



Hywaves: Transforming Off-Grid Hydrogen Production



THE SOLUTION

One of the biggest challenges in scaling green hydrogen production is energy inefficiency. Traditional hydrogen production systems rely on multiple conversions, which result in significant energy losses, increased costs, and reduced feasibility.

HyWaves is tackling this issue with its cutting-edge H2Top DC-DC technology, designed to integrate off-grid solar energy directly with hydrogen production. By eliminating unnecessary energy conversions, H2Top maximises energy use, reduces operational costs, and significantly enhances the feasibility of off-grid hydrogen generation

Through the Technology Accelerator Fund, Hywaves advanced this innovative technology and established a pilot site at Cranfield University, providing a real-world testing ground for H2Top. Additionally, the funding enabled the acquisition of a 50kW solar array in collaboration with Lightsource BP, ensuring a stable and renewable energy source for testing.

The TAF fund enabled HyWaves to refine its technology, validate its real-world effectiveness, and strengthen its position as a leader in green hydrogen, attracting future investments and collaborations.

ABOUT THE FUND

The Technology Accelerator Fund supports start-ups seeking to develop or validate an innovative solution that directly addresses challenges related to climate change.

Up to £50,000 is available to use to access Cranfield Universities wide range of applied science and engineering expertise and facilities.

The fund is open to SMEs/start-ups/spinouts with a technology that is currently TRL 4 - 5 and those with a technical challenge that can be over come with a four-month project.

AT A GLANCE

The Solution

- Direct solar-to-hydrogen integration with H2Top technology
- Scalable, off-grid hydrogen production for diverse applications

The Fund

- Innovative green technologies or products
- Up to £50,000 available
- Mid-range technology readiness levels required (TRL 4 to 5)



“The TAF funding has been transformative. It has enabled us to build essential infrastructure, secure key components, and foster collaborations that are vital for advancing green hydrogen innovation”

Josephine Fanning
Hydrogen Project Lead
HYWAVES