



Department for
Business, Energy
& Industrial Strategy

Hydrogen Advisory Council

Ninth Meeting - Summary

7 December 2022

Attendees

Co-Chairs:

Rt Hon Graham Stuart MP, Minister of State for Climate (BEIS)
Jane Toogood, Sector Chief Executive, Johnson Matthey

Council members:

Name	Role	Organisation
Luci Austin (deputising for Paul Bogers)	Vice President - Hydrogen	Shell
Wouter Bleukx	Hydrogen Business Director	Inovyn
Olivia Breese	Senior Vice President	Orsted
Baroness Brown	Offshore Wind Sector Champion	
James Walker (deputising for Jonathan Brearley)	Decarbonisation & Energy Transition lead	Ofgem
Andrew Doyle	Executive Director	Mitsubishi UFJ Financial Group
Sam French	Business Development Director	Johnson Matthey
Alex Grant	Executive Vice President of Global Strategy and Business Development & UK Country Manager	Equinor
Emma Harrison (deputising for Richard Halsey)	Capabilities Director	Energy Systems Catapult
Matthew Williamson (deputising for Louise Kingham)	UK Head of Country	BP
Jon Maddy	Senior Lecturer	University of South Wales
Chris Manson-Whitton	Director	Progressive Energy
Jim Mercer	President UK & Ireland	BOC / Linde
Catherine Raw (deputising for Alistair Phillips-Davies)	Managing Director	SSE
Steve Scrimshaw	Vice President	Siemens Energy Limited UK & Ireland
Professor Nilay Shah	Director of the Centre for Process Systems Engineering & Head of Chemical Engineering	Imperial College London
Chris Train	'Gas Goes Green' lead	Energy Networks Association
Adam Gray (deputising for Susi Wiseman)	Hydrogen and CCS project technical authority	Storegga
Buta Atwal	CEO	Ryze
Graham Cooley	CEO	ITM Power
Katharine Palmer	Global Head of Sustainability	Lloyd's Register, Marine & Offshore

Government observers:

Name	Organisation
Professor Paul Monks	Chief Scientific Adviser (CSA) - BEIS
Ashley Ibbett	Director General Energy & Infrastructure, BEIS
Stef Murphy, Paro Konar	Directors, Hydrogen & Industrial Carbon Capture (HICC), BEIS
Iona Mylek	Deputy Director, HICC, BEIS
Katie Ostheimer	Deputy Director, HICC, BEIS
Alison Conboy	Deputy Director, HICC, BEIS
Will Lochhead	Deputy Director, HICC, BEIS
Sarah Sharples	CSA, Department for Transport (DfT)
Caroline Low	Director, DfT
Bob Moran	Deputy Director, DfT
Vicky Edmonds	Deputy Director, DfT
Edward Kerr	Northern Irish Government
Professor Ron Loveland	Welsh Government
John Howells	Welsh Government
Rich Denny	Infrastructure and Projects Authority

Also in attendance, officials from: Department for Business Energy and Industrial Strategy; Department for Transport CSA; Department for International Trade; Her Majesty's Treasury; Ministry of Defence; Engineering and Physical Sciences Research Council and Innovate UK/UKRI; Scotland Office.

NB: This is a summary of Council member comments made in an **advisory** capacity. The summary of member comments does not represent government policy or views.

Item 1: Welcome & Introductions - Jane Toogood (JT)

JT welcomed Council members. **Ashley Ibbett**, Director General of Energy & Infrastructure Group, BEIS, introduced himself to the Council.

Item 2: BEIS Policy Update - Stef Murphy/Paro Konar (SM/PK)

SM & PK provided an update to the council on the hydrogen policy developments since the last HAC meeting in May 2022, which included:

- The continuation of the **Energy Security Bill** in this parliamentary session.
- **Hydrogen production**, including funding support from the Net Zero Hydrogen Fund and Hydrogen Production Business Model.
- Work to deliver the BESS commitment to design new business models for **hydrogen transport and storage** by 2025.
- Support for **industrial** use of hydrogen, as well as work on hydrogen's role in the future **power** system, and progress in hydrogen for **transport** and for **heating**.
- Work to realise **economic opportunities in the UK**, as set out in the Hydrogen Sector Development Action Plan, and future trade opportunities.

Item 3: Hydrogen Use in Transport - Caroline Low, Director of Transport Decarbonisation, DfT (CL)

DfT policy leads provided an overview of policies and funds that support the development of hydrogen technology and its demonstration across all types of transport. Dedicated funding is currently focussed on heavier applications, such as maritime, aviation and road freight, or in regional hubs such as the Tees Valley Hydrogen Transport Hub, where transport supports demand alongside industrial and energy users.

Officials invited HAC members for views, signalling the value of frequent dialogue to ensure that the government takes pragmatic steps and provides the right mix of support and leadership as industry tests and deploys low carbon vehicles, including those powered by hydrogen and derivatives.

Comments, questions and answers were raised on:

- The interaction and compatibility of the UK Low Carbon Hydrogen Standard and the Renewable Transport Fuel Obligation which would facilitate the use of hydrogen in transport.
- Compatibility of standards and targets with other countries.
- The evidence requirements around hydrogen combustion.
- Infrastructure planning for different modes of transport.
- DfT's Zero Emissions Vehicles mandate, which will regulate all harmful emissions at the tailpipe.

Item 4: Transport and Storage business model consultation – Head of Hydrogen Networks Strategy, BEIS:

BEIS officials presented early findings from the consultation on hydrogen Transport & Storage (T&S) which closed in November and from workshops held during the course of the consultation. Feedback centred around the hydrogen transport business model, the storage business model and strategic planning.

Members recognised progress made on T&S in recent months and welcomed the consultation and the open discussion held around it.

Comments, questions and answers were raised on:

- The role Hydrogen T&S business models would play in removing risk for investors.
- The role of the business models in the context of the broader hydrogen economy; decisions around use of hydrogen for power or transport infrastructure would impact T&S requirements, as T&S can help balance supply and demand.
- An interim solution for T&S to facilitate investment decisions before 2025.
- Who would manage the import, transport and cracking of ammonia.
- The national plan for how T&S would develop across the country.

Several members were keen to hear more about the Working Group discussions on T&S.

Item 5: Secretary of State Remarks, Grant Shapps, BEIS SoS (GS):

GS welcomed the Council members and thanked them for their hard work.

GS highlighted the important role that low carbon hydrogen will play in the future energy mix for the UK.

He said that he was looking forward to working with the Council, alongside Minister Stuart, to realise the Government's ambition for 10GW of hydrogen production capacity in the UK by 2030, with at least half of this coming from electrolytic hydrogen.

Item 6: Ministerial Update, Minister Stuart (MS):

MS introduced himself to the Council members. .

He highlighted some of the BEIS policy achievements since the last meeting of the Council in May. This included the opening of the first electrolytic allocation round under the Hydrogen Production Business Model and Net Zero Hydrogen Fund.

He noted the appointment of Jane Toogood as UK Hydrogen Champion, welcoming her to the role.

MS emphasised his commitment to developing a UK hydrogen economy and securing the economic opportunities and supply chains that it offers for the UK.

MS stated that Government has provided a clear long-term signal to investors in terms of ambition and policy framework and called on industry to bring forward projects on the ground and seize the exciting opportunities low carbon hydrogen presents for the UK.

He noted the critical role that the Council plays in engaging with Ministers and Officials to realise Government's hydrogen ambitions. He is looking forward to co-chairing the Council, alongside Jane Toogood, and working with members over the coming years to drive investment and deliver a world leading UK hydrogen economy.

Item 7: Introduction to H2 Champion and HAC reset, Jane Toogood & Iona Mylek, Deputy Director for Hydrogen Portfolio and Strategy (JT & IM):

JT gave the Council a short update on her role as UK Hydrogen Champion for industry. She has engaged many stakeholders across the hydrogen value chain and is developing a report to synthesise insights from this engagement and propose a set of recommendations for BEIS ministers on how further government and industry action could help to ensure that collective hydrogen ambitions are met.

IM discussed proposals to reset the HAC to have even greater focus on delivery of key government commitments over the next two years, building on the excellent work to inform the development of the Hydrogen Strategy and key policy schemes so far.

The Council discussed changing the name of the Council to Hydrogen Delivery Council.

Item 8: Actions from Previous Meeting & Closing Remarks – Jane Toogood (JT)

JT thanked BEIS and DfT colleagues for their presentations to the Council.

Industry is ready and keen to engage on all issues raised in this meeting, including on expediting policy development.

JT thanked members for their engagement in the Council. The next Council meeting will likely take place in March 2023.