



## CO-FOUNDER NEEDED

# We empower small-scale green ammonia production via sorption-based solutions



## AMMISORB



### THE PROBLEM

Ammonia is vital for food production, but current fossil-based, large-scale synthesis causes 1.5% of global CO<sub>2</sub> emissions and is unsuited for small-scale, renewable-driven plants due to inefficient and costly separation.

### OUR SOLUTION

Ammisorb is a separation device tailored for small-scale green ammonia plants, boosting efficiency from 70% to 99%, cutting costs by up to 11%, and enabling flexible, low-pressure processes powered by renewables.

### PATENT STATUS

Yes, European patent application submitted in Apr 2025.

### FINANCIAL OVERVIEW

- **Business model & Pricing:** Revenue comes from selling Ammisorb units with recurring sales through maintenance and sorbent renewal; pricing follows a cost-plus/value-based approach, starting at ~€70,000 per tonne/day of NH<sub>3</sub> and decreasing with scale.
- **Commercialization:** Pilot demonstrations with 3 ammonia system integrators start in Q2 2026, aiming for first commercial launch in 2027.

### MILESTONES ACHIEVED

- TRL4 is achieved. TRL5 will be reached in Q2 2026.
- Three letters of intent and 9 letters of interest.
- Over 0,8 MEUR were secured through soft funding programs within 2 years.

### TARGET MARKET & CUSTOMERS

Our target customers are companies developing small-scale green ammonia plants, where Ammisorb units are a critical component.

### CO-FOUNDER PROFILE WE ARE LOOKING FOR

#### Must-have qualifications/background

- Business background
- Experience in the chemical industry (able to understand the technology at intermediate level)
- Previous experience with startups

#### Nice-to-have qualifications/background

- Experience in the ammonia industry.

#### Personal fit

- Getting things done attitude and respectful.

#### TASKS & RESPONSIBILITIES (FIRST 3 MONTHS)

- Team & Funding: Map potential funding opportunities and align with co-founders.
- Strategy & Planning: Build a startup plan, including actions, costs, and pricing models.
- Market & Customers: Conduct market research, update pitch deck, and test commercial hypotheses with customers.

#### ACADEMIC BACKGROUND OF CURRENT CO-FOUNDERS

Anastasiia Karabanova – PhD (DTU Energy), founder

Jasraunaq Singh – MSc Sust Eng (DTU), co-founder

Emmelina Viktoria Frick – MSc Chem Eng (Lund University)

Georgios Karasakalidis – MSc Sust Eng (DTU)

#### PHYSICAL ADDRESS

DTU Energy (Building 301, office 206)



### ABOUT OPEN ENTREPRENEURSHIP

Open Entrepreneurship is a collaboration between all Danish universities aiming to create more research-based startups.

[www.open-entrepreneurship.com](http://www.open-entrepreneurship.com)



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