations by imposing restrictions on our and our industry partners’:

- existing and proposed business operations or the need to install enhanced or additional controls;
- need to obtain and comply with permits and authorizations;

- liability for exceeding applicable permit limits or legal requirements;
- specifications related to the ethanol and other products we or our industry partners market and produce using our process technologies;
- criteria for assessing the carbon intensity and GHG emissions attributable to fuels produced using our process technologies.

In the normal course of business, we and our industry partners may be involved in administrative or legal proceedings under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, the Resource Conservation and Recovery Act of 1976 ("RCRA") in the United States, and similar environmental laws across the globe relating to the designation of certain sites for investigation or remediation with respect to environmental risks, the disposal of hazardous waste, and reduction of the hazards associated with storage, handling and transportation of the products we and our industrial partners produce. Potential consequences of these proceedings can include the need to pay for remediation of contaminated sites, the costs of which can be significant and uncertain.

Likewise, in the normal course of business, we and our industry partners may need to obtain and comply with air emissions permits pursuant to the Clean Air Act of 1963 and water discharge permits pursuant to the Clean Water Act of 1972 in the United States, and similar environmental permits and authorizations across the globe relating to air and water emissions. Potential changes to regulatory, permit and authorization standards, requirements or processes may result in uncertainty and additional costs for us and our industry partners.

Furthermore, GHG emissions are subject to environmental laws and regulations in the various jurisdictions in which we and our industry partners have operations. Some of our and our industry partners' operations are within jurisdictions that have or are developing regulatory regimes governing emissions of GHGs, including carbon dioxide ("CO_2"). These include existing coverage under the European Union Emission Trading System, the California cap and trade scheme, India's Performance, Achieve and Trade scheme, South Africa's Trade Exposure and Greenhouse Gas Benchmark Regulations, the Tokyo Cap-and-Trade Program, China's Emission Trading Scheme, related subnational programs and any potential expansions of these policies or related policies. In addition, the EPA requires mandatory reporting of GHG emissions and is regulating GHG emissions for new construction and major modifications to existing facilities. The EPA and California also regulate the amount of GHGs that may be emitted by new motor vehicles, including passenger cars, and new commercial airplanes. These and related regulations could be implemented and developed in ways that reduce or eliminate reliance on carbon-based fuels in transportation, for example, by hastening the widespread adoption of electricity or hydrogen as a fuel source, in lieu of low-carbon fuels, for certain categories of transportation vehicles.

Increased public concern surrounding the emission of GHGs may result in more international, national or subnational requirements to reduce or mitigate the effects of GHG emissions. Although uncertain, these developments could increase the costs related to the application of our fermentation technology. Additionally, although governmental policies to reduce GHG emissions may continue to incentivize the production of low-carbon fuels and carbon capture, it is also possible that such policies could be altered in a way that may negatively impact our growth, increase our and our industry partners' operating costs, or reduce demand for our technology. We cannot predict the manner or extent to which such policy or legislation may affect our industry partners and ultimately harm or help our business or the carbon capture industry in general.

Our business could be affected in the future by additional international, national and subnational regulation, pricing of GHG emissions or other climate change legislation, regulation or agreements. It is difficult at this time to estimate the likelihood of passage, or predict the potential impact, of any additional legislation, regulations or agreements. Potential consequences of new obligations could include increased technology, transportation, material, and administrative costs and may require us to make additional investments in our operations. As we continue distributing our technology to our target markets, international, national or subnational government entities may seek to impose regulations or competitors may seek to influence regulations through lobbying efforts.

Any changes in laws or regulations or failure by us or our industry partners to comply with applicable regulatory laws and regulations could have a material adverse effect on our reputation as well as our business, results of

operations and financial condition and could substantially hinder our and our partners' ability to manufacture and commercialize products produced using our process technologies.

Our success may be dependent on popular, government and corporate sentiment regarding the production of carbon-based fuels and chemicals and the development and deployment of carbon capture and utilization technology.

At present, we believe that popular, government and corporate sentiment largely favors the production of carbon-based fuels and chemicals and the development and deployment of carbon capture and utilization technology, which has led to many national governments' enactment of policies and incentives that favor the production of the fuels and chemicals we manufacture and the processes we have developed to create them. However, there are a number of scientists, policy makers and other actors who believe carbon capture and utilization technologies will simply prolong the life of high-carbon sectors and impede the transition to renewable energy sources. Such individuals believe that using the carbon capture and utilization process to produce fuels, such as ethanol, simply defers the emission of CO_2 into the atmosphere and that anything that promotes the adoption of low-carbon fuels and advanced liquid fuels (other than hydrogen produced via electrolysis) will result in "locking in" a carbon economy from which the world should be moving away. These scientists, policy makers and other actors advocate for the adoption of regulations and incentives that would reduce or eliminate reliance on carbon-based fuels in favor of the adoption of electricity and hydrogen as fuel sources.

If scientists, policy makers and other actors are successful in convincing governments and corporations to enact policies that disfavor, or changes in government administrations result in shifts in policy that disincentivize, the production of carbon-based fuels and the development and deployment of carbon capture and utilization technology, it could negatively impact the demand for products produced using our process technologies and our ability to maintain and develop relationships with our strategic partners, which would harm our business, results of operations and financial condition. The viability of our business model also could be impacted if, over time, popular, government and corporate support gravitates significantly away from the use of carbon-based fuels toward the predominant use of electricity and hydrogen as fuel sources.

We and our industry partners use hazardous materials and must comply with applicable environmental, health and safety laws and regulations. Any claims relating to improper handling, storage or disposal of these materials or noncompliance with applicable laws and regulations could be time consuming and costly and could adversely affect our business and results of operations.

We and our industry partners use hazardous chemicals and biological materials and are subject to a variety of international, national and subnational laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials, including RCRA and the Occupational Safety and Health Act of 1970. Although we and our industry partners have implemented safety procedures for handling and disposing of these materials and waste products, we cannot be sure that our safety measures are compliant with legal requirements or adequate to eliminate the risk of accidental injury or contamination. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our insurance coverage. There can be no assurance that neither we nor any of our industry partners will not violate environmental, health and safety laws as a result of human error, accident, equipment failure or other causes.

Compliance with applicable environmental, health and safety laws and regulations is expensive and time consuming, and the failure to comply with past, present or future laws or regulations could result in the imposition of fines, third-party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production or a cessation of operations. Our liability in such an event may exceed our total assets. Liability under environmental laws can be joint and several and without regard to comparative fault. Environmental laws and regulations could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business. Accordingly, violations of present and future environmental laws or regulations by us or any of our industry partners could restrict our ability to develop and commercialize products using our process technologies, build out or expand facilities, or pursue certain technologies, and could require us and our industry partners to acquire equipment or incur potentially significant costs to comply with environmental regulations. In

addition, our hazardous materials and environmental laws and regulations-related risks may augment as we expand our international operations, including imposition of laws and regulations impacting our ability to transfer hazardous chemicals and biological materials between countries.

We may be subject to product liability claims, which could result in material expense, diversion of management time and attention and damage to our business, reputation and brand.

The products produced using our process technologies that we and our industry partners commercialize may contain undetected defects or impurities that are not discovered until after the products have been used by customers or incorporated into products for end-users. This could result in claims from customers or others, damage to our business and reputation and brand or significant costs to correct the defect or impurity. Therefore, the sale of products produced using our process technologies entails the risk of product liability claims. Any product liability claim brought against us, regardless of its merit, could result in material expense, diversion of management time and attention, damage to our business, reputation and brand and cause us to fail to retain existing industry partners or to fail to attract new industry partners.

Ethical, legal and social concerns about genetically engineered products and process technologies that use genetically engineered supplies could limit or prevent the use of products produced using our process technologies and could limit our revenues.

The use of genetically engineered products and process technologies that use genetically engineered supplies is subject to laws and regulations in many countries, including by the EPA under the Toxic Substances Control Act of 1976, some of which are new or still evolving. Public attitudes about the safety and environmental hazards of genetically engineered products and processes, and ethical concerns over genetic research, could influence public acceptance of our technology, processes and products produced using our process technologies that use genetically engineered supplies.

Our ability to develop and commercialize one or more of our technologies or process technologies could be limited by additional factors, including:

- public attitudes regarding, and potential changes to laws governing, ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage others from supporting, developing or commercializing products produced using our process technologies; and
- governmental reaction to negative publicity concerning genetically engineered organisms, which could result in greater government regulation of genetic research, greater government regulation of genetic-related feedstock sources, or other adverse governmental regulatory restrictions.

The subject of genetically engineered organisms has received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically engineered products. These trends could result in increased expenses, delays or other impediments to our programs or the public acceptance and commercialization of the products produced using our process technologies.

Our genetically engineered microbes may be subject to regulatory scrutiny and may face future development and regulatory difficulties. Additionally, failure to obtain import permits for all relevant microbes in jurisdictions with our industry partners could adversely affect our business and results of operations.

Some of our genetically engineered microbes may have significantly altered characteristics compared to those found in the wild and may be subject to regulatory scrutiny. As a result, we may be required to implement additional costly measures to obtain and maintain our regulatory permits, licenses, authorizations and approvals. To the extent such regulatory scrutiny or changes impact our ability to execute on existing or new programs for our industry partners, or make doing so more costly or difficult, our business, financial condition, or results of operations may be adversely affected.

Because the use of genetically engineered products and process technologies that use genetically engineered supplies is subject to laws and regulations in many countries, some of which are new or still evolving, regulatory

requirements, including those related to import permits, may continue to change in various jurisdictions. If such regulatory requirements prevent us from obtaining import permits for jurisdictions where we have industry partners, such changes may impact our ability to execute on existing or new programs for our industry partners, or make doing so more costly or difficult, which may adversely affect our business, financial condition, results of operations, market share and prospects.

Our government grants are subject to uncertainty, which could harm our business and results of operations.

We have sought and may continue to seek to obtain government grants in the future to offset a portion of the costs of our research and development, commercialization and other activities. We cannot be certain that we will be able to secure any such government grants in a timely fashion, or at all. Moreover, any of our existing grants or new grants that we may obtain may be terminated, modified or recovered by the granting governmental body. If such grant funding is discontinued, our revenue and cash received from grants will decrease. If we do not receive grants we are counting on, our liquidity will be impacted, which will impact our ability to grow or maintain our business.

We may also be subject to additional regulations and audits by government agencies as part of routine audits of our activities funded by our government grants. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. Funds available under grants must be applied by us toward the research and development programs specified by the granting agencies, rather than for all of our programs generally. If any of our costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed may have to be refunded. Accordingly, an audit could result in an adjustment to our revenues and results of operations.

The requirements of being a public company may strain our resources and divert management's attention, and the increases in legal, accounting and compliance expenses that will result from being a public company may be greater than we anticipate.

As a result of the Business Combination, we have become a public company, and as such, we have and will continue to incur significant legal, accounting and other expenses that we did not incur as a private company. We are subject to the reporting requirements of the Exchange Act, and we are also required to comply with the applicable requirements of the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as the rules and regulations subsequently implemented by the SEC and the listing standards of Nasdaq, including changes in corporate governance practices and the establishment and maintenance of effective disclosure and financial controls. Compliance with these rules and regulations can be burdensome. Our management and other personnel have recently devoted and will continue to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our historical legal and financial compliance costs and will make some activities more time-consuming and costly. For example, these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance than we obtained as a private company, and could also make it more difficult for us to attract and retain qualified members of the LanzaTech Board as compared to when we were a private company. In particular, we expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the requirements of Section 404 of the Sarbanes-Oxley Act. We are hiring additional accounting and financial staff, and engaging outside consultants, all with appropriate public company experience and technical accounting knowledge and maintaining an internal audit function, which will increase our operating expenses. Moreover, we could incur additional compensation costs in the event that we decide to pay cash compensation closer to that of other public companies, which would increase our general and administrative expenses and could materially and adversely affect our profitability.

Our management has limited experience in operating a public company.

Our executive officers and directors have limited experience in the management of a publicly traded company subject to significant regulatory oversight and reporting obligations under federal securities laws. Our management team may not successfully or effectively manage our transition to a public company following the Business Combination. Their limited experience in dealing with the increasingly complex laws pertaining to public companies could be a significant disadvantage in that it is likely that an increasing amount of their time may be devoted to these

activities, which will result in less time being devoted to our management and growth. We may not have adequate personnel with the appropriate level of knowledge, experience and training in the accounting policies, practices or internal controls over financial reporting required of public companies in the United States. It is possible that we will be required to expand our employee base and hire additional employees to support our operations as a public company, which will increase our operating costs in future periods.

If we experience a significant disruption in our information technology systems, including security breaches, or if we fail to implement new systems and software successfully, our business operations and financial condition could be adversely affected.

We depend on information technology systems to, among other functions, control our manufacturing processes, process orders and invoices, collect and make payments, interact with industry partners and suppliers, manage inventory and otherwise conduct our business. We also depend on these systems to respond to inquiries, contribute to our overall internal control processes, maintain records of our property, plant and equipment and record and pay amounts due to vendors and other creditors. The failure of our information technology systems to perform as we anticipate could disrupt our business and could result in transaction errors, processing inefficiencies and the loss of sales and industry partners. As we implement planned upgrades or changes to systems, we may also experience interruptions in service, loss of data or reduced functionality and other unforeseen material issues which could adversely impact our ability to provide quotes, take orders and otherwise run our business in a timely manner. In addition, if our new systems fail to provide accurate and increased visibility into pricing and cost structures, it may be difficult to improve or maximize our profit margins. As a result, our results of operations could be adversely affected.

In addition, cyber-attacks or security breaches could compromise our trade secrets or other confidential, business critical information, cause a disruption in our operations, or harm our reputation. Our information technology systems are subject to potential disruptions, including significant network or power outages, service disruptions or interruptions from third-party information technology service providers, software or hardware errors, cyberattacks, computer viruses, malware, ransomware events, other malicious codes and/or unauthorized access attempts, denial-of-service attacks, phishing schemes, fraud, or other disruptive problems, any of which, if successful, could result in data leaks or otherwise compromise our confidential or proprietary information and disrupt our operations. Despite our efforts to protect sensitive information and comply with and implement data security measures, there can be no assurance that any controls and procedures that we have in place will be sufficient to protect us. Further, as cyber threats are continually evolving, our controls and procedures may become inadequate and we may be required to devote additional resources to modify or enhance our systems in the future. We may also be required to expend resources to monitor for and remediate cyber-related incidents or to enhance and strengthen our cyber security, including by deployment of additional personnel and technical protection measures, further training of employees, changing vendor control and monitoring practices, and engaging third-party experts and consultants. Any such disruptions to our information technology systems, breaches or compromises of data, or misappropriation of information could result in violation of privacy and other laws, litigation, fines, negative publicity, lost sales or business delays, any of which could have a material adverse effect on our business, financial condition or results of operations.

International sales by us and our industry partners expose us and our industry partners to the risk of fluctuation in currency exchange rates and rates of foreign inflation, which could adversely affect our results of operations.

Because we and our industry partners commercialize and sell products produced using our process technologies outside of the United States, a portion of our and our industry partners’ revenues is generated outside of the United States and we derive some of our revenues from our industry partners in their local currencies. As a result, our revenues and results of operations are subject to foreign exchange fluctuations, which we may not be able to manage successfully. We bear the risk that the rate of inflation in the foreign countries where we and our industry partners incur costs and expenses or the decline in value of the U.S. dollar compared to those foreign currencies, will increase our costs as expressed in U.S. dollars. The prices of the products produced using our process technologies may not be adjusted to offset the effects of inflation on our or our industry partners’ cost structure, which could increase costs and reduce net operating margins. If we do not successfully manage these risks through hedging or other mechanisms, our revenues and results of operations could be adversely affected.

Changes in interest rates and capital availability may impact investment and financing decisions by our industry partners, which could adversely affect our results of operations.

We depend on partnering, licensing, and contractual relationships with our industry partners that implement our process technologies, as well as investments by such partners, as a significant source of financing. Changes in credit and capital market conditions, including changes in interest rates and capital availability, may increase the cost of financing for our industry partners, which may limit their ability or willingness to enter into partnering agreements with us or to further invest in their facilities that implement our process technologies. Such changes may also make it more difficult for us to obtain favorable terms for any future partnership arrangements. To the extent that these changes impact investment and financing decisions by our industry partners in a manner that is adverse to us, such changes could adversely affect our results of operations.

Any failure by us to manage acquisitions and other significant transactions successfully may have a material adverse effect on our results of operations, financial condition, and cash flows.

From time to time, we may consider opportunities to acquire other companies, products or technologies that may enhance our capabilities, expand the breadth of our markets or partner base, or advance our business strategies. Potential acquisitions involve numerous risks, including: problems assimilating the acquired service offerings, products or technologies, issues maintaining uniform standards, procedures, quality control and policies, unanticipated costs associated with acquisitions, diversion of management's attention from our existing business, risks associated with entering new markets in which we have limited or no experience, increased legal and accounting costs relating to the acquisitions or compliance with regulatory matters, and unanticipated or undisclosed liabilities of any target.

We have no current commitments with respect to any acquisition. We do not know if we will be able to identify acquisitions we deem suitable, whether we will be able to successfully complete any such acquisitions on favorable terms or at all, or whether we will be able to successfully integrate any acquired service offerings, products or technologies. Our potential inability to manage acquisitions and other significant transactions successfully or to integrate any acquired business, products or technologies effectively may adversely affect our business, results of operations and financial condition.

We believe our company culture has contributed to our success, and if we cannot maintain this culture as we grow and, in particular, become a public company, our business could be harmed.

We believe that our culture has contributed to our success to date. We have invested in building a strong corporate culture and believe it is one of our most important and sustainable sources of competitive advantage. Our corporate culture is team-oriented, community-based and rooted in company values to promote close alignment between employees throughout the organization. Community strengthening events and team activities encourage cross-team and cross-location interactions. This foundation promotes an understanding of our organizational values and ensures that our team members stand for and contribute to the vision and objectives of the company. Any failure to maintain our culture could negatively affect our ability to retain and recruit personnel, which is critical to our growth, and to effectively focus on and pursue our corporate objectives. In addition, as we develop the systems and processes associated with being a public company, we may find it difficult to maintain these important aspects of our culture. Furthermore, as we grow and evolve on an international scale, we may find it increasingly difficult to maintain these beneficial aspects of our corporate culture throughout our global footprint. If we fail to maintain our corporate culture, or if we are unable to retain or hire key personnel that contribute positively to our corporate culture, our business and competitive position may be harmed.

Causes of supply chain challenges, including COVID-19, could result in delays or increased costs for us and our partners deploying our technologies.

The products that we and our partners produce using our process technologies must be delivered to our industry partners and involve a variety of inputs which must be procured and delivered to our facilities. Our suppliers, sub-contractors and industry partners have been disrupted by certain issues related to the COVID-19 pandemic, including worker absenteeism, quarantines, restrictions on employees' ability to work, office and factory closures, disruptions to ports and other shipping infrastructure, border closures or other travel or health-related restrictions.

Supply chain disruptions may also occur from time to time due to a range of factors beyond our control, including, but not limited to, climate change, increased costs of labor, freight costs and raw material prices along with a shortage of qualified workers. Such issues may cause delays in the delivery of, or increases in the cost of, the inputs used in our process technologies, potentially resulting in delays or increased costs for us and our partners deploying our technologies or for our industry partners purchasing our products, which may materially impact our business, financial condition and results of operations.

We and our industry partners have a limited operating history utilizing our technology and different feedstocks, which may make it difficult to evaluate our future viability and predict our future performance.

We and our partners have a limited operating history utilizing our process technologies and different feed stocks on which to base an evaluation of our business and prospects. Our operating results are not predictable and our historical results may not be indicative of our future results. Few peer companies with our business model exist and none have yet established long-term track records at scale that might assist us in predicting whether our business model and strategy can be implemented and sustained over an extended period of time. It may be difficult for you to evaluate our potential future performance without the benefit of established long-term track records from companies implementing a similar business model. We may encounter unanticipated problems as we continue to refine our business model and process technologies, and may be forced to make significant changes to our anticipated sales and revenue models to compete with our competitors' offerings, which may adversely affect our results of operations and profitability.

We have not yet generated material revenues from marketing of CarbonSmart products and our revenue forecast must be considered in light of the uncertainty and risks frequently encountered by companies in their early stage of development.

We have not yet generated material revenues from marketing CarbonSmart products or the sale of our equipment. We are subject to the risks inherent to early-stage companies seeking to develop, market and distribute new products, particularly companies in evolving markets such as renewable energy and technology. The likelihood of our success must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with the development, introduction, marketing and distribution of new products in a competitive environment.

Such risks include dependence on the success and acceptance of our products, the ability to attract and retain a suitable partner base, and the management of growth. To address these risks, we must, among other things, further develop and enhance our process technologies, generate increased demand for our products, attract a sufficient partner base, collaborate with partners, respond to competitive developments, and attract, retain and motivate qualified personnel. We are thus subject to many of the risks common to companies in their early stage of development, including under-capitalization, cash shortages, limitations with respect to personnel, financial, and other resources and lack of revenues.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

We have incurred losses during our history. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire, if at all. As of December 31, 2022, we had no U.S. federal net operating loss carryovers to offset future taxable income.

Under the Tax Act (as defined below), as modified by the CARES Act (as defined below), U.S. federal NOL carryforwards generated in taxable periods beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such net operating loss carryforwards in taxable years beginning after December 31, 2020, is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to the Tax Act or the CARES Act.

In addition, our NOL carryforwards are subject to review and possible adjustment by the IRS, and state tax authorities. Under Sections 382 and 383 of the Code, our federal net operating loss carryforwards and other tax attributes may become subject to an annual limitation in the event of certain cumulative changes in the ownership of our stock. An "ownership change" pursuant to Section 382 of the Code generally occurs if one or more stockholders

or groups of stockholders who own at least 5% of a company's stock increase their ownership (as measured by value) by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Our ability to utilize our NOL carryforwards and other tax attributes to offset future taxable income or tax liabilities may be limited as a result of ownership changes, including potential changes in connection with our migration from New Zealand to the United States, the Business Combination or other transactions. Similar rules may apply under state tax laws. We have not yet determined the amount of the cumulative change in our ownership resulting from the Business Combination or other transactions, or any resulting limitations on our ability to utilize our net operating loss carryforwards and other tax attributes. If we earn taxable income, such limitations could result in increased future income tax liability to us and our future cash flows could be adversely affected. We have recorded a valuation allowance related to our NOL carryforwards and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

Changes in U.S. and foreign tax laws could have a material adverse effect on our business, cash flow, results of operations or financial conditions.

The tax regimes we are subject to or operate under, including income and non-income taxes, are unsettled and may be subject to significant change. Changes in tax laws, regulations, or rulings, or changes in interpretations of existing laws and regulations, could materially affect our financial position and results of operations. For example, the 2017 Tax Cuts and Jobs Act, or Tax Act, made broad and complex changes to the U.S. tax code, including changes to U.S. federal tax rates, additional limitations on the deductibility of interest, both positive and negative changes to the utilization of future NOL carryforwards, and allowing for the expensing of certain capital expenditures. The Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, has already modified certain provisions of the Tax Act and the United States Congress is considering new proposed tax legislation. The exact impact of the Tax Act and the CARES Act for future years is difficult to quantify, but these changes could materially affect our effective tax rate in future periods, in addition to any changes made by new tax legislation.

The Organization for Economic Cooperation and Development has been working on a Base Erosion and Profit Shifting Project and is expected to continue to issue guidelines and proposals that may change various aspects of the existing framework under which our tax obligations are determined in many of the countries in which we do business. Similarly, the European Commission and several countries have issued proposals that would change various aspects of the current tax framework under which we are taxed. These proposals include changes to the existing framework to calculate income tax, as well as proposals to change or impose new types of non-income taxes, including taxes based on a percentage of revenue.

As we expand the scale of our international business activities, these types of changes to the taxation of our activities could increase our worldwide effective tax rate, increase the amount of taxes imposed on our business, and harm our financial position. Such changes may also apply retroactively to our historical operations and result in taxes greater than the amounts estimated and recorded in our financial statements.

Political and economic uncertainty, including changes in policies of the Chinese government or in relations between China and the United States, may impact our revenue and materially and adversely affect our business, financial condition, and results of operations.

We and our partners operate facilities and do business on an international scale, including in China. Political and economic uncertainty, including changes in policies of the Chinese government or relations between China and the United States, may impact us adversely. There is significant uncertainty about the future relationship between China and the United States with respect to trade policy, government relations and treaties. Political uncertainty surrounding Chinese government policies, international trade disputes between China and the United States, and protectionist measures could result in increased trade controls and regulations. Heightened tensions resulting in restrictions and additional regulations may negatively impact our ability to send our microbes and other supplies to our plants in China, to purchase and ship ethanol out of China, or to gain ethanol-related licenses in China.

The implementation of sanctions on certain Chinese individuals or entities may result in complications for our interactions with LanzaTech China Limited, the Shougang Joint Venture and our joint venture partners in China, or with certain of our strategic investors located in China, including Sinopec. Sinopec is a Chinese investment platform

that was jointly established in 2018 by China Petrochemical Corporation ("Sinopec Group") and China Petroleum & Chemical Corporation ("Sinopec Corp"). Sinopec Corp is a majority-owned subsidiary of Sinopec Group, which is controlled by the State-owned Assets Supervision and Administration Commission of the State Council of the People's Republic of China. Based on publicly available information provided by China Petroleum & Chemical Corporation, as of August 2022, the China Petroleum & Chemical Corporation holds, directly or indirectly, 49% of the equity/voting rights of Sinopec. As a result of potential trade and investment restrictions, we may be unable to complete an investment in any joint venture that we may enter into with Sinopec, or to protect our interests in our existing or potential future joint ventures by nominating a non-Chinese director to the board of directors of any such joint venture. Sanctions also may negatively impact our ability to repatriate dividends from a Chinese joint venture and may result in further costs or delays as a result of currency controls. These increased costs and restrictions may reduce our margins or reduce demand for our products if prices increase for our industry partners, and could adversely affect our business, financial condition, and results of operations.

Our ability or the ability of our partners to operate in China may be impaired by changes in Chinese laws and regulations, including those relating to taxation, environmental regulation, restrictions on foreign investment, and other matters, which can change quickly with little advance notice.

While we are headquartered in Skokie, Illinois, we have business operations in China. This includes a minority ownership stake in the Shougang Joint Venture, several strategic investors located in China, including Sinopec, and a core team of technical, business and administrative professionals at a LanzaTech office in Shanghai, which support the ongoing operations and further growth of the business in China. We license our technology in China to the Shougang Joint Venture. Entities in which the Shougang Joint Venture holds a controlling interest currently produce low carbon ethanol at three commercial scale facilities using our process technology, which, in addition to its use as fuel, is transported and processed for use in consumer products.

The Chinese government has exercised and continues to exercise substantial control over every sector of the Chinese economy through regulation and state ownership. The central Chinese government or local governments having jurisdiction within China may impose new, stricter regulations, or interpretations of existing regulations, that would require additional expenditures and efforts on our part to ensure our compliance with such regulations or interpretations. For example, regulations in the PRC applicable to LanzaTech China Limited, a WFOE, may change. As such, our operations and the operations of our joint venture partners and our sales and licenses to partners located in China may be subject to governmental and regulatory interference in the provinces in which they operate. We, our joint venture and other partners could also be subject to regulation by various political and regulatory entities, including local and municipal agencies and other governmental subdivisions. Regulations may be imposed or change quickly with little advance notice. Our ability, and the ability of our joint venture and other partners, to operate in China may be impaired by any such laws or regulations, or any changes in laws and regulations in China. We and our joint venture and other partners may incur increased costs necessary to comply with existing and future laws and regulations or penalties for any failure to comply.

Our operations and financial results may be impacted if the PRC government determines that the contractual arrangements constituting part of the Shougang Joint Venture VIE structure do not comply with PRC regulations, or if these regulations change or are interpreted differently in the future.

We have business operations in China, several strategic investors located in China, including Sinopec, and a core team of technical, business and administrative professionals at a LanzaTech office in Shanghai, which support the ongoing operations and further growth of the business in China. We also hold a minority ownership stake in the Shougang Joint Venture. We have determined the Shougang Joint Venture to be a VIE for which we are not the primary beneficiary. The VIE structure was implemented in order to effectuate the intellectual property licensing arrangement between us and the Shougang Joint Venture and is not used to provide investors with exposure to foreign investment in China-based companies where Chinese law prohibits direct foreign investment in the operating companies. If the PRC government determines that the contractual arrangements constituting part of the VIE structure do not comply with PRC regulations, or if these regulations change or are interpreted differently in the future, it could result in a material change to our operations. This could result in our inability to assert contractual control over our intellectual property and other assets in the Shougang Joint Venture, or cause a material change in the value of the shares of the common stock.

We and our partners may be subject to regulatory actions by the Chinese government targeting concerns related to data security and monopolistic behavior.

Recent statements and regulatory actions by the Chinese government have targeted companies whose operations involves cross-border data security or anti-monopoly concerns. Although we are incorporated and headquartered in the United States, we may still be subject to certain PRC laws due to our business operations in China. These operations include several strategic investors located in China, including Sinopec, a core team of technical, business and administrative professionals at our office in Shanghai, and our minority ownership stake in, and contractual commitments with, the Shougang Joint Venture.

On June 10, 2021, China promulgated the PRC Data Security Law (the "DSL"), which became effective on September 1, 2021. The DSL intends to regulate data processing activities, ensure data security, promote data development and utilization, protect the data-related rights and interests of individuals and organizations, and safeguard Chinese sovereignty, security and development interests. Article 36 of the DSL provides that any Chinese entity that provides data to foreign judicial or law enforcement agencies (regardless of whether directly or through a foreign entity) without approval from a Chinese authority would likely be deemed to be in violation of the DSL. In addition, pursuant to Article 2 of Measures for Cybersecurity Reviews (the "Measures") issued by the CAC, the procurement of any network product or service by an operator of critical information infrastructure that affects or may affect national security will be subjected to a cybersecurity review. Pursuant to Article 35 of Cybersecurity Law of the PRC, "critical information infrastructure operators" that purchase network products and services which may influence national security will be subject to cybersecurity review by the CAC. With respect to LanzaTech China Limited, the Shougang Joint Venture and our operational partners in China, the exact scope of the term "critical information infrastructure operator" remains unclear, so there can be no assurance that we, the Shougang Joint Venture or our partners will not be subjected to critical information infrastructure operator review in the future. Furthermore, in the event that we, the Shougang Joint Venture or our partners become operators of critical information infrastructure in the future, they may be subject to the DSL, the Measures and cybersecurity review by the CAC.

Article 3 of Anti-Monopoly Law of the PRC (the "Anti-Monopoly Law") prohibits "monopolistic practices," which include: (a) the conclusion of monopoly agreements between operators; (b) the abuse of dominant market position by operators; and (c) concentration of undertakings which has or may have the effect of eliminating or restricting market competition. Furthermore, according to Article 19 of the Anti-Monopoly Law, the operator will be assumed to have a dominant market position if the following apply: (a) an operator has 50% or higher market share in a relevant market; (b) two operators have 66% or higher market share in a relevant market; or (c) three operators have 75% or higher market share in a relevant market. We believe that neither we nor any of our partners in China have engaged in any monopolistic practices in China, and that recent statements and regulatory actions by the Chinese government do not impact our ability to conduct business, accept foreign investments, or list on a U.S. or other foreign stock exchange. However, there can be no assurance that regulators in China will not promulgate new laws and regulations or adopt new series of interpretations or regulatory actions which may require us and our partners to satisfy new requirements related to these concerns.

Changes in China's economic, political or social conditions or legal system or government policies could have a material adverse effect on our business and operations.

Our business operations in China include the Shougang Joint Venture, several strategic investors located in China, including Sinopec, and a core team of technical, business and administrative professionals at a LanzaTech office in Shanghai, which support the ongoing operations and further growth of the business in China. We license our technology in China to the Shougang Joint Venture. Entities in which the Shougang Joint Venture holds a controlling interest currently produce low carbon ethanol at three commercial scale facilities using our process technology, which, in addition to its use as fuel, is transported and processed for use in consumer products. Meanwhile, several additional facilities are being engineered and constructed. Accordingly, our business, financial condition, results of operations and prospects may be influenced to a significant degree by political, economic and social conditions in China generally and by the significant discretion of Chinese governmental authorities. The Chinese government continues to play a significant role in regulating industry development by imposing industrial policies. The Chinese government also exercises significant control over China's economic growth through

allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, and providing preferential treatment to particular industries or companies. The increased global focus on environmental and social issues and China's potential adoption of more stringent standards in these areas may adversely impact us or our suppliers.

Furthermore, the Chinese legal system is based in part on government policies and internal rules, some of which are not published on a timely basis or at all and may have a retroactive effect. As a result, we or our suppliers may not be aware of our violation of any of these policies and rules until sometime after the alleged violation. In addition, any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management attention. Further, such evolving laws and regulations and the inconsistent enforcement thereof could also lead to failure to obtain or maintain licenses and permits to do business in China, which would adversely affect us or our suppliers in China. Any such disruption, or if one or more of our Chinese suppliers was prevented from operating, could have an adverse impact on our results of operations and financial condition.

We may be subject to risks that the Chinese government may intervene or influence our operations at any time.

Because we have employees located in China and conduct some operations in China, including through our China-based joint venture and at the facilities in China operated by entities in which the Shougang Joint Venture holds a controlling interest using our process technology, we are subject to the risk that the Chinese government may intervene or influence our operations at any time. However, because our operations in China are largely limited to technology licenses and the production of our low carbon ethanol, we do not expect that such intervention or influence would result in a material change in our operations. Nonetheless, in the event that the Chinese government were to intervene in our operations, we might experience a disruption at the three facilities in China operated by entities in which the Shougang Joint Venture holds a controlling interest using our process technology, or at the facilities in construction, to our joint venture and joint venture partners, to our licenses to partners in China and to our low carbon ethanol production, which could have a material adverse effect on our results of operations.

Products produced by our process technologies compete with or are intended to displace comparable products produced using fossil resources. The market prices for these alternatively produced products and commodities are subject to volatility and there is a limited referenceable market for the more sustainable, waste-based products that our process technologies enable.

Products produced by our process technologies compete with or are intended to displace comparable products produced using fossil resources. The market prices for these alternatively produced products and commodities are subject to volatility and may depend on uncertain consumer demand as well as changing supply of feedstocks. In particular, demand for our products may depend on changing attitudes toward, and the price and availability of, fossil resources.

We do not believe we have any direct competitors that produce products with similar attributes to ours. Due to the limited competition we face, there is a limited referenceable market for the more sustainable, waste-based products that our process technologies enable. It may be difficult to evaluate our potential future performance without the benefit of established long-term track records from companies developing similar sustainable, waste-based products.

Process performance at LanzaTech plants is dependent on the quality and quantity of the feedstock supplied from the host facility.

We design the parameters to best process the feedstock we expect to receive from the host facility. Although we rigorously test feedgas when a project is being designed in order to determine the expected composition of the feedstock there is no guarantee that the quality and quantity of the feedstock will be identical to the test conditions. Feedstock changes based on day-to-day variability in host company process conditions can be anticipated to some extent, but cannot be fully mitigated.

We have experienced variability in the quality and quantity of feedstock supplied from our operating facilities, and although it is typically in the facilities' best interest to provide consistent and good quality feedstock, which help maintain the high utilization of our process, there is no guarantee that it will be supplied.

The deployment of the technology for alternative waste gas feedstocks can lead to unforeseen issues due to the change in the upstream industrial process.

While we have designed our reactor and process to minimize the amount of mechanical and operational adjustments required for the utilization of different waste gas feedstocks, there is no guarantee that performance will be as expected. Our microbe has proven to be flexible to different feed gas compositions, with tests conducted at pilot-scale using a wide range of CO_2, hydrogen ("H_2") and carbon monoxide ("CO")-containing gases.

Scale-up and commercialization of process technologies for alternative feedstocks without first conducting tests at demonstration scale can introduce some risk. Performance related improvements may not be as fungible as anticipated in scaling up alternative feedstocks.

Risks Related to Our Intellectual Property

Our patent rights may not provide commercially meaningful protection against competition, and we may be unable to detect infringement of our patents.

Our success depends, in part, on our ability to obtain and maintain patent protection and other intellectual property rights to protect our technology from competition. We have adopted a strategy of seeking patents and patent licenses in the United States and in certain foreign countries with respect to certain technologies used in, or relating to, our process technology for developing products. As of March 15, 2023, our overall owned and in-licensed patent portfolio included 1,307 granted patents and 590 pending patent applications across 141 patent families in the United States and in various foreign jurisdictions.

The strength of patents involves complex legal and scientific questions and can be uncertain. The patent applications that we own or license may fail to result in issued patents in the United States or in other foreign countries. Even with regard to the patents that have been issued to us, it is possible that third parties could challenge the validity, enforceability, ownership or scope thereof, which could result in such patents being narrowed, invalidated or held unenforceable. There is a substantial amount of litigation involving patent and other intellectual property rights, including interference and reexamination proceedings before the U.S. Patent and Trademark Office, or oppositions or comparable proceedings in foreign jurisdictions. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our technology or prevent others from designing around our patent claims. In addition, patent laws may change over time, and such changes may impair our ability to maintain, protect or enforce our patents. Moreover, we may not be able to detect unauthorized use of, or take appropriate steps to enforce, our patents rights against third parties. For example, third parties could practice our inventions without authorization, in secret and in territories where we do not have patent protection. Furthermore, despite our efforts and precautions, we may be unable to prevent a third party from copying or otherwise obtaining and using our inventions or other proprietary information or technology without authorization, or from infringing our patents. Such third parties may then try to sell or import products made using our inventions in and into the United States or other territories. We may be unable to prove that such products were made using our inventions, and any legal and contractual remedies available to us may not adequately compensate us.

Additional uncertainty may result from patent reform legislation proposed by the U.S. Congress and other national governments and from legal precedent handed down by the U.S. Court of Appeals for the Federal Circuit, the U.S. Supreme Court and the courts of foreign countries, as they determine legal issues concerning the scope, validity and construction of patent claims. Because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publication of discoveries in the scientific literature often lags behind the actual discoveries, there is additional uncertainty as to validity of any issued patent. Accordingly, we cannot be certain that any of our patent applications will result in issued patents, or even if issued, be sure of their validity or enforceability. Additionally we cannot predict whether any of our patent rights will be broad enough in scope to provide commercial advantage and prevent circumvention. Also, it may be difficult for us to trace chemicals imported into the United States that are produced by others using microorganisms or processes covered by our patents without our authorization, which will limit our ability to enforce our patent rights against potential infringers. In any event, patents are enforceable only for a limited term.

Differences and uncertainties with respect to legal systems outside the United States could adversely affect the legal protection available to us.

We have and plan to continue partnering with others in building manufacturing facilities using our process technologies in countries other than the United States. However, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Many companies have encountered significant problems, including delays, in protecting and enforcing intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to bio-industrial technologies. This could make it difficult for us to stop the misappropriation of our trade secrets or the infringement of our patents or other intellectual property rights. Proceedings to enforce our patents and other proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Such proceedings could also be met with defenses, counterclaims and countersuits attacking the validity, enforceability, ownership and scope of our intellectual property rights, and if such defenses, counterclaims or countersuits are successful, we could lose valuable intellectual property rights in certain jurisdictions. Accordingly, our efforts to enforce our intellectual property rights in such countries could be inadequate to obtain a significant commercial advantage from the intellectual property that we develop. Moreover, the registration of intellectual property is costly and subject to complex rules, regulations and local laws. Outside the United States, we only file our patent applications in selected foreign jurisdictions and therefore will have no patent protection against potential infringers in jurisdictions where we have not applied for patent protection.

We may not be able to operate our business without infringing the proprietary rights of third parties.

Our ability and the ability of our partners to commercialize the products produced using our technology platform depends on the ability to develop, manufacture, market and sell such products without infringing the proprietary rights of third parties. Numerous U.S. and foreign patents and pending patent applications owned by third parties, including parties with whom we may compete, exist in fields including processes that relate to our technology platform and the processes derived using our technology platform. These third parties may allege that our technology platform or the processes derived using our technology platform, or even the methods and organisms themselves, infringe their intellectual property rights, and we may be subject to legal proceedings relating to these claims.

If we are found to infringe the intellectual property rights of a third party, we or our partners could be prohibited from commercializing the product produced using the infringing technology, or from licensing our technology, unless we obtain a license to use the technology covered by the third-party intellectual property rights or are able to design around the relevant third party intellectual property rights. We may be unable to obtain a license on terms acceptable to us, if at all, and we may not be able to redesign our technology or processes to avoid infringement. Even if we are able to redesign technology or processes to avoid an infringement claim, our efforts to design around the third-party intellectual property rights may lead to a less effective or more costly product. In addition, we may be subject to legal proceedings alleging the infringement, misappropriation or other violation of the intellectual property of third parties, which could result in substantial costs and divert our efforts and attention from other aspects of our business. A court could also order us to pay compensatory damages for any infringement, plus prejudgment interest and could, in addition, treble the compensatory damages and award attorney fees. These damages could be substantial and could harm our reputation, business, financial condition and results of operations. A court also could enter orders that temporarily, preliminarily or permanently prohibit us and our partners from making, using, selling or offering to sell one or more of the products that may be produced using our technology platform and processes, or could enter an order mandating that we undertake certain remedial activities.

Trade secrets can be difficult to protect and enforce, and our inability to do so could adversely affect our competitive position.

We rely on trade secrets and confidentiality agreements to protect some of our technology and proprietary know-how that is not patentable, processes for which patents are difficult to enforce, and any other elements of our technology platform that involve proprietary know-how, information or technology that is not covered by patents, particularly where we do not believe patent protection is appropriate or obtainable. However, trade secrets are

difficult to maintain and protect. Our strategy for scale-up of production requires us to share confidential information with our business partners and other parties. Our business partners' employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our proprietary information to competitors. Enforcement of claims that a third party has illegally obtained and is using trade secrets is an expensive, time-consuming and uncertain process. In addition, foreign courts are sometimes less willing than U.S. courts to protect trade secrets. If our competitors independently develop equivalent knowledge, methods and know-how, we would not be able to assert our trade secrets against them. Our failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

We have taken measures to protect our trade secrets and proprietary information, but these measures may not be effective. We require new employees and consultants to execute confidentiality agreements upon the commencement of an employment or consulting arrangement with us. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. Nevertheless, our proprietary information may be disclosed, third parties could reverse engineer our systems, and others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

If trade secrets are stolen, misappropriated or reverse engineered, others could use these designs to produce competing products.

A number of third parties, including various industry partners, plant operators, university scientists and researchers, and those involved in the shipping and handling of products produced using our technology platform, have or may have access in the future to our proprietary technology. If the proprietary technology covered by our trade secrets were stolen, misappropriated or reverse engineered based on unauthorized use or based on extrapolation from our disclosures in our patent applications, it could be used by other parties for their own commercial gain. If this were to occur, it could be difficult, time consuming and costly for us to discover or challenge this type of use, especially in countries with limited intellectual property protection.

If we are unable to prevent third parties from adopting, registering or using trademarks or otherwise violating our trademark rights, our business could be materially adversely affected.

We currently hold issued trademark registrations and have trademark applications pending, any of which may be the subject of a governmental or third-party objection, which could prevent the issuance or maintenance of the same and thus create the potential need to rebrand or relabel one or more of our services. As our business matures, our reliance on our trademarks to differentiate us from our competitors increases and as a result, if we are unable to prevent third parties from adopting, registering or using trademarks, trade dress, or other source indicators that infringe, dilute or otherwise violate our trademark rights, our business could be materially adversely affected.

We may not retain exclusive rights to intellectual property created as a result of our strategic partnering arrangements which could limit our prospects and result in costly and time-consuming disputes.

We are a party to joint development agreements with a number of parties and are seeking to enter into agreements with others, each of which involve research and development efforts. We expect to enter into additional strategic partnering arrangements in the future. Under our existing agreements, we share, and would share, to various degrees, intellectual property we jointly develop. Any disputes as to ownership with a partner that may arise could encumber or prevent our use of the disputed technology, could harm our relationship with the relevant partner and would likely negatively affect our commercialization plans with respect to that technology. Additionally, litigation may be necessary to resolve disputes as to the ownership of intellectual property rights as between us and our industry partners, which can be costly, distracting to management and can harm our reputation and the value of our company. Further, we may not be successful in defending our intellectual property rights in any such litigation, and if we are unsuccessful, the value of our company could be seriously harmed.

Some of our intellectual property may be subject to federal regulation such as "march-in" rights, reporting requirements and a preference for U.S. industry, and any such regulations could negatively impact our business and prospects.

Some of the intellectual property that protects our technology platform has been funded by grants from U.S. government agencies and is subject to certain federal regulations. For example, under the "march-in" provisions of the Bayh-Dole Act, the government may have the right under limited circumstances to require us to grant exclusive, partially exclusive or non-exclusive rights to third parties under any intellectual property discovered through the government-funded programs. March-in rights can be triggered if the government determines that we have failed to work sufficiently towards achieving practical application of a technology or if action is necessary to alleviate health or safety needs, to meet requirements for public use specified by federal regulations or to give preference to U.S. industry. Specifically, certain of our granted and pending patents that cover recombinant and other microorganisms, cell-free protein synthesis platforms, protein expression vectors, fermentative production pathways, and microbial and ethanol conversion pathways may be subject to march-in-rights. These patents account for less than one percent of our granted and pending patents. We are also subject to certain reporting requirements as well as a preference for U.S. industry relating to manufacturing of products under the Bayh-Dole Act. Any such regulations could negatively impact our business and prospects.

We depend on certain technologies that are licensed to us. We do not control these technologies and any loss of our rights to them could prevent us from developing or selling our process technologies.

We rely on licenses in order to be able to use various proprietary technologies that are material to our business, including a license with the Battelle Memorial Institute ("Battelle"). We do not own the patents that underlie these licenses. Our rights to use the technology we license are subject to the continuation of and compliance with the terms of those licenses. We do not always control the prosecution, maintenance or filing of the patents to which we hold licenses. Thus, some of these patents and patent applications were not written by us or our attorneys, and we did not have control over their drafting and prosecution. Our licensors might not have given the same attention to the drafting and prosecution of these patents and applications as we would have if we had been the owners of the patents and applications and had control over the drafting and prosecution. We cannot be certain that drafting or prosecution of the licensed patents and patent applications by the licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

Our rights to use the technology we license are subject to the validity of the owners' intellectual property rights. Enforcement of our licensed patents or defense or any claims asserting the invalidity of these patents is often subject to the control or cooperation of our licensors and/or interpretation of the license agreements. We cannot be certain that we will have control of the enforcement of these patents against third parties. Legal action could be initiated against the owners of the intellectual property that we license. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent our licensors from continuing to license the intellectual property that we may need to operate our business.

Certain of our licenses contain provisions that allow the licensor to terminate the license upon specific conditions, including breach or insolvency. Our rights under the licenses are subject to our continued compliance with the terms of the license, including the payment of royalties due under the license. Termination of these licenses could prevent us from developing or marketing some or all of our process technologies. Because of the complexity of our technologies underlying our process technologies and the patents we have licensed, determining the scope of the license and related royalty obligation can be difficult and can lead to disputes between us and the licensor. An unfavorable resolution of such a dispute could lead to an increase in the royalties payable pursuant to the license. If a licensor believed we were not paying the royalties due under the license or were otherwise not in compliance with the terms of the license, the licensor might attempt to revoke the license. If such an attempt were successful, we might be barred from developing and selling some or all of our process technologies.

Any strategic partnering arrangement that involves the licensing of any of our intellectual property may increase our risks, harm our competitive position and increase our costs.

In addition to partnering with industry leaders through our co-development model, we may enter into licensing arrangements aimed to accelerate commercialization of our production process pipeline. Licensing any of our intellectual property increases the number of people who have access to some of our proprietary information. The scope of any such license may not be sufficiently narrow to adequately protect our interests. Moreover, contractual obligations of our licensees not to disclose or misuse our intellectual property may not be sufficient to prevent such disclosure or misuse. The costs of enforcing contractual rights could substantially increase our operating costs and may not be cost-effective, reasonable under the circumstances or ultimately succeed in protecting our proprietary rights. If our competitors access our intellectual property, they may gain further insight into the technology and design of our process technologies, which would harm our competitive position.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, or lawsuits asserted by a third party, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may need to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference proceedings provoked by third parties or brought by the U.S. Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our collaborators or licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our proprietary rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments.

Because of the uncertainties involved in the issuance and enforcement of patents, and the value of a patent, patent disputes and litigations are common. We may become involved in patent disputes relating to infringement of our technology, with third-parties asserting their patents, with our licensors or licensees, with industry partners and with employees, among others. Patent disputes can take years to resolve, can be very costly and can result in loss of rights, injunctions and substantial penalties. Moreover, patent disputes and related proceedings can distract management’s attention and interfere with running the business.

Risks Related to Ownership of Our Securities

The price of the common stock may be volatile.

Fluctuations in the price of our securities could contribute to the loss of all or part of your investment. Prior to the Business Combination, there was not a public market for the stock of Legacy LanzaTech and trading in the shares of AMCI’s common stock was not active. If an active market for our securities develops and continues, the trading price of our securities could be volatile and subject to wide fluctuations in response to various factors, some of which are beyond our control. Any of the factors listed below could have a material adverse effect on your investment in our securities and our securities may trade at prices significantly below the price you paid for them. In

such circumstances, the trading price of our securities may not recover and may experience a further decline. Factors affecting the trading price of our securities may include:

- actual or anticipated fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;
- changes in the market's expectations about our operating results;
- the development of new plants;
- success of competitors;
- operating results failing to meet the expectations of securities analysts or investors in a particular period;
- entering into new agreements with partners;
- changes in financial estimates and recommendations by securities analysts concerning LanzaTech or the industry in which we operate in general;
- operating and stock price performance of other companies that investors deem comparable to LanzaTech;
- ability to market new and enhanced products and services on a timely basis;
- changes in laws and regulations affecting our business;
- commencement of, or involvement in, litigation involving LanzaTech;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- the volume of shares of common stock available for public sale;
- any major change in our board or management;
- sales of substantial amounts of common stock by our directors, executive officers or significant stockholders or the perception that such sales could occur; and
- general economic and political conditions such as recessions, interest rates, fuel prices, international currency fluctuations and acts of war or terrorism.

Broad market and industry factors may materially harm the market price of our securities irrespective of our operating performance. The stock market in general, and Nasdaq specifically, have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your securities at or above the price at which it was acquired. A loss of investor confidence in the market for the stocks of other companies which investors perceive to be similar to us could depress our stock price regardless of our business, prospects, financial conditions or results of operations. A decline in the market price of our securities also could adversely affect our ability to issue additional securities and our ability to obtain additional financing in the future.

Reports published by analysts, including projections in those reports that differ from our actual results, could adversely affect the price and trading volume of the common stock.

We expect that securities research analysts will establish and publish their own periodic projections for the business of LanzaTech. These projections may vary widely and may not accurately predict the results we actually achieve. Our stock price may decline if our actual results do not match the projections of these securities research analysts. Similarly, if one or more of the analysts who write reports on LanzaTech downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price could decline. If one or more of these analysts ceases coverage of LanzaTech or fails to publish reports on LanzaTech regularly, our stock price or trading volume could decline.

We may issue additional shares of common stock or other equity securities without your approval, which would dilute your ownership interests and may depress the market price of the common stock.

As of March 17, 2023, we had warrants outstanding to purchase up to an aggregate of 16,657,762 shares of common stock and options outstanding to purchase up to an aggregate of 14,310,025 shares of common stock. Under the LanzaTech 2023 Long-Term Incentive Plan (the "2023 Plan"), we also have the ability to issue 21,716,844 shares of our common stock, and the Brookfield SAFE may convert into up to 5,000,000 shares of our common stock. The 2023 Plan is required to provide for the ability to grant and recycle the common stock (including any shares subject to forfeited options or restricted stock awards), and to initially reserve a number of shares of the common stock constituting 10% of the total number of shares of the common stock outstanding on a fully diluted basis, as determined at the closing of the Business Combination, and include an "evergreen" provision pursuant to which the number of shares reserved for issuance under the 2023 Plan will be increased automatically each year by 3% of the aggregate number of shares of the common stock then outstanding on a fully diluted basis. We may also issue additional shares of common stock or other equity securities of equal or senior rank in the future in connection with, among other things, future acquisitions or repayment of outstanding indebtedness, without stockholder approval, in a number of circumstances.

Our issuance of additional shares of common stock or other equity securities of equal or senior rank would have the following effects:

- our existing stockholders' proportionate ownership interest in LanzaTech will decrease;
- the amount of cash available per share, including for payment of dividends in the future, may decrease;
- the relative voting strength of each previously outstanding share of common stock may be diminished; and
- the market price of shares of the common stock may decline.

Because we do not anticipate paying any cash dividends on the common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gains and you may never receive a return on your investment.

We may retain future earnings, if any, for future operations, expansion and debt repayment and have no current plans to pay any cash dividends for the foreseeable future. Any decision to declare and pay dividends as a public company in the future will be made at the discretion of the Board and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions and other factors that the Board may deem relevant. In addition, our ability to pay dividends may be limited by covenants of any existing and future outstanding indebtedness we or our subsidiaries incur. As a result, you may not receive any return on an investment in our securities unless you sell your securities for a price greater than that which you paid for it.

The Public Warrants are identical to the Private Placement Warrants in material terms and provisions, except in certain circumstances, and are materially different from the LanzaTech warrants.

The Public Warrants are identical to the Private Placement Warrants in material terms and provisions, except that the Private Placement Warrants are not transferable, assignable or salable until 30 days after the closing of the Business Combination (except in limited circumstances) and are not redeemable by us so long as they are held by the Sponsor or its permitted transferees. If the Private Placement Warrants are held by holders other than the Sponsor or its permitted transferees, they will be redeemable by us and exercisable by the holders on the same basis as the Public Warrants. The Sponsor agreed not to transfer, assign or sell any of the Private Placement Warrants until 30 days after the closing of the business combination.

We may redeem the Public Warrants prior to their exercise at a time that is disadvantageous to holders of Public Warrants. We have the ability to redeem outstanding Public Warrants at any time after they become exercisable and prior to their expiration, at a price of $0.01 per Public Warrant, provided that the closing price of the common stock equals or exceeds $18.00 per share (as adjusted for adjustments to the number of shares issuable upon exercise or the exercise price of a warrant) for any 20 trading days within a 30 trading day period commencing once the Public Warrants become exercisable and ending three days before we send the notice of redemption to Public Warrant

holders. If and when the Public Warrants become redeemable by us, we may exercise the redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws. As a result, we may redeem the warrants as set forth above even if the holders are otherwise unable to exercise the warrants. Redemption of the outstanding Public Warrants could force holders of the Public Warrants (i) to exercise their Public Warrants and pay the exercise price therefor at a time when it may be disadvantageous for them to do so, (ii) to sell their Public Warrants at the then-current market price when they might otherwise wish to hold their Public Warrants or (iii) to accept the nominal redemption price which, at the time the outstanding Public Warrants are called for redemption, is likely to be substantially less than the market value of their Public Warrants. As noted above, none of the Private Placement Warrants will be redeemable by us so long as they are held by the Sponsor or its permitted transferees.

The terms of the Legacy LanzaTech warrants that were converted into LanzaTech warrants at the closing of the Business Combination are materially different from those of the Public Warrants. The AM Warrant entitles its holder to purchase up to 300,000 shares of common stock at an exercise price equal to $10.00, and will expire on the fifth anniversary of the consummation of the Business Combination. The Shortfall Warrants entitle the holders to purchase up to 4,083,486 shares of common stock at an exercise price equal to $10.00 per share, subject to adjustment, and will expire on March 27, 2028.

You may only be able to exercise your Public Warrants on a "cashless basis" under certain circumstances, and if you do so, you will receive fewer shares of the common stock from such exercise than if you were to exercise such warrants for cash.

The Warrant Agreement provides that in the following circumstances holders of warrants who seek to exercise their Public Warrants will not be permitted to do so for cash and will, instead, be required to do so on a cashless basis in accordance with Section 3(a)(9) of the Securities Act: (i) if the shares of common stock issuable upon exercise of the warrants are not registered under the Securities Act in accordance with the terms of the Warrant Agreement; (ii) if we have so elected and the shares of common stock is at the time of any exercise of a warrant not listed on a national securities exchange such that they satisfy the definition of "covered securities" under Section 18(b)(1) of the Securities Act; and (iii) if we have so elected and we call the Public Warrants for redemption. If you exercise your Public Warrants on a cashless basis, you would pay the warrant exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the excess of the "fair market value" of our shares of common stock (as defined in the next sentence) over the exercise price of the warrants by (y) the fair market value. The "fair market value" is the average closing price of the shares of the common stock for the 10 trading days ending on the third trading day prior to the date on which the notice of exercise is received by the warrant agent or on which the notice of redemption is sent to the holders of warrants, as applicable. As a result, you would receive fewer shares of the common stock from such exercise than if you were to exercise such warrants for cash.

Our warrant agreement designates the courts of the State of New York or the United States District Court for the Southern District of New York as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by holders of our warrants, which could limit the ability of warrant holders to obtain a favorable judicial forum for disputes with our company.

Our warrant agreement provides that, subject to applicable law, (i) any action, proceeding or claim against us arising out of or relating in any way to the Warrant Agreement, including under the Securities Act, will be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York, and (ii) that we irrevocably submit to such jurisdiction, which jurisdiction will be the exclusive forum for any such action, proceeding or claim. We will waive any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum.

Notwithstanding the foregoing, these provisions of the Warrant Agreement will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal district courts of the United States of America are the sole and exclusive forum. Any person or entity purchasing or otherwise acquiring any interest in any of our warrants will be deemed to have notice of and to have consented to the forum provisions in our Warrant Agreement. If any action, the subject matter of which is within the scope the forum provisions of the

Warrant Agreement, is filed in a court other than a court of the State of New York or the United States District Court for the Southern District of New York (a “foreign action”) in the name of any holder of our warrants, such holder will be deemed to have consented to: (x) the personal jurisdiction of the state and federal courts located in the State of New York in connection with any action brought in any such court to enforce the forum provisions (an “enforcement action”), and (y) having service of process made upon such warrant holder in any such enforcement action by service upon such warrant holder’s counsel in the foreign action as agent for such warrant holder.

This choice-of-forum provision may limit a warrant holder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with our company, which may discourage such lawsuits against us and our directors, officers, or other employees and may result in increased litigation costs for our stockholders. Alternatively, if a court were to find this provision of the Warrant Agreement inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could materially and adversely affect our business, financial condition and results of operations and result in a diversion of the time and resources of our management and board of directors.

We may amend the terms of the Public Warrants in a manner that may be adverse to holders with the approval by the holders of at least 50% of the then-outstanding Public Warrants. As a result, the exercise price of a holder’s Public Warrants could be increased, the exercise period could be shortened and the number of shares of the common stock purchasable upon exercise of a Public Warrant could be decreased, all without the approval of that warrant holder.

Our Public Warrants were issued in registered form under the Warrant Agreement between Continental Stock Transfer & Trust Company, as warrant agent, and us. The Warrant Agreement provides that the terms of the Public Warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval by the holders of at least 50% of the then-outstanding Public Warrants to make any change that adversely affects the interests of the registered holders. Accordingly, we may amend the terms of the Public Warrants in a manner adverse to a holder if holders of at least 50% of the then-outstanding Public Warrants approve of such amendment. Although our ability to amend the terms of the Public Warrants with the consent of at least 50% of the then-outstanding Public Warrants is unlimited, examples of such amendments could be amendments to, among other things, increase the exercise price of the Public Warrants, convert the Public Warrants into cash or stock, shorten the exercise period or decrease the number of shares of common stock purchasable upon exercise of a Public Warrant.

We have identified material weaknesses in our internal control over financial reporting. While some of these material weaknesses have been remediated, they could continue to adversely affect our ability to report our results of operations and financial condition accurately and in a timely manner.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with US GAAP. Our management is likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses identified through such evaluation of those internal controls. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

AMCI previously identified a material weakness in its internal control over financial reporting related to the accounting for certain complex financial instruments issued by AMCI that were not effectively designed or maintained. This material weakness resulted in the restatement of AMCI’s balance sheet as of August 6, 2021. Additionally, this material weakness could have resulted in a misstatement of complex financial instruments and related accounts and disclosures that would result in an additional material misstatement of AMCI’s financial statements that would not be prevented or detected on a timely basis. This material weakness has been remediated.

Additionally, AMCI has identified a quantitative and qualitative material weakness in its internal control over financial reporting related to the accounting of certain fees of Evercore related to advisory and placement agent

services, which Evercore waived in connection with its resignation. Pursuant to an advisory agreement and a placement agency agreement that AMCI entered into with Evercore, AMCI agreed to pay Evercore an aggregate fee of approximately $8.0 million in connection with AMCI's initial business combination that was wholly contingent on the closing of its initial business combination. On or about October 11, 2022, AMCI determined that disclosure regarding such arrangements and aggregate fees of $8.0 million, which were reasonably estimable and reasonably possible, had been omitted from the footnotes contained in its previously-issued financial statements. AMCI's management evaluated the impact of the error on its internal control over financial reporting, and although the error had no impact to its consolidated balance sheets, statements of cash flows or operations because such amount was never probable in accordance with the guidance set forth in ASC 450-20, the omission of such contingent payment from the footnotes to its financial statements was significant and therefore was determined to be a material error. Based on the above, AMCI's management concluded that the nondisclosure represented a material weakness in AMCI's internal control over financial reporting.

It is possible that we may identify other material weaknesses in the future. Our management has expended, and will continue to expend, a substantial amount of effort and resources for the improvement of our internal control over financial reporting. While we have processes to properly identify and evaluate the appropriate accounting technical pronouncements and other literature for all significant or unusual transactions, we have expanded and will continue to improve these processes to ensure that the nuances of such transactions are effectively evaluated in the context of the increasingly complex accounting standards.

Legacy LanzaTech has also identified material weaknesses in its internal control over financial reporting. The material weaknesses relate to the segregation of duties over manual journal entries and account reconciliations due to finance team size limitations; the design of formal accounting policies to analyze, account for, and disclose complex transactions; and the design, implementation, and documentation of internal controls at the entity level and certain reporting processes. During 2022, Legacy LanzaTech restated its previously issued 2020 and 2021 financial statements. The restatement resulted from certain material weaknesses, as described above. For additional information on the restatement, see Note 2 — S*ummary of Significant Accounting Policies* to Legacy LanzaTech's 2020 and 2021 restated financial statements. LanzaTech has not sufficiently designed, documented and implemented formal accounting policies, processes, and controls at the entity level or over the process of the accounting for complex transactions under U.S. GAAP: LanzaTech has not implemented certain key entity level controls that are integral to the COSO framework and that address the risk assessment component of COSO. For example, as of December 31, 2022, LanzaTech had not implemented and performed an entity-wide risk assessment, established a whistleblower hotline, or established a process for tracking and remediating control deficiencies. Further, due to size limitations of the finance and accounting group, LanzaTech has a limited number of experienced accounting personnel and has not sufficiently designed, documented and implemented internal controls over the accounting and disclosure of complex transactions under U.S. GAAP.

We can give no assurance that these measures will remediate the deficiencies in internal control or that additional material weaknesses or significant deficiencies in internal control over financial reporting will not be identified in the future. Failure to implement and maintain effective internal control over financial reporting could result in material misstatements of our consolidated financial statements that may require us to restate our financial statements or cause us to fail to meet our periodic reporting obligations. As a result, we could be subject to sanctions or investigations by the stock exchange on which the common stock is listed, the SEC or other regulatory authorities. Failure to timely file will cause us to be ineligible to utilize short form registration statements on Form S-3 or Form S-4, which may impair our ability to obtain capital in a timely fashion to execute our business strategies or issue shares to effect an acquisition. In either case, there could result a material adverse effect on our business. The existence of material weaknesses or significant deficiencies in internal control over financial reporting could adversely affect our reputation or investor perceptions of LanzaTech, which could have a negative effect on the trading price of the common stock. In addition, we would incur additional costs to remediate material weaknesses in our internal control over financial reporting.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting for future annual reports on Form 10-K to be filed with the SEC. Failure to comply with the Sarbanes-Oxley Act could potentially subject us to sanctions or investigations by the SEC, Nasdaq or other regulatory authorities, which would require additional financial and

management resources. However, for as long as we are an emerging growth company under the Jumpstart Our Business Startups Act of 2012, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. We could be an emerging growth company for up to five years from the last day of the fiscal year of AMCI's initial public offering.

We may face litigation and other risks as a result of the material weaknesses in our internal control over financial reporting.

As described elsewhere herein, we have identified a material weakness in our internal control over financial reporting related to the accounting for certain complex financial instruments issued by AMCI that were not effectively designed or maintained, which material weakness resulted in the restatement of AMCI's balance sheet as of August 6, 2021, and a material weakness in our internal control over financial reporting related to the accounting of certain fees of Evercore.

As a result of such material weaknesses, the restatement, the change in accounting for the financial instruments, and other matters raised or that may in the future be raised by the SEC, we face potential for litigation or other disputes which may include, among others, claims invoking the federal and state securities laws, contractual claims or other claims arising from the restatement and material weaknesses in our internal control over financial reporting and the preparation of our financial statements. As of the date hereof, we have no knowledge of any such litigation or dispute. However, we can provide no assurance that such litigation or dispute will not arise in the future. Any such litigation or dispute, whether successful or not, could have a material adverse effect on our business, results of operations and financial condition or our ability to complete a business combination.

Delaware law and provisions in our certificate of incorporation and bylaws could make a takeover proposal more difficult.

Our organizational documents are governed by Delaware law. Certain provisions of Delaware law and of our certificate of incorporation and bylaws could discourage, delay, defer or prevent a merger, tender offer, proxy contest or other change of control transaction that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares of the common stock held by our stockholders. These provisions include the ability of the Board to designate the terms of and issue new series of preference shares, supermajority voting requirements to amend certain provisions of our certificate of incorporation, the classification of the Board, and a prohibition on stockholder actions by written consent, which may make more difficult the removal of management and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our securities.

These anti-takeover provisions as well as certain provisions of Delaware law could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares. If prospective takeovers are not consummated for any reason, we may experience negative reactions from the financial markets, including negative impacts on the price of the common stock. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors of their choosing and to cause us to take other corporate actions that our stockholders desire.

Our certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings and the federal district courts as the sole and exclusive forum for other types of actions and proceedings, in each case, that may be initiated by our stockholders, which could limit our stockholders' ability to obtain what such stockholders believe to be a favorable judicial forum for disputes with Lus or our directors, officers or other employees or increase our stockholders' costs in bringing such a claim.

Our certificate of incorporation provides that, unless we consents to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of LanzaTech; (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or employee of LanzaTech to LanzaTech or its stockholders; (iii) any action asserting a claim against

LanzaTech or any director, officer or employee arising pursuant to any provision of the DGCL or our certificate of incorporation or bylaws; or (iv) any action asserting a claim against LanzaTech or any director, officer or employee of LanzaTech governed by the internal affairs doctrine, and, if brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to (A) the personal jurisdiction of the state and federal courts within Delaware and (B) service of process on such stockholder's counsel. The provision described in the immediately preceding sentence will not apply to (i) suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction and (ii) any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, or the rules and regulations promulgated thereunder, for which the federal courts will be the exclusive forum. Any person or entity purchasing or otherwise acquiring an interest in any shares of our capital stock will be deemed to have notice of and to have consented to the forum provisions in our certificate of incorporation. These choice-of-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that he, she or it believes to be favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers, or other employees and may result in increased litigation costs for our stockholders. We note that there is uncertainty as to whether a court would enforce these provisions and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 22 of the Securities Act creates concurrent jurisdiction for state and federal courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

Alternatively, if a court were to find these provisions of our certificate of incorporation inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could materially adversely affect our business, financial condition and results of operations and result in a diversion of the time and resources of our management and the Board.

We may not have the funds necessary to satisfy our future obligations under the Forward Purchase Agreement.

Pursuant to that certain forward purchase agreement by and between the Company, ACM ARRT H LLC, and the other parties thereto (the "Forward Purchase Agreement"), on the Maturity Date the Company is obligated to pay to the Seller the Maturity Consideration, which may be paid in cash or in shares, the Share Consideration and the Prepayment Amount. However, at the time, the Company may not have sufficient funds or be able to obtain financing from third parties to pay such amounts. The Company also may not have sufficient shares authorized to pay the Maturity Consideration in shares. Breach by the Company of any of these obligations could constitute an event of default under the Forward Purchase Agreement, which could subject the Company to financial exposure thereunder (including arising from potential indemnification claims by the Seller). In addition, future debt or other contractual agreements may contain cross-default or cross-acceleration provisions that could be triggered if we defaulted on our obligations to the Seller. Any or all of these consequences could have material adverse consequences for us.

Financial Information

Reference is made to the disclosure set forth in Item 9.01 of this Current Report on Form 8-K concerning the financial information of AMCI and Legacy LanzaTech, which is incorporated herein by reference.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Reference is made to the disclosure set forth in Item 9.01 of this Current Report on Form 8-K concerning the management's discussion and analysis of financial condition and results of operations of AMCI and Legacy LanzaTech, which is incorporated herein by reference.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information regarding the beneficial ownership of shares of common stock as of March 17, 2023, after giving effect to the Business Combination:

- each person known by us to be the beneficial owner of more than 5% of common stock;

- each of our named executive officers and directors; and
- all of our executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. A person is a “beneficial owner” of a security if that person has or shares “voting power,” which includes the power to vote or to direct the voting of the security, or “investment power,” which includes the power to dispose of or to direct the disposition of the security, or has the right to acquire such powers within 60 days.

The beneficial ownership of shares of common stock is calculated based on 195,451,598 shares of common stock outstanding as of March 17, 2023.

Unless otherwise noted in the footnotes to the following table, and subject to applicable community property laws, the persons and entities named in the table have sole voting and investment power with respect to their beneficially owned common stock.

Name and Address of Beneficial Owner	**Number of shares**	**% of Total Voting Power**
Directors and Named Executive Officers of LanzaTech [(1)]		
Dr. Jennifer Holmgren [(2)]	4,842,306	2.46 %
Geoff Trukenbrod [(3)]	503,088	*
Barbara Byrne	—	— %
Nigel Gormly	—	— %
Dorri McWhorter	—	— %
James Messina [(4)]	1,077,926	*
Nimesh Patel	268,148	*
Gary Rieschel	—	— %
Patrick Murphy	160,890	*
Sean Simpson [(5)]	3,554,721	1.81 %
All Directors and Executive Officers of LanzaTech as a Group (18 individuals)	**12,981,479**	**6.41 %**
Five Percent Holders:		
Khosla Ventures [(6)]	43,839,900	22.4 %
Guardians of New Zealand Superannuation [(7)]	33,263,337	17.0 %
Sinopec Capital Co., Ltd. [(8)]	17,112,976	8.8 %
Novo Holdings A/S [(9)]	15,814,845	8.1 %

* Less than one percent.

(1) Unless otherwise noted, the business address of each of the following individuals is 8045 Lamon Avenue, Suite 400, Skokie, Illinois 60077.

(2) Consists of (i) 3,154,003 shares of Common Stock and (ii) 1,688,303 shares of Common Stock subject to options exercisable within 60 days of March 17, 2023.

(3) Consists of 503,088 shares of Common Stock subject to options exercisable within 60 days of March 17, 2023.

(4) Consists of 1,077,926 shares of Common Stock subject to options exercisable within 60 days of March 17, 2023.

(5) Consists of (i) 1,081,801 shares of New LanzaTech Common Stock held by the Shikine Onsen Investment Trust, (ii) 1,083,038 shares of New LanzaTech Common Stock held by Dr. Simpson, and (iii) 1,240,202 shares of New LanzaTech Common Stock subject to options exercisable within 60 days of March 17, 2023. Dr. Simpson and his spouse are trustees of the Shikine Onsen Investment Trust and Dr. Simpson may be deemed to have shared voting and dispositive power over the shares held by the Shikine Onsen Investment Trust.

(6) Consists of (i) 13,875,332 shares of LanzaTech common stock held by KV III, (ii) 28,992,029 shares of LanzaTech common stock held by entities owned or controlled by Vinod Khosla, and (iii) 972,539 shares of LanzaTech common stock held by limited partners of KV II not affiliated with Vinod Khosla. Khosla Ventures Associates III, LLC (“KVA III”) is the general partner of KV III. VK Services, LLC (“VK Services”) is the Manager of KVA III. Vinod Khosla is the Managing Member of VK Services. As such, (i) each of KVA III and VK Services may be deemed to be the beneficial owners having shared voting power and shared investment power over 13,875,332 shares of LanzaTech common stock, and (ii) Vinod Khosla may be deemed to be the beneficial owner having shared voting power and shared investment power over 42,867,361 shares of LanzaTech common stock, and each disclaims beneficial ownership of such securities except

to the extent of his or its pecuniary interest therein. The business address of Vinod Khosla and each of the other entities listed in this footnote is 2128 Sand Hill Road, Menlo Park, CA 94025.

(7) Consists of shares of Common Stock held by Guardians of New Zealand Superannuation, as the manager and administrator of the New Zealand Superannuation Fund. Matt Whineray, Chief Executive Officer, has direct voting and investment power over these shares. The business address of Guardians of New Zealand Superannuation is 21 Queen Street Level 12, Auckland 1010, New Zealand.

(8) Any action by Sinopec Capital Co., Ltd. with respect to its shares, including voting and dispositive decisions, requires a vote of three out of the five members of its investment team. Under the so-called "rule of three," because voting and dispositive decisions are made by three out of the five members of the investment team, none of the members is deemed to be a beneficial owner of securities held by Sinopec Capital Co., Ltd. Accordingly, none of the members of the investment team is deemed to have or share beneficial ownership of the shares held by Sinopec Capital Co., Ltd. The business address of Sinopec Capital Co., Ltd. is 22nd Floor, World Financial Center East Tower, 1 East 3rd Ring Middle Road, Chaoyang District, Beijing, China.

(9) Novo Holdings A/S has the sole power to vote and dispose of the shares, and no individual or other entity is deemed to hold any beneficial ownership in the shares. The business address of Novo Holdings A/S is Tuborg Havnevej 19, 2900 Hellerup, Denmark.

Directors and Executive Officers

Reference is made to the disclosure in the subsections entitled "Board of Directors" and "Executive Officers" in Item 5.02 of this Current Report, which is incorporated herein by reference. Further reference is made to the section of the Proxy Statement/Prospectus entitled "New LanzaTech Management After the Business Combination," beginning on page 304 of the Proxy Statement/Prospectus, which is incorporated herein by reference.

Information with respect to the independence of New LanzaTech's directors is set forth beginning on page 308 of the Proxy Statement/Prospectus in the section titled "New LanzaTech Management After the Business Combination—Independence of Directors," which is incorporated herein by reference.

Executive Compensation

Reference is made to the sections of the Proxy Statement/Prospectus entitled "New LanzaTech Management After the Business Combination—Executive Officer and Director Compensation Following the Business Combination," beginning on page 304 and "LanzaTech's Executive and Director Compensation," beginning on page 311 of the Proxy Statement/Prospectus, respectively, which are incorporated herein by reference.

On the Closing Date, in connection with the consummation of the Business Combination, the LanzaTech 2023 Long-Term Incentive Plan (the "2023 Plan"), the Annual Bonus Plan (the "Annual Bonus Plan"), and the Executive Severance Plan (the "Severance Plan") became effective.

The 2023 Plan, the Annual Bonus Plan, and the Severance Plan are described in greater detail in the sections of the Proxy Statement/Prospectus entitled "The Incentive Plan Proposal," "LanzaTech's Executive and Director Compensation—Annual Bonus Plan," and "LanzaTech's Executive and Director Compensation—Executive Severance Plan" beginning on pages 187 and 320 of the Proxy Statement/Prospectus, respectively. Those summaries and the foregoing descriptions of the 2023 Plan, the Annual Bonus Plan, and the Severance Plan do not purport to be complete and are qualified in their entirety by reference to the text of the 2023 Plan, the Annual Bonus Plan, and the Severance Plan which are attached hereto as Exhibits 10.2, 10.28 and 10.34 respectively and are incorporated herein by reference.

Director Compensation

A description of the compensation of the directors of Legacy LanzaTech before the consummation of the Business Combination is set forth beginning on page 320 of the Proxy Statement/Prospectus in the section entitled "LanzaTech's Executive and Director Compensation—Non-Employee Director Compensation," which is incorporated herein by reference.

After the completion of the Business Combination, the Board adopted a non-employee director compensation plan pursuant to which each non-employee director is entitled to receive annual cash compensation of $60,000 and annual incentive compensation in the form of RSUs worth $100,000 for his or her service on the Board. Additionally, the lead independent director is entitled to additional annual cash compensation of $30,000, and each member of the audit committee of the Board, the compensation committee of the Board, and the nominating and governance committee of the Board is entitled to annual cash compensation of $10,000, $7,500, and $5,000,

respectively. The chairperson of each such committee is entitled to additional annual cash compensation of $10,000, $7,500, and $5,000, respectively.

Certain Relationships and Related Transactions, and Director Independence

Reference is made to the sections of the Proxy Statement/Prospectus entitled "Certain Relationships and Related Party Transactions" and "New LanzaTech Management After the Business Combination—Independence of Directors," beginning on pages 321 and 308 of the Proxy Statement/Prospectus, respectively, which are incorporated herein by reference.

Legal Proceedings

There is no material litigation, arbitration or governmental proceeding currently pending against us or any members of our management team in their capacity as such.

Market Price of and Dividends on the Registrant's Common Equity and Related Stockholder Matters

Prior to the Closing Date, AMCI's publicly traded Class A common stock, public warrants and units were listed on the Nasdaq Capital Market under the symbols "AMCI," "AMCIW" and "AMCIU," respectively. Upon the consummation of the Business Combination, the Common Stock and New LanzaTech's warrants began trading on Nasdaq under the symbols "LNZA" and "LNZAW," respectively. AMCI's publicly traded units automatically separated into their component securities upon the Closing, and as a result, no longer trade as a separate security and will be delisted from the Nasdaq Capital Market.

As of the close of business on the Closing Date, New LanzaTech had 196,222,737 shares of Common Stock issued and outstanding held of record by 142 holders.

New LanzaTech has not paid any cash dividends on shares of its Common Stock to date. The payment of any cash dividends in the future will be within the discretion of the Board. The payment of cash dividends in the future will be contingent upon New LanzaTech's revenues and earnings, if any, capital requirements, and general financial condition. It is the present intention of Board to retain all earnings, if any, for use in business operations, and accordingly, the Board does not anticipate declaring any dividends in the foreseeable future.

Recent Sales of Unregistered Securities

Reference is made to the disclosure in Item 3.02 of this Current Report, which is incorporated herein by reference.

Indemnification of Directors and Officers

Reference is made to the disclosure under the subheading "Indemnification Agreements" in Item 1.01 of this Current Report, which is incorporated herein by reference.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Reference is made to the disclosure in Item 4.01 of this Current Report, which is incorporated herein by reference.

Financial Statements, Exhibits and Supplementary Data

Reference is made to the disclosure in Item 9.01 of this Current Report, which is incorporated herein by reference.

Item 3.02. Unregistered Sales of Equity Securities

In connection with the Closing, AMCI consummated the Private Placement. Reference is made to the disclosure under the heading "Introductory Note" of this Current Report, which is incorporated herein by reference. The shares of common stock issued pursuant to the Subscription Agreements have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), and were issued in reliance upon the exemption provided under Section 4(a)(2) of the Securities Act and Regulation D promulgated thereunder.

On January 29, 2021, the Sponsor subscribed for an aggregate of 5,031,250 shares of AMCI Class B common stock, par value $0.0001 per share (the "Founder Shares") for a total subscription price of $25,000, or approximately $0.005 per share. In March 2021, the Sponsor transferred all of the Founder Shares held by it to members of AMCI's board of directors, its management team and persons or entities affiliated with AMCI Group. On May 14, 2021, certain of AMCI's initial stockholders forfeited an aggregate of 718,750 Founder Shares, resulting in an aggregate of 4,312,500 Founder Shares outstanding. On September 17, 2021, the over-allotment option expired and therefore, the initial stockholders forfeited 562,500 Founder Shares, resulting in an aggregate of 3,750,000 Founder Shares outstanding.

Simultaneous with the consummation of AMCI's Initial Public Offering, the Sponsor purchased 3,500,000 Private Placement Warrants at a price of $1.00 per Private Placement Warrant, generating gross proceeds of $3.5 million. No underwriting discounts or commissions were paid with respect to such sales. This issuance was made pursuant to the exemption from registration contained in Section 4(a)(2) of the Securities Act.

On February 8, 2023, pursuant to certain non-redemption agreements dated February 3, 2023 and February 6, 2023, AMCI issued and sold 1,250,000 shares of AMCI Class A common stock to certain qualified institutional buyers and accredited investors.

On February 8, 2023 AMCI issued and sold 469,052 shares of AMCI Class A common stock to certain anchor investors.

Upon the Closing, unvested options to purchase an aggregate of 3,271,104 shares of Legacy LanzaTech common stock at exercise prices of approximately $0.70 and $43.60 per share under the Legacy LanzaTech Plans were automatically and without any required action on the part of any holder or beneficiary thereof, assumed by us and converted into options to purchase an aggregate of 14,310,025 shares of common stock at exercise prices of approximately $0.16 to $9.97.

On March 27, 2023, we issued an aggregate of 4,083,486 Shortfall Warrants to certain investors pursuant to the Forward Purchase Agreement.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. We believe each of these transactions was exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act (and Regulation D promulgated thereunder) as transactions by an issuer not involving any public offering or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer under benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed on the share certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 3.03. Material Modifications to Rights of Security Holders.

In connection with the consummation of the Business Combination, AMCI changed its name to "LanzaTech Global, Inc." and adopted the Second Amended and Restated Certificate of Incorporation (the "Charter"). Reference is made to the sections of the Proxy Statement/Prospectus entitled "The Charter Proposal," "The Advisory Charter Amendment Proposals," "Comparison of Stockholders' Rights" and "Description of New LanzaTech's Securities After the Business Combination" beginning on pages 179, 181, 289 and 276 of the Proxy Statement/Prospectus, respectively, which are incorporated herein by reference. This summary is qualified in its entirety by reference to the text of the Charter and the bylaws of New LanzaTech, which are attached as Exhibits 3.1 and 3.2 hereto, respectively, and which are incorporated herein by reference.

Item 4.01. Change in the Registrant's Certifying Accountant.

On February 8, 2023, the Board approved a resolution appointing Deloitte & Touche, LLP ("Deloitte") as New LanzaTech's independent registered public accounting firm to audit New LanzaTech's consolidated financial statements for the fiscal year ending December 31, 2023. Deloitte served as the independent registered public

accounting firm of Legacy LanzaTech prior to the Business Combination. Accordingly, Marcum LLP ("Marcum"), AMCI's independent registered public accounting firm prior to the Business Combination, was informed on February 8, 2023 that it will be dismissed as New LanzaTech's independent registered public accounting firm, effective on March 28, 2023 upon completion of Marcum's audit of AMCI's consolidated financial statements as of and for the year ended December 31, 2022, and the issuance of their report thereon.

The report of Marcum on AMCI's consolidated financial statements as of and for the fiscal years ended December 31, 2022 and 2021 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainties, audit scope or accounting principles.

During AMCI's fiscal years ended December 31, 2022 and 2021, there were no disagreements between AMCI and Marcum on any matter of accounting principles or practices, financial disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Marcum, would have caused it to make reference to the subject matter of the disagreements in its reports on AMCI's consolidated financial statements for such year.

During AMCI's fiscal years ended December 31, 2022 and 2021, there were no "reportable events" (as defined in Item 304(a)(1)(v) of Regulation S-K ("Regulation S-K") under the Exchange Act), except that Marcum advised AMCI of material weaknesses related to: (i) the accounting for certain complex financial instruments and (ii) the accounting of certain fees related to financial advisory and placement agent services.

New LanzaTech provided Marcum with a copy of the foregoing disclosures and has requested that Marcum furnish New LanzaTech with a letter addressed to the SEC stating whether it agrees with the statements made by New LanzaTech set forth above. A copy of Marcum's letter, dated March 28, 2023, is filed as Exhibit 16.1 hereto.

During the fiscal years ended December 31, 2022 and 2021, neither New LanzaTech, nor any party on behalf of New LanzaTech, consulted with Deloitte with respect to either (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of the audit opinion that might be rendered with respect to New LanzaTech's consolidated financial statements, and no written report or oral advice was provided to New LanzaTech by Deloitte that was an important factor considered by New LanzaTech in reaching a decision as to any accounting, auditing or financial reporting issue, or (ii) any matter that was subject to any disagreement (as that term is defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) or a reportable event (as that term is defined in Item 304(a)(1)(v) of Regulation S-K).

Item 5.01. Changes in Control of Registrant.

Reference is made to the section of the Proxy Statement/Prospectus entitled "The Business Combination Proposal—Structure of the Merger Agreement," beginning on page 120 of the Proxy Statement/Prospectus, which is incorporated herein by reference. Further reference is made to disclosure in the section entitled "Introductory Note" and in Item 2.01 of this Current Report, which is incorporated herein by reference.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

Board of Directors

Upon the consummation of the Business Combination, each director of AMCI and each executive officer of AMCI ceased serving in such capacities, and seven new directors were elected to the Board. The Board was divided into three staggered classes of directors and each director was assigned to one of the three classes. At each annual meeting of the stockholders of New LanzaTech, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The Board consists of the following directors:

- Three Class I directors: Nigel Gormly, Jennifer Holmgren and Nimesh Patel.
- Two Class II directors: Barbara Byrne and Gary Rieschel.
- Two Class III directors: Jim Messina and Dorri McWhorter.

Dr. Holmgren serves as chair of the Board. The primary responsibilities of the Board are to provide risk oversight and strategic guidance to New LanzaTech and to counsel and direct New LanzaTech's management. The Board will meet on a regular basis and will convene additional meetings, as required.

Furthermore, effective as of the Effective Time, the Board established three standing committees: an audit committee, a nominating and governance committee, and a compensation committee. The members of the audit committee are Barbara Byrne, Nigel Gormly and Dorri McWhorter, and Ms. McWhorter chairs the audit committee. The members of the nominating and governance committee are Nigel Gormly, Dorri McWhorter and Jim Messina, and Mr. Messina chairs the nominating and governance committee. The members of the compensation committee are Barbara Byrne, Jim Messina and Gary Rieschel, and Mr. Rieschel chairs the compensation committee.

Reference is made to the description of the compensation of the directors of Legacy LanzaTech and of AMCI before the consummation of the Business Combination described in the Proxy Statement/Prospectus in the sections entitled "LanzaTech's Executive and Director Compensation—Non-Employee Director Compensation" and "Other Information About AMCI—Executive Compensation and Director Compensation," beginning on pages 289 and 194 of the Proxy Statement/Prospectus, respectively, which are incorporated herein by reference.

New LanzaTech's executive compensation program is designed to align compensation with business objectives and the creation of stockholder value, while enabling New LanzaTech to attract, retain, incentivize and reward individuals who contribute to its long-term success. Decisions regarding the executive compensation program are made by the compensation committee of the Board.

Independence of Directors

New LanzaTech adheres to the rules of Nasdaq in determining whether a director is independent. The Nasdaq listing standards generally define an "independent director" as a person who is not an executive officer or employee, or who does not have a relationship which, in the opinion of the company's board of directors, would interfere with the exercise of independent judgment in carrying out his or her responsibilities as a director. Our board of directors has determined that Nigel Gormly, Barbara Byrne, Jim Messina, Dorri McWhorter and Gary Rieschel are independent directors of New LanzaTech. New LanzaTech's independent directors intend to hold regularly scheduled meetings at which only independent directors are present.

The board recognizes the importance of appointing a strong lead independent director to maintain a counterbalancing structure to ensure the board functions in an appropriately independent manner. Jim Messina serves as our lead independent director. Our lead independent director's responsibilities include, among other things:

- presiding at all meetings of the board in the absence of, or upon the request of, the Chairperson of the board;
- lead regular executive sessions of the independent members of the board;
- call special meetings of the New LanzaTech Board as necessary to address important or urgent LanzaTech issues;
- call meetings of the non-employee or independent members of the board, with appropriate notice;
- advise the Nominating and Governance Committee and the Chairperson of the board on the membership of the various board committees and the selection of committee chairpersons;
- serve as principal liaison between the non-employee and independent members of the board, as a group, the Chief Executive Officer of New LanzaTech, and the Chairperson of the board, as necessary;
- engage when necessary and appropriate, after consultation with the Chairperson of the board and the Chief Executive Officer, as the liaison between the board and the New LanzaTech shareholders and other stakeholders; and
- foster open dialogue and constructive feedback among the independent directors.

Executive Officers

Upon the Closing, the following individuals were appointed to serve as executive officers of New LanzaTech:

Name	Age	Position(s)
Jennifer Holmgren, Ph.D.	62	Chief Executive Officer and Director
Geoff Trukenbrod	50	Chief Financial Officer
Steven Stanley, Ph.D.	60	Chief Commercial Officer
Carl Wolf	37	Chief Operating Officer
Freya Burton	42	Chief Sustainability Officer
Joseph Blasko	55	General Counsel
Julie Zarraga	55	Executive Vice President, Engineering
Johanna Haggstrom, Ph. D.	44	Vice President, Chemicals & Hydrocarbon Fuels Technology
Robert Conrado, Ph. D.	40	Vice President, Engineering Design and Development

Reference is made to the section of the Proxy Statement/Prospectus entitled "New LanzaTech Management After the Business Combination," beginning on page 304 of the Proxy Statement/Prospectus, which is incorporated herein by reference.

LanzaTech 2023 Long-Term Incentive Plan

Upon the Closing, New LanzaTech adopted the 2023 Plan. The 2023 Plan is described in greater detail in the section of the Proxy Statement/Prospectus entitled "The Incentive Plan Proposal," beginning on page 187 of the Proxy Statement/Prospectus. That summary and the foregoing description of the 2023 Plan do not purport to be complete and is qualified in its entirety by reference to the text of the 2023 Plan, which is attached as Exhibit 10.2 hereto and is incorporated herein by reference.

Annual Bonus Plan

Upon the Closing, New LanzaTech adopted the Annual Bonus Plan. The Annual Bonus Plan is described in greater detail in the section of the Proxy Statement/Prospectus entitled "LanzaTech's Executive and Director Compensation—Annual Bonus Plan," on page 320 of the Proxy Statement/Prospectus. That summary and the foregoing description of the Annual Bonus Plan do not purport to be complete and is qualified in its entirety by reference to the text of the Annual Bonus Plan, which is attached as Exhibit 10.28 hereto and is incorporated herein by reference.

Executive Severance Plan

Upon the Closing, New LanzaTech adopted the Severance Plan. The Severance Plan is described in greater detail in the section of the Proxy Statement/Prospectus entitled "LanzaTech's Executive and Director Compensation—Executive Severance Plan," on page 320 of the Proxy Statement/Prospectus. That summary and the foregoing description of the Executive Severance Plan do not purport to be complete and is qualified in its entirety by reference to the text of the Executive Severance Plan, which is attached as Exhibit 10.34 hereto and is incorporated herein by reference.

Employment Arrangements with Named Executive Officers

Reference is made to the disclosure regarding Legacy LanzaTech's employment arrangements with its named executive officers (the "named executive officers") in the section of the Proxy Statement/Prospectus entitled "LanzaTech's Executive and Director Compensation," beginning on page 311 of the Proxy Statement/Prospectus, which is incorporated herein by reference.

Potential Payments Upon Termination or Change of Control

The named executive officers hold stock options granted subject to the general terms of Legacy LanzaTech's 2019 Stock Plan, 2015 Stock Plan, 2013 Stock Plan, 2011 Stock Plan, the 2006 Share Option Scheme, and the Options

Deed Poll (together the “Legacy LanzaTech Plans”). New LanzaTech also expects to grant to the named executive officers stock options subject to the general terms of the 2023 Plan. A description of the termination and change in control provisions in the 2023 Plan and the Legacy LanzaTech Plans that are applicable to the stock options granted to the named executive officers under such plans is included in the sections of the Proxy Statement/Prospectus entitled “Incentive Plan Proposal—Corporate Transactions and Recapitalizations,” “LanzaTech’s Executive and Director Compensation—Equity Incentive and Other Compensation Plans,” beginning on pages 189 and 315 of the Proxy Statement/Prospectus, respectively. This summary does not purport to be complete and is qualified in its entirety by reference to the texts of the Legacy LanzaTech Plans and the 2023 Plan, which are attached as Exhibits 10.2, 10.22,10.23, 10.24, 10.25, and 10.26 hereto and are incorporated herein by reference.

Indemnification Agreements

At the Effective Time, New LanzaTech entered into indemnification agreements with each of its directors and certain executive officers. These indemnification agreements provide the directors and executive officers party thereto with contractual rights to indemnification and advancement of certain expenses incurred by such director or executive officer in any action or proceeding arising out of his or her services as one of New LanzaTech’s directors or executive officers.

The foregoing description of the indemnification agreements does not purport to be complete and is qualified in its entirety by the full text of the form of indemnification agreement, a copy of which is attached hereto as Exhibit 10.29 and is incorporated herein by reference.

Certain Relationships and Related Person Transactions

Reference is made to the section of the Proxy Statement/Prospectus entitled “Certain Relationships and Related Party Transactions,” beginning on page 321 of the Proxy Statement/Prospectus, which is incorporated herein by reference.

Administrative Service Fee

Subsequent to the closing of AMCI’s initial public offering, AMCI agreed to pay its Sponsor $10,000 per month for office space and secretarial and administrative services provided to members of the management team.. For the year ended December 31, 2022 and for the period from January 28, 2021 (inception) through December 31, 2021, AMCI incurred $120,000 and $50,000 of such fees, respectively, included as general and administrative fees - related party on the accompanying statements of operations included elsewhere in the prospectus. As of December 31, 2022 and 2021, approximately $120,000 and $50,000, respectively, of such fees are included as due to related party on the accompanying consolidated balance sheets included elsewhere in the prospectus.

Item 5.03. Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

On the Closing Date, New LanzaTech amended and restated its existing amended and restated certificate of incorporation (the “Charter”). A copy of the Charter is attached as Exhibit 3.1 hereto and is incorporated herein by reference.

Reference is made to the disclosure regarding the material changes to the Charter and the rights of New LanzaTech’s stockholders set forth therein in the sections of the Proxy Statement/Prospectus entitled “The Charter Proposal,” “Description of New LanzaTech’s Securities After the Business Combination” and “Comparison of Stockholders’ Rights,” beginning on pages 179, 276 and 289 of the Proxy Statement/Prospectus, respectively, which are incorporated herein by reference.

Item 5.05 Amendments to the Registrant’s Code of Ethics, or Waiver of a Provision of the Code of Ethics

On February 8, 2023, the Board adopted a new Code of Conduct and Ethics that applies to all of its employees, officers and directors, including its Chief Executive Officer, Chief Financial Officer and other executive and senior financial officers. The full text of New LanzaTech’s Code of Conduct and Ethics is available on its website at https://ir.lanzatech.com/corporate-governance/documents-charters.The information contained in, or that can be accessed through, our website is not a part of, or incorporated by reference in, this Form 8-K/A.

The adoption of the Code of Conduct and Ethics did not relate to or result in any waiver, explicit or implicit, of any provision of AMCI's Code of Conduct. Any waivers under the Code of Conduct and Ethics will be disclosed on a Current Report on Form 8-K or as otherwise permitted by the rules of the SEC and Nasdaq (or other stock exchange on which New LanzaTech securities are then listed).

Item 5.06. Change in Shell Company Status.

As a result of the Business Combination, AMCI ceased to be a shell company upon the Closing. The material terms of the Business Combination are described in the section of the Proxy Statement/Prospectus entitled "The Business Combination Proposal," beginning on page 120 of the Proxy Statement/Prospectus, and are incorporated herein by reference.

Item 7.01. Regulation FD Disclosure.

On February 9, 2023, New LanzaTech issued a press release announcing the consummation of the Business Combination. Reference is made to such press release, which is furnished as Exhibit 99.3 hereto and is incorporated herein by reference. The foregoing (including Exhibit 99.3) is being furnished pursuant to Item 7.01 and will not be deemed to be filed for purposes of Section 18 of the Exchange Act, or otherwise be subject to the liabilities of that section, nor will it be deemed to be incorporated by reference in any filing under the Securities Act or the Exchange Act.

Item 8.01. Other Events.

In connection with AMCI's initial public offering, AMCI entered into letter agreements with certain qualified institutional buyers or institutional accredited investors (the "Anchor Investors" and such agreements, the "Investment Agreements"), pursuant to which, among other items, the Anchor Investors agreed to purchase units in AMCI's initial public offering in exchange for the agreement of certain founders of AMCI (the "Founders") to transfer a portion of the shares of Class B common stock of AMCI owned by them (the "Founder Shares") to the Anchor Investors at the closing of a business combination of AMCI. The Investment Agreements provided that, instead of selling the Founder Shares directly to the Anchor Investors, the Founders could forfeit the Founder Shares upon the closing of a business combination to AMCI, and AMCI could issue an identical number of shares to the Anchor Investors at the same per share price initially paid by the Founders. On the Closing Date, New LanzaTech issued an aggregate of 469,052 shares of common stock to the Anchor Investors (the "Anchor Investor Shares"). Although AMCI's board of directors approved AMCI's entry into the Investment Agreements on August 3, 2021, AMCI's board of directors did not authorize the issuance of the Anchor Investor Shares to the Anchor Investors. As such, the issuance arose out of a "failure of Authorization" within the meaning of Section 204 of the Delaware General Corporation Law (the "DGCL") and such issuance was a "defective corporate act" within the meaning of Section 204 of the DGCL. On March 27, 2023, the Board ratified the issuance of the Anchor Investor Shares to the Anchor Investors pursuant to Section 204 of the DGCL.

The statutory notice required by Section 204 of the DGCL to New LanzaTech's stockholders is set forth in Exhibit 99.2 hereto and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(a) Financial statements of businesses acquired.

The audited consolidated financial statements of AMCI and Legacy LanzaTech as of December 31, 2022 and 2021 and for the years ended December 31, 2022 and 2021 are included as Exhibits 99.3 and 99.5 to this Current Report, respectively, and are incorporated herein by reference. Management's Discussion and Analysis of Financial Condition and Results of Operations of AMCI and Legacy LanzaTech for the year ended December 31, 2022 are included as Exhibits 99.4 and 99.6 to this Current Report, respectively, and are incorporated herein by reference.

(b) Pro forma financial information.

The unaudited pro forma condensed combined financial information of New LanzaTech for the year ended December 31, 2022, is attached as Exhibit 99.7 to this Current Report and incorporated herein by reference.

(d) Exhibits

Exhibit Number	Description
2.1*†	Merger Agreement, dated as of March 8, 2022, by and among AMCI, AMCI Merger Sub, Inc., and LanzaTech NZ, Inc. (incorporated by reference to Exhibit 2.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
2.2*	Amendment No. 1 to Merger Agreement, dated as of December 7, 2022, by and among AMCI Acquisition Corp. II, AMCI Merger Sub, Inc. and LanzaTech NZ, Inc. (incorporated by reference to Exhibit 2.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
3.1*	Second Amended and Restated Certificate of Incorporation of LanzaTech Global, Inc.
3.2*	Bylaws of LanzaTech Global, Inc.
4.1*	Warrant Agreement, dated as of August 3, 2021, between AMCI Acquisition Corp. II and Continental Stock Transfer & Trust Company (incorporated by reference to Exhibit 4.1 LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
4.2*	SAFE Warrant, dated as of December 7, 2021, from LanzaTech NZ, Inc. to ArcelorMittal XCarb S.à r.l.
4.3*†	Assignment and Novation Agreement, dated February 3, 2023, by and among AMCI Acquisition Corp. II, LanzaTech NZ, Inc., ACM ARRT H LLC, and VellarOpportunity Fund SPV LLC - Series 10.
4.4	Form of Shortfall Warrant.
10.1*	Form of Initial Subscription Agreement (incorporated by reference to Exhibit 10.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.1.1*†	Form of Amendment and Consent of Initial PIPE Investors (incorporated by reference to Exhibit 10.1.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.2*+	LanzaTech 2023 Long-Term Incentive Plan.
10.2.1*+	Form of Stock Option Agreement under LanzaTech 2023 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.2.2*+	Form of Time-Vested Restricted Stock Unit Agreement under the LanzaTech 2023 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.2.3*+	Form of Director Restricted Stock Unit Agreement under the LanzaTech 2023 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4.3 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.2.4*+	Form of Time- and Performance-Vested Restricted Stock Unit Agreement under the LanzaTech 2023 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4.4 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.3*†	Registration Rights Agreement (included in Exhibit 2.1).
10.4*	Form of Lock-up Agreement (incorporated by reference to Exhibit 10.7 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.5*	Exclusive Patent License Agreement, dated September 13, 2018, by and between Battelle Memorial Institute and LanzaTech, Inc. (incorporated by reference to Exhibit 10.12 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.5.1*#	Letter Amendment 1, dated January 13, 2020, between Battelle Memorial Institute and LanzaTech, Inc. (incorporated by reference to Exhibit 10.12.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.5.2*#	Clarification Letter, dated April 24, 2020, between Battelle Memorial Institute and LanzaTech, Inc. (incorporated by reference to Exhibit 10.12.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.6*†#	Amended and Restated Investment Agreement, dated April 2, 2021, by and among LanzaTech, Inc., LanzaJet, Inc., Mitsui & Co., Ltd., Suncor Energy Inc., British Airways PLC and Shell Ventures LLC. (incorporated by reference to Exhibit 10.13 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)

10.7*†#	Intellectual Property and Technology License Agreement, dated May 28, 2020, between LanzaTech, Inc. and LanzaJet, Inc. (incorporated by reference to Exhibit 10.14 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.8*†#	Amended and Restated Stockholders' Agreement, dated April 2, 2021, by and among LanzaJet, Inc., LanzaTech, Inc., Mitsui & Co., Ltd., Suncor Energy Inc., British Airways PLC, and Shell Ventures LLC. (incorporated by reference to Exhibit 10.15 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.9*#	Amended and Restated Alliance Agreement, dated February 15, 2022, by and between LanzaTech NZ, Inc. and Mitsui & Co., Ltd. (incorporated by reference to Exhibit 10.16 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.9.1*#	Amendment No. 1 to Amended and Restated Alliance Agreement, dated March 24, 2022, by and between LanzaTech NZ, Inc. and Mitsui & Co., Ltd. (incorporated by reference to Exhibit 10.16.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.9.2*#	Amendment No. 2 to Amended and Restated Alliance Agreement, dated October 2, 2022, by and between LanzaTech NZ, Inc. and Mitsui & Co., Ltd (incorporated by reference to Exhibit 10.16.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.10*#	Articles of Association of Beijing Shougang LanzaTech Technology Co., Ltd. (incorporated by reference to Exhibit 10.17 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.11*	Side Letter Agreement, dated November 3, 2021, by and among Beijing Shougang LanzaTech Technology Co., Ltd., Mitsui & Co., Ltd., and LanzaTech Hong Kong Limited (incorporated by reference to Exhibit 10.18 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.12*#	2021 Intellectual Property Rights License Agreement, dated September 6, 2021, between Beijing Shougang LanzaTech Technology Co., Ltd. and LanzaTech Hong Kong Limited (incorporated by reference to Exhibit 10.19 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023)
10.12.1*	Amendment No. 1 to 2021 Intellectual Property License Agreement, dated January 14, 2022, between Beijing Shougang LanzaTech Technology Co., Ltd. and LanzaTech Hong Kong Limited (incorporated by reference to Exhibit 10.19.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.13*#	Letter Agreement, dated April 12, 2021, among LanzaTech New Zealand Limited, LanzaTech Hong Kong Limited, Sinopec Capital Co, Ltd and Beijing Shougang-LanzaTech Technology Co., Ltd. (incorporated by reference to Exhibit 10.20 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.14*†#	Grant Agreement, dated October 7, 2020, among the European Climate, Infrastructure and Environmental Executive Agency, SkyNRG BV, RSB Roundtable on Sustainable Biomaterials Association, LanzaTech BV, E4tech UK Ltd, and Fraunhofer Gesellschaft zur Forderung der Angewandten Forschung E.V. (incorporated by reference to Exhibit 10.21 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.15*#	Memorandum of Understanding, dated June 20, 2018, between Sekisui Chemical Co., Ltd. and LanzaTech, Inc. (incorporated by reference to Exhibit 10.22 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.16*#	Term Sheet, dated February 21, 2020, between Sekisui Chemical Co., Ltd. and LanzaTech, Inc. (incorporated by reference to Exhibit 10.23 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.17*#	Letter of Agreement, dated December 4, 2017, between LanzaTech, Inc. and IndianOil Corporation Limited (incorporated by reference to Exhibit 10.24 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.18*#	Master Licensing Agreement, dated October 6, 2020, between Suncor Energy Inc. and LanzaTech, Inc. (incorporated by reference to Exhibit 10.25 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.18.1*	Amendment No. 1 to Master Licensing Agreement, dated October 2, 2022, between Suncor Energy Inc. and LanzaTech, Inc. (incorporated by reference to Exhibit 10.25.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.19*+	Executive Employment Agreement, dated April 20, 2010, between Dr. Jennifer Holmgren and LanzaTech, Inc. (incorporated by reference to Exhibit 10.26 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).

10.19.1*+	Letter from LanzaTech, Inc. to Dr. Jennifer Holmgren, dated May 17, 2021 (incorporated by reference to Exhibit 10.26.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.19.2*†+	Executive Employment Agreement, dated December 20, 2022, between Dr. Jennifer Holmgren and LanzaTech Global, Inc. (incorporated by reference to Exhibit 10.26.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.20*+	Employment Agreement, dated October 21, 2013, between Dr. Sean Simpson and LanzaTech, Inc. (incorporated by reference to Exhibit 10.27 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.20.1*+	Letter from LanzaTech, Inc. to Dr. Sean Simpson, dated January 6, 2020 (incorporated by reference to Exhibit 10.27.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.20.2*†+	Transition Letter, entered into on January 2, 2023, between Dr. Sean Simpson and LanzaTech, Inc. (incorporated by reference to Exhibit 10.27.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.20.3*†+	Consulting Agreement, entered into on January 2, 2023, between Dr. Sean Simpson and LanzaTech, Inc. (incorporated by reference to Exhibit 10.27.3 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.21*+	Employment Agreement, dated May 28, 2021, between Geoff Trukenbrod and LanzaTech, Inc. (incorporated by reference to Exhibit 10.28 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.21.1*†+	Executive Employment Agreement, dated December 21. 2022, between Geoff Trukenbrod and LanzaTech Global, Inc. (incorporated by reference to Exhibit 10.28.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.22*+	Deed Poll Relating to Option Schemes Established by LanzaTech New Zealand Limited and LanzaTech New Zealand Limited 2006 Share Option Scheme (incorporated by reference to Exhibit 10.29 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.22.1*+	Deed of Amendment to Deed Poll Relating to Option Schemes Established by LanzaTech New Zealand Limited, dated September 12, 2011 (incorporated by reference to Exhibit 10.29.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.22.2*+	Deed of Amendment to Deed Poll Relating to Option Schemes Established by LanzaTech New Zealand Limited, dated January 8, 2016 (incorporated by reference to Exhibit 10.29.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.22.3*+	Deed of Amendment to Deed Poll Relating to Option Schemes Established by LanzaTech New Zealand Limited, dated October 28, 2021 (incorporated by reference to Exhibit 10.29.3 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.23*+	LanzaTech New Zealand Limited 2011 Stock Plan (incorporated by reference to Exhibit 10.30 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.23.1*+	Form of Stock Option Agreement under the LanzaTech New Zealand Limited 2011 Stock Plan (incorporated by reference to Exhibit 10.30.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.23.2*+	Form of Stock Option Agreement under the LanzaTech New Zealand Limited 2011 Stock Plan (New Zealand employees) (incorporated by reference to Exhibit 10.30.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.24*+	LanzaTech New Zealand Limited 2013 Stock Plan (incorporated by reference to Exhibit 10.31 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.24.1*+	Form of Stock Option Agreement under the LanzaTech New Zealand Limited 2013 Stock Plan (incorporated by reference to Exhibit 10.31.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.24.2*+	Form of Stock Option Agreement under the LanzaTech New Zealand Limited 2013 Stock Plan (New Zealand employees) (incorporated by reference to Exhibit 10.31.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.25*+	LanzaTech New Zealand Limited 2015 Stock Plan (incorporated by reference to Exhibit 10.32 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).

10.25.1*+	Form of Stock Option Agreement under the LanzaTech New Zealand Limited 2015 Stock Plan (incorporated by reference to Exhibit 10.32.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.26*+	LanzaTech NZ, Inc. 2019 Stock Plan (incorporated by reference to Exhibit 10.33 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.26.1*†+	Form of Notice of Grant and Subscription for Stock Option under the LanzaTech NZ, Inc. 2019 Stock Plan (incorporated by reference to Exhibit 10.33.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.26.2*†+	Form of Notice of Restricted Stock Grant under the LanzaTech NZ, Inc. 2019 Stock Plan (incorporated by reference to Exhibit 10.33.2 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.26.3*+	Form of Stock Option Agreement under the LanzaTech NZ, Inc. 2019 Stock Plan (incorporated by reference to Exhibit 10.33.3 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.27*+	Amendment to LanzaTech New Zealand Limited Stock Option Award Agreements, dated October 28, 2021 (incorporated by reference to Exhibit 10.34 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.28*+	Annual Bonus Plan (incorporated by reference to Exhibit 10.35 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.29*+	Form of indemnification agreement between LanzaTech Global, Inc. and each of its directors and officers (incorporated by reference to Exhibit 10.36 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.30*†#	Framework Agreement, dated as of October 2, 2022, by and between LanzaTech, Inc. and BGTF LT Aggregator LP (incorporated by reference to Exhibit 10.37 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.31*†#	Simple Agreement for Future Equity, dated as of October 2, 2022, by and between LanzaTech NZ, Inc. and BGTF LT Aggregator LP (incorporated by reference to Exhibit 10.38 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.31.1*	Amendment No. 1 to Simple Agreement for Future Equity, dated as of December 30, 2022, by and between LanzaTech NZ, Inc. and BGTF LT Aggregator LP (incorporated by reference to Exhibit 10.38.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.32*#	Cooperation Letter Agreement, dated as of October 2, 2022, by and between LanzaTech, Inc., Suncor Energy, Inc. and BGTF LT Aggregator LP (incorporated by reference to Exhibit 10.39 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.33*	Form of Additional Subscription Agreement (incorporated by reference to Exhibit 10.40 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023) (incorporated by reference to Exhibit 10.40 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.33.1*†	Form of Amendment and Consent of Additional PIPE Investors (incorporated by reference to Exhibit 10.40.1 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.34*+	LanzaTech U.S. Executive Severance Plan (incorporated by reference to Exhibit 10.41 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.35*†#	Grant Agreement, by and between LanzaTech UK Limited and the Secretary of State for Transport, dated December 12, 2022 (incorporated by reference to Exhibit 10.42 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.36*†#	Note Purchase Agreement, dated November 9, 2022, by and among LanzaJet Freedom Pines Fuels LLC, LanzaTech, Inc. and the other purchasers named therein (incorporated by reference to Exhibit 10.43 to LanzaTech Global, Inc.'s Registration Statement on S-4/A, filed with the SEC on January 9, 2023).
10.37*	Simple Agreement for Future Equity, dated as of December 8, 2021, by and between LanzaTech NZ, Inc. and ArcelorMittal XCarb S.à r.l.
10.38*	Forward Purchase Agreement, dated February 3, 2023, by and among ACM ARRT H LLC, AMCI Acquisition Corp. II and LanzaTech NZ, Inc. (incorporated by reference to Exhibit 10.1 to LanzaTech Global, Inc.'s Current Report on Form 8-K, filed with the SEC on February 6, 2023).

10.39*	Subscription Agreement between AMCI Acquisition Corp. II and Oxy Low Carbon Ventures, LLC (incorporated by reference to Exhibit 10.1 to LanzaTech Global, Inc.'s Current Report on Form 8-K, filed with the SEC on February 7, 2023).
10.40*	Subscription Agreement between AMCI Acquisition Corp. II and Pescadero Capital, LLC (incorporated by reference to Exhibit 10.2 to LanzaTech Global, Inc.'s Current Report on Form 8-K, filed with the SEC on February 7, 2023)
10.41	Form of director compensation letter.
16.1	Letter from Marcum LLP to the SEC, dated March 28, 2023
21.1*	Subsidiaries of LanzaTech Global, Inc.
99.1*	Press release dated February 9, 2023 announcing the closing of the Business Combination.
99.2	Notice to the Stockholders of LanzaTech Global, Inc. pursuant to Section 204 of the Delaware General Corporation Law.
99.3	Audited consolidated financial statements of AMCI II Acquisition Corp. as of December 31, 2022 and 2021, and for the years ended December 31, 2022 and 2021.
99.4	Management's Discussion and Analysis of Financial Condition and Results of Operations of AMCI II Acquisition Corp. for the year ended December 31, 2022
99.5	Audited consolidated financial statements of LanzaTech NZ, Inc. as of December 31, 2022 and 2021, and for the years ended December 31, 2022 and 2021.
99.6	Management's Discussion and Analysis of Financial Condition and Results of Operations of LanzaTech NZ, Inc. for the year ended December 31, 2022
99.7	Unaudited pro forma condensed combined financial information of New LanzaTech
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

* Previously filed.

\+ Indicates management contract or compensatory plan.

† Annexes, schedules and exhibits to this Exhibit omitted pursuant to Item 601(b)(2) of Regulation S-K. The Registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

\# Certain confidential information contained in this exhibit, marked by brackets, has been omitted because the information (i) is not material and (ii) is the type of information that the registrant both customarily and actually treats as private and confidential.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: March 28, 2023

LANZATECH GLOBAL, INC.

By:	/s/ Geoffrey Trukenbrod
Name:	Geoffrey Trukenbrod
Title:	Chief Financial Officer

NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

COMMON STOCK PURCHASE WARRANT

LANZATECH GLOBAL, INC.

Warrant Shares: [ ] Initial Exercise Date: [ ]

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, [ ] or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date hereof (the "Initial Exercise Date") and on or prior to 5:00 p.m. (New York City time) on the fifth year anniversary of the Initial Exercise Date (the "Termination Date") but not thereafter, to subscribe for and purchase from LanzaTech Global, Inc., a Delaware corporation (the "Company"), up to [ ] shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain forward purchase agreement (the "Forward Purchase Agreement"), dated February 3, 2023, among the Company, Lanzatech NZ, Inc. and the Seller signatory thereto.

Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed and completed PDF copy submitted by e-mail (or e-mail attachment) of the Notice of Exercise substantially in the form attached hereto as Exhibit A (the "Notice of Exercise"). Within two (2) Scheduled Trading Days following the date of exercise, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer by a United States bank unless the cashless exercise

procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Business Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of Common Stock under this Warrant shall be $10.00, subject to adjustment hereunder (the "Exercise Price").

c) Cashless Exercise. This Warrant may also be exercised, in whole or in part, by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = as applicable: (i) the VWAP Price on the Scheduled Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Scheduled Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Scheduled Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Scheduled Trading Day, (ii) the VWAP Price on the Scheduled Trading Day immediately preceding the date of the applicable Notice of Exercise or (iii) the VWAP Price on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Scheduled Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of "regular trading hours" on such Scheduled Trading Day;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the holding period of the Warrant Shares being issued may be tacked on to the holding period of this Warrant. The Company agrees not to take any position contrary to this Section 2(c).

Notwithstanding anything herein to the contrary, on the Termination Date, this Warrant shall be automatically exercised via cashless exercise pursuant to this Section 2(c).

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's or its designee's balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Warrants), and otherwise by physical delivery of a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Scheduled Trading Days after the delivery to the Company of the Notice of Exercise, and (ii) one (1) Scheduled Trading Day after delivery of the aggregate Exercise Price to the Company (such date, the "Warrant Share Delivery Date"). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within two (2) Scheduled Trading Days following delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each $1,000 of Warrant Shares subject to such exercise (based on the VWAP Price of the

Common Stock on the date of the applicable Notice of Exercise), $5 per Scheduled Trading Day (increasing to $10 per Scheduled Trading Day on the fifth Scheduled Trading Day after the Warrant Share Delivery Date) for each Scheduled Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date (other than a failure caused by incorrect or incomplete information provided by the Holder to the Company), and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its

exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of $10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder $1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that, in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the assignment form substantially in the form attached hereto as Exhibit B ("Assignment Form") duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice

of Exercise, the Holder (together with the Holder's affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its affiliates or Attribution Parties. "Common Stock Equivalent" means any warrant, option, subscription or purchase right with respect to shares of Common Stock, any security convertible into, exchangeable for, or otherwise entitling the holder thereof to acquire, shares of Common Stock or any warrant, option, subscription or purchase right with respect to any such convertible, exchangeable or other security. For purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the 1934 Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the "Reported Outstanding Share Number"). If the Company receives a Notice of

Exercise from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Notice of Exercise would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 2(e), to exceed the Beneficial Ownership Limitation (as defined below), the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Notice of Exercise (the number of shares by which such purchase is reduced, the "Reduction Shares"), (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares, and (iii) publicly disclose the number of outstanding shares of Common Stock on the next business day. Upon the written or oral request of a Holder, the Company shall within five Business Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 9.9% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.9% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any Common Stock Equivalent (which, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of

Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Equity Sales. If the Company or any subsidiary thereof, as applicable, at any time while this Warrant is outstanding, shall sell, enter into an agreement to sell, or grant any option to purchase, or sell or grant any right to reprice, or otherwise dispose of or issue (or announce any offer, sale, grant or any option to purchase or other disposition) any Common Stock or Common Stock Equivalents, at an effective price per share less than the Exercise Price then in effect (such lower price, the "Base Share Price" and such issuances collectively, a "Dilutive Issuance") (it being understood and agreed that if the holder of the Common Stock or Common Stock Equivalent so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is less than the Exercise Price, such issuance shall be deemed to have occurred for a price less than the Exercise Price on such date of the Dilutive Issuance at such effective price), then simultaneously with the consummation of each Dilutive Issuance the Exercise Price shall be reduced (and only reduced) to equal the Base Share Price. The Company shall notify the Holder, in writing, no later than the Scheduled Trading Day following the issuance or deemed issuance of any Common Stock or Common Stock Equivalents subject to this Section 3(b), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the "Dilutive Issuance Notice"). For purposes of clarification, whether or not the Company provides a Dilutive Issuance Notice pursuant to this Section 3(b), upon the occurrence of any Dilutive Issuance, the Holder is entitled to receive a number of Warrant Shares based upon the Base Share Price regardless of whether the Holder accurately refers to the Base Share Price in the Notice of Exercise. If the Company enters into a Variable Rate Transaction, the Company shall be deemed to have issued Common Stock or Common Stock Equivalents at the lowest possible price, conversion price or exercise price at which such securities may be issued, converted or exercised. "Variable Rate Transaction"

means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive additional shares of Common Stock either (A) at a conversion price, exercise price or exchange rate or other price that is based upon or varies with the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into, or effects a transaction under, any agreement, including, but not limited to, an equity line of credit, whereby the Company may issue securities at a future determined price. Notwithstanding the foregoing, this Section 3(b) shall not apply to (i) any grants or issuances of equity awards (or Common Stock underlying such equity awards) under the Company's equity compensation plans (to the extent such plans have been authorized and publicly disclosed by the Company as of the Initial Exercise Date), or (ii) Common Stock underlying warrants or SAFEs (Simple Agreements for Future Equity) of the Company outstanding as of the Initial Exercise Date.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other

securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

e) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock or 50% or more of the voting power of the common equity of the Company, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires 50% or more of the outstanding shares of Common Stock or 50% or more of the voting power of the common equity of the Company (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration")

receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the Holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value (as defined below) of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction; provided, however, that, if the Fundamental Transaction is not within the Company's control, including not approved by the Company's board of directors, the Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction; provided, further, that if holders of Common Stock of the Company are not offered or paid any consideration in such Fundamental Transaction, such holders of Common Stock will be deemed to have received common stock of the Successor Entity (which Entity may be the Company following such Fundamental Transaction) in such Fundamental Transaction. "Black Scholes Value" means the value of this Warrant based on the Black-Scholes Option Pricing Model obtained from the "OV" function on the Bloomberg Screen determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable contemplated Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of (1) the 30 day volatility, (2) the 100 day volatility or (3) the 365 day volatility, each of clauses (1)-(3) as obtained from the HVT function on the Bloomberg Screen (determined utilizing a 365 day annualization factor) as of the Scheduled Trading Day immediately following the public announcement of the applicable contemplated Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the highest VWAP Price during the period beginning on the Scheduled Trading

Day immediately preceding the public announcement of the applicable contemplated Fundamental Transaction (or the consummation of the applicable Fundamental Transaction, if earlier) and ending on the Scheduled Trading Day of the Holder's request pursuant to this Section 3(e) and (D) a remaining option time equal to the time between the date of the public announcement of the applicable contemplated Fundamental Transaction and the Termination Date and (E) a zero cost of borrow. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds (or such other consideration) within the later of (i) five Business Days of the Holder's election and (ii) the date of consummation of the Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall be added to the term "Company" under this Warrant (so that from and after the occurrence or consummation of such Fundamental Transaction, each and every provision of this Warrant referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Successor Entity or Successor Entities, jointly and severally with the Company, may exercise every right and power of the Company prior thereto and the Successor Entity or Successor Entities shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company herein. For the avoidance of doubt, the Holder shall be entitled to the benefits of the provisions of this Section 3(e) regardless of (i) whether the Company has sufficient authorized shares of Common Stock for the issuance of Warrant Shares and/or (ii) whether a Fundamental Transaction occurs prior to the Initial Exercise Date.

f) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding

as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company (or any of its Subsidiaries) is a party, any sale or transfer of all or substantially all of its assets, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by email to the Holder at its last email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the

Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

h) Voluntary Adjustment By Company. Subject to the prior receipt of any required shareholder approval and to the rules and regulations of the Exchange, the Company may at any time during the term of this Warrant reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Scheduled Trading Days of the date on which the Holder delivers an Assignment Form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the original Issue Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name

of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

Section 5. Miscellaneous.

a) Other Agreements. The Company has not entered into any common stock purchase warrant or similar agreement with any other party to an equity prepaid forward transaction with the Company, other than the Common Stock Purchase Warrant issued to ACM ARRT H LLC on the date hereof (the "Other Agreement"), provided that the Other Agreement reflects the same terms and conditions that are contained herein. The Other Agreement has not been and will not be amended in any material respect without the prior written consent of the Holder.

b) No Rights as Stockholder Until Exercise; No Settlement in Cash. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3. Without limiting any rights of a Holder to receive Warrant Shares on a "cashless exercise" pursuant to Section 2(c) or to receive cash payments pursuant to Section 2(d)(i) and Section 2(d)(iv) herein, in no event shall the Company be required to net cash settle an exercise of this Warrant.

c) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

d) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

e) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Exchange upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

f) Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the Forward Purchase Agreement.

g) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, and the Holder does not utilize cashless exercise, will have restrictions upon resale imposed by state and federal securities laws.

h) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

i) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be delivered in accordance with the notice provisions of the Forward Purchase Agreement.

j) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

k) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

l) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

m) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

n) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

o) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

p) Registration Rights. The Warrant Shares are subject to certain registration rights set forth in the Forward Purchase Agreement.

****

(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

LANZATECH GLOBAL, INC.

By: ____________________________

Name:

Title:

EXHIBIT A

NOTICE OF EXERCISE

TO: LANZATECH GLOBAL, INC.

(1) The undersigned hereby elects to purchase ________ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

[ ] in lawful money of the United States; or

[ ] if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

____

The Warrant Shares shall be delivered to the following DWAC Account Number:

____

____

____

(4) Accredited Investor. The undersigned is an "accredited investor" as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: _______________________________
Signature of Authorized Signatory of Investing Entity: _______________________________
Name of Authorized Signatory: _______________________________
Title of Authorized Signatory: _______________________________
Date: _______________________________

EXHIBIT B

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: ______________________________
(Please Print)

Address: ______________________________
(Please Print)

Phone Number: ______________________________

Email Address: ______________________________

Dated: _____________ ___, ______________________________

Holder's Signature: ______________________________

Holder's Address: ______________________________

[LANZATECH GLOBAL, INC. LETTERHEAD]

[ ], 2023

Re: Board Appointment – Independent Non-Employee Director, [ ]

[ ]:

The following constitutes a summary of the terms of your appointment to the Board of Directors (the "Board") of LanzaTech Global, Inc. (the "Company").

Commencement Date:	[ ]
Class & Initial Term:	[ ]
Subsequent Terms:	Such term as may be specified by the Board in accordance with the Certificate of Incorporation or Bylaws of the Company.
Initial Director Fee:	USD $160,000, consisting of (1) a cash retainer of USD $60,000, and (2) subject to approval by the Compensation Committee, an annual grant of restricted stock units (RSUs) with an estimated value of $100,000 on the date of grant that will vest on the one-year anniversary of the grant date. The total fee and the form of the fee will be reviewed from time to time. The RSU award will be subject to the terms of the LanzaTech 2023 Long-Term Incentive Plan and the award agreement, which shall control in the event of any conflict with this letter.
Board Committee Membership & Fee:	[ ]
Board Meetings:	For fiscal year 2023, there will be a minimum of four Board meetings, the majority of which will be physical, in person meetings.
Expenses:	All reasonable director-related expenses will be reimbursed in accordance with the Company's policies as may be amended from time to time.
Travel:	Business class. In accordance with the Board Expenses Policy and as agreed by the Board from time to time, the Company will reimburse the expenses for a spouse or partner to accompany you to a Board meeting once each fiscal year.
D&O Insurance:	The Company maintains D&O insurance for all members of the Board, which is set at an appropriate level and reviewed on an annual basis. Insurance premiums are paid by the Company. A copy of the current D&O insurance policy will be provided to you via the Company's Board portal. If you become aware of any matter that may give rise to an actual or potential claim, you must notify the General Counsel and Corporate Secretary immediately.
Indemnity:	You will receive an indemnity from the Company.

Obligations:	You must exercise your responsibilities with diligence, good faith, and in accordance with all applicable law and Board policies. The Bylaws and Committee charters set out your role and responsibilities. Copies of these and applicable Board policies will be provided to you via the Company's Board portal.
Termination:	Your appointment will terminate on the earlier of your resignation, on the expiration of your applicable term if you are not re-elected, or on removal by the shareholders.
Independence:	The Board will regularly assess your independence to ensure that you do not have any relationship or interest that interferes with your unfettered and independent judgment, or which could reasonably give the impression that your independence as a member of the Board has been compromised, so as to interfere with your ability to act in the best interests of the Company. During the course of your service as a member of the Board, should a situation or circumstance arise which may reasonably impact or call into question your independence as a member of the Company's Board, you must notify the General Counsel and Corporate Secretary immediately. Similarly, if there is a change to your interests, positions, associations, or relationships that could bear upon your independence or give rise to a conflict of interest, you must inform the Board at the earliest opportunity.
Policies:	Subject always to applicable law, you will be required to comply with Board policies, as amended from time to time, in relation to, the Company's Global Code of Business Conduct, share trading, anti-bribery and corruption, market and investor communications and corporate governance. Copies of these policies will be provided to you via the Company's Board portal.
Access to professional advice:	You may seek any professional advice you feel is necessary to perform your responsibilities and duties as a member of the Board. The Company will reimburse you for all reasonable expenses incurred in obtaining this advice, if the expenses were incurred in good faith, were approved by the Board Chair in advance and, where appropriate, a copy of the advice is made available to the Board.
Access to Information:	As a member of the Board, you will have access to all information you reasonably consider necessary to perform your responsibilities and to exercise independent judgment when making decisions.

Confidentiality:	Any confidential information of the Company acquired by you during or immediately before commencing your term as a member of the Board must be kept confidential. During and after your appointment, you must not disclose any confidential information of the Company to a third party, except where that disclosure is: • authorized by the Board Chair, it being acknowledged that during your term as a member of the Board the Board Chair will generally authorize disclosure as required by the Board, the auditor of the Company or by any general meeting of shareholders; or • required by law or a regulatory body.
Review:	A performance review of each member of the Board is conducted routinely in accordance with Board policy.
Time Commitment:	In accepting this appointment, you agree that you have sufficient time to fulfil your responsibilities as a member of the Board. You are required to notify the Board Chair before accepting any new appointment as a director of another listed entity, any other material directorship, or any other position that could impact upon the time commitment expected of you as a member of the Board.

Should you have any questions in relation to this letter please do not hesitate to contact me.

Sincerely,

[ ]

Joseph C. Blasko

General Counsel and Corporate Secretary LanzaTech Global, Inc.

Exhibit 16.1

March 28, 2023

Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Commissioners:

We have read the statements made by LanzaTech Global Inc. (formerly known as AMCI Acquisition Corp. II) under Item 4.01 of its Amendment No. 1 to Form 8-K dated March 28, 2023. We agree with the statements concerning our Firm in such Amendment No. 1 to Form 8-K; we are not in a position to agree or disagree with other statements of LanzaTech Global Inc. (formerly known as AMCI Acquisition Corp. II) contained therein.

Very truly yours,

/s/ Marcum LLP

Marcum LLP

STATUTORY NOTICE PURSUANT TO SECTION 204(G)
of the
DELAWARE GENERAL CORPORATION LAW

Notice is hereby given pursuant to Section 204 of the Delaware General Corporation Law (the "DGCL"), that on March [●], 2023, the Board of Directors (the "Board") of LanzaTech Global, Inc., a Delaware corporation (the "Company"), adopted resolutions approving the ratification of a potentially defective corporate act, as described below, pursuant to Section 204 of the DGCL.

The Board determined that the grant and issuance of an aggregate of 469,052 shares of the Company's common stock, par value $0.0001 per share (the "Putative Shares"), to certain qualified institutional buyers or institutional accredited investors (the "Anchor Investors") on February 8, 2023 were potentially "defective corporate acts" within the meaning of Section 204 of the DGCL because they arose out of a "failure of authorization" (within the meaning of Section 204 of the DGCL). This failure of authorization occurred because the Board did not authorize and approve the issuance of the Putative Shares to the Anchor Investors prior to such issuance. The Board determined it to be advisable and in the best interests of the Company and its stockholders to approve the ratification of the issuance of the Putative Shares. On March [●], 2023, the Board ratified the issuance of the Anchor Investor Shares to the Anchor Investors pursuant to Section 204 of the DGCL.

A copy of the resolutions approving the ratification of the Defective Act is attached hereto as Exhibit A. The ratification of the Defective Act is not required to be submitted to the Company's stockholders for approval under Section 204 of the DGCL and the listing rules of The Nasdaq Stock Market LLC.

Any claim that the Defective Act ratified by Section 204 of the DGCL in the resolutions included herein are void or voidable due to a failure of authorization, or that the Court of Chancery of the State of Delaware should declare in its discretion that the ratification not be effective or effective only on certain conditions must be brought within 120 days from the date of this notice, July [●], 2023.

Exhibit A

Resolutions Approving the Ratification of the Defective Act

WHEREAS, on August 3, 2021, in connection with the initial public offering ("IPO") of LanzaTech Global, Inc., a Delaware corporation (the "Company"), the Board of Directors of the Company (the "Board") authorized and approved certain letter agreements entered into by and between the Company and certain qualified institutional buyers or institutional accredited investors (such agreements, the "Investment Agreements" and such investors, the "Anchor Investors"), pursuant to which, among other items, the Anchor Investors agreed to purchase units in the IPO in exchange for the agreement of certain founders of the Company (the "Founders") to transfer a portion of the shares of Class B common stock of the Company owned by them (the "Founder Shares") to the Anchor Investors at the closing of a business combination of the Company;

WHEREAS, the Investment Agreements provided that, instead of selling the Founder Shares directly to the Anchor Investors, the Founders could forfeit the Founder Shares upon the closing of a business combination to the Company, and the Company could issue an identical number of shares to the Anchor Investors at the same per share price initially paid by the Founders;

WHEREAS, on February 8, 2023 (the "Closing Date") the Company consummated the business combination (the "Business Combination") pursuant to the terms of that certain agreement and plan of merger, dated as of March 8, 2022 and amended on December 7, 2022, by and among the Company, AMCI Merger Sub, Inc., and LanzaTech NZ, Inc.;

WHEREAS, on the Closing Date, the Company issued an aggregate of 469,052 shares of the Company's common stock, par value $0.0001 per share ("common stock") to the Anchor Investors pursuant to the Investment Agreements (the "Putative Shares") and the Founders forfeited an equivalent number of Founder Shares;

WHEREAS, the Board failed to authorize and approve the issuance of the Putative Shares to the Anchor Investors prior to such issuance, and such failure constituted a "defective corporate act" pursuant to Section 204 of the General Corporation Law of Delaware (the "DGCL");

WHEREAS, the Board deems it advisable and in the best interest of the Company to invoke the procedure set forth in Section 204 of the DGCL to ratify the issuance of the Putative Shares;

WHEREAS, the Board desires to instruct the proper officers of the Company, from time to time (the "Authorized Officers"), to deliver to the Company's stockholders by way of a Current Report on Form 8-K, or an amendment thereto, as authorized pursuant to Section 204(g) of the DGCL, notice of the corrective action of the Board relating to the issuance of the Putative Shares (the "Stockholder Notice"); and

WHEREAS, any claim that the issuance of the Putative Shares is void or voidable due to the failure of authorization, or that the Delaware Court of Chancery should declare in its discretion that the ratification thereof in accordance with Section 204 of the DGCL not be effective or be effective only on certain conditions, must be brought within the later of 120 days from the validation effective time under Section 204 of the DGCL.

NOW, THEREFORE, BE IT RESOLVED, that the Putative Shares consist of 469,052 shares of common stock issued to the Anchor Investors on the Closing Date pursuant to the Investment Agreements.

RESOLVED, that the defective corporate act to be ratified under Section 204 of the DGCL consisted of the failure of the Board to authorize and approve the issuance of the Putative Shares to the Anchor Investors prior to such issuance.

RESOLVED, that the issuance of the Putative Shares be, and hereby is, ratified, authorized and approved, and the Authorized Officers be, and each of them hereby is, authorized to take all such actions and execute all such

documents on behalf of the Company as such Authorized Officer may, in his or her sole discretion, consider necessary or desirable to effect the foregoing.

RESOLVED, that the Authorized Officers are hereby instructed to deliver the Stockholder Notice to all stockholders of the Company, including the holders of the Putative Shares, as of the date of the ratification of the issuance of the Putative Shares, together with a copy of these resolutions of the Board, and any documents required to be delivered to the Company's stockholders under Section 204 of the DGCL.

RESOLVED, that the Authorized Officers be, and each of them hereby is, authorized, in the name and on behalf of the Company, to (or to instruct the Company's transfer agent to) deliver evidence representing such shares of common stock in book-entry form, in accordance with the terms and conditions of each Investment Agreement.

Audited consolidated financial statements of AMCI II Acquisition Corp. as of December 31, 2022 and 2021, and for the years ended December 31, 2022 and 2021.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

LanzaTech Global, Inc. (formerly known as AMCI Acquisition Corp. II)

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of LanzaTech Global, Inc. (formerly known as AMCI Acquisition Corp. II) (the “Company”) as of December 31, 2022 and 2021, the related consolidated statements of operations, changes in stockholders’ deficit and cash flows for the year ended December 31, 2022 and for the period from January 28, 2021 (inception) through December 31, 2021, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for the year ended December 31, 2022 and for the period from January 28, 2021 (inception) through December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Marcum LLP

Marcum LLP

We have served as the Company’s auditor since 2021.

New York, NY
March 28, 2023

LANZATECH GLOBAL, INC.
(FORMERLY KNOWN AS AMCI ACQUISITION CORP. II)

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2022	2021
Assets:		
Current assets:		
Cash	$ 6,671	$ 343,399
Prepaid expenses – current	190,645	337,534
Total current assets	197,316	680,933
Prepaid expenses – long-term	—	184,812
Investments held in trust account	152,296,551	150,006,015
Total Assets	**$ 152,493,867**	**$ 150,871,760**
Liabilities, Class A Common Stock Subject to Possible Redemption and Stockholders' Deficit:		
Current liabilities:		
Accounts payable	$ 2,494,997	$ 85,534
Accrued expenses	2,257,059	229,733
Due to related party	1,374,000	49,723
Capital base tax payable	394,311	198,129
Franchise tax payable	43,552	188,237
Income tax payable	309,320	
Total current liabilities	6,873,239	751,356
Deferred underwriting commissions	200,000	5,250,000
Derivative warrant liabilities	2,640,370	5,610,000
Total liabilities	9,713,609	11,611,356
Commitments and Contingencies (see Note 5)		
Class A common stock subject to possible redemption, $0.0001 par value; 15,000,000 shares issued and outstanding at approximately $10.07 and $10.00 per share at redemption as of December 31, 2022 and 2021, respectively	151,113,633	150,000,000
Stockholders' Deficit:		
Preferred stock, $0.0001 par value; 1,000,000 shares authorized; no shares issued or outstanding as of December 31, 2022 and 2021	—	—
Class A common stock, $0.0001 par value; 280,000,000 shares authorized; no non-redeemable shares issued or outstanding as of December 31, 2022 and 2021	—	—
Class B common stock, $0.0001 par value; 20,000,000 shares authorized; 3,750,000 shares issued and outstanding as of December 31, 2022 and 2021	375	375
Additional paid-in capital	—	—
Accumulated deficit	(8,333,750)	(10,739,971)
Total stockholders' deficit	(8,333,375)	(10,739,596)
Total Liabilities, Class A Common Stock Subject to Possible Redemption and Stockholders' Deficit	**$ 152,493,867**	**$ 150,871,760**

The accompanying notes are an integral part of these consolidated financial statements.

LANZATECH GLOBAL, INC.
(FORMERLY KNOWN AS AMCI ACQUISITION CORP. II)

CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Year Ended December 31, 2022	For the Period from January 28, 2021 (inception) through December 31, 2021
General and administrative expenses	$ 5,923,760	$ 951,461
General and administrative expenses – related party	120,000	50,000
Capital base tax expense	246,182	198,129
Franchise tax expense	200,050	188,237
Loss from operations	(6,489,992)	(1,387,827)
Other income (expenses):		
Change in fair value of derivative warrant liabilities	2,969,630	1,905,000
Gain from extinguishment of deferred underwriting commissions on public shares	171,700	
Offering costs allocated to derivative warrant liabilities	—	(476,450)
Income from investments held in trust account	2,299,536	6,015
Income (loss) before income tax expense	(1,049,126)	
Income tax expense	309,320	
Net income(loss)	**$ (1,358,446)**	**$ 46,738**
Weighted average shares outstanding of Class A common stock, basic and diluted	**15,000,000**	**4,690,909**
Basic and diluted net income (loss) per share, Class A common stock	**$ (0.07)**	**$ 0.01**
Weighted average shares outstanding of Class B common stock, basic and diluted	**3,750,000**	**3,750,000**
Basic and diluted net income (loss) per share, Class B common stock	**$ (0.07)**	**$ 0.01**

The accompanying notes are an integral part of these consolidated financial statements.

LANZATECH GLOBAL, INC.
(FORMERLY KNOWN AS AMCI ACQUISITION CORP. II)

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' DEFICIT
FOR THE YEAR ENDED DECEMBER 31, 2022 AND FOR THE PERIOD FROM JANUARY 28, 2021 (INCEPTION) THROUGH DECEMBER 31, 2021

	Common Stock						
	Class A		Class B		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance – January 28, 2021 (inception)	—	$ —	—	$ —	$ —	$ —	$ —
Issuance of Class B common stock to Sponsor	—	—	4,312,500	431	24,569	—	25,000
Excess cash received over the fair value of the private warrants	—	—	—	—	1,085,000	—	1,085,000
Forfeited shares	—	—	(562,500)	(56)	56	—	—
Contribution from Sponsor upon sale of founder shares to Anchor Investors	—	—	—	—	6,509,758	—	6,509,758
Accretion of Class A common stock subject to possible redemption amount	—	—	—	—	(7,619,383)	(10,786,709)	(18,406,092)
Net income	—	—	—	—	—	46,738	46,738
Balance – December 31, 2021	**—**	**$ —**	**3,750,000**	**$ 375**	**$ —**	**$ (10,739,971)**	**$ (10,739,596)**
Extinguishment of deferred underwriting commissions on public shares	—	—	0	—	4,878,300	—	4,878,300
Reclass from additional paid-in capital to accumulated deficit	—	—	—	—	(4,878,300)	4,878,300	—
Subsequent remeasurement of Class A common stock subject to possible redemption	—	—	—	—	—	(1,113,633)	(1,113,633)
Net loss	—	—	—	—	—	(1,358,446)	(1,358,446)
Balance - December 31, 2022	**—**	**$ —**	**3,750,000**	**$ 375**	**$ —**	**$ (8,333,750)**	**$ (8,333,375)**

The accompanying notes are an integral part of these consolidated financial statements.

LANZATECH GLOBAL, INC.
(FORMERLY KNOWN AS AMCI ACQUISITION CORP. II)

CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended December 31, 2022	For the Period from January 28, 2021 (inception) through December 31, 2021
Cash Flows from Operating Activities:		
Net income (loss)	$ (1,358,446)	$ 46,738
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
General and administrative expenses paid by Sponsor in exchange for issuance of Class B common stock	—	1,000
Change in fair value of derivative warrant liabilities	(2,969,630)	(1,905,000)
Gain from extinguishment of deferred underwriting commissions on public shares	(171,700)	
Offering costs allocated to derivative warrant liabilities	—	476,450
Income from investments held in the trust account	(2,299,536)	(6,015)
Changes in operating assets and liabilities:		
Prepaid expenses	331,701	155,454
Accounts payable	2,409,463	85,534
Due to related party	1,324,277	49,723
Accrued expenses	2,027,326	199,733
Capital based tax payable	196,182	198,129
Franchise tax payable	(144,685)	188,237
Income tax payable	309,320	
Net cash used in operating activities	(345,728)	(510,017)
Cash Flows from Investing Activities		
Cash deposited in trust account	—	(150,000,000)
Investment income released from trust account for payment of taxes	9,000	
Net cash provided by (used in) investing activities	9,000	(150,000,000)
Cash Flows from Financing Activities:		
Proceeds from note payable to related party	—	1,000
Proceeds received from initial public offering, gross	—	150,000,000
Proceeds received from private placement	—	852,416
Net cash provided by financing activities	—	150,853,416
Net change in cash	(336,728)	343,399
Cash – beginning of the period	343,399	—
Cash – end of the period	**$ 6,671**	**$ 343,399**
Supplemental disclosure of noncash activities:		
Offering costs paid by related party under note payable and advances	$ —	$ 1,968,784
Offering costs included in accrued expenses	$ —	$ 30,000
Offering costs paid by Sponsor in exchange for issuance of Class B common stock	$ —	$ 24,000
Prepaid expenses paid by related party under note payable and advances	$ —	$ 677,800
Repayment of note payable and advances by Sponsor in exchange for issuance of private placement warrants	$ —	$ 2,647,584
Deferred underwriting commissions in connection with the initial public offering	$ —	$ 5,250,000
Value of Class B common stock transferred to Anchor Investors at initial public offering	$ —	$ 6,509,758
Extinguishment of deferred underwriting commissions on public shares	$ 4,878,300	$ —

The accompanying notes are an integral part of these consolidated financial statements.

Note 1 — Description of Organization and Business Operations

LanzaTech Global, Inc., formerly known as AMCI Acquisition Corp. II prior to February 8, 2023 (the “Closing Date”) (the “Company”), was a blank check company incorporated as a Delaware corporation on January 28, 2021. The Company was formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with *one or more businesses (the “business combination”).*

Business Combination

On the Closing Date, the Company consummated the previously announced business combination pursuant to the terms of the Agreement and Plan of Merger (the “Closing”), dated as of March 8, 2022 (as amended on December 7, 2022, the “Merger Agreement”), by and among AMCI, AMCI Merger Sub, Inc., a Delaware corporation (“Merger Sub”) and LanzaTech NZ, Inc., a Delaware corporation (“Legacy LanzaTech”). Pursuant to the Merger Agreement, on the Closing Date, (i) AMCI changed its name to “LanzaTech Global, Inc.” (“New LanzaTech”), and (ii) Merger Sub merged with and into Legacy LanzaTech, with Legacy LanzaTech as the surviving company in the Business Combination. After giving effect to such Business Combination, Legacy LanzaTech became a wholly owned subsidiary of New LanzaTech.

Pursuant to the Merger Agreement, at the effective time of the Business Combination (the “Effective Time”), (i) each outstanding share of common stock of Legacy LanzaTech (the “Legacy LanzaTech common stock”) was converted into the right to receive 4.374677 shares of common stock, par value $0.0001 per share, of New LanzaTech (the “Common Stock”); (ii) each warrant to purchase Legacy LanzaTech common stock that was outstanding and unexercised immediately prior to the Effective Time and would automatically be exercised or exchanged in full in accordance with its terms by virtue of the occurrence of the Business Combination, was automatically exercised or exchanged in full for the applicable shares of Legacy LanzaTech capital stock, and each such share of Legacy LanzaTech capital stock was treated as being issued and outstanding immediately prior to the Effective Time and was cancelled and converted into the right to receive the applicable shares of Common Stock; (iii) each warrant to purchase Legacy LanzaTech common stock that was outstanding and unexercised prior to the Effective Time and was not automatically exercised in full as described in clause (ii) was converted into a warrant to purchase shares of Common Stock, in which case (a) the number of shares underlying such New LanzaTech warrant was determined by multiplying the number of shares of Legacy LanzaTech capital stock subject to such warrant immediately prior to the Effective Time, by 4.374677 and (b) the per share exercise price of such New LanzaTech warrant was determined by dividing the per share exercise price of such Legacy LanzaTech warrant immediately prior to the Effective Time by 4.374677, except that in the case of a certain warrant issued by Legacy LanzaTech to ArcelorMittal XCarb S.à r.l on December 8, 2021, such exercise price is $10.00; and (iv) to the extent not converted in full immediately prior to the Effective Time, the Brookfield SAFE was assumed by New LanzaTech and is convertible into 5,000,000 shares of Common Stock. In addition, the accumulated dividends payable to the holders of Legacy LanzaTech preferred shares in connection with the share conversion based on the applicable conversion ratio at the Effective Time were settled by delivery of Common Stock.

Pursuant to the Merger Agreement, at the Effective Time, each Legacy LanzaTech option was converted into New LanzaTech options to purchase a number of shares of Common Stock (rounded down to the nearest whole share) equal to the product of (i) the number of Legacy LanzaTech common shares subject to such Legacy LanzaTech option multiplied by (ii) 4.374677. The exercise price of such New LanzaTech options is equal to the quotient of (a) the exercise price per share of such Legacy LanzaTech option in effect immediately prior to the Effective Time divided by (b) 4.374677 (and as so determined, this exercise price will be rounded up to the nearest full cent). Pursuant to the Merger Agreement, at the Effective Time, each Legacy LanzaTech RSA that was outstanding immediately prior to the Effective Time was converted into a New LanzaTech RSA on the same terms and conditions as were applicable to such Legacy LanzaTech RSA immediately prior to the Effective Time, except that such New LanzaTech RSA will relate to a number of shares of Common Stock equal to the number of Legacy LanzaTech common shares subject to such Legacy LanzaTech RSA, multiplied by 4.374677.

Business Prior to the Business Combination

As of December 31, 2022, the Company has neither engaged in any operations nor generated any revenues. All activity for the period from January 28, 2021 (inception) through December 31, 2022 relates to the Company's formation and the initial public offering ("initial public offering"), described below. The Company will not generate any operating revenues until after the completion of its initial business combination, at the earliest. The Company will generate non-operating income in the form of interest income on cash and cash equivalents from the proceeds derived from the initial public offering and from changes in the fair value of its derivative warrant liabilities, if applicable.

The Company's sponsor is AMCI Sponsor II LLC, a Delaware limited liability company (the "Sponsor").

The registration statement for the Company's initial public offering was declared effective on August 3, 2021 (the "effective date"). On August 6, 2021, the Company consummated its initial public offering (the "initial public offering") of 15,000,000 units (the "units"). Each unit consists of one Class A common stock of the Company, par value $0.0001 per share (the "Class A common stock"), and one-half of one redeemable warrant of the Company (the "warrant"), each whole warrant entitling the holder thereof to purchase one Class A common stock for $11.50 per share. The units were sold at a price of $10.00 per unit, generating gross proceeds to the Company of $150,000,000, which is discussed in Note 3.

Simultaneously with the closing of the initial public offering, the Company completed the private sale of an aggregate of 3,500,000 warrants (the "private placement warrants") to the Sponsor at a purchase price of $1.00 per private placement warrant, generating gross proceeds to the Company of $3,500,000. The private placement warrants are identical to the warrants sold in the initial public offering, except that the private placement warrants, so long as they are held by the Sponsor or its permitted transferees, (i) are not redeemable by the Company, (ii) may not (including the Class A common stock issuable upon exercise of such private placement warrants), subject to certain limited exceptions, be transferred, assigned or sold by such holders until 30 days after the completion of the Company's initial business combination, (iii) may be exercised by the holders on a cashless basis and (iv) will be entitled to registration rights. No underwriting discounts or commissions were paid with respect to such sales.

As the initial public offering includes two instruments, Class A common stock and warrants, and as the warrants are classified as a financial liability, it is necessary to allocate the gross proceeds between Class A common stock and warrants. The Company adopted the residual method to allocate the gross proceeds between Class A common stock and warrants based on their relative fair values. The gross proceeds were first allocated to the fair value of the warrants and the residual amount was allocated to the Class A common stock. The percentage derived from this allocation was used to allocate the deferred offering costs between Class A common stock and warrants. Issuance costs allocated to the warrants were expensed to the Company's statement of operations.

Transaction costs of the initial public offering amounted to $13,782,542 and consisted of $1,500,000 of underwriting discount, $5,250,000 of deferred underwriting discount, $6,509,758 in fair value of Class B common stock issued to Anchor Investors, and $522,784 of other offering costs.

A total of $150,000,000 was placed in a U.S.-based trust account maintained by Continental Stock Transfer & Trust Company, acting as trustee (the "trust account").

The shares of common stock subject to redemption were recorded at a redemption value and classified as temporary equity upon the completion of the initial public offering, in accordance with Financial Accounting Standards Board's ("FASB") Accounting Standards Codification ("ASC") Topic 480, "Distinguishing Liabilities from Equity." In such case, the Company will proceed with a business combination if the Company has net tangible assets of at least $5,000,001 upon such consummation of a business combination and, if the Company seeks stockholder approval, a majority of the issued and outstanding shares voted are voted in favor of the business combination.

Emerging Growth Company Status

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the independent registered public accounting firm attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Securities and Exchange Act of 1934, as amended (the "Exchange Act")) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that an emerging growth company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of the Company's consolidated financial statements with those of another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Risks and Uncertainties

Management is continuing to evaluate the impact of the COVID-19 pandemic on the industry and has concluded that while it is reasonably possible that the virus could have a negative effect on the Company's financial position, results of its operations and/or search for a target company, the specific impact is not readily determinable as of the date of these consolidated financial statements. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

On August 16, 2022, President Biden signed into law the Inflation Reduction Act of 2022 (the "***IR Act***"), which, among other things, imposes a new 1% U.S. federal excise tax on certain repurchases of stock by "covered corporations" (which include publicly traded domestic (i.e., U.S.) corporations) beginning in 2023, with certain exceptions (the "***Excise Tax***"). The Excise Tax is imposed on the repurchasing corporation itself, not its stockholders from which the stock is repurchased. Because we are a Delaware corporation and our securities are trading on Nasdaq, we are a "covered corporation" for this purpose. The amount of the Excise Tax is generally 1% of the fair market value of the shares repurchased at the time of the repurchase. However, for purposes of calculating the Excise Tax, repurchasing corporations are permitted to net the fair market value of certain new stock issuances against the fair market value of stock repurchases during the same taxable year. In addition, certain exceptions apply to the Excise Tax. The U.S. Department of the Treasury has authority to provide regulations and other guidance to carry out, and prevent the abuse or avoidance of the Excise Tax. It is uncertain whether, and/or to what extent, the Excise Tax could apply to any repurchase by us of our common stock or in the event of our liquidation, in each instance after December 31, 2022, including any redemptions in connection with an initial business combination or in the event we do not consummate an initial business combination by August 6, 2023.

Liquidity and Capital Resources

As of December 31, 2022, the Company had approximately $7,000 in its operating bank account and a working capital deficit of approximately $5.9 million.

The Company's liquidity needs up to December 31, 2022 have been satisfied through a contribution of $25,000 from the Sponsor to cover for certain offering costs in exchange for the issuance of Founder Shares, and a loan and advances from the Sponsor pursuant to the Note (as defined in Note 4). Subsequent to the initial public offering, net

proceeds from the private placement of $0.9 million were placed in the operating account for working capital purposes. In addition, in order to finance transaction costs in connection with a business combination, the Sponsor or an affiliate of the Sponsor, or certain of the Company’s officers and directors may, but are not obligated to, provide the Company Working Capital Loans (as defined in Note 4). On March 28, 2022, the Company entered into a non interest-bearing Working Capital Loan with its Sponsor for the principal amount of up to $1.5 million. As of December 31, 2022 and 2021, there were no amounts outstanding under any Working Capital Loan.

In connection with the execution of the Merger Agreement, AMCI entered into subscription agreements (as amended on December 7, 2022, the “Initial Subscription Agreements”) with certain investors (the “Initial PIPE Investors”). AMCI entered into additional subscription agreements with certain institutional and accredited investors (the “PIPE Investors”) on October 8, 2022 (as amended on December 7, 2022) and February 6, 2022 (collectively, the “PIPE Subscription Agreements” and together with the subscription agreement between AMCI and ArcelorMittal, the “Subscription Agreements”). Pursuant to the Subscription Agreements, the PIPE Investors purchased an aggregate of 18,500,000 shares of common stock in a private placement at a price of $10.00 per share for an aggregate purchase price of $185 million (the “PIPE Investment”). Such aggregate number of shares and aggregate purchase price include 3,000,000 shares of common stock issued to ArcelorMittal pursuant to the AM SAFE with Legacy LanzaTech, as a result of which such PIPE Investor entered into a Subscription Agreement prior to the closing of the Business Combination. The PIPE Investment was consummated in connection with the consummation of the Business Combination. Upon closing of the Business Combination, the Company retained approximately $153 million net of transaction expenses as working capital.

Upon closing of the Business Combination, the Company’s immediate sources of liquidity include cash generated from operations, accounts receivable, and existing credit facilities of LanzaTech. Based on the foregoing, management believes that the Company will have sufficient working capital and borrowing capacity to meet its needs through one year from this filing.

Note 2 — Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements are presented in conformity with accounting principles generally accepted in the United States of America (“US GAAP”) and pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (the “SEC”).

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiary. All significant intercompany accounts and transactions have been eliminated in consolidation.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash accounts in a financial institution, which, at times, may exceed the Federal Deposit Insurance Corporation coverage limit of $250,000. As of December 31, 2022 and 2021, the Company has not experienced losses on these accounts and management believes the Company is not exposed to significant risks on such accounts.

Cash and Cash Equivalents

The Company considers all short-term investments with an original maturity of three months or less when purchased to be cash equivalents. The Company had no cash equivalents as of December 31, 2022 and 2021.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent

assets and liabilities at the date of the consolidated financial statements and the reported amounts of income and expenses during the reporting period. Making estimates requires management to exercise significant judgment. It is at least reasonably possible that the estimate of the effect of a condition, situation or set of circumstances that existed at the date of the consolidated financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future confirming events. Accordingly, the actual results could differ significantly from those estimates.

Investments Held in the Trust Account

The Company's portfolio of investments is comprised of U.S. government securities, within the meaning set forth in Section 2(a)(16) of the Investment Company Act, with a maturity of 185 days or less, or investments in money market funds that invest in U.S. government securities and generally have a readily determinable fair value, or a combination thereof. When the Company's investments held in the trust account are comprised of U.S. government securities, the investments are classified as trading securities. When the Company's investments held in the trust account are comprised of money market funds, the investments are recognized at fair value. Trading securities and investments in money market funds are presented on the consolidated balance sheets at fair value at the end of each reporting period. Gains and losses resulting from the change in fair value of these securities is included in income on investments held in the trust account in the accompanying consolidated statements of operations. The estimated fair values of investments held in the trust account are determined using available market information.

Financial Instruments

The fair value of the Company's assets and liabilities which qualify as financial instruments under the FASB ASC 820, "Fair Value Measurement," equal or approximate the carrying amounts represented in the consolidated balance sheets.

Fair Value Measurements

Fair value is defined as the price that would be received for sale of an asset or paid for transfer of a liability, in an orderly transaction between market participants at the measurement date. GAAP establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). These tiers consist of:

- Level 1, defined as observable inputs such as quoted prices (unadjusted) for identical instruments in active markets; and
- Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable such as quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in markets that are not active; and
- Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions, such as valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In those instances, the fair value measurement is categorized in its entirety in the fair value hierarchy based on the lowest level input that is significant to the fair value measurement.

Offering Costs Associated with Initial Public Offering

Offering costs consisted of legal, accounting, underwriting fees and other costs incurred through the initial public offering that were directly related to the initial public offering. Offering costs were allocated to the separable financial instruments issued in the initial public offering based on a relative fair value basis, compared to total proceeds received. Offering costs associated with derivative warrant liabilities were expensed as incurred and presented as non-operating expenses in the statement of operations. Offering costs associated with the Class A

common stock issued were charged against the carrying value of the shares of Class A common stock upon the completion of the initial public offering. The Company classifies deferred underwriting commissions as non-current liabilities as their liquidation is not reasonably expected to require the use of current assets or require the creation of current liabilities.

Class A Common Shares Subject to Possible Redemption

The Company accounts for its Class A common stock subject to possible redemption in accordance with the guidance in ASC Topic 480, "Distinguishing Liabilities from Equity." Class A common stock subject to mandatory redemption (if any) is classified as liability instruments and are measured at fair value. Conditionally redeemable Class A common stock (including Class A common stock that features redemption rights that are either within the control of the holder or subject to redemption upon the occurrence of uncertain events not solely within the Company's control) is classified as temporary equity. At all other times, Class A common stock is classified as stockholders' equity. The Company's Class A common stock feature certain redemption rights that are considered to be outside of the Company's control and subject to the occurrence of uncertain future events. Accordingly, as of the initial public offering, 15,000,000 shares of Class A common stock subject to possible redemption are presented at redemption value as temporary equity, outside of the stockholders' equity (deficit) section of the Company's consolidated balance sheets.

Under ASC 480-10-S99, the Company has elected to recognize changes in the redemption value immediately as they occur and adjust the carrying value of the security to equal the redemption value at the end of the reporting period. This method would view the end of the reporting period as if it were also the redemption date of the security. Effective with the closing of the initial public offering, the Company recognized the accretion from initial book value to redemption amount, which resulted in charges against additional paid-in capital (to the extent available) and accumulated deficit.

Derivative Financial Instruments

The Company does not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risks. The Company evaluates all of its financial instruments, including issued stock purchase warrants, to determine if such instruments are derivatives or contain features that qualify as embedded derivatives, pursuant to ASC 480 and FASB ASC Topic 815, "Derivatives and Hedging" ("ASC 815"). The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period.

The public warrants and the private placement warrants are recognized as derivative liabilities in accordance with ASC 815. Accordingly, the Company recognizes the warrant instruments as liabilities at fair value and adjusts the carrying value of the instruments to fair value at each reporting period until they are exercised. The initial fair value of the public warrants issued in connection with the initial public offering was estimated using a Monte-Carlo simulation model and the initial fair value of the private placement warrants was estimated using a Black-Scholes option pricing model. The fair value of the public warrants as of December 31, 2022 and 2021 is based on observable listed prices for such warrants. The fair value of the private placement warrants as of December 31, 2022 and 2021 is determined using a Black-Scholes option pricing model. The determination of the fair value of the warrant liability may be subject to change as more current information becomes available and, accordingly, the actual results could differ significantly. Derivative warrant liabilities are classified as non-current liabilities as their liquidation is not reasonably expected to require the use of current assets or require the creation of current liabilities.

Income Taxes

The Company follows the asset and liability method of accounting for income taxes under FASB ASC Topic 740, "Income Taxes" ("ASC 740"). Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the

period that included the enactment date. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

ASC 740 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by taxing authorities. ASC 740 also provides guidance on derecognition, classification, interest and penalties, accounting in period, disclosure and transition. The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position. The Company is subject to income tax examinations by major taxing authorities since inception.

Net Income (Loss) Per Share of Common Stock

The Company complies with accounting and disclosure requirements of FASB ASC Topic 260, "Earnings Per Share." Prior to the closing of the Business Combination, the Company had two classes of shares, which are referred to as Class A common stock and Class B common stock. Income and losses are shared pro rata between the two classes of shares. Net income (loss) per common share is calculated by dividing the net income (loss) by the weighted average shares of common stock outstanding for the respective period.

The calculation of diluted net income (loss) does not consider the effect of the warrants underlying the units sold in the initial public offering and the private placement warrants to purchase an aggregate of 11,000,000 shares of Class A common stock in the calculation of diluted income (loss) per share, because their exercise is contingent upon future events and their inclusion would be anti-dilutive under the treasury stock method. As a result, diluted net income (loss) per share is the same as basic net income (loss) per share for the year ended December 31, 2022 and for the period from January 28, 2021 (inception) through December 31, 2021. Accretion associated with the redeemable Class A common stock is excluded from earnings per share as the redemption value approximates fair value.

The following table reflects presents a reconciliation of the numerator and denominator used to compute basic and diluted net income (loss) per share for each class of common stock:

	For the Year Ended December 31, 2022		For the period from January 28, 2021 (inception) through December 31, 2021	
	Class A	Class B	Class A	Class B
Basic and diluted net income (loss) per common share:				
Numerator:				
Allocation of net income (loss)	$ (1,086,757)	$ (271,689)	$ 25,974	$ 20,764
Denominator:				
Basic and diluted weighted average common shares outstanding	15,000,000	3,750,000	4,690,909	3,750,000
Basic and diluted net income (loss) per common share	$ (0.07)	$ (0.07)	$ 0.01	$ 0.01

Recent Accounting Pronouncements

In June 2022, the FASB issued ASU 2022-03, ASC Subtopic 820 "Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions". The ASU amends ASC 820 to clarify that a contractual sales restriction is not considered in measuring an equity security at fair value and to introduce new disclosure requirements for equity securities subject to contractual sale restrictions that are measured at fair value. The ASU applies to both holders and issuers of equity and equity-linked securities measured at fair value. The amendments in this ASU are effective for the Company in fiscal years beginning after December 15, 2023, and interim periods within those fiscal years. Early adoption is permitted for both interim and annual financial statements that have not

yet been issued or made available for issuance. The Company is still evaluating the impact of this pronouncement on the consolidated financial statements.

The Company's management does not believe that any other recently issued, but not yet effective, accounting standards updates, if currently adopted, would have a material effect on the Company's consolidated financial statements.

Note 3 — Initial Public Offering

On August 6, 2021, the Company consummated its initial public offering of 15,000,000 units, at an offering price of $10.00 per unit, generating gross proceeds of $150.0 million, and incurring offering costs of approximately $13.8 million, inclusive of $1.5 million of underwriting discount, approximately $5.3 million in deferred underwriting commissions, approximately $6.5 million in fair value of Class B common stock issued to Anchor Investors, and approximately $0.5 million in other offering costs. Each whole warrant entitles the holder to purchase one share of Class A common stock at a price of $11.50 per share, subject to adjustment (see Note 8). Certain qualified institutional buyers or institutional accredited investors (the "Anchor Investors") purchased 15,480,000 units in the initial public offering. None of the Anchor Investors are affiliated with any member of the Company's management.

The underwriters had a 45-day option from the date of the underwriting agreement (August 3, 2021) to purchase up to an additional 2,250,000 units to cover over-allotments. On September 17, 2021, the over-allotment option expired unexercised, resulting in 562,500 shares of Class B common stock that were subject to forfeiture to be forfeited.

Note 4 — Related Party Transactions

Founder Shares

On January 29, 2021, the Sponsor paid $25,000, or approximately $0.005 per share, to cover certain offering costs in consideration for 5,031,250 shares of Class B common stock, par value $0.0001. In March 2021, the Sponsor transferred all of the founder shares it held to members of the Company's board of directors, management team, and persons or entities affiliated with AMCI Group (the "initial shareholders"). Such shares were fully paid. On May 14, 2021, the Sponsor surrendered 718,750 founder shares to the Company for no consideration, resulting in the Sponsor owning 4,312,500 founder shares. Up to 562,500 of the founder shares will be forfeited depending on the extent to which the underwriters' over-allotment is exercised. On September 17, 2021, the over-allotment option expired unexercised, resulting in 562,500 of the founder shares being forfeited.

In exchange for the Anchor Investors' participation in the initial public offering as described in Note 3, the Sponsor sold a total of 780,000 founder shares to the Anchor Investors. The Company determined that the fair value of these founder shares was approximately $6.5 million (or approximately $8.35 per share) using a Monte Carlo simulation. The Company recognized the excess fair value of these founder shares, over the price sold to the Anchor Investors, as an expense of the initial public offering resulting in a charge against the carrying value of Class A common stock subject to possible redemption.

The initial stockholders have agreed not to transfer, assign or sell any of their founder shares and any Class A common stocks issuable upon conversion thereof until the earlier to occur of: (A) one year after the completion of the initial business combination and (B) the date on which the Company completes a liquidation, merger, capital stock exchange or other similar transaction after the Company's initial business combination that results in all of the Company's stockholders having the right to exchange their Class A common stock for cash, securities or other property; except to certain permitted transferees and under certain circumstances (the "Lock-up"). Any permitted transferees will be subject to the same restrictions and other agreements of the company's initial stockholders with respect to any founder shares. Notwithstanding the foregoing, the founder shares will be released from the Lock-up if the closing price of the Company's Class A common stock equals or exceeds $12.00 per share (as adjusted for stock splits, stock capitalizations, reorganizations, recapitalizations and the like) for any 20 trading days within any 30-trading day period commencing at least 150 days after the company's initial business combination.

Private Placement

Simultaneously with the closing of the initial public offering, the Company's Sponsor has purchased an aggregate of 3,500,000 private placement warrants, each exercisable to purchase one Class A common stock at $11.50 per share, at a price of $1.00 per warrant, or $3,500,000 in the aggregate.

The private placement warrants will not be redeemable by the Company so long as they are held by the initial purchasers or their permitted transferees. The initial purchasers, or their permitted transferees, have the option to exercise the private placement warrants on a cashless basis. If the private placement warrants are held by holders other than initial purchasers or their permitted transferees, the private placement warrants will be redeemable by the Company and exercisable by the holders on the same basis as the warrants included in the units being sold in the initial public offering. Otherwise, the private placement warrants have terms and provisions that are identical to those of the warrants being sold as part of the units in the initial public offering.

If the private placement warrants are held by holders other than the Sponsor or its permitted transferees, the private placement warrants will be redeemable by the Company in all redemption scenarios and exercisable by the holders on the same basis as the warrants included in the units being sold in the initial public offering.

Related Party Loans and Advances

On January 29, 2021, the Sponsor agreed to loan the Company up to $300,000 to be used for a portion of the expenses of the initial public offering ("Note"). This loan was non-interest bearing, unsecured and payable upon the closing of the initial public offering. In addition to the Note, the Sponsor of the Company also paid certain administrative expenses and offering costs on behalf of the Company. These advances were due on demand and were non-interest bearing. The Company repaid the note payable and advances in exchange for the issuance of private placement warrants.

In addition, in order to finance transaction costs in connection with an intended business combination, the Sponsor or an affiliate of the Sponsor, or certain of the Company's officers and directors may, but are not obligated to, loan the Company funds as may be required on a non-interest basis ("Working Capital Loans"). If the Company completes the initial business combination, it will repay the Working Capital Loans. In the event that the initial business combination does not close, the Company may use a portion of the working capital held outside the trust account to repay the Working Capital Loans but no proceeds from the trust account would be used to repay the Working Capital Loans. Up to $1,500,000 of such Working Capital Loans may be convertible into warrants of the post-business combination entity at a price of $1.00 per warrant at the option of the lender. Such warrants would be identical to the private placement warrants. Except as set forth above, the terms of Working Capital Loans, if any, have not been determined and no written agreements exist with respect to such loans. As of December 31, 2022 and 2021, the Company had no borrowings under the Working Capital Loans.

Administrative Service Fee and Reimbursements

Subsequent to the closing of the initial public offering, the Company will pay its Sponsor $10,000 per month for office space, secretarial and administrative services provided to members of the management team. Upon completion of the initial business combination or the Company's liquidation, the Company will cease paying these monthly fees. For the year ended December 31, 2022 and for the period from January 28, 2021 (inception) through December 31, 2021, the Company incurred $120,000 and $50,000 of such fees, respectively, included as general and administrative fees — related party on the accompanying statements of operations. As of December 31, 2022 and 2021, approximately $120,000 and $50,000, respectively, of such fees are included as due to related party on the accompanying consolidated balance sheets.

The Sponsor, officers and directors, or any of their respective affiliates will be reimbursed for any out-of-pocket expenses incurred in connection with activities on the Company's behalf such as identifying potential target businesses and performing due diligence on suitable business combinations. The Company's audit committee will review on a quarterly basis all payments that were made by the Company to the Sponsor, directors, officers or directors of the Company, or any of their affiliates. As of December 31, 2022 and 2021, there were approximately

$1.4 million and $0, respectively, of such fees included as due to related party on the accompanying consolidated balance sheets.

Note 5 — Commitments and Contingencies

Registration Rights

Prior to the consummation of the Business Combination, the holders of the (i) founder shares, which were issued in a private placement prior to the closing of the initial public offering, (ii) private placement warrants, which were issued in a private placement simultaneously with the closing of the initial public offering and the shares of Class A common stock underlying such private placement warrants and (iii) private placement warrants that may be issued upon conversion of Working Capital Loans had registration rights to require the Company to register a sale of any of its securities held by them prior to the consummation of the initial business combination pursuant to a registration rights agreement which was signed on the effective date of the initial public offering. The holders of these securities were entitled to make up to three demands, excluding short form demands, that the Company registers such securities. In addition, the holders had certain "piggy-back" registration rights with respect to registration statements filed subsequent to the Company's completion of its initial business combination. The Company would bear the expenses incurred in connection with the filing of any such registration statements. In addition, the Anchor Investors would, upon receipt of their founder shares, execute a registration rights agreement with respect to their founder shares. These registration rights terminated in connection with the consummation of the Business Combination.

In connection with the consummation of the Business Combination, AMCI, the Sponsor, Legacy LanzaTech, and certain of the Legacy LanzaTech stockholders and AMCI stockholders entered into a Registration Rights Agreement (the "Registration Rights Agreement"), pursuant to which, among other things, such stockholders were granted certain registration rights with respect to certain securities held by them.

In addition, the Registration Rights Agreement provides that the Sponsor, then-holders of all outstanding shares of the Company's Class B common stock, and certain holders of shares of Legacy LanzaTech capital stock will be subject to certain restrictions on transfer with respect to their shares of common stock and LanzaTech warrants. Such restrictions will end (i) with respect to the Sponsor and the holders of the Company's Class B common stock, on the earlier of (a) the date that is one year following the closing of the Business Combination, (b) such date upon which the closing price per share of common stock equals or exceeds $12.00 per share for any 20 trading days within any 30 day trading period commencing at least 150 days after the closing of the Business Combination and (c) the date on which LanzaTech completes a liquidation, merger, capital stock exchange, reorganization or other similar transaction after the Business Combination that results in all of LanzaTech's stockholders having the right to exchange their shares of common stock for cash, securities or other property, and (ii) with respect to the holders of shares of Legacy LanzaTech capital stock, on the date that is six months following the closing of the Business Combination.

Underwriting Agreement

The Company granted the underwriters a 45-day option from the date of the underwriting agreement to purchase up to an additional 2,250,000 units to cover over-allotments, if any. On September 17, 2021, the over-allotment option expired unexercised, resulting in the forfeiture of 562,500 shares of founder shares.

The underwriters were paid an underwriting discount of 1% of the gross proceeds of the initial public offering, or $1,500,000. Additionally, in connection with the initial public offering, the Company agreed to pay the underwriters a deferred underwriting fee of 3.5% of the gross proceeds, or $5,250,000, of the initial public offering upon the completion of the Company's initial business combination. On September 29, 2022, as discussed further below, Evercore Group L.L.C., ("Evercore") the representative of the underwriters of the initial public offering, waived its deferred underwriting fee that accrued from its participation in the initial public offering. The Company recognized approximately $4.9 million of the commissions waiver as a reduction to additional paid-in capital in the statements of changes in stockholders' deficit for the year ended December 31, 2022, as this portion represents an extinguishment of deferred underwriting commissions on public shares which was originally recognized in accumulated deficit. The remaining balance of approximately $172,000 is recognized as a gain from extinguishment

of deferred underwriting commissions on public shares in the consolidated statements of operations, which represents the original amount expensed in the Company's initial public offering.

On September 27, 2022 and September 29, 2022, the Company received notice and a formal letter, respectively, from Evercore Group, L.L.C., an underwriter in the Company's initial public offering, advising that it had, among other things, (i) resigned from and ceased or refused to act in, its roles as co-placement agent, co-capital markets advisor and exclusive financial advisor to the Company in connection with the Merger and as underwriter in the Company's initial public offering and (ii) waived its right to receive an aggregate of $13,050,000 in fees, all of which were contingent upon and payable upon the closing of the Merger, consisting of $500,000 for its role as co-placement agent, $7,500,000 for its role as exclusive financial advisor and $5,050,000 of deferred underwriting fees accrued from its participation in the Company's initial public offering, as well as any expense reimbursements owed to it under those arrangements.

Note 6 — Class A Common Stock Subject to Possible Redemption

The Company's Class A common stock features certain redemption rights that are considered to be outside of the Company's control and subject to the occurrence of future events. The Company is authorized to issue 280,000,000 shares of Class A common stock with a par value of $0.0001 per share. Holders of the Company's Class A common stock are entitled to one vote for each share. As of December 31, 2022 and 2021, there were 15,000,000 shares of Class A common stock outstanding subject to possible redemption and are classified outside of permanent equity in the balance sheet.

The Class A common stock subject to possible redemption reflected on the balance sheets is reconciled in the following table:

Gross proceeds	$	150,000,000
Less:		
Amount allocated to public warrants		(5,100,000)
Class A common stock issuance costs		(13,306,092)
Plus:		
Accretion of carrying value to redemption value		18,406,092
Class A common stock subject to possible redemption, December 31, 2021	$	150,000,000
Subsequent remeasurement of Class A common stock subject to possible redemption		1,113,633
Class A common stock subject to possible redemption, December 31, 2022	$	151,113,633

Note 7 — Stockholders' Deficit

Preferred Stock — The Company is authorized to issue 1,000,000 shares of preferred stock with a par value of $0.0001 and provides that shares of preferred stock may be issued from time to time in one or more series. The Company's board of directors will be authorized to fix the voting rights, if any, designations, powers, preferences, the relative, participating, optional or other special rights and any qualifications, limitations and restrictions thereof, applicable to the shares of each series. As of December 31, 2022 and 2021, there were no shares of preferred stock issued or outstanding.

Class A Common Stock — The Company is authorized to issue 280,000,000 shares of Class A common stock with a par value of $0.0001 per share. As of December 31, 2022 and 2021, there were 15,000,000 shares of Class A common stock issued and outstanding, all of which were subject to possible redemption and are classified as temporary equity (see Note 6).

Class B Common Stock — The Company is authorized to issue 20,000,000 Class B common stock with a par value of $0.0001 per share. As of December 31, 2022 and 2021, there were 3,750,000 shares of Class B common stock issued and outstanding (see Note 4).

Holders of Class A common stock and holders of Class B common stock will vote together as a single class on all matters submitted to a vote of the Company's stockholders except as required by law. Unless specified in the Company's amended and restated certificate of incorporation, or as required by applicable provisions of the Delaware General Corporation Law ("DGCL") or applicable stock exchange rules, the affirmative vote of a majority of the Company's shares of common stock that are voted is required to approve any such matter voted on by its stockholders.

The Class B common stock will automatically convert into shares of Class A common stock concurrently with or immediately following the consummation of the initial business combination on a one-for-one basis, subject to adjustment for stock splits, stock dividends, reorganizations, recapitalizations and the like, and subject to further adjustment as provided in the Amended and Restated Certificate of Incorporate. In the case that additional shares of Class A common stock or equity-linked securities are issued or deemed issued in connection with the initial business combination, the number of shares of Class A common stock issuable upon conversion of all founder shares will equal, in the aggregate, on an as-converted basis, 20% of the total number of shares of Class A common stock outstanding after such conversion (after giving effect to any redemptions of shares of Class A common stock by public stockholders), including the total number of shares of Class A common stock issued, or deemed issued or issuable upon conversion or exercise of any equity-linked securities or rights issued or deemed issued, by the Company in connection with or in relation to the consummation of the initial business combination, excluding any shares of Class A common stock or equity-linked securities or rights exercisable for or convertible into shares of Class A common stock issued, or to be issued, to any seller in the initial business combination and any private placement warrants issued to the Sponsor, officers or directors upon conversion of working capital loans, provided that such conversion of founder shares will never occur on a less than one-for-one basis.

Note 8 — Warrants

As of December 31, 2022 and 2021, in connection with the initial public offering, the Company has 7,500,000 public warrants and 3,500,000 private placement warrants outstanding.

Each whole warrant entitles the registered holder to purchase one share of Class A common stock at a price of $11.50 per share, subject to adjustment as discussed below, at any time commencing 30 days after the completion of the initial business combination, provided that the Company has an effective registration statement under the Securities Act covering the shares of Class A common stock issuable upon exercise of the warrants and a current prospectus relating to them is available (or the Company permits holders to exercise their warrants on a cashless basis under the circumstances specified in the warrant agreement) and such shares are registered, qualified or exempt from registration under the securities, or blue sky, laws of the state of residence of the holder. The warrants will expire five years after the completion of the Company's initial business combination, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

The Company has agreed that as soon as practicable, but in no event later than 15 business days after the closing of the initial business combination, it will use its best efforts to file with the SEC a registration statement for the registration, under the Securities Act, of the Class A common stock issuable upon exercise of the warrants. The Company will use its best efforts to cause the same to become effective and to maintain the effectiveness of such registration statement, and a current prospectus relating thereto, until the expiration of the warrants in accordance with the provisions of the warrant agreement. If a registration statement covering the shares of Class A common stock issuable upon exercise of the warrants is not effective by the 60th business day after the closing of the initial business combination, warrant holders may, until such time as there is an effective registration statement and during any period when the Company will have failed to maintain an effective registration statement, exercise warrants on a "cashless basis" in accordance with Section 3(a)(9) of the Securities Act or another exemption. Notwithstanding the above, if the Company's Class A common stock are at the time of any exercise of a warrant not listed on a national securities exchange such that they satisfy the definition of a "covered security" under Section 18(b)(1) of the Securities Act, the Company may, at its option, require holders of public warrants who exercise their warrants to do so on a "cashless basis" in accordance with Section 3(a)(9) of the Securities Act and, in the event the Company so elect, it will not be required to file or maintain in effect a registration statement, and in the event the Company do not so elect, it will use its best efforts to register or qualify the shares under applicable blue sky laws to the extent an exemption is not available.

Once the warrants become exercisable, the Company may redeem the outstanding warrants:

- in whole and not in part;
- at a price of $0.01 per warrant;
- upon a minimum of 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the closing price of the Class A common stock equals or exceeds $18.00 per share (as adjusted for adjustments to the number of shares issuable upon exercise or the exercise price of a warrant as described under the heading "— Warrants — Public Stockholders' Warrants — Anti-Dilution Adjustments") for any 20 trading days within a 30-trading day period ending three trading days before we send the notice of redemption to the warrant holders.

In addition, if (x) the Company issues additional shares of Class A common stock or equity-linked securities for capital raising purposes in connection with the closing of our initial business combination at an issue price or effective issue price of less than $9.20 per share (with such issue price or effective issue price to be determined in good faith by the Company's board of directors and, in the case of any such issuance to the Sponsor or its affiliates, without taking into account any founder shares held by the Sponsor or such affiliates, as applicable, prior to such issuance) (the "Newly Issued Price"), (y) the aggregate gross proceeds from such issuances represent more than 60% of the total equity proceeds, and interest thereon, available for the funding of our initial business combination on the date of the consummation of the initial business combination (net of redemptions), and (z) the volume weighted average trading price of the Company's Class A common stock during the 20 trading day period starting on the trading day prior to the day on which the Company consummate the initial business combination (such price, the "Market Value") is below $9.20 per share, the exercise price of the warrants will be adjusted (to the nearest cent) to be equal to 115% of the higher of the Market Value and the Newly Issued Price, the $18.00 per share redemption trigger price described above under "— Redemption of warrants when the price per share of Class A common stock equals or exceeds $18.00" will be adjusted (to the nearest cent) to be equal to 180% of the higher of the Market Value and the Newly Issued Price, and the $10.00 per share redemption trigger price described above under "— Redemption of warrants when the price per share of Class A common stock equals or exceeds $10.00" will be adjusted (to the nearest cent) to be equal to the higher of the Market Value and the Newly Issued Price.

Note 9 — Fair Value Measurement

The following table presents information as of December 31, 2022 and 2021 about the Company’s financial assets and liabilities that are measured at fair value on a recurring basis by level within the fair value hierarchy:

December 31, 2022

Description	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:			
Investments held in trust account	$ 152,296,551	$ —	$ —
Liabilities:			
Derivative liabilities – public warrants	$ 1,800,000	$ —	$ —
Derivative liabilities – private placement warrants	$ —	$ —	$ 840,370

December 31, 2021

Description	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:			
Investments held in trust account	$ 150,006,015	$ —	$ —
Liabilities:			
Derivative liabilities – public warrants	$ 3,825,000	$ —	$ —
Derivative liabilities – private placement warrants	$ —	$ —	$ 1,785,000

Transfers to/from Levels 1, 2 and 3 are recognized at the beginning of the reporting period. The estimated fair value of public warrants was transferred from a Level 3 fair value measurement to a Level 1 measurement, when the public warrants were separately listed and traded in September 2021. There were no other transfers between levels in the year ended December 31, 2022 and in the period from January 28, 2021 (inception) through December 31, 2021.

Level 1 assets include investments in mutual funds invested in U.S. government securities and derivative warrant liabilities (public warrants). The Company uses inputs such as actual trade data, quoted market prices from dealers or brokers, and other similar sources to determine the fair value of its investments.

For periods where no observable traded price is available, the fair value of the public warrants has been estimated using a Monte-Carlo simulation model and the private placement warrants has been estimated using a Black-Scholes option pricing model. For periods subsequent to the detachment of the public warrants from the units, the fair value of the public warrants is based on the observable listed price for such warrants. The estimated fair value of the public and private placement warrants, prior to the public warrants being traded in an active market, was determined using Level 3 inputs. Inherent in a Monte-Carlo simulation and Black-Scholes option pricing model are assumptions related to the unit price, expected volatility, risk-free interest rate, term to expiration, and dividend yield. The unit price is based on the publicly traded price of the units as of the measurement date. The Company estimated the volatility for the public and private placement warrants based on the implied volatility from the traded prices of warrants issued by other special purpose acquisition companies. The risk-free interest rate is based on interpolated U.S. Treasury rates, commensurate with a similar term to the public and private placement warrants. The expected life of the warrants is assumed to be equivalent to their remaining contractual term. Finally, the Company does not anticipate paying a dividend. Any changes in these assumptions can change the valuation significantly.

For the year ended December 31, 2022 and for the period from January 28, 2021 (inception) through December 31, 2021, the Company recognized a change to the statement of operations resulting from a decrease (increase) in

the fair value of liabilities of approximately $3.0 million and $1.9 million, respectively, presented as change in fair value of derivative warrant liabilities on the accompanying consolidated statements of operations.

The following table provides quantitative information regarding Level 3 fair value measurements inputs at their measurement dates:

	As of December 31, 2022	As of December 31, 2021
Exercise price	$ 11.50	$ 11.50
Volatility	5.2 %	9.6 %
Stock price	$ 9.98	$ 9.66
Remaining term (years)	5.09	5.75
Risk-free rate	3.91 %	1.32 %

The change in the fair value of the derivative warrant liabilities, measured using Level 3 inputs, for the year ended December 31, 2022 and for the period from January 28, 2021 (inception) through December 31, 2021 is summarized as follows:

Derivative warrant liabilities at January 28, 2021 (inception)	$ —
Issuance of Public and Private Warrants	7,515,000
Transfer of Public Warrants to Level 1	(5,100,000)
Change in fair value of derivative liabilities	(630,000)
Derivative warrant liabilities at December 31, 2021	1,785,000
Change in fair value of derivative liabilities	944,630
Derivative warrant liabilities at December 31, 2022	$ 840,370

Note 10 — Income Taxes

The Company files income tax returns in the U.S. federal and Connecticut jurisdictions and is subject to examination. The income tax provision consists of the following:

	For the Year Ended December 31, 2022	For the Period from January 28, 2021 (inception) through December 31, 2021
Current		
Federal	$ 309,320	$ —
State	—	—
Deferred		
Federal	(15,220)	(290,181)
State	—	
Valuation allowance	15,220	290,181
Income tax provision	$ 309,320	$ —

The Company's net deferred tax assets are as follows:

	December 31, 2022	December 31, 2021
Deferred tax assets:		
Start-up/Organization costs	$ 305,401	$ 210,307
Net operating loss carryforwards	—	79,874
Total deferred tax assets	305,401	290,181
Valuation allowance	(305,401)	(290,181)
Deferred tax asset, net of allowance	$ —	$ —

In assessing the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which temporary differences representing net future deductible amounts become deductible. Management considers the scheduled reversal of deferred tax assets, projected future taxable income and tax planning strategies in making this assessment. After consideration of all of the information available, management believes that significant uncertainty exists with respect to future realization of the deferred tax assets and has therefore established a full valuation allowance. For the year ended December 31, 2022 and for the period from January 28, 2021 (inception) through December 31, 2021, the valuation allowance was$305,401 and $290,181, respectively. As of December 31, 2021, the Company had $380,351 of U.S. federal net operating loss carryovers, which do not expire, available to offset future taxable income. As of December 31, 2022, the net operating loss carryovers were fully utilized. As such there were no federal net operating loss carryovers to offset future taxable income.

There were no unrecognized tax benefits as of December 31, 2022 and 2021. No amounts were accrued for the payment of interest and penalties as of December 31, 2022 and 2021. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position. The Company is subject to income tax examinations by major taxing authorities since inception. The Company's management does not expect that the total amount of unrecognized tax benefits will materially change over the next twelve months.

A reconciliation of the statutory federal income tax rate (benefit) to the Company's effective tax rate (benefit) is as follows:

	For the Year Ended December 31, 2022	For the Period from January 28, 2021 (inception) through December 31, 2021
Statutory federal income tax rate	21.0 %	21.0 %
Change in fair value of derivative warrant liabilities	59.4 %	(855.9)%
Offering costs allocated to derivative warrant liabilities	0.0 %	214.0 %
Gain from settlement of deferred underwriting commissions	3.4 %	— %
Capitalized merger costs	(111.9)%	— %
Change in valuation allowance	(1.5)%	620.9 %
Income tax expense	(29.5)%	0.0 %

Note 11 — Subsequent Events

The Company evaluated subsequent events and transactions that occurred up to the date the consolidated financial statements were issued. Based upon this review, except as noted in Note 1, the Company did not identify any subsequent events that would have required adjustment or disclosure in the consolidated financial statements.

Management's Discussion and Analysis of Financial Condition and Results of Operations of AMCI II Acquisition Corp. for the year ended December 31, 2022

Capitalized terms used but not defined herein have the meanings ascribed to them in LanzaTech Global, Inc.'s Current Report on Form 8-K/A. References in this section to the "Company," "AMCI Acquisition Corp. II," "AMCI," "our," "us" or "we" refer to AMCI Acquisition Corp. II prior to the consummation of the Business Combination. In connection with the consummation of the Business Combination, AMCI's Class A common stock, par value $0.0001 per share ("Class A common stock"), and AMCI's Class B common stock, par value $0.0001 per share ("Class B common stock") were reclassified into a single class of common stock, par value $0.0001 per share, of LanzaTech. The following discussion and analysis of the Company's financial condition and results of operations should be read in conjunction with the financial statements and the notes thereto contained elsewhere in this Annual Report on Form 10-K. Certain information contained in the discussion and analysis set forth below includes forward-looking statements that involve risks and uncertainties.

Overview

Prior to February 8, 2023, the Company was a blank check company. The Company was originally incorporated as a Delaware corporation on January 28, 2021. On the Closing Date, the Company consummated its Business Combination with Legacy LanzaTech.

The Business Combination is a subsequent event that occurred after the periods for which the financial information herein is presented. The Company's financial statement presentation to be included in quarterly and annual filings with the Securities and Exchange Commission ("SEC") on Forms 10-Q and 10-K with respect to periods subsequent to the Business Combination will include the consolidated financial statements of Legacy LanzaTech and its subsidiaries for periods prior to the completion of the Business Combination and of LanzaTech Global, Inc. for periods from and after the Closing Date. The financial information included in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" reflects the historical operations of AMCI, the legal acquirer, unless otherwise noted.

Our sponsor was AMCI Sponsor II LLC (the "Sponsor").

Results of Operations

Our entire activity from inception up to December 31, 2022 was in preparation for our formation, the initial public offering, identifying the target for the Business Combination and consummating the Business Combination. We did not generate any operating revenues prior to the consummation of the Business Combination.

For the year ended December 31, 2022, we had a net loss of approximately $1.4 million, which consisted of approximately a $3.0 million gain from changes in fair value of derivative warrant liabilities, approximately $172,000 gain from extinguishment of deferred underwriting commissions on public shares and approximately $2.3 million of income from investments held in the trust account, partially offset by approximately $5.9 million in general and administrative expenses, $120,000 in general and administrative expenses - related party, approximately $246,000 in capital based tax expenses, approximately $200,000 in franchise tax expenses, and approximately $309,000 in income tax expenses.

For the period from January 28, 2021 (inception) through December 31, 2022, we had net income of approximately $47,000, which consisted of approximately a $1.9 million gain from changes in fair value of derivative warrant liabilities and approximately $6,000 of income from investments held in the trust account, partially offset by approximately $951,000 in general and administrative expenses, $50,000 in general and administrative expenses - related party, approximately $198,000 in capital base tax expenses, approximately $188,000 in franchise tax expenses, and approximately $476,000 in offering costs allocated to derivative warrant liabilities.

Liquidity and Capital Resources

As of December 31, 2022, we had approximately $7,000 in operating cash and a working capital deficit of approximately $5.9 million.

On January 29, 2021, the Sponsor agreed to loan the Company up to $300,000 to be used for a portion of the expenses of the initial public offering

Our liquidity needs up to December 31, 2022 have been satisfied through a contribution of $25,000 from the Sponsor to cover certain offering costs in exchange for the issuance of founder shares, and the Sponsor's loan to the Company of up to $300,000 (the "Note"). In addition to the Note, the Sponsor also paid certain administrative expenses and offering costs on behalf of the Company. Subsequent to the initial public offering, net proceeds from the private sale of an aggregate of 3,500,000 warrants (the "private placement warrants") to the Sponsor (the "private placement") of $0.9 million were placed in the operating account for working capital purposes. In addition, in order to finance transaction costs in connection with a business combination, the Sponsor or an affiliate of the Sponsor, or certain of our officers and directors may, but were not obligated to, loan the Company funds as may be required on a non-interest basis ("Working Capital Loans"). On March 28, 2022, the Company entered into a noninterest-bearing Working Capital Loan with its Sponsor for the principal amount of up to $1.5 million. As of December 31, 2022 and 2021, there were no amounts outstanding under any Working Capital Loan.

In connection with the execution of the Merger Agreement, AMCI entered into subscription agreements (as amended on December 7, 2022, the "Initial Subscription Agreements") with certain investors (the "Initial PIPE Investors"). AMCI entered into additional subscription agreements with certain institutional and accredited investors (the "PIPE Investors") on October 8, 2022 (as amended on December 7, 2022) and February 6, 2022 (collectively, the "PIPE Subscription Agreements" and together with the subscription agreement between AMCI and ArcelorMittal, the "Subscription Agreements"). Pursuant to the Subscription Agreements, the PIPE Investors purchased an aggregate of 18,500,000 shares of common stock in a private placement at a price of $10.00 per share for an aggregate purchase price of $185 million (the "PIPE Investment"). Such aggregate number of shares and aggregate purchase price include 3,000,000 shares of common stock issued to ArcelorMittal pursuant to the AM SAFE with Legacy LanzaTech, as a result of which such PIPE Investor entered into a Subscription Agreement prior to the closing of the Business Combination. The PIPE Investment was consummated in connection with the consummation of the Business Combination. Upon closing of the Business Combination, the Company retained $153 million net of transaction expenses as working capital.

Upon closing of the Business Combination, the Company's immediate sources of liquidity include cash generated from operations, accounts receivable, and existing credit facilities of LanzaTech. Based on the foregoing, management believes that the Company will have sufficient working capital and borrowing capacity to meet its needs through one year from this filing..

Management continues to evaluate the impact of the COVID-19 pandemic on the industry and has concluded that while it is reasonably possible that the virus could have a negative effect on our financial position, results of our operations and/or search for a target company, the specific impact is not readily determinable as of the date of the financial statements. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Contractual Obligations

Registration Rights Agreement

In connection with the consummation of the Business Combination, AMCI and Legacy LanzaTech entered into a Registration Rights Agreement that AMCI, the Sponsor, certain stockholders of AMCI, Legacy LanzaTech, and certain stockholders of Legacy LanzaTech. Pursuant to the Registration Rights Agreement, we granted the parties thereto certain customary registration rights with respect to certain shares of common stock and warrants.

In addition, the Registration Rights Agreement provides that the Sponsor, then-holders of all outstanding shares of AMCI Class B common stock, and certain holders of shares of Legacy LanzaTech capital stock will be subject to

certain restrictions on transfer with respect to their shares of common stock and LanzaTech warrants. Such restrictions will end (i) with respect to the Sponsor and the holders of AMCI Class B common stock, on the earlier of (a) the date that is one year following the closing of the Business Combination, (b) such date upon which the closing price per share of common stock equals or exceeds $12.00 per share for any 20 trading days within any 30 day trading period commencing at least 150 days after the closing of the Business Combination and (c) the date on which LanzaTech completes a liquidation, merger, capital stock exchange, reorganization or other similar transaction after the Business Combination that results in all of LanzaTech's stockholders having the right to exchange their shares of common stock for cash, securities or other property, and (ii) with respect to the holders of shares of Legacy LanzaTech capital stock, on the date that is six months following the closing of the Business Combination.

Underwriting Agreement

We granted the underwriters a 45-day option from the date of the underwriting agreement to purchase up to an additional 2,250,000 units to cover over-allotments, if any. On September 17, 2021, the over-allotment option expired unexercised, resulting in the forfeiture of 562,500 shares of Class B common stock.

The underwriters were paid an underwriting discount of 1%of the gross proceeds of the initial public offering, or $1,500,000. Additionally in connection with the initial public offering, the Company agreed to pay the underwriters a deferred underwriting discount of 3.5% of the gross proceeds, or $5,250,000, of the initial public offering upon the completion of our initial business combination. On September 29, 2022, Evercore Group L.L.C. ("Evercore"), the representative of the underwriters of our initial public offering, waived their deferred underwriting fee that accrued from its participation in our initial public offering. The Company recognized approximately $4.9 million of the commissions waiver as a reduction to additional paid-in capital in the statements of changes in stockholders' deficit for the year ended December 31, 2022, as this portion represents an extinguishment of deferred underwriting commissions on public shares which was originally recognized in accumulated deficit. The remaining balance of approximately $172,000 is recognized as a gain from extinguishment of deferred underwriting commissions on public shares in the statements of operations, which represents the original amount expensed in the Company's initial public offering.

On September 27, 2022 and September 29, 2022, the Company received notice and a formal letter, respectively, from Evercore, advising, among other things, that it had, among other things, (i) resigned from and ceased or refused to act in, its roles as co-placement agent, co-capital markets advisor and exclusive financial advisor to the Company in connection with the Business Combination and as underwriter in the Company's initial public offering and (ii) waived its right to receive an aggregate of $13,050,000 in fees, all of which were contingent upon and payable upon the closing of the Business Combination, consisting of $500,000 for its role as co-placement agent, $7,500,000 for its role as exclusive financial advisor and $5,050,000 of deferred underwriting fees accrued from its participation in the Company's initial public offering, as well as any expense reimbursements owed to it under those arrangements.

Administrative Service Fee

Subsequent to the closing of the initial public offering, we have agreed to pay our Sponsor $10,000 per month for office space and secretarial and administrative services provided to members of the management team. Upon completion of the initial business combination or our liquidation, we will cease paying these monthly fees. For the year ended December 31, 2022 and for the period from January 28 (inception) through December 31, 2021, we incurred $120,000 and $50,000 of such fees, respectively, which are included as general and administrative fees - related party on the accompanying statement of operations.

Critical Accounting Policies Prior to the Business Combination

This management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to fair value of financial instruments and accrued expenses. We base our estimates on historical experience, known trends and events and

various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We have identified the following as our critical accounting policies:

Class A Common Stock Shares Subject to Possible Redemption

We account for our Class A common stock subject to possible redemption in accordance with the guidance in ASC Topic 480, "Distinguishing Liabilities from Equity." Class A common stock subject to mandatory redemption (if any) are classified as liability instruments and is measured at fair value. Conditionally redeemable Class A common stock (including Class A common stock that features redemption rights that are either within the control of the holder or subject to redemption upon the occurrence of uncertain events not solely within our control) are classified as temporary equity. At all other times, Class A common stock are classified as stockholders' equity. Our Class A common stock feature certain redemption rights that are considered to be outside of our control and subject to the occurrence of uncertain future events. Accordingly, as of the initial public offering, 15,000,000 shares of Class A common stock subject to possible redemption are presented at redemption value as temporary equity, outside of the stockholders' equity section of our balance sheet.

Under ASC 480-10-S99, we have elected to recognize changes in the redemption value immediately as they occur and adjust the carrying value of the security to equal the redemption value at the end of the reporting period. This method would view the end of the reporting period as if it were also the redemption date of the security. Effective with the closing of the initial public offering, we recognized the accretion from initial book value to redemption amount, which resulted in charges against additional paid-in capital (to the extent available) and accumulated deficit.

Derivative Financial Instruments

We do not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risks. We evaluate all of its financial instruments, including issued stock purchase warrants, to determine if such instruments are derivatives or contain features that qualify as embedded derivatives, pursuant to ASC 480 and FASB ASC Topic 815, "Derivatives and Hedging" ("ASC 815"). The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period.

The public warrants and the private placement warrants are recognized as derivative liabilities in accordance with ASC 815. Accordingly, we recognize the warrant instruments as liabilities at fair value and adjust the carrying value of the instruments to fair value at each reporting period until they are exercised. The initial fair value of the public warrants issued in connection with the initial public offering was estimated using a Monte-Carlo simulation model. The fair value of the public warrants as of December 31, 2022 and 2021 is based on observable listed prices for such warrants. The fair value of the private placement warrants as of December 31, 2022 and 2021 is determined using a Black-Scholes option pricing model. The determination of the fair value of the warrant liability may be subject to change as more current information becomes available and, accordingly, the actual results could differ significantly. Derivative warrant liabilities are classified as non-current liabilities as their liquidation is not reasonably expected to require the use of current assets or require the creation of current liabilities.

Net Income (Loss) Per Share of Common Stock

We comply with accounting and disclosure requirements of FASB ASC Topic 260, "Earnings Per Share." Prior to the Business Combination, we had two classes of shares, which are referred to as Class A common stock and Class B common stock. Income and losses are shared pro rata between the two classes of shares. Net income (loss) per common share is calculated by dividing the net income (loss) by the weighted average shares of common stock outstanding for the respective period.

The calculation of diluted net income (loss) does not consider the effect of the warrants underlying the units sold in the initial public offering and the private placement warrants to purchase an aggregate of 11,000,000 warrants in the calculation of diluted income (loss) per share, because their exercise is contingent upon future events and their inclusion would be anti-dilutive under the treasury stock method. As a result, diluted net income (loss) per

share is the same as basic net income (loss) per share for the period from January 28, 2021 (inception) through December 31, 2021. Accretion associated with the redeemable Class A common stock is excluded from earnings per share as the redemption value approximates fair value.

Recent Accounting Pronouncements

In June 2022, the FASB issued ASU 2022-03, ASC Subtopic 820 “Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions”. The ASU amends ASC 820 to clarify that a contractual sales restriction is not considered in measuring an equity security at fair value and to introduce new disclosure requirements for equity securities subject to contractual sale restrictions that are measured at fair value. The ASU applies to both holders and issuers of equity and equity-linked securities measured at fair value. The amendments in this ASU are effective for the Company in fiscal years beginning after December 15, 2023, and interim periods within those fiscal years. Early adoption is permitted for both interim and annual financial statements that have not yet been issued or made available for issuance. The Company is still evaluating the impact of this pronouncement on the financial statements.

Management does not believe that any other recently issued, but not yet effective, accounting standards updates, if currently adopted, would have a material effect on our financial statements.

Off-Balance Sheet Arrangements

As of December 31, 2022, we did not have any off-balance sheet arrangements as defined in Item 303(b)(1)(ii)(B) of Regulation S-K.

JOBS Act

The Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”) contains provisions that, among other things, relax certain reporting requirements for qualifying public companies. We qualify as an “emerging growth company” and under the JOBS Act are allowed to comply with new or revised accounting pronouncements based on the effective date for private (not publicly traded) companies. We are electing to delay the adoption of new or revised accounting standards, and as a result, we may not comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. As a result, the financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Additionally, we are in the process of evaluating the benefits of relying on the other reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, if, as an “emerging growth company,” we choose to rely on such exemptions we will not be required to, among other things, (i) provide an auditor’s attestation report on our system of internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) comply with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements and (iv) disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of the executive compensation to median employee compensation. These exemptions will apply for a period of five years following the completion of our initial public offering or until we are no longer an “emerging growth company,” whichever is earlier.

Audited consolidated financial statements of LanzaTech NZ, Inc. as of December 31, 2022 and 2021, and for the years ended December 31, 2022 and 2021

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of LanzaTech NZ, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of LanzaTech NZ, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of operations and comprehensive loss, consolidated statements of cash flows, and consolidated statements of changes in redeemable convertible preferred stock and shareholders' equity (deficit) for each of the two years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

Chicago, Illinois
March, 28, 2023

We have served as the Company’s auditor since 2021.

LANZATECH NZ, INC.

CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share data)

	Year Ended December 31,	
	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 83,045	$ 128,318
Trade and other receivables, net of allowance	11,695	2,878
Contract assets	18,000	11,700
Other current assets	11,157	5,779
Total current assets	123,897	148,675
Property, plant and equipment, net	19,689	14,148
Right of use assets	6,969	4,686
Equity Method Investment	10,561	24,752
Equity Security Investment	14,990	—
Other non-current assets	750	750
Total assets	$ 176,856	$ 193,011
Liabilities, Contingently Redeemable Preferred Stock, and Shareholders' Deficit		
Current liabilities:		
Accounts payable	$ 7,455	$ 2,444
Other accrued liabilities	6,621	7,059
AM SAFE liability	28,986	28,271
AM SAFE warrant	1,989	1,729
Contract liabilities	3,101	3,476
Accrued salaries and wages	7,031	4,261
Current lease liabilities	798	2,050
Total current liabilities	55,981	49,290
Non-current lease liabilities	6,615	3,283
Non-current contract liabilities	10,760	13,901
Brookfield SAFE liability	50,000	—
Other long-term liabilities	1,591	823
Total liabilities	124,947	67,297
Commitments and Contingencies (see note 14)		
Contingently Redeemable Preferred Stock		
Redeemable convertible preferred stock, $0.0001 par value; 29,747,033 shares authorized, 29,521,810 shares issued and outstanding as of December 31, 2022 and December 31, 2021, respectively	480,631	480,631
Shareholders' Deficit		
Common stock, $0.0001 par value; 36,327 shares authorized, 2,382,358 and 2,106,934 shares issued and outstanding as of December 31, 2022 and December 31, 2021, respectively	—	—
Additional paid-in capital	24,783	21,711
Accumulated other comprehensive income	2,740	3,261
Accumulated deficit	(456,245)	(379,889)
Total shareholders' deficit	$ (428,722)	$ (354,917)
Total liabilities, contingently redeemable preferred stock, and shareholders' deficit	$ 176,856	$ 193,011

See the accompanying Notes to the Consolidated Financial Statements.

LANZATECH NZ, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except share and per share data)

	Year Ended December 31,	
	2022	2021
Revenue:		
Revenue from contracts with customers - services	$ 27,798	$ 18,871
Revenue from contracts with customers - tangible products	$ 4,000	—
Revenue from collaborative arrangements	2,575	3,337
Revenue from related party transactions	2,970	3,253
Total revenue	37,343	25,461
Cost and operating expenses:		
Cost of revenue from contracts with customers - services (exclusive of depreciation shown below)	(22,912)	(13,167)
Cost of revenue from contracts with customers - tangible products (exclusive of depreciation shown below)	(3,648)	—
Cost of revenue from collaborative arrangements (exclusive of depreciation shown below)	(1,250)	(1,254)
Cost of revenue from related party transactions (exclusive of depreciation shown below)	(477)	(808)
Research and development expense	(53,191)	(44,229)
Depreciation expense	(4,660)	(3,806)
Selling, general and administrative expense	(26,804)	(13,216)
Total cost and operating expenses	(112,942)	(76,480)
Loss from operations	(75,599)	(51,019)
Other (expense) income		
Interest income (expense), net	8	(7)
Gain on extinguishment of debt	—	3,065
Other (expense) income, net	(2,757)	(673)
Total other (expense) income, net	(2,749)	2,385
Loss before income taxes	(78,348)	(48,634)
Income tax expense	—	—
Gain from equity method investees, net	1,992	1,945
Net loss	$ (76,356)	$ (46,689)
Other comprehensive loss:		
Foreign currency translation adjustments	(1,449)	95
Comprehensive loss	$ (77,805)	$ (46,594)
Unpaid cumulative dividends on preferred stock	(38,672)	(36,758)
Net loss allocated to common shareholders	$ (115,028)	$ (83,447)
Net loss per common share - basic and diluted	$ (54.10)	$ (42.59)
Weighted-average number of common shares outstanding - basic and diluted	2,126,346	1,959,165

LANZATECH NZ, INC.

CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND SHAREHOLDERS' EQUITY (DEFICIT)
(all amounts in thousands, except share data)

	Redeemable Convertible Preferred Stock		Common Stock Outstanding		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Shareholders' Deficit
	Shares	Amount	Shares	Amount				
Balance at January 1, 2021	25,729,542	$394,408	1,656,415	$ —	$ 18,818	$ (333,200)	$ 3,166	$ (311,216)
Issuance of Series F Preferred Stock, net of issuance cost of $0	3,634,210	83,073	—	—	—	—	—	—
Exercise of warrants	158,058	3,150	—	—	—	—	—	—
Share-based compensation expense	—	—	—	—	2,531	—	—	2,531
Repurchase of equity instruments	—	—	—	—	(396)	—	—	(396)
Net loss	—	—	—	—	—	(46,689)	—	(46,689)
Issuance of common stock upon exercise of options	—	—	450,519	—	758	—	—	758
Foreign currency translation	—	—	—	—	—	—	95	95
Balance at December 31, 2021	29,521,810	$480,631	2,106,934	$ —	$ 21,711	$ (379,889)	$ 3,261	$ (354,917)
Share-based compensation expense	—	—	—	—	2,527	—	—	2,527
Repurchase of equity instruments	—	—	—	—	(649)	—	—	(649)
Net loss	—	—	—	—	—	(76,356)	—	(76,356)
Issuance of common stock upon exercise of options	—	—	275,424	—	1,194	—	—	1,194
Transfer from foreign currency translation to equity security investment	—	—	—	—	—	—	928	928
Foreign currency translation	—	—	—	—	—	—	(1,449)	(1,449)
Balance at December 31, 2022	29,521,810	$480,631	2,382,358	$ —	$ 24,783	$ (456,245)	$ 2,740	$ (428,722)

See the accompanying Notes to the Consolidated Financial Statements.

LANZATECH NZ, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,	
	2022	2021
Cash Flows From Operating Activities:		
Net loss	$ (76,356)	$ (46,689)
Adjustments to reconcile net loss to net cash used in operating activities:		
Share-based compensation expense	2,527	2,531
Loss on change in fair value of SAFE and warrant liabilities	1,949	563
Bad debt expense and recoveries	—	(27)
Depreciation of property, plant and equipment	4,660	3,806
Non-cash lease expense	1,825	1,679
Non-cash recognition of licensing revenue	(2,160)	(2,022)
Gain from equity method investees, net	(1,992)	(1,945)
PPP loan forgiveness	—	(3,065)
Gain from disposal of PPE	(49)	—
Net foreign exchange loss	668	55
Changes in operating assets and liabilities:		
Accounts receivable, net	(8,817)	2,670
Contract assets	(6,246)	(5,514)
Other assets	(5,127)	(941)
Accounts payable and accrued salaries and wages	8,243	1,256
Contract liabilities	(488)	5,762
Operating lease liabilities	(2,028)	(1,618)
Other liabilities	(1,312)	908
Net cash used in operating activities	$ (84,703)	$ (42,591)
Cash Flows From Investing Activities:		
Purchase of property, plant and equipment	(10,735)	(5,752)
Proceeds from disposal of property, plant and equipment	49	5
Net cash used in investing activities	$ (10,686)	$ (5,747)
Cash Flows From Financing Activities:		
Proceeds from issue of equity instruments of the Company	1,194	83,831
Proceeds from exercise of a warrant	—	3,150
Proceeds from issue of SAFE and warrant instruments	50,000	30,000
Repurchase of equity instruments of the Company	(649)	(396)
Repayment of borrowings	—	(570)
Net cash provided by financing activities	$ 50,545	$ 116,015
Net (decrease) increase in cash, cash equivalents and restricted cash	(44,844)	67,677
Cash, cash equivalents and restricted cash at beginning of period	128,732	60,909
Effects of currency translation on cash, cash equivalents and restricted cash	(178)	146
Cash, cash equivalents and restricted cash at end of period	$ 83,710	$ 128,732
Supplemental disclosure of non-cash investing and financing activities:		
Acquisition of property, plant and equipment under accounts payable	246	708
Receipt of common shares as payment for option exercises	1,944	938
Right-of-use asset additions	4,108	—
PPP loan forgiveness	—	3,065

See the accompanying Notes to the Consolidated Financial Statements.

Note 1 — Description of the Business

Effective October 28, 2021, LanzaTech New Zealand Limited filed a Certificate of Incorporation to form a new entity in Delaware, LanzaTech NZ, Inc. and migrated the country of domicile of its global headquarters from New Zealand to Delaware. The reporting entity is LanzaTech NZ, Inc. and its subsidiaries (collectively, "the Company" or "LanzaTech"). LanzaTech NZ, Inc. is a profit-oriented entity previously incorporated in New Zealand. The amendment of the Article of Incorporation was approved by the Board of Directors of LanzaTech and was effected by the filing of a Certificate of Incorporation with the Delaware Secretary of State.

By using the Company's proprietary fermentation technology, the Company's customers can convert certain carbon-rich waste gases into fuels and chemicals.The Company licenses its technology to customers and sells biocatalysts used in the fermentation process. It also performs related services such as feasibility studies, engineering services, and research and development ("R&D") in biotechnology for commercial and government customers. The Company also purchases the low carbon ethanol produced at customer facilities employing the Company's technology and sells it under the brand name CarbonSmart. As of December 31, 2022, the Company's partners operate three commercial scale waste-to-gas ethanol plants in China, with others currently in development in various countries compared to two commercial scale waste-to-gas ethanol plants in Chain as of December 31, 2021.

Proposed Merger

On March 8, 2022, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") with AMCI Acquisition Corp. II, a Delaware corporation ("AMCI") and AMCI Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of AMCI ("Merger Sub"). Under the Merger Agreement, Merger Sub will merge with and into LanzaTech, with LanzaTech surviving the Merger as a wholly-owned subsidiary of AMCI ("the Business Combination"). In connection with the Business Combination, AMCI will be renamed LanzaTech Global, Inc. ("New LanzaTech"). AMCI has agreed to acquire all of the outstanding equity interests of LanzaTech at a valuation of approximately $1.8 billion. Completion of the transaction is subject to certain customary regulatory consents and approval by stockholders of AMCI and the Company.

The Merger Agreement was amended on December 7, 2022, to provide for, among other things, (i) the inclusion of the aggregate net proceeds from each of the ArcelorMittal ("AM") Simple Agreement for Future Equity ("SAFE") Note and Brookfield SAFE in the Acquiror Closing Cash Amount, (ii) the reduction of the Minimum Closing Cash Condition from $250,000 to $230,000, (iii) the clarification that, to the extent that the Brookfield SAFE remains unexercised at Closing, it will be assumed by AMCI, remain in effect on the same terms and conditions as are in effect prior to the Closing and thereafter entitle the holder thereof to be issued shares of common stock in AMCI after the Closing, (iv) the clarification that, in the event that it becomes reasonably apparent to the parties that the Acquiror Closing Cash Amount will be less than the Minimum Closing Cash Condition, AMCI will use commercially reasonable efforts to enter into non-redemption agreements, or similar agreements, as may be necessary to satisfy the Minimum Closing Cash Condition, (v) the extension of the outside date applicable to the Closing from December 7, 2022 to February 28, 2023 and (vi) the elimination of LanzaTech's right to terminate the agreement in the event that we fail to, on or prior to July 7, 2022, enter into one or more additional subscription agreements or non-redemption agreements as a result of which the sum of the PIPE Investment Amount (including net proceeds under the AM SAFE Note to LanzaTech) and the aggregate number of shares of Class A common stock subject to non-redemption agreements multiplied by $10.00, minus certain transaction expenses and other liabilities at Closing, would be equal to at least the Minimum Closing Cash Condition.

In connection with the Merger Agreement, AMCI entered into subscription agreements with certain investors pursuant to which AMCI agreed to issue and sell a private placement to close immediately prior to the Business Combination.The transaction closed on February 8, 2023. Please refer to Note 16, *Subsequent Events*.

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States of America (“US GAAP"). The consolidated financial statements include the accounts of LanzaTech NZ, Inc. and its wholly-owned consolidated subsidiaries. All significant intercompany transactions and balances have been eliminated in consolidation.

As part of its evaluation, the Company makes judgments in determining whether an entity is a variable interest entity (“VIE”) and, if so, whether it is the primary beneficiary of the VIE and is thus required to consolidate the entity. A VIE is a legal entity that has a total equity investment that is insufficient to finance its activities without additional subordinated financial support or whose equity investors lack the characteristics of a controlling financial interest. Our variable interest arises from contractual, ownership or other monetary interests in the entity, which change with fluctuations in the fair value of the entity’s net assets. A VIE is consolidated by its primary beneficiary, the party that has both the power to direct the activities that most significantly impact the VIE’s economic performance, and the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. We consolidate a VIE when we are deemed to be the primary beneficiary. We assess whether or not we are the primary beneficiary of a VIE on an ongoing basis. If we are not deemed to be the primary beneficiary in a VIE, we account for the investment or other variable interests in a VIE in accordance with applicable US GAAP.

The Company holds interests in certain VIEs for which it has been determined the Company is not the primary beneficiary. The Company's variable interests primarily relate to entities in which the Company has a non-controlling equity interest. Although these financial arrangements resulted in holding variable interests in these entities, they do not empower the Company to direct the activities of the VIEs that most significantly impact the VIEs' economic performance. The Company's interests in the VIEs are, therefore, accounted for under the equity method of accounting or at fair value (including, when applicable, the practicability exception to fair value under ASC 321-10-35). Refer to Note 5 - *Investments*, for further information. The Company is exposed to the VIEs’ losses and other impairment indicators up to the carrying value of each investment and any amounts receivable from the VIE, less amounts payable. Refer to Note 12, *Related Party Transactions*, for further details on the transactions with VIEs.

Going Concern

The accompanying consolidated financial statements of the Company have been prepared in accordance with US GAAP and assuming the Company will continue as a going concern. The going concern basis of presentation assumes that the Company will continue in operation one year after the date these financial statements are issued and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business. The Company had cash and cash equivalents of $83,045 and an accumulated deficit of $(456,245) as of December 31, 2022 and cash outflows from operations of $(84,703) and a net loss of $(76,356) for the year ended December 31, 2022.

The Company has historically funded its operations through debt financing and issuance of equity securities. Based on the Company’s financial position as of the date these consolidated financial statements were available to be issued, the Company projects that it will be able to cover its liquidity needs for the next twelve months with cash on hand. Further, as a result of the Business Combination described in Note 1 closing on February 8, 2023, the Company received $153,042, which represents the proceeds from the Business Combination received net of transaction expenses paid at Closing and the amount paid to ACM ARRT H LLC in relation to the Forward Purchase Agreement. Accordingly, the Company’s consolidated financial statements have been prepared on the basis that it will continue as a going concern.

Use of Estimates

The preparation of financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and

liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Significant estimates include fair value of equity awards granted to both employees and non-employees, revenue recognized over time, AM SAFE, Brookfield SAFE and the AM SAFE warrants.

The Company uses the percentage of completion for both input and output methods to recognize revenue over time for certain contract with a customer. Under the output method, the Company exercises judgment and estimation when determining the percentage of completion against the total transaction price initially estimated. Under the input method, the Company exercises judgment and estimation when selecting the most indicative measure of such performance.

Additionally, most of our arrangements provide fixed consideration, however, when there are variable consideration elements, the Company estimates the transaction price and whether revenue should be constrained. Significant estimates and judgments are also used when a material right is provided to the customer. In these instances, the Company estimates the stand-alone selling price and apportions the total transaction price to this material right.Refer to Revenue Recognition section in Note 2 hereunder.

Changes in facts and circumstances or additional information may result in revised estimates, and actual results may differ from these estimates.

Segment Information

The Company operates as one operating segment. Operating segments are defined as components of an enterprise for which separate financial information is evaluated regularly by the chief operating decision maker ("CODM"), in deciding how to allocate resources and assess performance.

While the Company offers a variety of services and operates in multiple countries, the Company's business operates in one operating segment because most of the Company's service offerings are delivered and supported on a global basis, most of the Company's service offerings are deployed in a similar way, and the Company's CODM evaluates the Company's financial information and resources and assesses the performance of these resources on a consolidated basis. There are no segment managers who are held accountable by the CODM, or anyone else, for operations, operating results, and planning for components below the consolidated level. Accordingly, the Company has determined that it has a single reportable and operating segment. See Note 4, *Revenues*, for disaggregation of the Company's revenues by customer location and contract type.

Foreign Currencies

The Company's reporting currency is the U.S. Dollar. The Company has certain foreign subsidiaries where the functional currency is the local currency. All of the assets and liabilities of these subsidiaries are converted to U.S. dollars at the exchange rate in effect at the balance sheet date, income and expense accounts are translated at average rates for the period, and shareholder's equity accounts are translated at historical rates. The effects of translating financial statements of foreign operations into our reporting currency are recognized as an adjustment in accumulated other comprehensive income (loss).

The Company also has foreign subsidiaries that have a functional currency of the U.S. dollar. Purchases and sales of assets and income and expense items denominated in foreign currencies are remeasured into U.S. dollar amounts on the respective dates of such transactions. Net realized and unrealized foreign currency gains or losses relating to the differences between these recorded amounts and the U.S. dollar equivalent actually received or paid are included within other expense, net in the consolidated statements of operations and comprehensive loss.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the time of purchase to be cash equivalents. As of December 31, 2022 and December 31, 2021, the Company had $83,045 and $128,318 of cash and cash equivalents, respectively.

Restricted Cash and Other Cash Flows from Operating Activities

The Company is required to maintain a cash deposit with a bank which consists of collateral on certain travel and expense programs maintained by the bank. The following represents a reconciliation of cash and cash equivalents in the consolidated balance sheets to total cash, cash equivalents and restricted cash in the consolidated statements of cash flows as of December 31, 2022 and December 31, 2021 (in thousands).

	As of	
	December 31, 2022	December 31, 2021
Cash and cash equivalents	$ 83,045	$ 128,318
Restricted cash (presented within Other current assets)	665	414
Cash, cash equivalents and restricted cash	$ 83,710	$ 128,732

Trade and Other Receivables

Receivables are reported net of allowances for doubtful accounts. The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of customers to make required payments. The Company estimates the allowance for doubtful accounts based on a variety of factors including the length of time receivables are past due, the financial health of customers, unusual macroeconomic conditions, and historical experience. As of December 31, 2022 and December 31, 2021, the Company recognized an allowance for doubtful accounts of $1,051 and $1,235, respectively.

Other Current Assets

Other current assets consist of prepaid expenses, materials and supplies, and other assets. Material and supplies consist of spare parts and consumables used for research and research equipment and is stated at the weighted average cost.

Property, Plant and Equipment, net

Property and equipment are stated at cost and include improvements that significantly increase capacities or extend the useful lives of existing plant and equipment. Depreciation is calculated using the straight-line method over the estimated useful life of the assets. Useful lives range from three to five years for instruments and equipment, three to five years for office equipment and furniture and software, five years for vehicles and, for leasehold improvements, the shorter of the life of the improvement or the remaining term of the lease.

The Company reviews the remaining useful life of its assets on a regular basis to determine whether changes have taken place that would suggest that a change to depreciation policies is warranted.

Upon retirement or disposal of property, plant and equipment, the cost and related accumulated depreciation are removed from the account, and the resulting gains or losses, if any, are recorded in the consolidated statements of operations and comprehensive loss. Net gains or losses related to asset dispositions are recognized in earnings in the period in which dispositions occur. Routine maintenance, repairs and replacements are expensed as incurred.

Leases

The Company determines if an arrangement is a lease at inception. Lease agreements under which the Company is a lessee are evaluated to classify the lease as a finance or operating lease. Operating lease assets and liabilities are recognized at the commencement date of the lease based on the present value of lease payments over the lease term. Lease assets represent the Company’s right to use an underlying asset for the lease term and lease liabilities represent the Company’s obligation to make lease payments arising from the lease. As most leases do not provide an implicit interest rate, the Company uses its incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments.

Leases with an initial term of 12 months or less are not recorded on the Company's consolidated balance sheets. The Company recognizes lease expense for these leases on a straight-line basis over the lease term. The Company accounts for lease components and non-lease components as a single lease component.

Impairment of Long-Lived Assets

The Company performs a recoverability assessment of each of its long-lived assets whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Indicators may include, but are not limited to, adverse changes in the regulatory environment in a jurisdiction where the Company operates, a decision to discontinue the development of a long-lived asset, early termination of a significant customer contract, or the introduction of newer technology.

When performing a recoverability assessment, the Company measures whether the estimated future undiscounted net cash flows expected to be generated by the asset exceeds its carrying value. In the event that an asset does not meet the recoverability test, the carrying value of the asset will be adjusted to fair value resulting in an impairment charge.

Management develops the assumptions used in the recoverability assessment based on active contracts as well as information received from third-party industry sources. The Company did not record an impairment during the years ended December 31, 2022 and 2021.

Equity Method Investments

Investments in entities over which the Company has significant influence, but not control, are accounted for using the equity method of accounting. Gain or loss from equity method investees, net, represents the Company's proportionate share of net income or loss of its equity method investees and any gains or losses resulting from transactions in the investee's equity.

Equity method investments are assessed for impairment whenever changes in the facts and circumstances indicate a loss in value may have occurred. When a loss is deemed to have occurred and is other than temporary, the carrying value of the equity method investment is written down to fair value. In evaluating whether a loss is other than temporary, the Company considers the length of time for which the conditions have existed and its intent and ability to hold the investment.

Equity Security Investments

Investments in entities over which the Company has neither significant influence, nor control, are accounted for as an equity security. For investments where the fair value is not readily determinable, the Company will account for its investment using the alternative measurement principals as permitted under Accounting Standards Codification ("ASC") 321, *Investments — Equity Securities*.

Subsequently, under the alternative measurement method, the Company will adjust the carrying value for observable changes in price and will reassess whether its investment continues to qualify for such method. Additionally, the Company will perform a qualitative assessment and recognize an impairment if there are sufficient indicators that the fair value of the investment is less than its carrying value. The changes in value and impairment charges (if any), are recorded in other expense, net in the consolidated statement of operations

ArcelorMittal Simple Agreement for Future Equity ("AM SAFE")

In December 2021, the Company issued a SAFE that allowed an investor to participate in future equity financings through a share-settled redemption of the amount invested (such notional being the "invested amount"). The Company determined that the AM SAFE was not legal form debt (i.e., no creditors' rights). The AM SAFE includes a provision allowing for cash redemption upon the occurrence of a change of control, the occurrence of which is outside the control of the Company. Therefore, the AM SAFE is classified as mark-to-market liability pursuant to ASC 480, *Distinguishing Liability from Equity* ("ASC 480").

Brookfield SAFE

On October 2, 2022, the Company entered into a SAFE with Brookfield (the "Brookfield SAFE"). Under the Brookfield SAFE, the Company agreed to issue to Brookfield the right to certain shares of its capital stock, in exchange for the payment of $50,000 (the "Initial Purchase Amount"). The Brookfield SAFE is legal form debt. Management has elected to apply the Fair Value Option ("FVO") under ASC 825, *Financial Instruments*. As the Brookfield SAFE is accounted for under the FVO, the Brookfield SAFE is classified as mark-to-market liability.

Warrants

The Company has issued warrants to purchase its preferred shares that remain outstanding as of December 31, 2022 and 2021 representing 225,223 preferred shares, for each period respectively, which warrants expire at various dates through December 31, 2027. The exercise prices of the warrants range from $14.69 to $19.93 as of each of December 31, 2022 and 2021. The Company accounts for these warrants as liabilities based upon the characteristics and provisions of each instrument. The liabilities are included in other accrued liabilities on the Company's consolidated balance sheets at their fair value on the date of issuance and are revalued in each subsequent reporting period until such instruments are exercised or expire. The change in fair value between reporting periods is included in other expense, net in the consolidated statements of operations and comprehensive loss.

Further, the warrant related to the AM SAFE ("AM SAFE warrant") of $1,989 is accounted for as a liability. The AM SAFE warrant is exercisable upon the earliest to occur of a business combination with a special purpose acquisition corporation, an initial public offering, a change in control and a future round of financing involving preferred shares (collectively, the "Corporate Transactions"). The number of shares available under the AM SAFE warrant equals $3,000 divided by the exercise price. The exercise price is the price per share of the PIPE shares in the case of a business combination with a special purpose acquisition corporation or 90% of the price per share in connection with the other Corporate Transactions. The AM SAFE warrant expires at the earliest of (a) the fifth anniversary of the first Corporate Transaction, (b) the consummation of a dissolution event, (c) a change of control, and (d) the date that is the ten-year anniversary of issuance of the AM SAFE warrant. This liability is recorded in current liabilities on the Company's consolidated balance sheets at fair value on the date of issuance and will be revalued each subsequent reporting period until such instrument is exercised or expires. The change in fair value between reporting periods is included in other expense, net in the consolidated statements of operations and comprehensive loss.

Long-Term Debt and Debt Issuance Costs

The Company's debt consists of credit facilities with financial institutions. Costs directly related to the issuance of debt are reported on the consolidated balance sheets as a reduction from the carrying amount of the recognized debt liability and amortized over the term of the debt using the effective interest method. The only legal form debt outstanding as of December 31, 2022 is the Brookfield SAFE, which is accounted for under the FVO as described above. There is no debt outstanding as of December 31, 2021.

On September 28, 2021, the Company received notice of forgiveness for the Paycheck Protection Program (the "PPP Loan") granted in 2020 under the Coronavirus Aid, Relief and Economic Security Act, for the total obligation of $3,065. The Company recorded the gain on extinguishment in the 2021 consolidated statement of operations and comprehensive loss.

Revenue Recognition

The Company recognizes revenue in accordance with ASC 606, *Revenue from Contracts with Customers* ("ASC 606"). The Company primarily earns revenue from services related to carbon capture and transformation technology, which includes: feasibility studies and basic engineering design of commercial plants, licensing of technologies and sales of biocatalysts. The other two revenue streams are joint development and contract research activities to develop novel biocatalysts and related technologies and sale of ethanol produced using the Company's proprietary technologies (referred to as CarbonSmart Ethanol).

Revenue is measured based on the consideration specified in a contract with a customer. The Company records taxes collected from customers and remitted to governmental authorities on a net basis. The Company's payment terms are between 30-60 days and can vary by customer type and products offered. Management has evaluated the terms of the Company's arrangements and determined that they do not contain significant financing components.

Carbon Capture and Transformation

The Company provides feasibility studies and basic design and engineering services used for detailed design, procurement, and construction of commercial plants that utilize the Company's technologies, along with the sale of microbes and media. The services provided are recognized as a performance obligation satisfied over time. Revenue is recognized using the output method based on milestone completion, the cost-to-cost input method for certain engineering services, or the percentage of completion method as performance obligations are satisfied. Revenue for the sale of microbes and media is at a point in time, depending on when control transfers to the customer.

The Company licenses intellectual property to generate recurring revenue when its customers deploy our technology in their carbon capture and transformation plants. When licenses are considered to be distinct performance obligations, the recognition of revenue is dependent on the terms of the contract, which may include fixed consideration or royalties based on sales or usage, in which case, the revenue is recognized when the subsequent sale or usage occurs or when the performance obligation to which some or all of the sales or usage-based royalty is allocated has been satisfied, whichever is later.

Research and Development Services

The Company performs R&D services related to novel technologies and development of biocatalysts for commercial applications, mainly to produce fuels and chemicals. The Company engages in two main types of R&D services – joint development agreements, and other contract research, including projects with the U.S. Department of Energy and other US and foreign government agencies. Such services are recognized as a performance obligation satisfied over time. Revenue is recognized based on milestone completion, when payments are contingent upon the achievement of such milestones, or based on percentage-completion method when enforceable rights to payment exist. When no milestones or phases are clearly defined, management has determined that the cost incurred, input method, is an appropriate measure of progress towards complete satisfaction of the performance obligations under ASC 606, and estimates its variable consideration under the expected value method.

Revenue is not recognized in advance of customer acceptance of a milestone when such acceptance is contractually required. Payments for R&D services with no contractual payments are not due from customers until a technical report is submitted; therefore, a contract asset is recognized at milestone completion but prior to the submission of a technical report. The contract asset represents the Company's right to consideration for the services performed at milestone completion. Occasionally, customers provide payments in advance of the Company providing services which creates a contract liability for the Company. The contract liability represents the Company's obligation to provide services to a customer.

Collaboration Arrangements

The Company has certain partnership agreements that are within the scope of ASC 808, *Collaborative Arrangements*, which provides guidance on the presentation and disclosure of collaborative arrangements. Generally, the classification of the transaction under the collaborative arrangements is determined based on the nature of the contractual terms of the arrangement, along with the nature of the operations of the participants. The Company's collaborative agreements generally include a provision of R&D services related to novel technologies and biocatalysts. Amounts received for these services are classified as Revenue from collaborative arrangements in the consolidated statements of operations and comprehensive loss. The Company's R&D services are a major part of the Company's ongoing operations and therefore ASC 606 is applied to recognize revenue.

CarbonSmart

The Company acquires ethanol from customers who have deployed our proprietary technologies in their carbon capture and transformation facilities and sells it as CarbonSmart ethanol to end customers. Revenue is recognized at

a point in time when control transfers to our end customer, which varies depending on the shipping terms. The Company acts as the principal in such transactions and accordingly, recognizes revenue and cost of revenues on a gross basis. Amounts received for sales of CarbonSmart ethanol are classified as Revenue from contract with customers - tangible products in the consolidated statements of operations and comprehensive loss.

Cost of Revenues

The Company's R&D, engineering, and other direct costs of services and goods related to revenue agreements with customers, related parties, and collaborative partners represent cost of revenue. Costs include both internal and third-party fixed and variable costs and include materials, supplies, labor, and fringe benefits.

Research and Development

We incur costs associated with various R&D activities and expense these costs as incurred.

Stock-Based Compensation

In exchange for certain employee and director services, compensation is given in the form of equity awards. The Company accounts for equity-based compensation in accordance with ASC 718, *Compensation – Stock Compensation*. Accordingly, equity-classified awards are recorded based on the grant date fair value and expensed over the requisite service period for the respective award.

The Company's equity-based awards include stock option awards and restricted stock issued by the Company, which vest based on either time or the achievement of certain performance conditions. The Company records forfeitures as they occur. Compensation expense resulting from time-vesting-based awards is recognized in the Company's consolidated statements of operations and comprehensive loss, primarily within research and development expenses, at the grant date fair value over the requisite service period. Compensation expense resulting from performance awards recognized over the requisite service period when it is probable that the performance condition will be met. The calculated compensation expense for performance awards is adjusted based on an estimate of awards ultimately expected to vest. The Company estimates grant date fair value using a Black-Scholes option pricing model that uses assumptions including expected volatility, expected term, and the expected risk-free rate of return. The Company has determined that the Black-Scholes option pricing model, as well as the underlying assumptions used in its application, is appropriate in estimating the fair value of its award grants.

Benefit Plans

The Company sponsors a 401(k) defined contribution retirement plan for the benefit of its employees, substantially all of whom are eligible to participate after meeting minimum qualifying requirements. Contributions to the plan are at the discretion of the Company. For the years ended December 31, 2022 and 2021, the Company contributed $987 and $720, respectively, to the plan, which contributions are included within research and development expense in the consolidated statements of operations and comprehensive loss.

Income Taxes

The Company follows the asset and liability method of accounting for income taxes under ASC 740, *Income Taxes*. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to temporary differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that included the enactment date. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

Deferred income tax assets are evaluated to determine if valuation allowances are required or should be adjusted. Valuation allowances are established based on a more likely than not standard. The ability to realize deferred tax assets depends on the Company's ability to generate sufficient taxable income within the carry back or carryforward periods provided for in the tax law for each tax jurisdiction. The Company considers the various

possible sources of taxable income when assessing the realization of its deferred tax assets. The valuation allowances recorded against deferred tax assets generated by taxable losses in certain jurisdictions will affect the provision for income taxes until the valuation allowances are released. The Company's provision for income taxes will include no tax benefit for losses incurred and no tax expense with respect to income generated in these jurisdictions until the respective valuation allowance is eliminated.

The Company records uncertain tax positions on the basis of a two-step process whereby it is determined whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position, and for those tax positions that meet the more likely than not criteria, the largest amount of tax benefit that is greater than 50% likely to be realized upon ultimate settlement with the related tax authority is recognized. The Company recognizes accrued interest and penalties related to unrecognized tax benefits in income tax expense.

Related Party Transactions

The Company follows ASC 850-10, *Related Party Transactions*, for the identification of related parties and disclosure of related party transactions.

Pursuant to ASC 850-10-20, related parties include: a) affiliates of the Company; b) entities for which investments in their equity securities would be required, absent the election of the fair value option under the Fair Value Option Subsection of Section 825-10-15, to be accounted for by the equity method by the investing entity; c) trusts for the benefit of employees, such as pension and profit-sharing trusts that are managed by or under the trusteeship of management; d) principal owners of the Company; e) management of the Company; f) other parties with which the Company may deal if one party controls or can significantly influence the management or operating policies of the other to an extent that one of the transacting parties might be prevented from fully pursuing its own separate interests; and g) other parties that can significantly influence the management or operating policies of the transacting parties or that have an ownership interest in one of the transacting parties and can significantly influence the other to an extent that one or more of the transacting parties might be prevented from fully pursuing its own separate interests. Refer to Note 5 - *Investments*, and Note 12, *Related Party Transactions*, for further information.

Net Loss Per Share

Basic net loss per share is computed by dividing net loss attributable to participating stock by the weighted average number of shares of participating stock outstanding during the period.

Diluted net loss per share reflects potential dilution and is computed by dividing net loss attributable to participating stock by the weighted average number of shares of participating stock outstanding during the period. The dilutive effect of outstanding awards, if any, is reflected in diluted earnings per share by application of the treasury stock method or if-converted method, as applicable. Refer to Note 3, *Net Loss Per Share*, for additional information.

Shareholders' Equity

The securities of the Company are represented by common shares, par value $0.0001 per share. Each common share is entitled to one vote. With respect to payment of dividends and distribution of assets upon liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, all common shares shall participate pro rata in such payment whenever funds are legally available and when declared by the Board of Directors of the Company, subject to the prior rights of holders of all classes of stock outstanding.

Fair Value of Financial Instruments

Fair value is defined as the exchange price that would be received for an asset or an exit price paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the

use of observable inputs and minimize the use of unobservable inputs. The fair value hierarchy defines a three-level valuation hierarchy for disclosure of fair value measurements as follows:

Level 1 — Valuations based on quoted prices in active markets for identical assets or liabilities that an entity has the ability to access;

Level 2 — Valuations based on quoted prices for similar assets or liabilities, quoted prices for identical assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable data for substantially the full term of the assets or liabilities; and

Level 3 — Valuations based on inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The fair value of the Company's assets and liabilities, which qualify as financial instruments under ASC 820, *Fair Value Measurement*, approximates the carrying amounts represented in the accompanying consolidated balance sheets, primarily due to their short-term nature, except for the warrant liability.

Concentration of Credit Risk and Other Risks and Uncertainties

Revenue generated from the Company's customers outside of the United States for the years ended December 31, 2022 and 2021 was approximately 61% and 38%, respectively.

As of December 31, 2022 and December 31, 2021, approximately 35% and 35%, respectively, of trade accounts receivable and unbilled accounts receivable were due from customers located outside the United States. As of December 31, 2022 and December 31, 2021, the value of property, plant, and equipment outside the United States was immaterial.

The Company's revenue by geographic region based on the customer's location is presented in Note 4, *Revenues*.

Customers

Customers representing 10% or greater of revenue were as follows for the years ended December 31, 2022 and 2021:

	Year Ended December 31,	
	2022	**2021**
Customer A	22 %	27 %
Customer B	10 %	15 %
Customer C	7 %	12 %

Recently Adopted Accounting Pronouncements

In December 2019, the FASB issued Accounting Standard Update ("ASU") 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"), as part of its simplification initiative to reduce the cost and complexity in accounting for income taxes. ASU 2019-12 removes certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 also amends other aspects of the guidance to help simplify and promote consistent application of US GAAP. The Company adopted ASU 2019-12 as of January 1, 2021 with no material impact on its consolidated financial statements.

Note 3 — Net Loss Per Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock of the Company outstanding during the period. Diluted net loss per share is computed by giving effect to all potential shares of common stock of the Company, including outstanding stock options, warrants, and contingently redeemable preferred stock, to the extent dilutive.

The following table presents the calculation of basic and diluted net loss per share for the Company's common stock (in thousands, except shares and per share amounts):

	Year Ended December 31,	
	2022	2021
Numerator:		
Net loss for basic and diluted earnings per common share	$ (76,356)	$ (46,689)
Unpaid cumulative dividends on preferred stock	(38,672)	(36,758)
Net loss allocated to common shareholders	$ (115,028)	$ (83,447)
Denominator:		
Weighted-average shares used in calculating net loss per share, basic and diluted	2,126,346	1,959,165
Net loss per common share, basic and diluted[1]	$ (54.10)	$ (42.59)

(1) In periods in which the Company reports a net loss, all stock-based compensation awards are excluded from the calculation of diluted weighted average shares outstanding because of their anti-dilutive effect on earnings (loss) per share.

As of December 31, 2022 and 2021, potential shares of common stock not included in the computation of loss per share because their effect would be antidilutive include the following:

	Year Ended December 31,	
	2022	2021
Redeemable convertible preferred stock (if converted)	29,521,810	29,521,810
Options	3,354,591	3,848,420
RSAs	579,660	579,660
Warrants	225,223	225,223
Total	33,681,284	34,175,113

Under the organizational documents of the Company, the preferred shares and undeclared dividends are convertible by the holder at any time at their option. In addition, the preferred shares will automatically convert into common shares upon either (i) the determination of the holders of certain requisite preferred shares of the Company (which determination will be submitted for approval by such stockholders in connection with the Business Combination described in Note 1, *Description of the Business*), or (ii) a firmly underwritten initial public offering of the Company's shares that satisfies certain requirements (but not, for the avoidance of doubt, upon a business combination with a special purpose acquisition company, such as the Business Combination, unless such conversion is otherwise effected pursuant to clause (i) above). Such conversion would be at a 1:1 ratio, adjusted for certain corporate events. Upon conversion of the preferred shares, the cumulative accrued, declared and unpaid dividends will become payable. The total amount of cumulative accrued, undeclared and unpaid dividend is approximately $237 million. The additional 29,521,810 of potential shares of common stock resulting from any such conversion are not included in the computation of diluted net loss per share in the years ended December 31, 2022 and 2021, respectively, because doing so would be anti-dilutive.

In connection with the AM SAFE and Brookfield SAFE, see Note 7 - *Fair Value*, the Company could issue additional potential shares of common stock upon closing of the Business Combination. Further, under the AM SAFE warrant, additional potential shares of common stock could be issued upon closing of the Business Combination and exercise of the warrant. These potential shares of common stock have not been issued as of

December 31, 2022. The per share issuance price for the AM SAFE and AM SAFE warrant upon closing of the Business Combination is 100% of the liquidity price. If another qualified liquidity event occurs instead, the issuance price is 90% of the liquidity price. The per share issuance price for the Brookfield SAFE upon closing of the Business Combination or any other qualified liquidity event is the liquidity price as defined in the Brookfield SAFE agreement.

Note 4 — Revenues

Disaggregated Revenue

The following table presents disaggregated revenue in the following categories (in thousands):

	Year Ended December 31,	
	2022	2021
Contract Types:		
Licensing	2,160	2,025
Engineering and other services	19,061	9,539
Carbon capture and utilization revenue	21,221	11,564
Joint development agreements	6	11,700
Other contract research	6	2,197
Research and development revenue	12	13,897
CarbonSmart (tangible product)	4,000	—
Total Revenue	$ 37,343	$ 25,461

Revenue from partners in collaborative arrangements of $2,575 and $3,337 for the years ended December 31, 2022 and 2021, is included in the table above within joint development agreements. Revenue from related parties is included in licensing for $2,160 and $2,025 with the remaining revenue of $810 and $1,228 in Engineering and other services, for the years ended December 31, 2022 and 2021, respectively.

The following table presents disaggregation of the Company's revenues by customer location for the years ended December 31, 2022 and 2021 (in thousands):

	Year Ended December 31,	
	2022	2021
North America	$ 17,149	$ 15,825
Europe, Middle East, Africa (EMEA)	11,500	7,522
Asia	5,752	1,477
Australia	2,942	637
Total Revenue	$ 37,343	$ 25,461

Contract balances

The following table provides changes in contract assets and liabilities (in thousands):

	Current Contract Assets	Current Contract Liabilities	Non-current Contract Liabilities
Balance as of January 1, 2021	$ 6,186	$ 5,480	$ 11,291
Additions to unbilled accounts receivable	8,516	—	—
Increases due to cash received	—	20	5,690
Unbilled accounts receivable recognized in trade receivables	(3,002)	—	—
Reclassification from long-term to short-term	—	3,080	(3,080)
Reclassification to revenue as a result of performance obligations satisfied	—	(5,104)	—
Balance as of December 31, 2021	11,700	3,476	13,901
Additions to unbilled accounts receivable	30,308	—	—
Increases due to cash received	—	996	37
Unbilled accounts receivable recognized in trade receivables	(24,062)	—	—
Change on revaluation of currency	54	—	(341)
Reclassification from non-current to current contract liabilities	—	2,837	(2,837)
Reclassification to revenue as a result of performance obligations satisfied	—	(4,208)	—
Balance as of December 31, 2022	$ 18,000	$ 3,101	$ 10,760

The increase in contract assets was mostly due to unbilled accounts receivable resulting from revenue recorded under contracts with customers where the Company performed engineering and other services, while the decrease in contract liabilities was primarily due to the recognition of revenue during the period related to advance payments previously received by the Company for engineering and other services contracts with customers. As of December 31, 2022 and December 31, 2021 the Company had $11,695 and $2,878, respectively, of billed accounts receivable, net of allowance.

The contract liability balance comprises unconditional payments received from the Company's customers prior to the satisfaction of the related performance obligations. Such amounts are anticipated to be recorded as revenues when services are performed in subsequent periods. The Company expects to recognize the amounts classified as current contract liabilities in revenue within one year or less and those classified as non-current within two to three years.

Remaining performance obligations

Transaction price allocated to the remaining performance obligation represents contracted revenue that has not yet been recognized, which includes unearned revenue that will be recognized as revenue in future periods. Transaction price allocated to remaining performance obligations is influenced by several factors, including the length of the contract term compared to the research term and the existence of customer specific acceptance rights.

Remaining performance obligations consisted of the following (in thousands):

	As of	
	December 31, 2022	December 31, 2021
Current	$ 3,101	$ 3,476
Non-current	10,760	13,901
Total	$ 13,861	$ 17,377

Note 5 — Investments

The Company's investments consisted of the following (in thousands):

	As of	
	December 31, 2022	December 31, 2021
Equity Method Investment in LanzaJet	$ 10,561	$ 12,433
Equity Method Investment in SGLT	—	12,319
Equity Security Investment in SGLT	14,990	—
Total Investment	$ 25,551	$ 24,752

LanzaJet

On May 13, 2020, the Company contributed $15,000 in intellectual property in exchange for a 37.5% interest ("Original Interest") of LanzaJet, Inc. ("LanzaJet") in connection with an investment agreement ("Investment Agreement"). The Company accounts for the transaction as a revenue transaction with a customer under ASC 606. The licensing and technical support services provided are recognized as a single combined performance obligation satisfied over the expected period of those services, beginning May 2020 through December 2025. During the years ended December 31, 2022 and 2021, the Company has recognized revenue from this arrangement of $2,160 and $2,025 respectively, net of intra-entity profit elimination, and has recorded deferred revenue of $8,062 and $10,746, as of December 31, 2022 and December 31, 2021, respectively. Intra-entity profits related to revenue contracts with LanzaJet are $527 and $662 as of December 31, 2022, and December 31, 2021, respectively. Intra-entity profit is amortized over the 15-year amortization period through 2034.

Between February 1, 2021 and April 4, 2021, LanzaJet closed two additional rounds of investment which reduced the Company's Original Interest to approximately 25%. As a result, the Company recognized a gain on dilution of $503. The Company retained its contingent right to receive additional interest in LanzaJet of up to 45 million shares for no additional consideration.

The carrying value of our equity method investment in LanzaJet as of December 31, 2022 and December 31, 2021 was approximately $3,700 and $3,100 less than our proportionate share of our equity method investees' book values, respectively. The basis differences are largely the result of a difference in the timing of recognition of variable consideration to which we may become entitled in exchange for our contribution of intellectual property to LanzaJet. The variable consideration we may receive will be in the form of additional ownership interests and the majority of the basis difference will reverse in connection with recognition of that variable consideration.

In connection with a sublicense agreement to LanzaJet under our license agreement with Battelle Memorial Institute ("Battelle"), LanzaTech remains responsible for any failure by LanzaJet to pay royalties due to Battelle. The fair value of LanzaTech's obligation under this guarantee was immaterial as of December 31, 2022 and December 31, 2021.

SGLT

On September 28, 2011, the Company contributed RMB 25,800 (approx. $4,000) in intellectual property in exchange for 30% of the registered capital of Beijing Shougang LanzaTech Technology Co., LTD ("SGLT").

As of December 31, 2021, the Company's interest in SGLT's registered capital is approximately 10.01%. As the result of the admittance of new investors, the Company recognized a gain from dilution of $3,048 during the year ended December 31, 2021. On April 29, 2022, SGLT closed a round of financing which reduced the Company's ownership to 9.31% and resulted in the recognition of gain from dilution of $3,368. As of September 30, 2022, the Company no longer had significant influence over the operating and financial policies of SGLT due to the significant and sustained decrease in SGLT's technological dependence on LanzaTech. As such, the Company ceased applying the equity method and reclassified cumulative currency translation adjustments associated with its investment in SGLT of $928 to include those adjustments in the carrying value of its investment, which is included

as a non-cash adjustment in the consolidated statement of cash flows. From October 1, 2022 and forward, the Company accounts for its investment in equity security of SGLT using the alternative measurement principals as permitted under ASC 321, *Investments - Equity Securities,* because SGLT's fair value is not readily determinable. As the change was effective on September 30, 2022, the Company recorded SGLT's attributable net loss of $76, for the first nine months of the year, on the consolidated statements of operations and comprehensive loss.

The following table presents summarized aggregated financial information of the equity method investments:

	Year Ended December 31,	
	2022	2021
Selected Statement of Operations Information[1]:		
Revenues	$ 40,985	$ 40,244
Gross profit	7,319	(5,703)
Net loss	(6,221)	(9,695)
Net loss attributable to the Company	(1,422)	(1,606)

	Year Ended December 31,	
	2022	2021
Selected Balance Sheet Information[2]:		
Current assets	$ 72,711	$ 56,204
Non-current assets	114,736	270,454
Current liabilities	15,534	64,499
Non-current liabilities	114,934	58,802

(1) As of September 30, 2022 the Company no longer accounts for the investment in SGLT under the equity method. As such, the income statement balances reflect SGLT activity for the nine months ended September 30, 2022 and LanzaJet activity for the year ended December 31, 2022.

(2) The balance sheet information reflects only LanzaJet as of December 31, 2022.

As of December 31, 2022 and 2021, there were no impairments of equity method investees. During 2022 and 2021, the Company received no dividends from equity method investments. See Note 12 - *Related Party Transactions*, for information on sales, accounts receivable, contract assets and purchases and open accounts payable with equity method investees.

Note 6 — SAFE

AM SAFE

In December 2021, the Company issued the AM SAFE that allows an investor to participate in future equity financings through a share-settled redemption of the invested amount. Upon the occurrence of a change of control, the investor has the right to receive the greater of (i) a cash payment equal to the invested amount under the AM SAFE, or (ii) the consideration payable in such change of control in respect of the number of common shares equal to the invested amount divided by the liquidity price set forth in the AM SAFE. Upon an initial public offering or a business combination with a special purpose acquisition company, the investor has the right to receive a number of common shares equal to the invested amount divided by the liquidity price set forth in the AM SAFE, except that if a business combination with a special purpose acquisition company involves a private placement of newly issued shares, the invested amount will be treated as participating in such private placement and exchanged for a number of common shares equal to the invested amount divided by the price per share applicable in such private placement (subject to a discount upon certain circumstances).

The AM SAFE also contains change of control and initial public offering settlement alternatives described above, that settle differently upon a next round financing such that it allows the investor to participate in future equity financings through a share-settled redemption at a discounted price to the price paid by other investors. That is, upon a future equity financing involving preferred shares, the AM SAFE would be settled into a number of

preferred shares equal to the invested amount of the AM SAFE divided by a percentage of the discounted price investors paid to purchase preferred shares in the financing, with such discounted price calculated as a percentage of the price investors paid to purchase preferred shares in the financing.

The AM SAFE had not yet converted as a qualifying financing had not yet occurred as of December 31, 2022. As of December 31, 2022 and December 31, 2021, the AM SAFE had a fair value of $28,986 and $28,271, respectively. The AM SAFE was recorded within current liabilities on the consolidated balance sheet.

Brookfield SAFE

On October 2, 2022, LanzaTech entered into the Brookfield SAFE and received a cash payment of $50,000 as the Initial Purchase Amount. In exchange, the Company granted to Brookfield the right to certain shares of the Company's capital stock upon a Liquidity Event. If no Liquidity Event occurs prior to the fifth anniversary of the Brookfield SAFE, LanzaTech will repay in cash any remaining unconverted portion of the Initial Purchase Amount less any Non-Repayable Amount (i.e. the Remaining Amount), plus interest on such Remaining Amount in the high single digits, compounded annually. Brookfield has the option to extend the repayment date to the tenth anniversary of the date of the Brookfield SAFE if certain events do not occur

Following the first of either (a) a transaction with the principal purpose of raising capital, pursuant to which the Company issues and sells preferred stock at a fixed valuation (an “Equity Financing”), or (b) the completion of an initial public offering, a direct listing, or a merger of LanzaTech with a special purpose acquisition company, which includes the Business Combination (such a merger, a “de-SPAC Transaction” and such event described in (b), a “Liquidity Event”), Brookfield may, at any time at its option, convert all or a portion of the Initial Purchase Amount less any amount that has already been converted or repaid into shares of LanzaTech capital stock or, in the case of a de-SPAC Transaction, shares of common stock of the surviving public company in such de-SPAC Transaction (including, in the case of the Business Combination, New LanzaTech Common Stock) at Liquidity Event or Equity Financing’s share price.

For each $50,000 of aggregate equity funding required for qualifying projects acquired by Brookfield in accordance with the Brookfield Framework Agreement (discussed below), the Remaining Amount will be reduced by $5,000 (such cumulative reductions the “Non-Repayable Amount”) and converted into shares of LanzaTech. Upon and after the first Equity Financing or Liquidity Event, the Non-Repayable Amount would convert automatically into shares of LanzaTech capital stock or, in the case of a de-SPAC Transaction, shares of common stock of the surviving public company in such de-SPAC Transaction (including, in the case of the Business Combination, New LanzaTech Common Stock), at the Liquidity Event or Equity Financing's share price. The Remaining Amount may convert into LanzaTech or New LanzaTech capital stock, in the case of a de-SPAC Transaction, at any time at the sole option of Brookfield.

The Brookfield SAFE had not yet converted as a qualifying financing had not yet occurred and no project investments were presented to Brookfield as of December 31, 2022. As of December 31, 2022, the Brookfield SAFE had a fair value of $50,000 and was recorded within non-current liabilities on the consolidated balance sheet.

Brookfield Framework Agreement

On October 2, 2022, LanzaTech entered into a framework agreement with Brookfield (the “Brookfield Framework Agreement”). Under such agreement, LanzaTech agreed to exclusively offer Brookfield the opportunity to acquire or invest in certain projects to construct commercial production facilities employing carbon capture and transformation technology in the U.S., the European Union, the United Kingdom, Canada or Mexico for which LanzaTech is solely or jointly responsible for obtaining or providing equity financing, subject to certain exceptions. LanzaTech agreed to present Brookfield with projects that over the term of the agreement require equity funding of at least $500,000 in the aggregate. With respect to projects acquired by Brookfield, LanzaTech is entitled to a percentage of free cash flow generated by such projects determined in accordance with a hurdle-based return waterfall. Brookfield has no obligation under the Brookfield Framework Agreement to invest in any of the projects. There have been no investments in projects as of December 31, 2022.

Note 7 — Fair Value

The following table presents the Company's fair value hierarchy for its assets and liabilities measured at fair value as of December 31, 2022 and December 31, 2021 (in thousands):

	Fair Value Measurement as of December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$ 523	$ —	$ —	$ 523
Liabilities:				
Warrants on preferred shares	$ —	$ —	$ 2,119	$ 2,119
Brookfield SAFE liability	—	—	50,000	50,000
AM SAFE warrant	—	—	1,989	1,989
AM SAFE liability	—	—	28,986	28,986
Total liabilities	$ —	$ —	$ 83,094	$ 83,094

	Fair Value Measurement as of December 31, 2021			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$ 516	$ —	$ —	$ 516
Liabilities:				
Warrants	—	—	1,145	$ 1,145
AM SAFE warrant	—	—	1,729	1,729
AM SAFE liability	—	—	28,271	28,271
Total Liabilities	$ —	$ —	$ 31,145	$ 31,145

Warrants

The Company has warrants to purchase preferred shares outstanding as of December 31, 2022 and December 31, 2021 representing 225,223 preferred shares, for each period respectively, which warrants expire at various dates through December 31, 2027. The exercise prices of the warrants range from $14.69 to $19.93 as of each of December 31, 2022 and December 31, 2021.

The warrants are accounted for as liabilities in accordance with ASC 480, and are presented within other accrued liabilities on the consolidated balance sheets. The warrant liabilities are measured at fair value at inception and on a recurring basis, with changes in fair value presented within the consolidated statements of operations and comprehensive loss.

The fair value of the warrants was calculated using the Black-Scholes Option Pricing Model. For the years ended December 31, 2022 and 2021, the Company recognized a change in the fair value of liabilities of approximately $(974) and $(563), respectively, on the consolidated statements of operations and comprehensive loss within other expense, net.

The estimated fair value of the warrants is determined using Level 3 inputs. Inherent in the Black-Scholes Option Pricing Model are assumptions related to expected stock-price volatility, expected life, risk-free interest rate and dividend yield. The Company estimates the volatility of its warrants based on implied volatility from the Company's warrants and from historical volatility of select peer companies that match the expected remaining life of

the warrants. The risk-free interest rate is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the warrants. The expected life of the warrants is assumed to be equivalent to their remaining contractual term. The dividend rate is based on the historical rate, which the Company anticipates remaining at zero.

The following table represents the weighted average inputs used in calculating the fair value of the preferred share warrants outstanding as of December 31, 2022 and December 31, 2021:

	December 31, 2022	December 31, 2021
Stock price	$ 22.81	$ 13.77
Weighted average exercise price	17.31	17.32
Term (in years)	1.1	2.8
Expected volatility	73.4 %	70.6 %
Risk-free interest rate	4.5 %	0.8 %
Expected dividend yield	— %	— %

SAFE Liabilities and AM SAFE Warrant

The change in fair value between reporting periods for both the SAFE liabilities and SAFE warrant is included in other expense, net in the consolidated statements of operations and comprehensive loss.

The Company's AM SAFE liability, Brookfield SAFE liability and AM SAFE warrant are mark-to-market liabilities and are classified within Level 3 of the fair value hierarchy as the Company is using a scenario-based approach which allowed the Company to estimate the implied value of the business based on the terms of the SAFE. Significant unobservable inputs included probability and expected term. Probability is based upon the likelihood of the Company closing a transaction with a special purpose acquisition company. The expected term was based on the anticipated time until the SAFE investments would have a conversion event.

Significant inputs for Level 3 AM SAFE liability fair value measurement at December 31, 2022 are as follows:

	Near Term	Long-Term
Key assumptions:		
Probability weighting	61 %	39 %
Time to conversion (in years)	0.1	0.8
Liquidity price	100 %	90 %
Discount rate	24.7 %	24.7 %

Significant inputs for Level 3 SAFE warrant fair value measurement at December 31, 2021 are as follows:

	Near Term	Long-Term
Key assumptions:		
Probability weighting	61 %	39 %
Remaining life (in years)	5.0	5.0
Volatility	75 %	75 %
Interest rate	3.99 %	3.99 %
Time to conversion (in years)	0.1	0.8
Risk-free interest rate	4.12 %	4.75 %
Dividend yield	— %	— %

Significant inputs for Level 3 Brookfield SAFE liability fair value measurement at December 31, 2022 are the timing and likelihood of project financings under the Brookfield Framework Agreement. As of its issuance date, the fair value of the Brookfield SAFE is equal to the investment amount of $50,000 based on the orderly nature of the transaction. The value as of December 31, 2022 remains the same due to the proximity of the valuation date to the issuance date (i.e., less than two months) and the absence of events which would indicate a change in expected payoffs to the investor. As of December 31, 2022 the same expectations about sufficient projects meeting the agreed-upon investment criteria pursuant to the Brookfield Framework Agreement are maintained. As such the Brookfield SAFE's fair value is estimated to be $50,000, as of December 31, 2022.

The following tables represent reconciliations of the fair value measurements of the liabilities associated with our SAFE and warrant obligations using significant unobservable inputs (Level 3) (in thousands):

	Warrants	AM SAFE liability	AM SAFE warrant	Brookfield SAFE
Balance as of January 1, 2022	$ 1,145	$ 28,271	$ 1,729	$ —
Issuance of Brookfield SAFE liability	—	—	—	50,000
Loss recognized in consolidated statement of operations and comprehensive loss	974	715	260	$ —
Balance as of December 31, 2022	$ 2,119	$ 28,986	$ 1,989	$ 50,000

	Warrants	AM SAFE liability	AM SAFE warrant	Brookfield SAFE
Balance as of January 1, 2021	$ 582	$ —	$ —	$ —
Issuance of SAFE liability and warrant	—	28,271	1,729	—
Loss recognized in consolidated statement of operations and comprehensive loss	563	—	—	—
Balance as of December 31, 2021	$ 1,145	$ 28,271	$ 1,729	$ —

Note 8 — Other Current Assets

As of December 31, 2022 and 2021 other current assets consisted of the following (in thousands):

	As of	
	December 31, 2022	December 31, 2021
Materials and supplies	$ 4,164	$ 2,900
Prepaid assets	2,833	1,503
Other	4,160	1,376
	$ 11,157	$ 5,779

Note 9 — Property, Plant and Equipment, net

The Company's property, plant and equipment, net consisted of the following (in thousands):

	As of	
	December 31, 2022	December 31, 2021
Land	$ 64	$ 64
Leasehold improvements	4,126	4,113
Instruments and equipment	33,093	26,627
Vehicles	85	71
Office Equipment and furniture	1,719	1,590
Other	871	728
Construction in progress	6,780	3,328
	$ 46,738	$ 36,521
Less accumulated depreciation and amortization	$ 27,049	$ 22,373
Total property, plant and equipment, net	$ 19,689	$ 14,148

Depreciation for the years ended December 31, 2022 and December 31, 2021 totaled $4,660 and $3,806, respectively.

Note 10 — Income Taxes

The components of (loss) income before income taxes and gain from equity method investees, net are as follows (in thousands):

	Year Ended December 31,	
	2022	2021
United States	$ (73,271)	$ (39,860)
Foreign	(3,085)	(6,829)
Total	$ (76,356)	$ (46,689)

The Company does not have any current or deferred taxes in either the United States or our foreign operations.

The following table is a reconciliation of income taxes computed at the statutory federal income tax rate (21.0% federal income tax rate in the United States for 2022 and 2021) to the income tax expense (benefit) reflected in the consolidated statement of operations and comprehensive loss (in thousands, except percentages):

	Year Ended December 31,			
	2022		2021	
Income tax (benefit) at the statutory federal income tax rate	$ (16,035)	21.0 %	$ (9,805)	21.0 %
Foreign tax rate differential	(72)	0.1 %	(605)	1.3 %
State and local taxes	(6,961)	9.1 %	(4,068)	8.7 %
Foreign exchange differences	—	— %	(143)	0.3 %
Stock-based compensation	288	(0.4)%	501	(1.1)%
Interest income on receivable	—	— %	882	(1.9)%
Equity method investment	(701)	0.9 %	(443)	0.9 %
Non-deductible legal costs	—	— %	1,291	(2.8)%
Gain from redomiciliation of intellectual property	—	— %	4,890	(10.5)%
Valuation allowance	26,286	(34.4)%	7,958	(17.0)%
PPP loan forgiveness	—	— %	$ (644)	1.4 %
Deferred True-Up	(2,836)	3.7%	—	—%
Other	31	— %	186	(0.3)%
Total income tax benefit	$ —	— %	$ —	— %

Deferred Taxes

Significant components of deferred tax assets and liabilities were as follows (in thousands):

	Year Ended December 31,	
	2022	2021
Deferred tax assets:		
Net operating loss and credit carryforwards	$ 133,537	$ 107,979
Stock-based compensation	2,071	—
Operating lease liability	2,473	1,878
Accrued bonus	1,514	981
Accrued expenses	239	1,566
Deferred revenue	126	309
Equity method investment	2,040	1,243
Other	460	925
	$ 142,460	$ 114,881
Valuation allowance	(139,562)	(113,276)
Net deferred tax asset	$ 2,898	$ 1,605
Deferred tax liabilities:		
Operating lease asset	(2,125)	(1,429)
Other	(773)	(176)
Total deferred tax liabilities	$ (2,898)	$ (1,605)
Net deferred income tax assets and liabilities:	$ —	$ —

At December 31, 2022 and 2021, the Company had $391,759 and $299,194, respectively, of tax losses and credits carried forward subject to shareholder continuity and acceptance in the countries where the Company has tax losses carried forward. R&D tax credits included within these amounts are $35,147 for both periods, which may be available to offset future income tax liabilities. At December 31, 2022 and 2021, the net operating loss and credit carryforwards are comprised of $318,382 and $239,559 in the United States, $29,691 and $22,203 in state and local, $43,655 and $39,705 in foreign jurisdictions, respectively. At December 31, 2022 and 2021, the Company had net operating loss carryforwards of approximately $146,467 and $136,454, respectively, that expire in various years from 2023 through 2037, plus $210,145 and $127,593, respectively, for which there is no expiration date.

Section 382 of the Internal Revenue Code imposes an annual limitation on the utilization of net operating loss carryforwards based on a statutory rate of return and the value of the corporation at the time of a "change of ownership" as defined by Section 382. The Company had a change in ownership in November 2014. Therefore, the Company's ability to utilize its net operating loss carryforwards incurred prior to the 2014 ownership change, will be subject in future periods to annual limitations.

In assessing the realizability of deferred tax assets, the Company assesses whether it is more-likely-than-not that a portion or all of the deferred tax assets will not be realized. The Company considers the scheduled reversal of deferred tax liabilities, tax planning strategies and projected future taxable income in making this assessment. At December 31, 2022 and 2021, a valuation allowance of $139,562 and $113,276, respectively, was recorded against certain deferred tax assets based on this assessment. The Company believes it is more-likely-than-not that the tax benefit of the remaining net deferred tax assets will be realized. The amount of net deferred tax assets considered realizable could be increased or reduced in the future if the Company's assessment of future taxable income or tax planning strategies changes.

The Company and its foreign subsidiaries have historically been loss generating entities that have resulted in no excess earnings to consider for repatriation and accordingly there are no deferred income taxes recognized as of December 31, 2022 and 2021.

At December 31, 2022 and 2021, the Company had no tax liability or benefit related to uncertain tax positions. No interest or penalties related to uncertain taxes have been recognized on the accompanying consolidated statements of operations. Management does not expect a significant change in uncertain tax positions during the twelve months subsequent to December 31, 2022.

The Company conducts business in multiple jurisdictions within and outside the United States. Consequently, the Company is subject to periodic income tax examinations by domestic and foreign income tax authorities. During December 2021, the Internal Revenue Service completed an income tax examination of the Company's U.S. federal income tax return for the year ended December 31, 2016, which resulted in no impact to the Company's consolidated financial statements. The Company has no other ongoing tax examinations with domestic or foreign taxing authorities.

During 2021, the Company migrated its country of domicile from New Zealand to Delaware in the United States. On migration, the Company was deemed to have disposed of all its assets and liabilities to a third-party at market value which resulted in taxable income to the Company for New Zealand income tax purposes. The migration to Delaware is classified as a tax-free reorganization for U.S. federal income tax purposes.

Note 11 — Share-Based Compensation

The Company offers share option plans to employees, directors, and others providing similar employee-related services, which meet the definition of an equity-classified share-based payment.

Stock Options

The Company has five ownership-based participation rights plans for employees, directors, and certain third-party providers. In accordance with the provisions of the plans, as approved by the directors and shareholders, grantees have been granted options to purchase common shares at an exercise price based on the fair value price of the Company's common shares on the date of grant as approved by the directors. The stock options generally have a service condition of two to five years and vest over time as the service condition is being satisfied. Upon termination of employment, unvested stock options are evaluated for forfeiture or modifications, subject to the terms of the awards and Company's policies.

Stock option awards outstanding as of December 31, 2022 and changes during the period ended December 31, 2022 were as follows:

	Shares under option (thousands)	Weighted average exercise price	Weighted average remaining contractual term (years)	Aggregate intrinsic value (thousands)
Outstanding at January 1, 2022	3,848	$ 6.55	6.16	$ 27,796
Vested and expecting to vest at January 1, 2022	3,848	6.55	6.16	27,796
Exercisable at January 1, 2022	2,479	$ 6.31	4.85	$ 18,499
Exercised	(451)	6.98	—	3,520
Cancelled/forfeited	(44)	9.53	—	218
Expired	(1)	6.61	—	4
Outstanding at December 31, 2022	3,353	$ 6.45	5.80	$ 58,565
Vested and expecting to vest at December 31, 2022	3,353	6.45	5.80	58,565
Exercisable at December 31, 2022	2,563	$ 6.27	5.15	$ 45,204

The Company recorded compensation expense of $2,527 and $2,531 for the years ended December 31, 2022 and December 31, 2021, respectively. Unrecognized compensation costs as of December 31, 2022 was $3,354 and will be recognized over a weighted average of 2.07 years .

Restricted Stock Awards (“RSAs”)

RSAs become eligible to vest upon the satisfaction of a time-based service condition. However, in order to vest, a liquidity event, defined as acquisition, asset transfer, or initial listing, must occur within 10 years from the grant date. Upon a liquidity event, if the participant’s service has not terminated, the entire RSA award vests in full, whether or not previously eligible for vesting. If the participant’s service has terminated and they have satisfied the time-based service condition, the RSAs that are outstanding and eligible for vesting shall immediately vest in full upon liquidity event. The time-based service requirements of the RSAs have a maximum term of three years from the date of grant.

As of December 31, 2022, there were 579,660 outstanding unvested shares for a weighted average fair value of $4.72. There were no changes during the year ended December 31, 2022.

As of December 31, 2022, and December 31, 2021 the Company concluded that the liquidity event performance condition described above for the RSAs was not probable of being satisfied at such time. As a result, the Company did not recognize any compensation expense during the years ended December 31, 2022 and December 31, 2021 for these RSAs.

Note 12 — Related Party Transactions

As of December 31, 2022 and December 31, 2021, the Company had an equity ownership in LanzaJet and SGLT with a combined carrying value of $25,551 and $24,752, respectively. The table below summarizes amounts related to transactions with these related parties (in thousands):

	Year Ended December 31,	
	2022	2021
Revenues	$ 2,970	$ 3,253

	As of	
	December 31, 2022	December 31, 2021
Accounts receivable	$ 1,821	$ 1,071
Contract assets	—	60
Purchases and open accounts payable	3,195	2,575

LanzaJet

The accounts payable balance is for work that LanzaJet performed as a subcontractor to the Company. Refer to Note 5, *Investment*s, for more information.

In connection with the formation of LanzaJet, the Company entered into a transition services agreement with LanzaJet. The transition services agreement generally sets out the respective rights, responsibilities and obligations of the Company and LanzaJet with respect to R&D services, access to office and laboratory space, business development and other administrative support services. The transition services agreement may be terminated by mutual consent of the Company and LanzaJet, by LanzaJet at any time, and by the Company upon breach or non-payment by LanzaJet. There are no substantive termination penalties in the event the Company terminates. For the years ended December 31, 2022 and December 31, 2021, the Company recognized revenue from related parties of approximately $185 and $495, respectively, under the transition services agreement.

The Company also provides certain engineering and other services related to a gas-to-jet demonstration plant currently in development by LanzaJet pursuant to the Investment Agreement described in Note 5, *Investments*. In

connection with this agreement, the Company recognized an immaterial amount of revenue for the year ended December 31, 2022, and $428 for the year ended December 31, 2021.

The Company also leases certain land to a subsidiary of LanzaJet. Refer to Note 15, *Leases*, for more information.

LanzaJet Note Purchase Agreement

On November 9, 2022, the Company and the other LanzaJet shareholders entered into a Note Purchase Agreement (the "Note Purchase Agreement"), pursuant to which LanzaJet Freedom Pines Fuels LLC ("FPF"), a wholly owned subsidiary of LanzaJet, will issue, from time to time, notes in an aggregate principal amount of up to $147.0 million (the "Notes"), comprised of approximately $113.5 million aggregate principal amount of 6.00% Senior Secured Notes due December 31, 2043 and $33.5 million aggregate principal amount of 6.00% Subordinated Secured Notes due December 31, 2043. The Company has committed to purchase $5.5 million of Subordinated Secured Notes in a funding scheduled to occur on May 1, 2023. The Senior Secured Notes are secured by a security interest over substantially all assets of FPF, and both the Senior Secured Notes and the Subordinated Secured Notes are secured by a security interest over the intellectual property owned or in-licensed by LanzaJet. LanzaJet also provides a guarantee of any costs and expenses required to complete the initial facility and achieve commercial operation.

Each purchaser of Notes under the Note Purchase Agreement is also entitled to receive a warrant for the right to purchase 575 shares of common stock of LanzaJet for each $10 of Notes purchased by such purchaser for an exercise price of $0.0575 per share, and for up to three years after the loan under the Note Purchase Agreement is fully funded. In the case of the Company, this will be equal to a right to purchase 316,250 shares of common stock of LanzaJet.

The Note Purchase Agreement may be amended with the approval of holders of at least 66 2⁄3% of the Notes, except with respect to certain rights that require approval of all holders to amend. Upon an event of default under the Note Purchase Agreement, each purchaser may accelerate its own Notes. Enforcement against the collateral securing the Notes requires the approval of certain holders as specified in the Notes.

SGLT

The Company supplies SGLT with certain water-soluble organic compounds required in the Company's proprietary gas fermentation process, and small-size equipment. As a result, for the years ended December 31, 2022 and December 31, 2021, the Company recognized revenue from related parties of approximately $289 and $282, respectively. The Company also provided engineering services and incurred costs of $645 and $1,223 for the years ended December 31, 2022 and December 31, 2021, respectively.

Additionally, LanzaTech and SGLT entered into a license agreement in 2019, subsequently amended in 2021, to provide SGLT with the right to sublicense the intellectual property that LanzaTech previously licensed to SGLT. In exchange, the Company is entitled to receive licensing consideration, calculated as a percentage of the royalties received by SGLT from the sublicenses. Currently, SGLT sublicenses to certain of its subsidiaries that use LanzaTech's proprietary technology. The royalties received by SGLT are based on sales-and-usage of the sublicensed technology. For the years ended December 31, 2022, and December 31, 2021, the Company did not earn any sublicensing revenue as no royalties were received by SGLT.

Note 13 — Redeemable, Convertible Preferred Stock

The Company has six outstanding series of contingently redeemable convertible preferred stock. The authorized, issued and outstanding shares, issue price, and carrying value as of December 31, 2022 and December 31, 2021, are as follows (in thousands, except share and per share amounts):

	Shares Authorized	Shares Issued and Outstanding	Issue Price	Carrying Amount
Series A	4,666,503	4,666,503	$1.75 - 3.94	$ 12,230
Series B	1,733,370	1,733,370	10.38	18,000
Series C	4,254,733	4,142,408	14.69	60,850
Series D	10,274,260	10,161,362	19.93	188,402
Series E	5,183,957	5,183,957	22.86	118,076
Series F	3,634,210	3,634,210	22.86	83,073
	29,747,033	29,521,810		$ 480,631

There were no changes in redeemable convertible preferred stock issued and outstanding during the year ended December 31, 2022. The holders of preferred shares are entitled to receive dividends on an as converted to common shares basis as if all preferred shares had been converted into common shares on the date of such event. Dividends are cumulative and are payable in arrears at the rate of 8% of the original issue price.

In March 2021, a warrant was exercised for a total issuance of 158,058 Series D preferred shares which led to an increase in redeemable convertible preferred stock of $3,150 during the year ended December 31, 2021. In April 2021, the Company closed a Series F round with the issuance of 3,634,210 Series F preferred shares for the net proceeds of $83,073.

Redemption features of preferred shares are not fixed and do not have a determinable price on fixed or determinable dates. As of December 31, 2022, the preferred shares are not currently redeemable, and it is not probable that the preferred shares will become redeemable, since it is uncertain whether or when circumstances exist that would constitute a deemed liquidation event. Accordingly, the Company has not adjusted the carrying value of the preferred shares to their redemption values.

Note 14 — Commitments and Contingencies

Litigation

The Company may be involved in legal proceedings and exposed to potential claims in the normal course of business. As of December 31, 2022 and December 31, 2021, the Company does not have any reasonably possible or probable losses from such claims.

Commitments

In November 2022, the Company entered into a Note Purchase Agreement. Refer to Note 12, *Related Party Transactions*, for more information.

In November 2022, the Company entered into a lease for real estate to expand its headquarters in Skokie, Illinois, commencing on May 1, 2024. As the lease has not commenced, it is not part of the disclosures in Note 15, *Leases*. The following table represents the future lease payments for this lease (in thousands):

Year ending December 31,	
2023	—
2024	642
2025	1,303
2026	1,342
2027	—
Thereafter	—
Total cash payments	3,287

Note 15 — Leases

The Company leases certain office space and laboratory facilities. The Company's lease agreements typically do not contain any significant guarantees of asset values at the end of a lease, renewal options or restrictive covenants. Pursuant to ASC 842, *Leases*, all leases are classified as operating leases. During 2022 and 2021, the discount rate used in the calculation of lease liabilities was 7.50%, which is the estimate of the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term.

Total operating lease costs and variable lease costs for the years ended December 31, 2022 and 2021 were $2,167 and $2,126 and $2,227 and $2,575, respectively. Cash paid for amounts included in the measurement of operating lease liabilities for the years ended December 31, 2022 and 2021 was $2,370 and $2,059, respectively.

As of December 31, 2022, lease payments for operating leases for the Company's office facility and laboratories are shown below (in thousands):

Year ending December 31,		
2023	$	1,302
2024		2,602
2025		2,347
2026		2,418
2027		—
Thereafter		—
Total lease payments	$	8,669
Less: imputed interest		1,256
Total lease liabilities	$	7,413

The following is a summary of weighted average remaining lease term and discount rate for all of the Company's operating leases:

	Year Ended December 31,	
	2022	2021
Weighted average remaining lease term (years)	3.5	2.4
Weighted average discount rate	7.50 %	7.50 %

Lessor accounting

In May 2020, the Company executed an agreement to lease certain land to a subsidiary of LanzaJet for a period of 10 years with an option to renew this lease for five additional periods of one year with minimum annual rent due. This agreement is accounted for as an operating lease. In February 2022, the lease agreement with LanzaJet was amended to extend the pre-development term of the lease until the earlier of commencement of construction of the alcohol-to-jet fuel facility on the leased land or December 31, 2023, increased the annual base rent amount and increased the term from 10 years to 12 years. Additionally, the subsidiary of LanzaJet was granted an option to renew this lease for thirteen additional periods of one year. In August 2022, the lease agreement was amended further to increase the annual rent due upon commencement of construction of the alcohol-to-jet fuel facility. We recognize lease revenue on a straight-line basis over the life of the lease agreement. The following future minimum lease payments due to us from the lease agreement at December 31, 2021, is as follows (in thousands)

Year ending December 31,	
2023	$ 34
2024	155
2025	155
2026	155
2027	155
Thereafter	1,240
	$ 1,894

Note 16 — Subsequent Events

The Company has evaluated events occurring subsequent to December 31, 2022 through March 28, 2023, the date the consolidated financial statements were available to be issued. The Company has identified:

Closing of the Business Combination

On February 8, 2023 (the “Closing Date”), AMCI, consummated the previously announced Business Combination (refer to Note 1) pursuant to the terms of the Agreement and Plan of Merger (the “Closing”), dated as of March 8, 2022 (as amended on December 7, 2022, the Merger Agreement), by and among the Merger Sub (AMCI, AMCI Merger Sub, Inc., a Delaware corporation) and LanzaTech NZ, Inc. Pursuant to the Merger Agreement, on the Closing Date, (i) AMCI changed its name to “LanzaTech Global, Inc.” (New LanzaTech), and (ii) Merger Sub merged with and into LanzaTech NZ, Inc., with LanzaTech NZ, Inc. as the surviving company in the Business Combination. After giving effect to such Business Combination, LanzaTech NZ, Inc. became a wholly owned subsidiary of New LanzaTech.

The Business Combination will be accounted for as a reverse recapitalization. LanzaTech is deemed the accounting predecessor and New LanzaTech is the successor SEC registrant. Under this method of accounting, AMCI is treated as the acquired company for financial statement reporting purposes. Accordingly, the consolidated balance sheets and results of operations of LanzaTech will become the historical financial statements of New LanzaTech, and AMCI’s assets, liabilities and results of operations will be consolidated with LanzaTech’s beginning on the acquisition date. The net assets of LanzaTech will be recognized at carrying value, with no goodwill or other intangible assets recorded.

The Company is still evaluating all of the accounting impacts of the Closing of the Business Combination, and will account for them in its consolidated financials for the period ended March 31, 2023.

Forward Purchase Agreement

On February 3, 2023, AMCI, LanzaTech NZ, Inc. and ACM ARRT H LLC (the "Seller") entered into an agreement (the "Forward Purchase Agreement") for an over-the-counter equity prepaid forward transaction (the “Forward Purchase Transaction”). Pursuant to the terms of the Forward Purchase Agreement, the Seller can

purchase up to 10,000,000 Class A common shares, par value $0.0001 per share, of AMCI before the Closing from holders of AMCI's common shares (other than AMCI), including from holders who have previously elected to redeem their AMCI's common shares (the “Recycled Shares”). As of the Closing Date, the Seller obtained 5,916,514 Recycled Shares on the open market for approximately $10.16 per share (“Redemption Price”), and such purchase price of $60.1 million was funded by the use of proceeds from the Business Combination deposited in a trust account, as a prepayment (“Prepayment Amount”) for the Forward Purchase Agreement redemption at the end of three years (“Maturity Date”). The Seller has the right at the end of three years to return the shares and keep the Prepayment Amount plus the fees described below, or may, at the Seller’s sole discretion, to partially or fully terminate this transaction over the course of the three year term by returning cash in an amount equal to the number of shares terminated from time to time (“Terminated Shares”) multiplied by the Redemption Price, which price may be reduced in the case of certain dilutive events (“Reset Price”).

At the end of the three-year term, New LanzaTech is obligated to pay the Seller an amount equal to the product of (1) 7,500,000 less (b) the number of Terminated Shares multiplied by (2) $2.00 (the “Maturity Consideration”). In addition to the Prepayment Amount and the Maturity Consideration, on the Maturity Date, New LanzaTech shall pay to the Seller an amount equal to the product of (x) 500,000 and (y) the Redemption Price, totaling $5.1 million (the “Share Consideration”).

In addition, the Seller may request, at its sole discretion, warrants of New LanzaTech exercisable for shares in an amount equal to 10,000,000 less the number of Recycled Shares (“Shortfall Warrants”). The Shortfall Warrants warrants have an exercise price equal to the Reset Price. The form of the Shortfall Warrants shall be agreed upon by LanzaTech, AMCI and the Seller within 45 days of the executed Forward Purchase Agreement. The Seller has requested 4,083,486 Shortfall Warrants based on the number of Recycled Shares purchased. In connection with the Forward Purchase Agreement, the Seller assigned its rights, duties and obligations with respect to a portion of the shares purchased under the Forward Purchase Agreement to Vellar Opportunity Fund SPV LLC - Series 10.

Exhibit 99.6

Management's Discussion and Analysis of Financial Condition and Results of Operations of LanzaTech NZ, Inc. for the year ended December 31, 2022

Capitalized terms used but not defined herein have the meanings ascribed to them in LanzaTech Global, Inc.'s Current Report on Form 8-K/A (the "Current Report"). The following discussion and analysis should be read in conjunction with LanzaTech's financial statements and related notes included elsewhere in the Current Report. This discussion and analysis and other parts of the Current Report contain forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties, and assumptions. LanzaTech's actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under "Risk Factors" and elsewhere in the Current Report. You should carefully read the "Risk Factors" section of the Current Report to gain an understanding of the important factors that could cause actual results to differ materially from any such forward-looking statements. Please also see "Forward-Looking Statements." In this section, unless otherwise indicated or the context otherwise requires, references in this section to "New LanzaTech," the "Company," "we," "us," "our" and other similar terms refer to LanzaTech Global, Inc. and its consolidated subsidiaries, including LanzaTech NZ, Inc. and its consolidated subsidiaries subsequent to the Business Combination. References to "LanzaTech" and "Legacy LanzaTech" refer to LanzaTech NZ, Inc. and its consolidated subsidiaries prior to the Business Combination and references to "AMCI" refer to AMCI Acquisition Corp. II prior to the Business Combination.

Overview

We are a nature-based carbon refining company that transforms waste carbon into the chemical building blocks for consumer goods such as sustainable fuels, fabrics, and packaging that people use in their daily lives. Our customers leverage our proven proprietary gas fermentation technology platform to convert certain feedstock, including waste carbon gases, into sustainable fuels and chemicals such as ethanol. We are focused on taking advantage of the many uses of ethanol while capitalizing on the growing preference among major companies for renewable products and environmentally-conscious manufacturing processes.

LanzaTech performs research and development ("R&D") services related to novel technologies and development of biocatalysts for commercial applications, mainly to produce fuels and chemicals. We primarily employ a licensing business model whereby our customers build, own and operate facilities that use our technology, and in return, we are paid a royalty fee based on the revenue generated from the use of our technology. We began operations in 2005 and in 2018, we established the world's first commercial waste gas to ethanol plant in China, followed by a second and a third one in 2021 and 2022, respectively, also in China, with others currently in development in various countries around the world.

We have not achieved operating profitability since our formation. Our net losses after tax were $(76.4) million for the year ended December 31, 2022 and $(46.7) million for the year ended December 31, 2021. As of December 31, 2022 we had an accumulated deficit of $(456.2) million compared to an accumulated deficit of $(379.9) million as of December 31, 2021. We anticipate that we will continue to incur losses until we sufficiently commercialize our technology.

The common stock and the common stock issuable upon exercise of the resale securities noted above represent a substantial percentage of the total outstanding shares of our common stock as of the date of this Current Report. Additionally, assuming all of the Convertible Securities were converted or exercised, as applicable, the selling stockholders would own 203,371,061 shares of common stock, representing approximately 93% of the total outstanding common stock. So long as the Registration Statement on Form S-1 (the "Registration Statement") is effective, the sales of the securities being offered in the Registration Statement could result in a significant decline in the public trading price of the common stock.

The Business Combination

On March 8, 2022, AMCI entered into the Merger Agreement with Legacy LanzaTech and Merger Sub . On February 8, 2023, upon the terms and subject to the satisfaction or waiver of the conditions described in the Merger Agreement, including approval of the transaction by the AMCI Stockholders and LanzaTech stockholders, Merger Sub merged with and into LanzaTech. Upon consummation of the Business Combination, the separate corporate

existence of Merger Sub ceased, and LanzaTech survived the Business Combination and became a wholly owned subsidiary of AMCI. In connection with the consummation of the Business Combination, the combined company was renamed "LanzaTech Global, Inc.." and is referred to in this section as "New LanzaTech."

Accounting Impact of the Business Combination

The Business Combination was accounted for as a reverse recapitalization. LanzaTech was deemed the accounting predecessor and New LanzaTech is the successor SEC registrant.

Under this method of accounting, AMCI was treated as the acquired company for financial statement reporting purposes. For accounting purposes, LanzaTech was deemed to be the accounting acquirer in the transaction and, consequently, the transaction was treated as a recapitalization of LanzaTech (i.e., a capital transaction involving the issuance of stock by AMCI for the stock of LanzaTech). Accordingly, the consolidated balance sheets and results of operations of LanzaTech became the historical financial statements of New LanzaTech, and AMCI's assets, liabilities and results of operations were consolidated with LanzaTech's beginning on the acquisition date. The net assets of LanzaTech were recognized at carrying value, with no goodwill or other intangible assets recorded.

The most significant change in New LanzaTech's financial position as of the date of the Closing and results is expected to be an estimated $151.5 million net increase in cash and cash equivalents and an estimated $644.9 million net increase in total stockholders' equity, in each case as compared to LanzaTech's historical consolidated balance sheet as of December 31, 2022. This increase in cash and cash equivalents and stockholders' equity reflects (i) the receipt of $185.0 million in gross proceeds from the Private Placement that closed concurrently with the consummation of the Business Combination and (ii) redemptions of 8,351,626 shares by the AMCI stockholders in connection with the Business Combination. Total transaction costs were approximately $11.9 million. See "Unaudited Pro Forma Condensed Combined Financial Information" for additional information.

Factors Affecting Our Performance

We believe that our performance and future success depend on several factors that present significant opportunities for New LanzaTech but also pose risks and challenges.

With respect to New LanzaTech's business, we have identified several potential risk factors, including (i) the history of LanzaTech's net losses and the fact that New LanzaTech anticipates incurring further losses going forward; (ii) New LanzaTech's reliance upon industry partners to effect our growth strategy and to execute our business plan; (iii) New LanzaTech owns and anticipates acquiring additional equity interests in several of our customers' plants and has exposure to the volatility and liquidity risks inherent in holding such equity; (iv) the concentration of New LanzaTech's revenue in a limited number of customers and the fact that our growth will depend on expanding that customer base; (v) rapidly changing technology and extensive competition for technologies addressing decarbonization; (vi) the protection of New LanzaTech's intellectual property; (vii) construction risks, including failure to complete projects on time or in a cost effective manner; (viii) the fluctuating availability and cost of waste based feedstocks used in New LanzaTech's process; (ix) volatility in commodity chemicals prices and the associated impact on New LanzaTech's royalty revenue and CarbonSmart revenues and (x) market conditions and geopolitical factors. For additional information regarding risks facing our business, see "Risk Factors."

Basis of Presentation

LanzaTech's consolidated financial statements were prepared in accordance with US GAAP. See Note 2 to our consolidated financial statements for a full description of our basis of presentation.

Key Operational and Business Metrics

In addition to the measures presented in our consolidated financial statements, we review the following key business metrics to measure our performance, identify trends affecting our business, formulate business plans, and make strategic decisions that will impact the future operational results of New LanzaTech. Increases or decreases in our key business metrics may not correspond with increases or decreases in our revenue.

Key Financial Metrics:

The key elements of LanzaTech's performance for the years ended December 31, 2022 and December 31, 2021 are summarized in the tables below:

(In thousands, except for percentages)	Year Ended December 31, 2022	Year Ended December 31, 2021	Change 2022 vs. 2021	
GAAP Measures:				
Revenue	$ 37,343	$ 25,461	$ 11,882	47 %
Net Loss	(76,356)	(46,689)	(29,667)	64 %
Key Performance Indicators:				
One-Time Revenue	33,764	21,512	12,252	57 %
Recurring Revenue [(1)]	3,579	3,949	(370)	(9)%
Total Revenue	$ 37,343	$ 25,461	$ 11,882	47 %
Cost of Revenues (ex. Depreciation) [(2)]	(28,287)	(15,229)	(13,058)	86 %
Selling, general & administrative and other expense	(26,804)	(13,216)	(13,588)	103 %
Adjusted EBITDA [(3)]	$ (69,220)	$ (44,792)	$ (24,428)	55 %

(1) Includes revenue from licensing and sales of microbes and media.
(2) Consists of costs of revenues from contracts with customers (exclusive of depreciation), cost of revenue from collaboration agreements (exclusive of depreciation) and cost of revenue from related party transactions (exclusive of depreciation).
(3) Adjusted EBITDA is calculated as net loss, excluding the impact of depreciation, interest income (expense), net, gain on extinguishment of debt, stock-based compensation and change in fair value of warrant liability, and loss/(gain) from equity method investees, net. Adjusted EBITDA is a supplemental measure that is not a substitute for, or superior to, measures of financial performance prepared in accordance with US GAAP. Adjusted EBITDA does not represent, and should not be considered, an alternative to net income (loss), as determined in accordance with US GAAP. See "*Non-GAAP Financial Measures*" for additional information and reconciliation of Adjusted EBITDA to net loss, its most directly comparable US GAAP measure.

Key Non-Financial Metrics:

(In thousands of tonnes per annum)	As of December 31, 2022	As of December 31, 2021	Change 2022 vs. 2021	
New Capacity Additions	60	45	15	33 %
Cumulative Capacity Additions	150	90	60	67 %

LanzaTech's installed capacity, which includes capacity by equity and cost method investees and customers, is one of the key drivers for the Company's licensing revenues given that they are usually contracted on a percentage-of-revenue or a dollars-per-tonne basis.

Components of Operating Results

While we have offerings in multiple market segments and operate in multiple countries, we operate and manage our business as one reportable operating segment. Nearly all of our service offerings are delivered and supported on a global basis. Additionally, most of our service offerings are deployed in a similar way, and we evaluate our financial information and resources and assess the performance of these resources on a consolidated basis.

Revenues

To date, we have financed our operations primarily through equity and debt financing, proceeds from joint development agreements, U.S. government contracts, engineering and other services contracts, and licensing

agreements. We derive all revenues from a single operating segment. Revenues can be viewed as a combination of the following:

- Feasibility studies and engineering services related to basic design of commercial plants utilizing our technologies;
- Licensing of intellectual property when customers deploy our carbon capture and transformation technology;
- Research and development services related to novel technologies and the development of biocatalysts; and
- Sale of CarbonSmart ethanol to customers.

Revenue is measured based on the consideration specified in customer contracts and excludes amounts collected on behalf of third parties.

Carbon Capture and Transformation

We provide feasibility studies and basic design and engineering services used for detailed design, procurement, and construction of commercial plants that utilize our technologies, along with the sale of equipment and microbes. The services provided are recognized as a performance obligation satisfied over time. Revenue is recognized using the output method based on milestone completion, the cost-to-cost input method for certain engineering services, or the percentage of completion method in accordance with Accounting Standards Codification ("ASC") 606, *Revenue from Contracts with Customers* ("ASC 606"). Revenue for the sale of microbes and media is at a point in time, depending on when control transfers to the customer.

We license intellectual property to generate recurring revenue when our customers deploy carbon capture and transformation plants. When licenses are considered to be distinct performance obligations, the recognition of revenue is dependent on the terms of the contract, which may include fixed consideration or royalties based on sales or usage, in which case, the revenue is recognized when the subsequent sale or usage occurs or when the performance obligation to which some or all of the sales or usage-based royalty is allocated or has been satisfied, whichever is later.

Research and Development Services

We perform R&D services related to novel technologies and the development of biocatalysts for commercial applications, mainly to produce fuels and chemicals. We engage in two main types of R&D services – joint development agreements, and other contract research, including projects with the U.S. Department of Energy. Such services are recognized as a performance obligation satisfied over time. Revenue is recognized based on milestone completion, when payments are contingent upon the achievement of such milestones, or based on stage of contract or phase completion method when enforceable rights to payment exist. When no milestones or stages are clearly defined, management has determined that the cost incurred, input method, is an appropriate measure of progress toward complete satisfaction of the performance obligations under ASC 606 and estimates its variable consideration under the expected value method.

Revenue is not recognized in advance of customer acceptance of a milestone, when such acceptance is contractually required. Payments for R&D services with no contractual payments are not due from customers until a technical report is submitted; therefore, a contract asset is recognized at milestone completion but prior to the submission of a technical report. The contract asset represents the Company's right to consideration for the services performed at milestone completion. Occasionally, customers provide payments in advance of us providing services which creates a contract liability for the Company. The contract liability represents our obligation to provide services to a customer.

Collaboration Arrangements

We have certain partnership agreements that are within the scope of ASC 808, *Collaborative Arrangements* ("ASC 808"), which provides guidance on the presentation and disclosure of collaborative arrangements. Generally,

the classification of the transactions as collaborative arrangements is determined based on the nature of the contractual terms of the arrangement, along with the nature of the operations of the participants. Our collaborative agreements generally include provision of R&D services related to novel technologies and biocatalysts. Amounts received for these services are classified as Revenue from collaborative arrangements in the consolidated statements of operations and comprehensive loss. New LanzaTech's R&D services are a major part of our ongoing operations and therefore ASC 606 was applied to recognize revenue.

CarbonSmart

We sell CarbonSmart ethanol directly to customers from LanzaTech licensed plants using the Company's proprietary technologies. Revenue is recognized at a point in time when control transfers to the customer, which varies depending on the shipping terms. The Company acts as the principal in such transactions and accordingly, recognizes revenue and cost of revenues on a gross basis.

Cost of Revenues

Our R&D, engineering, and other direct costs of services are related to revenue agreements with customers, related parties, and collaborative partners, and represent cost of revenue. Costs include both internal and third-party fixed and variable costs and include materials, supplies, labor, and fringe benefits.

Research and Development Expenses

R&D expenses consist of personnel costs and the cost of consultants, materials and supplies associated with internal R&D projects as well as various laboratory studies. Indirect R&D costs include depreciation and other indirect overhead expenses. We expect our R&D activities to increase substantially as we continue to invest in improving our technology and developing new products.

Selling, General and Administrative Expenses

Selling, general and administrative expenses ("SG&A") consist primarily of personnel costs, costs of general business development activities, travel-related expenses, and other indirect overhead costs. We expect that our business development expenses will increase as we expand our sales and marketing efforts, commercial capability, brand awareness and customer base through targeted business development initiatives.

Our general and administrative expenses consist primarily of personnel costs for our executive, finance, corporate and other administrative functions, intellectual property and patent costs, facilities and other allocated expenses, other expenses for outside professional services, including legal, human resources, audit and accounting services, and insurance costs. We expect our general and administrative expenses to increase as a result of operating as a public company, including additional costs relating to compliance with the rules and regulations of the SEC and stock exchange rules, legal and audit services, additional insurance, investor relations activities, and other administrative and professional services. We also expect our intellectual property expenses to increase as we expand and increase protection of our intellectual property portfolio.

Other Expense, Net

Other expense, net relates to miscellaneous other income and expense and foreign currency gains and losses. Interest income consists of income earned from our cash, cash equivalents and short-term investments. We expect our interest income to increase following completion of the Business Combination as we invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing obligations of the U.S. government and its agencies.

Gain from Equity Investees, Net

We hold interests in LanzaJet located in the United States, and the Shougang Joint Venture (also referred as "SGLT" herein) located in China which we have determined to be variable interest entities ("*VIEs*") for which it has been determined we are not the primary beneficiary. Our variable interests primarily relate to entities in which we have a non-controlling equity interest. Although these financial arrangements resulted in holding variable interests in

these entities, they do not empower us to direct the activities of the VIEs that most significantly impact the VIEs' economic performance, therefore LanzaTech has determined it is not the primary beneficiary and does not currently consolidate these VIEs..

Through our holdings in LanzaJet, our representation on the board of directors and participation in the policy-making process, as well as the material intra-entity transactions, we have determined that we can exercise significant influence over the activities of LanzaJet. Our interest in LanzaJet is accounted for under the equity method of accounting, with income (loss) from equity method investees, net recognized in our consolidated statements of operations and comprehensive loss and equity method investments recognized on our consolidated balance sheets.

As of September 30,2022, we no longer have significant influence over the activities of SGLT and as a result, our investment is accounted for at cost with adjustments for observable changes in price and impairment (if any) recognized in our consolidated statements of operations and comprehensive loss. Previously to September 30, 2022, we accounted for SGLT under the equity method of accounting, with income (loss) from equity method investees, net, including gain on dilution recognized in our consolidated statements of operations and comprehensive loss and equity method investments recognized on our consolidated balance sheet.

The Company currently has a license agreement with SGLT and a letter agreement with SGLT and Sinopec. These agreements do not provide LanzaTech with the power to direct the activities that are most significant to the economic performance of these entities.

Income Tax Expense (Benefit)

Current and deferred taxes are calculated based on tax rates enacted or substantively enacted at the reporting date and are recognized in profit or loss except when the tax relates to items charged or credited to other comprehensive income, in which case the tax is also recognized in other comprehensive income. Deferred tax is recognized in respect of temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax assets including those relating to temporary differences, net operating loss carryforwards and tax credit carryforwards, are only recognized to the extent it is probable that future taxable income will be available to utilize the temporary differences and carryforwards. Our net operating loss carryforwards are subject to shareholder continuity rules, and may be impacted by future fundraising activities.

We maintain a valuation allowance against the full value of our net deferred tax assets because management believes the recoverability of the tax assets is not more likely than not.

Results of Operations — Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

The results of operations presented below should be reviewed in conjunction with our consolidated financial statements and notes. The following table sets forth our consolidated results of operations for the periods indicated:

	Year Ended December 31,		Change	
	2022	2021	2022 vs. 2021	
(In thousands, except for per share amounts)	(in thousands)			
Total revenue	$ 37,343	$ 25,461	$ 11,882	47 %
Cost of revenues	(28,287)	(15,229)	(13,058)	86 %
Operating expenses:				
Research and development expense	$ (53,191)	$ (44,229)	$ (8,962)	20 %
Depreciation expense	(4,660)	(3,806)	(854)	22 %
Selling, general and administrative expense	(26,804)	(13,216)	(13,588)	103 %
Total operating expenses	**$ (84,655)**	**$ (61,251)**	**$ (23,404)**	**38 %**
Loss from operations	(75,599)	(51,019)	(24,580)	48 %
Other (expense) income, net	(2,749)	2,385	(5,134)	(215) %
Loss before income taxes	**$ (78,348)**	**$ (48,634)**	**$ (29,714)**	**61 %**
Income tax expense	—	—	—	— %
Gain from equity method investees, net	1,992	1,945	47	2 %
Net loss	**$ (76,356)**	**$ (46,689)**	**$ (29,667)**	**64 %**
Other comprehensive loss:				
Foreign currency translation adjustments	(1,449)	95	(1,544)	(1625) %
Comprehensive loss	**$ (77,805)**	**$ (46,594)**	**$ (31,211)**	**67 %**
Net loss per common share - basic and diluted	$ (54.10)	$ (42.59)		
Weighted-average number of common shares outstanding - basic and diluted	2,126,346	1,959,165		

Revenue

Total revenue increased $11.9 million, or 47%, in 2022 compared to 2021. Engineering and other services increased revenue by $9.5 million, consisting of an increase of $13.6 million from contracts with existing customers, partially offset by $(4.1) decrease in revenue from projects with new customers. Additionally, the following categories increased revenue: $4.0 million in CarbonSmart ethanol, $3.9 million in other contract research, $0.2 million in licensing, partially offset by a decrease of $(5.7) million in revenue from joint development agreements as a result of the completion and near-completion of certain joint development projects.

Cost of Revenues

Cost of revenue increased $13.1 million, or 86%, in 2022 compared to 2021. Cost of revenue from engineering and other services increased by $9.3 million mainly due to an increase in the number of customer projects and a shift in sales mix with certain projects generating higher cost of revenue. Additional changes in cost of revenue resulted from increases in CarbonSmart ethanol sales, which generated $3.7 million in cost of revenue, and an increase in cost of revenue of $2.6 million from other contract research. These increases were partially offset by decreases of $(2.5) million of cost of revenue from joint development agreements.

Research and Development

R&D expense increased $9.0 million, or 20%, in 2022 compared to 2021. This was due to an increase of $5.9 million in R&D headcount and related costs to accelerate growth, a $2.3 million increase in general R&D spend, and an increase of $0.8 million in external R&D services to expand.

Selling, General and Administrative Expense

SG&A expense increased $13.6 million, or 103%, in 2022 as compared to 2021. The increase was primarily related to $7.6 million increase in one-time external consulting fees related to the proposed Business Combination, $6.2 million higher personnel costs as the Company scaled up non-R&D-related functions, offset by a $(0.2) million decrease in general non-R&D spend.

Other Income (Expense), Net

The following table shows our other income (expense), net for the years ended December 31, 2022, and 2021, and related period-over-period changes:

	Year Ended December 31,		Change	
	2022	2021	2022 vs. 2021	
Interest income (expense), net	$ 8	$ (7)	$ 15	(214)%
Gain on extinguishment of debt	—	3,065	(3,065)	(100)%
Other expense, net	(2,757)	(673)	(2,084)	310 %
Total other (expense) income, net	$ (2,749)	$ 2,385	$ (5,134)	(215)%

Other income (expense), net decreased $(5.1) million, or (215)%, in 2022 compared to 2021. The decrease is primarily due to a gain on the forgiveness of $3.1 million in principal outstanding under the PPP Loan (as defined below) on September 28, 2021. Additional expenses resulted from changes in fair values of our SAFE and warrant instruments for $(1.4), and $(0.7) million in unrealized foreign currency losses. The impact of the change in interest income (expense), net is immaterial as of the year ended December 31, 2022.

Liquidity and Capital Resources

Cash and Cash Equivalents

Cash and cash equivalents comprise cash on hand, demand deposits at banks, and other short-term, highly liquid investments with original maturity of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. The following table shows the balances of our cash, cash equivalents and restricted cash as of December 31, 2022 and December 31, 2021:

	December 31,		Change	
(In thousands, except for percentages)	2022	2021	2022 vs. 2021	
Total cash, cash equivalents, and restricted cash	$ 83,710	$ 128,732	$ (45,022)	(35)%

As of December 31, 2022, as compared to December 31, 2021, the Legacy LanzaTech's cash, cash equivalents, and restricted cash decreased by $(45.0) million, or (35)%, primarily due to an increase in cash usage (see Cash flow section below) to fund working capital, an increase in the net loss adjusted for non-cash charges, and purchases of property, plant and equipment, partially offset by the proceeds from the issuance of the $50.0 million Brookfield SAFE.

Sources and Uses of Capital

Since inception, we have financed our operations primarily through equity financing and proceeds from revenue generating activities.

Our ability to successfully develop products and expand our business depends on many factors, including our ability to meet working capital needs, the availability of equity or debt financing and, over time, our ability to generate cash flows from operations. We manage our capital to ensure that LanzaTech can continue as a going concern while maximizing the return to stakeholders through the optimization of debt and equity balances. Our overall capital risk strategy remains unchanged from prior years. Following completion of the Business Combination, the Company may change its capital risk strategy related to use of capital proceeds from the Business Combination to increase its product offerings or for business growth purposes.

As of December 31, 2022, our capital structure consists of equity (comprising issued capital, and accumulated deficit). We are not subject to any externally imposed capital requirements.

LanzaTech had six outstanding series of redeemable preferred stock. LanzaTech preferred shares were convertible at the holder's option into shares of common stock, on a share-for-share basis, using a conversion rate determined by dividing the original issue price by the conversion price. Each LanzaTech preferred share was automatically converted into a common share of LanzaTech upon the Closing. In April 2021, Legacy LanzaTech issued 3,634,210 Series F preferred shares for gross proceeds of $83.1 million ($22.86 per share).

On October 2, 2022, LanzaTech entered into the Brookfield SAFE with Brookfield and received a cash payment of $50.0 million as the Initial Purchase Amount. In exchange, the Company granted to Brookfield the right to certain shares of the Company's capital stock upon a Liquidity Event. If no Liquidity Event occurs beforehand to the fifth anniversary of the Brookfield SAFE, LanzaTech will repay in cash any remaining unconverted portion of the Initial Purchase Amount less any Non-Repayable Amount, plus interest in the high single digits, compounded annually. Brookfield has the option to extend the repayment date to the tenth anniversary of the date of the Brookfield SAFE if certain events do not occur.

LanzaTech does not have any outstanding debt, other than the Brookfield SAFE classified as liability for accounting purposes, on its consolidated balance sheet as of December 31, 2022. During fiscal year 2021, LanzaTech repaid the outstanding amount of $(0.6) million of its loan facility with Venture Lending and Leasing VII Inc. and Venture Lending and Leasing VIII, Inc. Additionally, LanzaTech's $3.1 million Paycheck Protection Program loan (the "*PPP Loan*") outstanding as of December 31, 2021 was fully forgiven by the Small Business Administration in September 2021. Consequently, LanzaTech recognized a gain on debt extinguishment of $3.1 million related to the PPP Loan, in other income in the statement of operations and comprehensive loss for the year ended December 31, 2021.

On November 9, 2022, LanzaTech committed to purchase $5.5 million of Subordinated Secured Notes in a funding for LanzaJet's subsidiary Freedom Pines Fuels LLC, scheduled to occur on May 1, 2023. The Subordinated Secured Notes are secured by a security interest over the intellectual property owned or in-licensed by LanzaJet. LanzaJet also provides a guarantee of any costs and expenses required to complete the initial facility and achieve commercial operation.

On February 8, 2023, New LanzaTech completed the Business Combination. The completion of the Business Combination resulted in $153.0 million of cash proceeds to New LanzaTech. The amount released to New LanzaTech is also net of the transaction expenses related to the Business Combination paid at Closing and the amount paid to ACM in relation to the Forward Purchase Agreement which LanzaTech, AMCI and ACM executed on February 3, 2023. Pursuant to the Forward Purchase Agreement, ACM purchased 5,916,514 Class A common shares on the open market for approximately $10.16 per share, and such purchase price of $60.1 million was deposited with ACM as a prepayment for the Forward Purchase Agreement redemption at the end of three years.

In the normal course of our business, we also enter into purchase commitments or other transactions in which we make representations and warranties that relate to the performance of our goods and services. We do not expect material losses related to these transactions.

We believe our existing cash and cash equivalents will be sufficient to fund our operations for at least the next 12 months from the date of this Current Report. However, our liquidity assumptions may prove to be incorrect, and we could utilize our available financial resources sooner than we currently expect. Our future capital requirements and the adequacy of available funds will depend on many factors, including those set forth under "Risk Factors" elsewhere in this Current Report.

We will receive up to an aggregate of approximately $188 million from the exercise of all of the warrants, the AM Warrant, and the Shortfall Warrants, assuming the exercise in full of all of the warrants, the AM Warrant, and the Shortfall Warrants for cash. However, if the market price for shares of common stock is less than the exercise price of a holder's warrant, the AM Warrant, or the Shortfall Warrants, as applicable, such holder may be less likely to exercise the warrants as such holder would be selling at a loss if they sold their common stock. Subject to adjustment, the exercise price of the warrants is $11.50 per share, the exercise price of the AM Warrant is $10.00 per share, and the exercise price of the Shortfall Warrants is $10.00 per share, subject to adjustment. On March 24, 2023 the last reported sales price of the common stock was $3.48 per share. Additionally, if the market price for shares of common stock is less than $10.00 per share, holders of shares of common stock would be selling at a loss if they purchased the shares of common stock at $10.00 per share. Because certain selling stockholders purchased shares privately at a price below the current market price, they may have an incentive to sell shares of their common stock because they could profit despite the market price of common stock falling below $10.00 per share. While these selling stockholders may, on average, experience a positive rate of return based on the current market price, public securityholders may not experience a similar rate of return on the securities they purchased due to differences in the purchase prices and the current market price. Based on the closing price of our common stock of $3.48 on March 24, 2023, the selling stockholders would have a potential profit of up to approximately $3.48 per share, or up to approximately $96 million in the aggregate (not giving effect to the issuance of common stock issuable upon exercise of the warrants and options held by them).

We may not be able to secure additional financing to meet our operating requirements on acceptable terms, or at all. If we raise additional funds by issuing equity and/or convertible debt securities, dilution to our existing stockholders will result. If we raise additional financing and incur indebtedness, we would be subject to increased fixed payment obligations and could also be subject to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we are unable to obtain additional funds, we will have to reduce our operating costs, which will cause a delay or reduction in our technology development and commercialization programs.

The common stock and the common stock issuable upon exercise of the resale securities noted above represent a substantial percentage of the total outstanding shares of our common stock as of the date of this Current Report. Additionally, assuming all of the Convertible Securities were converted, the selling stockholders would own 203,371,061 shares of common stock, representing approximately 93% of the total outstanding common stock. So long as the Registration Statement remains effective, the sales of the securities being offered in the Registration Statement could result in a significant decline in the public trading price of the common stock.

Pursuant to the Forward Purchase Agreement, on the Maturity Date the Company is obligated to pay to the Seller the Maturity Consideration, which may be paid in cash or in shares, the Share Consideration and the Prepayment Amount. However, at the time, the Company may not have sufficient funds or be able to obtain financing from third parties to pay such amounts. The Company also may not have sufficient shares authorized to pay the Maturity Consideration in shares. Breach by the Company of any of these obligations could constitute an event of default under the Forward Purchase Agreement, which could subject the Company to financial exposure thereunder (including arising from potential indemnification claims by the Seller). In addition, future debt or other contractual agreements may contain cross-default or cross-acceleration provisions that could be triggered if we defaulted on our obligations to the Seller. Any or all of these consequences could have material adverse consequences for us.

Cash Flows

For the Years Ended December 31, 2022 and 2021

The following table provides a summary of our cash flow for the years ended December 31, 2022 and December 31, 2021:

(In thousands, except for percentages)	Year Ended December 31, 2022	Year Ended December 31, 2021	Change 2022 vs. 2021	
Net cash provided by (used in):				
Operating activities	$ (84,703)	$ (42,591)	$ (42,112)	99 %
Investing activities	(10,686)	(5,747)	(4,939)	86 %
Financing activities	50,545	116,015	(65,470)	(56)%
Effects of currency translation	(178)	146	(324)	(222)%
Net (decrease) increase in cash, cash equivalents, and restricted cash	$ (45,022)	$ 67,823		

Cash Flows Used in Operating Activities

For the year ended December 31, 2022, net cash used in operating activities was $(84.7) million. This was primarily driven by a net loss of $(76.4) million, adjusted for share-based compensation expense of $2.5 million, depreciation of property, plant and equipment of $4.7 million, the loss on change of fair value of SAFE and warrant liabilities of $1.9 million, non-cash lease expense of $1.8 million and non-cash foreign currency exchange losses of $0.7 million. The additional net cash usage is related to the adjustments for net cash by operating assets and liabilities of $(15.8) million, the non-cash gain from equity method investees, net of $(2.0) million, and the non-cash recognition of licensing revenue of $(2.2) million.

For the year ended December 31, 2021, net cash used in operating activities was $(42.6) million. This was primarily driven by a net loss of $(46.7) million, adjusted for net cash provided by operating assets and liabilities of $2.5 million, share-based compensation expense of $2.5 million, depreciation of property, plant and equipment of $3.8 million, loss on change in fair value of SAFE and warrant liabilities of $0.6 million, non-cash lease expense of $1.7 million and non-cash foreign currency exchange loss of $0.1 million. This was partially offset by non-cash recognition of licensing revenue of $(2.0) million, the forgiveness of the Company's $(3.1) million aggregate principal amount PPP Loan, and the gain from equity method investees, net of $(1.9) million.

Cash Flows Used in Investing Activities

For the year ended December 31, 2022, net cash used in investing activities was $(10.7) million, driven by the purchase of property, plant and equipment.

For the year ended December 31, 2021, net cash used in investing activities was $(5.7) million, driven by the purchase of property, plant and equipment.

Cash Flows from Financing Activities

For the year ended December 31, 2022, net cash provided by financing activities was $50.5 million. This was driven by $50.0 million in proceeds from the issuance of the Brookfield SAFE and proceeds of $1.2 million from the exercise of options to acquire shares of common stock of the Company. This was partially offset by the repurchase of equity instruments of $(0.6) million.

For the year ended December 31, 2021, net cash provided by financing activities was $116.0 million. This was driven by $83.1 million in proceeds from the issuance of equity instruments of the Company, proceeds of $0.7 million from the exercise of options to acquire shares of common stock of the Company, the proceeds from the exercise of warrants of $3.2 million and the proceeds from the issuance of the AM SAFE and AM SAFE Warrants of $30.0 million. This was partially offset by the repayment of borrowings of $(0.6) million and the repurchase of equity instruments of the Company of $(0.4) million.

Off-Balance Sheet Arrangements

As of December 31, 2022 and December 31, 2021, we did not engage in any off-balance sheet arrangements, including the use of structured finance, special purpose entities or variable interest entities.

Critical Accounting Policies and Management Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements included elsewhere in this Current Report that have been prepared in accordance with US GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. We consider an accounting estimate to be critical to the consolidated financial statements if the estimate is complex in nature or requires a high degree of judgment and actual results may differ from these estimates with any such differences being potentially material. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. While our significant accounting policies are more fully described in Note 2 to our consolidated financial statements, we believe that the accounting policies discussed below are critical to understanding our historical and future performance:

Revenue Recognition

We recognize revenue from our contracts with customers in accordance with ASC 606. The Company also has certain partnership agreements that are within the scope of ASC 808. We primarily earn revenue from services related to feasibility studies and basic engineering design of commercial plants, joint development, and contract R&D activities to develop novel biocatalysts and related technologies. When accounting for these arrangements, we must develop assumptions that require judgment such as determining the performance obligations in the contract, determining the transaction price for the contract and stand-alone selling price for each performance obligation identified, and measuring progress towards satisfaction of the performance obligations.

The determination of whether goods and services qualify as distinct performance obligations is based on the contract terms and our view of the business. Typically, our goods and services provided under a contract with a customer are viewed as a single performance obligation. Most of our arrangements provide fixed consideration, however, when there are variable consideration elements, we estimate the transaction price and whether revenue should be constrained. Significant estimates and judgments are also used when a material right is provided to the customer. In these instances, management estimates the stand-alone selling price and apportions the total transaction price to this material right.

Most performance obligations on our non-governmental arrangements are recognized over time. We typically use the output method to measure the satisfaction of such performance based on milestone completion or percentage completion when certain revenue recognition requirements are met. We exercise judgment when determining the percentage of completion against the total transaction price initially estimated. For arrangements with government agencies, we measure the satisfaction of performance obligations over time using the input method which requires judgment when selecting the most indicative measure of such performance.

Stock-Based Compensation

We measure stock-based awards granted to employees and directors based on their fair value on the date of grant. We have elected not to estimate forfeitures which means compensation expenses may be reversed in the period in which the forfeiture occurs.

We mostly apply judgment for stock-based awards with performance conditions, because compensation expense is recognized only when it is probable the performance conditions will be met (i.e. occurrence of a liquidity event). Management determined that the occurrence of the liquidity event is probable when the event is consummated, as such, no compensation expenses have been recognized.

We estimate the fair value of each stock option grant on the date of grant using the Black-Scholes option-pricing model, which requires the use of highly subjective assumptions including:

- Expected Term — We have opted to use the “simplified method” for estimating the expected term of plain-vanilla options, whereby the expected term equals the arithmetic average of the vesting term and LanzaTech’s contractual term of the option (generally 10 years).
- Risk-Free Interest Rate — The risk-free rate assumption is based on the U.S. Treasury zero-coupon instruments with maturities similar to the expected term of LanzaTech’s stock options.
- Expected Dividend — We have not issued any dividends and do not anticipate issuing dividends on LanzaTech’s common stock. As a result, we have estimated the dividend yield to be zero.
- Expected Volatility — Due to our limited operating history and a lack of company-specific historical and implied volatility data, we have based our estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. The historical volatility data was computed using the daily closing prices for the various companies' shares during the equivalent period of the calculated expected term of the stock-based awards.

We estimate the fair value of the restricted stock awards (RSAs) using the fair value of common stock. Please refer to the Common Stock Valuation section below.

Warrant Liabilities

Warrants to purchase shares of redeemable convertible preferred stock are classified as liabilities under Other accrued liabilities and under SAFE warrant on our consolidated balance sheets. These warrants are recognized at fair value with subsequent changes recorded in other income (expense), net, in the statements of operations and comprehensive loss. We will continue to adjust for changes in fair value until the earlier of the exercise of the warrants, at which time the liability will be reclassified as redeemable convertible preferred stock, or the expiration of the warrants, at which time the entire amount will be reversed and reflected in the statements of operations and comprehensive loss.

We utilized the Black-Scholes option-pricing model, which incorporates management’s assumptions and estimates, to value the preferred stock warrants. Estimates and assumptions impacting the fair value measurement include the fair value per share of the underlying redeemable convertible preferred stock, the remaining contractual term of the warrants, risk-free interest rate, expected dividend yield and expected volatility of the price of the underlying preferred stock. We determined the fair value per share of the underlying preferred stock by taking into consideration our most recent issuance of our preferred stock with additional factors deemed relevant, because we are a private company and lack company-specific historical and implied volatility information of our stock. We determined the remaining contractual term based on the contract term of the warrants adjusted for the probability of a liquidity event. Expected stock volatility was based on the historical volatility of publicly traded peer companies for a similar remaining contractual term.

Common Stock Valuation

As there has been no public market for our equity instruments to date, the estimated fair value of our shares of common stock has been determined by management and approved by the LanzaTech Board as of the grant date. The LanzaTech Board considered our most recently available independent third-party valuation of the common stock and additional objective and subjective factors that it believed were relevant at the date of the grant. The valuation of our common stock is one of the key input in the valuation of our SAFE and warrant instruments classified as liabilities in our consolidated balance sheet.

The independent third-party valuations of the common stock have been performed in accordance with the guidance outlined in the AICPA Practice Aid, Valuation of Privately-Held Company Equity Securities Issued as Compensation (“AICPA’s Practice Aid”). The specialist considered all objective and subjective factors, including

management's best estimate of our business condition, prospects, and operating performance at each valuation date. Other significant factors included:

- the rights, preferences, and privileges of our preferred stock as compared to those of our common stock, including the liquidation preferences of our preferred stock;
- our results of operations, and financial position;
- arms-length transactions involving recent rounds of preferred stock financings;
- the lack of liquidity of our common stock;
- our stage of development and business strategy and the material risks related to our business and industry;
- the valuation of publicly traded companies in relevant industry sectors, as well as recently completed mergers and acquisitions of peer companies;
- the likelihood of achieving a liquidity event, such as an initial public offering or a sale of our company, given prevailing market conditions; and

In valuing our common stock, the fair value of our business was determined using an option pricing model to backsolve the value of the security from our most recent round of financing which implies a total equity value as well as a per-share common stock value at the valuation date. In August 2021, LanzaTech used a weighted-average methodology for valuing its common stock that included a probability-adjusted liquidity event.

Following the Business Combination, the fair market value of the common stock will be determined based on the quoted market price of the common stock.

Emerging Growth Company Status

Section 102(b)(1) of the JOBS Act exempts "emerging growth companies" (as defined in Section 2(a) of the Securities Act) from being required to comply with new or revised financial accounting standards until private companies are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can choose not to take advantage of the extended transition period and comply with the requirements that apply to non-emerging growth companies, but any such election to not take advantage of the extended transition period is irrevocable. AMCI was an emerging growth company and elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards. Following the consummation of the Business Combination, New LanzaTech expects to continue taking advantage of the benefits of the extended transition period, although it may decide to early adopt new or revised accounting standards to the extent permitted by such standards and relevant laws and regulations. This may make it difficult or impossible to compare New LanzaTech's financial results with the financial results of another public company that is either not an emerging growth company or is an emerging growth company that has chosen not to take advantage of the extended transition period exemptions because of the potential differences in accounting standards used.

New LanzaTech will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which the market value of common stock that is held by non-affiliates equals or exceeds $700 million as of the end of that year's second fiscal quarter, (ii) the last day of the fiscal year in which New LanzaTech has total annual gross revenue of $1.235 billion or more during such fiscal year (as indexed for inflation), (iii) the date on which New LanzaTech has issued more than $1 billion in non-convertible debt in the prior three-year period or (iv) December 31, 2026, which is the last day of the fiscal year following the fifth anniversary of AMCI's IPO.

Implications of being a Smaller Reporting Company

Additionally, New LanzaTech is a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. New LanzaTech will remain a smaller reporting company until the last day of the fiscal year in which (i) the market value of common stock held by non-affiliates

exceeds $250 million as of the end of that year's second fiscal quarter, or (ii) New LanzaTech's annual revenues exceeded $100 million during such completed fiscal year and the market value of common stock held by non-affiliates equals or exceeds $700 million as of the end of that year's second fiscal quarter. To the extent New LanzaTech takes advantage of such reduced disclosure obligations, it may also make comparison of its financial statements with other public companies difficult or impossible.

Recently Issued and Adopted Accounting Standards

See Note 2 to our consolidated financial statements for a full description of recent accounting pronouncements, including the actual and expected dates of adoption and estimate effects on our consolidated results of operations and financial condition, which is incorporated herein by reference.

Non-GAAP Financial Measures

To supplement our financial statements presented in accordance with US GAAP and to provide investors with additional information regarding our financial results, we have presented in this Current Report adjusted EBITDA, a non-GAAP financial measure. Adjusted EBITDA is not based on any standardized methodology prescribed by US GAAP and is not necessarily comparable to similarly titled measures presented by other companies.

We define adjusted EBITDA as our net loss, excluding the impact of depreciation and amortization, interest income (expense), income tax benefit (expense), gain on extinguishment of debt, stock-based compensation, and loss/(gain) from equity method investees. We monitor and have presented in this Current Report adjusted EBITDA because it is a key measure used by our management and the Board to understand and evaluate our operating performance, to establish budgets, and to develop operational goals for managing our business. We believe adjusted EBITDA helps identify underlying trends in our business that could otherwise be masked by the effect of certain expenses that we include in net loss. Accordingly, we believe adjusted EBITDA provides useful information to investors, analysts, and others in understanding and evaluating our operating results and enhancing the overall understanding of our past performance and future prospects.

Adjusted EBITDA is not prepared in accordance with US GAAP and should not be considered in isolation of, or as an alternative to, measures prepared in accordance with US GAAP. There are a number of limitations related to the use of adjusted EBITDA rather than net loss, which is the most directly comparable financial measure calculated and presented in accordance with US GAAP. For example, adjusted EBITDA: (i) excludes stock-based compensation expense because it is a significant non-cash expense hat is not directly related to our operating performance; (ii) excludes depreciation expense and, although this is a non-cash expense, the assets being depreciated and amortized may have to be replaced in the future; and (iii) does not reflect the cash requirements necessary to service interest on our debt, which affects the cash available to us; (iv) gain or losses on equity method investee; and (v) certain income or expense items that do not provide a comparable measure of our business performance. In addition, the expenses and other items that we exclude in our calculations of adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude from adjusted EBITDA when they report their operating results. In addition, other companies may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison.

The following table reconciles adjusted EBITDA to net loss, the most directly comparable financial measure calculated and presented in accordance with US GAAP.

Reconciliation of Net loss to Adjusted EBITDA

	Year Ended December 31,	
(In thousands)	**2022**	**2021**
Net Loss	$ (76,356)	$ (46,689)
Depreciation	4,660	3,806
Interest (income) expense	(8)	7
Gain on extinguishment of debt	—	(3,065)
Stock-based compensation expense and change in fair value of warrant liability [1]	4,476	3,094
Gain from equity method investees, net	(1,992)	(1,945)
Adjusted EBITDA	$ (69,220)	$ (44,792)

(1) Stock-based compensation expense represents expense related to equity compensation plans

Unaudited Pro Forma Condensed Combined Financial Information of LanzaTech Global, Inc.

Capitalized terms used but not defined herein have the meanings ascribed to them in LanzaTech Global, Inc.'s Current Report on Form 8-K/A. Unless otherwise indicated or the context otherwise requires, references in this document to "New LanzaTech," the "Company," "we," "us," "our" and other similar terms refer to LanzaTech Global, Inc. and its consolidated subsidiaries, including LanzaTech NZ, Inc. and its consolidated subsidiaries subsequent to the Business Combination. References to "LanzaTech" and "Legacy LanzaTech" refer to LanzaTech NZ, Inc. and its consolidated subsidiaries prior to the Business Combination and references to "AMCI" refer to AMCI Acquisition Corp. II prior to the Business Combination.

Introduction

New LanzaTech is providing the following unaudited pro forma condensed combined financial information to aid you in your analysis of the financial aspects of the Business Combination.

AMCI was a blank check company formed for the purpose of entering into a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more businesses.

The registration statement for AMCI's IPO became effective on August 3, 2021. On August 6, 2021, AMCI consummated its IPO of 15,000,000 units. Each unit consists of one share of Class A common stock, and one-half of one redeemable warrant, each whole warrant entitling the holder thereof to purchase one share of Class A common stock for $11.50 per share. The units were sold at $10.00 per unit, generating gross proceeds to AMCI of $150.0 million, and incurring offering costs of approximately $7.3 million, inclusive of approximately $5.3 million in deferred underwriting commissions. The underwriters were granted a 45-day option from the date of the underwriting agreement (August 3, 2021) to purchase up to 2,250,000 additional units to cover over-allotments, at $10.00 per unit. On September 17, 2021, the over-allotment option expired, resulting in 562,500 founder shares that were subject to forfeiture to be forfeited.

Simultaneously with the closing of the IPO, AMCI consummated the sale of an aggregate of 3,500,000 private placement warrants at a price of $1.00 per private placement warrant, generating gross proceeds to AMCI of $3.5 million. No underwriting discounts or commissions were paid with respect to such sales.

Upon closing of the IPO and sale of private placement warrants, $150.0 million was placed in the trust account established in connection with the IPO ("Trust Account").

AMCI had 24 months from the closing of the IPO (by August 6, 2023) to complete an initial business combination.

LanzaTech was founded in 2005 in New Zealand and is headquartered today in Chicago, Illinois. LanzaTech is a nature-based carbon refining company that transforms waste carbon into materials such as sustainable fuels, fabrics, and packaging that people use in their daily lives.

The unaudited pro forma condensed combined balance sheet as of December 31, 2022 combines the consolidated historical balance sheet of AMCI and the historical consolidated balance sheet of LanzaTech on a pro forma basis as if the Business Combination and the related transactions contemplated by the Merger Agreement, summarized below, had been consummated on December 31, 2022. The unaudited pro forma condensed combined statement of operations for the year-ended December 31, 2022 combines the historical consolidated statements of operations of AMCI and LanzaTech for such period on a pro forma basis as if the Business Combination and related transactions, summarized below, had been consummated on January 1, 2022, the beginning of the period presented. The related transactions that are given pro forma effect include:

- the reverse recapitalization between AMCI and LanzaTech;
- the net proceeds from the issuance of 18,500,000 shares of New LanzaTech Common Stock in connection with the Private Placement; and
- the Forward Purchase Agreement between AMCI, LanzaTech and ACM.

The unaudited pro forma condensed combined financial information may not be useful in predicting the future financial condition and results of operations of New LanzaTech. The actual financial position and results of operations of New LanzaTech may differ significantly from the pro forma amounts reflected herein due to a variety of factors.

The historical financial information of AMCI was derived from the audited consolidated financial statements of AMCI as of and for the year ended December 31, 2022, which are included elsewhere in this prospectus. The historical financial information of LanzaTech was derived from the audited consolidated financial statements of LanzaTech as of and for the year ended December 31, 2022, which are included elsewhere in this prospectus. This information should be read together with AMCI's and LanzaTech's audited consolidated financial statements and related notes, the sections titled "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and other financial information included elsewhere in this prospectus.

LanzaTech, AMCI and ACM executed the Forward Purchase Agreement on February 3, 2023. Pursuant to the Forward Purchase Agreement, ACM obtained 5,916,514 Recycled Shares on the open market for $10.16 per share ("Redemption Price"), and such purchase price of $60.1 million was funded by the use of Trust Account proceeds as a prepayment ("Prepayment Amount") for the Forward Purchase Agreement redemption at the end of 3 years ("Maturity Date"). ACM has the right at the end of 3 years to return the shares and keep the Prepayment Amount plus the fees described below, or may, at ACM's sole discretion, partially or fully terminate this transaction over the course of the three-year term by returning cash in an amount equal to the number of shares terminated ("Terminated Shares") multiplied by the Redemption Price, which may be reduced in the case of certain dilutive events ("Reset Price").

At the end of the three-year term, New LanzaTech is obligated to pay ACM an amount equal to the product of (1) 7,500,000 less (b) the number of Terminated Shares multiplied by (2) $2.00 (the "Maturity Consideration"). In addition to the Prepayment Amount and the Maturity Consideration, on the Maturity Date, New LanzaTech shall pay to ACM an amount equal to the product of (x) 500,000 and (y) the Redemption Price, totalling $5.1 million (the "Share Consideration").

In addition, ACM may request, at its sole discretion, warrants of New LanzaTech exercisable for shares in an amount equal to 10,000,000 less the number of Recycled Shares ("Shortfall Warrants"). These warrants have an exercise price equal to the Reset Price. The form of the Shortfall Warrants shall be agreed upon by LanzaTech, AMCI and ACM within 45 days of the executed Forward Purchase Agreement. ACM has requested 4,083,486 Shortfall Warrants based on the number of Recycled Shares purchased. In connection with the Forward Purchase Agreement, ACM assigned its rights, duties and obligations with respect to a portion of the shares purchased under the Forward Purchase Agreement to Vellar Opportunity Fund SPV LLC - Series 10.

The Business Combination closed on February 8, 2023 and was accounted for as a reverse recapitalization, in accordance with US GAAP. Under this method of accounting, AMCI was treated as the "acquired" company for financial reporting purposes. Accordingly, the Business Combination was treated as the equivalent of LanzaTech issuing stock for the net assets of AMCI, accompanied by a recapitalization. The net assets of AMCI were stated at historical cost, with no goodwill or other intangible assets recorded. Operations prior to the Business Combination are those of LanzaTech.

LanzaTech was determined to be the accounting acquirer based on evaluation of the following facts and circumstances:

- LanzaTech stockholders have the largest portion of voting rights (85.3%) in New LanzaTech;
- LanzaTech's existing senior management team comprise senior management of New LanzaTech;
- The operations of New LanzaTech primarily represent operations of LanzaTech; and
- In comparison with AMCI, LanzaTech has significantly more revenues and total assets.

Description of the Business Combination

The aggregate consideration for the Business Combination will be payable in the form of shares of New LanzaTech common stock.

The following summarizes the purchase consideration:

Total shares transferred[1]		167,324,363
Value per share[2]	$	10.00
Total share consideration	**$**	**1,673,243,630**
Options exchanged[3]		143,756,370
Total equity value[4]	**$**	**1,817,000,000**

(1) Total shares transferred include the conversion of LanzaTech RSAs to New LanzaTech RSAs in accordance with the Merger Agreement. Total shares transferred do not include LanzaTech options. See note (3) directly below for further information on these instruments.
(2) Total share consideration is calculated using a $10.00 per-share reference price. The closing share price of the Business Combination was determined on the Closing Date. As the Business Combination was accounted for as a reverse recapitalization, the value per share is disclosed for informational purposes only in order to indicate the fair value of shares transferred.
(3) Options exchanged represents the conversion of LanzaTech options into New LanzaTech options in accordance with the Merger Agreement. These options are not assumed to be exercised for the purposes of the unaudited pro forma condensed combined financial information and, therefore, have not been included in Total share consideration. The value of the options represents the number of shares that would be issued under the option agreements assuming full cash exercise. Those shares are valued at the $10.00 per-share reference price.
(4) Total equity value includes the value of the exchanged options assuming full cash exercise of all such instruments. The total equity value is equal to the equity value of $1,817.0 million outlined in the Merger Agreement.

The following summarizes the pro forma shares of New LanzaTech Common Stock outstanding:

	Shares outstanding	%
AMCI Public Stockholders	1,981,860	1.0 %
AMCI Shares subject to Forward Purchase Agreement[1]	5,916,514	3.0 %
AMCI Insiders[2]	2,500,000	1.3 %
Total AMCI Shares	10,398,374	5.3 %
Legacy LanzaTech stockholders	167,324,363	85.3 %
PIPE Investors	18,500,000	9.4 %
Pro Forma New LanzaTech Common Stock at December 31, 2022[3]	196,222,737	100.0 %

(1) Represents shares purchased by ACM as part of the Forward Purchase Agreement described in Footnote M below. These shares are redeemable at the option of ACM.
(2) 1,250,000 AMCI Insider shares were cancelled and re-issued to public shareholders whereby those public shareholders agreed not to redeem their Class A common stock in connection with the Business Combination. The transfer of AMCI Insider shares served as an incentive for public shareholders to not redeem. These shares remain outstanding following the Closing and are reflected in this table as part of the AMCI Public Stockholders share count.
(3) Amounts and percentages exclude all LanzaTech options (including vested LanzaTech options) as they are not outstanding common stock at the time of Closing. Further, these amounts also exclude the 11,000,000 warrants outstanding to acquire AMCI Class A common stock as these were outstanding at the Closing. Additionally, amounts and percentages reflect no election by Brookfield or ArcelorMittal to convert any portion of the Brookfield SAFE or AM Warrant into shares of New LanzaTech common stock following the Closing.

The following unaudited pro forma condensed combined balance sheet as of December 31, 2022 and the unaudited pro forma condensed combined statement of operations for the year ended December 31, 2022 are based on the historical consolidated financial statements of AMCI and LanzaTech. The unaudited pro forma adjustments are based on information currently available, and assumptions and estimates underlying the unaudited pro forma adjustments are described in the accompanying notes. Actual results may differ materially from the assumptions used to present the accompanying the unaudited condensed combined pro forma financial information.

UNAUDITED PRO FORMA CONDENSED COMBINED BALANCE SHEET AS OF DECEMBER 31, 2022 (IN THOUSANDS)

	As of December 31, 2022			
	AMCI Acquisition Corp. II (Historical	LanzaTech NZ, Inc. (Historical)	Transaction Accounting Adjustments	Pro Forma Combined
ASSETS				
Current Assets:				
Cash and cash equivalents	$ 7	$ 83,045	$ 67,467 (B)	$ 234,563
			(200) (C)	
			(10,209) (D)	
			155,000 (E)	
			(60,547) (M)	
Trade and other receivables, net of allowance	—	11,695	—	11,695
Contract assets	—	18,000	—	18,000
Prepaid expenses - current	191	—	(191) (A)	—
Other current assets	—	11,157	191 (A)	9,823
			(1,525) (D)	
Total Current Assets	198	123,897	149,986	274,081
Investments held in Trust Account	152,297	—	(152,297) (B)	—
Property, plant and equipment, net	—	19,689	—	19,689
Right of use assets	—	6,969	—	6,969
Equity Method Investment	—	10,561	—	10,561
Equity Security Investment	—	14,990	—	14,990
Forward purchase agreement derivative asset	—	—	13,023 (M)	13,023
Other non-current assets	—	750	—	750
Total Assets	**$ 152,495**	**$ 176,856**	**$ 10,712**	**$ 340,063**
LIABILITIES, CONTINGENTLY REDEEMABLE PREFERRED EQUITY, AND SHAREHOLDERS' EQUITY (DEFICIT)				
Accounts payable	$ 2,495	$ 7,455	$ (2,418) (D)	$ 7,532
Capital based tax payable	394	—	—	394
Franchise tax payable	44	—	(44) (A)	—
Income tax payable	310	—	—	310
Other accrued liabilities	—	6,621	2,301 (A)	6,124
			(679) (D)	
			(2,119) (G)	
AM SAFE liability	—	28,986	(28,986) (E)	—
AM SAFE warrant	—	1,989	(1,989) (J)	—
Accrued expenses	2,257	—	(2,257) (A)	—
Due to related party	1,374	—	—	1,374
Contract liabilities	—	3,101	—	3,101
Accrued salaries and wages	—	7,031	—	7,031
Current lease liabilities	—	798	—	798
Total current liabilities	6,874	55,981	(36,191)	26,664
Deferred underwriting commissions payable	200	—	(200) (C)	—
Derivative warrant liabilities	2,641	—	25,576 (N)	28,217
Non-current lease liabilities	—	6,615	—	6,615
Non-current contract liabilities	—	10,760	—	10,760

Brookfield SAFE liability		50,000		50,000
Other long-term liabilities	—	1,591	—	1,591
Total Liabilities	9,715	124,947	(10,815)	123,847
Commitments and Contingencies				
Class A common stock subject to possible redemption	$ 151,114	$—	$ (66,284) **(K)**	—
			(84,831) **(B)**	
Contingently Redeemable Preferred Equity				
Redeemable convertible preferred stock	—	480,631	241,529 **(F)**	—
			(722,160) **(G)**	
Shareholders' Equity				
Preferred stock	—	—		—
Class A common stock	—	—		—
Class B common stock	—	—		—
Common stock	—	—	2 **(E)**	20
			17 **(G)**	
			1 **(K)**	
Additional paid-in capital	—	24,783	(11,664) **(D)**	988,155
			184,998 **(E)**	
			724,262 **(G)**	
			2,741 **(I)**	
			70 **(H)**	
			1,989 **(J)**	
			66,283 **(K)**	
			(5,307) **(L)**	
Accumulated other comprehensive income	—	2,740		2,740
Accumulated (deficit) equity	(8,334)	(456,245)	3,027 **(D)**	(774,699)
			(1,014) **(E)**	
			(241,529) **(F)**	
			(2,741) **(I)**	
			(70) **(H)**	
			5,307 **(L)**	
			(47,524) **(M)**	
			(25,576) **(N)**	
Total shareholders' (deficit) equity	(8,334)	(428,722)	653,272	216,216
TOTAL LIABILITIES, CONTINGENTLY REDEEMABLE PREFERRED EQUITY, AND SHAREHOLDERS' EQUITY (DEFICIT)	$ 152,495	$ 176,856	$ 10,712	$ 340,063

See accompanying notes to the unaudited pro forma condensed combined financial information.

UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2022 (IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

	AMCI Acquisition Corp. II (Historical)	LanzaTech NZ, Inc. (Historical)	Transaction Accounting Adjustments		Pro Forma Combined
Revenue:					
Revenue from contracts with customers - services	$ —	$ 27,798	$ —		$ 27,798
Revenue from contracts with customers – tangible products		4,000			4,000
Revenue from collaborative arrangements	—	2,575	—		2,575
Revenue from related party transactions	—	2,970	—		2,970
Total revenue	—	37,343	—		37,343
Cost and operating expenses:					
Cost of revenues from contracts with customers - services (exclusive of depreciation shown below)	—	(22,912)	—		(22,912)
Cost of revenues from contracts with customers – tangible products (exclusive of depreciation shown below)		(3,648)			(3,648)
Cost of revenue from collaborative arrangements (exclusive of depreciation shown below)	—	(1,250)	—		(1,250)
Cost of revenue from related party transactions (exclusive of depreciation shown below)	—	(477)	—		(477)
Research and development	—	(53,191)	(30)	(CC)	(54,400)
			(1,179)	(DD)	
Depreciation expense	—	(4,660)	—		(4,660)
Selling, general and administrative expense	—	(26,804)	(6,370)	(AA)	(32,200)
			(40)	(CC)	
			(1,562)	(DD)	
			3,027	(II)	
			(451)	(JJ)	
General and administrative expenses	(5,924)	—	5,924	(AA)	—
General and administrative expenses - related party	(120)	—	—		(120)
Capital based tax expense	(246)	—	246	(AA)	—
Franchise tax expense	(200)	—	200	(AA)	—
Total cost and operating expenses	(6,490)	(112,942)	(235)		(119,667)
Loss from operations	(6,490)	(75,599)	(235)		(82,324)
Other income (expense):					
Interest income, net	—	8	—		8
Other (expense) income, net	—	(2,757)	2,970	(AA)	(71,501)
			(1,014)	(EE)	
			260	(FF)	
			715	(GG)	
			974	(HH)	
			(47,073)	(JJ)	
			(25,576)	(KK)	

Change in fair value of derivative warrant liabilities		2,970		—	(2,970) (AA)		—
Gain from extinguishment of deferred underwriting commissions on public warrants		172			(172) (BB)		
Income from investments held in Trust Account		2,300		—	(2,300) (BB)		—
Total other income (loss), net		5,442		(2,749)	(74,186)		(71,493)
Income (loss) before income taxes		(1,048)		(78,348)	(74,421)		(153,817)
Income tax (expense) benefit		(309)		—	309 (LL)		—
Gain from equity method investees, net		—		1,992	—		1,992
Net loss		(1,357)		(76,356)	(74,112)		(151,825)
Unpaid cumulative dividends on preferred stock		—		(38,672)	38,672 (MM)		—
Net income (loss) allocated to common shareholders		(1,357)		(115,028)	(35,440)		(151,825)
Weighted average shares outstanding of Class A common stock		15,000,000					
Basic and diluted net income per share, Class A	$	(0.07)					
Weighted average shares outstanding of Class B common stock, basic and diluted		3,750,000					
Basic and diluted net income per share, Class B common stock	$	(0.07)					
Weighted-average number of common shares outstanding - basic and diluted				2,126,346			196,222,737
Net loss per common share - basic and diluted			$	(54.10)	$	$	(0.77)

See accompanying notes to the unaudited pro forma condensed combined financial information.

NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

1. Basis of Presentation

The Business Combination was accounted for as a reverse recapitalization in accordance with US GAAP. Under this method of accounting, AMCI was treated as the "acquired" company for financial reporting purposes. Accordingly, the Business Combination was treated as the equivalent of LanzaTech issuing stock for the net assets of AMCI, accompanied by a recapitalization. The net assets of AMCI were stated at historical cost, with no goodwill or other intangible assets recorded. Operations prior to the Business Combination are those of LanzaTech.

The unaudited pro forma condensed combined balance sheet as of December 31, 2022 assumes that the Business Combination occurred on December 31, 2022. The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2022 give pro forma effect to the Business Combination as if it had been completed on January 1, 2022. The financial information is presented on the basis of LanzaTech as the accounting acquirer.

The unaudited pro forma condensed combined balance sheet as of December 31, 2022 has been prepared using, and should be read in conjunction with, the following:

- AMCI's audited consolidated balance sheet as of December 31, 2022 and the related notes as of and for the year ended December 31, 2022, included elsewhere in this prospectus; and
- LanzaTech's audited consolidated balance sheet as of December 31, 2022 and the related notes as of and for the year ended December 31, 2022, included elsewhere in this prospectus.

The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2022 has been prepared using, and should be read in conjunction with, the following:

- AMCI's audited consolidated statement of operations for the year ended December 31, 2022 included elsewhere in this prospectus; and
- LanzaTech's audited consolidated statement of operations and comprehensive loss for the year ended December 31, 2022 included elsewhere in this prospectus.

Management has made significant estimates and assumptions in its determination of the pro forma adjustments. As the unaudited pro forma condensed combined financial information has been prepared based on these preliminary estimates, the final amounts recorded may differ materially from the information presented.

The unaudited pro forma condensed combined financial information does not give effect to any anticipated synergies, operating efficiencies, tax savings, or cost savings that may be associated with the Business Combination.

The pro forma adjustments reflecting the consummation of the Business Combination are based on certain currently available information and certain assumptions and methodologies that management believes are reasonable under the circumstances. The unaudited combined pro forma adjustments, which are described in the accompanying notes, may be revised as additional information becomes available and is evaluated. Therefore, it is likely that the actual adjustments will differ from the pro forma adjustments and it is possible the differences may be material. Management believes that its assumptions and methodologies provide a reasonable basis for presenting all of the significant effects of the Business Combination based on information available to management at this time and that the pro forma adjustments give appropriate effect to those assumptions and are properly applied in the unaudited pro forma condensed combined financial information.

2. Adjustments to Unaudited Pro Forma Condensed Combined Financial Information

The unaudited pro forma condensed combined financial information has been prepared to illustrate the effect of the Business Combination and has been prepared for informational purposes only.

The unaudited pro forma information has been prepared in accordance with Article 11 of Regulation S-X as amended by the final rule, Release No. 33-10786, "Amendments to Financial Disclosures about Acquired and Disposed Businesses." Release No. 33-10786 replaces the existing pro forma adjustment criteria with simplified requirements to depict the accounting for the transaction ("*Transaction Accounting Adjustments*") and present the reasonably estimable synergies and other transaction effects that have occurred or are reasonably expected to occur ("*Management's Adjustments")*. Management has elected not to present Management's Adjustments and will only be presenting Transaction Accounting Adjustments in the unaudited pro forma condensed combined financial information.

The pro forma basic and diluted loss per share amounts presented in the unaudited pro forma combined statement of operations are based upon the number of shares of New LanzaTech Common Stock outstanding, assuming the Business Combination occurred on January 1, 2022.

Adjustments to Unaudited Pro Forma Condensed Combined Balance Sheet

The adjustments included in the unaudited pro forma condensed combined balance sheet as of December 31, 2022 are as follows:

(A) Reflects the following reclassifications on the balance sheet to align presentation:

- Reflects the reclassification of $0.2 million of prepaid expenses - current into $0.2 million of other current assets.

- Reflects the reclassification of $2.2 million of accrued expenses and $0.1 million of franchise tax payable to other accrued liabilities.

(B) Reflects the reclassification of $152.3 million of marketable securities held in the Trust Account at the balance sheet date that becomes available at the Closing. This amount is reduced by the $84.8 million in cash that was paid to redeeming shareholders for the 8,351,626 shares of Class A common stock subject to redemption that were redeemed at a per share redemption price of $10.16.

(C) Reflects the payment of $0.2 million of deferred underwriting fees payable that were incurred in connection with the IPO. The fees were paid at the close of the Business Combination.

(D) Represents the settlement of transaction costs of both AMCI and LanzaTech related to the Business Combination of $11.7 million, in addition to the $0.2 million of deferred underwriting fees noted above, inclusive of advisory, banking, printing, legal and accounting fees that are capitalized into additional paid-in capital as a reduction to proceeds. The unaudited pro forma condensed combined balance sheet reflects these costs as a reduction of cash of $10.2 million as $1.5 million have been paid as of December 31, 2022. $0.7 million in other accrued liabilities and $2.4 million in accounts payable was accrued between both AMCI and LanzaTech as of December 31, 2022. $1.5 million was capitalized on LanzaTech's balance sheet as of December 31, 2022. Adjustment to accumulated deficit of $3.0 million represents the capitalization of transaction costs expensed by AMCI through December 31, 2022.

(E) Represents the net proceeds from the Private Placement of 18,500,000 shares of Class A common stock, par value $0.0001, at $10.00 per share. Proceeds from the Private Placement totaled $155.0 million as 3,000,000 shares of Class A common stock were issued under the AM SAFE Note in satisfaction of the related liability recorded on LanzaTech's balance sheet. Additionally, the AM SAFE Note is effectively adjusted to $30.0 million immediately prior to its conversion to shares through an entry to accumulated deficit for $1.0 million. See footnote EE for further details.

(F) Represents the implied declaration of the $241.5 million unpaid cumulative dividends immediately prior to the conversion of LanzaTech preferred shares into LanzaTech common shares. As required by the Merger Agreement, all unpaid cumulative dividends on LanzaTech preferred shares are converted to shares of New LanzaTech common stock by dividing the total cumulative dividends by $10.00. This conversion occurs in footnote G. The dividend accrual was calculated through February 8, 2023, the Closing Date.

(G) Represents recapitalization of LanzaTech through the issuance of 167,324,363 shares of New LanzaTech common stock to LanzaTech shareholders as consideration for the reverse recapitalization, including the settlement of LanzaTech preferred shares into shares of New LanzaTech common stock and the settlement of the cumulative unpaid dividend on the LanzaTech preferred shares into shares of New LanzaTech common stock as discussed in footnote F. LanzaTech preferred shares were converted into LanzaTech common shares prior to the reverse recapitalization on a one for one basis.

Additionally, this adjustment reflects the net exercise of all outstanding warrants to purchase up to an aggregate of 225,223 shares of LanzaTech common stock granted by LanzaTech to Venture Lending and Leasing VI, Inc. in September 2012, and to Venture Lending and Leasing VII, Inc. and Venture Lending and Leasing VIII, Inc. in November 2016 (collectively, the "VLL Warrants") into LanzaTech common shares immediately prior to the reverse capitalization. The $2.1 million liability for these warrants is derecognized as a result of the exercise.

Holders of LanzaTech common shares received per share consideration of 4.37 shares of New LanzaTech common stock.

(H) Represents the conversion and accelerated vesting of LanzaTech options into New LanzaTech options where the option agreement includes a performance condition that accelerated vesting as a result of the Business Combination.

(I) Represents the conversion and accelerated vesting of LanzaTech RSAs into the New LanzaTech RSAs.

(J) Reflects the reclassification of the AM Warrant from liability to equity upon close of the Business Combination as the warrant became exercisable for a fixed number of shares at a fixed exercise price at the time of the Business Combination.

(K) Reflects the reclassification of $66.3 million of Class A common stock subject to possible redemption that were ultimately not redeemed to permanent equity.

(L) Reflects the elimination of AMCI's historical accumulated deficit to additional paid-in capital. The amount eliminated is adjusted for the amount of AMCI historical accumulated deficit already reclassified in footnote D.

(M) Reflects the Forward Purchase Agreement. The combination of the Prepayment Amount (reflected as a cash outflow of $60.5 million, inclusive of $0.5 million in stock acquisition fees in this adjustment) and ACM's optional early termination economically result in the arrangement being akin to a prepaid written put option on 5,916,514 Class A common shares. Because prepaid, New LanzaTech is entitled over the 36 month maturity period to either a return of cash or a return of shares, which ACM will determine at its sole discretion.

The Forward Purchase Agreement is therefore evaluated as a prepaid redemption contract that meets the definition of a derivative and is initially valued at an estimated fair value as of February 8, 2023, the Closing Date,of $13.0 million. The value of the derivative is comprised of the Prepayment Amount, and is reduced by the economics of the downside protection provided to ACM, the Maturity Consideration on non-terminated shares and the Share Consideration, reducing the value of the Prepayment Amount by $47.1 million. The derivative will be remeasured to fair value with changes reflected in earnings in future periods. The accounting for the forward purchase agreement asset, as well as the final valuation, are still under evaluation and may be subject to change.

Expensed transaction costs, representing the stock acquisition fees, in the amount of $0.5 million are reflected as an adjustment to accumulated deficit.

The difference between the Prepayment Amount and fair value of the derivative is recorded through accumulated deficit as a one-time charge reflecting the cost of entering the Forward Purchase Agreement.

(N) Reflects the issuance of 4,083,486 Shortfall Warrants to ACM in connection with the Forward Purchase Agreement. The form of these warrants will be negotiated between ACM and New LanzaTech within 45 days of the executed Forward Purchase Agreement. For the purpose of the pro forma financial information, these warrants are assumed to be liability classified and have a three-year term. The Shortfall Warrant value is recorded to derivative warrant liabilities, with an offsetting entry to accumulated deficit. As the form of the warrant has not yet been determined, the classification and valuation of these warrants is subject to change based on the final form agreed between the parties.

Adjustments to Unaudited Pro Forma Condensed Combined Statement of Operations

The pro forma adjustments included in the unaudited pro forma condensed combined statement of operations for the year ended December 31, 2022 are as follows:

(AA) Reflects the following reclassifications on the combined statement of operations to align presentation:

- Reflects the reclassification of general and administrative expense, franchise tax expense and capital-based tax expense into selling, general and administrative expense.
- Reflects the reclassification of change in fair value of derivative warrant liabilities into other (expense) income, net.

(BB) Reflects the elimination of investment income on the Trust Account and the gain from the settlement of deferred underwriting fees resulting from the resignation of Evercore. As this gain resulting from Evercore's resignation occurred prior to Closing and is recorded by AMCI, the gain is reversed.

(CC) Reflects the expense related to the conversion and accelerated vesting of LanzaTech options into New LanzaTech options where the option agreement includes a performance condition that accelerated vesting as a result of the Business Combination. This expense is split between selling, general and administrative expense and research and development expense based on where the related employees' compensation expense is recorded.

(DD) Reflects the expense related to the conversion and accelerated vesting of LanzaTech RSAs into New LanzaTech RSAs. This expense is split between selling, general and administrative expense and research and development expense based on where the related employees' compensation expense is recorded.

(EE) Reflects the mark-to-market adjustment on the AM SAFE liability to increase the value of the liability to $30.0 million at the time of settlement as 3,000,000 shares of New LanzaTech common stock valued at $10.00 per share are to be issued in satisfaction of the SAFE liability.

(FF) Reflects the reversal of the fair value adjustment on the AM Warrant as the AM Warrant is equity classified upon close of the Business Combination (see footnote J above).

(GG) Reflects the reversal of the fair value adjustment on the AM SAFE as the AM SAFE is satisfied upon close of the Business Combination (see footnote E above).

(HH) Reflects the reversal of the fair value adjustment on the VLL Warrants, which were exercised immediately prior to the close of the Business Combination (see Footnote G above).

(II) Reflects the reversal of capitalizable transaction costs which would not have been expensed had the transaction taken place on January 1, 2022.

(JJ) Reflects the transaction costs related to the issuance of the Forward Purchase Agreement as if the transaction had taken place on January 1, 2022. These transaction costs are included in selling, general and administrative expense. Lastly, this reflects the one-time, non-cash charge of entering

into the Forward Purchase Agreement, which are included in other (expense) income, net. See Footnote M for further details.

(KK) Represents the expense on the Shortfall Warrants issued in connection with the Forward Purchase Agreement (see Footnote N above).

(LL) LanzaTech has significant deferred tax assets in the jurisdictions in which it operates. The ability to realize deferred tax assets depends on LanzaTech's ability to generate sufficient taxable income within the carryforward periods provided for in the tax law for each tax jurisdiction. The valuation allowances recorded against deferred tax assets generated by taxable losses in certain jurisdictions will affect the provision for income taxes until the valuation allowances are released.

The unaudited pro forma condensed combined financial information assumes these deferred tax assets and the related valuation allowance will transfer to New LanzaTech, so New LanzaTech's provision for income taxes will include no tax benefit for losses incurred in these jurisdictions until the respective valuation allowance is eliminated. As a result, there has been no tax effect applied to any of the pro forma adjustments detailed above as the valuation allowances remain outstanding during the period of the unaudited pro forma condensed combined statement of operations.

For the year ended December 31, 2022, the income tax expense recorded by AMCI has been reversed from the unaudited pro forma condensed combined statement of operations due to the expectations noted here. The associated current tax liability on the unaudited pro forma condensed combined balance sheet as of December 31, 2022 has not been reversed as the Business Combination does not trigger its settlement.

(MM) Reflects the elimination of the unpaid cumulative dividend on LanzaTech preferred shares as all LanzaTech preferred shares were converted into New LanzaTech common stock at the Closing. New LanzaTech did not have any outstanding preferred shares at the Closing.

3. Loss per Share

Represents the net loss per share calculated using the historical weighted average shares outstanding, and the issuance of additional shares in connection with the Business Combination, assuming the shares were outstanding since January 1, 2022. As the Business Combination and related equity transactions are being reflected as if they had occurred at the beginning of the period presented, the calculation of weighted average shares outstanding for basic and diluted net income (loss) per share assumes that the shares issued relating to the Business Combination have been outstanding for the entirety of the period presented.

(Dollars in thousands except per share data)

	For the year ended December 31, 2022
Pro forma net loss	$ (151,825)
Weighted average shares outstanding of common stock	196,222,737
Net loss per share (basic and diluted) attributable to common stockholders[(1)(2)]	$ (0.77)

(1) As LanzaTech had a net loss on a pro forma combined basis, the outstanding New LanzaTech options and the outstanding New LanzaTech warrants have no impact to diluted net loss per share as they are considered anti-dilutive.

(2) If Brookfield were to convert the Brookfield SAFE to 5,000,000 shares of New LanzaTech common stock, the pro forma loss per share would be $(0.75) for the year ended December 31, 2022.

Adjusted EBITDA, a non-GAAP measure, is in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with US GAAP and should not be considered as an alternative to net income, operating income or any other performance measure derived in accordance with GAAP or as alternative to cash flows from operating activities as a measure of liquidity. See "Non-GAAP Financial Measures" for additional information and reconciliation of this measure.