

Future of Gas

Minutes from Steering Group meeting on 14th July 2021

Location

Virtual Event

Attendees

Chris Logue (Chair) – National Grid
Angus Paxton – AFRY
Bill Goode – National Grid
Bogdan Kowalewicz – Ofgem
David Mitchell – Chemical Industries Association
Jon Cranmer – National Grid
Julie Cox – Energy UK
Kirsty Ingham – Centrica
Lisa Fischer – E3G
Lorna Millington – Cadent
Ned Abbs-Brown – National Grid
Neil Rowley – National Grid
Pavanjit Dhesi – Interconnector UK
Professor Joe Howe – Thornton Energy Institute
Ray Arrell – REGEN
Richard Fairholme – Uniper
Rob Hewitt – BEIS
Robin Crannings – Storengy
Rosannah East – National Grid
Sam French – Johnson Matthey
Sam Hughes – Citizens Advice
Susannah Ferris – National Grid
Thomas Koller – ENA
Will Webster – OGUK

Apologies:

Alexandra Howe – BEIS
Marcus Newborough – ITM Power
David O'Neil – Ofgem
Corin Taylor – DNV GL
Hywel Lloyd – 100UK
Stella Matthews – Northern Gas Networks

Guests:

Tom Neal – National Grid
Corrina Jones – National Grid
Francesca Bell – OGUK

Welcome and Introduction:

The chair welcomed attendees and confirmed the agenda for the day. The Chair then highlighted a new member of the Steering Group, Stella Matthews from Northern Gas Networks. The chair then welcomed guests to the meeting.

Terms of Reference Review:

National Grid gave a summary of the proposed changes to the Terms of Reference (ToR) for the Group. Key suggestions for updating the Terms of Reference included: changes to the

purpose and the scope of the Steering Group to reflect how the Group has evolved over time; changes to the process of Group membership to allow for more flexibility; and finally flexibility to ways of working and future FOG meetings in recognition of the increase in remote working due to COVID-19.

There was a discussion on the need to ensure FOG SG membership appropriately covers the gas industry value chain, and that industry group terminology is clearly and accurately defined in the ToR.

Members shared their preferences on ways of working going forward. There was a discussion on achieving the balance between allowing for in-person meetings, whilst also being conscious of the fact that members have taken on more work since lockdown and may be forced to choose between meetings if they had to travel again.

Members Update:

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

AFRY gave an update on analysis AFRY have done on benefits of CCUS to the UK economy. The headline is that CCUS is essential to achieving net zero. The Executive Summary has been published and can be found [here](#).

AFRY then gave a summary of the decarbonisation policy landscape in Europe, highlighting that many countries have set climate and energy objectives and announced funding, but that inconsistent regulation is emerging. AFRY then pointed toward other reports on decarbonisation as well as hydrogen projects they have recently been involved in.

NG: ENTSOG have commissioned their own report on the regulation of future hydrogen networks which will be released soon.

Professor Joe Howe raised some issues for AFRY to reflect on including the ongoing cluster sequencing exercise, the UKs hydrogen strategy due to be released imminently, the Mission Innovation agenda and low carbon heat strategy.

OGUK have agreed the North Sea Transition Deal with Government, which includes a commitment to 5GW of Hydrogen. OGUK also had their annual Conference at the beginning of June which highlighted the role hydrogen is likely to play in Europe. One point raised was the potential for a European Hydrogen Index that would form the basis of future hydrogen markets. There is a need to think about how hydrogen will be traded in the future. Finally, there was an update on sustainable taxonomy. An EU taxonomy was developed last year which natural gas was excluded from. Since then the UK has announced they will set up their own green finance taxonomy, which should include natural gas, hydrogen and CCUS.

E3G: CCS is critical for blue hydrogen and there is a need to think about what needs to be delivered by when for blue hydrogen to come on stream.

Johnson Matthey: the cluster sequencing process that BEIS are running will define the first CCS clusters. Submissions were due last week and had to be led by the transport and storage partner, rather than the CO2 emitters. The announcement for which clusters will decarbonise first is due in October and the clusters chosen will determine the first blue hydrogen projects.

Regen had various updates for the group. In May Regen wrote a letter to the Energy Minister about the Heat and Buildings Strategy with some policy recommendations. The letter has been published and can be found [here](#).

They have also been working with Community Energy England, Community Energy Scotland and Community Energy Wales and contributed reports to the 2021 Edition of the Community Energy State of the Sector. The reports can be found [here](#).

Regen also shared a few articles of relevance to the group: one discussing [heat decarbonisation](#) and one on [electricity use and green tariffs](#).

Centrica has a strong desire to be involved in the decarbonisation of energy. They are keen for the Rough gas field to be converted into a hydrogen storage facility. They are also active in heat pumps as well as blending and future billing arrangements.

GGG gave an update on two GGG deliverables that are both under the Consumer Workstream. One is looking at updating the assumptions on the network cost of conversion figures. They are currently tendering for a model to bring together the updated assumptions with the overall costs and benefits of hydrogen to the consumer. The second is a desktop study to look at the impacts of decommissioning parts of the gas network, in terms of cost, regulatory issues, engineering safety issues, and wider social and legal concerns.

Cadent: The hydrogen home that was part funded by BEIS, NGN and Cadent will be open from tomorrow (15th July). Find out more [here](#). In terms of future billing, Cadent are looking at what they can do for blending under the current arrangements.

FutureGrid – FOG Debate

National Grid led the debate on their FutureGrid project, located at RAF Spade Adam. FutureGrid is a technical project looking at whether National Grid's assets are compatible with hydrogen. The project is funded by Ofgem's NIC funding mechanism and has six key partners. Its total cost is nearing £13m and it started this April with a duration of 2 years. The first phase of FutureGrid is focussed on building the hydrogen test facility in an offline capacity, using decommissioned assets. This allows NG as the transmission network to understand how its assets will cope with different blends of hydrogen. Testing will start with a 2% blend of hydrogen with natural gas, before increasing to 20%, and then 100% hydrogen. The second phase of FutureGrid will look at more complicated areas such as compression and deblanding. The project has an ambitious engagement plan as NG are keen to share knowledge on hydrogen and build the case for a National Transmission System for hydrogen.

Citizens Advice: suggested blending is tested on the site soon as blends of natural gas and hydrogen are expected to be distributed into some homes relatively soon.

NG: NG highlighted the work being undertaken by the HyDeploy project. HyDeploy is currently looking to prove the safety case for blending hydrogen into the gas grid at 20% blends at a domestic level, so that project should deliver answers on blending and domestic capability.

OGUK get a lot of questions on what's happening downstream of their sector and raised the benefit of having more visibility of these testing projects.

NG appreciated the feedback and said they will review the current visibility of projects and report back.

NG: also pointed to one of the latest hydrogen GMaP projects which has split the country up into six different regions and mapped out where different projects are happening (Find the report [here](#) – Section 4 has the maps.)

Citizen Advice: there was a question on timelines for the FutureGrid project.

NG: the first phase of the project looking at 2%, 20% and 100% blends of hydrogen is two years long. After this, the FutureGrid team will have greater understanding of what's possible and what might need to change in order to operate the network with hydrogen. As we move into Phase 2, the more complicated areas around compression and deblending will be answered.

FES 2021 High Level Summary

National Grid gave a summary of the 2021 Future Energy Scenarios (FES) which were released earlier this week.

FES Key Messages: There are four key messages included in FES 2021. The first is that there is a need for detailed policy, accountabilities and a focus on sustained delivery of those policies. The second is around consumers and digitalisation, with consumer behavioural change being pivotal to achieving decarbonisation. The third is around markets and flexibility; holistic energy market reform is needed to drive the investment, behaviour changes to achieve net zero and security of supply at a fair cost. The fourth message concerns investment in infrastructure and whole energy systems.

FES Framework: The framework is unchanged from 2020, it still reflects the net zero targets as it did last year. There are four future scenarios, each with different characteristics: steady progression (slowest credible way to decarbonise), system transformation, consumer transformation, leading the way (fastest credible way to decarbonise). Neil Rowley then explained the picture of energy demand in 2020 compared to 2050, followed by the picture of supply in 2050, in the different Future Energy Scenarios.

Read about the 2021 Future Energy Scenarios [here](#).

AFRY asked whether the scenarios have been costed.

NG took the question away and committed to getting back to the group with an answer.

***NG:** FES 2021 has not been costed this year, the last costing exercise was FES 2020. Due to the framework being unchanged and the limited change to underlying technology cost data the decision was taken to not cost this time around. A link to the FES 2020 costing info is [here](#).*

Gas Goes Green 2.1 Update:

Bill Goode gave an update on the Gas Goes Green 2.1 Deliverable on Gas Blending. The project is market based and looking to create a timeline of change required to facilitate hydrogen blending and increased biomethane injection. The timeline covers several aspects relating to what change is needed and when, including change to legislation, regulation, license and code as well as safety GS(M)R change. The next steps are to continue to work up a range of timelines and engage with stakeholders. Publication of the final report should be in August / September.

AOB:

The Chair closed by thanking those that presented and attended the meeting.

Next Meeting:

Wednesday 15th September 2021

Other links from the meeting:

Green washing task force:

<https://www.gov.uk/government/news/new-independent-group-to-help-tackle-greenwashing>

Sign up to Cadent's Green Print Launch Event:

<https://www.workcast.com/register?cpak=1356878729655130>

The European Green Deal: Fit for 55 Package: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en

Actions to complete:

Action	Who is to complete it?	Deadline for completion
Terms of Reference: comments and feedback on proposed version to Rosannah.east@nationalgrid.com	Steering Group Members	28 th July
Terms of Reference: Review of FOG SG membership	National Grid	30 th July
Terms of Reference: circulate finalised version	National Grid	Within the first two weeks of August
Report back to FOG SG on visibility of projects relating to hydrogen / future of gas	National Grid	September Steering Group
Report back to FOG SG on whether the 2021 FES have been costed	National Grid	As soon as possible – See answer above