



International Partnership
for Hydrogen and Fuel Cells
in the Economy

United Kingdom Update

43rd IPHE Steering Committee Meeting
10-11 June 2025
Santiago, Chile

Hydrogen Initiatives, Programmes & Policies - *United Kingdom*

Hydrogen to Power

- In December 2024, the UK Government confirmed we will be introducing a Hydrogen to Power Business Model to support its accelerated deployment.
- Government Call for Evidence to gather technical evidence on innovative hydrogen to power projects that can deliver by 2030, ahead of large scale enabling hydrogen infrastructure.



Hydrogen Strategy Refresh

- We have seen a huge amount of progress but also change since our initial strategy publication in 2021.
- The UK Government will be publishing a refresh to the hydrogen strategy later this year, to ensure it aligns with its clean energy superpower missions.

Hydrogen Allocation Rounds *United Kingdom*

Hydrogen Allocation Round 1 (HAR1) Projects

- The Low Carbon Contracts Company has now signed some of the first Hydrogen Production Business Model contracts with successful HAR1 projects.

Hydrogen Allocation Round 2 (HAR2)

- Hydrogen Allocation Round 2 launched in December 2023 with an application deadline of 19 April 2024, building upon the success of the First Hydrogen Allocation Round.
- On 7 April 2025, the Government announced a shortlist of 27 projects across England, Scotland and Wales that have been invited to the next stage of the Second Hydrogen Allocation Round process, which includes due diligence and a cost assessment.



International Collaboration *United Kingdom*

UK-Germany Trade Study

- Study jointly produced by Arup, DENA (German Energy Agency) and Adelphi to consider the **feasibility of, and steps required to enable future pipeline-based hydrogen trade**.
- This study sets out the **building blocks for enabling future trade** and we will continue to work on next steps.

dena adelphi ARUP

UK-Germany Joint Feasibility Study on the Trade of Hydrogen

Produced on behalf of the Bundesministerium für Wirtschaft und Klimaschutz and the UK Department for Energy Security and Net Zero

Study Report (7/21)



UK-EU Summit

- The UK and the EU Commission explored areas with the potential to strengthen bilateral cooperation, resulting in a Common Understanding on 19 May 2025 that contains a statement on new (energy) technologies, **including hydrogen**.



Hydrogen R&D *United Kingdom*

- The £1 billion Net Zero Innovation Portfolio (NZIP) continues to accelerate the commercialisation of low carbon technologies, such as hydrogen.
 - **ERM** received £8.6m to test its **offshore pipe connectors (risers)** and run a **world-leading demo of electrolysis** using seawater in Wales.
 - **ITM** received £7.7 million for its **Gigatest project**, using new manufacturing equipment to help automate production processes and to improve quality standards.
- UKHyRES, the UK Hub for Research Challenges in Hydrogen and Alternative Liquid Fuels has awarded **10 research projects** a **combined total of nearly £3 million**.
- The Hydrogen Environmental Impacts Programme held a two-day workshop in March 2025, highlighting that **climate benefits of a hydrogen economy can be maximised when atmospheric release is reduced as far as possible**.



Hydrogen Skills and Education *United Kingdom*

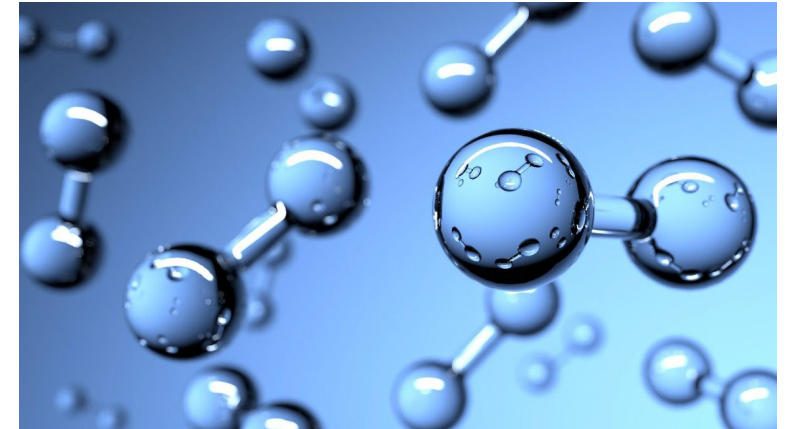
- February 2025: the **Hydrogen Skills Alliance (HSA)** launched [Empowering the Future: A Strategic Skills Plan for the UK Hydrogen Economy](#).
 - Outlines a **strategic plan of action for hydrogen skills** and calls for a collaborative approach that is fast, dynamic and complements the existing skills ecosystem.
- April 2025: The **Hydrogen Skills Framework** was the first deliverable from Empowering the Future.
 - Open-source, proof-of concept skills framework to **help employers develop skills needed to build future workforces**.
 - Enables the creation of **industry-recognised qualifications and quality assured training programmes** to align with H2 sector needs.



Regulations, Codes & Standards, and Safety Update *United Kingdom*

Standard for Hydrogen-fired equipment for use in industrial and commercial (non-domestic) settings

- March 2025: The British Standards Institute published PAS 4445:2025 to give comprehensive recommendations for the **safety, design, construction, testing, and performance of large hydrogen-fired equipment for use in industrial and commercial (non-domestic) settings.**



Hydrogen-Powered Off-Road Machinery

- April 2025: The Department for Transport introduced an amendment to **allow hydrogen-powered off-road machinery to be used legally on UK roads.**

Health and Safety Consultation for Offshore Hydrogen and CCUS

- June 2025: The UK's Health and Safety Executive has launched a public consultation exploring proposals for legislative change in relation to **offshore production of hydrogen and CCUS operations offshore and in pipelines.**

Recent Hydrogen Publications - *United Kingdom*

Update to the Market (Dec 2024): Sets out the key milestones achieved by DESNZ in 2024 to deliver the hydrogen economy and an ambitious forward look at our next steps and upcoming opportunities.

H2P Consultation Response (Dec 2024): Announced a commitment to introduce a Hydrogen to Power Business Model, and outlining the next steps government will take to deliver its market intervention.

Gas Shipper Obligation Consultation (Jan 2025): A consultation for proposed design choices of the Gas Shipper Allocation, intended to be the long-term funding mechanism for initial hydrogen production projects through the Hydrogen Production Business Model.

Innovation Hydrogen-to-Power Projects (March 2025): The government sought technical evidence on innovative hydrogen to power projects that can deliver by 2030, ahead of enabling hydrogen infrastructure.

Hydrogen Allocation Round 2 (HAR2): shortlisted projects (April 2025): Provides a list of shortlisted projects for HAR2, and also a link to a Cost Challenge document, which points projects in the direction of cost challenge areas of focus.



United Kingdom – Profile June 2025

Status of Deployments

- HAR2 shortlist announced
- HTBM and HSBM designs completed by end of 2025

Leading Government Initiatives

- Clean Energy Superpower Mission
 - Clean Power 2030
 - Accelerating to Net Zero

Goals or Focus Areas

- Hydrogen Strategy Refresh
- Hydrogen to Power, Production, Transport and Storage Business Models (H2PBM, HTBM, HSBM)

Deployment Goals

- Launching the Hydrogen Production Business Model
- First rounds of HTBM and HSBM

Funding

- £21.6 bn for H2 and CCUS projects over 15 years
- HAR1: £2bn from Hydrogen Production Business Model and £90m from Net Zero Hydrogen Fund.

Thank you



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