H2PRO

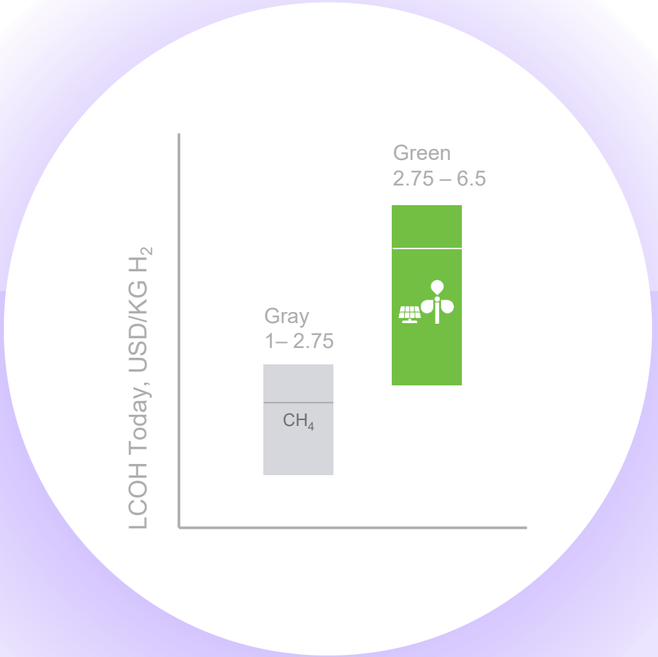
fueling tomorrow

March 30, 2026

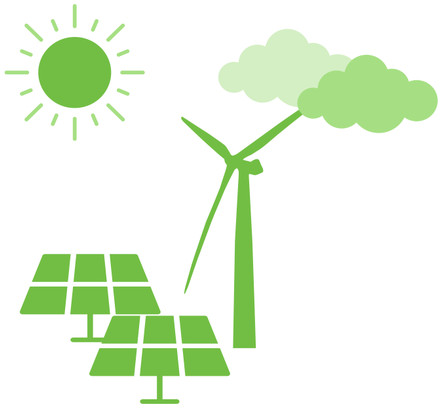
EHEC 2026 EUROPEAN HYDROGEN ENERGY CONFERENCE

AeH2 SPANISH HYDROGEN ASSOCIATION

The Fossil Parity challenge



How to achieve low LCOH



Use the cheapest electricity

Problem

Extremely Variable

Low Capacity Factors

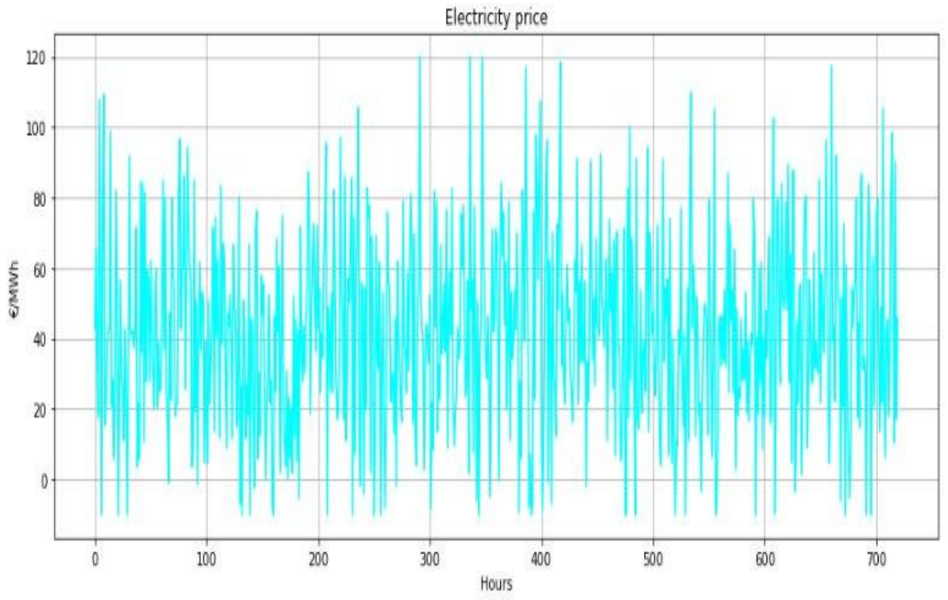
Solution

Hyper Flexible Electrolyzer

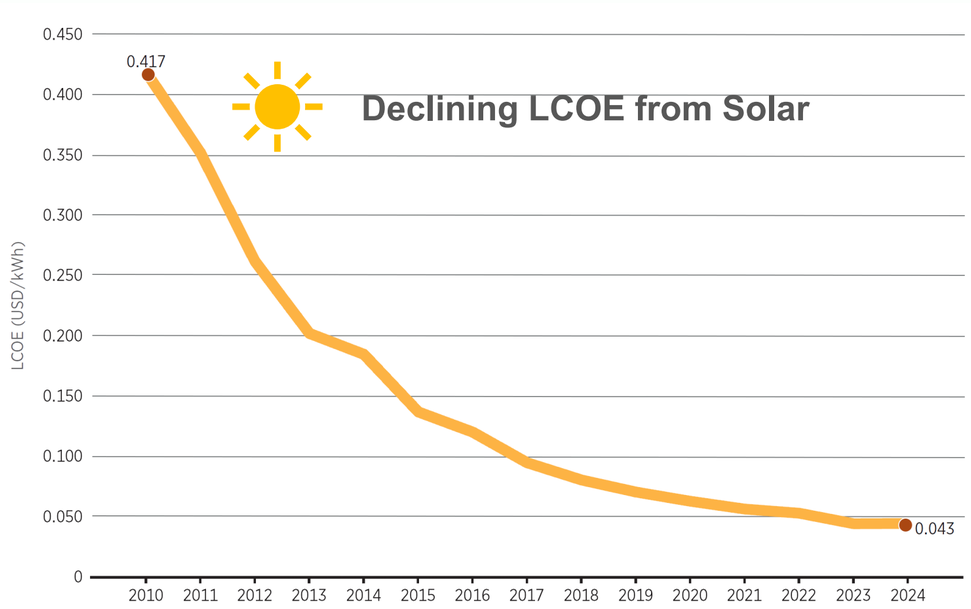
Ultra low CAPEX

‘Off-grid‘ and ‘Grid balancing‘ will overcome hurdles to achieve the lowest LCOH

Grid Balancing



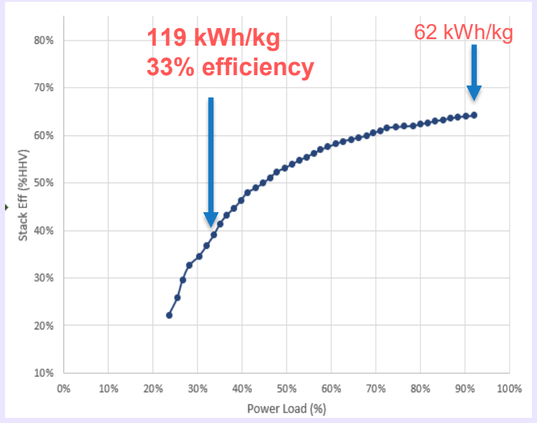
Off-Grid



Source: IRENA 2024

Current electrolyzers don’t fit renewables

AEL



low efficiency at low load

Can't operate below 30% load

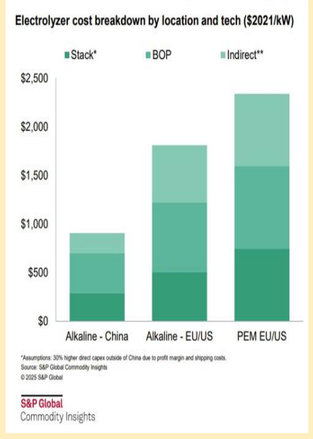
Turning off has penalty
degradation
Long ramp-up (cold & hot)

PEM

CAPEX is too high

Turning off has penalty
not as bad as AEL, but still bad

Platinum Group Metals
Platinum & iridium as catalyst



H2Pro's DWE Decouples Water Electrolysis

Efficient &
Hyper flexible
with no membrane

H2Pro in brief

- Developing a breakthrough and patented electrolyzer technology
- Established 2019 based on research at Technion
- ~ 100 employees, 10 patanets
- Raised over $100 Million

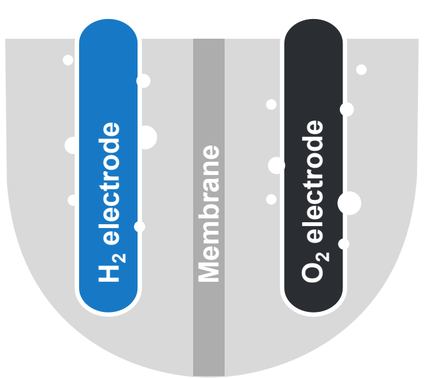
Investors

Breakthrough Energy
TEMASEK HOLDINGS
ArcelorMittal
Sumitomo Corporation
DORAL
Horizons Ventures
OurCrowd
NewFortress energy
extantia
COPEC
CSN
BAZAN GROUP
HYUNDAI
origin
YARA

H2Pro’s DWE (Decoupled Water Electrolysis)

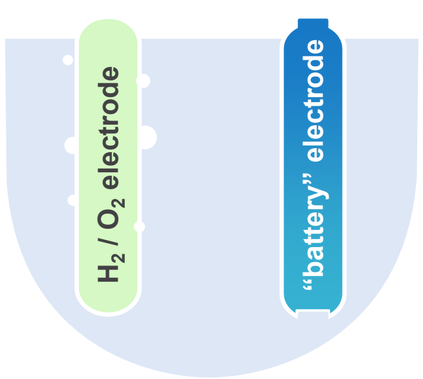
Conventional Electrolysis

Simultaneous H_2 and O_2 production



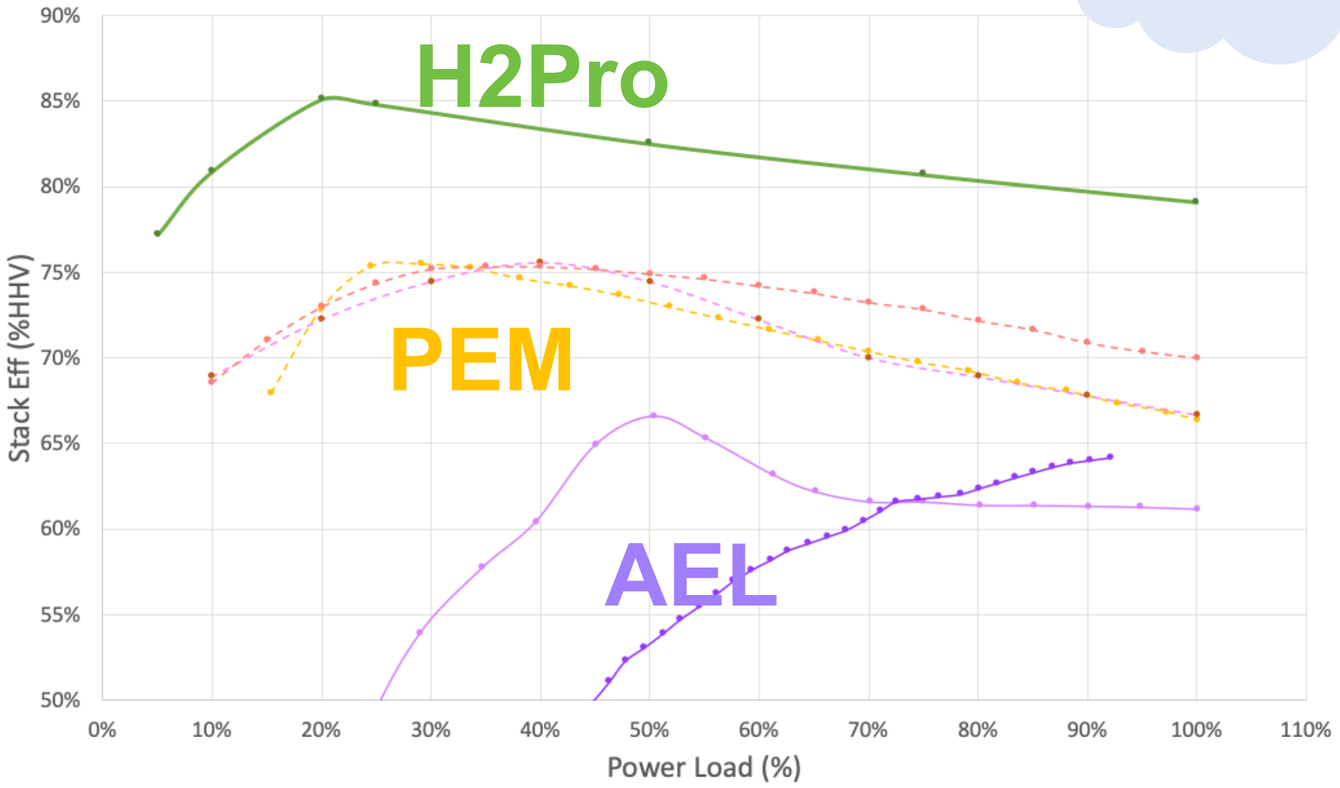
H2Pro Electrolysis

Proprietary 2-phase process
with time-separated H_2 and O_2 production



H2Pro is ‘Fit for Green’

- **Unlimited ON/OFF**
- Lower minimum point
- Higher Efficiency Curve

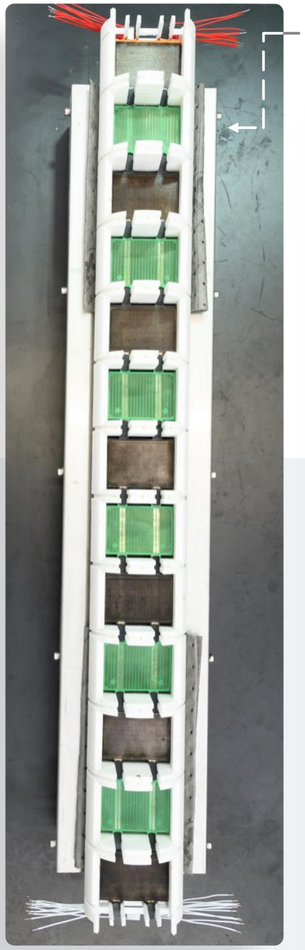


** DC efficiency – including shunt current and overpotential losses*

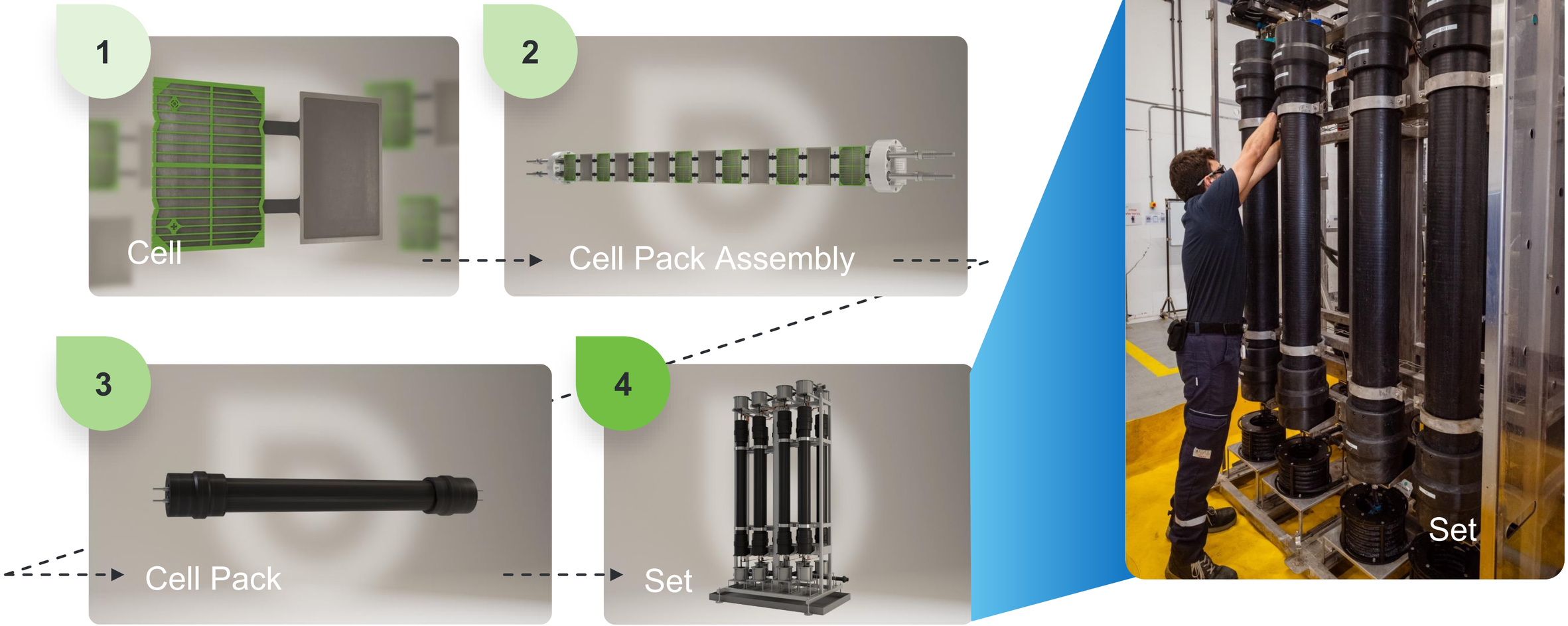
Designed for scale

Bi-functional electrode

“Battery” electrode

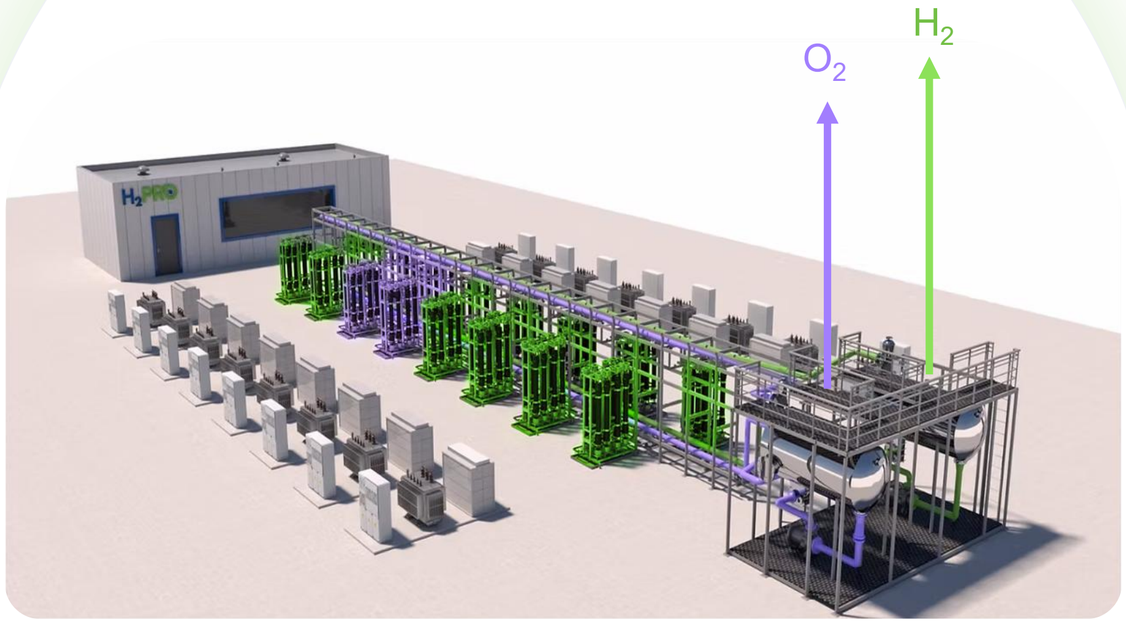


From “electrodes” to “set”



20 MW system level

- Multiple sets connected to common Balance of Plant (BOP)
- BOP consists of separation tanks, pumps, valves and heat management
- **Continuous hydrogen production**



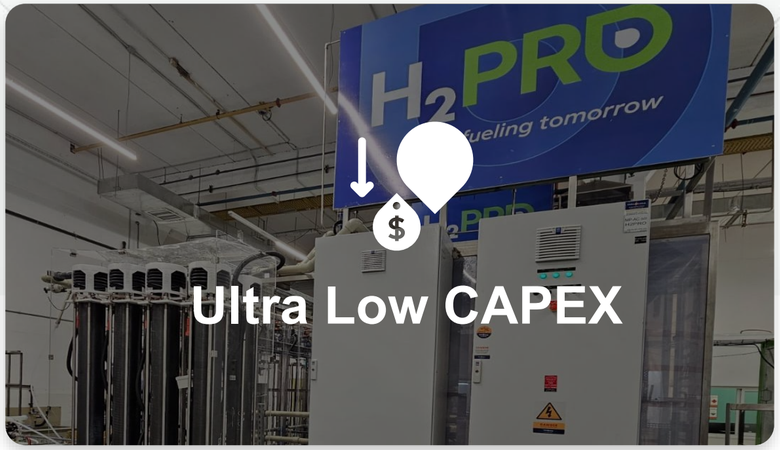
How H2Pro systems will deliver the lowest LCOH

Wide load range

High efficiency

Unlimited ON / OFF

Quick ramp up / down



No Membrane

Inexpensive materials

No PFAS

No PGM

Pilot Project
UNDER CONSTRUCTION
0.56 MW system

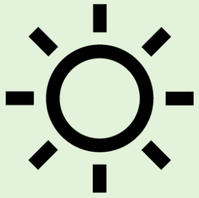
- First green hydrogen in Israel,
  ~200 kg per day
- Gas blending – industrial application
- Demonstrating PV load curve
- Site: industrial zone – Ziporit
- Doral Energy .

First ever - PV Off-grid to Blending announcement

DORAL Hydrogen

H2PRO

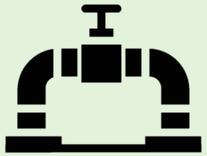
enagas



Following **the exact sun profile**

Connected **directly to PV**

H2Pro's **hyper-flexible Electrolyzer**



Blending to the **gas grid/ future H2Med**

Going Forward

- European partners
- A 5MW Off-grid system
  to be scaled up to a large project
- Renewable connected
- Round C – Q2 2026

H2PRO

thank you!