

# Hydrogen Advisory Council

## Second Meeting – Summary

14 October 2020

## Attendees

### Co-chairs:

Rt Hon Kwasi Kwarteng MP, Minister for Business, Energy and Clean Growth

Sinead Lynch, UK Country Chair, Shell

### Council members:

Buta Atwal	CEO	Ryse
Paul Bogers	Vice President - Hydrogen	Shell
Baroness Brown	Deputy Chair	Climate Change Committee
Al Cook	Executive Vice President of Global Strategy and Business Development & UK Country Manager	Equinor
Duncan Clark	Head of UK Region	Orsted
Graham Cooley	CEO	ITM Power
Andrew Doyle	Executive Director	Mitsubishi UFJ Financial Group
Richard Halsey	Capabilities Director	Energy Systems Catapult
Alan James	Managing Director	Pale Blue Dot
Jon Maddy	Senior Lecturer	University of South Wales
Peter Mather	UK Head of Country	BP
John Panikar	CEO	BOC
David Parkin	Director	Progressive Energy
Professor Nilay Shah	Director of the Centre for Process Systems Engineering & Head of Chemical Engineering	Imperial College London
Steve Scrimshaw	Vice President	Siemens Energy Limited UK & Ireland
Jane Toogood	Sector Chief Executive, Efficient Natural Resources	Johnson Matthey

### Government observers:

Professor Paul Monks	BEIS
Julian Critchlow	BEIS
Paro Konar/Stephanie Murphy (job-share)	BEIS
Rita Wadey	BEIS
Will Lochhead	BEIS
Professor Phil Blythe	Department for Transport
Bob Moran	Department for Transport
Joshua Lawrence	Department for International Trade
Syeda Qader	Her Majesty's Treasury
Alix Green	Her Majesty's Treasury
James Fleming	EPSRC
Edward Kerr	Northern Irish Government

Margo Maciver	Scottish Government
Professor Ron Loveland	Welsh Government
John Howells	Welsh Government

## 1. Welcome from Sinead Lynch

Sinead Lynch welcomed Members and noted a number of important publications since the last meeting, including:

- Offshore Wind Industry Council [report](#) 'Solving the Integration Challenge.'<sup>1</sup>
- Oil and Gas Technology Centre 'Closing the Gap – realising a net zero North Sea' [report](#)
- National Grid's 'Future Energy Scenarios' [report](#)

## 2. Ministerial Update from Minister Kwarteng

Minister Kwarteng set out the importance of the next 12 months in tackling the Net Zero challenge, developing the hydrogen economy, and demonstrating global leadership ahead of COP26. The Minister added that BEIS has committed to publishing a hydrogen strategy in 2021 which will set out plans to support the development of both blue and green hydrogen with a 'twin-track approach', and will deliver a clear signal to industry, investors and international counterparts, with firm commitments backed up by plans for implementation where possible.

Minister Kwarteng explained that our hydrogen market is currently mostly confined to the petrochemical sector and dominated by high carbon fuel. This position raises significant challenges across the hydrogen value chain. Government will therefore need to work together with industry to develop and expand a low carbon hydrogen economy.

To support the whole system view to be set out in the strategy the Minister proposed to expand the membership of the Council to interests on the demand side.

## 3. Update on actions from the first meeting

Council members received and noted the update from BEIS on actions from the last meeting. This included an update on the establishment of the Council Working Groups and that BEIS will look to formalise engagement with relevant Government-Industry councils (e.g. CCUS Council, Offshore Wind Industry Council). This will be reflected in the Hydrogen Advisory Council's Terms of Reference.

## 4. Hydrogen Taskforce Paper - Estimating Hydrogen Production Capacity and Demand in the UK by 2030

The Council were invited to consider and discuss the Hydrogen Taskforce paper on *Estimating hydrogen production capacity and demand in the UK by 2030* and constraints to establishing and scaling the hydrogen economy. The following points were made in the discussion:

- Members were supportive of including both blue and green hydrogen with ambition which is stretching but achievable.
- Members agreed that a whole system approach is needed, including for example, demand, consideration of storage and distribution, and potential constraints on critical materials.

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<sup>1</sup> Offshore Wind Industry Council & the Offshore Renewable Energy Catapult (2020) *Offshore Wind and Hydrogen: Solving the Integration Council*.

- Members wanted to see more detail on the paper's scenarios and assumptions, especially on demand side assumptions.
- Members signalled the importance of near-term actions ahead of 2030.
- Members commented that it was important to consider the global context, including export opportunities.
- Consistent government support is needed. Important to be open around investment and subsidies from government. Need quick decisions - delays on early decisions will become a constraint to wider project timelines.
- Lack of business models is currently the main constraint - it is important that businesses can access hydrogen at the same cost as natural gas.
- Members suggested the need to consider the distribution network and associated development time. Land acquisition and regulatory approval will be crucial for establishing a hydrogen economy.
- Members suggested heat policy to be a potential constraint and emphasised the need for a heating strategy.

## **5. BEIS Strategy Update**

Rita Wadey provided an update on the BEIS Hydrogen Strategy, emphasising the importance of an ambitious, stretching, but credible strategy. The strategy will adopt a UK-wide whole system view focussed on actions to scale up out to 2030, with the 2020s about 'learning by doing' and gaining assurances for future scale up. It will be important to realise the economic benefits from the outset and learn from experiences in other sectors.

BEIS expects to publish the strategy in 2021 as part of a sequence of strategic documents including the Energy White Paper, Heat and Buildings Strategy, and Industrial Decarbonisation Strategy.

## **6. BEIS Business Models Update**

The Council was updated on the 2021 Business Models consultation which will be published alongside the Hydrogen Strategy. The November session of the Business Models Expert Group will focus on the consultation.

## **7. BEIS Discussion on Building Investor Confidence**

The Council considered and discussed the challenges involved in building investor confidence. The following points were made in discussion:

- BEIS needs to keep seeking views on how investors will make use of a strategy and make the case for hydrogen in the UK to increase investor confidence. Members keen that roadmaps do not constrict pace. Need an industry strategy, not just an energy strategy, particularly in light of economic recovery agenda. Also need long-term policy mechanisms.
- It will be important to plan for a system evolution over time, including industrial clusters and green transport hubs to allow bigger systems to grow out of initial niches. Geographical considerations will be important.
- There is an opportunity for the UK to lead, but also need an awareness of the global context and to learn from other nations. Members highlighted the importance of cooperation with an early supported phase, which eventually transitions to a full market basis. Need to promote proof points that demonstrate investment potential and a credible market.
- Members highlighted that investor confidence needs to translate into investment – which will only happen by creating a market, not just a series of projects. Early

investors will need protection around demand risks, given that hydrogen is a new market, unlike offshore wind.

- Members suggested that the role of government as a procurer is key, especially to build a guaranteed market and not just a subsidy strategy.

## **8. Workstreams Update**

The Council were updated on BEIS's progress on establishing the Council Working Groups.

## **9. Closing remarks from Sinead Lynch**

Sinead Lynch closed the meeting with a forward look to the December session.