



## World's leading steel company, ArcelorMittal and LanzaTech announce first ethanol samples from commercial flagship carbon capture and utilisation facility in Ghent, Belgium

June 14, 2023

- **€200 million commercial scale CCU plant first of its kind in the European steel industry**
- **Facility employing LanzaTech's cutting-edge carbon recycling process couples decarbonization technology with chemical production to advance EU's 2030 Climate Target Plan and a circular economy**

CHICAGO, June 14, 2023 (GLOBE NEWSWIRE) -- ArcelorMittal and LanzaTech Global Inc. (Nasdaq: LNZA) today announced a next step toward full operation of ArcelorMittal's commercial flagship carbon capture and utilisation ('CCU') facility in Ghent, Belgium. The €200 million 'Steelanol' facility is a first of its kind for the European steel industry, deploying technology developed by leading carbon utilization company LanzaTech.

This week saw new progress toward full operation of a commercial scale facility that will capture carbon-rich waste gases from steelmaking and biologically convert them into advanced ethanol through LanzaTech's bio-based process. Unlike traditional fermentation, the process ferments gases instead of sugars and uses a biocatalyst instead of yeast. The facility was inaugurated in December 2022, with cold commissioning taking place thereafter. The biocatalyst has now been introduced into the facility (a process called inoculation) to begin growth and verify production of new molecules.

In May 2023, the first gases from the steel mill's blast furnace were safely introduced to LanzaTech's biocatalyst. After a successful inoculation, initial samples that contained ethanol were produced this week, demonstrating that the carbon in the gases is being converted into new chemical products. Commercial-scale ethanol production from the bioreactors will follow, with expected ramp up of production in the coming months. This advanced ethanol can then be used as a building block to produce a variety of products, including sustainable transport fuels, packaging materials, apparel, and even cosmetic fragrances, hence helping to advance the decarbonization efforts of the global chemical sector. The ethanol will be jointly marketed by ArcelorMittal and LanzaTech under the Carbalyst® brand name.

The Steelanol plant has the annual capacity to produce 80 million litres of advanced ethanol, around half of the total current demand in Belgium. It expects to reduce carbon emissions from the Ghent plant by 125,000 tonnes annually, thereby advancing the EU's 2030 Climate Target Plan to reduce greenhouse gas emissions by 55% by the end of the decade. Project partners include Primetals Technologies and E4tech with support from CINEA, the European Climate, Infrastructure and Environment Executive Agency.

The product samples from the facility this week mark an important step toward the circular use of carbon and the end of single-use carbon, whereby gases are no longer regarded as waste but as raw materials. In addition, the recycling of carbon means Steelanol's process of Carbalyst® ethanol production does not compete in any way with food crops, as is the case for traditional methods of ethanol production.

*"This is a momentous occasion. ArcelorMittal has long been a leader in decarbonization of the steel industry, and today we are delighted to announce the first product samples from the Steelanol plant," said Jennifer Holmgren, CEO LanzaTech. "LanzaTech, ArcelorMittal, Primetals and E4Tech have worked together and have been supported by CINEA, to create a vision of a new circular carbon economy in Europe, displacing fossil carbon from the ground. To many people, using CCU to capture emissions to make everyday products seems like science fiction, but we have shown the world what is possible at industrial scale today."*

*"ArcelorMittal has a passion for sustainability and circularity and has found the right partner in LanzaTech to realize that today. The beauty of the Steelanol facility is that we are enabling a new form of industrial symbiosis, connecting industries together by using gases from steel production as a feedstock for other sectors," reflected Manfred Van Vlierberghe, CEO ArcelorMittal Belgium. "This is part of the Smart Carbon Strategy we are developing. By coming together and sharing these resources between sectors, we are not only furthering our circular, Smart Carbon mission, but also helping to solve climate, CO<sub>2</sub> and waste challenges."*

The LanzaTech process implemented at this site is fully flexible: not only can it use industrial gases from today's steel production methods but also it can adapt as the industry transitions to future steel production technologies with increased green hydrogen input. This versatility enables the carbon recycling application to evolve with available residue, waste streams, and green H<sub>2</sub>. LanzaTech's process is already employed by three operational commercial facilities, and LanzaTech anticipates the launch of two additional commercial facilities, in Asia, before the end of the year.

Funding for the commercial Steelanol facility was obtained from various sources, including the Flemish government, the Belgian federal government and the European Union's Horizon 2020 research and innovation program under grant agreement No 656437. Part of the funding was also secured with a loan from the European Investment Bank.

The Steelanol facility is expected to reach full operational capacity before the end of the year.

### **About ArcelorMittal**

*ArcelorMittal is the world's leading steel and mining company, with a presence in 60 countries and primary steelmaking facilities in 16 countries. In 2022, ArcelorMittal had revenues of \$79.8 billion and crude steel production of 59.0 million metric tonnes, while iron ore production reached 45.3 million metric tonnes. Our purpose is to produce ever smarter steels that have a positive benefit for people and planet. Steels made using innovative processes which use less energy, emit significantly less carbon and reduce costs. Steels that are cleaner, stronger and reusable. Steels for electric vehicles and renewable energy infrastructure that will support societies as they transform through this century. With steel at our core, our inventive people and an entrepreneurial culture at heart, we will support the world in making that change. This is what we believe it takes to be the steel company of the future. ArcelorMittal is listed on the stock exchanges of New York (MT), Amsterdam (MT), Paris (MT), Luxembourg (MT) and on the Spanish stock exchanges of Barcelona, Bilbao, Madrid and Valencia (MTS). For more information about ArcelorMittal please*

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#### About LanzaTech

Headquartered in Skokie, IL, LanzaTech Global, Inc. (Nasdaq: LNZA) captures waste carbon and transforms it into materials such as sustainable fuels, fabrics, packaging, and other products. Using a variety of waste feedstocks, LanzaTech's technology platform highlights a future where consumers are not dependent on virgin fossil feedstocks for everything in their daily lives. LanzaTech's goal is to challenge and change the way the world uses carbon, enabling a new circular carbon economy where carbon is reused rather than wasted, skies and oceans are kept clean, and pollution becomes a thing of the past. For more LanzaTech visit <https://lanzatech.com>.

#### Forward-Looking Statements

This press release includes forward-looking statements regarding LanzaTech based on the beliefs and assumptions of its management. Although LanzaTech believes that its plans, intentions, and expectations reflected in or suggested by these forward-looking statements are reasonable, LanzaTech cannot assure you that it will achieve or realize these plans, intentions, or expectations. Forward-looking statements are inherently subject to risks, uncertainties, and assumptions. You should not put undue reliance on these statements, which speak only as of the date hereof. LanzaTech undertakes no obligations to update or revise publicly any forward-looking statements, whether because of new information, future events or otherwise, except as required by law.

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