LanzaTech Nasdag: LNZA

A Carbon Recycling Company

CORPORATE PRESENTATION - MAY 2023

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Financial Information; Non-GAAP Financial Measures

To supplement our financial results presented in accordance with US GAAP and to provide investors with additional information regarding our financial results, we have presented in this presentation 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 as net loss, excluding the impact of depreciation, interest income (expense), net, gain on extinguishment of debt, stock-based compensation and change in fair value of warrant liability, and loss/(gain) from equity method investees, net. We monitor and have presented in this presentation adjusted EBITDA because it is a key measure used by our management and the board of directors to understand and evaluate our operating performance, to establish budgets, and to develop operational goals for managing our business. We believe adjusted EBITDA helps identify underlying trends in our business that could otherwise be masked by the effect of certain expenses that we include in net loss. Accordingly, we believe adjusted EBITDA provides useful information to investors, analysts, and others in understanding and evaluating our operating results and enhancing the overall understanding of our past performance and future prospects.

Adjusted EBITDA is not prepared in accordance with US GAAP and should not be considered in isolation of, or as an alternative to, measures prepared in accordance with US GAAP. There are a number of limitations related to the use of adjusted EBITDA rather than net loss, which is the most directly comparable financial measure calculated and presented in accordance with US GAAP. For example, adjusted EBITDA: (i) excludes stock-based compensation expense because it is a significant non-cash expense hat is not directly related to our operating performance; (ii) excludes depreciation expense and, although this is a non-cash expense, the assets being depreciated and amortized may have to be replaced in the future; and (iii) does not reflect the cash requirements necessary to service interest on our debt, which affects the cash available to us; (iv) gain or losses on equity method investee; and (v) certain income or expense items that do not provide a comparable measure of our business performance. In addition, the expenses and other items that we exclude in our calculations of adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude from adjusted EBITDA when they report their operating results. In addition, other companies may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison.

The Company does not provide a reconciliation of forward-looking non-GAAP financial measures to the most comparable U.S. GAAP financial measures on a forward-looking basis because the Company is unable to predict with reasonable certainty the ultimate outcome of pending litigation, unusual gains and losses, foreign currency exchange gains or losses and potential future asset impairments, as well as discrete taxable events, without unreasonable effort. These items are uncertain, depend on various factors, and could have a material impact on U.S. GAAP results for the guidance period.

OUR "CLIMATE TIME BOMB IS TICKING"

– Antonio Guterres, U.N. Secretary-General March 2023

The processes that underlie human civilization are making our planet uninhabitable

> LanzaTech has **commercialized a decarbonization solution** that unites biology with engineering to **enable a circular economy**

Image credit: Pacific Ring of Fire 2004 Expedition. NOAA Office of Ocean Exploration; Dr. Bob Embley, NOAA PMEL, Chief Scientist. THE WORLD HAS ENOUGH CARBON ABOVE GROUND TO MAKE EVERYTHING WE NEED

> WE CREATE VALUE WHERE OTHERS SEE WASTE

GLOBALLY LICENSED, COMERCIALLY OPERATIONAL

Production Volume: 46,000 Tons per Year Ethanol

Carbon Source: Steel Mill Emissions **Production Volume:** 46,000 Tons per Year Ethanol

Carbon Source: Ferroalloy Emissions **Production Volume:** 60,000 Tons per Year Ethanol

Carbon Source: Ferroalloy Emissions

OUR PROCESS RECYCLES CARBON WASTE INTO CHEMICAL BUILDING BLOCKS TO CREATE A WIDE VARIETY OF PRODUCTS

Forbes

Swiss Footwear Brand Develops A Running Shoe Made From Carbon Emissions



FAST@MPANY

These gorgeous Zara party dresses are made from carbon emissions

Carbon created by a Chinese steel factory is fermented with bacteria and then ends up in this cansule collection



Richard Branson's Virgin Atlantic set to fly a 747 jet with fuel made from factory pollution



CREATING VALUE FROM WASTE: COMMERCIALLY PROVEN AT SCALE

- 18 years of continuous scaling and de-risking
- 3 licensed commercial facilities operating; 3 additional expected to start in 2023
- Global footprint, diverse feedstocks
- Demonstrated revenue growth year-over-year

STRONG REVENUE GROWTH Y/Y: 2020-2023E



A NOVEL CIRCULAR SOLUTION, RECYCLING WASTE CARBON INTO VALUABLE PRODUCTS



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BROAD IP PORTFOLIO UNDERPINS GAS FERMENTATION BONA FIDES



LanzaTech has over 1,300 patents granted worldwide with over 575 pending

Section II Business Overview

LanzaTech

THREE INTEGRATED AND COMPLEMENTARY BUSINESS LINES

Innovation and IP underpin diversified business model that facilitates profitable growth

Biorefining: Carbon Capture Transformation (CCT) Plants

- Capital light business model; Licensing of core technology
- Customers fund the capital required to build, which helps profitably decarbonize their processes



CarbonSmart[™]

- LanzaTech as offtaker to supply major brands with the chemical building blocks for sustainable products
- Product demand creates demand pull and accelerates deployment of Biorefining CCT plants

Joint Development & Contract Research

- Contracted R&D work with partners that leverage world-class synthetic and computational biology toolkit to develop new microbes, optimize processes, and produce an extensive range of products
- Expands addressable product markets and drives additional demand for Biorefining CCT plants



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BIOREFINING: CARBON CAPTURE TRANSFORMATION (CCT) PLANTS

Asset Light

- License technology to customers
- Provide engineering services
- Customers provide capital funding

Revenue Diversification

- One-time/Development Stage equipment sales, engineering services, and startup services
- Recurring/Operational Stage royalties, microbes & media sales, and software/monitoring sales
- Ability to co-develop projects with partners like Brookfield, creating additional optionality and revenue potential



PROFITABLE UNIT LEVEL ECONOMICS FOR THE CUSTOMER

- Plant economics vary by region, feedstock, and chosen product
- Economics are expected to be attractive for plant sponsor, exclusive of the benefit of carbon emission reductions
- Strong cash margins on a per ton basis, driving annual paybacks on invested capital of 4-6 years
- "Feedstock Costs" represent the opportunity cost for which the customer may have otherwise used the waste gas
- Further upside to plant economics from:
 - Declining feedstock costs as the cost of carbon increases
 - Improvements to Capex and Opex
 - Direct production of higher value chemicals



Expected Biorefining CCT Plant Economics Plant Level Data Feedstock Type Industrial Off-Gas **Potential avoided** Production (TPA / million GPY) 50,000 / 16.7 cost of \$10mm per annum to the Carbon Captured (tons per year) ~100.000 plant assuming a carbon price of Project CapEx (\$M) \$150 \$100/t

	Current (\$/t)	Carbon Upside (\$/t)
Revenues	\$1,115	\$1,115
Feedstock Costs	\$(250)	+\$100
OpEx Costs	\$(375)	\$(375)
Total Cash Costs	\$(625)	\$(275)
Cash Margin (\$/t)	\$490	\$840
Annual Cash Margin (\$M per year)	\$25	\$42

Source: LanzaTech management. Plant economics vary by region, size, feedstock, etc. The above is intended to be illustrative of the unit economics of plants. LanzaTech expects to continue to innovate around its platform technology in order to reduce operating expense and capital expenditures, but those innovations are not reflected in these estimates.

PROFITABLE UNIT LEVEL ECONOMICS FOR LANZATECH

Each Biorefining CCT plant generates a combination of both one-time and recurring cash flows to LanzaTech. Unit-level economics shown represent 50 KTA capacity unit.

- One-Time/Development Stage Cash Flows: Engineering Services, Startup Services, and Equipment Sales
- Recurring/Operational Stage Cash Flows: Royalties from Licensing, Sales of Microbes & Media, Sales of Monitoring & Software, and CarbonSmart[™] related marketing fees



Source: LanzaTech management. Plant economics vary by region, size, feedstock, etc. The above is intended to be illustrative of the unit economics of plants. KTA represents "thousand tons per annum".

WORLD CLASS PARTNERS CURRENTLY DEPLOYING AND COMMITTED TO ROLLING OUT BIOREFINING CCT PLANTS

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Partnership with Industrial Leaders Deploying LanzaTech Solutions

- ✓ De-risked technology at commercial-scale
- ✓ Multiple feedstocks deployed globally
- Licensing model where partners fund capital required for projects



PROJECTS IN OPERATION, CONSTRUCTION AND ADVANCED ENGINEERING ACROSS THE GLOBE



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STRONG PIPELINE THAT POSITIONS THE COMPANY FOR CONTINUED GROWTH AND SCALE

ACTIVE CUSTOMER BIOREFINING PROJECT PIPELINE¹

PROJECT DEVELOPMENT & PIPELINE STAGE GATES



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BROOKFIELD PARTNERSHIP DRIVES IMPLEMENTATION OF LANZATECH CO-DEVELOPMENT STRATEGY

Co-Development Strategy Overview

- Co-Development strategy allows LanzaTech to play a more active role as project developer, **bringing its partner's capital to the table** in instances where there may not be a natural licensee
- LanzaTech receives all of its customary revenue streams through the Co-Development and expands total addressable projects

Brookfield: Flagship Co-Development Partner

- Brookfield partnership unlocks sophisticated infrastructure capital to invest in projects and further validates the LanzaTech technology platform
- Structured framework agreement enables capital-light project development solution and accelerates global project deployment

Brookfield

Brookfield Partnership Catalyzes LanzaTech Co-Development Strategy

\$500M

Up to \$500M to invest in Biorefining CCT projects meeting pre-agreed milestones; Additional \$500M investment possible

Drives Revenue

LanzaTech receives its customary one-time and recurring project-related revenue; LanzaTech participates in project economic upside

Broad Scope

Global focus enables broad deployment of Biorefining CCT technology 50% Offtake

LanzaTech eligible to take up to 50% of the offtake to place into CarbonSmart™

CARBONSMART[™]: TRANSFORMING CARBON WASTE INTO SUSTAINABLE PRODUCTS

Chemicals

- LanzaTech as offtaker to supply major brands with sustainable chemical building blocks for their supply chains
- Product demand creates demand pull for Biorefining CCT plants and accelerates deployment
- Work with conversion partners to upgrade ethanol from Biorefining CCT plants to be used as polymers, materials, and plastics

Sustainable Aviation Fuel

- LanzaTech ethanol can be converted into sustainable aviation fuel (SAF) through the LanzaJet[™] Alcohol-to-Jet process
- Further product demand pull for LanzaTech Biorefining CCT plants



TOTAL END MARKETS FOR PRODUCTS ENABLED BY THE LANZATECH PLATFORM

\$1T Addressable Market

Potential for >1 billion tons/year of product from waste feedstocks



¹ Ethanol (\$89.18, 2019, Grand View Research, ³ Jet fuel (\$179.2B, 2018, Allied Market Research), ³ Ethylene (\$222B, 2019, The Business Research Company), Ethylene Oxide (\$45B, 2020, Research and Markets), PET (\$43.8B, 2019, The Business Research Company), MEG (\$26B, 2018, Market Research Future), ⁴ Acetone (\$4.6B, 2019, Grand View Research), Isoprench, Isoprench, Isoprench, Isoprench, Isoprench, Isoprench, Isoprench, Research, Isoprench, Research, Isoprench, Status, 2019, Grand View Research), Methacrylate (MMA) (\$12.6B, 2019, Fortune Business Insights), Specialty chemicals (\$530B, 2019, Grand View Research), Methacrylate (MMA) (\$12.6B, 2019, Fortune Business Insights), Specialty chemicals (\$530B, 2019, Grand View Research), Methacrylate (MMA) (\$12.6B, 2019, Fortune Business Insights), Specialty chemicals (\$530B, 2019, Grand View Research), Methacrylate (MMA) (\$12.6B, 2019, Fortune Business Insights), Specialty chemicals (\$530B, 2019, Grand View Research), Methacrylate (MMA) (\$12.6B, 2019, Fortune Business Insights), Specialty chemicals (\$530B, 2019, Grand View Research), Methacrylate (MMA) (\$12.6B, 2019, Fortune Business Insights), Specialty chemicals (\$530B, 2019, Grand View Research), Methacrylate (MMA) (\$12.6B, 2019, Fortune Business Insights), Specialty chemicals (\$530B, 2019, Grand View Research), Methacrylate (MMA) (\$12.6B, 2019, Fortune Business Insights), Specialty chemicals (\$530B, 2019, Grand View Research), Methacrylate (\$100, Grand View Research), Methac



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MARKET FOR SAF DRIVES TAILWIND FOR LANZATECH

Alcohol-to-Jet technology developed within LanzaTech and in partnership with the US Department of Energy and the Pacific Northwest National Laboratory (PNNL)

Patented process & ASTM certified

LanzaJet spun out in 2020. ~25% ownership; path to majority through additional IP contribution

LanzaTech + LanzaJet

Significant competitive advantages from joint process

Lowest Cost	Direct CO ₂	High Potential		
Process ¹	Feedstock Use	Jet Yield (90%) ²		

Abundant Lowcost Feedstocks Non-food Based Multiple Global Plants in Development

SAF from LanzaJet Platform Creates Demand Pull for Waste-Based Ethanol

SUSTAINABLE AVIATION FUELS MARKET OPPORTUNITY

"SAFs are the only viable near-term option to decrease emissions in the aviation sector, as they are compatible with current aircraft engines and fueling infrastructure and can power flights with no distance limits" (McKinsey & Company)¹



respectively. ⁴ World Economic Forum, Clean Skies for Tomorrow 2030 Ambition Statement ⁵ World Economic Forum, Clean Skies for Tomorrow Insight Report

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COMPLETE WASTE-TO-SAF SOLUTION THROUGH INTEGRATION WITH LANZAJET PLATFORM

~100B GPY commercial aviation fuel market drives significant demand for SAF¹

LanzaJet[™] Alcohol-to-Jet process creates significant demand pull for waste-based ethanol



Drop-In Ready – ASTM Approved // Patented Process

¹https://www.energy.gov/eere/bioenergy/articles/sustainableaviation-fuel-review-technical-pathways-report/ σ

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CONSTRUCTION OF LANZAJET'S 10M GPY SAF FACILITY TO BE COMPLETED IN 2023



DECEMBER 2022

APRIL 2023

Once operational, this facility will account for ~10 percent of global SAF production capacity¹ and ~double the amount of current SAF production in the United States²

> ¹ https://www.iata.org/en/iata-repository/pressroom/fact-sheets/fact-sheet---alternativefuels/; ² https://www.lanzajet.com/lanzajet-marks-major-milestone-on-its-freedom-pinesfuels-construction/

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JOINT DEVELOPMENT & CONTRACT RESEARCH

- Prioritization of product roadmap through paid, contracted work with partners to expand chemicals portfolio and optimize processes
- World-class synthetic and computational biology capabilities to develop new microbes, optimize processes, and produce an extensive range of products
- Expands addressable product markets and drives additional demand for Biorefining CCT plants
- Facilitates LanzaTech's continued investment in disruptive synthetic biology platform



CUTTING EDGE CAPABILITIES AND PROCESSES

World-Class Synthetic Biology Platform

Benchtop & Pilot Scale Gas-Fed Reactors with Integrated Analytics & Data Collection



Global Leaders in Gas Fermentation

Fully Automated Engineering & Screening of Thousands of Anaerobic Gas Fermentation Strains



Fully-Integrated Predictive Metabolic & Process Models



Predictive & Low-Cost, Cell-Free Prototyping of Enzymes & Pathway Designs



WHERE WE'RE HEADED: DIRECT PRODUCTION OF BULK COMMODITY CHEMICALS ON A DISTRIBUTED SCALE



New product development and direct production of high value chemicals expands TAM and increases demand for Biorefining CCT licensing

Images generated with Biorender.com.

LANZATECH ENABLES CARBON NEGATIVE PRODUCTS TODAY WITH FORESEEABLE IMPROVEMENT OVER TIME

Renewable Energy

Further reduces carbon intensity of LanzaTech process and products

Carbon Negative Feedstocks

Enable increasingly negative product carbon intensity

Net Zero Economy

Enabled by LanzaTech products



Section III 2023 Execution Priorities

LanzaTech

2023 EXECUTION PRIORITIES

SAFETY FIRST Zero lost time injuries



ADJUSTED EBITDA

Reduce 2023 Adjusted EBITDA loss y/y by 10-20%: 2023E Adjusted EBITDA guidance of \$(55M)-\$(65M) Pathway to Adjusted EBITDA positive by the end of 2024



GLOBAL PRODUCTION

Grow total installed nameplate capacity by ~100% to enable >300 KTA of waste-based ethanol Commercial operations across multiple feedstocks & geographies including China, Europe, and India

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COMMERCIAL GROWTH

Meet revenue guidance of \$80M-\$120M Continued pipeline development to support >2x topline growth for 2024

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PROCESS COMPETITIVENESS

Ongoing Optimization of profit/ton of CO₂ abatement Demonstrate 1+ non-ethanol microbe at scale

THE WORLD HAS ENOUGH CARBON ABOVE GROUND TO MAKE EVERYTHING WE NEED

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PROVEN COMMERCIALIZED TECHNOLOGY TO VALORIZE WASTE & PIONEER A NEW CIRCULAR CARBON ECONOMY

Complementary Business Model Accelerates Global Deployment of LanzaTech Platform

BIOREFINING: CCT PLANTS

CARBONSMART[™] MARKETING

JOINT DEVELOPMENT & CONTRACT RESEARCH

Robust Pipeline for Rapid, Global Growth

3 Commercial Plants In Continuous Operation and Counting

Massive Addressable Market

>54 Million Gallons of Ethanol Produced

LanzaTech Nasdag: LNZA

WELCOME TO THE POST POLLUTION FUTURE

LanzaTech

Nasdaq: LNZA

APPENDIX I: Corporate DNA

SAFETY IS OUR TOP PRIORITY

Global commitment to zero lost time injuries

Ongoing systematic risk and hazard assessments at all global facilities

Strategic focus on executive-led safety initiatives, including risk and employee engagement

2022 SAFETY STATS









OUR PEOPLE ARE OUR COMPETITIVE ADVANTAGE

~400*

Global Employees in 11 Countries >90%

2023 YTD Employee Retention

55%

Women on Executive Team >40%

Women on the Board of Directors EanzaTech

ESG IS OUR BUSINESS

- We've set baselines using established ESG frameworks and guides, including:
 - GRI framework
 - SASB framework
 - TCFD framework
 - Nasdaq ESG reporting guide
- 2. Conducted in-depth market and competitor analyses

- 3. Implemented processes to track annual metrics, including:
 - Scope I and II for U.S. Operations
 - Water recycling and usage
 - Global diversity figures
 - Environmental impact of our day-to-day operations
 - Sustainability audits for commercially operating facilities
- 4. Integrated metrics into executive-level performance



LanzaTech has been an RSB stakeholder community member for many years and has supported the certification of numerous licensee plants. LanzaTech has also achieved trader certification to ensure compliance across value chains containing carbon emissions recycled through the LanzaTech process.

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APPENDIX II: Summary Financial Results

SUMMARY FINANCIAL RESULTS

Summary Financial Results	Year Ended December 31,			% Change	
In thousands, except for percentages	2022	2021	2020	2022 vs. 2021	2021 vs. 2020
Revenue	\$37,343	\$25,461	\$18,353	47%	39%
Net Loss	\$(76,356)	\$(46,689)	\$(37,713)		
Adjusted EBITDA ¹	\$(69,220)	\$(44,792)	\$(34,263)		
Ending Total Cash ²	\$83,710	\$128,732	\$60,909		

Reconciliation of Net Loss to Adjusted EBITDA Year Ended Decen		nber 31,	
In thousands	2022	2021	2020
Net Loss	\$(76,356)	\$(46,689)	\$(37,713)
Depreciation	\$4,660	\$3,806	\$2,979
Interest (income) expense	\$(8)	\$7	\$351
Gain on extinguishment of debt	-	\$(3,065)	-
Stock-based compensation expense and change in fair value of warrant liability ³	\$4,476	\$3,094	\$2,287
Gain from equity method investees, net	\$(1,992)	\$(1,945)	\$(2,167)
Adjusted EBITDA	\$(69,220)	\$(44,792)	\$(34,263)

¹ Adjusted EBITDA is calculated as net loss, excluding the impact of depreciation, interest income (expense), net, gain on extinguishment of debt, stock-based compensation and change in fair value of warrant liability, and loss/(gain) from equity method investees, net. Adjusted EBITDA is a supplemental measure that is not a substitute for, or superior to, measures of financial performance prepared in accordance with US GAAP. Adjusted EBITDA does not represent, and should not be considered, an alternative to net income (loss), as determined in accordance with US GAAP;² Cash and cash equivalents comprise cash on hand, restricted cash, 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; ³ Stock-based compensation expense represents expense related to equity compensation plans