

UK Hydrogen Strategy

September 2021

BEIS Hydrogen Strategy Team



HM Government

UK Hydrogen Strategy



August 2021

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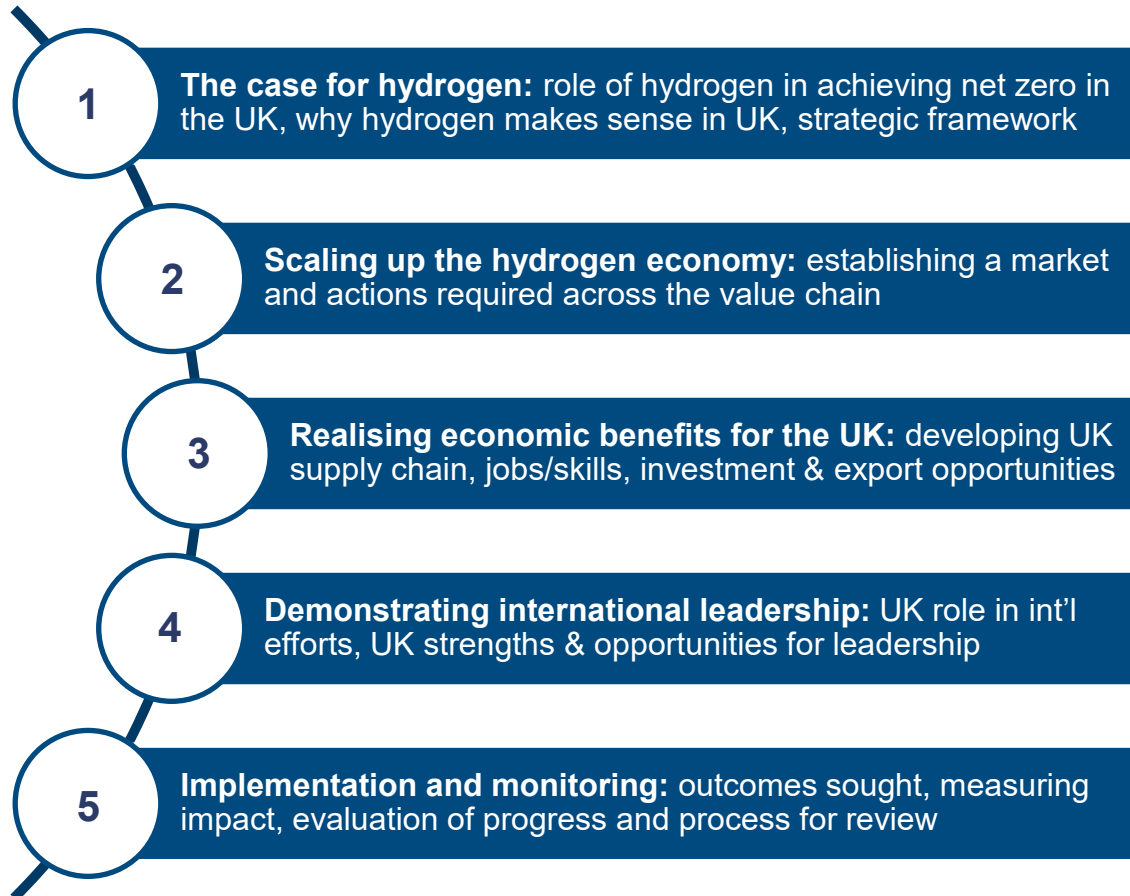
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Department for
Business, Energy
& Industrial Strategy

UK Hydrogen Strategy & consultations: overview

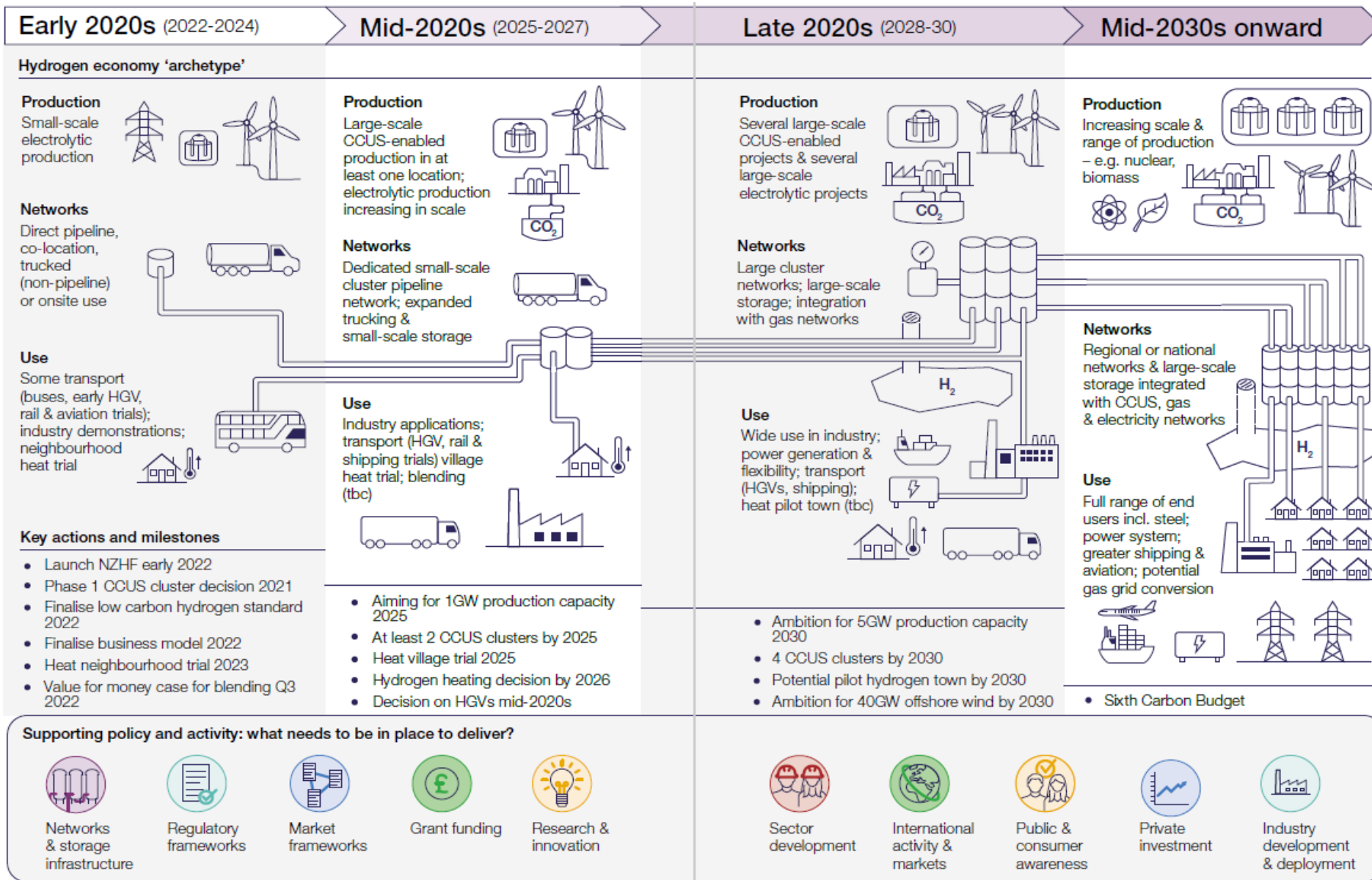
Scope of Hydrogen Strategy



Plus broader policy package:

- 'Minded to' consultation on **hydrogen business model**
- Consultation on **low carbon hydrogen standard**
- Consultation on **Net Zero Hydrogen Fund**
- Analytical annex (covering whole package)
- Hydrogen production cost report

2020s Roadmap: a whole-system approach to developing a UK hydrogen economy



Across the decade, **what supporting policy and activity needs to be in place to deliver the UK hydrogen economy, and how will this evolve over time?**

What needs to be in place across:

- Network infrastructure
- Regulatory & market frameworks
- Funding
- Innovation
- Supply chains, jobs & skills
- International activity
- Public awareness
- Investment
- Industry deployment

[Strategy Chapter 4] Furthering international collaboration

Demonstrating international leadership

- UK is working with other leading hydrogen nations to **drive global leadership** on the development of low carbon hydrogen to support the world's transition to net zero. **We are keen to deepen collaboration behind this shared goal.**
- Hydrogen Strategy sets out how UK will support hydrogen collaboration & cooperation – our aim is to accelerate innovation & deployment of technologies, to **increase supply** 'push' & **incentivise demand** 'pull'.
- The strategy outlines the UK's active role in **multilateral collaboration** on hydrogen, including through the **MI Clean Hydrogen Mission, CEM Hydrogen Initiative & IPHE.**
- It also sets out opportunities **for bilateral & regional collaboration** with key partner countries to spur development of thriving domestic, regional & international hydrogen markets.



Ares of focus: opportunities & challenges

Shared challenges

- High **production cost** cf. high-carbon fuel alternatives
- High **technological and commercial risks**
- Lack of **market structure**
- Lack of **infrastructure**
- High **transport costs**
- Policy and regulatory **uncertainty**



What we can offer: UK strengths and vision

- Strong **R&I ecosystem** to support commercialisation
- Attractive environment for **investment in UK projects**
- £4 billion in private investment by 2030
- **World-leading export potential**: together, aim to create **jobs**, develop **skills** - 9,000 jobs by 2030
- Providing **commercial frameworks** –Hydrogen Business Model, Net Zero Hydrogen Fund (NZHF)
- Reducing regulatory uncertainty – through UK **Low Carbon Hydrogen Standard**
- Decades of experience in **gas regulation, management and safety; lessons from oil & gas/ other low carbon sectors**
- Geography & geology mean regional relevance -
large-scale **H2 storage, offshore wind capacity**

Bilateral and Regional Opportunities – and legislative relevance

The UK Strategy sets out opportunities **for bilateral & regional collaboration** with key partner countries to spur development of thriving domestic, regional & international hydrogen markets. Chapter 4 is clear that we will take an **open and active approach** to supporting the regional and, in time, global H2 roll-out.

Opportunities include:



- **Regional policy frameworks / trade** – “Working with our North Sea and European neighbours will be key to developing common approaches that will support UK hydrogen investment and facilitate regional trade through interconnectors, pipelines and shared infrastructure”



- **North Sea collaboration-** “Realise the region’s potential significance for hydrogen production, storage and transportation, including facilitation of future North Sea trade”



- **R&I/Mission Innovation** – “Build on, and complement, multilateral activities, especially where we share common interests – such as in decarbonising industrial sectors – or hold complementary expertise. For example, as co-leads of MI’s Clean Hydrogen Mission...UK and European Commission collaboration on regional value chains”.



- **Developing common regulatory approaches and other policies** where appropriate – including by pooling insights on policy development and the feasibility of new use cases.