UK Hydrogen Strategy

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BEIS Hydrogen Strategy Team
UK Hydrogen Strategy & consultations: overview

Scope of Hydrogen Strategy

1. The case for hydrogen: role of hydrogen in achieving net zero in the UK, why hydrogen makes sense in UK, strategic framework

2. Scaling up the hydrogen economy: establishing a market and actions required across the value chain

3. Realising economic benefits for the UK: developing UK supply chain, jobs/skills, investment & export opportunities

4. Demonstrating international leadership: UK role in int’l efforts, UK strengths & opportunities for leadership

5. Implementation and monitoring: outcomes sought, measuring impact, evaluation of progress and process for review

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
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
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.