

Today's natural gas infrastructure meets tomorrow's decarbonization targets.

LOW-COST, INDUSTRIAL-SCALE CLEAN HYDROGEN WHEREVER THERE'S NATURAL GAS INFRASTRUCTURE

Decarbonizing hard-to-abate sectors is a priority to ensure we meet emissions targets and rising global demand for clean energy. Many industrial sectors and applications are challenging to electrify. Cost-effective solutions for clean hydrogen are needed to drive rapid decarbonization at the scale industry requires.



AGRICULTURE



MINING



TRANSPORTATION



CONSTRUCTION MATERIALS



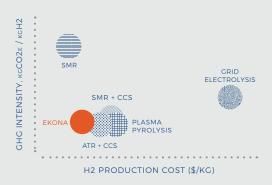
PETROCHEMICALS



ENERGY

WHY EKONA?

Ekona is developing a clean hydrogen solution that is not reliant on carbon capture and storage infrastructure, clean electricity, or water feedstock. It has the potential to achieve hydrogen production costs on par with conventional steam methane reformers, while significantly reducing greenhouse gas emissions.



ATR: AUTOTHERMAL REFORMING CCS: CARBON, CAPTURE & STORAGE SMR: STEAM METHANE REFORMERS



METHANE PYROLYSIS: A VIABLE NEAR-TERM CLEAN HYDROGEN PATHWAY

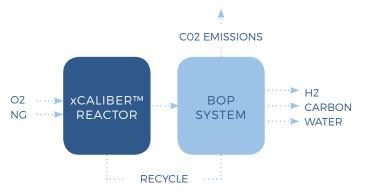
Existing production pathways for clean hydrogen are expensive and challenging to deploy. Methane pyrolysis is an emerging, environmentally friendly approach to clean hydrogen production.

Ekona is developing a low-cost, scalable methane pyrolysis solution that can be deployed wherever there is natural gas infrastructure. Ekona's solution converts natural gas into hydrogen and solid carbon, literally bringing carbon and greenhouse gas management back down to earth.

THE xCALIBER™ PROCESS

Preheated feedstock natural gas feeds into the reactor chamber where combustion products are also injected to create energy for the pyrolysis reaction. Products from the reactor discharges to downstream purification equipment for the delivery of two co-products, hydrogen and solid carbon.

Ekona's methane pyrolysis process uses industry standard balance of plant (BOP) equipment for carbon handling, hydrogen purification, compression, and thermal energy recovery, simplifying process integration and mitigating development risk.



BURNABY PILOT

Ekona has developed a 200 kg-H2/day pilot facility for evaluating methane pyrolysis reactors and process integration.



MOVING TOWARDS COMMERCIALIZATION



BURNABY PILOT EXPANSION

Gen2 xCaliber™ reactor · BOP integration · Carbon handling expansion · Pilot demonstration



PROGRAMS

Modularized platform · Customer validation



EARLY COMMERICAL PROGRAMS

Scale-up · First customer
deployments

ABOUT EKONA™

Ekona's team has a proven track record taking clean technologies from early-stage development to commercialization, and a deep desire to solve hard-tech, high-impact challenges. Using an established process – methane pyrolysis – in a ground-breaking new way, Ekona has created a low-cost clean hydrogen production pathway to meet growing global demand for hydrogen, decarbonized natural gas, and greenhouse gas reductions at the scale and timing necessary to combat climate change. Learn more at ekonapower.com