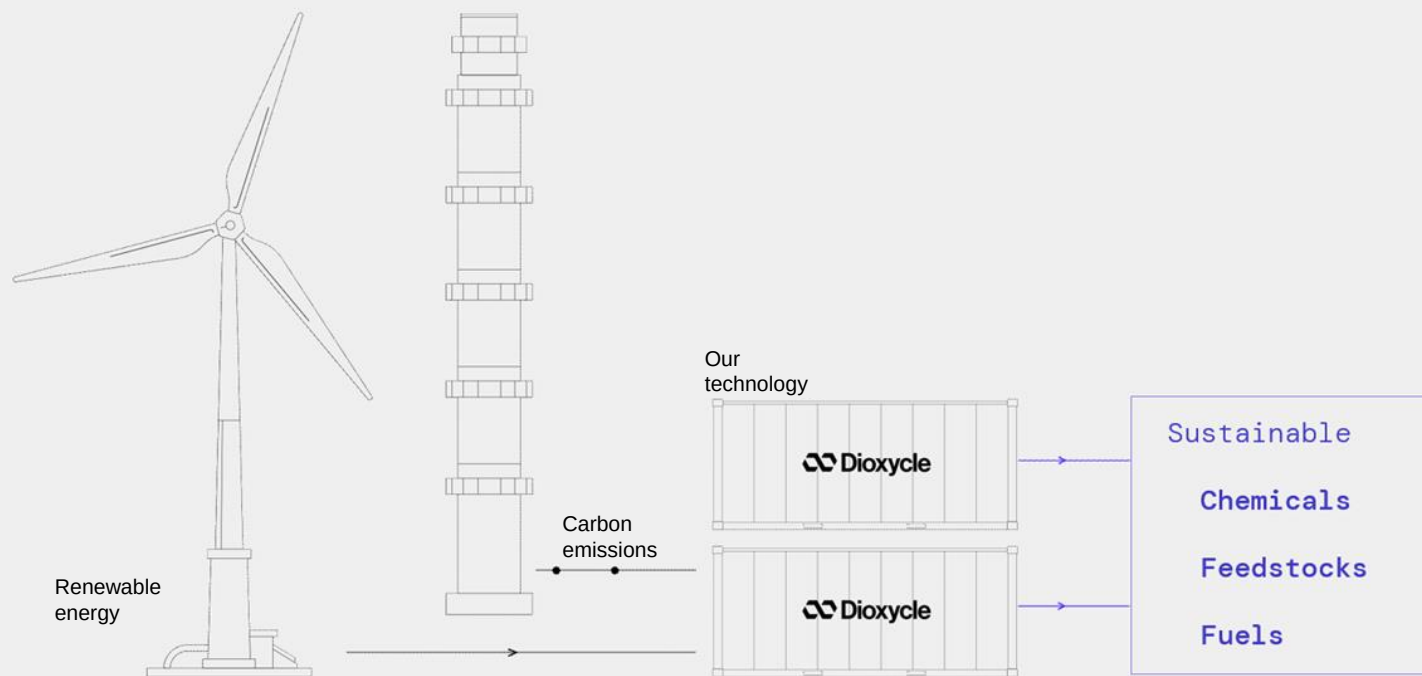




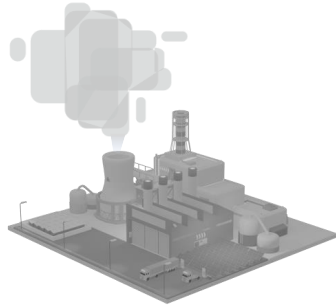
Society needs to reduce carbon emissions.
Society needs to produce cost-effective chemicals.

Dioxycle transforms carbon emissions into
cost-effective sustainable chemicals.



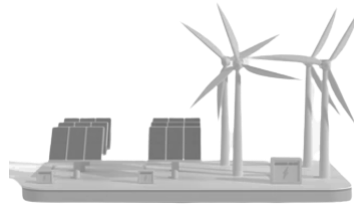
4% of global emissions come from
Scope 1, 2 & 3 of **chemicals**

We help carbon emitters lead the way to a low-carbon world by



Reducing
net carbon emissions

Environmental action needed
Carbon quotas & taxes
Unprecedented incentives (IRA)

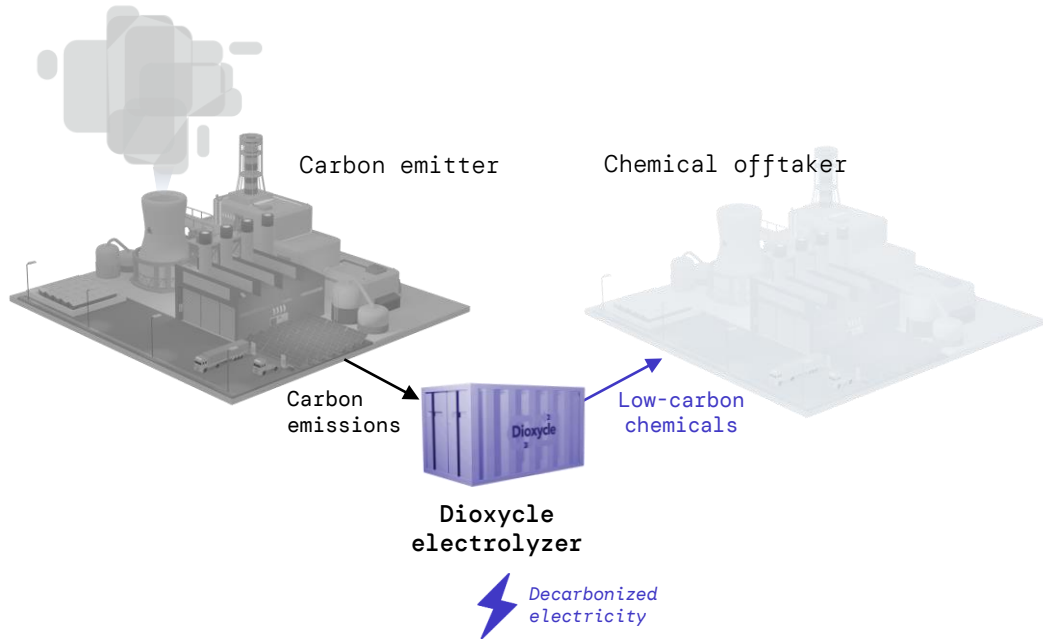


Profiting
by producing sustainable chemicals

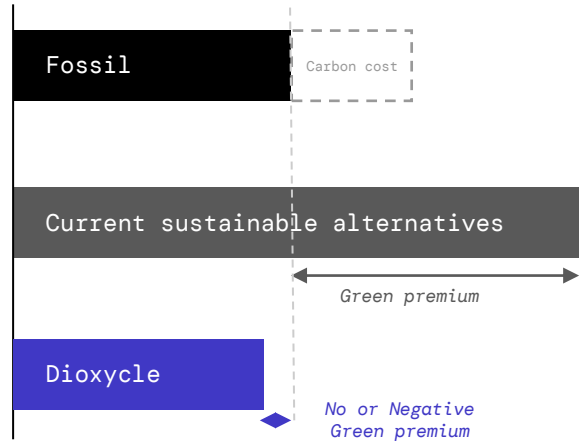
Customer demand for low-C-footprint product
Need to build a modern brand

Having a positive
impact on the world
through their
business

We profitably decarbonize emitting sites through their conversion in sustainable cost-competitive chemicals



Chemical price

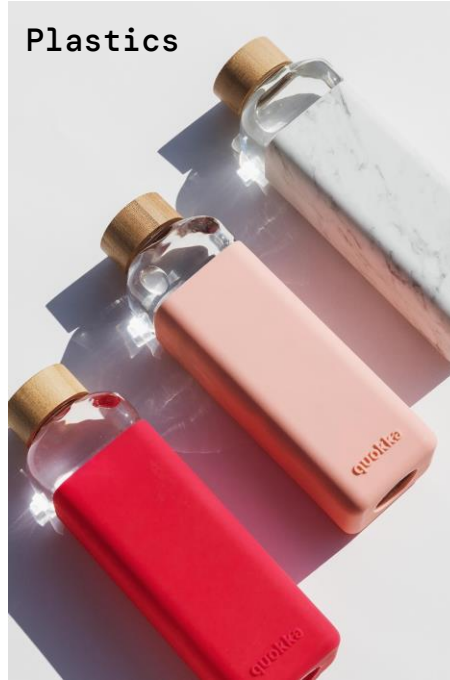


We start with ethylene, the world's most produced organic chemical used in

Fabrics



Plastics



PVC for materials



By reinventing the way ethylene is made, Dioxycle has the potential to displace **over 1% of the world's yearly emissions** addressing a \$170 Bn market.

TEAM

Our team is made of some of the global experts in electrolysis and industrialization



Dr. Sarah Lamaison
CEO



Recognitions

- > L'Oreal-UNESCO For Women in Science Young Talent
- > Forbes 30 Under 30 - Manufacturing & Industry



Dr. David Wakerley
CTO



Recognitions

- > Lindemann Trust Fellow
- > Marie Skłodowska-Curie post-doctoral fellowship



Dr. Luc Rouveyre
Head of Stacks



Experience

- > Ex founder & CTO of Symbio, >500 FTEs, France's leader in the fuel cell industry

Our team



20 FTEs - 10 nationalities



>70% of PhDs from top institutions



>10 articles published in Science, Nature by team members



12 patent family applications



Paris, France and Menlo Park, CA

Our funders

Funding to date **\$26 m**



Breakthrough
Energy

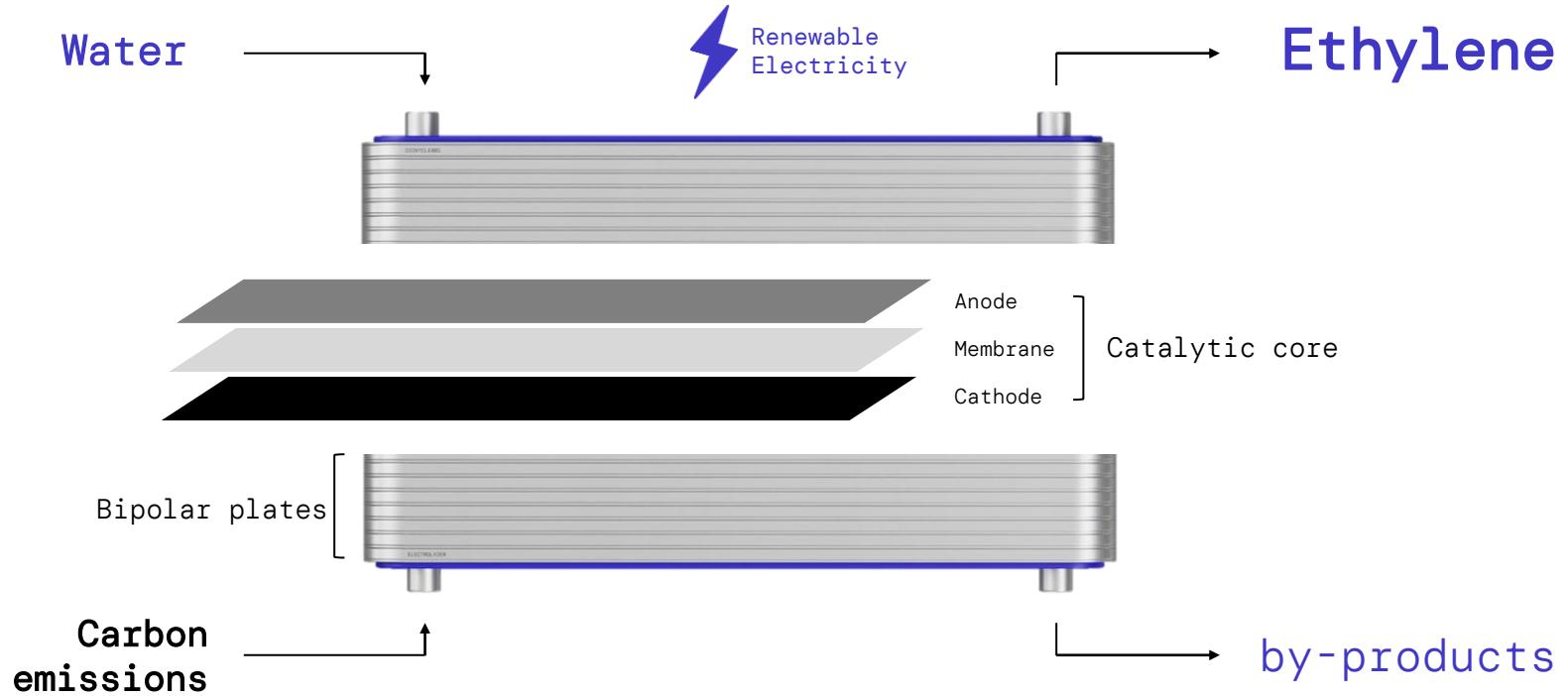


Gigascale
Capital



Our mission is to create cost-effective ways to transform the world's carbon emissions into products we need.

We are developing a novel low-temperature carbon electrolyzer

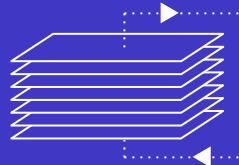


We reach unprecedented energy and cost efficiency by innovating at all levels



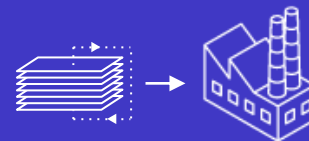
Component level

High-efficiency catalysts
Super-low-cost membranes



System level

Modular stack design for multi-product
Continuously improving through data

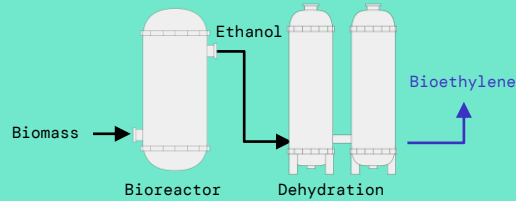


Industrial level

Integration within existing
process to minimize cost
and valorize stranded assets

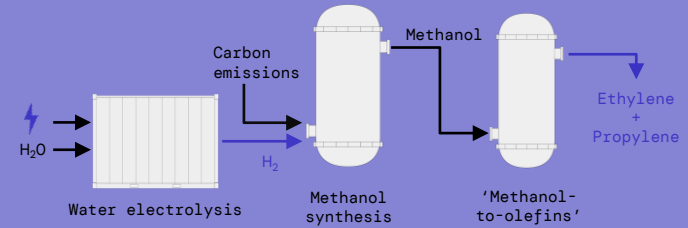
UNFAIR ADVANTAGE

We provide the first route towards low-carbon footprint ethylene, cost-competitive with fossil



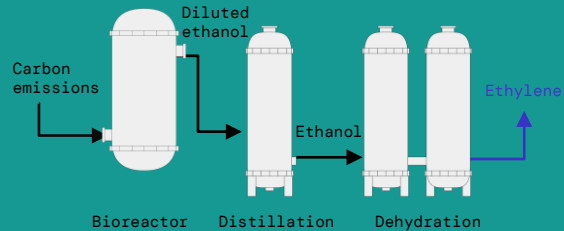
Green premium

Biomass fermentation



Green premium

Hydrogenation



Green premium

Biological process



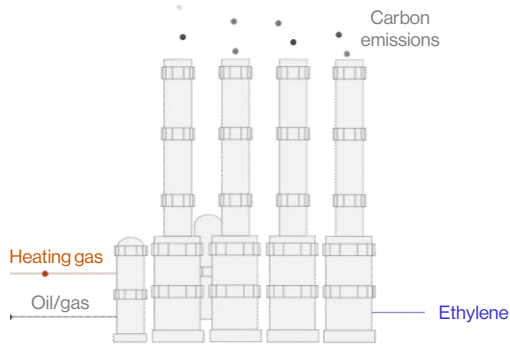
No or negative green premium

Dioxycle's electrolysis

DECARBONIZATION POTENTIAL

By cost-competitively displacing fossil fuel for the production of ethylene, Dioxycle can cut down over 700 million t_{CO_2} / year

The incumbent - Steam cracking

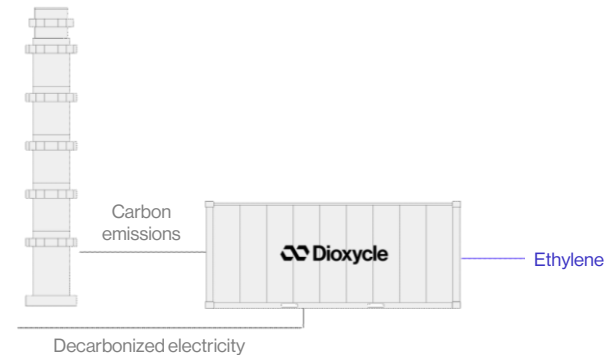


Carbon intensity:
emission per $\text{ton}_{\text{ethylene}}$ produced

0.9 to 1.7 ton_{CO_2}

Global production: ~200 million $\text{ton}_{\text{ethylene}}/\text{y}$

Dioxycle - Carbon emission electrolysis



Carbon impact:
 CO_2 removed/avoided per $\text{ton}_{\text{ethylene}}$

-3.5 to -4.8 ton_{CO_2}

Total Carbon impact potential:
 CO_2 removed/avoided over the total production

over - 700 million $\text{ton}_{\text{CO}_2}/\text{y}$



Thank you.

Get in touch:
getintouch@dioxycle.com