nationalgrid

Shaping the Future Webinars – Keynote Speech Q&A's

Questions	Answers
Do you see ammonia playing a key role in the energy transition or will it be just hydrogen focused?	Ammonia is emerging as an affordable way to transport hydrogen internationally, avoiding some of the costs of cooling the gas to a transportable temperature. We are assessing this and other global developments as we develop our long-term innovation plan.
Will hydrogen be more secure than natural gas?	This depends on how the policy/market framework and production of hydrogen develop. Hydrogen could be produced through steam methane reforming using existing sources of gas supply to the UK, and/or may come from electrolysis using surplus offshore windpower (and solar on land). Both of these options could be developed in the UK, providing more self-sufficiency. However, it is also possible that a viable global market may develop in hydrogen, subject to demand in different parts of the world.
Do you see the UK as a potential exporter/importer of Hydrogen to/from continental Europe?	There could be export opportunities through implementing Project Union: in GT we are looking at how we can repurpose 2000km of existing gas transmission pipelines - around 25% of the network - and link up clusters at Teesside, Humberside, Grangemouth, Southampton, North West and South Wales to create a backbone which could help accelerate the rollout of hydrogen across the country. However, connecting the backbone to interconnectors at Bacton could open the door for future importing and exporting of hydrogen with European neighbours. Interconnectors already provide reliable, secure and flexibility supply with, for example, the Netherlands and Belgium – this project could add hydrogen to the mix by linking up a UK backbone with the backbone being developed in Europe, enhancing the ability for both sides to adjust supply in response to peaks in demand. In Scotland, there are already plans for exporting hydrogen to northern Germany to help in the latter's energy decarbonisation plans (Scotland draft hydrogen action plan).
The heat and building strategy prioritises heat pumps over hydrogen. Are you assuming that there will be large scale use of hydrogen for residential heating?	This is ultimately a Government policy decision about providing heat, so we cannot assume anything. We are planning development of hydrogen responsibly, using the Future Energy Scenarios to guide us. This incorporates the realistic projections of a wide range of industry stakeholders, combined with what we already know (not least the net zero by 2050 target). Our hydrogen roll-out as presented in Project Union would begin in the industrial clusters, initially decarbonising industry before potential expansion into other sectors.
Do you think consumers take gas for granted?	To a degree, we want consumers to be able to rely totally on our supply capability, but we also value their views on what we can do better as an industry, and what their priorities are. Without their engagement, reaching net zero will be impossible, so we must broaden the conversation about heat, power, industry and transport.

Do you think the recent events with the Russian pipeline mean that the priority of Hydrogen moves at a faster pace around security of supply?	This is a geo-political issue and there will always be movements in global markets which affect security of supply or affect wholesale gas prices (prices hit record lows last year during the first Covid-19 lockdown for example). There is no evidence that Nord Stream 2 issues will hasten the development of hydrogen.
Perhaps a key priority should be - Underpinning energy supply throughout the energy transition to net zero.	We welcome this suggestion and any other proposals for our priorities, which we can test as we continue with our stakeholder engagement programme
Do we need Storage to ensure security of supply?	Yes. Storage facilities connected to our system continue to be predominantly fast cycle, with the potential to both increase stock levels in a small number of days - even in the winter period - and export large volumes of gas onto the NTS within short time periods.
How sure are we that Hydrogen is the right solution? What happens if we realise in 5 years time that the direction needs to be again corrected?	There are a number of no-regrets actions which we can take now, including hydrogen blending which in itself; appliances can run on a mix of upto 20% hydrogen without any substantial changes at all. On the policy side, mandating hydrogen-ready boilers is also future-proof as these will still run on methane until any future adoption of hydrogen for heat and will be the same cost as natural gas boilers.
Is biomethane a distraction? Should the focus be hydrogen levies rather than the green gas levy? Are we risking stranded assets?	We need all decarbonisation options to make progress as soon as possible, and biomethane is an important component. We have a biomethane connection on the National Transmission System, and are happy to create more. There is also a role for biomethane for powering HGVs, a growing market as fleet owners look to reduce their impact on both carbon and the NOx emissions which diesel engines produce.
When will the WGN (Western Gas Network upgrade) project to increase capacity from Milford Haven be completed? Is it financed by customers, as you suggest, or is it part financed by NGGT?	We are due to complete the project at the beginning of 2026. National Grid is working on a programme of upgrading parts of the National Transmission System between South Hook Terminal and Churchover in the Midlands. The upgrades are taking place to allow for more gas to pass through the pipelines at a higher pressure and more efficiently. The major part of the work will be two new stretches of pipeline in Churchover (2km) and between Wormington and Honeybourne (9km). There will also be smaller works at AGI sites along the route in both Wales and England. WGN was part of RIIO-2 final determinations, and Ofgem has approved the need for the project this month (Dec 2021): but the specific costs to customers will be subject to a re-opener process.