HYDROGEN BLENDING



Date	Monday 27 th November 2023
Time	16:00-17:00
Venue	The Macmillan Room, Portcullis House
Chair	Alexander Stafford MP, Chairman of the APPG on Hydrogen
Speakers	 Brett Ryan, Head of Policy and Analysis, Hydrogen UK Jake Tudge, Director of Corporate Affairs, National Gas Richard King, External Affairs Manager, SGN Jane Toogood, Chief Executive, Hydrogen Delivery Council

Theme/ Background information

Hydrogen is one of a handful of low carbon solutions which can help the UK achieve its emissions reductions targets for Carbon Budget Six and net zero by 2050 as well as provide greater domestic energy security. Hydrogen blending refers to the blending of low carbon hydrogen with other gases (primarily natural gas) in pre-existing gas network infrastructure and appliances.

In 2021, the UK Government published the Net Zero Strategy, which sets out policies and proposals for decarbonising all sectors of the UK economy to meet our net zero target by 2050. This supports the preceding publications of the Hydrogen Strategy and the Prime Minister's Ten Point Plan. Building on this, the British Energy Security Strategy doubled our 5GW low carbon hydrogen production capacity ambition to deliver up to 10GW by 2030, with at least half of this coming from electrolytic hydrogen.

In September 2023, the Government published a consultation to help to build the necessary evidence base to determine whether hydrogen blending offers strategic and economic value and meets the required safety standards. The Government is aiming to reach a strategic policy decision in 2023 on whether to support blending of up to 20% hydrogen by volume into the Great Britain gas distribution networks.

This session will discuss the case for hydrogen blending and the role it can play in the UK's hydrogen economy, as well as public perception of hydrogen and whether it acts as a barrier to blending.

Background Information for the Chair

The APPG on Hydrogen is chaired by Alexander Stafford, MP for Rother Valley. The APPG has a total of 19 parliamentary members. It provides a forum for MPs and Peers to engage with leading businesses and organisations to work to enable the UK to meet its

decarbonisation targets through the implementation of hydrogen projects and discuss policy options to support these.

The APPG's sponsors are Baxi, Bosch, Cadent, EDF, Energy and Utilities Alliance, Equinor, Johnson Matthey, National Grid, Northern Gas Networks, SGN, Shell and Stovax & Gazco.

The Hydrogen APPG believes that the UK has the potential to become a global leader in low-carbon hydrogen technology, but that the UK must move fast to grasp this opportunity and achieve the maximum economic benefits. The APPG also favours a twin tracked approach between blue and green hydrogen, as they believe blue will help in the transition.

Alexander Stafford MP formally opened the meeting and introduced the topic of 'Hydrogen Blending" as one of significant importance because of its implication in energy trading, sustainability, and interconnectivity with European trade partners. He introduced Jake Tudge, Director of Corporate Affairs, National Gas.

Jake gave the perspective from pipeline companies. National Grid can blend up to 20% of hydrogen in to their networks. National gas now has 2% capable pipe networks throughout their networks with little modification, this will move up to 5,10,20 and eventually 100% hydrogen networks by 2024. 2% of a lot is a lot, this is what the EU has set out as a target by 2025 and it is quite a large ambition. The UK needs to support continued interoperability with the EU throughout the gas networks because our current system can support 2% with no changes to the system. If they do not change the laws or make a significant decision, then the costs will increase significantly because we will have to de-blend.

Alexander Stafford thanked **Jake Tudge** and introduced **Richard King,** External Affairs Manager, SGN.

Richard gave the intro to SGN, 300,000 industrial and commercial users throughout their network. Blending is an interim step in the net zero journey. The benefits include de-risking investment into hydrogen production. Blending ensures that producers can release their hydrogen to the network, ensuring that it gets used. It allows producers to release surplus. 47% of industrial demand is outside of industrial clusters. Helps other energy producers in topping up their energy production.

Alexander Stafford thanked **Richard King** and introduced **Brett Ryan,** Head of Policy and Analysis, Hydrogen UK.

Brett gave an introduction to the work that hydrogen UK does, spoke about the potential that lies within the UK as a producer and leader in the hydrogen economy.

Alexander Stafford thanked **Brett Ryan** and introduced **Jane Toogood,** Chief Executive, Hydrogen Delivery Council

Jane Toogood introduced the hydrogen delivery council and the context of it. She spoke about how blending is a different decision from heating. Blending is about decarbonising and enable supply and demand to be addressed. Separate issues of blending and decarbonisation.

Alexander asked Jane if the UK government needs to be stronger on legislation like Germany and do we risk missing out if not. Jane replied saying that we can't be racing against each other but rather try to find commonality on energy quality which ensures there needs to be collaboration.

Question and answer session began.

Lord Naseby took over as Chair from Alexander, who needed to see the whips office. He took further questions from the audience.