HydroGlyn is a first-of-its-kind pilot exploring how farms in Wales can use **green hydrogen** to power operations, cut energy costs, and open new income streams – while helping Wales reach **Net Zero.**

Find out more and download the **HydroGlyn Feasibility Roadmap**, available December 2025: watertowater.co.uk

Gelli Aur
+44 (0)1554 748578
Neil.Nicholas@colegsirgar.ac.uk

Water to Water
+44 (0)7951 043070
info@watertowater.co.uk

Why HydroGlyn Matters

- Tackles energy price volatility and supply risk
- Supports Wales's **Net Zero by 2050** target
- Provides a **blueprint** for rural energy independence
- Creates **new income** for farming communities
- **Scalable and replicable** across Wales
- Builds local skills and supply chains in clean energy

HydroGlyn builds on lessons from **HydroGlen,** our sister demonstrator in Aberdeenshire, proving green hydrogen works in real rural settings.

Canolfan Ymchwil Amaeth ARC Agriculture Research Centre colegsirgâr

water to water

HydroGlyn

Renewable Hydrogen-Powered Farm & College

Hosted by: Coleg Sir Gar – Gelli Aur College Farm Golden Grove, Carmarthen
Developed by: Water to Water, specialists in farm-scale renewable and hydrogen systems

UKRI Innovate UK

Sero Net Diwydiant Cymru Net Zero Industry Wales

What is HydroGlyn?

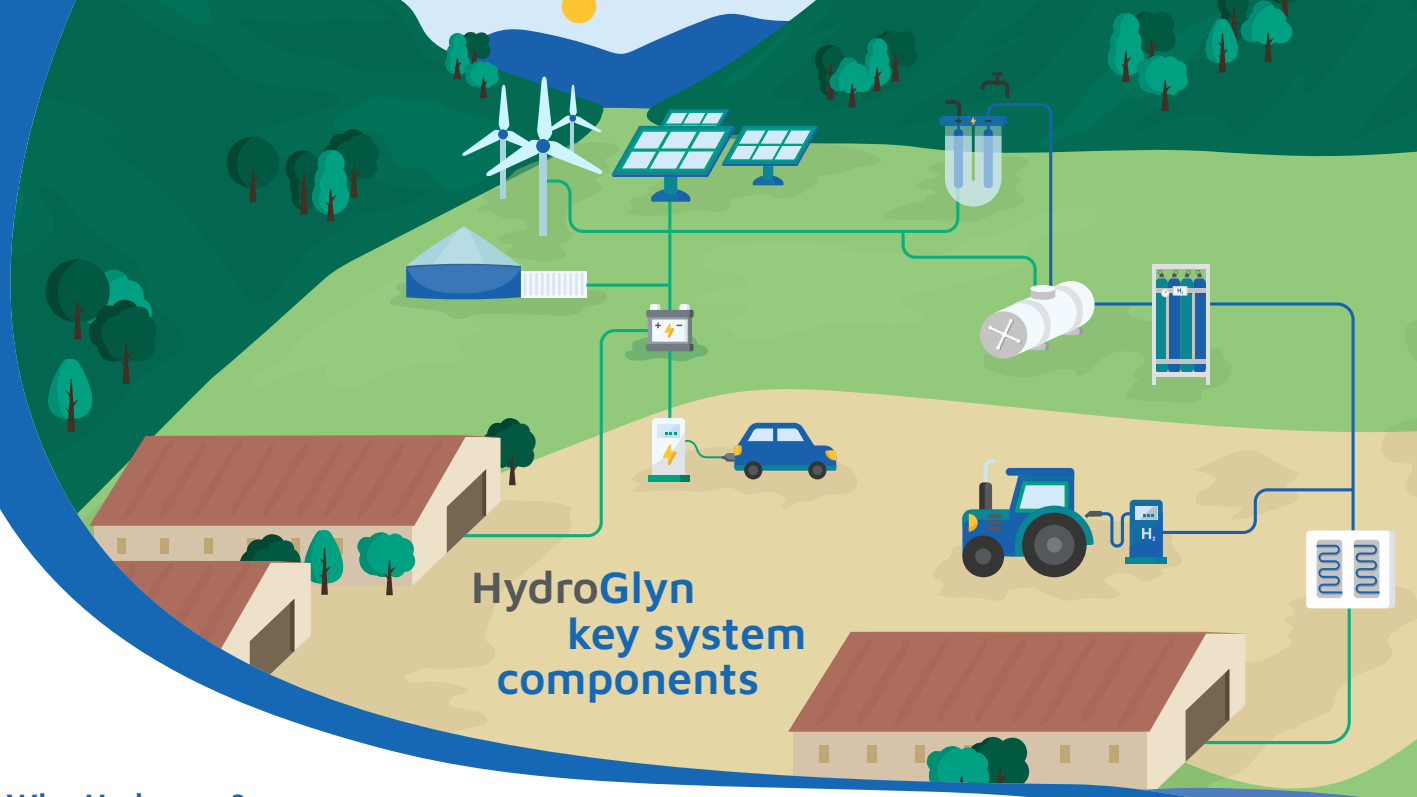
HydroGlyn explores how a typical Welsh farm can become **energy independent** by producing and using its own renewable electricity and **green hydrogen.**

We assess how a farm can:

- Generate clean electricity from solar, wind, and other renewables
- Use that power to make hydrogen on-site via **electrolysis**
- Store hydrogen safely **for power, heat, and transport**
- Sell surplus hydrogen for **new income**

Goal: show farms and rural communities can be **self-reliant energy producers,** supplying 100% (or more) of their needs while cutting emissions.

water to water



Why Hydrogen?

Hydrogen is a **clean fuel** made from water and renewable electricity – and an **energy store** for when the sun isn't shining or the wind isn't blowing.

HydroGlyn we use a **hybrid system:**

- **Batteries** for short-term storage (overnight/ between sunny spells)
- **Hydrogen** for longer-term storage (weeks/ months) and future low-carbon vehicles

Result: greater **resilience,** less reliance on the grid, and readiness for low-carbon farming.

Hydrogen as a Community Opportunity

Producing green hydrogen on-site can:

- ✓ Lower fuel and power costs
- ✓ Keep energy spend local
- ✓ Create income by **selling surplus hydrogen** via an **aggregation model** – where Water to Water combines small volumes from many farms and supplies larger users (e.g., bus fleets, industry)

Together, farms can build a **rural hydrogen network** leading the energy transition.