

Hydrogen Delivery Council

Twelfth Meeting – Summary

27 November 2023

Attendees

Co-Chairs:

The Rt Hon Claire Coutinho MP, Secretary of State for Energy Security and Net Zero.

Lord Callanan, Minister for Energy Efficiency and Green Finance, Department for Energy Security and Net Zero.

Jane Toogood, former UK Hydrogen Champion and former CEO of Catalyst Technologies at Johnson Matthey.

Council members:

Name	Role	Organisation
Wouter Bleukx	Business Director, Hydrogen	Inovyn
Paul Bogers	Vice President, Hydrogen	Shell
Olivia Breese	CEO Power-to-X and Senior Vice President	Orsted
Martin Cook (Deputising for Jon Butterworth)	Chief Commercial Officer	National Gas
Andrew Doyle	Executive Director	Mitsubishi UFJ Financial Group
James Earl	Gas Goes Green Champion	Energy Networks Association
Sam French	Business Development Director	Johnson Matthey
Rajesh Kedia (deputising for lan Brown)	Banking Director and Investments	UK infrastructure bank
Ben Madden (Deputising for Jo Bamford)	Chief Technical Officer	Ryze
Chris Manson-Whitton	CEO	Progressive Energy
Dominic Martin (deputising for Alex Grant)	VP, Carbon Markets – Senior Advisor – Policy and Regulation	Equinor
Sarah Potts	Hydrogen and CCS Process Technical Authority	Storegga
Catherine Raw (Deputising for Alistair Phillips-Davies)	Managing Director	SSE Thermal
Dennis Schultz	CEO	ITM Power
Steve Scrimshaw	Vice President	Siemens Energy
Prof Nilay Shah	Director, Centre for Process Systems Engineering	Imperial College London
Sopna Sury		RWE
Steven Thompson (Deputising for Armando Botello)	Executive Director On-Site and Bulk GB)	BOC Linde
Matthew Williamson (Deputising for Louise Kingham)	Business Development Director, Hydrogen, UK & G&LCE Hydrogen – UK	BP

Working Group Chairs:

Name	Role	Organisation
Grant Pearson	Chairman	Ensus
Matthew Knight	Head of Market and Government Affairs	Siemens Energy

Observers:

Name	Organisation
Debbie Baker	Aviso
Emma Bulmer	Deputy Director, HICC, Department for Energy Security and Net Zero
Rich Denny	Infrastructure and Projects Authority
Simon Green	Deputy Director, HICC, Department for Energy Security and Net Zero
John Howells	Welsh Government
Edward Kerr	Northern Irish Government
Paro Konar	Director, HICC, Department for Energy Security and Net Zero
Josh Lawrence	Department for Business & Trade
Professor Ron Loveland	Welsh Government
Will Lochhead	Deputy Director, HICC, Department for Energy Security and Net Zero
Andrew Mackenzie	Department for Transport
Professor Paul Monks	Chief Scientific Adviser (CSA) - Department for Energy Security and Net Zero
Bob Moran	Department for Transport
Iona Mylek	Deputy Director, HICC, Department for Energy Security and Net Zero
Katie Ostheimer	Deputy Director, HICC, Department for Energy Security and Net Zero
Margo MacIvor	Scottish Government
Robert Schulz	German Hydrogen Council
James Walker	Ofgem

Also in attendance, officials from: Department for Energy Security and Net Zero, Infrastructure and Projects Authority, Ofgem, Welsh Government, Department for Business & Trade, Department for Transport and Scottish Government.

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: Chair Introduction & Ministerial Update - Jane Toogood & Lord Callanan (JT & LC)</u>

JT opened the meeting with feedback on her recent engagement with industry including with the German Hydrogen Council.

Item 2: Industry Narrative Feedback & Next Steps - Sam French (SF)

The HDC was tasked with producing a shared industry narrative for the Hydrogen Sector. SF led the subgroup who completed this project and presented the draft narrative to members.

The narrative included:

- The vital role of hydrogen in the low carbon energy mix and for energy security.
- Essential applications of UK hydrogen such as hard-to-decarbonise industries, chemical processes, sustainable fuels, heavy duty vehicles and to balance the energy system.
- The forthcoming hydrogen development journey in both near and long term.
- Press, public and NGO perceptions.
- Addressing negative messages and suggesting key messages for investors and industry.
- The inward investment picture.

The Council discussed whether the narrative could do more to emphasise that hydrogen is safe.

The Council agreed that the narrative was owned by the HDC industry members and members must gain consent before using.

<u>Item 3: SoS Introduction & Q&A - Claire Coutinho, Secretary of State for Energy</u> Security and Net Zero (SoS)

SoS joined the meeting virtually from the Global Investment Summit, and spoke about her commitment to getting the hydrogen sector the investment that it needs. She was delighted to take on the role of co-chair with LC and JT.

SoS spoke about the hydrogen stakeholder roundtable she chaired in November. At this roundtable, **SoS** was asked for certainty and clarity on timelines. **SoS** listed some recent achievements: the Energy Act 2023, the UK-German hydrogen partnership, supply chains support through the recently announced Green Industries Growth Accelerator (GIGA) fund to support clean energy manufacturing, as well as progress on support for hydrogen transport and storage infrastructure; these demonstrate Government's commitment to providing the hydrogen sector with the best possible policy framework and support.

SoS thanked the Council for all its work and opened the floor to questions. Council members welcomed these remarks and raised points on topics including:

- Operationalising the UK-German hydrogen partnership.
- Importance of the upcoming hydrogen policy announcements to be made in December and their alignment with CCUS progress.
- UK company involvement in skills and training for the hydrogen sector.

SoS thanked the Council members for their questions and said she was looking forward to the next meeting of the HDC.

<u>Item 4: Hydrogen publications and announcements in December - Head of Hydrogen Strategy, Department for Energy Security and Net Zero</u>

The DESNZ Head of Hydrogen Strategy outlined the publications and announcements due in December, which would cover all aspects of the value chain, unlocking near term delivery and provide longer term policy certainty. This would reinforce that hydrogen remains a key priority for the UK to deliver net zero, energy security and related economic benefits.

She highlighted the Hydrogen Strategy Delivery Update to be published at the midway point between the UK Hydrogen Strategy (2021) and its five-year refresh. This would summarise the announcements made alongside it, provide a retrospective reference guide to what has been achieved since the publication of the Hydrogen Strategy, set out near term priorities, and include an updated UK Hydrogen Economy Roadmap for the 2020s and early 2030s.

Council members welcomed the substantial update and raised points and questions on topics including:

- The Hydrogen Village Trial decision.
- Timeline to publish a decision on blending at transmission level.
- Use of hydrogen in transport and the role of the RTFO in this.
- Alignment of December hydrogen announcements and CCUS cluster sequencing.
- Timings and value of HAR2 and HAR3.

Item 5: Break

<u>Item 6: Working Group progress against Work Plan - Jane Toogood (JT)</u>

JT Reiterated the importance of the wider stakeholder engagement through the Working Groups and explained the new standing agenda item for deep dive updates from Working Group chairs. **JT** provided a brief summary of Working Group progress.

Item 7: HDC Working Group deep-dives:

Offtaker Working Group - Grant Pearson (GP)

GP set out recent progress made by the Offtaker Working Group including:

- 3 meetings on key objectives including report on demand barriers.
- Establishing offtaker sub-groups on different workstreams.
- Overseeing the work of a separate subgroup on Internal Combustion Engine.

GP noted that many very different sectors would need to make substantial changes to their technology to enable them to use hydrogen. The challenges for each were different. **GP** also raised the potential of broadening the Working Group membership to include other offtakers.

Questions and comments were raised on topics including:

- Future industrial demand and offtakers.
- Sequencing and timing of hydrogen production to meet hydrogen demand.
- Investor confidence in upstream hydrogen supply.
- International case studies.
- Increasing project costs.

Production Working Group - Matthew Knight (MK)

MK set out recent progress made by the Production Working Group including:

- September workshop and subsequent work to support DESNZ to produce the Hydrogen Production Roadmap.
- The role of first of a kind hydrogen production projects.
- The importance of building key transport and storage facilities.
- The upcoming NESO strategic spatial plan in 2026.

Council members welcomed MK's presentation and raised questions and comments on topics including:

- The cost and access to power for hydrogen production.
- The need to expedite first-of-a-kind hydrogen transport and storage projects and the future role of the FSO in developing a strategic special plan.
- The role of long-term hydrogen storage in a future net zero electricity system.

<u>Item 8: UK Infrastructure Bank (UKIB) Hydrogen & CCUS Strategy Update - Rajesh Kedia (RK)</u>

RK outlined UKIB's mission: to partner with the private sector and local government to increase infrastructure investment in pursuit of its two strategic objectives of achieving net zero and supporting regional and local economic growth. UKIB had recently published a green hydrogen investment strategy update and set out what their offer was on hydrogen.

Council members welcomed UKIB's presentation and raised questions and comments on topics including:

- Hydrogen transport & storage and infrastructure investments.
- Clarity over production pipelines for investment decision making.
- Lessons learned from CCUS clusters approach.
- The role of government-backed export credit agencies in supporting offtakers to increase their competitiveness and investability.
- Investing in project development stages.
- Solutions and remaining problems of financing and bankability of projects.
- Considerations for smaller projects.
- The lack of experienced project sponsors.
- A credit view of offtakers.
- EPC contract risk structure.
- Debt financing template for first HAR1 projects which can be used for future allocation rounds.

Item 9: Closing Remarks & AOB - Jane Toogood (JT),

JT thanked the Council members for their participation in the meeting.

There were no outstanding actions from the previous meeting.

The next Council meeting is due to take place Q1 2024.