



bp plc response to Ofgem Hydrogen Village Trial Detailed Design Studies Consultation

Question 1: Do you agree with our minded to decision on the projects to fund?

bp is highly supportive of Ofgem's minded-to position to fund a detailed design study by Northern Gas Networks (NGN) for a Hydrogen Village Trial in North East England. bp believes this detailed design study is a critical step towards realising the Hydrogen Village Trial and successful award of the funding is key to meet the ambition from Ofgem and BEIS for the trial to be delivered by 2025.

In bp's view, the NGN design study is of wider significance to the UK and will make an important contribution to supporting the UK to deliver on its net zero target as the replacement of natural gas with hydrogen is a key technology to substantially reduce emissions from buildings. The decarbonisation of buildings is a key challenge and progress in this sector has been limited despite buildings representing a significant source of the UK's total greenhouse gas emissions. In 2019 emissions from buildings were 87 MtCO₂e and emissions have been largely unchanged since 2015¹.

The Climate Change Committee (CCC) has identified hydrogen trials – such as that proposed by NGN – as one of the four priority areas to be progressed this decade to help ensure that the decarbonisation of buildings in the UK is on track for net zero by 2050.² bp believes the NGN trial will help the government to make informed decisions on the future of the gas grid, low-carbon zoning and hydrogen-ready boiler mandates to decarbonise heat and to understand the implications on wider net zero policy.

bp also believes that the North East of England represents an ideal location for this trial. The region has a range of existing and planned hydrogen production facilities, a skilled work force with experience of operating hydrogen facilities along with a supply chain that bp believes can help to deliver the Hydrogen Village.

The North East is home to an existing hydrogen industry representing c.50% of the UK's existing grey hydrogen production which is linked, via an existing hydrogen network, to a range of industrial customers. It is also the focus of bp's new low carbon hydrogen production projects in the UK. bp has announced its HyGreen electrolytic hydrogen production that targets 60 MWe of production by 2025 growing to up to 500 MWe by 2030. H2Teesside, a CCUS-enabled hydrogen production facility, aims to be producing hydrogen from 2027 with 1GW of capacity targeted by 2030³.

bp's experience is that key stakeholders within the region have been overwhelmingly positive to investment in new low carbon hydrogen technology. This includes strong

¹ CCC 6th Carbon Budget [The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf \(theccc.org.uk\)](https://theccc.org.uk/publications/the-sixth-carbon-budget-the-uks-path-to-net-zero/)

² *ibid*

³ [Hydrogen projects in Teesside | What we do | Home \(bp.com\)](https://www.bp.com/en/global/corporate/energy-transition/hydrogen/hydrogen-projects-in-teesside.html)

support from stakeholders, including regional Mayor Ben Houchen and local MPs; local companies and industries that want to use low carbon hydrogen to decarbonise their operations; and around 100 supply chain companies that have registered their interest with bp in supporting delivery of these projects.

The North East is a strategic hub for bp and a centre for the deployment of the net zero technologies that will help support decarbonisation of the region. bp believes the trial will provide critical insights on the role of hydrogen in supporting the decarbonisation of building heating, which is complementary to the range of hydrogen uses that bp is supporting in the North East. The inclusion of the Hydrogen Village Trial provides the opportunity for bp's HyGreen and H2Teesside projects to support the decarbonisation of major sectors requiring hydrogen to decarbonise in the UK, including industry, transport, power and buildings.

Question 2. Do you have any views on the proposed project deliverables for Cadent and NGN, and whether further deliverables are required?

bp believes that the proposed project deliverables appear appropriate.

Question 3. Do you have any views on the proposed directions for the projects contained in Appendix 2 to 4?

bp has no further views on the proposed direction to NGN.