Crown gives go ahead to rival ‘net zero carbon’ North Sea schemes

Exclusive: crown estates accused of greed in selling rights to ‘incompatible’ carbon capture and windfarm projects

The crown estate agreed to lease an area off the Yorkshire coast to Hornsea offshore windfarm, but also to a BP underwater carbon-capture project. Photograph: Arild Lilleboe/Getty Images/iStockphoto

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A clash between two multibillion pound “net zero carbon” schemes is brewing in the North Sea after the Queen’s property manager granted development rights for one patch of seabed to two different projects at the same time.

The crown estate will earn millions of pounds after agreeing to lease an area off the Yorkshire coast to the latest phase of the giant Hornsea offshore windfarm, as well as to a scheme led by BP which plans to begin storing carbon dioxide under the seabed. This has prompted concern that the giant wind turbines could interfere with seabed sensors for the carbon storage project.

The carbon capture scheme was granted “fast-track status” by the government as part of the long-awaited net zero strategy it set out earlier this week, meaning
developers will need to begin trapping, piping and storing carbon beneath the North Sea from a cluster of nearby factories by the mid-2020s.

The crown estate granted the East Coast Cluster project an agreement in 2013 to lease the plot while it develops plans to capture emissions from factories in the Teesside and Humber industrial clusters and store the carbon securely beneath the seabed.

It had already auctioned off the right to develop an offshore windfarm on an area that sits above the carbon capture site in 2010. The windfarm rights were later bought from the consortium by Danish developer Orsted in 2015 to host part of its Hornsea windfarm which will include 180 turbines on a plot which is 190 square miles.

The green developers are in early talks to find a way to “coexist” in close quarters but have no firm plans to manage the clash, and face a tighter deadline to find a solution due to the East Coast Cluster’s fast-track status.

“Put simply, the crown estate has been a bit greedy and leased one area to two projects at the same time,” said an industry source involved in one of the schemes.

The source said it would be “incompatible” for both projects to move ahead based on their existing plans because the foundations of the giant offshore wind turbines would be in the way of crucial seismic monitoring stations on the seafloor which are needed to detect and prevent emissions leaks from underwater carbon stores.

The crown estate declined to comment on the sums it would be paid by the low-carbon developers. A spokesperson said that some “co-location” of offshore projects may be necessary as the government pursues its net zero strategy and “should be considered”.

The crown estate opened an industry forum over the summer to facilitate discussions which would help “fit more clean energy technology and infrastructure” into the North Sea “without unintended consequences”.

“The seabed is a finite resource which is more in demand than ever before, and so as these technologies scale up to support a low-carbon economy, we
recognise that, at times, some co-location may be necessary,” the crown estate spokesperson said.

“This is a new challenge that will inevitably require new ways of working, but we believe that through collaboration, planning and technological developments, the co-location of CCUS [carbon, capture, utilisation and storage] and offshore wind sites should be considered, which is why it's important we allow parties to explore the opportunity for different technologies to coexist.”

The industry source said: “It seems like too little, too late.”

A spokesperson for the East Coast Cluster said it was “working on a mutually acceptable solution” alongside the developers of Hornsea 4, which added that it “absolutely believe[s] that both projects can coexist”.

The crown and the Treasury stand to receive an offshore windfarm windfall of up to £9bn over the next decade, after an auction of seabed plots earlier this year attracted runaway bids from would-be developers including BP.

The crown estate’s first offshore wind lease auction will earn the Queen’s property manager £879m a year, for up to 10 years, from the “rent” paid by six new offshore windfarms. This would more than double the profits made by the Queen and the Treasury from the crown estate, which reported profits of £345m for the last financial year.