Electrochaea

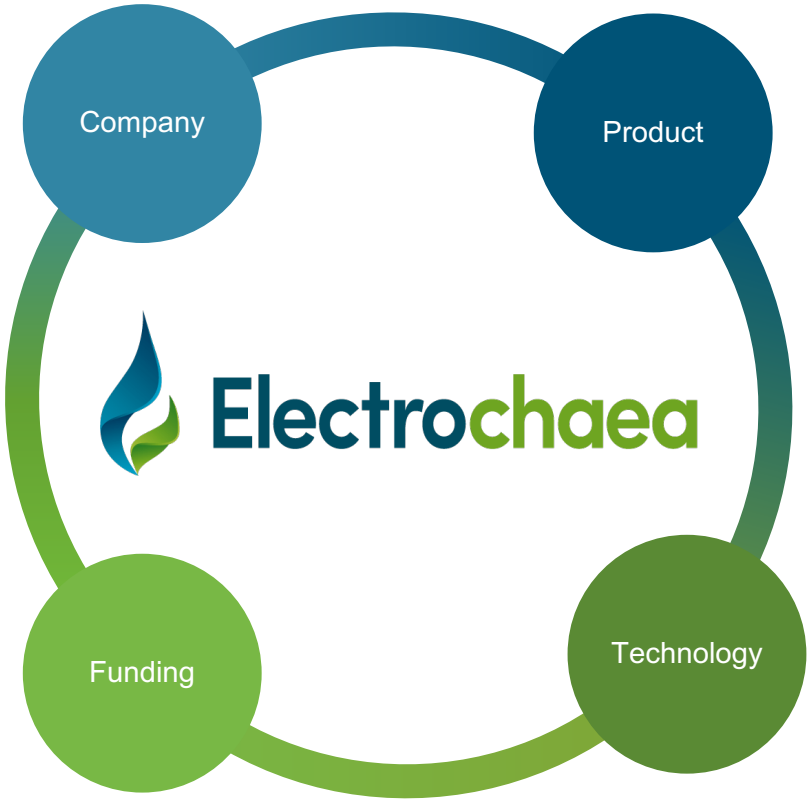
An Introduction

May 2024

Executive Summary

Electrochaea: Uniquely positioned to decarbonize the natural gas economy & infrastructure

Growth stage Power to Methane (P2M) technology company with commercial opportunities in Europe and North America underpinned by strategic partnerships



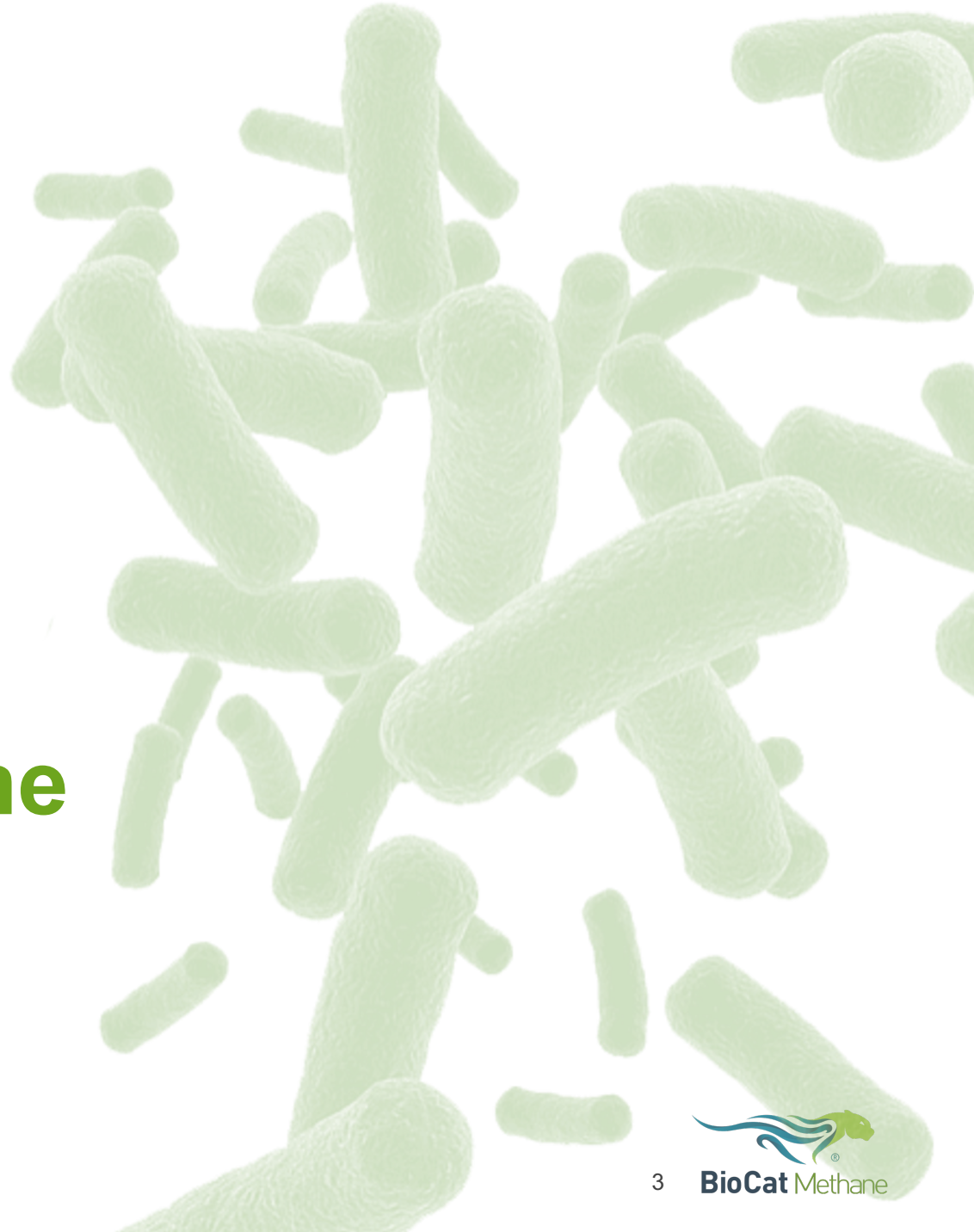
Low CI drop-in natural gas substitute – BioCat Methane – is the eFuel compatible with incumbent infrastructure and emerging decarbonization markets

Raising Series E equity to fund further expansion and seed capital budget through gas in grid (2026) and seeking additional capital to anchor investment for deployment of technology.

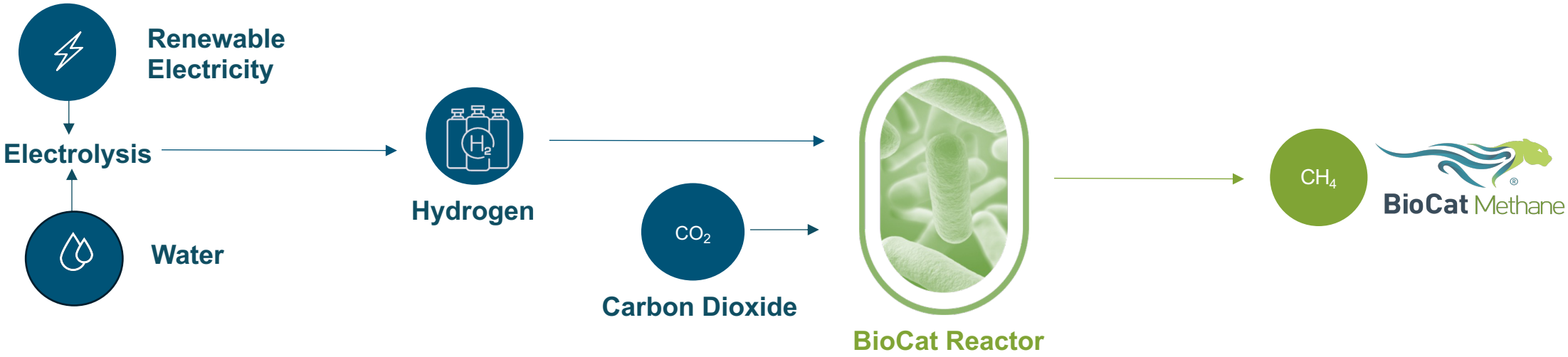
Proven, proprietary and patented technology enables synthetic methane production from CO_2 and renewable power

BioCat Methane

We provide our scalable, patented technology for renewable BioCat Methane production



Proprietary P2M Process



Produce green H_2 from renewable energy

Add CO_2 from biogenic or industrial sources

Unique biocatalyst archaea synthesizes methane

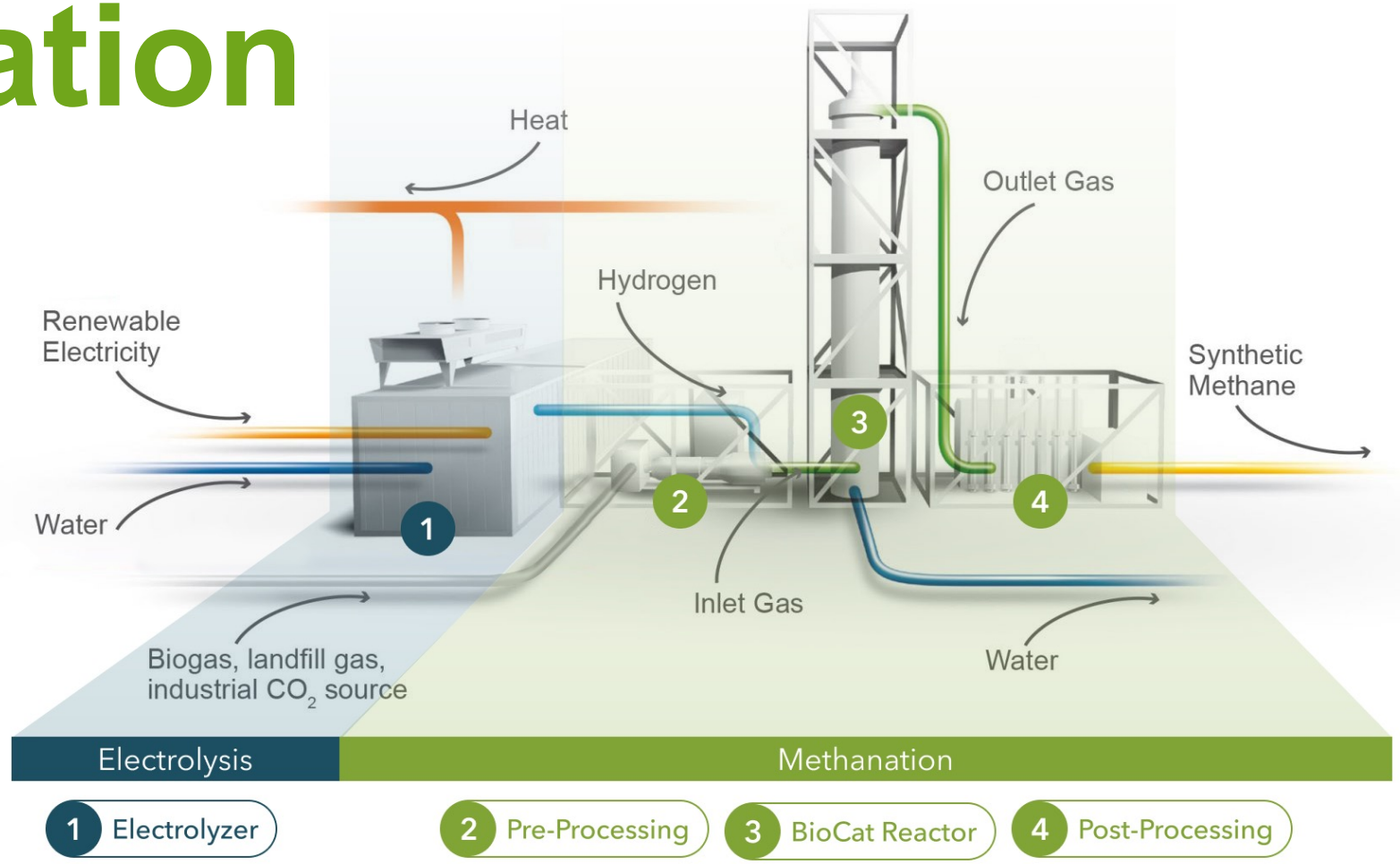
Use renewable BioCat Methane or inject into the natural gas grid for storage and distribution

Inputs

Process and Output

Overview of a biomethanation plant

Unique energy solution for the efficient and nearly unlimited storage of renewable energy



BioCat Methane

Value creation

Accelerated transport decarbonization

Increasing demand for low-carbon fuels

Compliance with regulatory and Scope objectives

CCU market growth

Rising demand for carbon capture & utilization

Global gas grid decarbonization initiatives

Long-term green energy storage

Prevent renewable curtailment and revenue loss

Transfer value across seasons and geographies

Optimize renewable infrastructure and increase energy security

Superior green hydrogen vector

Safety and cost advantages vs. green ammonia and e-methanol

Leveraging existing infrastructure minimizes timelines and costs

Scaled for commercial production with proven quality

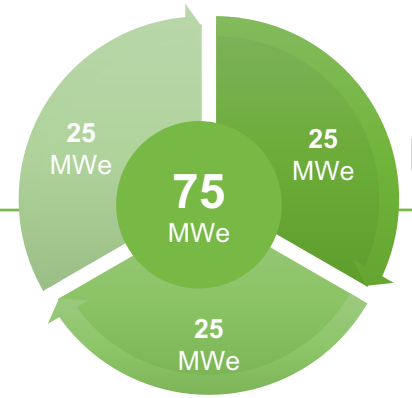
BioCat Methane

1 MWe

STORE&GO

10 MWe

European Innovation Council



Baker Hughes

- Industrial scale projects in DK and CH
- > 4000 operating hours with performance data
- Load-following capability & gas grid injection
- Automated scalable commercial design
- 0.29 kTon/year eCH_4

- Engineering archetype design co-funded with EIC grant support
- Basis for BioCat Roslev project
- FEED study in preparation
- 2.9 kTon/year eCH_4

- Designed in collaboration with Baker Hughes
- Modular 25 MWe bioreactor unit basis for commercial projects at climate-relevant scale
- Binding offer issued with EPC contractor for delivery of 25 MWe project
- 21.6 kTon/year eCH_4 at 75MWe

Building a strong pipeline

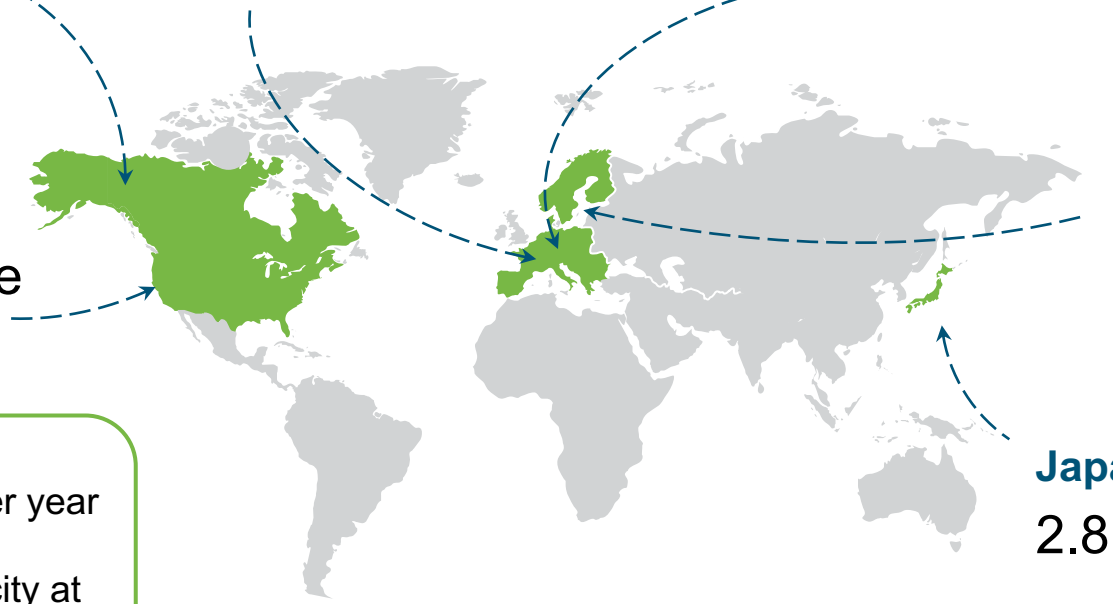
Key markets in 2030

Canada
23.2 TWh / 2900 MWe

Switzerland
3.2 TWh / 400 MWe
import required

European Union
40 TWh / >5000 MWe installations

United States
26 TWh / 3250 MWe



Maritime
9.88 TWh / 1235 MWe

Japan
2.8 TWh / 350 MWe

x TWh – renewable methane demand per year

x MWe – equivalent P2M installed capacity at 8,000 h operation per year

Electrochaea

Commercial BioCat Methane Projects

Producing > 6.5 mn Nm³/y of BioCat Methane

Roslev, Denmark

12 MWe input from onshore wind (behind the meter)
CO_2 from anaerobic digestion “waste” stream
BioCat Methane RFNBO production
Offtake in maritime fuel market
>EUR 35 mn TIC incl. electrolyzer & BioCat plant
450+ GWh over 20-year operating lifetime

Carbonaxion Neuville, Canada

Dare to be green!

5 MWe input from hydroelectric (green grid)
CO_2 from landfill “waste” stream
BioCat Methane production
Offtake by Provincial Gas Network operator
CAD 25 mn TIC incl. electrolyzer & BioCat plant
400 GWh over 20-year operating lifetime

CTBM Saint-Pie, Canada

5 MWe input from hydroelectric (green grid)
CO_2 from anaerobic digestion “waste” stream
BioCat Methane production
Offtake by Provincial Gas Network operator
CAD 25 mn TIC incl. electrolyzer & BioCat plant
400 GWh over 20-year operating lifetime

TechTour European Hydrogen Tech 25

2024 GLOBAL CLEANTECH 100 COMPANY

ERLG Energy Resilience Leadership Group

Now raising

50 mn €

Series E Funding

>75 mn €

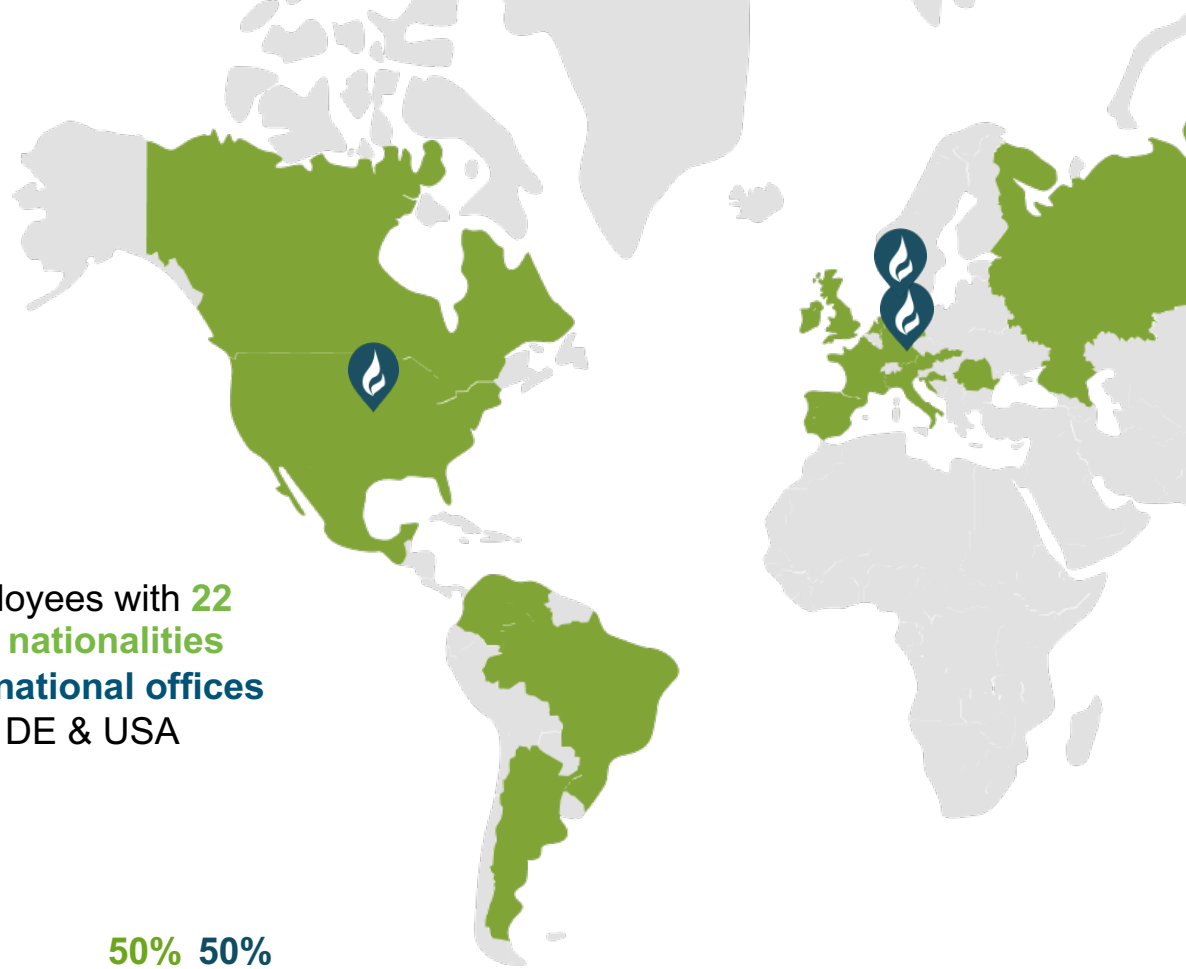
raised to date

Join us

in our mission to green the gas grid and ensure a sustainable future

KFW · Baker Hughes · storengy · MVP Munich Venture Partners · energie360° · Sirius Venture Partners · matter wave ventures · CALIZA · NIDUS · European Innovation Council

info@electrochaea.com www.electrochaea.com



~ 60 employees with **22 different nationalities** and **3 international offices** in DK, DE & USA

50% **50%**

Gender Diversity **at Managing Director Level**

40% **60%**

Gender Diversity **at Company Level**

Electrochaea

BioCat Methane

Electrochaea

Thank you for your interest!