UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

		g., ,		
		FORM 10	0-Q	
(Mark	One)			
\boxtimes	QUARTERLY REPORT PURSUANT	TO SECTION 13 OR 15(d) OF	THE SECURITIES EXCHANGE A	CT OF 1934
		For the quarterly period end	ed March 31, 2023	
		OR		
	TRANSITION REPORT PURSUANT	TO SECTION 13 OR 15(d) OF	THE SECURITIES EXCHANGE A	CT OF 1934
	_	Commission file number	er 001-40282	
		LanzaTech Glo	bal, Inc.	
	<u> </u>	(Exact name of registrant as spe	ecified in its charter)	
	Delaware		92-201896	9
	(State or other jurisdiction of incorporation	on or organization)	(I.R.S. Employer Ident	ification No.)
		8045 Lamon Avenue, Skokie, IL 600 (847) 324-24) 77	
		(Registrant's telephone number	including area code)	
Securit	ies registered pursuant to Section 12(b) of	the Act:		
	<u>Title of each class</u> Common stock	<u>Trading Symbol(s)</u> LNZA		ge on which registered pital Market
	Warrants	LNZAW	Nasdaq Caj	pital Market
during	e by check mark whether the registrant: (1) the preceding 12 months (or for such shorte ments for the past 90 days. Yes ⊠ No □			
to be su	e by check mark whether the registrant has abmitted and posted pursuant to Rule 405 o registrant was required to submit and post	of Regulation S-T (§232.405 of thi		
	e by check mark whether the registrant is a nitions of "large accelerated filer," "accele			
Large	accelerated filer	□ Acc	relerated filer	
Non-ac	celerated filer		aller reporting company erging growth company	X
	nerging growth company, indicate by checled in the second standards provided in the second standards provided in the second seco			iod for complying with any new
Indicate	e by check mark whether the registrant is a	shell company (as defined in Rul	e 12b-2 of the Act). Yes □ No ⊠	

The registrant had outstanding 195,451,596 shares of common stock as of March 31, 2023.



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CAUTIONARY NOTE ON FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q filed by LanzaTech Global, Inc. together with its consolidated subsidiaries, 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 Quarterly 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 discusses 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, LanzaTech's management.

Forward-looking statements 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;
- 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 Quarterly 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 the risk factors discussed herein and in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2022, in Part II, Item 1A of this Quarterly Report, and in other documents as we filed from time to time with the Securities and Exchange Commission ("SEC"). Moreover, we operate in a competitive industry, and new risks emerge from time to time. It is not possible for the management of 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 Quarterly Report may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements in this Quarterly Report.

CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited, in thousands, except share and per share data)

	Period Ended			
	M	Iarch 31, 2023	D	ecember 31, 2022
Assets				
Current assets:				
Cash and cash equivalents	\$	145,118	\$	83,045
Debt security investments		49,103		_
Trade and other receivables, net of allowance		9,277		11,695
Contract assets		18,460		18,000
Other current assets		18,689		11,157
Total current assets		240,647		123,897
Property, plant and equipment, net		19,794		19,689
Right-of-use assets		6,437		6,969
Equity method investment		9,835		10,561
Equity security investment		14,990		14,990
Other non-current assets		300		750
Prepaid forward contract derivative		15,954		_
Total assets	\$	307,957	\$	176,856
Liabilities, Contingently Redeemable Preferred Stock, and Shareholders' Deficit				
Current liabilities:				
Accounts payable	\$	11,522	\$	7,455
Other accrued liabilities	,	4,143		4,502
AM SAFE liability				28,986
Warrants		9,919		4,108
Contract liabilities		3,042		3,101
Accrued salaries and wages		4,644		7,031
Current lease liabilities		807		798
Total current liabilities		34,077		55,981
Non-current lease liabilities		5,939		6,615
Non-current contract liabilities		10,171		10,760
Fixed Maturity Consideration		6,967		· _
Brookfield SAFE liability		19,400		50,000
Other long-term liabilities		1,591		1,591
Total liabilities		78,145		124,947
Commitments and Contingencies (see note 15)		7 5,2 15		
Communication and Contingencies (see 1996–19)				
Contingently Redeemable Preferred Stock				
Redeemable convertible preferred stock, \$0.0001 par value; 20,000,000 and 130,133,670 shares authorized, — and 129,148,393 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively		_		480,631
Shareholders' Deficit				
Common stock, \$0.0001 par value; 400,000,000 and 158,918,093 shares authorized, 195,451,596 and 10,422,051 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively		19		1
Additional paid-in capital		988,188		24,782
Accumulated other comprehensive income		2,691		2,740
Accumulated deficit		(761,086)		(456,245)
Total shareholders' equity (deficit)	\$	229,812	\$	(428,722)
Total liabilities, contingently redeemable preferred stock, and shareholders' equity	\$	307,957	\$	176,856

See the accompanying Notes to the Condensed Consolidated Financial Statements.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(Unaudited, in thousands, except share and per share data)

	Three Months Ended March 31,			March 31,
	_	2023		2022
Revenue:				
Revenue from contracts with customers - services	\$	7,585	\$	6,463
Revenue from contracts with customers - tangible products		_		740
Revenue from collaborative arrangements		1,088		_
Revenue from related party transactions		973		654
Total revenue		9,646		7,857
Cost and operating expenses:				
Cost of revenue from contracts with customers - services (exclusive of depreciation shown below)		(7,342)		(5,196)
Cost of revenue from contracts with customers - tangible products (exclusive of depreciation shown below)		_		(564)
Cost of revenue from collaborative arrangements (exclusive of depreciation shown below)		(407)		
Cost of revenue from related party transactions (exclusive of depreciation shown below)		(41)		(69)
Research and development expense		(16,286)		(12,361)
Depreciation expense		(1,257)		(1,059)
Selling, general and administrative expense		(16,835)		(5,078)
Total cost and operating expenses		(42,168)		(24,327)
Loss from operations		(32,522)		(16,470)
Other expense:				
Interest income, net		214		_
Other expense, net		(30,396)		(26)
Total other expense, net		(30,182)		(26)
Loss before income taxes		(62,704)		(16,496)
Income tax expense		_		_
Loss from equity method investees, net		(608)		(282)
Net loss	\$	(63,312)	\$	(16,778)
Other comprehensive loss:				
Foreign currency translation adjustments		(49)		(28)
Comprehensive loss	\$	(63,361)	\$	(16,806)
·			-	
Unpaid cumulative dividends on preferred stock		(4,117)		(9,523)
Net loss allocated to common shareholders	\$	(67,429)	\$	(26,301)
	_			
Net loss per common share - basic and diluted	\$	(0.58)	\$	(2.85)
Weighted-average number of common shares outstanding - basic and diluted		116,530,963	•	9,219,499
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 $See \ the \ accompanying \ Notes \ to \ the \ Condensed \ Consolidated \ Financial \ Statements.$

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND SHAREHOLDERS' EQUITY /DEFICIT

(Unaudited, all amounts in thousands, except share data)

	Redeemable Co Preferred S		Additional Common Stock Paid-in Outstanding Capital		Accumulated Deficit	Accumulated Other Comprehensive Income	Total Shareholders' Equity / (Deficit)	
	Shares	Amount	Shares	Amount				
Balance as of December 31, 2022	29,521,810	\$480,631	2,382,358	s —	\$ 24,783	\$ (456,245)	\$ 2,740	\$ (428,722)
Retroactive application of recapitalization	99,626,583	_	8,039,693	1	(1)	_	_	_
Adjusted balance, beginning of period	129,148,393	480,631	10,422,051	1	24,782	(456,245)	2,740	(428,722)
Stock-based compensation expense	_	_	_	_	3,505	_	_	3,505
RSA vesting			2,535,825		_	_	_	_
Repurchase of equity instruments	_	_	(771,141)	_	(7,650)	_	_	(7,650)
Net loss	_	_	_	_	_	(63,312)	_	(63,312)
Issuance of common stock upon exercise of options	_	_	470,843	_	746	_	_	746
Exercise of a warrant, Series C and D Preferred Stock	594,309	5,890	_	_	_	_	_	_
In-kind payment of preferred dividend	_	241,529	_	_	_	(241,529)	_	(241,529)
Conversion of preferred stock into common stock	(129,742,702)	(728,050)	153,895,644	15	728,035	_	_	728,050
Recapitalization, net of transaction expenses (Note 3)	_		28,898,374	3	236,970	_	_	236,973
Reclassification of warrants to equity	_	_	_	_	1,800	_	_	1,800
Foreign currency translation	_	_	_	_	_	_	(49)	(49)
Balance as of March 31, 2023	_	_	195,451,596	19	988,188	(761,086)	2,691	229,812

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND SHAREHOLDERS' EQUITY /DEFICIT

(Unaudited, all amounts in thousands, except share data)

	Redeemable (Preferred		Common Outstar			Additional Paid-in Accumulated Capital Deficit		Ot Accumulated Compre				Other SI Comprehensive		Total nareholders' Equity / (Deficit)
	Shares	Amount	Shares	Amo	ount									
Balance as of December 31, 2021	29,521,810	\$480,631	2,106,934	\$	_	\$ 21,711	\$	(379,889)	\$	3,261	\$	(354,917)		
Retroactive application of recapitalization	99,626,583	_	7,110,226		1	(1)		_		_		_		
Adjusted balance, beginning of period	129,148,393	480,631	9,217,160		1	21,710		(379,889)		3,261		(354,917)		
Share-based compensation expense	_	_	_		_	738		_		_		738		
Repurchase of equity instruments	_	_	_		_	_		_		_		_		
Net loss	_	_	_		_	_		(16,778)		_		(16,778)		
Issuance of common stock upon exercise of options	_	_	5,031			7						7		
Transfer from foreign currency translation to equity security investment	—	_			_	_		_		_		_		
Foreign currency translation	_	_	_		_	_		_		(28)		(28)		
Balance at March 31, 2022	129,148,393	\$480,631	9,222,191	\$	1	\$ 22,455	\$	(396,667)	\$	3,233	\$	(370,978)		

See the accompanying Notes to the Condensed Consolidated Financial Statements.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited, in thousands)

		Three Months Ended March 31,		
		2023		2022
Cash Flows From Operating Activities:				
Net loss	\$	(63,312)	\$	(16,778)
Adjustments to reconcile net loss to net cash used in operating activities:				
Share-based compensation expense		3,505		738
Gain on change in fair value of SAFE and warrant liabilities		(20,979)		(60)
Loss on change in fair value of the prepaid forward contract and the Fixed Maturity Consideration		51,109		_
Provision for losses on trade and other receivables		800		_
Depreciation of property, plant and equipment		1,257		1,059
Non-cash lease expense		532		438
Non-cash recognition of licensing revenue		(553)		(540)
Loss from equity method investees, net		608		282
Net foreign exchange (gain) loss		(171)		65
Changes in operating assets and liabilities:				
Accounts receivable, net		1,618		808
Contract assets		(408)		(4,792)
Other assets		(8,593)		(1,807)
Accounts payable and accrued salaries and wages		1,692		1,113
Contract liabilities		(60)		299
Operating lease liabilities		(667)		(491)
Other liabilities		(188)		1,548
Net cash used in operating activities	\$	(33,810)	\$	(18,118)
Cash Flows From Investing Activities:				
Purchase of property, plant and equipment		(1,367)		(1,891)
Purchase of debt securities		(49,103)		_
Forward purchase option derivative purchase		(60,096)		_
Net cash used in investing activities	\$	(110,566)	\$	(1,891)
Cash Flows From Financing Activities:		<u> </u>		
Proceeds from issue of equity instruments of the Company		746		7
Proceeds from the Business Combination and PIPE, net of transaction expenses (Note 3)		213,381		_
Repurchase of equity instruments of the Company		(7,650)		_
Net cash provided by financing activities	\$	206,477	\$	7
Net increase (decrease) in cash, cash equivalents and restricted cash		62,101		(20,002)
Cash, cash equivalents and restricted cash at beginning of period		83,710		128,732
Effects of currency translation on cash, cash equivalents and restricted cash		(25)		(103)
Cash, cash equivalents and restricted cash at end of period	\$	145,786	\$	108,627
Supplemental disclosure of non-cash investing and financing activities:		·		
Acquisition of property, plant and equipment under accounts payable		234		60
Reclassification of capitalized costs related to the business combination to equity		1,514		_
Cashless conversion of warrants on preferred shares		5,890		_
Recognition of public and private warrant liabilities in the Business Combination		4,624		_
Reclassification of AM SAFE warrant to equity		1,800		_
Conversion of AM SAFE liability into common stock		29,730		_
Conversion of Legacy LanzaTech NZ, Inc. preferred stock and in-kind dividend into common stock		722,160		_

See the accompanying Notes to the Condensed Consolidated Financial Statements.

LANZATECH GLOBAL, INC. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

Note 1 — Description of the Business

LanzaTech Global, Inc., formerly known as AMCI Acquisition Corp. II ("AMCI") prior to February 8, 2023 (the "Closing Date") was incorporated as a Delaware Corporation on January 28, 2021.

On March 8, 2022, LanzaTech NZ, Inc. ("Legacy LanzaTech") entered into an Agreement and Plan of Merger (the "Merger Agreement") with AMCI and AMCI Merger Sub, Inc. a Delaware corporation and a wholly owned subsidiary of AMCI ("Merger Sub"). On February 8, 2023, Legacy LanzaTech completed its business combination with AMCI by which the Merger Sub merged with and into Legacy LanzaTech, with Legacy LanzaTech continuing as the surviving corporation and as a wholly owned subsidiary of AMCI (the "Business Combination"). The reporting entity is LanzaTech Global, Inc. and its subsidiaries (collectively referred to herein as "the Company" or "LanzaTech").

The Company is headquartered in Skokie, Illinois. The Company is 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. The Company's customers leverage its proven proprietary gas fermentation technology platform to convert certain feedstock, including waste carbon gases, into sustainable fuels and chemicals such as ethanol. The Company 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 chemicals produced at customer facilities employing the Company's technology and sells it under the brand name CarbonSmart. As of March 31, 2023, 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 China as of March 31, 2022.

The Company has reclassified its warrants on preferred shares as of December 31, 2022 from other accrued liabilities to warrants on the condensed consolidated balance sheet to conform with current period presentation. This reclassification resulted in a decrease to other accrued liabilities and corresponding increase to warrants of \$2,119 as of December 31, 2022.

As a result of the Business Combination, the Company's common stock trades under the ticker symbol "LNZA" and its Public Warrants trade under the ticker symbol "LNZAW" on the Nasdaq Stock Market. Prior to the consummation of the Business Combination, the Company's common shares were listed on Nasdaq Stock Market under the symbol "AMCI."

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying unaudited condensed consolidated financial statements of the Company have been prepared in accordance with generally accepted accounting principles for interim financial information, and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America ("US GAAP"), the accounting principles, standards, and procedures adopted by the U.S. Securities and Exchange Commission, for complete financial statements. However, in the opinion of management, all adjustments (consisting of normal recurring accruals) have been made that are necessary for a fair presentation of the condensed consolidated financial statements for the interim periods. For further information refer to the Consolidated Financial Statements and Footnotes thereto included in Legacy LanzaTech's Annual Report for the year ended December 31, 2022 included in the Company's second amended S-1 registration statement filed with the SEC on May 5, 2023.

The Business Combination is accounted for as a reverse recapitalization as Legacy LanzaTech was determined to be the accounting acquirer under Accounting Standards Codification ("ASC") 805, *Business Combinations* ("ASC 805") based on the evaluation of the following facts and circumstances:

- Legacy LanzaTech stockholders have the largest portion of voting rights (85.3% at the closing of the Business Combination) in the Company;
- Legacy LanzaTech's existing senior management team comprise senior management of the Company:
- · The operations of the Company primarily represent operations of Legacy LanzaTech; and
- In comparison with AMCI, Legacy LanzaTech has significantly more revenue and total assets.

Accordingly, for accounting purposes, the financial statements of the Company represent a continuation of the financial statements of Legacy LanzaTech with the acquisition being treated as the equivalent of Legacy 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. Legacy LanzaTech was deemed to be the predecessor, and the consolidated assets and liabilities and results of operations prior to February 8, 2023 are those of Legacy LanzaTech. Reported shares and earnings per share available to common stockholders, prior to the Business Combination, have been retroactively restated to reflect the exchange ratio established in the Merger Agreement. The number of shares of preferred stock was also retroactively restated based on the exchange ratio.

Variable Interest Entity ("VIE")

The Company makes judgments in determining whether an entity is a 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. The Company's variable interest arises from contractual, ownership or other monetary interests in the entity, which changes 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. The Company consolidates a VIE when the Company is deemed to be the primary beneficiary. The Company assesses whether or not the Company is the primary beneficiary of a VIE on an ongoing basis. If the Company is not deemed to be the primary beneficiary in a VIE, the Company accounts 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 6 - *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 13, *Related Party Transactions*, for further details on the transactions with VIEs.

Going Concern

The accompanying condensed 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 \$145,118, short-term held-to-maturity debt investments of \$49,103 and an accumulated deficit of \$(761,086) as of March 31, 2023 and cash outflows from operations of \$(33,810) and a net loss of \$(63,312) for the three months ended March 31, 2023. As a result of the Business Combination described in Note 1 closing on February 8, 2023, the Company received \$153,285, which represents the proceeds from the Business Combination received net of (1) transaction expenses paid in the three

months ended March 31, 2023, (2) the PIPE investment and (3) the amount paid to ACM ARRT H LLC ("ACM") and Vellar Opportunity Fund SPV LLC - Series 10 ("Vellar") in relation to the Forward Purchase Agreement.

The Company has historically funded its operations through debt financing and issuances of equity securities. Based on the Company's financial position as of the date the condensed consolidated financial statements were issued, the Company projects that it will be able to cover its liquidity needs for the next twelve months with cash on hand.

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 condensed 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, AM SAFE warrants, the Forward Purchase Agreement and the Private Placement Warrants.

The Company uses the percentage of completion for both input and output methods to recognize revenue over time for certain contracts with customers. 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.

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 the 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 5 - *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 translated 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 shareholders' equity accounts are translated at historical rates. The effects of translating financial statements of foreign operations into the Company's reporting currency are recognized 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 condensed 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 March 31, 2023 and December 31, 2022, the Company had \$145,118 and \$83,045 of cash and cash equivalents, respectively.

Restricted Cash

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 condensed consolidated balance sheets to total cash, cash equivalents and restricted cash in the condensed consolidated statements of cash flows as of March 31, 2023 and December 31, 2022 (in thousands).

	As of				
		March 31, 2023	December 31, 2022		
Cash and cash equivalents	\$	145,118	\$	83,045	
Restricted cash (presented within Other current assets)		668		665	
Cash, cash equivalents and restricted cash	\$	145,786	\$	83,710	

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 March 31, 2023 and December 31, 2022, the Company recognized an allowance for doubtful accounts of \$1,851 and \$1,051, respectively.

Debt Investments

Investments in debt securities are classified as trading, held-to-maturity or available-for-sale. Trading securities represent investments that are bought and sold principally for the purpose of selling in the near term. Held-to-maturity securities represent investments that the Company has both the ability and intent to hold to maturity. Available-for-sale securities represent investments in debt securities that are not classified as either trading or held-to-maturity.

Held-to-maturity securities are comprised of U.S. Treasury securities that the Company has both the ability and intent to hold to maturity. Held-to-maturity securities are carried at amortized cost, which is original cost net of periodic principal repayments and amortization of premiums and accretion of discounts. Accrued interest receivable is recorded separately in other current assets on the condensed consolidated balance sheets. Amortization of premiums and accretion of discounts are computed using the contractual level-yield method (contractual interest method), adjusted for actual prepayments. The contractual interest method recognizes the income effects of premiums and discounts over the contractual life of the securities based on the actual behavior of the underlying assets, including adjustments for actual prepayment activities, and reflects the contractual terms of the securities without regard to changes in estimated prepayments based on assumptions about future borrower behavior.

Held-to-maturity securities are evaluated individually on a quarterly basis for expected credit losses. If applicable, an allowance for credit losses is recorded with a corresponding credit loss expense (or reversal of credit

loss expense). The allowance for credit losses excludes uncollectible accrued interest receivable, which is measured separately.

Warrants

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in ASC 480, *Distinguishing Liabilities from Equity* ("ASC 480") and ASC 815-40, *Derivatives and Hedging—Contracts in Entity's Own Equity* ("ASC 815-40"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815-40, including whether the warrants are indexed to the Company's own common stock, among other conditions for equity classification.

For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be recorded at their initial fair value on the date of issuance and adjusted to the current fair value at each balance sheet date thereafter. Changes in the estimated fair value of the warrants are recognized as a non-cash gain or loss on the condensed consolidated statement of operations and comprehensive loss (see Note 8 - Warrants).

Forward Purchase Agreement

On February 3, 2023, the Company entered into a Forward Purchase Agreement ("FPA") with ACM. On the same date, ACM partially assigned its rights under the FPA to Vellar. ACM and Vellar are together referred to as the "Purchasers". Pursuant to the Forward Purchase Agreement, the Purchasers obtained 5,916,514 common shares ("Recycled Shares") on the open market for \$10.16 per share ("Redemption Price"), and such purchase price of \$60,096 was funded by the use of AMCI trust account proceeds as a prepayment ("Prepayment Amount") for the Forward Purchase Agreement redemption 3 years from the date of the Business Combination ("Maturity Date"). The Maturity Date may be accelerated, at the Purchasers discretion, if the Company share price trades below \$3.00 per share for any 50 trading days during a 60 day consecutive trading-day period or the Company is delisted. On any date following the Business Combination, the Purchasers also have the option to early terminate the arrangement in whole or in part by providing optional early termination notice to the Company (the "Optional Early Termination"). For those shares early terminated (the "Terminated Shares"), the Purchasers will owe the Company an amount equal to the Terminated Shares times the Redemption Price, which may be reduced in the case of certain dilutive events ("Reset Price").

At the Maturity Date, the Company is obligated to pay the Purchasers 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 Maturity Consideration, on the Maturity Date, the Company shall pay to the Purchasers an amount equal to the product of (x) 500,000 and (y) the Redemption Price, totaling \$5,079 (the "Share Consideration"). If the Purchasers were to utilize their Optional Early Termination to terminate the FPA early, neither the Maturity Consideration nor the Share Consideration would be due to the Purchasers.

The Purchasers' Optional Early Termination economically results in the prepaid forward contract being akin to a written put option with the Purchaser's right to sell all or a portion of the 5,916,514 common shares to the Company. The Company is entitled over the 36-month maturity period to either a return of the prepayment or the underlying shares, which the Purchasers will determine at their sole discretion.

Based on the terms described here, the FPA consists of three freestanding financial instruments representing the prepaid forward contract, the minimum portion of the Maturity Consideration (the "Minimum Maturity Consideration"), and the Share Consideration. The prepaid forward contract is a derivative instrument. The Company has recorded the prepaid forward contract as a derivative asset and measured it at fair value with the difference between the initial value of the derivative, including Maturity Consideration in excess of the Minimum Maturity Consideration (the "Variable Maturity Consideration"), and the Prepayment Amount recorded in the condensed consolidated statement of operations and comprehensive loss. Subsequent changes in fair value of the derivative asset are also recorded in the condensed consolidated statement of operations and comprehensive loss.

The Minimum Maturity Consideration, representing 7,500,000 less 5,916,513 multiplied by \$2.00 or \$3,167, and the Share Consideration are considered to be free-standing debt instruments. The Company has elected to measure these using the Fair Value Option ("FVO") under ASC 825, *Financial Instruments* ("ASC 825"). As both the Minimum Maturity Consideration and the Share Consideration will be paid on the same terms and at the same time, these are accounted for together and referred to as the "Fixed Maturity Consideration". The Variable Maturity Consideration is captured as part of the prepaid forward contract derivative asset, as noted above. The Fixed Maturity Consideration is recorded as long-term liability on the condensed consolidated balance sheets. The initial value of the Fixed Maturity Consideration is recorded through the condensed consolidated statement of operations and comprehensive loss. Subsequent changes in fair value of the Fixed Maturity Consideration are also recorded in the condensed 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 Biorefining (formerly known as carbon capture and transformation) which includes feasibility studies and basic engineering design of commercial plants, licensing of technologies and sales of biocatalysts. The other two revenue streams are: (1) joint development and contract research activities to develop novel biocatalysts and related technologies, and (2) supply of chemical building blocks for sustainable products produced using the Company's proprietary technologies (referred to as CarbonSmart).

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.

Biorefining

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.

Joint Development and Contract Research

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 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.

CarbonSmart

The Company supplies chemical building blocks from customers who have deployed our proprietary technologies in their carbon capture and transformation plants and sells them as CarbonSmart products. 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 products are classified as Revenue from contract with customers - tangible products in the condensed consolidated statements of operations and comprehensive loss.

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 condensed 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.

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 condensed 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 three months ended March 31, 2023 and 2022 was approximately 62% in each of the periods presented.

As of March 31, 2023 and December 31, 2022, approximately 41% and 35%, respectively, of trade accounts receivable and unbilled accounts receivable were due from customers located outside the United States. As of March 31, 2023 and December 31, 2022, 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 5, Revenues.

Customers

Customers representing 10% or greater of revenue were as follows for the three months ended March 31, 2023 and 2022:

	Three Mont	hs Ended March 31,
	2023	2022
Customer A	30	% 19 %
Customer B	13	% 22 %
Customer C	10	% 8 %

Recently Adopted and Issued Accounting Pronouncements

There are no recently adopted or issued accounting pronouncements that are expected to have a material impact on the Company.

Note 3 — Reverse Recapitalization

On February 8, 2023, Legacy LanzaTech and AMCI consummated the merger contemplated by the Merger Agreement (see Note 1 - *Description of the Business*).

Immediately following the Business Combination, there were 196,222,737 shares of common stock outstanding with a par value of \$0.0001. Additionally, there were outstanding warrants to purchase 12,574,200 shares of common stock.

The Business Combination was accounted for as a reverse recapitalization in accordance with US GAAP. Under this method, while AMCI was the legal acquirer, it has been treated as the "acquired" company for financial reporting purposes. Accordingly, the Business Combination was treated as the equivalent of pre-combination Legacy 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 pre-combination Legacy LanzaTech. Reported shares and earnings per share available to holders of the Company's common stock and preferred shares, prior to the Business Combination, have been retroactively restated to reflect the exchange ratio established in the Business Combination (approximately one pre-combination Legacy LanzaTech share to 4.3747 of the Company's shares).

Upon closing of the Business Combination, the shareholders of AMCI, including AMCI founders, were issued 10,398,374 shares of common stock of the Company. In connection with the closing, holders of 8,351,626 shares of common stock of AMCI were redeemed at a price per share of approximately \$10.16. In connection with the Closing, 18,500,000 shares of common stock of the Company were issued to PIPE investors. 15,500,000 of those shares were issued at a price per share of \$10.00. The remaining 3,000,000 shares were issued upon conversion of the AM SAFE liability. The Company incurred \$7,223 in transaction costs relating to the Business Combination and recorded those costs against additional paid-in capital in the condensed consolidated balance sheet.

The number of shares of Class A common stock issued and outstanding immediately following the consummation of the Business Combination and PIPE financing were:

	Shares	Percentage
Legacy LanzaTech shares	167,324,363	85.3 %
Public stockholders	10,398,374	5.3 %
PIPE shares	18,500,000	9.4 %
Total	196,222,737	100 %

The following table reconciles the elements of the Business Combination and PIPE financing to the condensed consolidated statement of cash flows for the three months ended March 31, 2023:

	Rec	apitalization
Cash - AMCI trust account ¹	\$	64,090
Cash - PIPE financing		155,000
Less: Transaction costs allocated to equity and paid in the three months ended March 31, 2023		(5,709)
Effect of the Business Combination and PIPE financing	\$	213,381

⁽¹⁾ The cash from the AMCI trust account is net of redemptions and the payment of pre-combination AMCI expenses.

The following table reconciles the elements of the Business Combination and PIPE financing to the change in additional paid-in capital on the condensed consolidated statement of changes in redeemable convertible preferred stock and shareholders' equity / deficit for the three months ended March 31, 2023:

	Recapitalization	
Cash - AMCI trust account	\$	64,090
Public Warrants and Private Placement Warrants recorded on the Closing Date		(4,624)
Cash - PIPE financing		155,000
Conversion of the AM SAFE		29,730
Transaction costs allocated to equity		(7,223)
	\$	236,973
Less: par value of shares held by PIPE investors and public stockholders		(3)
Total additional paid-in capital from recapitalization	\$	236,970

Note 4 — 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. Earnings per share calculation for all periods prior to the Business Combination have been retrospectively restated to the equivalent number of shares reflecting the exchange ratio established in the Merger Agreement of 4.3747.

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):

	Three Months Ended March 31,			
		2023		2022
Numerator:		_		
Net loss for basic and diluted earnings per common share	\$	(63,312)	\$	(16,778)
Unpaid cumulative dividends on preferred stock		(4,117)		(9,523)
Net loss allocated to common shareholders	\$	(67,429)	\$	(26,301)
Denominator:				
Weighted-average shares used in calculating net loss per share, basic and diluted		116,530,963		9,219,499
Net loss per common share, basic and diluted ⁽¹⁾	\$	(0.58)	\$	(2.85)

⁽¹⁾ In periods in which the Company reports a net loss, all potential common shares are excluded from the calculation of diluted weighted average shares outstanding because of their anti-dilutive effect on loss per share.

As of March 31, 2023 and 2022, potential shares of common stock not included in the computation of loss per share because their effect would be antidilutive include the following:

	Three Months Ended March 31,		
	2023	2022	
Redeemable convertible preferred stock (if converted)	_	129,148,393	
Options	14,355,066	16,790,437	
RSAs	_	2,535,825	
Brookfield SAFE	5,000,000	_	
Warrants	16,657,686	985,278	
Total	36,012,752	149,459,933	

The preferred shares automatically converted into common shares upon the Business Combination at a 1:1 ratio. On February 8, 2023, upon conversion of the preferred shares, the cumulative accrued, declared and unpaid dividends on the preferred shares became payable. The total amount of cumulative accrued, undeclared and unpaid dividends was approximately \$241,529 on the Closing Date. As stipulated by the Merger Agreement, this amount was divided by 10 and resulted in the issuance of an additional 24,152,942 common shares. Prior to the Business Combination, the additional 129,148,393 of potential shares of common stock resulting from any such conversion are not included in the computation of diluted net loss per share because doing so would be anti-dilutive.

In connection with the AM SAFE and Brookfield SAFE, see Note 10 - *Fair Value*, the Company could issue additional potential shares of common stock. Shares related to the AM SAFE were issued on the Closing Date. Shares related to the Brookfield SAFE and AM SAFE warrant have not been issued as of March 31, 2023. The terms of the AM SAFE warrant became exercisable for a fixed number of shares as of the Closing Date, see Note 8 – *Warrants*. As a result, these potential shares are included in the warrants line item in the potential share table above as of March 31, 2023. The per share issuance price for the Brookfield SAFE upon closing of the Business

Combination is the liquidity price as defined in the Brookfield SAFE agreement. As a result of the Business Combination, the Brookfield SAFE became convertible into a maximum number of shares, which is included in the table above for the three months ended March 31, 2023. None of these potential shares of common stock are included in the computation of diluted net loss per share until actually issued because doing so would be anti-dilutive.

Note 5 — Revenues

Disaggregated Revenue

The following table presents disaggregated revenue in the following categories (in thousands):

	Three Months Ended March 31,			arch 31,
		2023		2022
Contract Types:				
Licensing	\$	553	\$	540
Engineering and other services		5,801		4,308
Biorefining: carbon capture and transformation revenue	\$	6,354	\$	4,848
Joint development agreements		2,036		1,027
Contract research		1,256		1,242
Joint development and Contract research revenue	\$	3,292	\$	2,269
CarbonSmart (tangible product)		_		740
Total Revenue	\$	9,646	\$	7,857

Revenue from partners in collaborative arrangements, part of joint development and contract research revenue, in the amount of \$1,088 and \$0 for the three months ended March 31, 2023 and 2022, is included in the table above within joint development agreements. Revenue from related parties is included in licensing for \$553 and \$540 with the remaining revenue of \$420 and \$114 in Engineering and other services, for the three months ended March 31, 2023 and 2022, respectively.

The following table presents disaggregation of the Company's revenues by customer location for the three months ended March 31, 2023 and 2022 (in thousands):

	Three M	Three Months Ended March 31,			
	2023		2022		
North America	\$ 4	,232 \$	4,039		
Europe, Middle East, Africa (EMEA)	4	,711	2,823		
Asia		50	410		
Australia		653	585		
Total Revenue	\$ 9	,646 \$	7,857		

Contract balances

The following table provides changes in contract assets and liabilities (in thousands):

	Curren	t Contract Assets	Current Contract Liabilities	No	n-current Contract Liabilities
Balance as of January 1, 2023	\$	18,000	\$ 3,101	\$	10,760
Additions to unbilled accounts receivable		11,241	_		
Unbilled accounts receivable recognized in trade receivables		(10,833)	_		_
Increase on revaluation on currency		52	_		83
Reclassification from long-term to short-term		_	672		(672)
Reclassification to revenue as a result of performance obligations satisfied			(731)		<u> </u>
Balance as of March 31, 2023	\$	18,460	\$ 3,042	\$	10,171

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 March 31, 2023 and December 31, 2022 the Company had \$9,277 and \$11,695, 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 obligations 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			
	 March 31, 2023	December 31, 2022		
Current	\$ 3,042	\$	3,101	
Non-current	10,171		10,760	
Total	\$ 13,213	\$	13,861	

Note 6 — Investments

Debt securities

The Company has held-to-maturity securities consisting of U.S. Treasury securities. As these investments were purchased on March 31, 2023, the amortized cost equals the estimated fair value. There are no unrealized gains and losses. All held-to-maturity securities have contractual maturities due in one year or less. The Company regularly reviews held-to-maturity securities for declines in fair values that are determined to be credit related. As of

March 31, 2023, the Company did not have an allowance for credit losses related to held-to-maturity securities as they are guaranteed by the U.S. government.

Equity investments

The Company's equity investments consisted of the following (in thousands):

		As of				
	Mai	rch 31, 2023		December 31, 2022		
Equity Method Investment in LanzaJet	\$	9,835	\$	10,561		
Equity Security Investment in SGLT	\$	14,990		14,990		
Total Investment	\$	24,825	\$	25,551		

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 three months ended March 31, 2023 and 2022, the Company has recognized revenue from this arrangement of \$553 and \$540 respectively, net of intra-entity profit elimination, and has recorded deferred revenue of \$7,390 and \$8,062, as of March 31, 2023 and December 31, 2022, respectively. Intra-entity profits related to revenue contracts with LanzaJet are \$118 and \$132 as of March 31, 2023, and 2022, 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%. 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 March 31, 2023 and December 31, 2022 was approximately \$3,800 and \$3,700 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 March 31, 2023 and December 31, 2022.

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, 2022, the Company's interest in SGLT's registered capital is approximately 9.31% as a result of the admittance of new investors during the year. 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 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. For the three months ended March 31, 2023, there was no change in the value of the investment in SGLT.

As of March 31, 2023 and December 31, 2022, there were no impairments of equity method investees. During the three months ended March 31, 2023 and 2022, the Company received no dividends from equity method investments. See Note 13 - *Related Party Transactions*, for information on revenues, accounts receivable, contract assets and purchases and open accounts payable with equity method investment.

Note 7 — 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. On the Closing Date of the Business Combination, the AM SAFE converted into 3,000,000 shares of common stock. As of the Closing Date, the AM SAFE had a fair value of \$29,730, which equals the closing price of approximately \$9.91 on the Closing Date, multiplied by the number of shares issued. The AM SAFE was adjusted to its fair value on the Closing Date prior to settlement. As of December 31, 2022, the AM SAFE had a fair value of \$28,986. The AM SAFE was recorded within current liabilities on the condensed consolidated balance sheet as of December 31, 2022.

Note 8 — Warrants

Warrants on preferred shares

The Company had issued warrants to purchase its preferred shares representing 985,278 preferred shares. In connection with the closing of the Business Combination, all warrants were exercised on a cashless basis and are no longer outstanding. The warrants were exercised for 594,309 shares of preferred stock, which were converted at the closing of the Business Combination into shares of common stock. The exercise prices of the warrants ranged from \$3.36 to \$4.56 as of the closing of the Business Combination.

The warrants were accounted for as liabilities in accordance with ASC 480, and were presented within warrants on the condensed consolidated balance sheet as of December 31, 2022. The warrant liabilities were measured at fair value at inception and on recurring basis, with changes in fair value presented within other expense, net on the condensed consolidated statements of operations and comprehensive loss. Immediately before the exercise of these warrants, the associated warrant liability was marked-to-market a final time to \$5,890, which is equal to the number of shares issued multiplied by the share price of \$9.91 on the date of exercise, February 8, 2023.

AM SAFE warrant

The warrant related to the AM SAFE ("AM SAFE warrant") was accounted for as a liability in accordance with ASC 480 prior to the consummation of the Business Combination and was presented within warrants on the condensed consolidated balance sheet as of December 31, 2022. As a result of the Business Combination and issuance of the PIPE shares, the number of common shares available under the AM SAFE warrant equals 300,000. The exercise price of the AM SAFE warrant is \$10.00 per share as of the Closing Date and March 31, 2023. The AM SAFE warrant expires at the earliest of (a) the fifth anniversary of the Business Combination, (b) the consummation of a dissolution event and (c) a change of control. Due to the AM SAFE warrant becoming exercisable for a fixed number of shares at a fixed exercise price, it no longer meets the criteria for liability accounting under ASC 480 and meets the criteria for equity classification under ASC 815-40. As a result, on the Closing Date, the AM SAFE warrant was marked-to-market a final time to \$1,800 through other expense, net on the condensed consolidated statement of operations and comprehensive loss and reclassified to additional paid-in capital on the condensed consolidated balance sheet.

Shortfall Warrants

On March 27, 2023, the Company issued an aggregate of 2,073,486 warrants to ACM and 2,010,000 warrants to Vellar pursuant to the Forward Purchase Agreement (collectively, the "Shortfall Warrants"), as further described in Note 9 - 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 the Company sells, grants or otherwise issues 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 or after March 27, 2023. The Shortfall Warrants expire on the fifth anniversary of their issuance. As the Shortfall Warrants meet the definition of a derivative but do not qualify for the exception from derivative accounting under the indexation guidance, they meet the criteria for liability classification under ASC 815 and were presented within warrants on the condensed consolidated balance sheet. As a result, the Shortfall Warrants are measured at fair value at inception and on recurring basis, with changes in fair value presented within other expense, net on the condensed consolidated statements of operations and comprehensive loss. The fair value of the Shortfall Warrants as of March 31, 2023 was \$5,104.

On May 13, 2023, the Company amended the Shortfall Warrant agreement, which resulted in the reclassification of the Shortfall Warrants to equity on that date as the amended agreement met the requirements for equity classification in ASC 815-40. This reclassification will be reflected in the period ended June 30, 2023.

Public Warrants and Private Placement Warrants

As part of AMCI's initial public offering ("IPO"), AMCI issued warrants to third party investors where each whole warrant entitles the holder to purchase one share of the Company's common stock at an exercise price of \$11.50 per share (the "Public Warrants"). Simultaneously with the closing of the IPO, AMCI completed the private sale of warrants where each warrant allows the holder to purchase one share of the Company's common stock at \$11.50 per share. Additionally, prior to the consummation of the Business Combination, AMCI issued warrants for the settlement of a working capital loan. The working capital warrants have the same terms as the private sale of warrants issued at the IPO. Warrants sold in the private sale at the IPO and the warrants issued to convert the working capital loan are collectively referred to as the "Private Placement Warrants". On the Closing Date and as of March 31, 2023, 7,499,924 Public Warrants and 4,774,276 Private Placement Warrants remained outstanding.

These warrants expire on the fifth anniversary of the Business Combination or earlier upon redemption or liquidation and are exercisable commencing 30 days after the Business Combination, provided that the Company has an effective registration statement under the Securities Act covering the shares of 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 registered, qualified or exempt from registration under the securities, or blue sky, laws of the state of residence of the holder.

Once the warrants become exercisable, the Company may redeem the outstanding warrants:

- a. in whole and not in part;
- b. at a price of \$0.01 per warrant;
- c. upon a minimum of 30 days' prior written notice of redemption to each warrant holder; and
- d. if, and only if, the closing price of the common stock equals or exceeds \$18.00 per share 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.

The Public Warrants and 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 as of the Closing Date, with an offsetting entry to additional paid-in capital and adjusts the carrying value of the instruments to fair value through other expense, net on the condensed consolidated statement of operations and comprehensive loss at each reporting period until they are exercised. As of March 31, 2023, the Public Warrants and Private Placement Warrants are presented within warrants on the condensed consolidated balance sheet.

Note 9 — Forward Purchase Agreement

As discussed in Note 2 - *Summary of Significant Accounting Policies*, the FPA consists of the prepaid forward contract and the Fixed Maturity Consideration. The prepaid forward contract is evaluated as a written put option that meets the definition of a derivative. The value of the derivative is comprised of the Prepayment Amount, reduced by the economics of the written put option and the Variable Maturity Consideration on non-terminated shares.

The following table presents the reconciliation of the fair value of the prepaid forward contract as of March 31, 2023 (in thousands):

	Marc	ch 31, 2023
Prepayment Amount	\$	60,096
Less: Value of derivative and Variable Maturity Consideration		(44,142)
Fair value of prepaid forward contract	\$	15,954

The Fixed Maturity Consideration is valued at \$6,967 as of March 31, 2023. This represents the fair value of the Share Consideration and Fixed Maturity Consideration and is measured in accordance with the FVO.

Expensed transaction costs, representing the stock acquisition fees, in the amount of \$451 are recorded in other expense, net.

Note 10 — Fair Value

The following table presents the Company's fair value hierarchy for its assets and liabilities measured at fair value as of March 31, 2023 and December 31, 2022 (in thousands):

Fair Val	lue Measi	urement as of	i
_			

March 31, 2023							
	Level 1		Level 2	Level 2 Level 3		Total	
	_						
\$	31,397	\$	_	\$	_	\$	31,397
					15,954		15,954
\$	31,397	\$	_	\$	15,954	\$	47,351
\$	_	\$	_	\$	6,967	\$	6,967
	_		_		5,104		5,104
	_		_		19,400		19,400
	_		_		2,626		2,626
	2,189				_		2,189
\$	2,189	\$		\$	34,097	\$	36,286
	\$	\$ 31,397 \$ 31,397 \$ — - - - 2,189	\$ 31,397 \$	Level 1 Level 2 \$ 31,397 \$ — \$ 31,397 \$ — \$ - \$ — - — - — - — - — 2,189 —	Level 1 Level 2 \$ 31,397 \$ — \$ \$ 31,397 \$ — \$ \$ 31,397 \$ — \$ \$ — \$ — \$ — — — — — — — — — — — — — — — — — — — — — —	Level 1 Level 2 Level 3 \$ 31,397 \$ — \$ — 15,954 \$ 31,397 \$ — \$ 15,954 \$ — \$ 6,967 — 5,104 — — — 19,400 — — 2,626 2,189 — — —	Level 1 Level 2 Level 3 \$ 31,397 \$ — \$ — \$ \$ 31,397 \$ — \$ 15,954 \$ 31,397 \$ — \$ 15,954 \$ — \$ — \$ 6,967 \$ — — — 5,104 — — — 19,400 — — — 2,626 2,189 — — —

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	<u>s</u>		\$		\$ 83.094	\$	83,094

Forward Purchase Agreement

The fair value upon issuance of the FPA (both the prepaid forward contract and Fixed Maturity Consideration) and the change in fair value from issuance to March 31, 2023 is included in other expense, net in the condensed consolidated statements of operations and comprehensive loss. The fair value of the FPA was estimated using a Monte-Carlo Simulation in a risk-neutral framework. Specifically, the future stock price is simulated assuming a Geometric Brownian Motion ("GBM"). For each simulated path, the forward purchase value is calculated based on the contractual terms and then discounted back to present. Finally, the value of the forward is calculated as the average present value over all simulated paths. The Fixed Maturity Consideration was also valued as part of this

model as the timing of the payment of the Fixed Maturity Consideration may be accelerated if the Maturity Date is accelerated.

The following table represents the weighted average inputs used in calculating the fair value of the prepaid forward contract and the Fixed Maturity Consideration as of March 31, 2023:

	March 31, 2023
Stock price	\$ 3.88
Term (in years)	2.86
Expected volatility	55.0 %
Risk-free interest rate	3.81 %
Expected dividend yield	— %

Warrants on preferred shares

The fair value of the warrants on preferred shares was estimated using a Black-Scholes option pricing model. Since the warrants were exercised on February 8, 2023 (see Note 8 - *Warrants*, for a description of the valuation on that date), 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:

	December 31, 2022
Stock price	\$ 5.21
Weighted average exercise price	\$ 3.96
Term (in years)	1.1
Expected volatility	73.4 %
Risk-free interest rate	4.47 %
Expected dividend yield	— %

Shortfall Warrants

The fair value of the Shortfall Warrants was estimated using a Black-Scholes option pricing model. The following table represents the weighted average inputs used in calculating the fair value of the Shortfall Warrants outstanding as of March 31, 2023:

	March 31, 2023
Stock price	\$ 3.88
Weighted average exercise price	\$ 10.00
Term (in years)	5.0
Expected volatility	68.0 %
Risk-free interest rate	3.59 %
Expected dividend yield	—%

SAFE Liabilities and AM SAFE Warrant

The change in fair value between reporting periods for the Brookfield SAFE liability is included in other expense, net in the condensed consolidated statements of operations and comprehensive loss for the three months ended March 31, 2023. The change in fair value between December 31, 2022 and the Closing Date for the AM SAFE liability is included in other expense, net in the condensed consolidated statements of operations and comprehensive loss for the three months ended March 31, 2023. See Note 7 - *AM SAFE* for more details. See Note 8 - *Warrants* for further details on the AM SAFE warrant.

The Company's AM SAFE liability (until conversion to shares on the Closing Date), AM SAFE warrant (until conversion to an equity classified warrant on the Closing Date) and Brookfield SAFE liability 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 was 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.

At conversion, the AM SAFE liability was valued as described in Note 7 - *AM SAFE*. 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 %

At conversion to equity classification on February 8, 2023, the AM SAFE warrant was valued using a Black-Scholes option pricing model as the warrant became exercisable for a fixed number of shares at a fixed price as described in Note 8 - *Warrants*. The following table represents the weighted average inputs used in calculating the fair value of the preferred share warrants outstanding at conversion to equity on February 8, 2023:

	February 8, 2023
Stock price	\$ 9.91
Term (in years)	5.00
Expected volatility	70.0 %
Risk-free interest rate	3.82 %
Expected dividend yield	— %

Significant inputs for Level 3 AM SAFE warrant fair value measurement at December 31, 2022 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. The Brookfield SAFE is legal form debt that the Company has elected to measure using the FVO under ASC 825. As of March 31, 2023, no part of the Brookfield SAFE has converted to Company common shares as a qualifying financing had not yet

occurred and no project investments were presented. There were no cash flows associated with the Brookfield SAFE in the three months ended March 31, 2023.

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.

As of March 31, 2023, the Company expects to present sufficient projects to Brookfield to result in the Brookfield SAFE being automatically converted into shares. Since the liquidity price is not expected to change during the life of the Brookfield SAFE, the number of shares that Brookfield receives is fixed. Based on this expectation, the value of the Brookfield SAFE is equal to the Brookfield SAFE's as-converted value, which is the initial purchase amount, divided by the liquidity price, times the stock price, resulting in an estimated fair value of \$19,400 recorded on the condensed consolidated balance sheet.

Significant inputs for Level 3 Brookfield SAFE measurement at March 31, 2023 are as follows:

	March 31, 2023
Initial purchase amount	\$ 50,000
Liquidity price	10.00
Stock price	3.88

Public Warrants and Private Placement Warrants

For the 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 and recognized a decrease in the fair value of the liability of approximately \$286 on the condensed consolidated statements of operations and comprehensive loss within other expense, net representing the change in fair value from the Closing Date to March 31, 2023.

The fair value of the Private Placement Warrants was estimated using a Black-Scholes option pricing model. For the three months ended March 31, 2023, the Company recognized an increase in the fair value of liabilities of approximately \$477 on the condensed consolidated statements of operations and comprehensive loss within other expense, net representing the change in fair value from the Closing Date to March 31, 2023.

The following table represents the weighted average inputs used in calculating the fair value of the Private Placement Warrants outstanding as of March 31, 2023 and at the time of the Business Combination:

	March 31, 2023	February 8, 2023		
Stock price	\$ 3.88 \$	9.91		
Exercise price	\$ 11.50 \$	11.50		
Term (in years)	4.86	5.00		
Expected volatility	45.0 %	2.0 %		
Risk-free interest rate	3.60 %	3.82 %		
Expected dividend yield	— %	— %		

The following tables represent reconciliations of the fair value measurements of the assets and liabilities using significant unobservable inputs (Level 3) (in thousands):

	Prepaid forward contract	Fixed Maturity Consideration	Shortfall Warrants	Warrants on Preferred Shares	AM SAFE liability	AM SAFE warrant	Brookfield SAFE	Private placement warrants
Balance as of January 1, 2023 \$	_	\$ —	\$ —	\$ (2,119)	\$ (28,986)	\$ (1,989)	\$ (50,000)	\$
Recognized as a result of the Business Combination	_	_	_	_	_	_	_	(2,148)
Initial Prepayment Amount	60,096	_	_					_
(Loss) gain recognized in other expense, net on the condensed consolidated statement of operations and comprehensive loss	(44,142)	(6,967)	(5,104)	(3,770)	(744)	189	30,600	(477)
Conversion of warrants to preferred shares	_	_	_	5,889	_	_	_	_
Conversion of SAFE liability	_	_	_	_	29,730	_	_	_
Conversion of AM SAFE warrant to equity classification	_	_	_	_	_	1,800	_	_
Balance as of March 31, 2023	15,954	\$ (6,967)	\$ (5,104)	\$	\$	\$ —	\$ (19,400)	\$ (2,625)

	Warrants on Preferred Shares AM SAFE liability			A	M SAFE warrant
Balance as of January 1, 2022	\$ (1,145)	\$	(28,271)	\$	(1,729)
Gain (loss) recognized in other expense, net on the condensed consolidated statement of operations and comprehensive loss	41		148		(129)
Balance as of March 31, 2022	\$ (1,104)	\$	(28,123)	\$	(1,858)

Note 11 — Income Taxes

The Company is subject to federal and state income taxes in the United States, as well as income taxes in foreign jurisdictions in which it conducts business. The Company does not provide for federal income taxes on the undistributed earnings of its foreign subsidiaries as such earnings are reinvested indefinitely. 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 for the three months ended March 31, 2023 and 2022.

The Company recorded an income tax expense of \$0 for the three months ended March 31, 2023 and March 31, 2022, representing an effective tax rate of 0%. The difference between the U.S. federal statutory rate of 21% and the Company's effective tax rate in the first three months ended March 31, 2023 and March 31, 2022 is primarily due to

a full valuation allowance related to the Company's U.S. and foreign deferred tax assets. The Company reassesses the need for a valuation allowance on a quarterly basis. If it is determined that a portion or all of the valuation allowance is not required, it will generally be a benefit to the income tax provision in the period such determination is made.

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. The Company is subject to audits for tax years 2017 and onward for federal purposes. There are tax years which remain subject to examination in various other state and foreign jurisdictions that are not material to the Company's financial statements.

Note 12 — Share-Based Compensation

The Company offers equity incentive 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 exercise prices 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. The below table reflects the pre-combination shares under option multiplied by the exchange ratio and the weighted average exercise price divided by the exchange ratio.

Stock option awards outstanding as of March 31, 2023 and changes during the period ended March 31, 2023 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, 2023	14,661	\$ 1.48	5.80	\$ 58,565
Vested and expecting to vest at January 1, 2023	14,661	1.48	5.80	58,565
Exercisable at January 1, 2023	11,203	\$ 1.44	5.15	\$ 45,204
Granted	259	9.97	_	34
Exercised	(472)	1.59	_	1,827
Cancelled/forfeited	(93)	1.18	_	673
Outstanding at March 31, 2023	14,355	\$ 1.63	5.81	\$ 33,903
Vested and expecting to vest at March 31, 2023	14,355	1.63	5.81	33,903
Exercisable at March 31, 2023	11,303	\$ 1.44	5.25	\$ 27,650

The Company recorded compensation expense related to the options of \$764 and \$738 for the three months ended March 31, 2023 and March 31, 2022, respectively. Unrecognized compensation costs as of March 31, 2023 was \$4,321 and will be recognized over a weighted average of 2.37 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 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 2,535,825 outstanding unvested shares for a weighted average grant date fair value of \$1.08. This is also the number of RSAs that vested as a result of the Business Combination on the Closing Date. The vesting of the RSAs resulted in compensation expense of \$2,741. Subsequent to the vesting of these shares, the holders of the RSAs surrendered 771,141 common shares to fund the payment of payroll tax on their behalf by the Company. This resulted in a total cash payment of \$7,650 by the Company for employee payroll taxes associated with this vesting event.

Note 13 — Related Party Transactions

As of March 31, 2023 and December 31, 2022, the Company has an equity ownership in LanzaJet and SGLT (see Note 6 - *Investments* for further details). The table below summarizes amounts related to transactions with these related parties (in thousands):

	1 nree mo	ntns ena	ea
	 March 31, 2023	March 31, 2022	
	\$ 973	\$	654
	As	s of	
	March 31, 2023	Dec	ember 31, 2022
	\$ 626	\$	1,821
es and open accounts payable	3,048		3,195

LanzaJet

The accounts payable balance is for work that LanzaJet performed as a subcontractor to the Company. Refer to Note 6 - Investments, 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 three months ended March 31, 2023 and March 31, 2022, the Company recognized revenue from related parties of approximately \$45 and \$67, 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 6 - *Investments*. In connection with this agreement, the Company recognized \$338 in revenue for the three months ended March 31, 2023, and \$23 for the three months ended March 31, 2022.

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 which occurred 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.

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 the payment of 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 three months ended March 31, 2023 and March 31, 2022, the Company recognized revenue from related parties of approximately \$0 and \$18, respectively. The Company also provided engineering services and incurred costs of \$249 and \$126 for the three months ended March 31, 2023 and March 31, 2022, 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 three months ended March 31, 2023, and March 31, 2022, the Company did not recognize any sublicensing revenue as no royalties were received by SGLT.

Note 14 — Redeemable, Convertible Preferred Stock

The Company had six outstanding series of contingently redeemable convertible preferred stock. The dollar amounts and share counts in the table below are adjusted to reflect the impact of the exchange ratio on the shares authorized, shares issued and outstanding, and issue price. The authorized, issued and outstanding shares, issue price, and carrying value as of December 31, 2022 are as follows (in thousands, except share and per share amounts):

	Shares Authorized	Shares Issued and Outstanding	Issue Price	Carrying Amount
Series A	20,414,445	20,414,445	\$0.40 - \$0.90	\$ 12,230
Series B	7,582,934	7,582,934	2.37	18,000
Series C	18,613,084	18,121,698	3.36	60,850
Series D	44,946,572	44,452,681	4.56	188,402
Series E	22,678,139	22,678,139	5.23	118,076
Series F	15,898,496	15,898,496	5.23	83,073
	130,133,670	129,148,393		\$ 480,631

All redeemable, convertible preferred stock was converted into common shares on the Closing Date of the Business Combination on a 1:1 basis. Immediately before the conversion, all cumulative dividends were declared, totaling a dividend payable of \$241,529. This dividend was paid in-kind and subsequently converted, as a result of the Business Combination, into an additional 24,152,942 common shares. After the in-kind dividend payment and the conversion, the former preferred shareholders held 153,895,644 common shares.

There were no changes in redeemable convertible preferred stock issued and outstanding during the three months ended March 31, 2022.

Prior to the Business Combination, redemption features of the preferred shares were not fixed and did not have a determinable price on fixed or determinable dates. As of December 31, 2022, the preferred shares were not currently redeemable, and it was not probable that the preferred shares would become redeemable, since it was uncertain whether or when circumstances exist that would constitute a deemed liquidation event. Accordingly, the Company did not adjust the carrying value of the preferred shares to their redemption values.

Note 15 — 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 March 31, 2023 and December 31, 2022, 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 13 - 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 recorded on the condensed consolidated balance sheet. Total lease payments in 2024, 2025 and 2026 for this lease are expected to be \$3,287.

Note 16 — Subsequent Events

The Company has evaluated events occurring subsequent to March 31, 2023 through May 15, 2023, the date the condensed consolidated financial statements were issued. The Company has identified:

On May 1, 2023 the Company committed to purchase Subordinated Secured Notes as part of the LanzaJet Note Purchase Agreement. Refer to Note 13 - *Related Party Transactions*, for more information.

On May 13, 2023, the Company amended the Shortfall Warrant agreement, which resulted in the reclassification of the Shortfall Warrants to equity on that date as the amended agreement met the requirements for equity classification in ASC 815-40. This reclassification will be reflected in the period ended June 30, 2023.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with our interim condensed consolidated financial statements and the related notes included in Part I, Item 1 of this Quarterly Report, and our audited consolidated financial statements and related notes included in the Company's second amended S-1 registration statement filed with the Securities and Exchange Commission on May 5, 2023. This discussion and analysis may contain forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties, and assumptions, including, but not limited to, risks and uncertainties discussed under the heading 'Cautionary Note on Forward-Looking Statements,' in this Quarterly Report and in Part I, Item 1A "Risk Factors" included in our Annual Report on Form 10-K. In this section, unless otherwise indicated or the context otherwise requires, references in this section to "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 and LanzaTech NZ, Inc. and its consolidated subsidiaries prior to the Business Combination. 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. Today, 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 \$(63.3) million for the three months ended March 31, 2023 and \$(16.8) million for the three months ended March 31, 2022. As of March 31, 2023 we had an accumulated deficit of \$(761.1) million compared to an accumulated deficit of \$(456.2) million as of December 31, 2022. We anticipate that we will continue to incur losses until we sufficiently commercialize our technology.

The Business Combination

On March 8, 2022, AMCI entered into the Merger Agreement with LanzaTech NZ, Inc. and AMCI Merger Sub, Inc. ("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 NZ, Inc. Upon consummation of the Business Combination, the separate corporate existence of Merger Sub ceased, and LanzaTech NZ, Inc. 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.".

Accounting Impact of the Business Combination

The Business Combination was accounted for as a reverse recapitalization. LanzaTech NZ, Inc. was deemed the accounting predecessor and the Company 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 NZ, Inc. was deemed to be the accounting acquirer in the transaction and, consequently, the transaction was treated as a recapitalization of LanzaTech NZ, Inc. (i.e., a capital transaction involving the issuance of stock by AMCI for the stock of LanzaTech NZ, Inc.). Accordingly, the consolidated balance sheets and results of operations of LanzaTech NZ, Inc. became the historical financial statements of the Company, and AMCI's assets, liabilities and results of operations were consolidated with LanzaTech NZ Inc.'s beginning on the acquisition date. The net assets of AMCI were recognized at carrying value, with no goodwill or other intangible assets recorded.

Basis of Presentation

LanzaTech's condensed consolidated financial statements were prepared in accordance with US GAAP. See Note 2 to our condensed 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 condensed 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 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 March 31, 2023 and March 31, 2022 are summarized in the tables below:

	Three Months Ended March 31,		Change			
(In thousands, except for percentages)	 2023		2022	2023 vs. 2022		
GAAP Measures:						
Revenue	\$ 9,646	\$	7,857	\$	1,789	23 %
Net Loss	(63,312)		(16,778)		(46,534)	277 %
Key Performance Indicators:						
One-Time Revenue	8,889		6,957		1,932	28 %
Recurring Revenue (1)	757		900		(143)	(16)%
Total Revenue	\$ 9,646	\$	7,857	\$	1,789	23 %
Cost of Revenues (ex. Depreciation) (2)	(7,790)		(5,829)		(1,961)	34 %
Selling, general & administrative	(16,835)		(5,078)		(11,757)	232 %
Adjusted EBITDA (3)	\$ (27,575)	\$	(14,759)		(12,816)	87 %

⁽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, stock-based compensation, change in fair value of warrant liability, change in fair value of SAFE liabilities, change in fair value of the prepaid forward contract derivative and Fixed Maturity Consideration, transaction costs on issuance of Forward Purchase Agreement derivative, transaction costs on issuance of the Forward Purchase Agreement derivative, 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:

	As of March 31,		Change		
(In thousands of tonnes per annum)	2023	2022	2023	vs. 2022	
New Capacity Additions	60	0	60	N/M	
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

We earn revenue through joint development agreements, U.S. government contracts, engineering and other services contracts, and licensing agreements, which, together, represent 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 product to customers.

Revenue is measured based on the consideration specified in customer contracts and excludes amounts collected on behalf of third parties.

Biorefining

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.

Joint Development and Contract Research

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.

CarbonSmart

We sell CarbonSmart products 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 generally 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 activities. 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 scaling up 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 continue to expand our sales and customer engagement efforts, commercial capabilities, 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. These items include the mark-to-market adjustments on all liability classified warrants, the prepaid forward contract derivative, the Fixed Maturity Consideration, and SAFE liabilities. 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 financial instruments, 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 intraentity 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 Capital Co., Ltd related to the use of our intellectual property and potential collaborations. 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 — Three Months Ended March 31, 2023 Compared to Three Months Ended March 31, 2022

The results of operations presented below should be reviewed in conjunction with our condensed consolidated financial statements and notes. The following table sets forth our consolidated results of operations for the periods indicated:

	Three Months E	Ende	d March 31,	Change	
	 2023		2022	 2023 vs. 2022	
(In thousands, except for per share amounts)					
Total revenue	9,646		7,857	1,789	23 %
Cost of revenues	(7,790)		(5,829)	(1,961)	34 %
Gross Profit	\$ 1,856	\$	2,028	\$ (172)	(8)%
Operating expenses:					
Research and development	(16,286)		(12,361)	(3,925)	32 %
Depreciation expense	(1,257)		(1,059)	(198)	19 %
Selling, general and administrative expense	(16,835)		(5,078)	(11,757)	232 %
Total operating expenses	\$ (34,378)	\$	(18,498)	\$ (15,880)	86 %
Loss from operations	(32,522)		(16,470)	(16,052)	97 %
Total other expense, net	 (30,182)		(26)	 (30,156)	N/M
Loss before income taxes	\$ (62,704)	\$	(16,496)	\$ (46,208)	280 %
Income tax benefit	_		_	_	N/M
Loss from equity method investees, net	(608)		(282)	(326)	116 %
Net loss	\$ (63,312)	\$	(16,778)	\$ (46,534)	277 %
Other comprehensive loss:					
Foreign currency translation adjustments	(49)		(28)	(21)	75 %
Comprehensive loss	\$ (63,361)	\$	(16,806)	\$ (46,555)	277 %
Net loss per share - basic and diluted	(0.58)		(2.85)		
Weighted-average number of common shares outstanding - basic and diluted	116,530,963		9,219,499		

Revenue

Total revenue increased \$1.8 million, or 23%, in the three months ended March 31, 2023 compared to the same period in 2022. The increase was primarily driven by an increase in revenue from engineering and other services from contracts with existing customers of \$1.5 million. Additionally, we had a \$1.0 million increase in revenue from joint development agreements, partially offset by a decrease of \$(0.7) million in CarbonSmart product sales. Licensing revenue remained stable.

Cost of Revenues

Cost of revenue increased \$2.0 million, or 34%, in the three months ended March 31, 2023 compared to the same period in 2022. Cost of revenue from engineering and other services increased by \$2.2 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 of \$0.3 million of cost of revenue from joint development agreement and \$0.1 million from other contract research. These increases were partially offset by a decrease in cost of revenue of \$(0.6) million in CarbonSmart products.

Research and Development

R&D expense increased \$3.9 million, or 32%, in the three months ended March 31, 2023 compared to the same period in 2022. This was primarily due to an increase of \$1.7 million in R&D personnel and related expenses to accelerate growth, \$1.2 million in one-time expense for stock compensation related to the Business Combination, an increase of \$0.6 million in external R&D services and contractors, and \$0.4 million increase for laboratories constructions and improvements.

Selling, General and Administrative Expense

SG&A expense increased \$11.8 million, or 232%, in the three months ended March 31, 2023 compared to the same period in 2022. This was primarily due to an increase of \$6.1 million of SG&A external services mostly driven by one-time professional services fees related to the Business Combination, an increase of \$2.3 million in one-time employee transition arrangements related to the Business Combination, an increase of \$1.6 million in one-time expense for stock compensation related to the Business Combination, an increase of \$1.0 million in SG&A personnel and consumables expenses to support our growth and \$0.8 million related to an allowance for a customer receivable.

Other Expense, Net

The following table shows our other income (expense), net for the three months ended March 31, 2023, and 2022, and related period-over-period changes:

	Three Months Ended March 31,		Change			
	 2023		2022		2023 vs. 2022	
Interest income, net	\$ 214	\$	_	\$	214	N/M
Other expense, net	(30,396)		(26)		(30,370)	N/M
Total other expense, net	\$ (30,182)	\$	(26)	\$	(30,156)	N/M

Other expense, net increased \$30.4 million, in the three months ended March 31, 2023 compared to the same period in 2022. The increase is primarily due to entering into the Forward Purchase Agreement in February 2023, resulting in \$51.6 million in additional expense related to both the prepaid forward contract and the Fixed Maturity Consideration, including related transaction expenses. This was offset by changes in fair values of our SAFE liabilities and liability classified warrant instruments of \$(21.0) million, as well as \$(0.2) million in unrealized foreign currency gains. The impact of the change in interest income, net is immaterial for the three months ended March 31, 2023 when compared to the same period in 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 March 31, 2023 and December 31, 2022:

		As of		Chai	nge
(In thousands, except for percentages)	M	arch 31, 2023 Dec	ember 31, 2022	2023 vs	. 2022
Total cash, cash equivalents, and restricted cash	\$	145,786 \$	83,710	\$ 62,076	74 %

As of March 31, 2023, as compared to December 31, 2022, LanzaTech's cash, cash equivalents, and restricted cash increased by \$62.1 million, or 74%, primarily due to the closing of the Business Combination and PIPE financing, which was partially offset by cash usage (see Cash flow section below) to fund working capital, the net

loss adjusted for non-cash charges, funding of the Forward Purchase Agreement, purchase of debt securities, purchases of property, plant and equipment and the repurchase of equity instruments of the Company.

Debt Security Investments

Debt security investments comprise held-to-maturity U.S. Treasury securities that the Company has both the ability and intent to hold to maturity. These securities all mature within twelve months and will provide additional liquidity upon maturity. As of March 31, 2023, debt security investments totaled \$49.1 million. The Company did not have any debt security investments as of December 31, 2022.

Sources and Uses of Capital

Since inception, we have financed our operations primarily through equity and debt financing.

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. 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 March 31, 2023, our capital structure consists of equity (comprising issued capital, and accumulated deficit) and the Brookfield SAFE. We are not subject to any externally imposed capital requirements.

Prior to the Business Combination, 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 on the Closing Date.

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 common stock. 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 into shares of common stock.

LanzaTech does not have any outstanding debt, other than the Brookfield SAFE classified as liability for accounting purposes, on its condensed consolidated balance sheet as of March 31, 2023.

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, which occurred 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.

LanzaTech, AMCI and ACM executed the Forward Purchase Agreement on February 3, 2023. Pursuant to the Forward Purchase Agreement, ACM obtained 5,916,514 shares of common stock 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 three years ("Maturity Date"). ACM 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 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 will pay to ACM an amount equal to the product of (x) 500,000 and (y) the Redemption

Price, totaling \$5.1 million (the "Share Consideration"). 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 Purchasers. Any or all of these consequences could have material adverse impact on us.

On February 8, 2023, LanzaTech completed the Business Combination and related transactions. The completion of the Business Combination and related transactions resulted in \$153.3 million of cash proceeds to LanzaTech. The amount released to LanzaTech is also net of the transaction expenses related to the Business Combination paid in the three months ended March 31, 2023 and the amount paid to the Purchasers in relation to the Forward Purchase Agreement. Pursuant to the Forward Purchase Agreement, the Purchasers 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 the Purchasers 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 Quarterly 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".

If we determine that we require additional financing to meet our operating requirements, we may be unable to secure such financing 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.

Cash Flows

For the three months ended March 31, 2023 and 2022

The following table provides a summary of our cash flow for the periods ended March 31, 2023 and March 31, 2022:

	Three Months Ended March 31,		Change		
(In thousands, except for percentages)		2023	2022	202	23 vs. 2022
Net cash provided by (used in):					
Operating activities	\$	(33,810)	\$ (18,118)	\$ (15,692	87 %
Investing activities		(110,566)	(1,891)	(108,675	5,747 %
Financing activities		206,477	7	206,470	N/M
Effects of currency translation		(25)	(103)	78	(76)%
Net increase (decrease) in cash, cash equivalents, and restricted cash	\$ \$	62,076	\$ (20,105)		

Cash Flows Used in Operating Activities

For the three months ended March 31, 2023, net cash used in operating activities was \$(33.8) million. This was primarily driven by a net loss of \$(63.3) million, adjusted for the loss on change in fair value of the prepaid forward contract derivative and Fixed Maturity Consideration of \$51.1 million, provision for losses on trade and other receivables of \$0.8 million, share-based compensation expense of \$3.5 million, depreciation of property, plant and equipment of \$1.3 million, non-cash lease expense of \$0.5 million and the non-cash loss from equity method investees, net of \$0.6 million. The additional impact to net cash usage is related to the adjustments for net cash changes in operating assets and liabilities of \$(6.6) million, the gain on change of fair value of SAFE and warrant liabilities of \$(21.0) million, the non-cash recognition of licensing revenue of \$(0.6) million and non-cash foreign currency exchange gain of \$(0.2) million.

For the three months ended March 31, 2022, net cash used in operating activities was \$(18.1) million. This was primarily driven by a net loss of \$(16.8) million, adjusted for share-based compensation expense of \$0.7 million, depreciation of property, plant and equipment of \$1.1 million, the loss from equity method investees, net of \$0.3 million, non-cash lease expense of \$0.4 million and non-cash foreign currency exchange loss of \$0.1 million. The additional net cash usage is related to the adjustments for net cash changes in operating assets and liabilities of \$(3.3) million, non-cash recognition of licensing revenue of \$(0.5) million, and the gain on change in fair value of SAFE and warrant liabilities of \$(0.1) million.

Cash Flows Used in Investing Activities

For the three months ended March 31, 2023, net cash used in investing activities was \$(110.6) million, driven by the investment in debt securities of \$(49.1) million, the forward purchase Prepayment Amount of \$(60.1) million and the purchase of property, plant and equipment of \$(1.4) million.

For the three months ended March 31, 2022, net cash used in investing activities was \$(1.9) million, driven by the purchase of property, plant and equipment.

Cash Flows from Financing Activities

For the three months ended March 31, 2023, net cash provided by financing activities was \$206.5 million. This was driven by \$213.4 million in proceeds from the Business Combination and PIPE financing and proceeds of \$0.7 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 \$(7.7) million.

For the three months ended March 31, 2022, net cash provided by financing activities was not significant.

Off-Balance Sheet Arrangements

As of March 31, 2023 and December 31, 2022, 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 condensed consolidated financial statements 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 condensed 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. A discussion of our critical accounting policies and estimates may be found in the Company's second amended S-1 registration statement filed with the SEC on May 5, 2023 in "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the heading "Critical Accounting Policies and Management Estimates". As of March 31, 2023, there was one change to our critical accounting policies and estimates discussed below:

Forward Purchase Agreement Valuation

The Company has determined that the prepaid forward contract, including the Variable Maturity Consideration, within the Forward Purchase Agreement is (i) a freestanding financial instrument and (ii) a derivative. This derivative, referred to throughout as the prepaid forward contract derivative was recorded as an asset at fair value on the condensed consolidated balance sheet as of March 31, 2023. The fair value of the derivative was estimated using a Monte-Carlo Simulation in a risk-neutral framework. Specifically, the future stock price is simulated assuming a Geometric Brownian Motion ("GBM"). For each simulated path, the forward purchase value is calculated based on the contractual terms and then discounted back to present. Finally, the value of the forward is calculated as the average present value over all simulated paths.

The Company separately identified two other freestanding financial instruments in the Forward Purchase Agreement, the Share Consideration and the Minimum Maturity Consideration. As both of these payments are for a fixed amount at the Maturity Date, we have accounted for these cash outflows as debt-like instruments. In accordance with ASC 825, *Financial Instruments*, we have elected to account for these instruments under the Fair Value Option. As the terms and conditions of these payments are the same, they are accounted for together on the condensed consolidated balance sheet as of March 31, 2023 as the Fixed Maturity Consideration. The fair value of the Fixed Maturity Consideration was estimated within the same Monte-Carlo simulation as the prepaid forward contract to effectively model the potential acceleration of the Maturity Date and the corresponding acceleration in the payment of the Fixed Maturity Consideration.

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, 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 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.

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 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 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, 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. 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) 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 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 condensed consolidated financial statements for a 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 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, change in fair value of warrant liability, change in fair value of SAFE liabilities, change in fair value of the prepaid forward contract derivative and Fixed Maturity Consideration, transaction costs on issuance of Forward Purchase Agreement derivative and loss/(gain) from equity method investees. We monitor and have presented in this Quarterly 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 that 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

	Three Months Ended March 3			March 31,
(In thousands)		2023		2022
Net Loss	\$	(63,312)	\$	(16,778)
Depreciation		1,257		1,059
Interest income		(214)		_
Stock-based compensation expense and change in fair value of SAFE and warrant liabilities (1)		(17,474)		678
Change in fair value of the prepaid forward contract derivative and Fixed Maturity Consideration		51,109		_
Transaction costs on issuance of Forward Purchase Agreement		451		_
Loss from equity method investees, net		608		282
Adjusted EBITDA	\$	(27,575)	\$	(14,759)

⁽¹⁾ Stock-based compensation expense represents expense related to equity compensation plans

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to a variety of market and other risks, including the effects of changes in interest rates, inflation and foreign currency translation and transaction risks, as well as risks to the availability of funding sources, hazard events and specific asset risks.

Interest Rate Fluctuation Risk

We are exposed to market risk related to changes in interest rates. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our cash equivalents are invested in short-term U.S. Treasury and government obligations. However, because of the short-term nature of the instruments in our portfolio, an immediate change in market interest rates of 100 basis points would not have a material impact on the fair market value of our cash and cash equivalents or on our financial position or results of operations.

Foreign Currency Fluctuation Risk

We are subject to foreign currency exchange risk from the translation of the financial statements of our foreign subsidiaries, whose financial condition and results of operations are reported in their local currencies and then translated into U.S. dollars at the applicable currency exchange rate for inclusion in our consolidated financial statements. Foreign currency translation adjustments were \$(0.05) million and \$(0.03) million for the three months ended March 31, 2023 and March 31, 2022, respectively. Additionally, we have contracted with and may continue to contract with foreign vendors.

Inflation Fluctuation Risk

Inflation generally affects us by increasing our cost of labor, laboratory supplies, consumables and equipment. We do not believe that inflation had a material effect on our business, financial condition or results of operations during the three months ended March 31, 2023.

ITEM 4. CONTROLS AND PROCEDURES

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. We do not expect that our disclosure controls and procedures will prevent all errors and all instances of fraud. Disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Further, the design of disclosure controls and procedures must reflect the fact that there are resource constraints, and the benefits must be considered relative to their costs. Because of the inherent limitations in all disclosure controls and procedures, no evaluation of disclosure controls and procedures can provide absolute assurance that we have detected all our control deficiencies and instances of fraud, if any. The design of disclosure controls and procedures also is based partly on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rule 13a–15(e) and 15d-15(e)) as of March 31, 2023. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of March 31, 2023.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as such term is defined in Exchange Act Rule 13a–15(f) and 15d-15(f)) during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

LEGAL MATTERS

The Company may be involved in legal proceedings and exposed to potential claims in the normal course of business. Although we cannot predict the ultimate outcome of any legal matter with certainty, we do not believe the outcome of any of our pending legal proceedings will have a material adverse impact on our consolidated financial position, results of operations or cash flows.

ITEM 1A. RISK FACTORS

Our risk factors are disclosed in Part I, Item 1A of our Annual Report on Form 10-K. There have been no material changes during the three months ended March 31, 2023 from or updates to the risk factors discussed in Part I, Item 1A. Risk Factors, of our Annual Report on Form 10-K.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Except as previously reported by the Company on its Current Reports on Form 8-K, we did not sell any securities during the period covered by this Form 10-K that were not registered under the Securities Act.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit	Description
31.1*	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended.
<u>31.2</u> *	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended.
<u>32.1</u> *+	Certification of Principal Executive Officers and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Inline XBRL File (included in Exhibit 101)

^{*} Filed herewith.

⁺ Furnished herewith and not deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1934, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Skokie, State of Illinois, on May 15, 2023.

LANZATECH GLOBAL, INC.

By: /s/ Jennifer Holmgren, Ph.D.

Name: Jennifer Holmgren, Ph.D.

Title: Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Name	Position	Date
/s/ Jennifer Holmgren, Ph.D. Jennifer Holmgren, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	May 15, 2023
/s/ Geoff Trukenbrod Geoff Trukenbrod	Chief Financial Officer (Principal Financial Officer)	May 15, 2023

CERTIFICATION PURSUANT TO

RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,

AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Jennifer Holmgren, certify that:
- 1.I have reviewed this Quarterly Report on Form 10-Q of LanzaTech Global, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 15, 2023 By: /s/ Jennifer Holmgren

Jennifer Holmgren Chief Executive Officer (Principal Executive Officer)

CERTIFICATION PURSUANT TO

RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,

AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Geoff Trukenbrod, certify that:
- 1.I have reviewed this Quarterly Report on Form 10-Q of LanzaTech Global, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 15, 2023 By: /s/ Geoff Trukenbrod

Geoff Trukenbrod Chief Financial Officer (Principal Financial Officer)

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Jennifer Holmgren, Chief Executive Officer of LanzaTech Global, Inc. (the "Company"), and Geoff Trukenbrod, Chief Financial Officer of the Company, each hereby certifies that, to the best of their knowledge:

- 1. The Company's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2023, to which this Certification is attached as Exhibit 32.1 (the "Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 15, 2023 By: /s/ Jennifer Holmgren

Jennifer Holmgren Chief Executive Officer (Principal Executive Officer)

By: /s/ Geoff Trukenbrod

Geoff Trukenbrod Chief Financial Officer (Principal Financial Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of LanzaTech Global, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.