

INTERNATIONAL PARTNERSHIP FOR HYDROGEN AND FUEL CELLS IN THE ECONOMY

IPHE Country Update November 2021: United Kingdom

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Covered Period	June – November 2021

1. New Initiatives, Programs, and Policies on Hydrogen and Fuel Cells

- Hydrogen Strategy (August 2021): The government published the first UK Hydrogen Strategy, alongside key policy detail on its support for low carbon hydrogen production across the UK. This builds on the Prime Minister's announcement in his *Ten Point Plan for a Green Industrial Revolution* last year of the government's ambition for 5GW of low carbon hydrogen production capacity by 2030.
- Alongside the Strategy, the government published:
 - Consultation on a Hydrogen Business Model to stimulate private investment in new low carbon hydrogen projects. The consultation closed on 25 October 2021.
 Officials are now reviewing responses.
 - Consultation on the design of the £240 million Net Zero Hydrogen Fund
 (NZHF) confirmed out to 2025 to support new hydrogen production projects. The
 consultation closed on 25 October 2021. Officials are now reviewing responses.
 - Consultation on a UK Low Carbon Hydrogen Standard that will define what is meant by low carbon hydrogen, allowing us to incentivise and support low carbon hydrogen for supply across the energy system. The consultation closed on 25 October 2021. Officials are now reviewing responses.
 - Further detail on <u>projected costs of hydrogen production technologies</u> out to 2050, and an annex setting out the analysis and evidence underpinning the Hydrogen Strategy and consultations.
- Net Zero Strategy (October 2021): The government launched its Net Zero Strategy
 which sets out how the UK will deliver on its commitment to reach net zero emissions
 by 2050.
- Heat and Buildings Strategy (October 2021): The Strategy outlines a transition that
 focuses on reducing bills and improving comfort through energy efficiency, and building
 the markets required to transition to low-carbon heat and reducing costs, while testing
 the viability of hydrogen for heating.

2. Hydrogen and Fuel Cell R&D Update

Nothing new to report.



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3. Demonstration, Deployments, and Workforce Developments Update

• Cluster sequencing for CCUS deployment (November 2021): CCUS clusters have potential to enable low carbon hydrogen production at scale. Phase 1 of Cluster Sequencing identified Hynet and the East Coast Cluster as track 1 clusters for the mid-2020s, with the Scottish Cluster as a reserve. Track 1 Clusters will now be taken forward into negotiations. If the clusters represent value for money for the consumer and the taxpayer then subject to final decisions of Ministers, they will receive support under the government's CCUS Programme. Phase-2 of the process is now underway and focuses on identifying individual Projects across capture applications (industry, power, hydrogen) which could connect to a Track-1 or Reserve T&S Cluster.

4. Events and Solicitations

 COP26: Launch of Glasgow Breakthroughs (including hydrogen breakthrough): https://unfccc-cop26.streamworld.de/webcast/presidency-event-accelerating-clean-technology-i-2

5. Investments: Government and Collaborative Hydrogen and Fuel Cell Funding

The Hydrogen Strategy package (August 2021) includes details of almost £1bn worth of funds that hydrogen projects can bid into, alongside other low carbon technologies.

From October 2021:

- Nearly £100 million (\$136m) of new government funding announced as part of the £1 billion Net Zero innovation portfolio to support heavy industry to switch to low carbon fuels including hydrogen.
- We have set up the Industrial Decarbonisation and Hydrogen Revenue Support (IDHRS) scheme to fund our new hydrogen and industrial carbon capture business models. We will be providing up to £140 million (\$190m) to establish the scheme, including up to £100 million (\$136m) to award contracts of up to 250MW of electrolytic hydrogen production capacity in 2023 with further allocation in 2024.

6. Regulations, Codes & Standards, and Safety Update

 The UK launched a consultation in August to seek views on design options for a UK hydrogen standard that defines 'low carbon' hydrogen to underpin our support for hydrogen production. The feedback from the consultation is being analysed