

Future of Gas

Minutes from the Steering Group meeting on the 17th November 2021

Location

Virtual Event

Attendees

Martin Cook (Chair) – National Grid Gas
Alex Haffner – National Grid ESO
Lorna Millington – Cadent
Sam Hughes – Citizens Advice
Thomas Koller – Energy Networks Association
Robin Cannings – Storengy
David Mitchell – Chemical Industries Association
Joseph Howe – Thornton Energy Institute
Richard Fairholme – Uniper
Angus Paxton – Afry
Lisa Fischer – E3G
Sam French – Johnson Matthey
Ray Arrell – Regen
Marcus Newborough – ITM
Steven De Ranter – IUK
Will Webster – OGUK
Kirsty Ingham – Centrica
Julie Cox – Energy UK
Chris Logue – National Grid Gas
Neil Rowley – National Grid Gas

Apologies

Corin Taylor – DNV GL
Victoria Mustard – Xoserve
Hywel Lloyd – UK100
Alexandra Howe - BEIS
Rob Hewitt – BEIS

Guests

Harriet Reece – BEIS
Sophie Bull – BEIS
Lea Slokar – Ofgem

Welcome and Introduction:

The chair, Chris Logue welcomed the attendees and proceed to introduce the new chair for the group: Martin Cook. Martin is the National Grid Gas Commercial Director and informed the group how delighted he was to be taking over from Chris, who will now take up the position as National Grid representative on the group. Martin concluded the housekeeping section with setting the agenda for the meeting.

Members update:

Members provided updates to the group on key areas of interest.

BEIS covered several items. Firstly, Sophie Bull was introduced, who will be leading the Future of Gas System workstream. The recent COP 26 event was mentioned and opportunity to harness momentum and move towards unlocking hydrogen potential i.e. hydrogen commitment which commit signatories to make affordable, low carbon and renewable H2. BEIS also published Net Zero Strategy in October (i.e. hydrogen business models, grants for low carbon heating systems and boiler upgrades), which includes several interesting points for the gas industry.

ENA: Recent publications highlighted; firstly, Innovation impacts, which focused on the network innovation projects underway and jobs these will be creating. Secondly, System for all seasons report, how wind assets could contribute to H2 production and the whole energy system. Link to the documents:

Innovation: <https://www.energynetworks.org/industry-hub/resource-library/gas-goes-green-innovation-impacts.pdf>

All Seasons: <https://cdn.prgloo.com/media/download/cf18fb0354884d8eb3582869b8cc386e>

O&GUK: Provided a few updates. O&GUK are now monitoring H2 projects their members are doing and or involved in as part of North Sea transition deal i.e. Equinor, BP projects examples involving the traditional gas supply chain. There are also large green H2 projects that will emerge over time that O&GUK want to work with. Secondly, a new initiative that is in its infancy called Net Zero Industry, is aiming to bring more dialogue between potential producers and users of H2. For instance, a recent poll was held with their members on what fuel they intend to use going forwards. As a new initiative, this will develop over the next few months. Lastly, insight from COP 26 – it was noted that there was lots of interest in the H2 sector globally which was pleasing to see, Chile for example are hoping to produce H2 to meet some of their demands as well as looking for exporting opportunities.

Regen: Responded to BEIS H2 business models and low carbon H2 standard. Regen has been working on local area planning for Dorset on their route to Net Zero considering their geographical energy benefits. Some recent analysis on the pipeline of offshore wind development and those that are focused on developing wind for dedicated H2 production was also highlighted. Several links are provided below:

Consultation Response: <https://www.regen.co.uk/regen-responds-to-the-uk-hydrogen-strategy-consultations/>

Dorset: <https://www.regen.co.uk/project/low-carbon-investment-opportunities-in-dorset/>

Wind Pipeline: <https://www.regen.co.uk/graphic-of-the-month-the-offshore-wind-pipeline/>

Faces of the Energy Transition – COP26 related: <https://www.regen.co.uk/project/faces-of-the-energy-transition/>

University of Chester: The recent Cluster sequencing announcement was highlighted. With the key points that the UK Government has decided on two clusters (HyNet and East Coast cluster, with reserve of Acorn project). Second phase of clusters is ongoing. Selected track 1 clusters aiming for H2 production and Carbon capture by mid-2020's.

ITM: Highlighted that the Cologne 100MW Green H2 refinery is progressing. In addition, they have reached phase 2 FEED for 100MW in Humberside green H2 facility. Lastly, ITM are building a second factory in Sheffield, to produce 5GW per annum of electrolysers by 2024.

Cadent: Mentioned their recent H2 10 Point Plan, which for example includes items like: net zero construction (H2 fuelled construction cabins), packages to support Cadent employees install low carbon heating, moving towards H2 blending from 2025, HyNet pipeline by 2027 – supporting HyNet production facility, moving towards H2 vehicles, H2 education and training programmes. Link below:

<https://cadentgas.com/tenpointplan>

Pre-Debate on Decarbonising Heat in Homes

Afry and E3G introduced a pre-debate on the issues around decarbonising heat in homes. The aim of the session was to explore the topics and questions that the group felt would be important to explore as part of this upcoming debate. The intention is to deliver this debate in the next meeting, in January 2022. The starter questions below were presented to the group and comments invited for further areas.

- **Heat pumps:**
 - Under what circumstances are heat pumps the best suited solution?
 - What are the risks if they not deliver the needed comfort?

- What is the impact to the natural gas network?
- **Hydrogen boilers:**
 - Uncertainty on GHG upstream emissions (i.e. leakage, venting)
 - What are the air pollution and safety risks of H2?
 - How can we dictate what geographic region must switch to H2? How does this disrupt the commercial framework?
- **Why pays/ benefits:**
 - What are the costs in disruption, considering the two above systems?
 - How should decisions be made on network costs (gas and/or electricity), how are costs appropriately allocated? i.e. shrinking vs growing energy systems and how these costs are spread.
 - How can consumers choose?
 - What are the impacts to building stock? i.e. new builds vs existing homes? How can we reconcile Listed or Graded properties and their restrictions with net zero heating systems?
 - Urban vs rural needs?
- **Who decides?**
 - Individuals? Local Governments?
- **By when are the decisions needed?**
 - i.e. 2026?

Gas Goes Green

The ENA presented on the Gas Goes Green (GGG) Programme. GGG is a programme of work supporting zero carbon gas grids in GB, which started through, what was at the time one of the first net zero studies since the government commitment to net zero back in 2019. The study showed there was a strong role for decarbonised and renewable gases (biomethane and hydrogen) in the 2050 energy mix based on economic benefits (£13bn a year less cost than a more electrified, lower gas scenario). A number of deliverables have been met in 2021, including work around: The cost of converting GB gas network to H2, Timeline of legislation / regulatory changes to enable H2 blending, Mapping economic and social impact of reduced gas networks, Defining GB's smart gas grid and Developing a green gas data dashboard. The GGG programme has spent several studies focusing on the H2 cost to consumer during 2020 and 2021 which were outlined to the Steering Group. The presentation also described a cost to consumer tool that is being developed and lastly the group were engaged on the possible direction for future work in this area.

GMaP: Long Term Access Review (LTAR) Industry Consultation

National Grid presented on the LTAR work outlining the background, the high-level options, and the current project status. This work is seeking to explore the future of the capacity regime to better meet needs of users of the NTS. To date the project has reviewed the potential needs and options for a future NTS access regime and shared these through an industry consultation document which closes at the end of November. The consultation highlights 7 different solution options, ranging from incremental to transformational regime change. Once the consultation closes, the responses will be reviewed and the next steps in the project determined.

Programme Direction

National Grid presented on the proposed approach to 2022 for the FOG and GMaP programme. Firstly, the 2021 approach and programme outputs were recapped, which included: 7 FOG debates and 7 GMaP outputs over 5 topic areas. The policy landscape was then reviewed, it showed a clear direction for the future of gas through such releases as the H2 strategy, Net Zero strategy, Net Zero review, and the Heat and Building strategy. 2022 will be equally as busy with numerous technical and economic details set to be in focus. It was confirmed that the 2021 approach for the programme would be built on in 2022. There are still many big questions which the FOG SG debates should seek to explore. Some examples were provided, and National Grid confirmed that members views on the questions of interest and who could lead will be sought. In regard to the GMaP direction for 2022, a twin approach was highlighted: firstly, H2, Blending & Natural Gas market theme areas for which projects would be linked to were confirmed. Secondly, National Grid confirmed it intends to develop a live market development roadmap out to 2030. National Grid explained that this would build off the recent blending roadmap work (to come out before December), and that now is the right time to undertake this work as policy direction has provided the platform to start understanding when market change could be needed.

Meeting Close

The Chair thanked all for their participation and closed the meeting.

New Actions

Action	Owner	Deadline
The 2022 SG meeting invitation to be circulated	National Grid	10 th December 2021
FOG Debates engagement. National Grid to request input into the potential FOG Debates for 2022. Member to feedback views.	National Grid & Group Members	Process commences with the circulation of the November SG minutes