



International Partnership
for Hydrogen and Fuel Cells
in the Economy

United Kingdom Update

35th IPHE Steering Committee Meeting

22 – 23 June 2021

Virtual Meeting

Announcements / New Initiatives *United Kingdom*

HMG Energy White Paper (December 2020, see right->)

Set long-term strategic vision for the future UK energy system, consistent with net zero emissions by 2050 by replacing fossil fuels with clean energy technologies.

Carbon Budget 6 (December 2020/ adopted June 2021)

Enshrines in law the UK's new 78% emissions reduction by 2035 target.

Industrial Decarbonisation Strategy (March 2021)

Set out how UK industry will decarbonise while remaining competitive.

North Sea Transition Deal (March 2021)

Provides for UK oil and gas sector shift to a low carbon future. Joint government-sector investment of up to £16 billion by 2030, including up to £3 billion on Carbon Capture Usage and Storage, and up to £10 billion for hydrogen production.

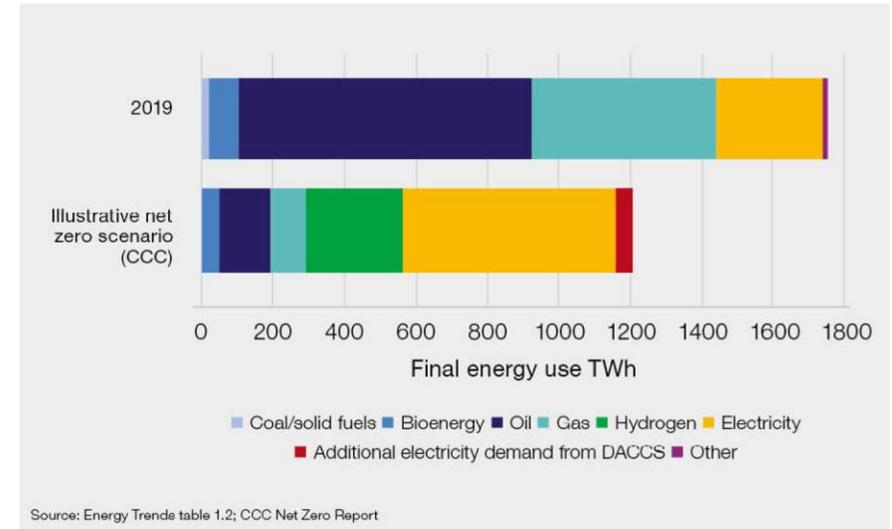
Phase 2 of Low Carbon Hydrogen Supply Competition (May 2021)

Provided £60million of support to projects developing innovation low carbon supply options, under £1bn Net Zero Innovation Portfolio (NZIP).

Launch of Mission Innovation Clean Hydrogen Mission – UK as co-lead; and UK full membership of CEM Hydrogen Initiative (May 2021)

UK will lead on MI R&D Pillar elements; and sees progression to full CEM H2I membership as key step on road to global H2 ambition.

Upcoming strategies in 2021: Transport Decarbonisation Plan, Heat & Buildings Strategy, Hydrogen Strategy and Net Zero Strategy.



United Kingdom – Profile June 2021

Status of Deployments

- Hydrogen Strategy will provide 2020s Roadmap:
- Small scale green projects deployed in **early 2020s**
 - Large-scale blue in at least one cluster; increasing green scale by **mid-2020s**
 - Several large-scale blue projects across clusters, and large-scale green projects, by **late 2020s**
 - Development, capital and revenue support: detail accompanying Strategy

Leading Government Initiatives

- **UK Hydrogen Strategy** – imminent
- **UK Presidencies of G7 and COP26** providing springboards for increased international coordination in support of deployment
- Ongoing **financial support** (e.g. via NZIP)

Goals or Focus Areas

- Wider Hydrogen Strategy package will include:
- ‘Minded to’ consultation on **hydrogen business models** (production development, revenue support)
 - Consultation on **low carbon hydrogen standard**
 - Consultation on design of **£240m-to-2024/25 Net Zero Hydrogen Fund** (capital support)

Funding

- £240 mil : **Net Zero Hydrogen Fund** (co-investment in hydrogen production projects)
- £33 mil : **Hydrogen Supply** - accelerating development of bulk low carbon H2 supply, including storage
- £7.3 mil : **HyDeploy** - blending up to 20% of H2 into grid
- £25 mil : **Hy4Heat** - looks at the feasibility of replacing natural gas with H2 for cooking/heating
- £20 mil : (up to) **Industrial Fuel Switching** (to stimulate early investment fuel switching processes and tech, including H2 (also electrification and bio))
- £315 mil : **Industrial Energy Transformation Fund** & £170 mil : **Industrial Clusters Mission** (share - decarbonisation funds which could support fuel switching to H2)
- £20 mil (up to) : **Storage at scale**, includes share for power to gas (2020)
- £23 mil: **H2 for Transport**
- £1 bil : **CCS Infrastructure Fund** (enabling blue hydrogen production)
- £1 bil : **Net Zero Innovation Programme** (H2 one of 10 priority areas: e.g. Low Carbon H2 Supply C'tn)

Thank you



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