



ammobia

Revolutionizing clean ammonia production

Who we are

ammobia

Providing our partners with
cutting edge innovation



We are a **technology developer**, supported by the **industry**,
on a mission to **feed and fuel** the world with **clean ammonia**

Ammonia as fertilizer
and energy carrier

To allow the production of
cost effective clean ammonia

Running Haber – Bosch with clean hydrogen is hard

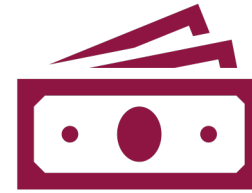
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Plants ideally **run 24/7 at high capacity** even during expensive renewable downtime



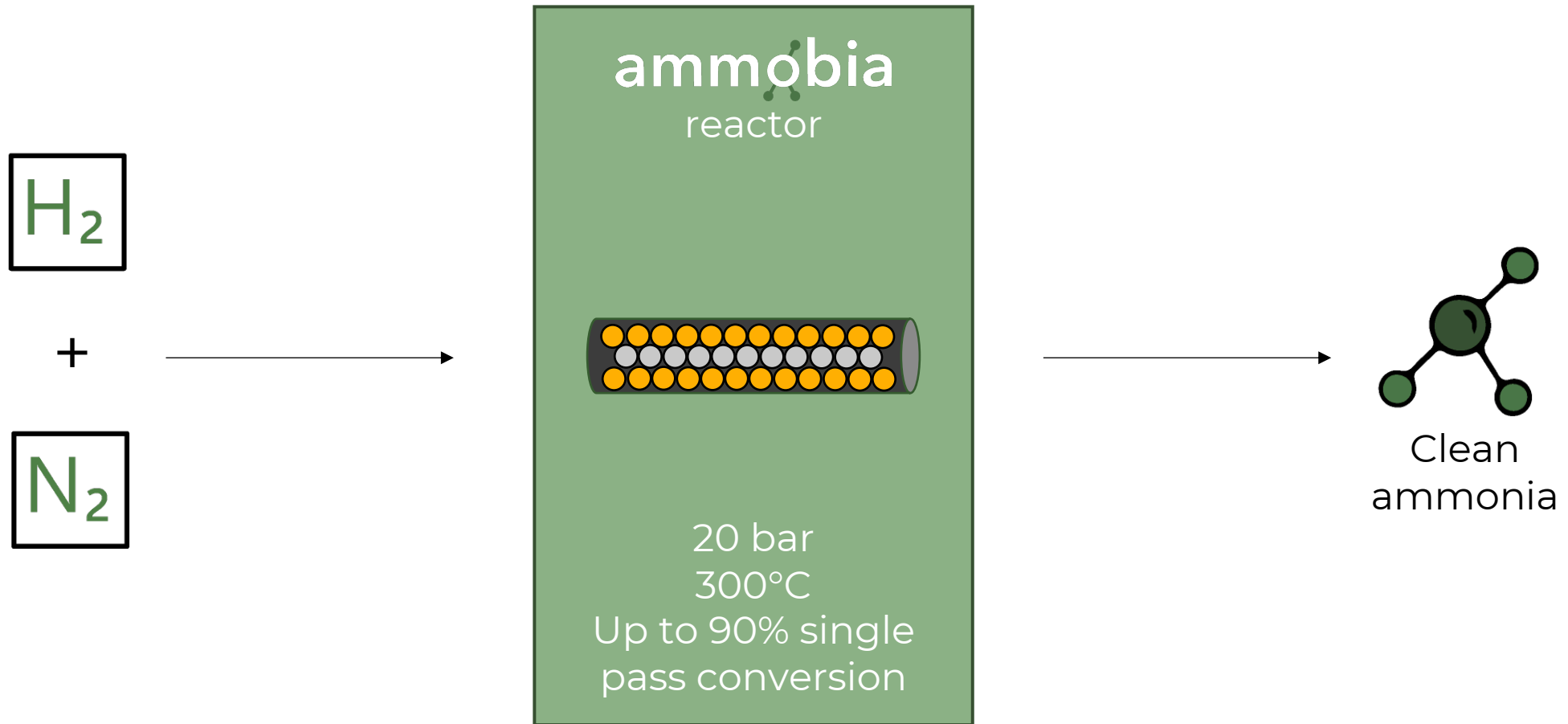
Requires high capex **hydrogen storage** facilities



Economics work at GW scale, **complex project development**

Our key innovation is a 10x lower pressure, flexible ammonia synthesis reactor

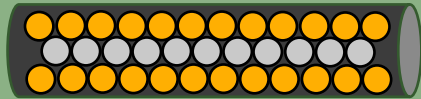
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Cost effective ammonia production, ideal for clean

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reactor



20 bar
300°C
Up to 90% single
pass conversion



10x lower pressure (~20 bar vs 200 bar)



200°C temperature reduction (~300°C vs 500°C)



2x capex reduction for ammonia synthesis loop



Up to **20% opex reduction** for total ammonia production process



Flexible, fit for green H₂, allows ramping with PEM electrolyzers

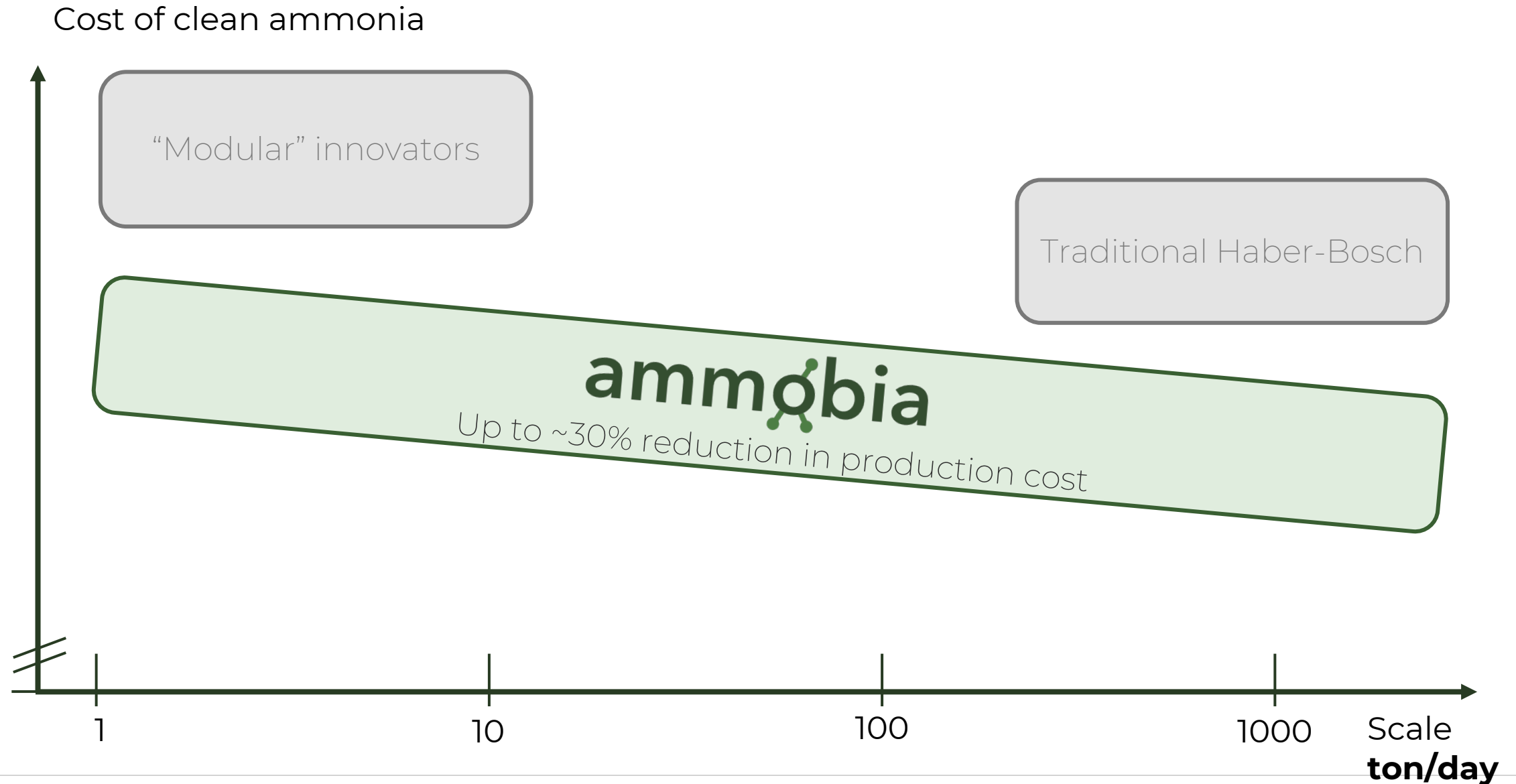


Modular technology works **across scales and hydrogen source**

More cost effective ammonia production, best fit for clean ammonia

Ammobia's disruptive tech enables low-cost clean NH_3 across scales

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Rapidly scaling from lab to bench to pilot to FOAK

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TRL 3 (Lab)
~10 grams/day
May 2024

TRL 4-5 (Bench)
1 kg/day
EOY 2024

TRL 6 (Pilot)
~50 kg/day
2026

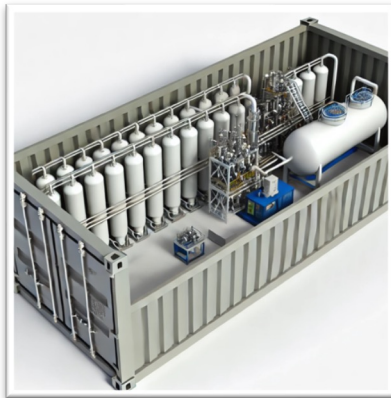
TRL 7 (FOAK)
~10 tons/day
2028



Long-term we aim to provide tech across scales

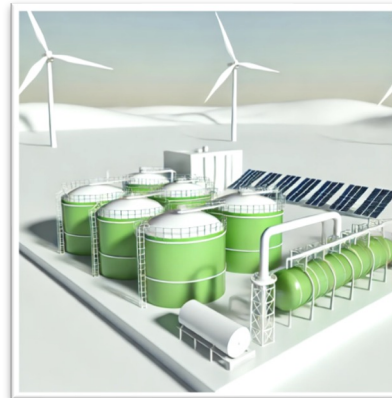
DISTRIBUTED

~10 ton/day modular,
flexible NH₃ loop



MEDIUM - LARGE

~200 ton/day modular
flexible NH₃ loop



LARGE – VERY LARGE

License + proprietary
equipment for 2000+
tons/day projects



Grateful for support from and collaborations with industry so far

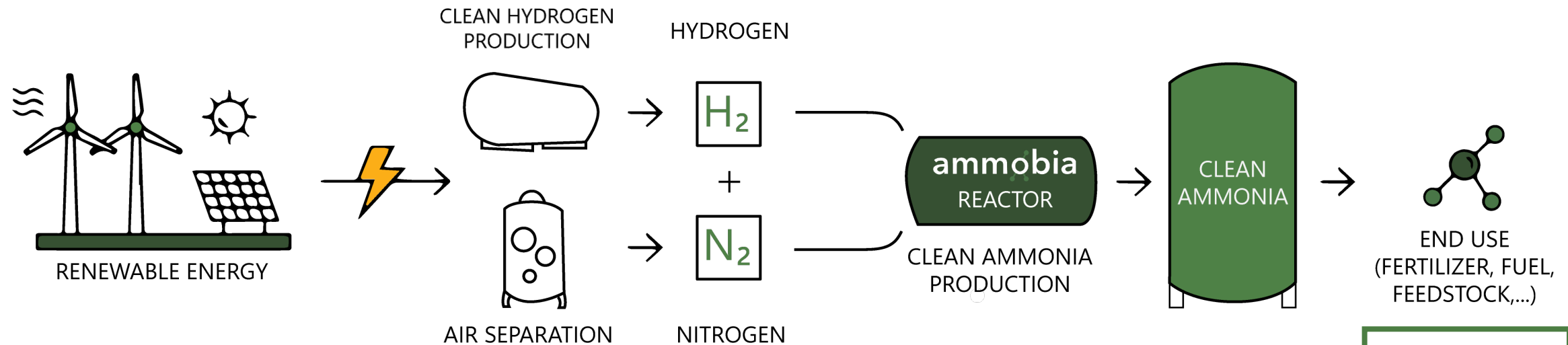
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Opportunities for collaboration & engagement across value chain

Engineering partners/Technology integrators

Renewables and hydrogen producers



Project developers

Ammonia producers

Ammonia off-takers & distributors

Hungry, low-ego team with passion to push boundaries & decarbonize

FOUNDERS



Karen Baert
Co-founder | CEO



Tristan Gilbert
Co-founder | CTO



- Bridging tech and market through experience at Breakthrough Energy Ventures, Bain and climate tech start-ups
- ChemE BS KULeuven (Belgium), EnergyE MS TUBerlin (Germany), MBA Stanford
- Diverse experience in technology development across material, reactor and process at range of climate tech start-ups incl. Form Energy, Sila Nano and Tesla
- MechE BS and MS Vanderbilt, PhD drop-out Stanford

ADVISORS (not exhaustive)



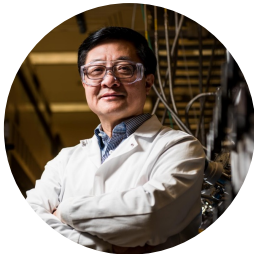
Hans Vrijenhoef
BusDev & Tech



Dr. Naomi Boness
Strategy



Dorian West
Engineering



Prof Yong Wang
Science



- 30y in the ammonia industry
- Ex-CEO of ammonia start-up
- Proton Ventures
- Ex-President of global Ammonia Energy Association
- Co-managing director Stanford Hydrogen Initiative
- Held variety of mgmt. positions at Chevron
- Serves on multiple (incl public) boards in energy industry
- 15 years at Tesla, grew from one of the 1st engineers to VP of Engineering
- Co-founder and former EVP of Engineering at Electric Hydrogen
- Professor in reaction and catalysis engineering at Washington State
- Associate Director WSU Institute for Integrated Catalysis

Thank you!

Interested to learn more about what Ammobia's tech would mean in terms of LCOA for your project?

Reach out to

Karen Baert, Co-founder/CEO karen@ammobia.co

Ian Kuhlenthal, Commercial Lead ian@ammobia.co