



Annual Review 2014 – 2015

Gaining consents for the Dogger Bank projects

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Introduction

Forewind is a consortium of four leading international energy companies – RWE, SSE, Statkraft and Statoil – formed to develop and gain all the necessary consents required for offshore wind development on Dogger Bank, in the North Sea.

> The organisation gained the rights to develop the Dogger Bank Zone, which at 8,660 square kilometres (3,343 square miles) was so large it had to be developed in stages. Four tranches of developable area were selected initially, before individual project boundaries were identified from within these areas. Four separate projects have now received development consent, and the Dogger Bank Zone has been dissolved. If fully realised the Dogger Bank projects will be the largest offshore wind development in the world.

> At its peak the Forewind team comprised around 45 full-time employees seconded from the owner companies, with support from a number of specialised consultants and contractors. The Forewind organisation has now significantly reduced in size, however a small team remains in place to manage the four consented projects until the owner companies eventually take them over to advance them towards the stages of construction and operation.

To identify the sites for the wind farms and the potential energy resource, Forewind spent four years accumulating a huge amount of data via detailed geophysical seabed and sub-seabed surveys; geotechnical testing, and meteorological and oceanographic data collection, including wind statistics gathered by the two meteorological masts installed in 2013 and the two laser based wind measurement instruments (lidars) installed in 2013 and 2014.

The comprehensive survey work formed the basis for both the development consent order applications submitted to the Planning Inspectorate: Dogger Bank Creyke Beck in August 2013 and Dogger Bank Teesside A&B in March 2014. Both applications were granted approval by the Secretary of State for Energy and Climate Change in 2015.

This report covers Forewind's achievements and progress on the development of offshore wind on the Dogger Bank from May 2014 to the end of 2015.





Chairman's Report

Offshore wind continues to be a UK success story with the nation retaining its number one position in terms of attractiveness for investors in this industry once again this year.* However, investors will require clarity about the extent of the Contracts for Difference arrangements to ensure that the Round 3 projects now maturing through the development phase are able to be realised and this top spot is maintained.

'In partnership with The Crown Estate, the owners have together already invested more than £100 million to ensure the consent applications were comprehensive, thorough and robust.' It has been my great pleasure to be chairman of Forewind as the consortium has, during 2015, gained approval for a total of four Round 3 projects, via two development consent applications. This achievement cannot be underestimated when you know that together they will in effect be the UK's largest power station with a combined capacity of 4.8GW. This is almost as much as all the offshore wind farms currently installed in UK waters.

Together they could generate 16 terawatt hours (TWh) of green energy every year, enough to power all the commercial and industrial users in Yorkshire and the Humber.

While we celebrated with the good news that both Dogger Bank Creyke Beck and Dogger Bank Teesside A&B were granted consent this year, we also announced that work on Dogger Bank Teesside C&D would not continue and that the rights to the seabed it was planned to occupy would be returned to The Crown Estate along with the remainder of the Dogger Bank Zone. This was not an unexpected announcement as, with four consented projects on the table, Forewind's four owner companies need to focus their resources and people on them.

In partnership with The Crown Estate, the owners have together already invested more than £100 million to ensure the consent applications were comprehensive, thorough and robust. This is a significant indicator of their commitment to the industry. To take each project through pre-construction, from consent to financial investment decision, will cost around an additional £50 million. The need for a defined and long-term support regime and certainty on government policy are therefore vital requirements for the owners as they decide how to progress the projects on to the stage when the wider benefits via supply chain development and employment can start to be realised.

During the year, most of the Forewind team members who have worked so hard on achieving the consents have gradually been either returning to their respective owner company or moving on to new challenges. I would like to use this opportunity to extend a personal thank you and congratulate them for their extraordinary commitment and work, to deliver such milestone achievements, of which they can rightly be proud. A small team will now finish the outstanding work and manage Forewind's assets and continued responsibilities.

Our attention now moves to the next phases as Dogger Bank advances to the stage where it has become an integral part of the UK's energy mix, and to when the significant economic and social rewards it promises have come to fruition. It has been a great privilege to work with such an exceptional team.

harles

Charles Hendry Forewind Chairman

*(EY, Renewable energy country attractiveness index, September 2015)



General Manager's Report

It has been a momentous time for Forewind with six years of work culminating in the receipt of two development consent orders for what is the world's largest consented offshore wind development.

'The four consented Dogger Bank projects now represent a highly attractive and viable opportunity for the UK to increase the renewable component of its energy mix...' Both the Planning Inspectorate and the Department of Energy and Climate Change recognised the need for phased development at Dogger Bank and in accordance awarded our second consent, Dogger Bank Teesside A&B, a seven year timeframe. This was an important decision as it allows for the realistic and staged maturation of the Dogger Bank development and is a good indicator to the UK supply chain that the projects constitute a long-term business opportunity.

The four consented Dogger Bank projects now represent a highly attractive and viable opportunity for the UK to increase the renewable component of its energy mix and reduce emissions, while strengthening the nation's security of supply and creating job prospects for many thousands, particularly in the areas closest to the projects – the North East, Yorkshire and the Humber.

While gaining consents was the major milestone this year, the data collection and maintenance of the two meteorology masts on Dogger Bank was, and still is, a key activity for Forewind. This year the upper sections were brought to shore for repair before being reinstalled offshore. The masts returned to full operation in May 2015. After meticulous planning and close collaboration with our contractors and service providers, the work was carried out safely and without incident. Operations far offshore do not allow for complacency and in order to ensure safe work we needed to plan carefully then revisit those plans, and create

then re-create the right attitudes. I congratulate the teams and individuals involved for their excellent cooperation on the planning and groundwork, and the resulting successful trips.

I look forward to the next stages of the Dogger Bank projects, but for now I would like to express my appreciation to everyone, both in and supporting Forewind, whose outstanding efforts contributed to the award of consents for 4.8GW of offshore wind on Dogger Bank.



Tarald Gjerde General Manager and Project Director

Progress since May 2014





In May 2014, the publication date of the previous Annual Review, Forewind was in the midst of the six-month examination phase for Dogger Bank Creyke Beck, which was concluded three months later in August. The Examiner then prepared the recommendation for the Secretary of State taking into account evidence from the hearings, interviews and site visits which formed the backbone of the examination.

May 2014 saw the completion of the Dogger Bank Teesside A&B Section 56 consultation phase, when organisations and individuals who wished to make comments on the application, participate in the examination process or be informed of its progress, were invited to register as an interested party. This month also saw the signing off of the first statement of common ground for Dogger Bank Teesside A&B.

Statements of common ground were a priority for Forewind for both the development consent order processes. They played a valuable role in the examinations as they laid out the commonly understood baselines while also highlighting the material differences requiring acknowledgement and consideration.

Just as the Dogger Bank Creyke Beck examination drew to a close in August 2014, the Dogger Bank Teesside A&B examination got underway with a preliminary meeting held in Redcar, Teesside. The examination provided an open forum for stakeholder concerns to be presented and addressed thereby reducing the likelihood of issues arising in the future when the wind farms are under construction.

The hearings for the Dogger Bank Teesside A&B examination started in October 2014 and, as with the Dogger Bank Creyke Beck examination, everyone who wanted to comment or be involved was given the opportunity to input into the process.

The Dogger Bank Teesside A&B examination concluded in February 2015, with the Examiner having three months from that time to prepare the recommendation for the Secretary of State based on what was submitted and the outcomes of the examination process. Since being awarded the rights to develop the Dogger Bank Zone by The Crown Estate in January 2010, Forewind has worked tirelessly towards gaining consent for the development of offshore wind on the site. The year 2015 saw the culmination of this work. On 5 February, the Secretary of State for Energy and Climate Change, Ed Davey, approved the organisation's application for the 2.4 gigawatt (GW) Dogger Bank Creyke Beck development.

He said with the announcement: "This is another great boost for Yorkshire and Humberside. This development has the potential to support hundreds of green jobs and power up to two million homes." There was significant national and international media interest in the announcement as at that time this was the world's largest consented offshore wind development. It was equalled in August with Forewind's second major milestone, the consent of Dogger Bank Teesside A&B.

On 5 August, the newly appointed Secretary of State for Energy and Climate Change, Amber Rudd, granted Forewind's second consent, to Dogger Bank Teesside A&B. This decision took the total of consented projects to 4.8GW, almost equal to all the offshore wind capacity in operation in the UK at the time.

Energy and Climate Change Minister Lord Bourne said: "Thanks to Government support the UK is the world leader in offshore wind energy. As we build the Northern Powerhouse, we want local communities to reap the benefits of investment and green jobs from low carbon developments like the Dogger Bank offshore wind project."

Also in August, Forewind announced that together with its owners and in agreement with The Crown Estate, it had ceased work on its remaining development consent application to focus efforts on the four consented Dogger Bank projects.







'The close out of the Dogger Bank Zone agreement and move to project specific agreements marks a shift to the next phase of large scale UK offshore wind development. The scale of the consented projects represents a major opportunity to provide energy security, drive down costs and stimulate economic development.'

Jonny Boston

Senior Development Manager, The Crown Estate This discontinued phase, known as Dogger Bank Teesside C&D, comprised two projects together totalling 2.4GW. The two projects were removed from the organisation's portfolio and the rights to develop that area of seabed, along with the remainder of the Dogger Bank Zone, were returned to The Crown Estate. The Dogger Bank Zone was dissolved and each of the four consented projects is now subject to a separate lease agreement with The Crown Estate.

Both the consented developments – four offshore wind farms in total – are now awaiting operators to be assigned to move into their next phase of pre-construction.

Key stakeholder groups

Two key stakeholder groups will be most directly impacted by the Dogger Bank developments. Offshore it will be the fisheries industry, and Forewind has long stated its objective of co-existence with those who fish both on the sites of the wind farms and along the cable routes. Onshore it will be landowners, who Forewind have established relationships with in an effort to reach mutual agreements on access to the land required to construct the onshore cables.

Fisheries

Fishermen and others in the fisheries industry participated in the examination of both Dogger Bank Creyke Beck and Dogger Bank Teesside A&B, by attending hearings and submitting relevant representations with comments and questions on their main issues. Answers were provided as part of the iterative process, along with revisions and changes to commitments.

Input from fisheries industry representatives, specifically during the Dogger Bank Teesside A&B examination process, resulted in an updated Fisheries Liaison Plan (FLP). Central to the plan is Forewind's position that the fishing industry and the offshore wind farms can co-exist peacefully provided there is open and continuous communication between the project operators and the fishing industry. The FLP also included a consultation strategy with objectives to ensure early, effective, meaningful and transparent engagement with marine stakeholders. Future roles were defined along with an overall strategy to cover mitigation or compensation for those within commercial fisheries likely to be subject to significant residual impacts.

The plan was secured within the Dogger Bank Teesside A&B development consent through the Deemed Marine Licences, which include, for example, the conditions to be met during the preconstruction, construction and operation and maintenance phases, with recognition of others' interests and points of view.

Also during the year, Forewind's 3D computer generated simulation of the proposed Dogger Bank offshore development was made available for download from the Forewind website. The model was developed to enable fishermen, sea users, search and rescue, and offshore authorities to better understand and visualise how the development will look once constructed. Almost 70 national and international organisations, educational institutions and governmental bodies have now downloaded it.

'The most sustainable approach to coexistence is to avoid and reduce impacts. Key to this will be adhering to the commitments made by Forewind and secured within the development consent order and Fisheries Liaison Plan.'

Martin Goff

Offshore Environmental Impact Assessment Manager, Forewind

Progress since May 2014 (continued)





HSE Policy

Forewind is committed to leading the industry in health, safety and environmental performance and believes that to achieve this visible management and organisation-wide involvement and commitment are essential.

Key to this is the understanding that there is always time to work safely.

'Forewind proved its consistency and dedication to improving offshore health and safety by coming runner-up for the third time in the Renewable UK and The Crown Estate annual industry award for health and safety.'

Nachaat Tahmaz Health & Safety Manager, Forewind

Landowners

Individual engagement with landowners has been integral to Forewind's work over the period covered by this report, and throughout the whole Dogger Bank development process, due to the potential impact of the projects on their land parcels.

Forewind, together with its land agent Dalcour Maclaren, continues to hold discussions with landowners and their representatives regarding onshore land rights. Heads of Terms have been discussed with all identified landowners for the onshore infrastructure needed for each of the four Dogger Bank projects.

To date Heads of Terms have been agreed with more than half of the 58 landowners for Dogger Bank Creyke Beck, and the majority of the 14 landowners for Dogger Bank Teesside A&B. While progress has been positive, there is still some work to be finalised.

Discussions are continuing where it has not yet been possible to sign Heads of Terms. It is Forewind's clear preference to reach mutual agreements with those affected by the onshore works, however where mutual agreement is not possible, compulsory acquisition may be necessary.

Before starting any onshore construction activities, the operator of each project will prepare a detailed construction programme, communicated to all those who will be directly affected by the works and there will be ongoing engagement throughout.

Health and safety

Health and safety in Forewind continues to be among the highest of priorities. Since May 2014, those working for the organisation and its contractors have completed more than 210,000 work hours, with zero incidents recorded.

Most of these worked hours involved high-risk activities such as onshore fabrication, as well as installation and maintenance of our offshore meteorological masts. Forewind's close cooperation with contractors, and innovative operational approach, combined with its strong focus on health and safety meant that the work could be delivered without harm to people or the environment.

Innovation has always been a key driver for Forewind. In 2014 the organisation was recognised as the first to implement the innovative "human free" mast installation technique by being awarded (for the second time) runner-up in the annual Renewable UK HSE award, in partnership with SeaRoc and Universal Foundation Norway. The innovation continued into 2015 with Forewind proving its consistency by once again being awarded runner-up in the Renewable UK and The Crown Estate safety award. This time it was for use of remotely operated aerial vehicles (ROAV) for meteorological mast inspections. This technique has resulted in almost eliminating the need for working at height while inspecting offshore meteorological masts.

Forewind has aimed to be an industry leader in health and safety and the organisation will continue to improve its standards as it retains responsibility for the servicing of the two meteorological masts. By improving its own standards, it can also influence those of the industry as a whole, by working closely with contractors and service providers to introduce new ideas and approaches to common challenges therefore reducing overall levels of risk.

Activities and achievements



Dogger Bank Creyke Beck

The hearings on the Dogger Bank Creyke Beck application continued into July 2014, having started in February of that year. The examination phase included one open floor public hearing and an additional nine days of issue-specific hearings plus two site visits to the proposed landfall and onshore cable route. It involved more than 30 stakeholder organisations and individuals with an interest in the project proposals and a total of more than 500 documents were submitted as part of the process.

The open and thorough process had the extensive involvement of stakeholders and interested parties, with Forewind agreeing nearly 100 statements of common ground with organisations ranging from environmental and technical bodies to local parish councils.

The Secretary of State for Energy and Climate Change granted a five-year consent for Dogger Bank Creyke Beck, meaning construction on both the projects is required to start by March 2020. Dogger Bank Creyke Beck will have an installed capacity of up to 2.4GW and will comprise two wind farms, Dogger Bank Creyke Beck A, which is 515km², and Dogger Bank Creyke Beck B, which is 599km², both are 131 kilometres from shore at their closest point.

The offshore cables will come to shore just north of Ulrome on the Holderness coast. From this landfall, onshore underground cables will carry the power approximately 30 kilometres to the two converter stations located between Beverley and Cottingham adjacent to the A1079. A further two kilometres of export cables will run from the converter stations to the National Grid substation at Creyke Beck. Operators for the Dogger Bank Creyke Beck projects should be assigned within the coming 12 months. Once in place, the operators will enter the "pre-construction" phase where priorities are likely to include: health and safety standards engagement with relevant stakeholders, technical work such as refining the wind farm design and liaising with the supply chain, and setting commercial agreements.

When fully built, the development will generate around eight terawatt hours (TWh) of green electricity per annum, which is almost enough to power all the homes in the Yorkshire and Humber region every year. It could also create up to 4,750 new direct and indirect jobs and generate more than £1.5 billion for the UK economy.

Summary of key offshore components for Dogger Bank Creyke Beck

Parameters	Maximum per project	Maximum for Dogger Bank Creyke Beck
Wind turbines	200	400
Offshore collector substation platforms	4	8
Offshore converter substation platforms	1	2
Length of inter-array cabling (km)	950	1,900
Length of inter- platform cabling (km)	320	640
Length of inter-project cabling (km)	-	300
Offshore accommodation or helicopter platforms	2	4
Offshore meteorological monitoring stations	5	10

Activities and achievements (continued)



Summary of key offshore components for Dogger Bank Teesside A&B

Parameters	Maximum per project	Maximum for Dogger Bank Teesside A&B
Wind turbines	200	400
Offshore collector substation platforms	4	8
Offshore converter substation platforms	1	2
Offshore accommodation or helicopter platforms	2	4
Offshore meteorological stations	5	10
Length of inter-array cabling (km)	950	1,900
Length of inter- platform cabling (km)	320	640
Number of HVDC export cable pairs	1	2

Dogger Bank Teesside A&B

Dogger Bank Teesside A&B is Forewind's second stage of development. The hearings for this development's examination, which ran from October 2014 to February 2015, comprised open floor and issue-specific hearings as well as five site visits – to the proposed landfall, along the onshore cable route, and to the locations for both the proposed converter stations and the connection works into the national grid.

The examination involved approximately 40 stakeholder organisations and individuals with an interest in the project proposals. Around 55 statements of common ground were agreed with key groups as part of the process, and a total of more than 550 documents were submitted over the period.

A seven-year consent was granted for Dogger Bank Teesside A&B which means construction work on both projects should start by September 2022. These projects are Dogger Bank Teesside A, which is 560km² with its closest point from shore at 196km, and Dogger Bank Teesside B, which is 593km² and located 165km from shore.

The offshore export cables will come to shore between Redcar and Marske-by-the-Sea in Teesside. A seven-kilometre buried HVDC cable will carry the power to two converter stations located in the Wilton Complex, south-east of Middlesborough. A twokilometre HVAC cable will then run underground to the existing National Grid substation at Lackenby, where the power will enter the national grid.

Dogger Bank Teesside A&B will remain the responsibility of Forewind until operators are assigned. The process to have operators in place will start some time after those for Dogger Bank Creyke Beck have been finalised.

Once constructed, it will have a total installed generating capacity of up to 2.4GW and will generate around 8 TWh of green electricity per annum, which is enough to power around 1.8 million British homes. It could also create up to 4,750 new direct and indirect jobs and generate more than £1.5 billion for the UK economy.

'Gaining consent for four projects on Dogger Bank is a staggering achievement, and a credit to the dedicated, talented and innovative project team. It is the culmination of many years of hard work and I have no doubt that the Dogger Bank projects will make a huge contribution to providing secure, sustainable and cost effective electricity generation to the UK in the future. We look forward to taking these projects into the next stage of development.'

David Flood

Vice President Project Ownership, Wind Offshore, Statkraft and Board Member, Forewind

Meteorological masts activity

In both the spring and summer of 2014, the two Dogger Bank meteorological masts were inspected and maintenance work carried out. Dogger Bank Met Mast East is located approximately 100 kilometres from the UK coast, and Dogger Bank Met Mast West is sited 150 kilometres from the coast.

Forewind introduced the use of remotely operated aerial vehicles (ROAV) to inspect the masts in advance of workers visiting and accessing them. During the latter of these trips, the need for corrective work to the topside platforms of each mast was identified.





'This programme has been incredibly well received by teachers and students alike and it has been hugely rewarding to see its impact evolve since we started with our first cohort in 2011.'

Mike Cargill Programme Director, HETA As it was not possible to perform the work at sea, both the topside platforms were transported to an Esbjerg fabrication yard for repair. A lidar was installed on the Dogger Bank Met Mast East foundation to enable continuous monitoring of wind speeds and weather conditions at the site. The meteorological masts and topside platforms were returned to site in May 2015 employing the same vessel used to remove the masts, Pacific Orca.

In August 2015, another successful inspection and scheduled maintenance trip was completed on both meteorological masts. The 15-day trip involved a crew of 20 plus a team of 22 personnel on board the 78m offshore supply vessel VOS Sympathy.

Forewind will continue to own and manage the two meteorological masts on Dogger Bank, as they collect valuable wind data for the wind farms.

Community engagement

Champions for Wind

Forewind's flagship schools education programme Champions for Wind drew to a close in 2015, with more than 3,000 students and 41 teachers having taken part over the past four years.

Launched in 2011 with the Humberside Engineering Training Association (HETA), the programme aimed to raise awareness amongst primary and secondary pupils of the potential career opportunities in offshore wind energy and to give them an understanding of the types of qualifications and experience required to gain employment in the industry.

A total of 24 secondary, primary and special educational schools in Teesside, Hull and the East Riding of Yorkshire were involved in the project, chosen due to their proximity to the proposed onshore infrastructure of the Dogger Bank wind projects. A final project evaluation completed by Dr Myfanwy Bugler, University of Hull, showed that pupils' knowledge of the offshore wind industry, Dogger Bank and related careers significantly increased after the programme had been delivered in their schools. In addition, their desire to work in the offshore wind industry also increased along with their interest to learn more about the industry.

Core sample donation

The wider scientific community will benefit from Forewind's survey work as the organisation donated all 71 of the core samples collected on Dogger Bank to the National Geological Repository (NGR), located at the British Geological Survey headquarters in Nottinghamshire.

The core samples, cylindrical soil sections extracted from the seabed, were collected during Forewind's four years of research to identify boundaries for offshore wind farm sites. Handed to the facility in June, they are now part of the UK's most extensive core sample collection, ensuring they will not only be preserved for future generations, but also accessible for anyone wanting to research changes in climate and sedimentary composition during Dogger Bank's history.

'The National Geological Repository – an integral part of the British Geological Survey – is grateful to Forewind for donating these Dogger Bank samples, adding to the unique asset we hold on behalf of the nation. They are now available for use by anyone with an interest in the field, from consultants and contractors to academics and students researching within a wide range of earth sciences.'

Dr Mike Howe

Chief Curator & Head of the National Geological Repository

Calendar of highlights

2014

May

Submissions delivered for the fifth deadline of the Dogger Bank Creyke Beck examination. There were nine deadlines to meet during the process.

Section 56 consultation phase for Dogger Bank Teesside A&B complete with the first relevant representations received.

First statement of common ground signed for the Dogger Bank Teesside A&B project.

June

Habitats Regulations Assessment hearings held for Dogger Bank Creyke Beck.

Three examining inspectors appointed for Dogger Bank Teesside A&B.

A successful operations and maintenance trip to both Dogger Bank meteorological masts was completed in conjunction with foundation supplier, Universal Foundation Norway.

July

Documents and responses submitted for the last deadline for the Dogger Bank Creyke Beck examination, including the final draft development consent order.

August

Examiner starts to prepare recommendation to the Secretary of State for Dogger Bank Creyke Beck.

Preliminary meeting held for Dogger Bank Teesside A&B marking the start of the six-month examination phase.

September

Meteorological masts are inspected using remotely operated aerial vehicles (also known as drones).

Trials of the innovative suction-installed bucket foundation were undertaken at Dogger Bank by Universal Foundation Norway as part of The Carbon Trust's Offshore Wind Accelerator programme.

Forewind and Natural England agree new "common currency" approach to assessing an offshore wind farm's potential impact on birds.

October

Examination hearings for the Dogger Bank Creyke Beck development consent order application wind farms start.

Consultation gets underway on two minor proposed changes to the development consent order application for Dogger Bank Teesside A&B.

November/December

3D computer generated simulation of the proposed Dogger Bank development is made available to others via the Forewind website.

Meteorological masts removed to enable structural work to be carried out onshore.

Annual meeting of marine wildlife experts and the five international offshore wind energy developers involved with the research programme, Disturbance Effects on the Harbour Porpoise Population in the North Sea (DEPONS).

2015

January

Forewind was awarded runner-up in the annual Renewable UK, Health and Safety Award for its case study on the use of remotely operated aerial vehicles to inspect its meteorological masts.

February

The Rt Hon Ed Davey MP, Secretary of State for Energy and Climate Change, approved the application for Dogger Bank Creyke Beck, the first Dogger Bank development to be granted consent.

March

Forewind becomes part of the Fisheries Liaison with Offshore Wind and Wet Renewables (FLOWW) subgroup to look at the potential risk to fishing trawlers from subsea cables.

April/May

Offshore met mast reinstallation took place. This also included the installation of the lidar on the platform of Met Mast East.

June

The core samples collected on Dogger Bank are donated to the National Geological Repository, part of the British Geological Survey.

July

Dutch expedition 'Duik de Noord Zee Schoon' removing abandoned fishing nets off wrecks at Dogger Bank discovered a sunken vessel, previously thought to be a submarine, was actually a very old steam ship.

August

The Rt Hon Amber Rudd MP, recently appointed Secretary of State for Energy and Climate Change, approved the application for Dogger Bank Teesside A&B.

Forewind, together with its owners and in agreement with The Crown Estate, announces it has ceased work on Dogger Bank Teesside C&D.

September

Champions for Wind draws to a close with more than 3,000 students and 41 teachers having taken part over the past four years.

Two-week offshore operation and maintenance trip to the two meteorological masts on Dogger Bank concludes.

October/November

Town and Country Planning Act application seeking permission to move the route of two sections of export cable permitted under Dogger Bank Teesside A&B consent is submitted to the Redcar & Cleveland Borough Council.

December

Forewind's lidar is removed from the Cavendish gas platform having collected wind speed data since April 2013. It will be serviced and post-calibrated for use elsewhere.

Future

Gaining consent for four projects totalling 4.8GW of offshore wind capacity in the same year is a major achievement of which both the Forewind team and owners are justifiably proud. However there is still much work needed to ensure the projects are progressed further. Assigning operators will be the next significant step.

The initial aim will be to assign operators for the two projects that make up Dogger Bank Creyke Beck. Once those operators are in place, they will initiate the pre-construction phase for the projects. The process to appoint operators for Dogger Bank Teesside A and Dogger Bank Teesside B will follow sometime later.

These projects represent a step change for the offshore wind industry in the UK and offer an enormous opportunity for the country to establish itself as a global leader, not just in terms of installed capacity, but in terms of supporting technological advancement, supply chain development and job creation. The local – Humber, Yorkshire and the North East – and national economies are poised to reap significant benefits from their construction and operation.

However the potential economic benefits from the Dogger Bank development will only be realised with the right conditions established. This means conditions that will give the developers a good economic basis to take each project up to and past final investment decisions, and that will also entice manufacturing companies to establish operations here in the UK. The consented Dogger Bank projects, with their consistently robust wind conditions, could contribute significantly to the UK's new and low carbon energy supply in the coming years, while at the same time creating long-term jobs and economic opportunities.

'It has been a privilege and a pleasure to have been a long-term member of such a dedicated and professional team as Forewind. As a remaining team member, I look forward to being closely involved in the commercial and business aspects of these globally significant projects as they progress towards the next phases.'

Ryan Trow

Commercial Manager, Forewind



Photo captions

Front cover DP Galyna at Dogger Bank Met Mast East

Inside front and inside back cover

Gwynt y Môr under construction. Photo courtesy of CHPV

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Computer-generated visual of the Dogger Bank development courtesy of 3D Web Technologies

Page 02 Forewind Chairman, Charles Hendry

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Forewind General Manager and Project Director, Tarald Gjerde

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Pages 04

Top: Redcar beach, Teesside Bottom: Map of four Dogger Bank projects

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Top: Fishing gear and boats, Teesside Middle: Computer-generated visual from the 3D simulation courtesy of 3D Web Technologies Bottom: Whitby, North Yorkshire

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Top: River Hull, east of Figham Common, Beverley Bottom: Using the remotely operated aerial vehicle (ROAV) for the meteorological mast inspection

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Top: Fulmar at Dogger Bank Bottom: Bridlington beach, East Riding of Yorkshire

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Wilton International, Teesside

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Top: Teachers take part in a Champions for Wind event at the National STEM Centre, York University Bottom: At the National Geological Repository, Nottinghamshire

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Pier at Saltburn-by-the-Sea, North Yorkshire

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Worker from Forewind contractor, RES, climbs the meteorological mast

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