bp on Teesside

Delivering the East Coast Cluster

Luke Warren 24 May 2022





bp on the East Coast





We are the operator, as one of the partners of the Northern Endurance Partnership, which plans to safely capture and store CO₂ emissions from industries across the region.

H2Teesside

A major blue hydrogen production facility in the UK planning to start up in 2027 and targeting 1GW of hydrogen by 2030. That's 10% of the UK government's 10GW by 2030 target, and has the potential to kickstart the UK's hydrogen economy. The world's first commercial scale gas-fired power station with carbon capture technology. Net Zero Teesside Power plans to provide up to 860MW of power, enough for 1.3 million homes. It plans to generate flexible low carbon electricity to back up renewable sources.

Net Zero Teesside power



bp plans to produce 500MWe of green hydrogen on Teesside by 2030. Aiming to start-up with 60MWe in 2025, it will scale up in multiple stages to match production with demand, helping to fuel the development of Teesside as a leading hydrogen transport hub.



An introduction to the East Coast Cluster



In October 2021, the East Coast Cluster was selected as one of the first two CCUS clusters to operating by the mid-2020s

In January 2022, individual projects from the Teesside and Humber regions submitted proposals to BEIS as part of Phase-2 of the CCUS cluster sequencing process.

The UK Government is set to announce a shortlist of successful projects from May that will be eligible for business model support. The successful projects are likely to be amongst the first to connect into the East Coast Cluster.





East Coast Cluster offers unmatched scale and diversity, removing almost half of the UK's industry cluster emissions



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Diversity is at the heart of the East Coast Cluster



and operation of onshore and offshore energy infrastructure



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The Endurance carbon store – serving Teesside and the Humber



• First-of-a-kind offshore CCS infrastructure in the UK

- CO₂ injection into a saline aquifer is a worldwide proven concept
- Largest saline aquifer in southern North Sea – capacity to store 450m tonnes of CO₂ with potential to extend capacity to around 1 billion tonnes with nearby stores
- Includes CO₂ pipelines from Teesside and the Humber
- Compression and pumping systems to a common subsea manifold and well injection site at the Endurance store





NZT Power summary







Economic benefits: the headlines



Please note that these figures are taken from the projects that were included in the East Coast Cluster bid in June 2021 as part of BEIS Phase-1 cluster sequencing process and give an indicative picture of the potential benefits of the East Coast Cluster







- Hydrogen: H2Teesside & HyGreen Teesside
- Power: NZT