

## **Heriot Watt University**

Heriot Watt University is a public research institution that works on developing hydrogen production technologies, large scale underground hydrogen storage, and exploring hydrogen use across different sectors. The University recently launched, Hydrogen Works, a centre for green hydrogen innovation in collaboration with hydrogen technologies experts Logan Energy and PlusZero. Hydrogen Works is part of Heriot-Watt University's pioneering strategy to engage with business and become leaders in sustainability.

Key Capabilities / Centres	Descriptions
Hydrogen Works Campus	The consortium collaborates across a range of hydrogen-related research and industry projects including clean-power generators, state-of-the-art refuelling infrastructure and cutting-edge energy systems for heavy industry. Hydrogen Works houses industry leaders, for instance, PlusZero, Logan Energy and Flexergy who are conducting product demonstration and trials at the Hydrogen Works facility.
Research and Development	Heriot Watt actively conducts research across many themes in the hydrogen economy and developing prototype materials in partnership with academic or industry players. The University established iNetZ+ global research institute for net zero which facilitates interdisciplinary collaboration in cross-cutting research across the decarbonisation sector. Heriot Watt's global reach is fortified by its campuses in Dubai, Malaysia, Orkney and Galashiels.

## **Collaboration opportunities**

Heriot Watt University offers collaborative opportunities with both academia, industry and social enterprises:

- Offers companies an opportunity to relocate to a base centred around hydrogen innovation (under Hydrogen Works).
- Facilities for R&D companies at their Riccarton Campus in Edinburgh.
- Facilitates trials and prototyping of products – route to commercialisation.
- Can potentially offer apprenticeship/internship collaboration opportunities for skills development

## **Centre location**



Value Chain Areas	Testing & validation	Pilot manufacturing	Digital tools & simulation	Open innovation spaces	Skills development
Production	<b>√</b>	0	0	<b>√</b>	0
Networks	Х	x	x	0	x
Storage	Х	х	x	0	X
Transport	<b>√</b>	0	0	<b>√</b>	О
Industry	✓	0	0	<b>√</b>	О
Power	✓	0	0	<b>√</b>	О
Heat	Х	X	X	0	X

## Hydrogen case studies

- Flexergy: Flexergy are developing a novel form of ultraefficient hydrogen compressor. It is assembling and testing its core technology at the Hydrogen Works site, where it plans to build a full-size prototype, and minimum viable product, before conducting customer pilots in 2026.
- iNetZ+: Within this institute, Heriot Watt is working on a £1M project with Malaysian company, PETRONAS, to develop cost effective technologies to produce hydrogen from biomass waste. In addition, Heriot Watt have forged an alliance with the University of Houston to collaborate on projects looking to produce hydrogen from wastewater stream.

Key hydrogen contact:

Iain Shirlaw

i.shirlaw@hw.ac.uk

