# Hornsea Two Offshore Wind Farm



# Welcome to Hornsea Two

Hornsea Two is the sister project to Hornsea One and comprises 165 turbines with a combined total capacity of 1.4 GW.

Ørsted is the largest offshore wind developer in both the world and the UK. Since 2004 we have been developing, constructing and operating offshore wind farms in the UK – our biggest market. Our 11 operational offshore wind farms are powering over 3.2 million homes and with another two in construction this number will rise to 5.5 million homes by 2022.

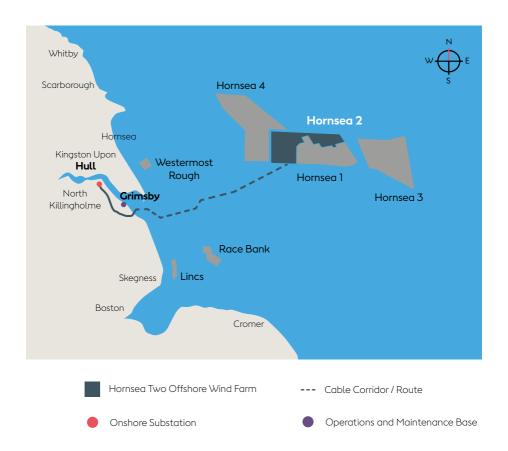
In addition to our offshore wind farms,we construct battery-storage projects, innovative waste and recycling westechnology and provide smart energy products to our commercial and industrial customers. We currently employ 1,000 people in the UK and have already invested over £9.5 billion. We will invest at least a further £3.5 billion by 2021.

We are committed for the long-term, both to leading the change to green energy, and to investing in the communities where we operate.



#### Where is Hornsea Two?

Hornsea Two will be located approximately 89 km (55.3 miles) off the Yorkshire coast in the North Sea, adjacent to Hornsea One which is currently under construction.



#### **Ownership**

Hornsea Two is 100% owned by Ørsted.

#### How big is it?

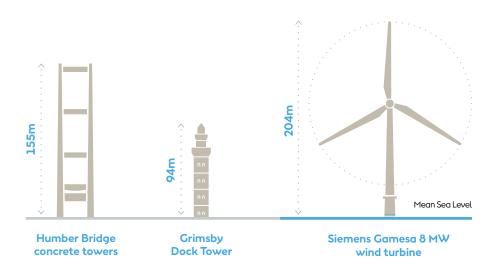
Hornsea Two will span an offshore area of

### 462 km<sup>2</sup>.

This is equal to **66,000** times the size of Blundell Park, home of Grimsby Town F.C.

The 89 km distance from the shore to the wind farm is greater than the distance from Hull to York.





#### How much clean electricity will be produced?



The project will have a capacity of **1.4** GW



It will provide power to around

**1.3** million homes in the UK <sup>1</sup>

#### What will the benefits to the local economy be?

Ørsted is committed to investing in the Humber region and supporting education and employment creation. We have developed an employment and skills plan to highlight employment and supply chain opportunities associated with the construction, operation and maintenance of an offshore wind farm project.

We are also investing £10 million to build our largest offshore wind operations base in Grimsby, the East Coast Hub.

We are keen to continue to forge links with UK based suppliers to continue to develop the UK supply chain.

#### What is happening onshore?

The onshore cable route for Hornsea Two will broadly follow the route taken for the cables on Hornsea One. The cables will make landfall at Horseshoe Point and will connect to the National Grid substation at North Killingholme. All cables will be buried underground and Horizontal Directional Drilling (HDD) will again be used to minimise the impacts on roads and network rail infrastructure.

<sup>&</sup>lt;sup>1</sup>We have based this on the BEIS 5-year average load factor of 38.6% and a household consumption of 3,828 kWh per year. Source: BEIS DUKES (2018), BEIS ECUK (2018)

#### **Project Timeline**



August **2016** 

Secretary of State grants Development Consent Order



September 2017

Contract for Difference awarded to the Project and Final Investment Decision made



April **2018** 

Site investigations offshore and enabling works on the onshore substation commenced  $% \left( 1\right) =\left( 1\right) \left( 1$ 



2018

Construction of onshore substation commenced



<sup>Q2</sup> 2019

Onshore cable installation work begins



2020

Offshore construction begins



2022

Hornsea Two becomes fully operational

#### What makes this project special?

At 1.4 GW, Hornsea Two will overtake Hornsea One as the world's biggest offshore wind farm. The project will use Siemens Gamesa 8 MW SG 8.0-167 DD turbines, which will deliver 20% more annual output than those used for Hornsea One. The majority of the blades will be delivered from the Siemens Gamesa factory in Hull. The project will use the world's largest offshore substation and will deliver the most affordable electricity from offshore wind to date.

Hornsea Two is a game-changing renewable energy project in terms of both size and cost. Large infrastructure projects like these have their challenges, but with each project we have built we are able to improve efficiencies. We continue to engage with local communities and interested parties on key developments in the project. We are very proud to be a part of the ongoing offshore wind development in the region, and we are very happy to continue our commitment to invest in the UK

**Duncan Clark, Project Director** 

## Contact us

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