

The Rt Hon Graham Stuart MP
Cc: Hydrogen Networks and Markets team
Department for Business, Energy and Industrial Strategy
1 Victoria Street
London, SW1H 0FT

22 November 2022

Dear Mr Stuart,

Thank you for the opportunity to respond to your consultation on infrastructure for hydrogen transport and storage. We are writing to you from four Trade Associations:

- Energy Networks Association (ENA)
- Hydrogen UK (HUK)
- The Association for Renewable Energy and Clean Technology (REA)
- The Carbon Capture & Storage Association (CCSA)

As a collective, we really welcome the constructive engagement we have had with BEIS on the development of this policy both before and during the consultation period, and we look forward to continuing to work with you as you further develop policy in this area.

The importance of transport and storage infrastructure to the hydrogen economy and whole energy system

The development of the hydrogen economy in the UK presents a once in a lifetime opportunity to not only reduce our carbon emissions in line with our net zero emissions target, but also to make a fundamental contribution to the wider economic and social fabric of our country. Investing and building the infrastructure we need for that economy, will:

- Improve our energy security and reduce our dependence on global markets, providing greater resilience to our economy as it decarbonises.

- Create a long-term, sustainable, economic stimulus for communities and industries, creating and protecting skilled jobs across the country.¹
- Capture inward investment from international hydrogen capital flowing into the UK.
- Make our energy system more efficient and resilient, and support efforts to improve the UK's long-term economic productivity challenge.

We were all very pleased to see the doubling of the hydrogen production ambition to 10GW by 2030 in Britain's Energy Security Strategy and have been working hard to enable you to deliver this. However, without urgent funding of the infrastructure needed to produce, transport and store 10GW of hydrogen production, this target is looking very challenging. Delivering investable hydrogen production business models needs to be the first priority (and we need the Energy Bill to pass swiftly through Parliament in order to achieve this) but robust business models for transport and storage need to be delivered at a similar pace.

As we have set out in our individual responses, the proposed timeframes of designing business models by 2025 (with primary legislation also likely to be needed to enact them) will not be quick enough, does not align with timelines for support to hydrogen production projects and risks missing government targets for the build out of the hydrogen economy.

This is an issue for the build out of the hydrogen economy to meet long term targets, but even more so for the near-term, anchor hydrogen projects. For the government to meet its commitment to deliver two carbon, capture and storage (CCS) clusters by the middle of this decade and 2GW of hydrogen production in construction or operation in the same timeframe, final investment decisions on the HyNet and East Coast Hydrogen projects will need to be made in approximately the next year to eighteen months. Clarity on the business models to support these projects will be required by investors to reach that decision.

We are concerned that there is now a real chance investor that interest in the UK's hydrogen prospects will wane, jeopardising the government's ambitions for the hydrogen economy. With other countries making significant moves in hydrogen, such as the US's ambitious funding programme through the Inflation Reduction Act (IRA), and Denmark's action to prepare their policy and investment framework, enabling them to import CO₂ across Europe, the UK needs to quickly develop and implement viable business models across the hydrogen value chain to ensure we can capture the opportunity, both in the short term and long term, and capital does not flow elsewhere instead.

¹ ENA research has shown that new hydrogen innovation projects proposed by Britain's five gas network companies could create a total of up to 25,000 highly skilled green jobs across Great Britain over the next ten years across five strategically important areas, including those in Industrial Clusters, as they plan to invest a total of £6.8 billion in proposed hydrogen innovation projects. <https://www.energynetworks.org/newsroom/hydrogen-innovation-set-to-drive-17-000-green-jobs-in-britains-industrial-heartlands>

Our asks of BEIS

To address the concerns highlighted in this letter, our organisations share the view that as part of its business models work, the government should:

- 1. Focus immediately on developing RAB models for hydrogen transportation.** These models should be developed at pace but based on fundamental principles of flexibility and agility, so they can adapt to the changing needs of the hydrogen economy as it develops and transitions from a 'growth' phase into a 'steady state' phase. Existing UK infrastructure demonstrates that RAB models work and investors into the UK infrastructure sectors understand them well, so we should focus on getting these implemented as swiftly as we can.
- 2. Put in place interim measures to enable the earliest transport and storage projects to take final investment decisions in the timeframes required to meet government targets.** These projects will not be able to wait for the planned 2025 policy decision point and will need certainty of investment returns well in advance of that. They are likely to need a more direct contractual agreement which can be transitioned into a RAB model once this is in place. Following this, a commitment to funding hydrogen transport infrastructure in RAV in RIIO-3 will also allow the regulated networks to build out the early stage hydrogen transportation projects.
- 3. Advocate hydrogen blending** as a critical tool to manage risks associated with building out the hydrogen economy and help investors to get projects up and running. We would urge government to embrace hydrogen blending through its policy decision in 2023 (as per the Hydrogen Investor Roadmap) and ensure blending receives business model support to make it viable and for it to deliver on its potential to mitigate early-stage hydrogen production volume and disruption risk, as well as enabling the scaling up of the hydrogen economy.
- 4. Recognise the importance of making key strategic decisions around the role that hydrogen storage will have in our energy system, with a clear business model to fund it.** These decisions can be made in parallel to the flexible and adaptable business model for transportation and storage infrastructure we proposed above. The remit and resources of the planned Future System Operator should also ensure that it is adequately equipped to make decisions in relation to the use of hydrogen on an equal basis with electricity.

With these measures taken forward, with the right urgency injected into this process and with (sufficient) funding support, the UK can still be at the forefront of developing a hydrogen economy which delivers sustainable, long-

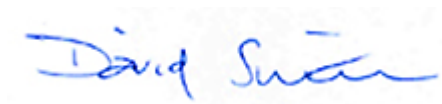
term economic growth across the country, provides jobs across a home-grown supply chain and improves the resilience and capacity of our energy system.

The hydrogen economy represents a significant economic opportunity at a critical time for our economy but it will only be realised if we move forwards swiftly and decisively with our decision-making.

All of our organisations are committed to working with you collaboratively to drive this process forward as quickly as we can, as well as providing access to our member companies to do so as well.

We look forward to hearing your next steps in this process and engaging with you closely on this going forward.

Yours sincerely,



David Smith
Chief Executive, ENA



Clare Jackson
Chief Executive, Hydrogen UK



Nina Skorupska
Chief Executive, The Association for
Renewable Energy and Clean
Technology



Ruth Herbert
Chief Executive, The Carbon
Capture & Storage Association

