

## Hydrogen Delivery Council

Fifteenth Meeting – Summary

26 March 2025

#### **Attendees**

#### Co-Chairs:

Minister Jones, Minister of State at the Department for Energy Security and Net Zero, and the Department for Business and Trade.

Jane Toogood, Council Industry Co-Chair.

#### **Council members:**

Organisation	Name	Role
Arcadia E-fuels	Andy McNeill (Deputising for Amy Hebert)	UK Business Development Manager
BOC Linde	Armando Botello	Business President, Region UK & Ireland
ВР	Matt Williamson (Deputising for Louise Kingham)	Business Development Director, Hydrogen UK
Future Energy Networks	Erica Brown (Deputising for James Earl)	Head of Policy
Equinor	Alex Grant	VP, Carbon Markets – Senior Advisor – Policy and Regulation
Hydrogen Energy Association (HEA)	Emma Guthrie	CEO of the HEA
Hydrogen UK (HUK)	Clare Jackson	CEO of Hydrogen UK
Imperial College London	Prof Nilay Shah	Director, Centre for Process Systems Engineering
Inovyn	Wouter Bleukx	Business Director, Hydrogen
ITM Power	Tim Calver	Commercial Director
Johnson Matthey	Andy Walker (Deputising for Eugene McKenna)	Group Government Affairs Director
Macquarie	Florence Deschuyteneer (Deputising for Nicholas Gole)	Senior Vice President
Mitsubishi UFJ Financial Group	Andrew Doyle	Executive Director
National Energy Systems Operator	Angus Paxton (Deputising for Julian Leslie)	Head of Gas and Whole Energy Network Development
National Gas	Jon Butterworth	CEO
Ofgem	Akshay Kaul	Director General, Infrastructure
Orsted	Duncan Clark (Deputising for Olivia Breese)	Head of Region UK
Progressive Energy	Chris Manson-Whitton	CEO

RWE	Richard Sargent (Deputising for Sopna Sury)	COO, Hydrogen of RWE Generation SE
Ryze	Ben Madden (Deputising for Jo Bamford)	Chief Technical Officer
Shell	Amir Mansouri (Deputising for Paul Bogers)	Shell's Project Director for Holland Hydrogen 1
Siemens Energy	Darren Davidson	Vice President, UK and Ireland
SSE Thermal	Hannah Bronwin (Deputising for Alistair Phillips-Davies)	Business Development Director, SSE Thermal
Storegga	Sarah Potts	Head of Hydrogen
Trades Union	Anna Markova	Policy Officer for Industry and Climate
Congress (TUC)	(Deputising for Kate Bell)	
UK Infrastructure Bank	Rajesh Kedia	Director (Hydrogen & Nuclear)

#### Observers:

Organisation	Name	Role
Department for International Trade	Josh Lawrence	Head of Hydrogen, Low-carbon Heat, CCUS sectors
Department for the Economy Northern Ireland	Edward Kerr	Head of Green Gas Team
Welsh Government	Professor Ron Loveland	Energy Advisor
Welsh Government	John Howells	Director Climate Change
Infrastructure Projects Authority	Rich Denny	Project Lead: CCUS & Hydrogen
Department for Transport	Bob Moran	Deputy Director, Decarbonisation Strategy
Department for Transport	Sophia Berry	Head of Net Zero Policy
Scottish Government	Margo MacIvor	Head of Hydrogen Policy and Funding and Sub Surface Energy Systems
Department for Energy Security and Net Zero	Paul Monks	Chief Scientific Adviser
UCL Energy Institute	Paul Dodds	Industry Chair of Low Carbon Hydrogen Standard & Certification Working Group: Professor of Energy Systems
Ensus UK	Grant Pearson	Industry Chair of Offtaker Working Group: Chairman Ensus UK
Siemens Energy	Matthew Knight	Industry Chair of Production Working Group: Head of Market and Government Affairs

Department for Energy Security and Net Zero	Sophie Jones	CEO, Digital & Energy Services Chair of Hydrogen Regulators Forum Head of Hydrogen Systems, Regulation
		and Markets
Waters Wye Associates Ltd	Nick Wye	Industry Chair of Transportation & Storage Working Group: Director

**Also in attendance,** officials from Department for Energy Security and Net Zero and Department for Transport.

**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.

## <u>Item 1: Co-Chair and Council Introductions</u>- Minister Jones (MJ), Minister of State at the Department for Energy Security and Net Zero (DESNZ), and the Department for Business and Trade and Jane Toogood (JT), Industry Co-Chair

Jane Toogood (**JT**) welcomed everyone and noted that Minister Sarah Jones (**MJ**) had to unexpectedly leave after 30 minutes due to urgent business. She mentioned that the agenda is shorter but more detailed, focusing on Hydrogen to Power and the Transport & Storage Working Group update, two crucial topics for progress. **JT** congratulated Paro Konar (**PK**) in her new role as Director General for the Major Decarbonisation Projects Group in DESNZ.

In addition, **JT** emphasised hydrogen's vital role in the global energy transition, with its significant potential to shape future energy systems worldwide.

There were no outstanding actions from the previous meeting, so **JT** then passed over to **MJ**, who provided some opening remarks to the Council.

**MJ** apologised for having to leaving early, as she had to attend a select committee. **MJ** reflected on the last HDC meeting in October, emphasising hydrogen's dual role in supporting both the economic growth and clean power by 2030 missions.

In MJ's updates she highlighted how much has happened since October 2024:

- The Clean Power Action Plan, published in December 2024, underlines the importance of hydrogen to power in a clean power system.
- A commitment from Government for Carbon Capture with over £20 billion of funding to launch the carbon capture, utilisation and storage industry, paving the way for the first large scale hydrogen production projects.
- The hydrogen to Power consultation response was published, paving the way for
  establishing a new Hydrogen to Power (H2P) business model, which will play a
  critical role in supporting the deployment of H2P capacity. The business model will
  help ensure the continued security of supply and clean power objectives, while
  providing decarbonisation pathways for unabated gas generation.
- A consultation on the design of the Gas Shipper Obligation, the funding mechanism for the Hydrogen Production Business model, to ensure there is robust support for critical early hydrogen production projects.
- The formation of the Major Decarbonisation Projects Group within DESNZ, led by PK with Stefaine Murphy (SM) taking on responsibility for the Hydrogen Directorate within DESNZ. The new structure will bring more coherence to the development of hydrogen, CCUS and greenhouse gas removal technologies within the department.

#### MJ also highlighted upcoming progress:

- On the first Hydrogen Allocation Round. Low Carbon Hydrogen Agreements are continuing to be signed with the successful projects, with the process expected to be completed in early 2025. When completed, these projects will lead to over £400 million of investment across the UK, and the creation of hundreds of new jobs.
- And next week, the Hydrogen to Power Call for Evidence will be launched which seeks to gather technical information to help us understand in more detail the type of innovative H2P projects that could deliver rapidly. This will help government consider the value, potential options, and risks associated with innovative H2P projects that plan to deliver by 2030.
- Also, in the next fortnight, there will be an announcement on the next stage of the HAR2 process. This will be an important milestone, and there is anticipation for collaboration with industry to deliver the vision for a thriving low carbon hydrogen economy in the UK.

**MJ** also reflected on the value of the last Hydrogen Strategy Update to the Market, published in December as promised, which provides an indication of the progress made in hydrogen policy. **MJ** concluded her remarks by emphasising that she wants to be as supportive as possible, and the spending review is coming up which is significant. The progress made demonstrates the government's commitment of working together with industry.

**PK** thanked **JT** and **MJ** and then introduced herself in her new role as Director General for the Major Decarbonisation Projects Group. In this capacity, she aims to significantly enhance senior leadership to address critical areas of decarbonisation, and reiterated as **MJ** said, that the creation of this designated resource shows governments commitment to these important and complex projects and is a testament to the work already done by government and industry together.

**SM** expressed her congratulations to **PK** appointment as Director General, aligning with the positive comments and updates shared by the Minister.

**SM** proceeded to provide a further policy update including:

- Hydrogen Strategy Update published in December 2024.
- Making progress with HAR1 contract signatures, aiming for completion early this year.
- The Second Hydrogen Allocation Round (HAR2) was launched in December 2023, receiving 87 applications totalling over 2.8GW in potential capacity, with the next stage to be announced shortly.
- Progressing with consultations on the Gas Shipper Obligation.
- A Hydrogen to Power Business Model will be introduced to accelerate deployment of hydrogen-powered electricity generation.
- Launching Call for Evidence next week to seek industry input for innovative hydrogen to power projects that plan to deliver by 2030.
- The Department for Business and Trade Advanced Propulsion Taskforce has made progress in hydrogen propulsion manufacturing, with the next meeting set for May.
- The Government's Phase 2 spending review is ongoing.
- The team is committed to providing clearer timelines on key initiatives, including Transport and Storage Infrastructure and the role of low-carbon hydrogen in achieving the UK's Clean Energy Superpower goals.

**JT** then opened the floor to questions and comments.

Council members welcomed these remarks and raised points on topics including:

- Maximising value for money in existing hydrogen investments, particularly in HAR, and aligning them with regional and project-specific needs.
- Updating policies following the Spending Review (SR) regarding HAR funding and future frameworks.
- Importance of early project deployment.
- Advancing HAR2 and how industry can input into the process to improve future rounds through more coordinated, industry-driven approaches.
- Ensuring the readiness of storage and pipeline infrastructure.
- Time sensitive nature of hydrogen opportunities and the need for swift decisions to unlock projects and job creation.
- Finalising hydrogen uses cases, including synthetic fuels, and focusing on creating viable business cases across various models with industry collaboration.

At this point **MJ** thanked the members for their continued involvement in the Council and left the meeting.

The Department for Transport environmental Director Ann-Therese Farmer (**ATF**) introduced herself outlined the work she covers on environment and decarbonisation strategy as well as the department's work on low carbon fuels, including the renewable transport fuel obligation and all our work on sustainable aviation fuel.

**ATF** thanked DESNZ for the engagement as hydrogen is on their critical path deprivation of transport, particularly so in maritime and aviation.

**ATF** thanked the council for having DfT and looks forward to working together.

# <u>Item 2: HDC Industry Co-chair Review: -</u> Stef Murphy (SM), Director of Hydrogen and Industrial Carbon Capture at the Department for Energy Security and Net Zero (DESNZ).

The Director of Hydrogen and Industrial Carbon Capture, **SM** set out the process for reviewing the current Council Industry Co-chair. A role with a time-limited two-year term.

**SM** explained that the nominations for a new industry co-chair will open via the HDC Secretariat.

- **SM** explained the nomination process which will be guided by three main criteria: engagement in the Council or wider industry, a broad scope of interest and involvement across the hydrogen value chain, and the commitment to diversity and inclusion.
- Nominations for co-chair can be made by Council members, Working Group chairs and DESNZ SCS. The current co-chair is eligible for nomination for a second term.
- The nomination period will last two months, closing on May 30. The new co-chair will be introduced at the summer HDC meeting.
- This role presents an opportunity to shape the direction of the Council and influence the ongoing development of Government hydrogen policy.
- **SM** also took a moment to thank **JT** for her leadership of the Council, committing countless hours to guiding the Council, leading it toward impactful outcomes that have played a crucial role in shaping and informing Government policy.

### <u>Item 3: Hydrogen to Power Update:</u> - Wil Knight (WK), Head of Hydrogen to Power at the Department for Energy Security and Net Zero (DESNZ).

**JT** handed over to Wil Knight **WK**.

**WK** outlined the Government's approach to hydrogen to power (H2P), its role in the Clean Power Mission, and how it supports energy security objectives. He also outlined the next steps, which includes the call for evidence set for release next week.

The key messages included:

 H2P plays a critical role in the Government's Clean Power Action Plan, which includes a projected need for 40-50 gigawatts of dispatchable, long-duration capacity by 2030.

- H2P is seen as a key technology in providing low carbon dispatchable generation, at a range of scales from large-scale deployments and smaller-scale peaking capacity. It's also key for supporting the decarbonisation of existing unabated gas generation, with the introduction of decarbonisation readiness requirements for new and substantially refurbishing combustion power plants starting in February 2026. This ensures that new capacity can transition to hydrogen or carbon capture storage.
- The Government's H2P approach is supported by stakeholder engagement, including the Expert Working Group, which held its first meeting in February.
- The next steps include the upcoming call for evidence, a market engagement document by late spring, and ongoing development of a hydrogen power business model. This will be followed by heads of terms and further design details.

Additionally, DESNZ have commissioned consultants Baringa to update cost assumptions for H2P, with stakeholder engagement ongoing. This research will help strengthen DESNZ's H2P evidence base.

The Government is committed to advancing H2P as a key technology in delivering a clean power system, and feedback on the proposed policy framework is encouraged.

In discussion, the Council raised questions and comments including:

- Initial thoughts on regional prioritisation for H2P and where it could provide the most system benefits.
- Thoughts on what the minimum scale for H2P should be, and whether there was a minimum scale considered in the call to evidence process.
- The flexibility of H2P, particularly in terms of grid blending.
- Hydrogen pricing from a policy perspective and what extent imports are being considered in this context.
- Whether space allowance for hydrogen-ready and natural gas systems up to 100% have been considered, and whether blending hydrogen-ready stations with natural gas will be enabled through HPBM or a separate policy area.

### <u>Item 4: Work of the Market Frameworks Subgroup</u> - Nick Wye (NW), Chair of Transport & Storage Infrastructure Working Group.

JT passed over to Nick Wye NW.

The HDC Transport & Storage Infrastructure Working Group was established in October 2022 to identify barriers to the development of hydrogen transportation (pipelines) and storage infrastructure and use this information to guide Government priorities in the sector.

This discussion focused on work undertaken by the group, started in autumn 2023, to consider shortcomings in the incumbent market framework for hydrogen and options for hydrogen networks.

The updates include:

The market frameworks subgroup has completed the first phase of their work, during which they developed three possible models. These models ranged from a bilateral model to having an intermediary to manage hydrogen contracting and distribution. Moving forward,

the subgroup is now focusing on the next phase, which will consider framework needs of early networks.

The group is meeting regularly, with the next session planned for the end of April. The goal is to focus on the practical and operational needs of initial hydrogen networks, for example considering how frameworks can ensure commercial and physical balance of hydrogen and offer views on whether legislative changes or new licences may be needed.

Feedback from the wider community will be gathered through sub-group representatives, ensuring that the group's work is informed by broader sectoral perspectives.

The focus is on moving quickly but effectively to support early-stage hydrogen networks, with a target for a report in summer 2025.

The Council raised questions and comments including:

- Creating a roadmap that specifies key milestones and target dates.
- Important to take lessons from CCUS, particularly in aligning stakeholders and involving stakeholders.
- Where does blending fit into the current approach, and is it part of the subgroup's work?

<u>Item 5: Working Group progress against Work Plan</u> Summary - Paul Henderson (PH), Deputy Director Hydrogen Strategy at the Department for Energy Security and Net Zero (DESNZ).

JT passed to PH.

PH provided a short update on the Council workplan including:

- The work plan reflects the need to refresh certain aspects and update objectives.
- Working groups, in collaboration with the secretariat, have been refining these objectives to align with the government's missions
- There has been significant cross-fertilisation between the different groups, which is a positive development.

**PH** explained the strong emphasis on pushing forward with current projects and ensuring their successful execution. The focus is now on clarifying the direction, addressing practical issues, and making progress on key projects.

#### Item 6: Closing Remarks & AOB - Jane Toogood (JT) Industry Co-Chair.

**JT** thanked everyone for their contributions and the progress made on specific projects and highlighted the importance of ongoing discussions outside of Council meetings to keep momentum. **JT** also thanked DESNZ officials for their coordination. The next meeting is to be scheduled for Summer 2025.