



LanzaTech and Eramet announce plans for first-of-a-kind integrated Carbon Capture, Utilization and Storage (CCUS) project in Norway

October 31, 2024

CHICAGO, Oct. 31, 2024 (GLOBE NEWSWIRE) -- LanzaTech Global, Inc. (NASDAQ: LNZA) (“LanzaTech”), the carbon recycling company transforming above-ground carbon into sustainable fuels, chemicals, materials, and proteins, today announced plans to develop a commercial-scale Carbon Capture and Utilization (“CCU”) facility (the “facility”, “plant”, or “project”) at Herøya Industrial Park in Porsgrunn, Norway. The plant will produce ethanol and is expected to begin operations in 2028. Eramet will supply furnace gas as feedstock to the facility from the Porsgrunn Manganese Alloys smelter but will not participate in its financing.

To unlock further emissions reductions, the two companies also intend to build upon the CCU infrastructure and, if demonstrated to be feasible, integrate Carbon Capture and Storage (“CCS”) technology as part of a second phase of the project. The integration of LanzaTech’s CCU technology with CCS, two commercially proven carbon management solutions, is expected to establish a first-of-a-kind, integrated facility that drives leading-edge carbon abatement metrics.

The new plant at Herøya will complement the six other commercial scale plants already using LanzaTech’s carbon recycling technology to produce ethanol and the first for which LanzaTech will manage the full scope of project design, construction, and operations. The project’s Front-end Engineering Design (FEED) phase was completed with global engineering firm Fluor Corporation, which brings deep experience and expertise across the project scope and has partnered with LanzaTech in creating a baseline plant design that can be replicated for projects around the world. The project is also being supported by Sweco Group, which brings best-in-class sustainability expertise and design acumen. From a project financing standpoint, LanzaTech’s infrastructure investment partner Brookfield Asset Management will have right of first refusal for financing and owning the project, with a Final Investment Decision (FID) expected within the next six months.

LanzaTech’s proprietary technology is a fermentation process that biologically converts carbon-rich gases into sustainable raw materials, such as ethanol, for use in clothing, personal care products, packaging, fuel, and more. The facility’s maximum production capacity is expected to be 24 kilotons per annum of fuel-grade ethanol. Demand markets for this ethanol are wide ranging and include chemicals and sustainable aviation fuel. Given LanzaTech’s growing ethanol product sales business, the company intends to market the produced ethanol through its existing and emerging sales channels.

Eramet Norway’s Porsgrunn smelter has two closed furnaces producing manganese alloys. Manganese smelting falls into the category of hard-to-abate, as carbon is necessary for the chemical reduction of manganese ore. Eramet Group, headquartered in France, is engaged in an ambitious decarbonization pathway, with a target of a 40% reduction of its scope 1 & 2 emissions by 2035 set by the company’s “Act for positive mining” CSR roadmap. CCUS has been identified by Eramet as a major lever of decarbonization for its metallurgical assets. Since metallurgy represents ~90% of Eramet’s scope 1 & 2 emissions, this project makes an important contribution to the validation of a path to Near Zero CO₂-emission Manganese Alloys.

The planned integration of LanzaTech’s CCU process with CCS technology demonstrates the ability of LanzaTech’s carbon recycling platform to partner with and enable other carbon management technologies to further reduce carbon footprints. Residual output from LanzaTech’s gas fermentation process at this facility will take the form of highly concentrated CO₂, suitable for CCS, which reduces further operating and capital costs compared to a standalone CCS project.

“We are thrilled to announce plans for Norway’s first commercial carbon recycling facility using LanzaTech’s technology,” said Dr. Jennifer Holmgren, CEO of LanzaTech. “Carbon is an incredibly important resource that requires a wide range of solutions to manage responsibly. By recycling above-ground carbon with our CCU process, this groundbreaking project gets us another step closer to realizing an enduring global circular carbon economy.”

The facility in Porsgrunn would allow the Eramet Norway Porsgrunn smelter to achieve a significant reduction in its CO₂ emissions. The potential inclusion of CCS in the project is pending results of a feasibility study and financing, though the companies remain optimistic about its implementation as further support of Norway’s position as a frontrunner in the deployment of CCUS.

In addition to CO₂ emissions reductions, the LanzaTech-Eramet collaboration will positively impact the local community by creating new jobs in the thriving industrial region of Grenland, and furthers the municipality’s reputation for technological innovation.

Geoff Streeton, Chief Development Officer, in charge of strategy, innovation and business development at Eramet, stated, *‘Eramet is pleased to be collaborating with LanzaTech on this first-of-its-kind decarbonization project of our manganese smelters. Firstly, to ensure optimal circular value creation in the use of our energy-rich furnace gas. Secondly, this creates an attractive option to further liquefy and ultimately sequester the remaining CO₂ streams. On a combined basis these CCU & CCS projects at Porsgrunn could bring a reduction of the company’s CO₂ emissions by ~200 kt of Eramet’s Scope 1 & 2 emissions. This project brings Eramet closer towards its target of producing and offering a Zero CO₂ manganese alloy product for the benefit of decarbonizing the value chain of steel.’*

About LanzaTech

LanzaTech Global, Inc. (NASDAQ: LNZA) is the carbon recycling company transforming waste carbon into sustainable fuels, chemicals, materials, and protein for everyday products. Using its biorecycling technology, LanzaTech captures carbon generated by energy-intensive industries at the source, preventing it from being emitted into the air. LanzaTech then gives that captured carbon a new life as a clean replacement for virgin fossil carbon in everything from household cleaners and clothing fibers to packaging and fuels. By partnering with companies across the global supply chain like ArcelorMittal, Zara, H&M Move, Coty, On, and LanzaJet, LanzaTech is paving the way for a circular carbon economy. For more information about LanzaTech, visit <https://lanzatech.com>.

About Eramet

Eramet transforms the Earth's mineral resources to provide sustainable and responsible solutions to the growth of the industry and to the challenges of the energy transition. Its employees are committed to this through their civic and contributory approach in all the countries where the mining and metallurgical group is present. Manganese, nickel, mineral sands, and lithium: Eramet recovers and develops metals that are essential to the construction of a more sustainable world. As a privileged partner of its industrial clients, the Group contributes to making robust and resistant infrastructures and constructions, more efficient means of mobility, safer health tools and more efficient telecommunications devices. Fully committed to the era of metals, Eramet's ambition is to become a reference for the responsible transformation of the Earth's mineral resources for living well together.

www.eramet.com

Eramet Norway

Operating manganese smelters in Porsgrunn, Sauda and Kvinesdal, Eramet Norway AS is fully owned by the French mining and metallurgical group Eramet SA and part of the Group's manganese alloy business unit.

Eramet Norway AS has a world leading market position on refined manganese alloys with one of the industry's lowest carbon footprints, and is ambitiously pursuing the ultimate target of producing Zero CO₂ manganese alloys for the benefit of decarbonizing the value chain of steel.

www.eramet.no

Forward Looking Statements

This press release includes forward-looking statements regarding, among other things, the plans, strategies, and prospects, both business and financial, of LanzaTech. These statements are based on the beliefs, assumptions, projections and conclusions of LanzaTech's management. Forward-looking statements are inherently subject to risks, uncertainties and assumptions, many of which are outside LanzaTech's control, that could cause actual results or outcomes to differ materially from those discussed in the forward-looking statements. LanzaTech cannot assure you that it will achieve or realize these plans, intentions or expectations. Forward-looking statements are not guarantees of future performance, conditions or results, and you should not rely on forward-looking statements.

Generally, statements that are not historical facts, including those concerning possible or assumed future actions, business strategies, events or results of operations, are forward-looking statements. These statements may be preceded by, followed by or include the words "believes," "estimates," "expects," "projects," "forecasts," "may," "will," "should," "seeks," "plans," "scheduled," "anticipates," "intends" or similar expressions. Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, among others, the following: (a) timing delays in the advancement of projects to the final investment decision stage or into construction; (b) failure by customers to adopt new technologies and platforms; (c) fluctuations in the availability and cost of feedstocks and other process inputs; (d) the availability and continuation of government funding and support; (e) broader economic conditions, including inflation, interest rates, supply chain disruptions, employment conditions, and competitive pressures; (f) unforeseen technical, regulatory, or commercial challenges in scaling proprietary technologies, business functions or operational disruptions; and (g) other economic, business, or competitive factors, and other risks and uncertainties, including the risk factors and other information contained in LanzaTech's most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, as well as other existing and future filings with the U.S. Securities and Exchange Commission.

Any forward-looking statement herein is based only on information currently available to LanzaTech and speaks only as of the date on which it is made. LanzaTech undertakes no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Media contact LanzaTech:

LanzaTech Global, Inc.

Investor Relations

Kate Walsh

VP, Investor Relations & Tax

Investor.Relations@lanzatech.com

Media Relations

Kit McDonnell

Director of Communications

press@lanzatech.com

Media contact Eramet:

Fanny Mounier

Media Manager

fanny.mounier@eramet.com

+33 145383732

Media contact Eramet Norway:

Kåre Bjarte Bjelland

Director Public Affairs

kare.bjarte.bjelland@eramet.com

+47 91636493