
oxylum
Pioneers in carbon transition

Carbon is everywhere!

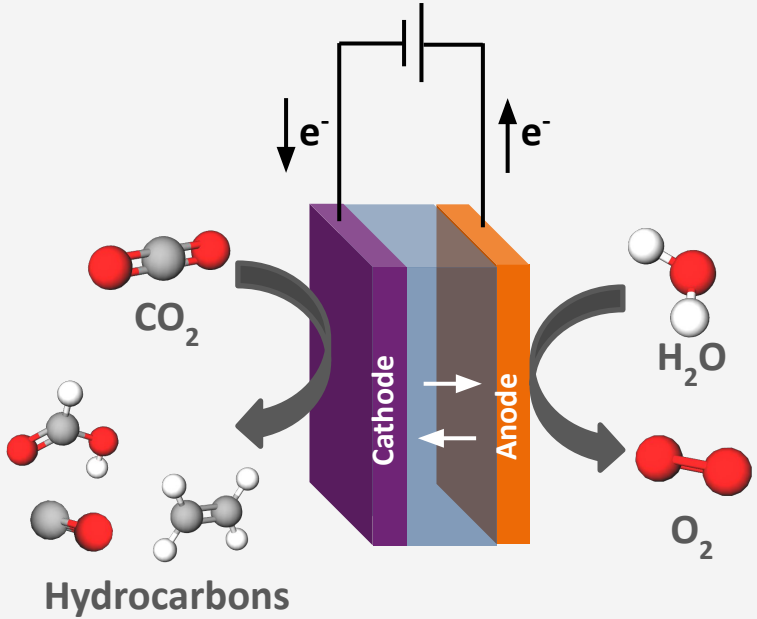
We solve two problems at once

1 Oxylum's carbon conversion technology provides an alternative to carbon emission and taxation or the cost intensive storage of carbon. Thereby carbon emitting companies can combine the European Union's ambitions with an economically interesting business case.

2 By converting CO_2 into chemical feedstocks, Oxylum can enable manufacturers to take the step towards the independence of their fossil based alternatives. Thereby reducing their own carbon footprints as well as the geopolitical liabilities attached to fossil fuels.

Electrochemical CO_2 conversion

We only need CO_2, electricity and water for the production of chemical feedstocks.

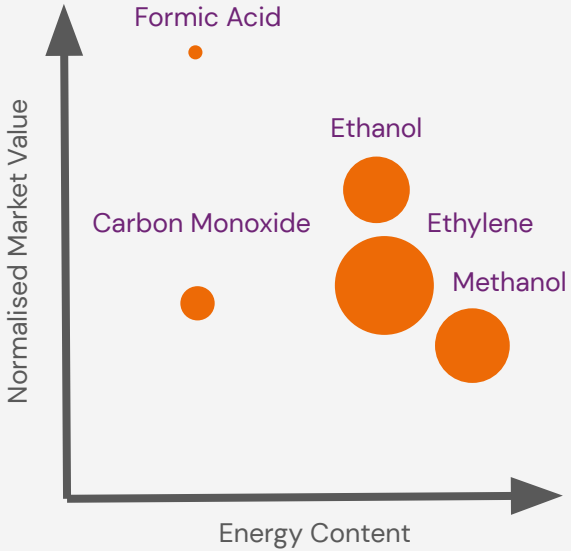


Intellectual property

Currently, Oxylum's technology is based on **6 years of research** performed by the Applied Electrochemistry and Catalysis research group from the University of Antwerp. Through a license agreement with the University of Antwerp, Oxylum can exploit both the **novel and patented reactor** design (WO2021110824A1) as well as the know-how to manufacture **state-of-the-art CO_2 electrolyzers**.

In the future, Oxylum wants to maintain its technological advantage by performing **R&D projects**, both internally and with external partners (i.e. knowledge institutes, industry). The goal of these projects is to generate **additional intellectual property**, both on a reactor, system and method level. An **aggressive IP strategy** will allow us to distance ourselves from the competition.

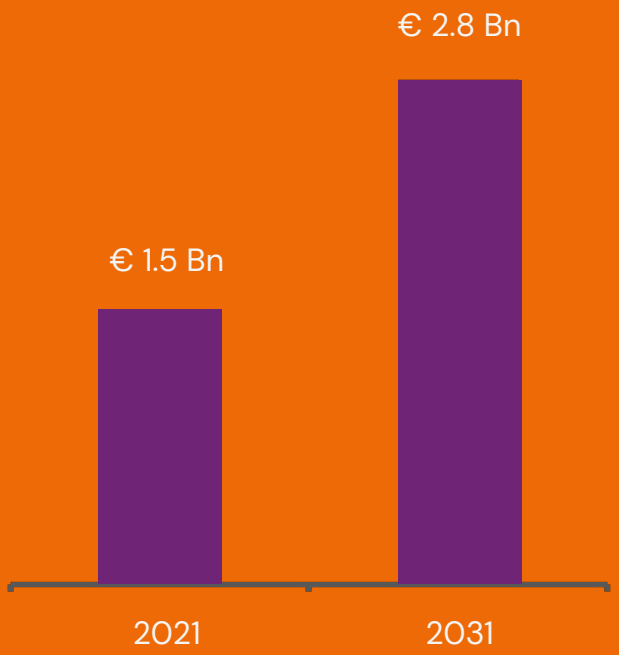
What can we make with CO_2?

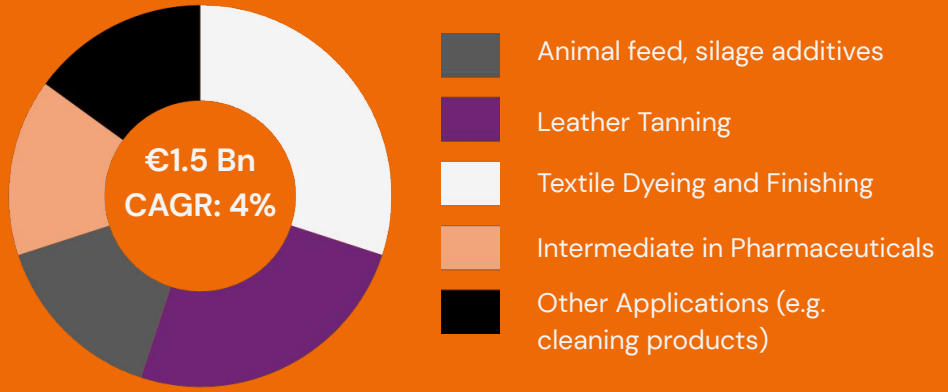


Formic acid is the perfect beachhead market:

1. It's low energy content, meaning less energy needs to be put in CO_2 to convert it.
2. The high market value, resulting in increased profit margins.
3. Liquid at room temperature, thus easy storage and handling.
4. A wide range of potential SME clients, divided across multiple industries.

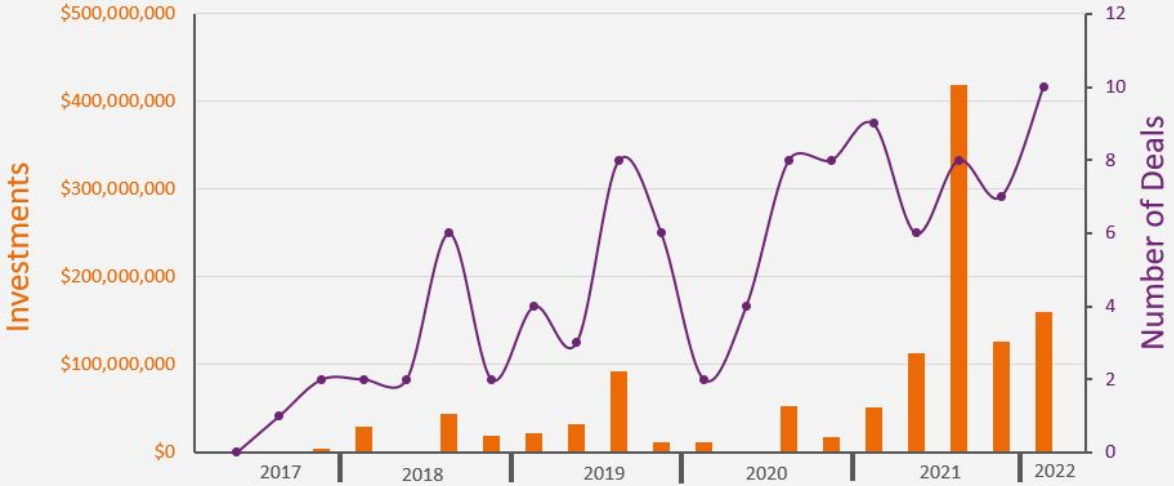
The formic acid market





Global formic acid market in 2021 Volume share (%) by application

CO_2 Utilization is hot



"We focus on sustainability not because we're environmentalists, but because we are capitalists"

Larry Fink, CEO Blackrock

- Proven market demand
- 60% of the investments were made pre-revenue
- New and upcoming market
- 76 CCU companies
- High market volume, 36 billion tonnes of CO_2 per year
- Not one player will be able to dominate the market
- Investments made mostly in US and EU
- Only few players compete in formic acid market

Unique selling points

oxylum

Fast scaling

Circular

High-Value Product

Business plan

Oxylum will generate revenue through the use of its technology in a **CO_2 conversion as a service** business model. We will provide a one stop solution for both CO_2 emitting companies as well as manufacturing companies in need of sustainable feedstocks. The major drivers behind Oxylum's business plan are the **price of formic acid**, **electricity costs** and **CO_2 pricing**, which are discussed in detail on the following pages.

Development trajectory

2022
Development prototype, validation business case

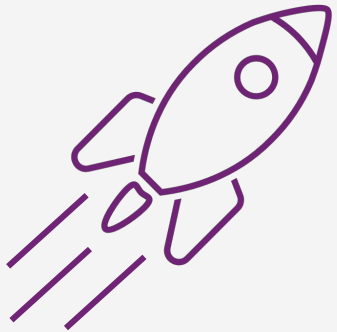
2023
Seed investment round (€ 2 Mio) and start engineering pilot plant

Summer 2023
Initiate process for environmental and construction permits

2024
Installation of first pilot plant modules and first sales (€ 50.000)

2025
Series A investment round (€ 5 Mio)

Fall 2025
100% of pilot plant modules installed and operational



The team

Bert De Mot

CEO, Co-founder

Bert has acquired a strong expertise in electrochemical CO_2 reduction during his PhD

Sander Neukermans

CTO, Co-founder

Sander has a PhD in electrocatalysis and works on further optimizing Oxylum's technology

Quinten Van Avondt

Business Development

Quinten supports Oxylum through his extensive experience in start-up's and knowledge of business management

Tom Breugelmans

Scientific advisor

With his experience as full professor at ELCAT, Tom advises the scientific trajectory of Oxylum

Contact us now!

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