



**CO<sub>2</sub>-based Fuels  
and Chemicals  
Conference 2026**

**28–29 April • Cologne (Germany)**

*Speaker: Maïke Lambarth, Cyclize GmbH*

**Title:** Cyclize: Enabling a Carbon Circular Economy Through CO<sub>2</sub> and Waste Conversion

**Abstract:**

Cyclize presents an innovative solution for advancing the carbon circular economy by converting CO<sub>2</sub> and waste into syngas—a mix of carbon monoxide and hydrogen, which serves as the primary building block for the chemical industry. Leveraging our patented plasma technology, Cyclize replaces the need for natural gas by recycling carbon atoms, including those from CO<sub>2</sub> and non-recyclable waste. The process uses up to 5 kg of CO<sub>2</sub> as feedstock per kg of waste, ensuring an overall CO<sub>2</sub>-negative footprint. Notably, our technology requires no green premium at scale to produce non-extractive-fossil syngas. This breakthrough offers a scalable pathway to mitigate climate change and create a sustainable, circular carbon economy.