

## Tech Talk: Net Zero – Real One's hosted by IMechE and IPowerE

Wednesday, May 27, 2020 5:15 pm    Duration:    1 hour

Registration is through the following link

<https://imeche-events.webex.com/imeche-events/onstage/g.php?MTID=e84de9a088410d092fdc60d7dfd875bf9>

David Few, Project Director, Innogy will give a talk on the 1.4 gigawatt (GW) Sofia Offshore Wind Farm sited on Dogger Bank, which will connect to the National Grid in Teesside and is the largest renewable project in the North East of England. Then Colin McGill, Project Director, Net Zero Teesside will give a talk on NZT's Carbon Capture, Utilisation and Storage (CCUS) project, based in Teesside in the North East of England. In partnership with local industry and with committed, world class partners, it aims to decarbonise a cluster of carbon-intensive businesses by as early as 2030.

### **Sofia Offshore Wind Farm**

The 1.4 gigawatt (GW) Sofia Offshore Wind Farm, sited on the shallow central area of the North Sea known as Dogger Bank, is the largest project in innogy SE's current development portfolio. The consented project is being developed 195 km off the UK's North East coast on a site of 593 square kilometres. It has an agreed connection point at an existing National Grid substation in Lackenby, Teesside.

The project is currently progressing through the latter stages of development and design, working closely with potential suppliers, stakeholders, statutory bodies and the authorities. The sheer scale and size of Sofia Offshore Wind Farm will offer significant economic opportunities for the UK with potential supply chain benefits, infrastructure and associated jobs and contracts.

Having won a Contract for Difference (CfD) in the UK Government's 2019 auction the project will now move towards a final investment decision, expected in 2020. On the current programme, the onshore civil works for Sofia are set to start in 2021 along with fabrication of the wind farm components. Offshore construction is due to start from 2022.

In terms of components, the wind farm could comprise up to 200 turbines, offshore converter stations and hundreds of kilometres of both inter-array and export cables, as well as onshore electrical infrastructure.

### **We can't tackle climate change without CCUS**

Carbon Capture, Utilisation and Storage (CCUS) describes a group of process technologies that remove carbon dioxide emissions and store them deep underground to prevent them from being released into the atmosphere. Carbon dioxide is a greenhouse gas that contributes towards climate change, so removing carbon dioxide from industrial emissions is a vital part of safeguarding the future British industry.

Net Zero Teesside is a CCUS project, based in the North East of England. In partnership with local industry and with committed, world class partners, it aims to decarbonise a cluster of carbon-intensive businesses by as early as 2030. Each year, we plan to capture up to 6 million tonnes of carbon dioxide emissions, the equivalent to the annual energy use of up to 2 million homes in the UK.

Not developing CCUS poses a real challenge to the future of British industry and jobs as we move to Net Zero, as CCUS is the only way to decarbonise many industries.

Net Zero - Emissions target set by the UK Government by 2050