



Forewind April 2012

Fact Sheet

Forewind Development partner for the Dogger Bank Zone

Forewind is committed to securing all the necessary consents required for the development and construction of the Dogger Bank offshore wind farm zone.

Who is Forewind?

Forewind is a consortium comprising four leading international energy companies – RWE, SSE, Statkraft and Statoil – which joined forces to bid as part of The Crown Estate's third licence round for UK offshore wind farms (Round 3).

Each of the four owners – all leading players in their own right – recognised that by joining forces they have a unique ability to both make a significant contribution to the future of wind energy in the UK and demonstrate commitment to the continuing development of offshore wind. Forewind is committed to securing all the necessary consents required for the development and construction of Dogger Bank, the first of which is anticipated around 2014.

Background

Under the Round 3 process, The Crown Estate identified nine offshore wind energy development zones, and the aim is that they will have the generation capacity to

deliver a quarter of the UK's total electricity needs by 2020.

In January 2010, Forewind was announced as development partner for Dogger Bank, the largest of the Round 3 zones.

As development partner for Dogger Bank, Forewind has the objective to achieve consent for an agreed target installed capacity of 9GW of offshore wind farm projects by 2020, however the zone has a potential for up to 13GW. This figure equates to almost 10 per cent of the UK's projected electricity requirements. If fully developed, it will be the world's largest offshore wind project.

Dogger Bank Zone

The Dogger Bank Zone is in the North Sea, located between 125 and 290 kilometres off the east coast of Yorkshire. It extends over approximately 8660 km² with its outer limit aligned to the UK continental shelf limit as defined by the UK Hydrographic Office.

Dogger Bank is the largest of the Round 3 zones but with water depths ranging from 18 to 63 metres, it is also one of the shallowest. It has the potential for approximately 4GW development capacity in less than 30m water depths and 8GW in less than 35m water depths. The Crown Estate Round 3 zones are much larger than those awarded in Round 2 so the sheer size of these developments dwarfs previous projects.

Forewind will work with The Crown Estate to identify suitable sites within the Dogger Bank Zone and then carry out thorough environmental impact assessments and consultation on these sites before submitting applications for consent to build.

Grid

The key link in any wind farm project is the grid connection, where the power generated by the wind farm feeds into the national grid system. In March 2010 Forewind signed a connection agreement for the first project, to connect at Creyke Beck, north of the Humber Estuary. In October 2011, Forewind signed two more connection agreements for an additional two projects likely to be located at an existing National Grid substation site at Lackenby, east of Middlesbrough.

More recently, in March this year, Forewind announced the signing of further 3GW grid connections. One of those will connect at Creyke Beck, the site of the first grid connection agreement. The remaining two connections will be located in Teesside at a site, which is to be finalised.

This means Forewind is now proceeding with the development of a total of 6GW of offshore wind farm generation capacity.

Forewind will now continue to work to identify the optimum route for each export cable, from the offshore tranche or project location to the onshore converter substation(s).

Development of Dogger Bank

The Dogger Bank project heralds a completely new era for offshore wind due to its huge size and distance from shore. This means there are many technical and logistical challenges to be addressed. Forewind will draw fully on the experience of each of the owner companies and also look for innovative suppliers and contractors to help meet the challenges and achieve consent.

To ensure that the work associated with meeting Forewind's objective is managed effectively, and to distribute demands on stakeholders and the supply chain more evenly, Forewind will develop the zone sequentially in four stages, known as tranches. Each tranche will be developed as a series of wind farm projects.

Tranche A was selected in late 2010 and Tranche B was defined in the second half of 2011 after stakeholder consultations, consideration of safety and examinations of environmental and consenting issues related to the zone. Forewind will seek to develop three similarly sized offshore wind farm projects within each tranche. Tranches C and D will be identified at a later stage.

In total, the Dogger Bank development will consist of a number of offshore wind farm projects, each with an onshore grid connection and a capacity of up to 1.2GW. These wind farms will individually comprise some hundreds of wind turbines (depending on the size of turbines selected), up to three offshore substations, export cables, onshore converter stations and associated infrastructure.

Dogger Bank Creyke Beck

Dogger Bank Creyke Beck will be the first stage of development in the Dogger Bank Zone. It will have an installed capacity of up to 2.4GW and will connect into the existing Creyke Beck substation near Cottingham, in the East Riding of Yorkshire. It will comprise up to two offshore wind farms, each with an installed capacity of up to 1.2GW.

Work on the Environmental Impact Assessment for Dogger Bank Creyke Beck, including surveys, studies and ongoing consultation, is well underway with the planning application due for submission by early 2013.

Dogger Bank Teesside

Dogger Bank Teesside will be Forewind's second stage of development and will consist of a maximum of four wind farm projects. Two of the projects are planned to connect at an existing substation in Lackenby, Teesside where Forewind has agreed connection points with National Grid. The other two wind farm projects are expected to connect at a new substation also likely to be sited in Teesside, however the location is to be finalised.

Forewind Mission

Achieve development consent for a minimum of 9GW of safe, technically deliverable and economically viable offshore wind capacity on the Dogger Bank that will provide an attractive opportunity for investors.



Source: R3 Zone © TCE, 2010
Country Boundaries © ESRI, 2011

Key facts



Size

8660 km² (3343 square miles)
Largest of the Round 3 zones



Distance from UK coast
125 to 290 kilometres
(77 to 180 miles)



Water depth

18 to 63 metres (59 to 206 feet)
One of the shallowest of
the Round 3 zones.



Estimated capacity

Agreed target 9GW, with the potential
for approximately 13GW.



CO₂ reduction

The 9GW Dogger Bank development
would reduce CO₂ emissions by
approximately 13.7 million tonnes
per annum, based on the current UK
energy mix and an assumed capacity
factor of 40%.

Forewind owners

Forewind's owner companies are:

RWE npower renewables

RWE npower renewables is the UK subsidiary of the German renewable energy company RWE Innogy (part of RWE AG) and has a strong, diversified position in renewables with significant ambition for growth throughout Europe.

www.rwe.com

SSE

SSE is one of the largest energy companies in the UK and is involved in the generation, transmission, distribution and supply of electricity; the storage, distribution and supply of gas; telecommunications; contracting; and other energy services.

www.sse.com

Statkraft

Statkraft is Europe's leader in renewable energy. The group develops and generates hydropower, wind power, gas power and district heating, and is a major player on the European energy exchanges. Headquartered in Norway, Statkraft is active in more than 20 countries.

www.statkraft.com

Statoil

Statoil is an international energy company with operations in 34 countries. Building on more than 35 years of experience from oil and gas production on the Norwegian continental shelf, Statoil is committed to accommodating the world's energy needs in a responsible manner, applying technology and creating innovative business solutions. Statoil is headquartered in Norway with 20,000 employees worldwide, and is listed on the New York and Oslo Stock Exchanges.

www.statoil.com



Contact

For further information on Forewind, please visit www.forewind.co.uk or email info@forewind.co.uk.